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LECTURES
ON
CYSTIC TUMOURS OF THE JAWS, AND ON THE ETIOLOGY OF TUMOURS.

Delivered at the Royal College of Surgeons of England, June 1882

BY F. S. EVE, F.R.C.S.,

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LECTURE I.—CYSTIC TUMOURS OF THE JAWS.

I HAVE chosen for the subject of this lecture the various forms of cystic tumour of the jaws, chiefly because this splendid museum has afforded me exceptional advantages for the study of a variety of morbid growth, which has been described as multilocular cystic tumour, cystic sarcoma, and adeno-sarcoma of the jaw. This disease much more commonly affects the lower than the upper jaw. It first makes its appearance as a small swelling near the socket of a tooth, and slowly increases, attaining sometimes large dimensions. When affecting the lower jaw, the tumour grows within the substance of the bone, expanding the compact wall, which forms a more or less complete capsule around it. A section displays an agglomeration of cysts separated by septa of dense fibrous tissue. The septa are, as a rule partially, and sometimes completely, ossified, as shown by a beautiful specimen in the museum of St. Bartholomew's Hospital (No. 537).*

The size of the cysts varies in different specimens. The more common form of tumour is composed chiefly of large cysts from half an inch to an inch or more in diameter, the other, almost entirely of small cysts, so that a section presents the appearance of a honeycomb with irregular cells. The septa between the cysts are, in the latter, usually ossified. The contents of the cysts differ even in the same tumour; they may be filled with a white glutinous colloid material, with a brownish serous fluid, or with a reddish friable substance, which is more commonly met with in the smaller tumours, or in the more recently formed portions.

In a specimen (R. C. S. Museum, No. 2203) described in Mr. Heath's exhaustive work,† a large cyst is almost filled with solid lobulated proliferous growths, projecting from its walls; in the other portion of the tumour, the cysts were filled with serous fluid.

When occurring in the upper jaw, the growth projects into and distends the antrum; it then usually possesses the ordinary clinical appearances of a solid tumour in that cavity. The general characters of such a growth are shown in a specimen (No. 2202) from the College Museum. It may be observed that the cysts are smaller, and the proportion of solid matter is much greater than in the majority of the tumours of the lower jaw.

Of the twelve specimens of multilocular cystic tumour which I have had the opportunity of examining microscopically, and in four other recorded cases in which microscopic examinations were made, all presented the same general structure. I think it, therefore, very improbable that a form of multilocular cystic tumour of the jaw exists, such as has been described as *simple* multilocular cystic disease. Again, the unilocular cysts—occasionally met with in the jaws—must be considered as distinct in their nature from the multilocular tumours; for I have been unable to find recorded in literature, or preserved in our museums, a single example of an unilocular tumour presenting similar peculiarities in its minute structure.

The general clinical and pathological characters of multilocular cystic tumours of the lower jaw are well illustrated by a specimen presented by Mr. Keetley to the Museum of St. Bartholomew's Hospital (No. 536). The tumour was removed, with one half of the lower jaw, from a lady, aged 45 years, who had noticed a swelling on the left side of the jaw ten years before coming under observation. It increased in size at first very slowly, and during the last year more rapidly, but neither caused pain nor affected the general health. The submaxillary glands were not enlarged. Ten years before the tumour was observed, she had for a long period a discharge from the socket of an imperfectly extracted tooth, and was told by a surgeon that the jaw was necrosed. Near this part, the tumour appeared. It involved the left half of the lower jaw, extending from the angle to the symphysis; its outer and lower surfaces were covered by the thin expanded external lamina of the bone. The left incisor, canine and bicuspid teeth, were crowded together at the upper and anterior edge of the tumour; the molar teeth had disappeared. A section of the growth presented the usual characters of multilocular cystic tumour, the cysts being, for the most part, of large size. They contained either brown serous fluid, colloid material, and, many of them, a reddish friable substance, especially near the symphysis, where the tumour was still encroaching on the bone.

Under the microscope, the solid portions of the tumour showed branching and irregularly arranged columns, composed of small round epithelial cells, which resembled those in the deeper layers of the epithelium of the gum. The columns, in longitudinal section, showed bulgings with intervening constrictions on their sides. In transverse section they appeared as alveoli inclosed by well formed fibrous tissue. A lining of elongated cells (see Figs. II and III) formed, in places, the peripheral layer of the cell-columns or masses. The cells occupying the centres of the columns were much enlarged from commencing colloid degeneration; and portions of the tumour, containing small cysts, showed that the central cells, or the whole contents of the alveolar spaces, had undergone colloid degeneration (see Fig. I). The tumour, apparently, grew by the formation

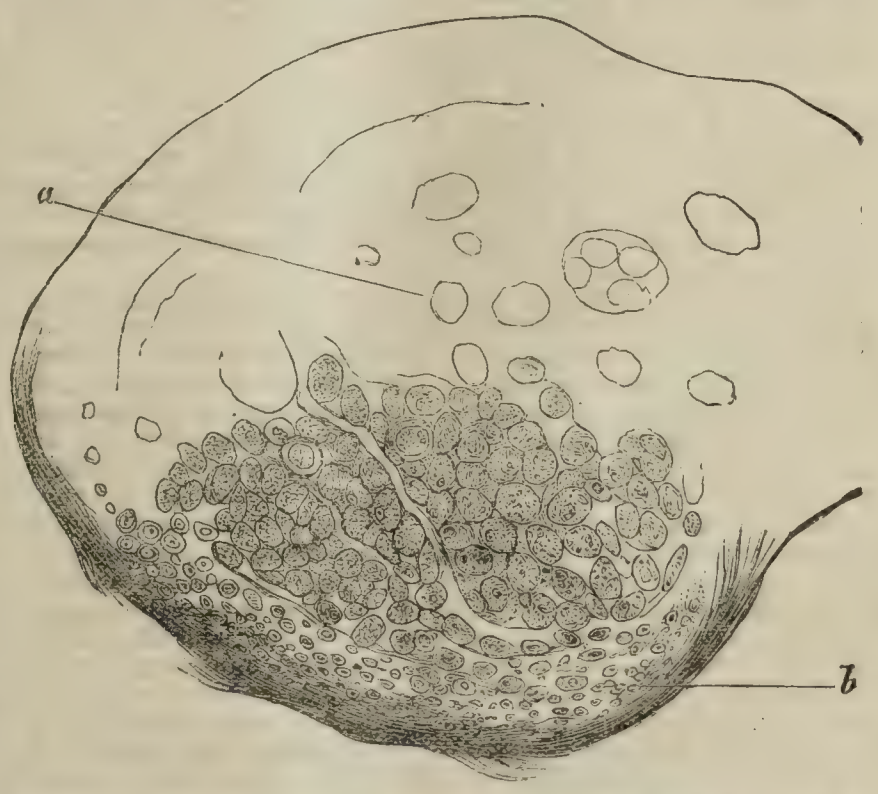


Fig. I, from specimen No. 536, St. Bartholomew's Hospital Museum.—Alveolus in state of transformation into a Cyst. (*a*) Epithelial Cells which have undergone Colloid Degeneration; (*b*) Nuclei of Young Cells.

of sprouts from the columns of cells, which formed its primary constituent; and, probably, by the subsequent cutting off of the sprouts, the alveolar spaces were formed. The cyst-formation evidently resulted from the expansion of these spaces by colloid de-

* Described by Mr. Coote, *Lancet*, October 10th, 1857.
† *Diseases and Injuries of the Jaw*, second edition, p. 304.

generation of their epithelial contents, and the accumulation of fluid within them as in cyst-formation elsewhere.

The other tumours I have examined correspond to the description just given in the essentials of their minute structure; they presented, however, minor points of difference, such as are observed in any variety of morbid growth. In some tumours, the tendency to degeneration of the cells was slight, and the cyst formation was in consequence scanty; these were composed largely of irregular masses of small epithelial cells, with numerous round patches of degeneration scattered throughout them. In many instances, the outer layer of cells composing the columns or masses were elongated, or imperfectly columnar. This arrangement of the cells, when associated with colloid degeneration of the central cells, gave the columns a close resemblance to gland-tubes (see Fig. II), and led to the supposition, in some cases, that the tumour was an adenoma.* The appearance of gland-tissue was, in the specimen (Fig. II), very closely imitated by the approximation of columns placed parallel to each other. It is, however, most improbable that these tumours have any connection with gland-tissue, for both Waldeyer and Klein assert that there are no mucous glands in the gum itself, an observation which I have verified.

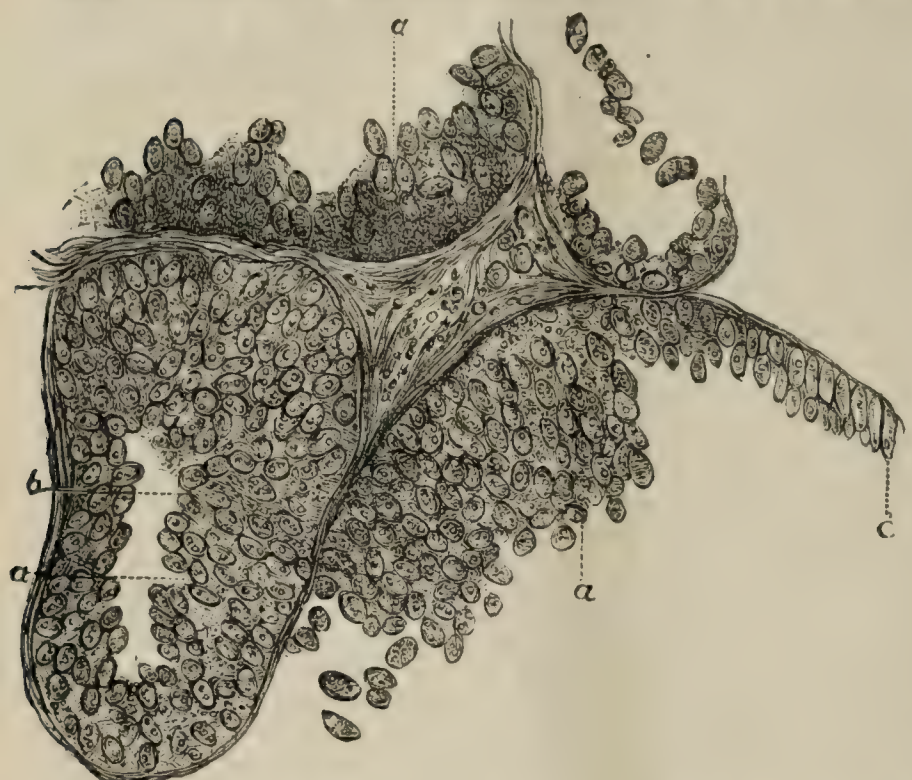


Fig. II, from a drawing in College Case-books.—(*a*) An Alveolus and portions of Alveoli filled with Epithelial Cells; (*b*) Central Space, probably formed from breaking down of Cells; (*c*) Elongated or Semi-columnar Peripheral Cells, not well marked in this specimen. No. 2,203.

Two cases of multilocular cystic tumour have been described in Germany by Drs. Falkson and Bryk, in which the columns and alveoli composing the tumour nearly resembled, in their minute structure, the rudimentary enamel organ. In Falkson's case,† the tumour grew within the symphysis; it occurred in a woman aged forty years, and had been growing ten years. It consisted microscopically of cylinders and alveoli, lined by a single layer of regularly arranged columnar cells inclosing a delicate network, formed by the anastomosing processes of stellate cells. In Bryk's case,‡ subsequently published, the microscopic appearances of sections of mucous membrane covering the tumour presented precisely similar appearances. Round cells were, however, observed within some of the columns, and small rods, or masses of nuclei, were scattered throughout the tumour.

Both of these specimens possessed the usual clinical and naked eye characters of multilocular cystic tumour, and resembled the specimen first described, both in the manner of their growth, and in the mode of the cyst-formation. The resemblance which, in their microscopic structure, they bore to the rudimentary enamel organ, led to the supposition that they were connected with the enamel organ of the tooth-follicles. This opinion Bryk thought to be supported by the clinical history in his case. The tumour, which was the size of a fist, was removed from a peasant, aged 32. When six years old, he sustained a fracture of the lower jaw near the symphysis from the kick of a horse. The fracture remained for some time imperfectly united, and, during the year following the accident, he pulled out ten loose teeth; no others formed to replace them. At fifteen years of age, he first noticed a swelling of the chin; and three years later many small knobs, of the size of hazel-nuts, had formed on one side of the symphysis at the site of the injury. The tumour subsequently grew rapidly. The inflammation of the bone following the fracture, according to Bryk, originated the disease by acting as a disturbing agent upon the forming or already formed tooth-pulps. The teeth extracted by the patient were, he thought, all milk-teeth, no permanent teeth being subsequently formed to replace them.

An obvious objection to this explanation is, that at the age of six years, all the teeth, except the third and perhaps the second molars, would have become calcified, and the eruption of the permanent set would, probably, have commenced. Therefore, the disease could not have originated in the already perfectly developed follicles near the symphysis.

In order to point out more clearly the relation of these tumours to the enamel organ, I will glance briefly at the development of that structure. About the seventh week of embryonic life an ingrowth of the epithelial lining of the gum takes place along the whole length of the jaws. The portions of this ingrowth about to form the teeth become enlarged into downward projecting papillæ consisting* of small round epithelial cells surrounded by a layer of elongated cells, which are continuous with those forming the deep stratum of the epithelium. These ingrowths of epithelium constitute the primary enamel organ. Into their apices or lowest portions, a papilla of gelatinous connective tissue projects, by which the enamel-organ is invaginated, so as to become converted into the enamel-cap. This projection of connective tissue constitutes the tooth-papilla upon the surface of which the dentine is formed. The cells composing the enamel organ, now the enamel cap, undergo various modifications. Those forming the inner layer—that nearest the tooth-papilla—become elongated and beautifully columnar; and from them the enamel-fibres are formed. The other cells remain for a time polyhedral, but subsequently the middle layer is converted into a gelatinous tissue, composed, apparently, of stellate anastomosing cells, with a clear soft intermediary substance. This layer is finally absorbed, and the external or superficial layer of cells forms the cuticle of the enamel (Klein, Waldeyer).

The resemblance between the tumours and the rudimentary enamel organ is at once apparent. The tumour consists of columns and alveoli lined with columnar epithelium, resembling that of the inner layer of cells of the enamel-organ, and inclosing a gelatinous tissue with the appearance of a network of stellate cells, which is comparable to the gelatinous tissue in the centre of the enamel-organ.

There now remains to be considered, first, the relation which the tumours described by Falkson and Bryk bear to those of which I have just given the details; and, secondly, the origin of the disease. I am disinclined to believe that any really generic difference exists between these tumours; for those which most nearly resembled the rudimentary enamel organ presented the ordinary clinical and naked-eye characters of the multilocular cystic tumours first described. If the most highly developed and the most elemental types were taken alone, without regard to the structure of other tumours, it might be believed that they differed in nearly the same degree as an adenoma differs from a cancer. But among the twelve tumours examined, I have observed some which lie in an intermediate position between these two extremes. As already mentioned, in some the cell-columns or alveoli were bounded, as in Falkson's and Bryk's specimens, by a single row of elongated or imperfectly columnar cells, while the central cells had undergone degeneration. In parts of others (No. 2198), the cells in the centre of alveoli presented the appearance of a network of anastomosing cells, although the microscopic characters of the greater part of the tumour more nearly agreed with those of the growth first described.

For these reasons, I think that all the tumours belong to the same group, the individual specimens presenting only differences in degree of development.

As regards the mode of degeneration leading to the appearance of a network within the alveoli, it could be distinctly observed in the tumour first described and in several others, that colloid material collected within the substance of the cells, pushing the nuclei to one side, and giving rise to the form known as the signet-ring cell; by the approximation of the compressed walls of such degenerated cells the appearance of a network was produced, with the nuclei at the

* *Transactions of the Pathological Society*, vol. xxiii, p. 181, and vol. xxii, p. 242.
† Virchow's *Arch.*, vol. lxxvi, p. 504, plate viii, fig. v.
‡ Langenbeck's *Arch.*, vol. xxv, 1881, p. 793, plate xii, fig. ii.

* Kölliker, *Grundriss der Entwicklungsgeschichte*, 1880.

points of contact. This is, I believe, the explanation of the formation of an apparent network in all the tumour formations.

I will now ask you, in the second place, to consider the probable mode of origin of the tumours.

After repeated examinations, I have been able to observe in several specimens appearances distinctly indicating that they originate by an ingrowth of the epithelium of the gum. Sections of a tumour of the superior maxilla showed pear-shaped ingrowths of epithelium connected with the epithelium of the gum by their narrow extremities. The cells composing them had completely undergone degeneration except at the periphery, and two similar ingrowths were continuous with the mass of the tumour. In the same sections, a prolongation downwards of the interpapillary processes of the epithelium as fine lines into the tumour was observed. Sections taken from specimens 2198 and 2203, and passing through the margins of ulcerated sockets from which the teeth had fallen out, showed, as the alveoli were approached, a gradually increasing thickening of the epithelium of the gum, and, near the margin, numerous papillary processes of epithelium passed down and became continuous with the cell-columns forming the tumour. Indications of ingrowth of epithelium near the alveoli over the tumour were also observed in other specimens. Again, Büchteman * describes a case in which he observed a similar ingrowth of epithelium which was in "unmistakable connection with the tumour-formation."

The mode of origin of the cystic tumours is therefore analogous to that of an ordinary epithelioma. Their precise relation will be discussed further on.

Multilocular cystic tumours have frequently followed some form of injury, irritation by decayed teeth, or long continued inflammation; these may be looked upon as exciting causes by inducing an increased blood-supply to the part. An epulis has, in some instances, preceded their formation. This is not surprising, as I have met with five epules from children and adults, composed largely of columns of epithelial cells.

The cystic disease is more common in early adult and middle age, but may occur at any period of life. Coote recorded a case in a child six months old, and another in a man aged 75. Wilks also described a case in which the disease was congenital. Of twenty-six cases in which the age was stated, twenty of the patients had reached the age of twenty years when they came under observation; and in one half of these cases the disease occurred between the ages of 20 and 40 years inclusive.

The clinical characters of these tumours are almost sufficiently indicated by the descriptions of the specimens already given. They are rounded, and usually lobulated on the surface from the presence of numerous cysts. They project, as a rule, more from the external than the internal surface of the bone. At some parts of the tumour, there is fluctuation, and at others the characteristic parchment-like crackling can be obtained by pressure on the thin bony covering of the cysts. Not unfrequently one or more of the teeth have fallen out from the affected portion of the jaw, and a glairy fluid has been observed by the patient to issue from the open alveoli.

On puncture, a turbid brownish serum, a sero-sanguineous or a glairy colloid fluid, may be obtained from different parts of the same tumour. If the disease involve the upper jaw, I think it could not, as a rule, be diagnosed from other solid growths in the antrum, unless the cysts were unusually large.

The tumours are slowly growing, existing sometimes † for twenty years; they have very little tendency to implicate surrounding parts, or the neighbouring lymphatic glands, and, if completely removed, rarely recur and still more rarely become disseminated throughout the system. Their comparative innocence is probably explained by the bony capsule forming their boundary, by their low degree of vascularity and by the remarkable tendency of the epithelial cells composing them to undergo degenerative changes. The effect of a bony envelope in diminishing the malignancy of tumours was distinctly shown by Mr. Butlin in the case of the central tumours of bones, which were necessarily surrounded by the expanded wall of the bone in the early part of their growth.

The general impression formerly existing, that all the multilocular cystic tumours are innocent, is entirely unfounded. Recurrence has taken place in many recorded cases after the cysts have been opened and their contents sponged or imperfectly gouged out. In a case treated in this manner by Syme, recurrence took place twice. The more radical gouging operation recommended by Mr. Butcher is, he tells me, perfectly successful in his hands; "the gouging", he writes, "must be carried out fearlessly and far wide of the disease".

* Langenbeck's *Arch.*, vol. 26, p. 249, plate iv.
† As in Mr. Wagstaffe's case, *Trans. Path. Soc.*, vol. xxii, p. 249.

Recurrence sometimes takes place after the complete removal of the affected portion of the jaw. Here is a portion of a recurrent growth removed by Mr. Heath twelve years after the tumour (No. 2203) already referred to. I have also examined a growth from the upper jaw, which recurred some years after the removal of a tumour from the same situation in a child. The recurrent growth in both cases possessed the usual microscopic characters of multilocular cystic tumour.

In completion of the evidence showing the truly malignant nature of *some* of the cystic tumours, I am able to quote the following case, for the notes of which I am much indebted to Mr. R. W. Parker, who also gave me microscopic sections of the morbid growths.

A rapidly growing tumour of the left side of the lower jaw was removed from a woman aged 60, by Mr. Jonathan Hutchinson, in the London Hospital; it had been noticed only thirteen weeks. The tumour was found on section to be soft, encapsuled, and it showed points of degeneration in its centre. The patient died eight days after the operation of broncho-pneumonia. The lumbar lymphatic glands near the suprarenal capsules were infiltrated with a morbid growth, but none of the viscera were affected. In minute structure, the tumour of the jaw consisted of columns of small epithelial cells undergoing degeneration at their centres; and the secondary deposit in the lumbar glands was the exact prototype of the primary growth. Here, then, was a rapidly, growing tumour of the variety under consideration, the elements of which had become disseminated throughout the system.

The multilocular cystic disease, like other tumour forms, doubtless possess a varying degree of malignancy. Advanced age probably increases their malignancy; and, I think, it will be generally found, that in proportion as the age at which the tumour appears is greater, it will more nearly approach in its minute structure the lowly modified form consisting of columns and masses of round epithelial cells, as in the specimen first described, and in Mr. Hutchinson's case, just related; in the former, the patient was forty-five and in the latter sixty years of age. This form is, therefore, probably more malignant than the more highly modified type occurring at an earlier age, and observed in its highest perfection in Bryk's case. Such a distinction, if found to be true in a larger number of cases in younger subjects, will be of the greatest practical importance in treatment. For it is almost superfluous to point out, that the gouging operation of Butcher would probably be effectual in the comparatively innocent tumours in young subjects; while in the malignant form, a more radical operation, such as the removal of a portion or the whole of one side of the jaw, would be indicated.

Finally, with regard to the position which these morbid growths occupy in the general classification of tumours, we find that they originate from an epithelial surface, that they are composed entirely of epithelial cells, that in many instances they recur locally after complete removal, and occasionally they give rise to secondary deposits; such a sum of characters naturally places them among the epithelial new formations, of which they may be considered a peculiarly modified variety. I therefore propose for them the name of multilocular cystic *epithelial* tumour. A considerable difference, however, exists between them and the ordinary epithelioma, owing to the kind of metamorphosis which the cells composing the cystic tumours undergo.

The gelatinous metamorphosis met with in the epithelial cystic tumours of the jaws depends, probably, upon the special characters and inherent tendencies of that portion of the epithelium of the gum from which they originate; peculiarities leading at an early period of fœtal life to the formation of the rudimentary enamel organ by an ingrowth from the epithelium, and the destruction of its central cells by a special form of degeneration. It is, therefore, not surprising that an epithelial ingrowth occurring in later life from the same structure, should, after penetrating into the same locality, take on approximately somewhat the same form, and undergo the same retrogressive metamorphosis as the rudimentary enamel organ itself; but the growth, like all tumour formations, makes no attempt at the higher development of the normal structure.

Analogous peculiarities in metamorphosis are met with in many other tumours, in accordance with the structure in which they originate. For example: in the epitheliomata of the skin, lips, and tongue, the cells forming the columns undergo the same successive changes from without inwards to the centre of the column, as do those of the skin or mucous membrane from within outwards. The cells forming the peripheral layer of the columns resemble the elongated deep layer of cells of the epithelial surfaces; and the inner cells gradually become more flattened until they are compressed into a central cornified plug.

The cell columns constituting cancer of the breast not uncom-

monly undergo fatty degeneration, like those derived from the epithelium of the acini in the formation of milk.

I must not omit to mention that Magitôt, in his valuable essay (*Sur les Kystes des Mâchoires*), completely ignores the existence of the class of multilocular cystic tumours I have just described. He regards them as a variety of follicular or periosteal cyst, whose multilocular form has been determined by the resistance of the cancellous tissue of the bone to the growth of the tumour, leading to its division into many intercommunicating loculi. In an exhaustive table of all recorded cases of cysts of the jaws, he classes examples of multilocular cystic epithelial tumour as cysts of undetermined nature, or cysts originating beneath the periosteum of the fang. The nature of some of the specimens thus classified I have determined by microscopic examination, and have found that they are cystic epithelial tumours.

Magitôt contends, that "every spontaneous cyst of the jaws is essentially and exclusively dentary." Within this definition, I cannot agree to place the multilocular cystic tumours: for, although connected, as regards their origin, with the tooth-forming property of the gum, yet there is no evidence to show that they are in any way connected with the rudiments of normal tooth-follicles.

Another form of tumour is met with in the jaw, resembling the group we have been considering in containing minute cysts, derived from cylinders and alveoli filled with epithelial cells. I know of the existence of only one example in an enormous tumour of the lower jaw, which accompanied Mr. Christopher Heath's Jacksonian Prize Essay (R. C. S. Museum, No. 2234). It is a large lobulated growth, involving the lower jaw from the left angle to the middle of the right ramus. Its section has the appearance of a fibro-sarcoma, with occasional small cysts and nodules of bone interspersed throughout it. The tumour was removed from a man, aged thirty-two years. Eleven years before presenting himself for treatment, he noticed a small hard swelling, just below the right canine tooth. The swelling continued of the same size for five or six years, and then began to grow rapidly after a violent blow in the face.

The bulk of the tumour presented, in its minute structure, the characters of a fibro-sarcoma, consisting of spindle-shaped and round nuclei embedded in a homogeneous or faintly fibrillar tissue. Scattered throughout it, I found masses and cylinders of epithelial cells, resembling the epithelial elements of the cystic tumours. They were composed of large irregularly-shaped or branched masses, and of small columns composed of round epithelial cells, with a layer of peripheral elongated cells (see Fig. III). This



Fig. III, from specimen No. 2,234, Royal College of Surgeons' Museum.—Showing Masses and Alveoli enclosing Spherical Epithelial Cells with a Peripheral Layer of Columnar Cells. (*a*) The ground-substance consists of Fibrous Tissue with abundant round and spindle-shaped Nuclei.

growth may be considered to occupy much the same position relatively to the other cystic tumours of the jaw, as an adeno-sarcoma of the breast does to an adenoma or a cancer.

A multilocular cystic tumour of the jaw may recur as a sarcoma, as is shown in a specimen (No. 2204) presented by Mr. Heath; it consists for the most part of round-cells, but some epithelial columns were found at its upper part.

Dentary Cysts.—The other varieties of cysts met with in the jaws are immediately connected with the teeth.

They admit of division into two distinct classes—1, cysts originating in connection with tooth-follicles, and called follicular, or if they contain a tooth, dentigerous cysts; 2, cysts originating beneath the periosteum of the fang, and hence called periosteal cysts. The follicular or dentigerous cysts originate in connection with teeth, which from displacement, or some other cause, have not been "cut," and have set up irritation. The tooth may have been placed too deeply, or in an oblique position, or its fang may have been undeveloped. In some instances it has been found inverted.

Dentigerous, or, as Magitôt calls them, follicular cysts, may be situated at any part of the jaws. When occupying the lower jaw they usually expand the external surface more than the internal, the tumour presenting itself as a rounded projection; but sometimes, as in specimen (No. 2195) in the College Museum, the walls of the bone are equally expanded. If the cyst arise in connection with the wisdom tooth, it may expand the ascending ramus.

In the upper jaw, dentigerous cysts have been observed occupying the antrum, the canine fossa, the orbital border, and even the hard palate. Mr. Cartwright describes a specimen in which the cyst occupied the antrum. Its wall, that is, the tooth-sac, was calcified but was not united to the walls of the antrum, so that it presented itself as a distinct bony cyst only attached to the lower part of that cavity.

The dentigerous cysts usually contain a clear serous, or a glairy fluid, sometimes it is yellowish, or brown from the presence of blood; rarely it contains pus from suppuration of the cyst.

A permanent tooth is most frequently the cause of the cyst formation, but in rare cases a temporary or a supernumerary tooth has been found within the cyst. When the contained tooth is supernumerary it is small and deformed. Even when the tooth belongs to the permanent set, its root is usually small and rounded, and is embedded in the cyst wall as far as the neck. The dentinal canal gives passage to vessels and nerves to the pulp, which is always much reduced in size. Occasionally the tooth lies loose in the cyst, either owing to the commencement of the cyst formation before the development of the fang; or, perhaps, from the fang undergoing absorption analogous to that which takes place in the shedding of the milk teeth.

Very rarely a cyst has been found occupied by two teeth, the follicles of which have become fused together.

A case is recorded by Barnes (*Med. Chir. Trans.*, vol. iv, p. 316), of a cyst in the upper jaw of a young man aged 17; there were two intercommunicating pouches, one of which contained a supernumerary tooth bathed in "pus," the other only a yellow fatty matter. The tumour was congenital, but had remained stationary until the age of twelve years.

Dupuytren, Tellander, and Tomes, have placed on record cases in which extraordinary numbers of irregular ill-formed dentary bodies were found within a single cyst. These, in Tellander's case, were twenty-eight in number, and presented the usual characters of supernumerary teeth. Such cysts as these and that described by Barnes are doubtless analogous to the dermoid cysts of the skin, ovary, etc.*

Cysts in the jaws have been observed, containing no tooth, but filled with layers of a fibrous appearance, sometimes free and floating in the liquid, more often adherent upon a point of the wall. (Magitôt).*

The existence of these cysts not containing teeth led Magitôt to divide the follicular cysts into three varieties.

1. Cysts developed during the early or embryonic period of the development of a tooth, before the formation of dentine and enamel.

2. Cysts corresponding to a period when the first rudiments of a crown have appeared in the follicle. To these he gives the name of odonto-plastic cysts.

3. Cysts of the coronary period, viz., cysts containing fully developed crowns of teeth, and corresponding to our dentigerous cysts. These have already been described.

One specimen in the College Museum (No. 194), is, perhaps, a cyst developed in the embryonic period; for I am quite at a loss otherwise to explain its pathogeny, it being certainly not dermoid. It

* Many, if not most of these cysts, probably, were dermoid. See Mikulicz, *Wien. Med. Woch.*, 1876, No. 44.

consists of the right side of the body of a lower jaw completely and uniformly dilated into a large spherical cyst with very thin bony walls. No tooth, or rudiment of a tooth, can be discovered in the cyst and its inner surface is lined with a thick soft membrane, thrown into folds. This lining is composed of small round epithelial cells. The condition of the teeth before the removal of the tumour is not mentioned. The patient was a woman, aged 35 years; the tumour had been growing for three years, and contained a thick dark fluid.

The odonto-plastic cysts—those of the second variety—are said to contain "hard grains, rounded and mamillated, or disposed in osseous plates applied and fixed upon a point of the wall"; these were found in one case to be composed of an osseous base covered with traces of dentine, which was again, in places, invested with enamel. Magitôt quotes a case of Broca's as an instance of this variety.

The same authority states that all the follicular or dentigerous cysts have a lining composed of two or three layers of polyhedral epithelial cells; this epithelial lining he regarded as a new formation, since "it has no equivalent in the wall of the normal tooth follicle." He also observes that epithelial cells are found in the fluid contents of these cysts.

Very few pathologists will be disposed to admit the possibility of the formation of an epithelial lining *de novo*, and I have examined three specimens of dentigerous cysts carefully with regard to this point, and find no trace of an epithelial lining. The minute structure of the wall was, in each case, precisely similar, consisting of fibrillar tissue containing granulation cells, which were more closely aggregated on the inner surface of the cysts. I think, therefore, that Magitôt is mistaken on this point.

The existence, or non-existence, of an epithelial lining to these cysts is not merely an anatomical detail, but a question of the first importance in considering their mode of origin.

If the view generally accepted with regard to the origin of dentigerous cysts be correct, we should not expect to find an epithelial lining to the cyst, as it is supposed that the accumulation of fluid takes place between the enamel and the tooth capsule.

In discussing this question, Mr. Tomes (*Dental Surgery*, pp. 625, 626) mentions that vesicular enlargements, containing serous fluid, are occasionally found over teeth about to penetrate the gums. "On incising this enlargement, the knife comes down on the enamel-coated covering of the coming tooth." Again, he says, "When the development of the enamel is completed, its outer surface becomes completely detached from the investing soft tissue, and a small amount of transparent fluid collects in the interval so formed." In these facts he finds "an explanation of the manner in which buried cysts arise; namely, by the gradual collection of fluid between the enamel and the tooth capsule."*

This theory completely coincides with the minute structure of the lining of the dentigerous cysts, but is not equally satisfactory when applied to cysts formed in an earlier period of development. The enamel organ would not then be separated from the surrounding connective tissue; and, further, the physiological explanation for the accumulation of fluid between the enamel and the tooth-sac is wanting.

A simple explanation of the origin of the cysts of the embryonic and odontoplastic periods suggests itself in the supposition, that they are due to accumulation of fluid within, and distension of the enamel organ itself, owing to an exaggeration of the degenerative process by which the cells in its centre are destroyed.

This theory would explain the existence of an epithelial lining in unilocular cysts not containing teeth, as in the specimen (No. 2194) from the College Museum.

The diagnosis between follicular cysts and solid tumours is usually easily made. Almost invariably one surface of the cyst is sufficiently thin in some places to admit of compression, when the characteristic diagnostic sign is obtained, known as the "crackling of parchment."

The diagnosis may be further facilitated by the absence of this shell at certain points, where fluctuation can be obtained. A puncture would, in doubtful cases, afford a certain test.

The dentition, although important, is, as Mr. Heath points out, not to be relied on as a diagnostic sign. So many variations in the number of teeth from congenital deficiency are met with, that the absence of one does not necessarily imply that it is misplaced.

The diagnosis between a follicular cyst and a multilocular cystic tumour would, I apprehend, in certain cases present considerable difficulties. The lobulation in the latter disease from the presence of numerous cysts, the incompleteness of its osseous covering, and the presence of fluctuation at several points, would afford valuable aid to diagnosis.

Exploratory puncture would, in the case of the multilocular cystic tumour, give exit to either a colloid, or a brownish serous fluid in different parts of the same tumour, whereas the fluid within the follicular cyst is, usually, clear and serous.

Periosteal Cysts.—Another variety of cyst connected with the teeth requires a short notice. Not unfrequently cysts of small size are found attached to the apex of a fang of an extracted tooth. They sometimes cause excessive pain from pressure on the nerve. The cysts are, as a rule, not larger than a pea, but may attain half an inch in diameter. They lie beneath the periosteum of the fang, and, from this circumstance, have been named periosteal cysts. The apex of the fang on which they are situated is frequently absorbed, and, by the introduction of a probe after puncture, the fang is found exposed within the cyst cavity. The contained fluid is rich in cholesterine. Mr. Tomes (*op. cit.*) considers that, in the first instance, the morbid process is, probably, identical with that resulting in the formation of an alveolar abscess; but, being less acute, a serous cyst is formed instead of a suppurating sac. The microscopic appearances of four specimens that I have examined bear out this view. The sections were made through the hardened wall, and, in some instances, through the dried contents of the cyst. The cyst-walls were composed of fibrillar and granulation tissue, and their cavities contained a cheesy mass, having the appearance of inspissation and degenerated pus or lymph. There was no trace of an epithelial lining to the cyst walls, such as Magitôt has stated to exist; but, upon their inner surface, was a layer of granulation cells; the lining, in fact, closely resembled that of the dentiferous cysts, but was thinner, less dense and more cellular.

Very commonly the crown of the affected tooth is the seat of caries. The cysts sometimes form a projection upon the outer surface of the jaw at the reflection of the buccal mucous membrane; if the wall of the bone have been sufficiently distended, "crackling" is obtained on pressure over the prominence.

I shall not enter into a consideration of the cysts of the antrum by dilatation of its mucous glands, for they are in no way connected with the teeth, and this cavity may be considered rather as an appendage to the nasal than a portion of the jaws.

Permit me to call your special attention to a few concluding remarks.

I shall not consider this study of the cystic tumours of the jaw in vain, if, by its means, I am able to bring forward one fact indicating the relation of the tumours to each other and to the malformations by excess.

The first step in this series of abnormalties in the jaws may be, perhaps, the formation of a more or less perfect supernumerary tooth, or the displacement of an ordinary tooth; in both instances a dentigerous cyst may result. Again, the rudiment of a supernumerary or suppressed tooth may give rise to a simple cyst lined with epithelium, probably by expansion of the enamel organ during the early or embryonic period of its growth. Allied to such simple cysts formed around a single supernumerary tooth, are those containing many imperfectly formed dentary bodies; these stand in much the same relation to the jaw as the dermoid cysts containing bone, teeth, muscle, do to the different parts of the body in which they occur.

And further still, the same *tendency* to abnormality in the dentition, or stated more exactly, a tendency to the formation of supernumerary teeth or the suppression of teeth, if not manifested until puberty or adult age may, perhaps, give rise to the form of multilocular cystic tumour, consisting of an enormous overgrowth of a tissue bearing a general resemblance to the rudimentary enamel organ; continuously growing, but having little tendency to recur after removal, and never becoming disseminated throughout the system.

And, if the morbid growth appears at a still later period of life, a form of tumour results resembling cancer both in its anatomical and clinical characters, but still possessing such a general likeness to the rudimentary enamel organ that its origin cannot be doubted; it may bear in type of development and clinical characters much the same relation to the other more benign form of multilocular cystic tumour as a cancer does to adenoma, but in a lesser degree, and between these two types every gradation in structure is observed.

Upon the chain of anatomical evidence just indicated, we may dare to argue that a tendency to variation first exhibiting itself in the formation of a supernumerary tooth, or possibly the suppression of a tooth may, through various modifications and dilutions in transmission, give rise by evolution and involution to all the

* As Mr. Tomes remarks, this view cannot be finally accepted until the presence of the cuticula dentis has been ascertained in teeth included in cysts; for, if the cuticle be absent, the fluid will probably have accumulated between the enamel and the cuticle.

different forms of cystic tumour of the jaw just mentioned. In support of this hypothesis, I may further add that all the different peculiarities in the number and form of the teeth are distinctly hereditary.*

PARTIAL EXCISON OF THE RECTUM: RECOVERY.

By ARTHUR E. BARKER, F.R.C.S.Eng.,
Assistant Professor of Clinical Surgery and Assistant Surgeon at University College Hospital.

REMOVAL of a considerable portion of the rectum for malignant growths being still a somewhat rare operation, the record of the following, though it be but a single case, may prove of use in view of the scarcity of data we possess at present for judging of the actual and relative risks of the operation and also its ultimate results.

J. T., aged 58, a whitesmith, was admitted into University College Hospital under my care on September 6th, 1881. He complained that since the beginning of summer he had noticed blood after his stools, and had suffered much from *pruritus ani*, stitch in the side, and flatulency, the distension of his abdomen requiring him often to undo his clothes for relief; he had also lost a little flesh lately, and noticed that he did not pass urine quite so well as usual.

His family history was good; none of his relatives were known to have had any tumours.

On examination, an irregular, flat, nodular growth was felt one inch and a half up the rectum, reaching from this point upwards for about another inch and a half, and laterally over the posterior and right aspect of the gut to a somewhat greater extent, but leaving the left and anterior part of the circumference free for fully one inch. The finger could be passed thus all around the margin of this flat growth, which was felt to be freely movable on the structures lying outside the rectum. No glandular infiltration could be detected anywhere. Blood was passed after each motion, and the patient complained of a bearing down pain; there was also much constant dull aching in the sacral and lumbar regions, groins and testicle, aggravated by standing long and by defæcation. There was no history of constipation alternating with diarrhœa, but then the bowels had been habitually relieved by laxatives, the motions being either liquid, or firm and small; there was no purulent or slimy discharge from the bowel.

The history of this case and physical examination of the rectum leaving no doubt that the case was one of epithelioma of the bowel (a view shared by my colleagues), the desirability of excision of part of the gut at once suggested itself, for the following reasons. 1. The growth appeared to be of comparatively recent formation, and was plainly limited to the wall of the gut, being freely movable with the latter on subjacent structures; no glandular infiltration was felt, or indeed to be expected, in view of the growth being so young, as cancers of the rectum go. 2. The patient was not too aged, and, except for some loss of flesh due to suffering and anxiety, appeared to be in fairly good health. 3. The growth was well within reach on all its aspects, and lay chiefly on the least dangerous aspect of the rectum.

I therefore removed the implicated portion of the rectum, as follows, on September 14th. A silver catheter was first passed into the bladder, and the patient placed in the lithotomy position. Along the finger passed into the rectum a sharp-pointed bistoury was introduced, and, being thrust directly backwards at the tip of the coccyx, was made to lay open the rectum from this point forwards directly in the middle line. In the wide chasm thus produced, the growth was brought well into view. I then divided the greater part of the circumference of the gut on its right, front, and posterior aspect, at a point midway between the lower margin of the growth and the border of the anus. Then, clearing the wall of the rectum from the surrounding structures with knife and scissors upwards at a full half-inch from the margin of the epithelioma, I finished the excision by a crescentic incision with Paquelin's cautery-knife above. Several vessels of considerable size were divided in this dissection, and bled freely, but were controlled finally with hemp ligatures. Being satisfied that all the growth was now removed, I placed a plug of salicylated wool on the wounded surface, to arrest a good deal of oozing which still persisted; this, with a drain-tube in the angle of the median wound, completed the dressing.

The growth, which appeared to have been completely removed with a good margin of sound tissue around it, presented all the characters of epithelioma of the columnar kind, as found in the rectum. The specimen is now in University College Museum.

The subsequent course of the case may be briefly summed up. On recovery from the chloroform, a good deal of pain was complained of, but the patient slept fairly well during the evening. At 10 P.M., the urine was drawn off with a catheter, and one-third of a grain of morphia was given. Later on, the abdomen became very painful and distended, and remained so for some days. This condition, which gave rise to suspicion of peritonitis at first, was relieved a few days later by small doses of oil of cajuput, and proved to be nothing more than a return of the same flatulence from which the patient had suffered occasionally for some months. There was no real tenderness or rigidity of the abdomen, and no effusion of fluid, and the other evidences of peritonitis were absent. Nevertheless, this painful distension was disquieting while it lasted, and led me to the use of morphia freely, perhaps more so than was good for the patient's digestion. All troublesome symptoms soon disappeared, at all events, on its discontinuance. The temperature, during the first week, was above normal, ranging from 100° to 102.6°, the average being 101°. After this, it soon sank below 99° permanently. For the first few days, the urine had to be drawn off, and was found to contain a trace of blood, but this soon disappeared.

The wound was washed out regularly two or three times a day with Condy's fluid, followed by a solution of salicylic acid in spirit and water, a drain-tube being left in in the intervals for the escape of gas and discharge. On another occasion, I should not plug the wound with wool, the removal of which gives some trouble when caked with clotted blood.

On the 6th, a little fæces came away, and continued to do so freely from the seventh day, with much relief to the patient.

From this time on, there is little to note, except that the patient made a steady and good recovery. He got up on the thirteenth day, and regularly after that, and left hospital on the twenty-eighth day. At this time, the whole wound was not completely healed, but had much contracted, being only about three-quarters of an inch broad from the margin of the anus. Above it, there was marked narrowing of the rectum, the lumen only admitting the forefinger, but this without force or producing bleeding. There was incontinence of fæces when the motions were loose; otherwise, he had some control over them.

After this, I saw the patient from time to time, and gave him a bougie for occasional use, to prevent any further narrowing of the gut.

In May 1882, I asked him to come up from the country for inspection, and was agreeably surprised at the improvement in his general appearance and health. He stated that the bowel gave him no trouble now, except when he was constipated, when there was a little difficulty in evacuation; also that there still was a little incompetence of the sphincter when the motions were liquid, but only to the extent of allowing some moisture to escape. On examination of the bowel, no trace of recurrence could be detected anywhere; but I was surprised, after what he had stated in regard to the comparative ease with which he passed his motions, except when hard, to find a very marked narrowing of the gut about an inch from the anus. I could hardly believe his statement that it gave him no trouble. The posterior wall of the gut appeared to have shrunk greatly, and to have been drawn over tightly against the anterior and left side, where, it will be remembered, a small portion of the circumference of the level had not been removed. In this way, a narrow slit was produced, which only admitted the tip of the finger, and through which there was a difficulty in inserting the latter, owing to the valve-like arrangement of the contracted part behind. This arrangement, I think, explained the fact that the patient complained of no great difficulty in defæcation; for the fæces pressing against this valve from within would distend the gut, and force it away from the anterior wall, and so enlarge the slit, whereas the finger found a great difficulty in getting round the edge of the valve when pressed upwards against the anterior wall.

Having the patient in hospital, I advised him to let me seize the opportunity for dilating the narrow part, to which he consented. I therefore notched the valve on each side with a bistoury, and then inserted bougies of increasing size for a few days, after which he left hospital, feeling relieved. His reason for allowing the bowel to contract as described (for I had given him a bougie for his own use when he left the hospital) was, that he had feared incontinence of fæces if he kept the opening too large. Anything of this kind was peculiarly unpleasant to him, as his work obliged him frequently to go up and down ladders.

I saw the patient on August 23rd, 1882, almost a year after operation, when he came up to hospital at my request, that his rectum might be examined. He looked and felt in the best of health, and

* For further illustrations of the multilocular cystic tumours, the reader is referred to the plates indicated.

complained in no way of the bowel, except when constipated, when he also had a little pain at the upper part of the sacrum. There was no trace of recurrence anywhere, but a little recontraction had taken place since last seen in May. The bowel, however, still admitted the index finger well beyond the narrow spot, and above this all was healthy.

This case appears very encouraging, as showing, like many others recorded, in the first place, the possibility and desirability of an early diagnosis of cancer of the rectum; and in the next, the feasibility of its complete removal with safety to the patient in properly selected cases.

I have requested this patient to present himself occasionally at hospital for examination, and shall report further as to his condition, should there be any recurrence.

NOTE ON THE PRACTICAL APPLICATION OF SPONGE-GRAFTING.

By D. J. HAMILTON, M.B., F.R.C.S.E.,
Professor of Pathological Anatomy, Aberdeen.

As from time to time since I wrote my paper on "Sponge-Grafting" in the *Edinburgh Medical Journal*, cases have been recorded in the BRITISH MEDICAL JOURNAL and elsewhere, in which its application for the purpose originally intended has been successful or unsuccessful, I think it may not be uninteresting if I add a few words in addition to what I have already written on the subject in regard to its practical application.

The first experiments I made were by placing a thick slice of sponge in the wound, sufficient to at once fill up the gap caused by the loss of tissue. There are several objections to this precedure, the chief being that a mass of sponge three-quarters to one inch thick placed over a suppurating wound becomes soaked with pus, and prevents any free drain from taking place. The pus so accumulated is almost sure to putrefy, and so interferes with the process of organisation going on in the deep layers. The danger of contact of such a putrefactive mass with an open wound, although less in the case of one that is granulating, is probably not to be underestimated.

I have, accordingly, generally found that in such cases it is necessary to cut off the superficial parts of the sponge, leaving the thin layer, which had become infiltrated with organising tissue, adherent. All this inconvenience can be avoided by adjusting the sponge in successive thin layers over the wound. These layers are not more than an eighth of an inch thick, and must be cut in large slices with a perfectly regular surface. The only method I know by which this can be accomplished is by means of a freezing microtome. I happen to possess a large microtome suited for the purpose, which I employ for cutting sections of the entire brain. It holds an entire Turkey sponge; and, when the latter is frozen, the whole mass can be cut into perfectly regular slices, of any desired thinness. Such a layer can be laid with the greatest facility over the wound, so as to fit into all its irregularities. In a few days, the first layer becomes organised. A second can then be placed over this, and so on, a mass of tissue being thus, in course of time, built up. There is no bagging of pus by this method of applying the sponge, and the danger of putrefaction occurring is reduced to a minimum.

Another precaution that is necessary is, to see that, where the wound is granulating, the edge of the layer of sponge does not come into contact with the pellicle of young epidermis at the side. If so, the epidermis will undermine it, and cause displacement. There ought to be one interval of about an eighth to a quarter of an inch between the edge of the epidermis and that of the sponge.

Dr. Sanctuary, in the JOURNAL of December 16th, makes the remark that firm pressure is a *sine quâ non* in obtaining adhesion. I agree with him so far that, when first applied, there ought to be firm and equable pressure all over the surface; but I question, after adhesion has once taken place, whether pressure exerts a salutary influence in promoting organisation. On the contrary, I should consider that the interstices of the sponge would fill up quicker if the vessels of the granulating part had free play. I should almost say that, in the treatment of a granulating wound of the lower extremity, it would be advantageous, when the sponge has once taken firm hold, to allow the limb to hang downwards, and probably to encourage the patient to take gentle exercise. By this latter means, the circulation through the granulation loops will be rendered active, and a certain amount of vascular turgescence is what is really required.

As regards Dr. Ferguson's observation (BRITISH MEDICAL JOURNAL, December 16th, 1882) that, in a case where he applied a layer of sponge, a quarter of an inch thick, to a wound of the calf of the leg, and where, after organisation had taken place, the new tissue proved to be sensitive, I may say that this might quite well be accounted for by small branches of nerves being carried into the interstices of the sponge by the granulation-vessels.

LARGE CYST OF THE MESENTERY SIMULATING AN OVARIAN CYST: OPERATION: DEATH.

By CHARLES H. CARTER, B.A., M.D., B.S. (Lond.),
Physician to the Hospital for Women.

CYSTS of the mesentery are exceedingly rare. At present only a few such instances have been recorded: Dr. R. Watts (*American Journal of Obstetrics*, 1879, xii, p. 333) describes one which was mistaken for an ovarian cyst, and operated upon: the patient died; also Péan (*Tumeurs de l'Abdomen*, pp. 1,111, 1,112, and 1,115) describes three such which were operated upon, one of the patients recovering. Mr. Spencer Wells speaks of what he considers to be one in a note on Mesenteric Cyst and Tumours in the JOURNAL of December 9th; and Mr. Knowsley Thornton, in the JOURNAL of December 23rd, describes another, which, at the time of operating, he considered of ovarian origin, and included in his list of ovariotomies. The following is an account of a cyst which sprang from the left side of the spine in the lumbar region where the mesentery is attached, and either rose between its folds, or from the subperitoneal tissue below it. Its fluid content was peculiar, and differed from that which has been found and described in the few recorded cases. It was about sixteen pints in quantity, a thin, clear, slightly opalescent fluid, alkaline, specific gravity 1009, giving, on boiling, no deposit, but on adding a few drops of nitric acid a very slight film, redissolved on adding more; no change at the line of junction on pouring some of the fluid on a layer of nitric acid; on adding a 10 per cent. solution of nitrate of silver a very copious white precipitate. The fluid, therefore, contained no albumen, but a large amount of chlorides. Dr. Murchison (*Clinical Lectures on Diseases of the Liver*, p. 61) says these are characters which apply to no other fluid in the body, whether healthy or morbid, but to the fluid from an hydatid cyst. The fluid was carefully examined under the microscope, but no hooklets or anything characteristic could be seen; unfortunately the part of the cyst wall removed was not at once examined to see if it presented the laminated appearance of an hydatid cyst wall. Fluid somewhat similar to this is also found in so-called cysts of the broad ligament.

The following is the history of the case. A. B, aged 44, married twenty-five years, and never pregnant, attended at the Out-patient Department of the Hospital for Women, May 18th, 1882, and was seen by Dr. Mansell Moullin, who found the abdomen distended by a tumour which presented all the characteristic marks of an unilocular ovarian cyst. The patient had noticed the abdomen enlarging for two years. She was admitted under my care June 22nd. With the exception of one brother having died of consumption, her family history presented no marked features. The only illnesses to which the patient referred were one which she called inflammation of the bowels twenty-five years ago, and a second six years ago, when she had "bilious fever" and a second attack of inflammation of the bowels. Her present illness began two years ago, when she noticed a lump in her abdomen, about as large as a good sized orange, about the level of the navel; it appeared to move from side to side with the movements of the body; it gradually enlarged, and as it did so it became less movable; it had grown more rapidly during the last six months. She had had no pain till recently, and that only "a bearing down;" no trouble or difficulty with micturition; the bowels were constipated. She was regular every four weeks, but scantily. On examination, the abdomen was distended, and especially on the left side, where there was dulness on percussion far back; on the right side there was resonance up to the line of the insertion of the rectus muscle. Fluctuation could be distinctly felt all over the front of the abdomen in every direction; in the middle line, dulness extended six inches above the umbilicus. The abdominal measurements were, at umbilical level 38 inches, 3 inches above umbilicus 36 inches, 3 inches below umbilicus 38 inches. The distance from the ensiform cartilage to the umbilicus was 9 inches, from the umbilicus to the pubes $8\frac{1}{2}$ inches: from the umbilicus to the iliac crest, on each side, 10 inches. The vaginal examination showed that the cervix was drawn over to the left side, the fundus lying towards the right foramen ovale; the sound passed $2\frac{1}{2}$ inches; the uterus was movable: nothing of the cyst could be felt by internal examination. The case was diagnosed as an unilocular ovarian cyst, and on July 13th she was operated upon. An

incision was made in the middle line, about four inches in length; and the abdominal walls, which were thin, were easily cut through. On opening the peritoneum, a thin walled cyst was seen covered in all directions with large veins; the hand, passed in, met with no adhesions in front or at the sides, but at the upper part something was recognised as holding the cyst. The cyst was tapped, and about sixteen pints of fluid, with the characters above described, flowed away; as it did so, the cyst was drawn out and was found to have no pelvic attachment and to be unconnected with the ovaries or the broad ligaments; the uterus and the ovaries were found in a natural condition. The cyst was firmly attached to the side of the spine and the left lumbar region; the spleen and the kidney on the left side were recognised as distinct from it, and on drawing up the cyst, its attachment was seen to be closely surrounded by coils of small intestine, which were firmly adherent to it. Seeing it would be impossible to free the cyst from its insertion, an attempt was made to enucleate it by stripping off its peritoneal covering; but this procedure was abandoned, as so many vessels were torn through and the hæmorrhage was free. It was then decided to fasten the cyst to the abdominal wall, cutting away as much as was possible; the circumference of the cyst was tied by six ligatures, and then the cyst was stitched to the abdominal walls by silkworm gut sutures, and a drainage-tube of India-rubber put into the cavity of the cyst; the peritoneum was sponged out and the abdominal wound closed and dressed with antiseptic gauze. The operation was performed under the carbolic spray.

The patient did well for the first twenty-four hours, and then the temperature rose on the evening of the second day to 101.2° and the pulse to 104. On the morning of the third day the dressings were found stained with blood, and there was seen to be a slight oozing from the cyst wall. The pulse and temperature kept up, and the patient began to show signs of septicæmia (with some internal hæmorrhage, this continued), and she rapidly sank and died on the sixth day after the operation.

At the *post mortem* examination, the part of the cyst left was empty and much contracted; the abdominal walls, at its attachment, drawn inwards and inverted; it was firmly attached to the side of the spine and the left lumbar region by a broad attachment, and its insertion was closely surrounded by coils of small intestine, which were intimately adherent to it. On the left side of the cyst the peritoneal coat had been stripped off by an extravasation of blood from a large opened vein, forming a sac about three inches by four, full of semicoagulated blood, and, without doubt, one of the large veins covering the cyst had been pierced by the needle carrying the suture, which fastened the cyst to the abdominal wall; and as the blood flowed, more and more of the vessels were ruptured, and the peritoneal coat torn back. There was also found some slight peritonitis. The uterus and ovaries were quite natural; all the other organs were healthy, but very bloodless.

CASE OF RUPTURE OF FEMALE BLADDER ASSOCIATED WITH ABORTION.

By T. LAWRIE GENTLES, L.F.P.S.G., Derby.

On October 13th, I was requested, at 3 A.M., to visit a woman in a neighbouring street, who was said by the messenger (her husband) "to have had a mishap".

On reaching the house, I found a well made woman of 36 lying on her left side, in bed, vomiting large quantities of a dark brown pungent-smelling liquid. The pillows were drenched with the fluid; so also was the carpet in front of the bed; and on the walls opposite to the patient were stains of a similar nature. There was also half a pint of vomit in the chamber-vessel. The woman was in a state of collapse; a cold clammy perspiration stood on her face; her hands and feet were like ice; and her pulse was imperceptible. There was no one in the house except the husband and two little children, the latter occupying the same bed as the patient; while, to add still more to the ghastliness of the scene, the younger of the children (a babe of nine months) was vainly endeavouring to reach its dying mother's breast in order to obtain its usual nourishment.

I made a rapid examination by the vagina, but found a closed os uteri, and no marked traces of hæmorrhage. I observed, however, that the abdomen was greatly distended. I tried to administer some ammonia, but the patient was unable to swallow; she gave one agonising look of dread, moved her lips as if to speak, and then died, the death taking place within a quarter of an hour after my arrival at the house.

My first impression was that the woman had died of internal hæmorrhage; the only things which seemed to militate against this being the redness of the lips and the copious vomiting. This idea of hæmorrhage seemed also confirmed by what the husband said at the bedside—viz., that "his wife had had a good many clots come from her, and that her linen was very much stained".

I refused, of course, to give any certificate, and communicated with the coroner. In collecting evidence for the inquest, the following facts were clearly brought out; first, that the woman was a drinker; secondly, that she had had a drinking bout for some days; and thirdly, that she had occasional difficulty in passing urine. In regard to the two first points, the husband's evidence was most conclusive, and showed clearly that when the poor woman had one of her drinking fits on, she would not only consume large quantities of beer (her favourite drink), but also all the spirituous liquors she could lay her hands on. In regard to the third point, the husband also made clear the fact that his wife had often suffered from retention of urine, but, "so far, had always got over it." At the inquest, further details of evidence brought to light the fact that the woman had complained of pain in her belly for two or three days previous to death. She had, however, been "up and downstairs" until 1 P.M. of the day preceding her death; but when her husband came home at 6 P.M., he found her in great pain, and was told by his wife that "she had been losing blood." A good many clots were in the chamber vessel, and these he threw away into the ash-pit. The pain getting no better, and finding that his wife was "altering for the worse," he came for a medical man as already stated.

The coroner having ordered a *post mortem* examination, I made one the same afternoon, and in this I was assisted by my brother and son.

There were no external signs of violence, except a slight abrasion on the forehead, another on the lower lip, and a small bruise on the inner side of the right thigh, none of which were of recent date. On cutting through the abdominal walls, the great depth of fat and its extreme "wateriness" arrested our attention, the knife going through the tissue with a distinct "swish". Suspecting an accumulation of fluid in the abdominal cavity, a small incision was made at first. No sooner was this done, than a reddish-brown liquid began to well up. Some of this was drawn off, and the opening enlarged, when nearly six pints of fluid were removed. The stomach and intestines having been carefully examined, were then taken out, in order to facilitate further search for the lesion. The first thing which we noticed was a pint of blood lying in the pelvic basin; and, on making more minute search, a rent was discovered in the posterior wall of the bladder—a rent large enough to admit four fingers. Here, then, was the cause of death. There were some fresh adhesions on each side of the bladder and the pelvic walls; there were also similar adhesions between the bladder and uterus. All these adhesions, however, were extremely soft, and broke with the slightest pressure. The walls of the bladder itself also seemed much thinner than usual. No flakes of lymph could be discovered in the fluid removed from the abdominal cavity, and neither did the peritoneum exhibit any great degree of vascularity. It may, however, be, I think, safely affirmed that a large portion of the fluid found was effused from an irritated peritoneum—the other portion of the fluid being, of course, urine from the ruptured bladder.

On opening the uterus, signs of recent delivery presented themselves; on observing which, I asked my son to tell the husband to rake up "the clots" from the ash-pit. The husband did so, and one of the "clots" was found to be a fœtus, three inches in length.

Now come the questions: When did the rupture of the bladder occur? and, Had uterine action anything to do with it? Supposing that "the pains in the belly", of which the woman complained for two or three days before death, were the commencement of the abortion, it is reasonable to infer that, when true expulsive efforts on the part of the uterus began, these efforts would be aided by the action of the abdominal muscles; and, supposing still further, that the bladder was at that time distended to its fullest capacity, it is perfectly possible that the pressure of the abdominal muscles would be the "last straw" necessary to produce the fatal lesion. I am, therefore, inclined to think that the rupture took place in the afternoon of the 12th. I ought to have stated that, although, when the husband came home at 6 P.M. on that day, he found his wife in bed, she, nevertheless, "kept getting out of bed, trying to pass urine, but could not." There can be but little doubt, that the alcoholic condition of the patient would rob her of her sense of attending to the calls of nature; and it is melancholy to think that, if she had only been seen earlier, a simple catheterism might have saved her.

As a piece of concurrent evidence of the habits of the patient, i

nay be stated that the liver was a genuine "nutmeg"; that the kidneys were thoroughly disorganised (the cortical substance being barely distinguishable); and that the spleen was exceedingly soft. The heart was small and fatty. The lungs were fairly healthy, but here were extensive adhesions in the right pleural cavity. The head was not examined.

THE ACTUAL CAUTERY IN THE TREATMENT OF CORNEAL ULCERATION, &c.

By SIMEON SNELL, M.R.C.S.Eng.,
Ophthalmic Surgeon to the Sheffield General Infirmary and to the School for the Blind.

ALTHOUGH for some time used by various ophthalmic surgeons on the continent, the actual cautery in the treatment of corneal ulcers does not seem to have been much adopted in England; hence I deed, I think, no excuse for recording this brief note.

As to its value, there can, I imagine, be little doubt. In hypopyon ulcer, it in many cases replaces the "Saemisch incision," which has done much for this destructive class of affections, and yields frequently very capital results. Three such cases are at present under my observation. In each the ulcer, directly after the cauterisation, has assumed a healthy appearance, commenced to heal, and the pus in the anterior chamber has disappeared. In an example also of the uncommon condition, bullous keratitis, and which I propose to record hereafter more in detail, the use of the actual cautery yielded excellent results. A case just now of marginal pustule, which seemed disposed to perforate, healed quickly after a slight touch with the cautery. Other cases will suggest themselves for its use, but I have touched upon sufficient for the brief limit I have set to this note.



The application of the cautery is not so painful as first impressions would lead one to fancy, and practically little complaint is made of its employment. It does not necessitate the administration of an anæsthetic. The cauterisation has in some instances to be repeated, and I need hardly add, its application is superficial. By some an iron bulb cautery has been used, and, indeed, I have, in some cases, employed one. Platinum presents, I fancy, however, advantages. It does not readily oxidise and discolour, nor do the organic particles tend to corrode it. Messrs. Pickard and Curry, of Great Portland Street, have made for me a little cautery, which answers well, I think, the purpose for which we require it. It is depicted in the woodcut. The bulb is of platinum, and is about two millimètres in diameter. It is readily heated in the flame of a spirit lamp. Of course a cautery could be employed attached to a battery, or with I suppose the thermo-cautery, but for ocular purposes the advantages would seem doubtful.

TROUBLESOME FREQUENCY OF MICTURITION.

By W. E. STEAVENSON, M.B.Cantab.,
Electrician to St. Bartholomew's Hospital.

THE question of troublesome frequency of micturition has lately been the subject of many questions and suggestions in the BRITISH MEDICAL JOURNAL, chiefly with regard to its treatment. This condition exists in others besides hysterical women; many cases have been quoted of children of various ages, and men; with no other urinary trouble, stone, diabetes, or any other recognised or ascertainable cause, who are constantly troubled by the necessity of frequently passing urine. If this desire is not satisfied, it results in an uncomfortable wetting of the clothes. Many of these cases in young children can be cured by proper training, and are only the result of a careless and dirty habit. Again, they may be caused by a long and irritated prepuce, or by reflex action due to worms; sometimes by the presence of oxalic acid in the urine. In the somewhat numerous cases which came under my observation when resident at the Hospital for Sick Children, Great Ormond Street, it was found that they, as a rule, readily yielded to treatment when the cause was obvious, but were most intractable when no cause could be ascertained. We never tried the effect of electricity upon them; but many of the cases were due, I think, to an abnormal condition of the nervous supply of the bladder, or an increase of reflex excitability of the spinal cord. When we consider that the micturition centre is in the lumbar region of the cord, the stimulation of it by electricity seems to be a rational mode of treatment, if in any way it does not perform its proper functions. On the continent, for some time past, and lately in this country, these cases of frequent micturition have been treated by electricity, with the most beneficial results. One electrode, in the form of a spinal disc, connected with the positive pole of the battery, has been applied to the lumbar region, and the other electrode above the pubes or to the perinæum, and a weak current passed for a few minutes daily, followed by a relief of the symptoms, from the commencement of the treatment, and complete cure usually within a fortnight.

In the first case described in the JOURNAL, which has called forth these remarks, oxalate of lime was discovered in the urine. In the letter from "M.D.," who mentioned the case of an officer from India troubled in this way, reference is made to the effective treatment of these cases by a blister to the back of the neck. Probably, a blister so applied, acts somewhat in the same way as electricity, by its effect on the spinal cord, and, through it, on the micturition centre in the lumbar region. The known action of strychnine on the cord also, points out its use as a rational mode of treatment, as mentioned by "L.R.C.P." in the recent correspondence. But, of all remedies, the passage of a weak galvanic current from the lumbar region to the region of the bladder, or its neck, appears to be the most efficacious in those cases where no reason can be ascertained for this frequent desire to pass urine.

CLINICAL MEMORANDA.

THE TREATMENT OF INFANTILE PARALYSIS.

IN regard to the treatment of infantile paralysis, I cannot do otherwise than insist upon the fact that, the majority of cases derive no benefit from electro-therapeusis. It may be conceded that some few are benefited, and, against these, we may balance about an equal number which are injured.

There is but little advantage in suggesting new names for this disease—at least, in adopting such a substitute as Dr. Barlow proposes, for the term "regressive" has no pathological meaning. We all know what is meant by infantile paralysis, and the fact that it occurs in rare cases among adults, is no argument for its disuse.

The case which Dr. Barlow mentions would, in my opinion, have done just as well without electric treatment. The question of *quid mali* has to be examined and considered, as well as that of the *maximum bonum*, by those who attribute special benefits to electro therapeusis.

ROBERT LEE, M.D.

THERAPEUTIC MEMORANDA.

GELSEMINUM IN TETANUS.

REFERRING to Dr. J. B. Read's paper as to the use of the liquid extract of *Gelseminum sempervirens* in the treatment of tetanus I would make the following remarks. During the session of 1873-74 I communicated to the Liverpool Medical Institution a paper on the physiological action of that drug, and as the result of many observations and experiments, came to the conclusion "that the principal effects produced by large doses are extreme muscular relaxation without either stupor or delirium. In these respects," continues the paper, which was published in April 1875, "its action seems somewhat akin to that of *Conium maculatum*, and these effects would seem to point to its probable utility in tetanus and other disorders attended with severe muscular spasms."

During the following session, Dr. Spratly of Rock Ferry, honorary surgeon to the Birkenhead Borough Hospital, communicated to the Liverpool Medical Institution a report of several (I think three) cases of traumaic tetanus, which he successfully treated by means of gelseminum in the manner indicated by Dr. Read, the doses of the drug being very large, and the effect in each case eminently satisfactory. One of these cases, which, by Dr. Spratly's courtesy, I had an opportunity, of seeing was very severe.

WILLIAM CARTER, M.D.
Liverpool.

THE ACTION OF HYOSCYAMINE.

LATELY I had occasion to use hypodermic injections of this alkaloid in the case of a gentleman, aged 58, suffering from a second attack of acute mania. On a certain day I injected 1-40th of a grain (Merck's). The patient fell asleep in a few minutes, and slept quietly for four or five hours, but on awaking his condition was not much improved. An attempt was made to give the hyoscyamine in

pills four times daily, but he resisted so much that it was uncertain on the next day whether he had really swallowed any of the drug or not. At all events he had had no sleep, and was very restless, talking and moving about incessantly. I therefore injected precisely 1-40th of a grain as before. Again, in a few minutes, he fell asleep, but now the respiratory centre shared in the sleep, his pulse could be felt at the wrist, but his breathing absolutely stopped, and a livid pallor overspread his face. I shook him into general wakefulness, and rolled him over; applied liquor ammoniæ to his upper lip (which was fortunately covered by a thick moustache) so that he might inhale it, and gave him 15 or 20 minims of liquor ammoniæ, in water, as quickly as he could take it. The ordinary "washing liquor," which is to be found in most houses, and which is apparently a fairly pure solution of ammonia, was used, and seemed to act quite well. In half an hour he was out of danger, and afterwards slept for a short time calmly. But on awaking he was more excited and noisy than before, so that in about four hours' time it was necessary to inject 1-80th of a grain. Subsequently 1-60th of a grain was injected without ill effect; but the drug seemed to have no really curative influence upon the mania, the cause of which appeared to be professional overwork and anxiety. The great advantage of the use of the hyoscyamine was that it gave the patient, the attendants, and the whole house some intervals of rest. T. CHURTON, M.D., Physician to the Leeds Infirmary.

SURGICAL MEMORANDA.

A PIECE OF STEEL REMOVED FROM THE EYE BY MEANS OF THE ORDINARY ELECTRO-MAGNET WITH POINTED POLES.

ON July 20th, while at work, a young carpenter came to the hospital with a chip of his chisel in the left eye. On examination by focal illumination, the piece of steel could be seen in the anterior chamber, touching the iris in the lower outer quarter. After an ineffectual attempt to remove it, the patient was again put under ether, and an incision made through the cornea, near the sclerotic junction. The pointed pole of the magnet (described below) was made to touch the lips of the incision, and the battery connected; the foreign body flew up, attached itself at once, and was extracted with the greatest ease. Very slight iritis followed, and the eye was perfectly well in seven days.

The magnet used was the ordinary bar (with a coil round it), shaped like a small horseshoe, by the ingenuity of Mr. Gordon, of the Cambridge Physical Laboratory. The poles were prolonged into sharp iron points, something like a crab's claw, fixed about half an inch apart, one longer and sharper than the other. These points were movable, being screwed into the magnet-poles, and in no way spoiled the magnet. The whole apparatus was adapted in about an hour's time. The battery used was a five-celled Groves.

I send an account of this case, to show how an ordinary electro-magnet may be adapted for such cases, with little expense or trouble. GEORGE WHERRY, M.A., F.R.C.S.,
Surgeon to Addenbrooke's Hospital, Cambridge.

NEW TREATMENT FOR PARAPHIMOSIS.

ABOUT a year ago a child was brought to me suffering from paraphimosis. I could not reduce it by pressure, and was about to cut the stricture, when I was struck with the idea of winding ordinary twine firmly and closely from before backwards around the constricted portion of the penis, thus driving the exudation backwards until I came to the stricture. On unwinding the twine, I found that the prepuce came forward without difficulty. It has since been repeated, always with success. There is very little pain attending the proceeding. M. R. O'CONNOR, M.D.,
Limerick Union Hospital.

OBSTETRIC MEMORANDA.

AN UNUSUAL CONDITION OF THE UMBILICAL CORD.

IN a midwifery case lately attended by me I noticed the following peculiarity upon the umbilical cord. About three inches from the umbilicus was a complete knot, drawn very close, but not so as to impede the circulation; the co d was rather long, but in other respects the case presented nothing beyond the ordinary. The child was strong and healthy. I see no mention is made of this abnormality in Dr. Meadows's *Handbook*. This condition must have existed from an early date of development, so as to allow of the fœtus "diving" between the coils of the cord, and thus producing the knot. ROBERT J. W. OSWALD, L.R.C.P. and S.Ed., M.R.C.S.Eng.,
48, Clapham Road, S.W.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

EDINBURGH ROYAL INFIRMARY.

SEVEN CASES OF REMOVAL OF LARGE UTERINE FIBROIDS AT THE VAGINAL JUNCTION.

Reported by SKENE KEITH, M.B., lately House-Surgeon to the Clinical Surgical Wards.

IN the new infirmary, two small rooms, each containing two beds, are set apart, under my father's care, for the surgical treatment of ovarian disease. I had charge of these wards for the first eighteen months down to the end of September last. Along with ovarian cases, a large number of uterine fibrous tumours of all kinds came or were sent for operation. Of these, some were pediculated fibrous outgrowths, and were, surgically speaking, tempting cases for removal. None were, however, interfered with, on the ground that such growths in no way endanger the life, and rarely even affect the comfort, of the patient. In seven cases, the tumours were so large, or were causing so much inconvenience, or were rendering life so useless from excessive and ever recurring hæmorrhages, that removal was recommended. Some of these operations were tedious, difficult, and laborious. In some, the convalescence was long and doubtful.

CASE I.—Mary C., aged 28, was sent by Dr. Robertson of Ardrossan. She had sought relief in many quarters in vain. The tumour was very large, and was first noticed five or six years before. She was wasted about the chest and arms, like a case of old ovarian disease. The abdomen measured forty-nine inches at the umbilicus; the tumour was firm and solid throughout. The ensiform cartilage was turned upwards, and the growth extended under the sternum and ribs; close to the sternum, there was a large projection, the size of a child's head. No trace of the ovaries could be detected. The greater part of the pelvis was occupied by the tumour. There was no distinct cervix, only a small triangular projection drawn away to the left side, almost beyond reach of the finger. For several years, no great inconvenience had resulted; menstruation was never in excess, and, for the last fifteen months, it had entirely ceased; since then, the increase in the tumour was rapid, and she could do little or nothing, owing to its weight. She sat all day knitting. At twenty-eight, her life prospects were anything but bright.

For obvious reasons, this patient was not taken down to the large theatre, but was operated on in the ward, on April 18th, 1881. Sulphuric ether was given. Every possible antiseptic precaution was taken. The spray was large, and embraced not only the patient, but the operator and assistants. Not a sponge nor instrument was allowed to pass beyond the fine spray-cloud which fell without the slightest current. The sponges, thirty in number, had been lying for long in a 5 per cent solution of carbolic acid, then washed in hot water, and then put into a 10 per cent solution, and wrung almost dry. These were used over and over again, and were not washed in any fresh solution during the operation. Dr. Wilson was present from Glasgow, and there were about twenty visitors and students. The first incision measured twelve inches; it terminated four inches above the pubes, so as to avoid the bladder, which was known to be elevated on the tumour. On the right side, the broad ligament rose as high as the crest of the ilium. The left broad ligament was largely spread over the half of the tumour as high up as the rib. The opening was then enlarged to twenty-two inches, and, by dint of hard pushing and patience, the huge mass was slowly moved forwards as far as its connections on the left side would permit. The right ovary was easily seen. On searching for the left, it was found to be transformed into a long tense umbilical-like cord, seven or eight inches in length. Here and there along this tense band were several small cysts. It was so imbedded in the tumour, that it could never have been removed. The right broad ligament was transfixed by soft iron wires, secured, and divided; all bleeding from the tumour side was prevented by a series of strong locking forceps

The fibroid was now more easily dealt with. It was drawn forwards, so as to put on the stretch its enormous connection on the left side. About a dozen powerful locking forceps, ten inches in length, were now applied to the broad ligament before and behind. The whole was then cut downwards, and the mass enucleated as low as possible. A strong soft iron ligature embraced the base, which was of great thickness. The tumour was then cut away, the stump showing a section of the cervix in the centre. The forceps were removed one by one, and all bleeding vessels separately tied. Some of these were large, and one threw blood over the assistant's head. There was much trouble in finding some bleeding points amongst the loose cellular tissue of the huge gap now left. The hæmorrhage was mostly venous. All present could see that this condition was full of danger, and that secondary hæmorrhage into this loose tissue was not one of the smallest risks of this operation. When all oozing seemed to have ceased, the stump (the thickness of the leg) and the end of the right broad ligament were secured, with much tension, outside; a glass drainage-tube was fixed in above the stump, and the wound closed by forty silk sutures. The operation lasted one hour and three-quarters. After much blood and serum had escaped from the tumour, its weight was 42 lbs.

Ten hours after operation, five ounces and a half of syrupy blood were removed from the pelvis through the tube. The pulse was 94; the temperature 102.2°, rising, two hours later, to 103.4° Fahr. During the night, back-pain was relieved by injections of morphia. The first day was passed fairly well. In the evening, the pulse was 126, and the temperature 102.2°; flatulence was troublesome. She felt weak, and had whiskey and water to drink. There were only four ounces of bloody serum from the tube. On the third morning, the pulse was 120, and the temperature 104°. On the fourth day, the pulse was 114 to 125; and the temperature from 101° to 103.5°. On the fifth day, after a restless night, the temperature had risen to 106°; it fell to 104°, and again in the afternoon it rose to 105.5°. There was œdema of the labia, and much cellular infiltration in the pelvis. She looked very ill during these days, not caring for food, but taking stimulants freely; on the sixth day, the pulse dropped to 92, and the temperature also fell to 101.6°. The tube was removed, there being only a tablespoonful of reddish serum in the pelvis. On the ninth day, the wound was found healed throughout. The stump was dry and sweet. The pulse and temperature almost normal. In the third week, there was again a rise of pulse and temperature from 101° to 103°. This continued for ten days, and caused some anxiety. On the eighteenth day, the wires were loose, and were removed. The loop was two inches and three-quarters in diameter. Seven weeks after operation, she left the hospital. She is now a strong woman again, in perfect health, and can do anything.

CASE II.—Mrs. B., aged 39, was transferred from Professor Fraser's wards in the medical house. Since the birth of her last child, three years before, the tumour had rapidly increased. It now reached the ensiform cartilage, completely filling the abdomen. Menstruation was frequent and profuse. Projecting from the vagina were four distinct swellings; prolapsus of the vaginal wall and bladder, prolapsus of the rectum and posterior vaginal wall. Between these were two large ulcerated swellings, like two fists, exuding a fœtid discharge. These are found to be the lips of the cervix, enormously enlarged. Behind this and pushing outwards was the tumour, completely filling the pelvis. These local wrongs had thoroughly broken down her health. Her life was utterly useless, her condition in every way most miserable. She was a nervous excitable person, bedridden, feeble and emaciated. She was willing to run any risk to obtain relief. The case was far from a promising one, and, at first, the condition of the kidneys seemed to forbid any interference. The urine was of low specific gravity, 1012. The daily quantity passed during the week before operation varied from 80 to 100 ounces. There was a little albumen, but nothing else.

The operation was performed on November 13th, and lasted one hour and twenty minutes. The incision was eighteen inches long. This opening was scarcely large enough, and much force was needed to push the tumour forwards, and especially to dislodge and bring up the pelvic portion, which was tied down by bands of adhesion everywhere in the pelvis. The steps of the operation were the same as in the previous case. The broad ligaments were stripped off and secured separately, and everything fixed in the lower angle of the wound. On proceeding now to remove the clots from the abdomen, a cystic tumour of the right kidney, as big as a child's head, was brought into view. It was pushed under the ribs by the tumour, and, as the operation went on, it came lower and lower into the abdomen. It was covered by adherent mesentery, and was of a very dark colour. It was not examined too curiously. The weight of the tumour removed was 21 lbs. She looked very ill on being placed in bed. Indeed, at this stage, she presented a very hopeless appearance. The interest of the case now centered in the state of the kidneys, and in what would be the probable effect of the carbolic acid spray on such a damaged organ. Soon after operation, she was seized with severe pain, which was relieved by draining off a pint and a half of limpid urine, slightly albuminous; in eight hours, fifty-three ounces were passed. The first night was fairly good, with an opiate. In the morning, the pulse was 104, and the temperature 101.8°. Fifty-seven ounces of urine were passed during the day, making 110 ounces in twenty-four hours. It was clear, with more albumen. The second night was bad. In the morning, she was flushed, and intensely cyanotic; the pulse was 134, and the temperature 101.2°. The urine was smoky, and towards evening it became bloody, and was loaded with albumen. The quantity was fifty-seven ounces during the day. She complained of intense headache, and was flushed and restless all day; the pulse was 130, and the temperature 101°. The third night was also bad; in the morning, the pulse was 128, and the temperature 101.4°; the urine was very bloody. The fourth and fifth nights were also restless. The urine still contained much blood, and some clots caused much distress in passing from the urethra. On the sixth day, the urine was free of blood, but loaded with albumen. On the next day, there was a return of the hæmorrhage, with much pain. On the tenth day, blood was observed for the last time; then came a week of great exhaustion from diarrhœa; and on the twenty-third day all trace of albumen had disappeared. There was free suppuration round the stump, though the wound healed well. She went home seven weeks after the operation, looking clear and healthy. She was freed from all her troubles. The vaginal and rectal prolapsus had disappeared. The cervix was tucked up under the pubes. Strange to say, the kidney-tumour has as yet—now more than a year after the operation—caused no inconvenience, though it has slightly increased in size.

CASE III.—M. V., aged 29, a field-worker from Inverness-shire, was admitted, in April 1881, with an uterine fibroid reaching to halfway between the umbilicus and ensiform cartilage; it filled the pelvis, and pressed so much on the rectum and bladder that much of the patient's time was spent in passing urine. There was a short small cervix. The sound entered six inches. Both broad ligaments were involved. Menstruation was profuse. At one time, she was a strong powerful woman. Of late, she had lost flesh, and had become much depressed, finding that she could no longer make her living, and having no friends to fall back upon.

The operation was performed on May 3rd. No carbolic spray was used. A free opening was made, and the tumour pushed out. When the pelvic portion was got up, it seemed as if it would be impossible to secure this tumour by any extra-peritoneal method—the base being of great thickness, and extending across an enormous pelvis. The broad ligaments were very voluminous, and the ovaries (the size of hen's eggs) were drawn high up, and to the back of the tumour. The bladder required separation downwards. Then the broad ligaments were secured by wire ligatures, twisted tightly, and detached from the tumour, a strong wire being first passed under the pelvic portion. The tumour was then cut away, and, with great tension, the stump was brought into the wound, though it could not be secured there till a large clamp was adjusted over the wire. This made the drag excessive; and, but for the large broad pelvis allowing the stump to be depressed very deeply, the stump could never have been secured outside. The broad ligaments were also fixed to the clamp, and the wound was closed. The operation lasted an hour. The weight of the tumour was 15 lbs.

There was vomiting for the first thirty hours, and large opiates were required. The highest temperature was 100.6°, and that only on one occasion. The highest pulse was 82. Recovery was uninterrupted. The tension was so great, that the clamp, four inches in length, gradually forced itself through the tissues, till it became buried out of sight, except a small portion in the centre, which was the only part visible at the end of the second week. Yet there was never the slightest constitutional disturbance. A very large cavity was thus left when the clamp was removed, and cicatrisation was not complete for eight weeks. She left the hospital on June 24th. She had quite recovered her health, and she weighed 13 st. 12 lb. when she went away.

CASE IV.—M. D., aged 37, had been under observation for four or five years, with a large bleeding fibroid. The cavity was nine inches in length, and everything in the way of remedies was tried in vain. The conditions in the pelvis were so unfavourable that no interference was recommended. She got gradually more and more anæmic and feeble, till she could no longer find employment as a cook. She

was friendless, and her means were exhausted. She was admitted into the hospital in August—more to give her rest and good food, than with the view of trying anything to effect a radical cure. She got worse instead of better, and was even more blanched than before. The effect of the good living seemed only to cause more blood to flow from the uterus. There was a constant drip going on, varied every now and then by a real hæmorrhage. As she had still ten years or more of invalidism to look forward to, at the best, her position was explained to her, and she agreed to anything being done that might be deemed feasible. The tumour reached two inches above the umbilicus. It was softer than any of the other cases—more so now than at any previous time, for it was well drained by long-continued bleeding. There was no cervix, and the mass filled up Douglas's space nearly to the anus. The operation was done on October 26th, after a residence of nearly three months in the hospital. She had long suffered from a chronic laryngitis, and the ether inhalation was difficult. It was agreed to remove the ovaries, should they be removable; for great doubts were entertained as to the possibility of removing the pelvic portion of the tumour. A free incision was made, the ovaries could not be found, and the tumour was turned out. The ovaries were found high up and behind. They were much enlarged, adherent, and imbedded in the midst of enormous varicose veins. They might have been ligatured close to the tumour; but then the pelvic part of the tumour, which was got up by much pulling, could never have been replaced again. The case looked pretty hopeless at this stage, and it was evident that great enucleation would be necessary before the wires could be placed under the pelvic portion of the tumour. The bladder came half-way up upon it, and the base was as thick as the thigh, more than filling the opening of the pelvis all round. The bladder was first detached. The peritoneal covering of the tumour was divided by scissors, right across, a little below a point corresponding to the situation of the umbilicus before the tumour was disturbed. Then each broad ligament was ligatured by soft iron wires, and detached from the tumour, strong locking forceps controlling all bleeding. The separation was continued by the scissors all round till the top of the vagina was reached, when a serre-nœud was applied as low as possible. The tumour was then cut away, all bleeding in the pelvis was stopped, and the stump secured in the wound. The tension was not greater than in the previous cases, while the tissue embraced was smaller. There seemed to be nothing held by the wires but the top of the vagina. The operation lasted one hour and thirty-five minutes. The weight of the tumour was 12 lbs. No spray was used during this operation, and the sponges were simply wrung out of hot water.

For the first week there was laryngeal irritation, followed by slight bronchitis. Still, considering her feeble condition, convalescence was unusually rapid. The opening left after the wires dropped off, was not larger than that in an ordinary clamp ovarian operation, not a trace of cervix could be felt by the finger. The vagina ended in a simple *cul-de-sac* close to the cicatrix in the abdominal wall. The whole organ was removed.

CASE V.—A young woman, only nineteen years of age, was transferred from Dr. Angus MacDonald's Ward and admitted for operation on April 24th, with a fibrous tumour extending midway between the umbilicus and ensiform cartilage. She was of a healthy family. The tumour was first noticed when she was seventeen. Menstruation had all along been painful and profuse, and there was a persistent pain in the left groin. She was anæmic and feeble from excessive hæmorrhages. She was allowed to go on till the day before menstruation was looked for, by which time she had somewhat regained strength, and had so far got over the loss of the previous period. This operation was remarkable only for its simplicity, and lasted little more than half an hour. It was possible to include both ovaries and cervix in an ordinary clamp. The ovaries were much enlarged and diseased. The tumour weighed 9½ lbs. The cavity of the uterus was large and full of fungosities. Recovery was uninterrupted.

(To be continued.)

CHARING CROSS HOSPITAL.

(Under the care of Mr. BELLAMY.)

[FOR the notes of the following cases of interest which have recently been in Mr. Bellamy's wards, we are indebted to Mr. B. W. THOMAS, Dresser.]

Ovariotomy: Recovery.—The object of reporting this case is to indicate that this serious operation is perfectly safe in an ordinary hospital theatre, although the greater mass of the spectators are students engaged in the dissecting, or in the *post mortem* room. The precautions taken were to render the theatre itself and the spectators thoroughly antiseptic; and to allow no one but the operator and his assistant (also rendered antiseptic) to have anything whatever to do with the patient. The theatre was exposed to the carbolic spray for some hours before operating, and, until the peritoneum was opened, the spray played on the patient, the operator, and his assistant; it was then withdrawn, and merely left playing freely into the theatre.

A. B., aged 30, was admitted on November 30th, 1882. The only serious illness she had had was twelve years ago, when she was laid up with inflammation of the bowels and congestion of the lungs. The family history was good; she had had two children, and both were living. Eleven months before admission, she was confined; she remained in bed for fourteen days after this, and noticed that, although her abdomen became a little smaller, it never returned to its normal size. Last June, the patient observed that her abdomen had recommenced to swell, and that it continued gradually to enlarge; she had suffered great pain, referred to the right lumbar region, since her confinement. From that time, up to three weeks before admission, she had suffered from menorrhagia. She looked pale and wasted; the abdomen was symmetrically enlarged, but to the greatest extent in the umbilical and hypogastric regions. The abdomen was dull on percussion from the ensiform cartilage to the symphysis, and on each side, for six inches from the umbilicus; it was resonant in the flanks. The circumference of the abdomen at the umbilicus was 35½ inches. The measurement from umbilicus to ensiform cartilage was 6½ inches, and from umbilicus to symphysis pubis 9½ inches.

On November 15th, Mr. Bellamy held a consultation with his colleagues Dr. Black examined the uterus, and said that "he failed to pass the uterine sound beyond the os; he thought he could feel distinct fibroids in the uterus, and that the lateral margins of the uterus were distinct, but not so the fundus of that organ."

On November 24th, Dr. Black again examined the patient, and passed the uterine sound easily; there was "flexion" of the uterus. Mr. Bellamy then inserted a trocar near the umbilicus, and drew off about half an ounce of a thick glairy fluid for examination.

November 30th. In the presence of the other members of the staff, Mr. Bellamy performed ovariotomy. An incision having been made through the walls of the abdomen, the cyst was clearly seen; no adhesions of any kind were discovered. The operator then thrust a Spencer Wells's trocar into the cyst, from which a thick glairy albuminous-looking fluid ran slowly out; at the same time, an assistant seized the cyst with forceps, and drew it outside the abdomen, while Mr. Boyd kept up pressure on either side of the incision with carbolic sponges; a second smaller cyst had also to be pierced. The pedicle was next tied with five ligatures of thick carbolised catgut. The tumour was then removed; no blood oozed from the pedicle, and no cystic fluid nor blood entered the abdomen; but, for safety, the abdominal cavity was wiped out antiseptically. The wound was then united with four harelip-needles, and four wire sutures were placed between the needles, to draw the parts into closer apposition. The parts were then dressed with antiseptic gauze, and a flannel bandage placed over all.

December 1st. The patient had passed a good night, looked bright and in good spirits. One-sixth of a grain of morphia was injected three times during the night. The pulse, strong and regular, was 115.

December 2nd. A rapid rise of temperature occurred, supposed to be due to over-feeding *(per rectum)*. Food was ordered to be diminished, with a satisfactory result. The urine was high coloured, clear, and acid; specific gravity 1029.

December 6th. The dressing was changed under the spray for the first time, the wound had united by first intention, there was no inflammation, and the dressings were sweet. The wire sutures were removed. The wound was dressed again on December 9th. All the parts were healthy, and there was no tenderness on pressure; the needles were removed.

The patient sat up December 15th, and was discharged cured on December 20th.

Colotomy: Improvement.—W. A., aged 59, a postman, was admitted on November 15th, 1882. His family history was exceptionally good. In May 1881, he noticed that his motions were constipated; and, on examining them in the stools, he saw a small amount of blood. From that time, his motions became more and more of a watery nature. From the first, the passage of fæces had not caused any pain. When admitted, he was a strong, robust, healthy-looking man. Fæces passed almost involuntarily. There was a great amount of

flatulence, which seemed to cause him more pain in its passage than fæces. In the lower three-and-a-half inches of the rectum, large hard nodulated masses were felt all round the gut; when first admitted, it was possible to get the finger beyond a constriction about three-and-a-half inches up, into a part of gut which appeared to be free from these lumps; afterwards, it appeared to pain the patient more, and it was impossible to get beyond.

December 7th. Mr. Bellamy performed colotomy, according to Amussat's operation. The parts were very fatty, so that it was very hard to find the descending colon; the gut was, therefore, inflated with fluid from the rectum; the colon was then distinctly seen, and secured in the usual way.

REMARKS BY MR. BELLAMY.—Since the operation, so far as it was concerned, the patient has progressed very favourably; but there has been a steady growth in the original seat of disease. When the patient first presented himself, he was hale and hearty looking, suffering no pain whatever; and it was, after due examination and consultation, determined to perform excision of the rectum; but the disease progressed so rapidly, and the prostate and bladder appeared to be so adherent to the mass, that I considered it preferable to perform colotomy at once, instead of subjecting the patient to a partial operation, which could not mitigate suffering, only add to it, and eventually, if operative proceedings were had recourse to, render far more serious steps necessary. It was a typical case of difficulty. The man was fat; he had an immense amount of subperitoneal fat, and the colon was as flat as a bandage, and recognisable only by relation and "feel". The finger passed downwards into the incision in the gut felt the encroachment of disease, certainly as far as the limit of the peritoneum, confirming the opinion formed.

Fatty Tumour between the Ribs: Removal: Recovery.—Some time ago, Mr. Bellamy, in this JOURNAL, called attention to peculiar regions in the body, where fatty tumours were commonly found—*e.g.*, the dorsal aspect of the phalanges, the tongue, and pedunculated fatty masses in the thigh, etc. This case, from its rarity and uncertainty in diagnosis, would seem worthy of report.

E. G., aged 28, was admitted on November 20th, 1882. When twelve years old, the patient suffered from scarlet fever; two years later, she was laid up for seventeen weeks with diphtheria. She had had four children, of whom three survived. Twelve months before admission, she was confined; after which, she suffered for thirteen weeks with puerperal fever. Since the puerperal fever, the patient had experienced an almost constant pain in the left side of the chest, greatest in the region of the left mamma. About a month before admission, she felt a rather sharper pain than usual in her side. On removing her clothes, she noticed a lump situated about the sixth rib. An oval tumour, measuring two by one and a half inches, semisolid, with doubtful fluctuation, was apparently attached to the lower border of the middle of the body of the sixth rib, on the left side; it was freely movable. The skin was freely movable in all directions over it. Direct pressure on the tumour caused stabbing pains.

On November 20th, Mr. Cantlie inserted a grooved needle, to make sure of the absence of fluid.

November 23rd. The tumour was removed by Mr. Bellamy, and found to be of a fatty nature; it grew from between the layers of the intercostal muscle. The wound was dressed antiseptically.

November 27th. The parts were swollen and inflamed around the incision, and tender near the mammary region.

November 29th. The patient complained of pain being greater; the wound was unhealthy; the dressings were removed, and poultices were applied.

December 1st. All the parts were healthy and sweet; and she was discharged, well.

ROYAL INFIRMARY, GLASGOW

CASE OF COMPOUND FRACTURE OF THE CLAVICLE: SUTURING OF THE FRAGMENTS BY MEANS OF WIRE: RECOVERY, WITH OSSEOUS UNION.

(Under the care of JAMES WHITSON, M.D., F.F.P.S.G.)

COMPOUND fractures of the clavicle, though occasionally heard of, are yet of sufficient rarity to justify their being placed on record; as a complication in such cases, it now and then happens that one or other of the large blood-vessels in the neighbourhood are injured at the same time. Mr. Bryant (*Manual of Surgery*, vol. ii, p. 390) mentions the fact that the late Sir Robert Peel met with an accident of this description, which resulted in the formation of a pulsating blood-tumour, most likely due to the laceration of one of the large veins in the neighbourhood; and, from the severe pain which was present, some of the nerves composing the brachial plexus were probably injured as well. Mr. Erichsen (BRITISH MEDICAL JOURNAL, June 7th, 1873) had a patient in whom the subclavian vein was pressed upon by a fragment of a broken clavicle, and it became necessary soon afterwards to amputate at the shoulder-joint.

A case of compound fracture of the clavicle, happily free from any of these complications, recently came under Dr. Whitson's care, while taking charge of Mr. Clark's wards in the Royal Infirmary, and the following history of it was kindly furnished by Mr. Sinclair, House-Surgeon. Archibald W., aged 15, a farm-servant, while at work in the harvest-field, on the morning of September 5th, 1882, was knocked down and run over by a reaping-machine. He was conveyed to town as speedily as possible, and, on admission, he was found to have sustained a compound fracture of the right clavicle, situated as nearly as possible in the middle of the bone, accompanied with a large lacerated wound which extended from above the clavicle down towards the axilla, and was altogether about five inches in length. There was also a compound fracture of the right humerus in its upper third, coupled with extensive bruising and abrasion of the skin of the back and thigh. There was very considerable riding of the broken ends of the clavicle, which it was noticed were stripped for a short distance of periosteum; as the fracture was oblique in its direction, a sharp projection was removed with the bone-forceps in order to obtain as perfect apposition as possible. The wounds were carefully injected with a solution of carbolic acid of one to twenty strength, the edges of the large laceration over the bone were brought together with catgut stitches, several drainage-tubes were inserted, the whole being afterwards dressed with protective plaster and gauze under the usual antiseptic precautions. A rectangular splint was applied to the right arm, and a pad was placed in the axilla as well.

The dressings were changed on the second day (September 7th), when everything appeared to be doing well with the exception of the back, which was much abraded, and the clavicle, one of the broken ends of which was found to be overriding that of the other. Being unwilling to reopen the wound if it could possibly be avoided, Dr. Whitson contented himself with putting a good pad of gauze over the fracture, while lint, with vaseline spread over it, was applied to the back.

On September 12th, however, it became evident that something must be done to keep the fractured ends of the clavicle accurately together, as the broken humerus and excoriated back were both augmenting the tendency to displacement. Suturing of the fragments appeared to offer the best solution of the difficulty, and the patient was accordingly put under chloroform, while the cicatrix, which by this time had formed, was divided with a few touches of the knife, in order to expose the parts at the seat of injury. Both ends of the bone were drilled, and a thread of tolerably thick wire was passed through the tracks so made; by tightening this, satisfactory approximation of the fragments was obtained. Two button-sutures were used to relieve tension, and so assist in promoting union between the edges of the wound; drainage-tubes were reinserted, and fresh dressings applied in the ordinary manner. These were regularly changed about once a week; and, on October 7th, the wire was untwisted, and, after some trouble, pulled out of the bone; osseous union was found to have taken place. The patient, who was a fine healthy lad, made an excellent recovery; and, on December 12th, Dr. Whitson received a letter from him, stating that the whole of the right side was gradually getting stronger, and he hoped before long to be able to resume his ordinary occupation.

REMARKS BY DR. WHITSON.—In cases such as the preceding, suturing of the broken ends would seem to me to be the most effectual method of treatment, and the one best calculated to yield a satisfactory result. The difficulty in the removal of thick wire constitutes almost the only drawback to its use; and, if rough or hasty measures be adopted at this juncture, a re-fracture is extremely likely to ensue. Should I be again called upon to treat a similar case, I would be inclined to leave the wire in until it could eat its way out of the bone; and, from the fact that, in the present instance, it became quite loose for some days before it was taken away, I am disposed to think that the process of extrusion was in progress, and only needed sufficient time to become completed. The presence of the wire, though perhaps rather inconvenient to the patient, can hardly do harm; and it certainly must be better to retain it for a little longer with comparative safety, than run any risk of renewing the fracture by its premature removal.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 2nd, 1883.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Carcinoma of Œsophagus.—This specimen was shown by Dr. NORMAN MOORE. The cancer occupied the middle third of the œsophagus. It infiltrated the whole wall, and had caused a stricture just admitting a large probe. The œsophagus was adherent to the lung, and at the point of adhesion its wall was perforated. The lung was at this point pneumonic, but not gangrenous. Secondary masses were shown in the small intestine, liver, spleen, mesenteric glands, and both lungs, and there was one nodule in the outer wall of the left ventricle. All the secondary masses were very firm, and those in the ileum were of the same shape as the new growth in the œsophagus; that is to say, they encircled the tube and infiltrated all its coats. The patient was a man aged 56. His first symptoms of dysphagia were in May, and he died in December, so that the duration of the new growth was about eight months. Twelve cases of carcinoma of the œsophagus had been examined at St. Bartholomew's in fifteen years. All were males. In six the lower, and in five the middle third were affected. In four cases secondary growths were found in the lungs; in one in the heart. Exhaustion was the commonest cause of death. Hæmorrhage was fatal in two cases; pleurisy in three; gangrene of the lung in one. The ages of the patients ranged from 36 to 58.

Lymphosarcoma invading the Duodenum.—Dr. NORMAN MOORE showed a lymphosarcomatous growth originating in the lumbar glands. They were greatly enlarged, and the mesenteric glands to a less degree. The duodenal wall was greatly thickened, and the mucous surface ulcerated. There were no other infiltrations. The specimen was from a woman, aged 41. During life, an irregular ovoid tumour was felt in the epigastric region. The greater part of it was dull on percussion; a lesser part was slightly resonant. The dull part was where the duodenum was most thickened by infiltration. The resonant part was where it was dilated. There was no intestine in front of the tumour. The duration of illness was eight months. A pulsation in the abdomen was first noticed, then vomiting after food, and the abdominal tumour.

Endocarditis with Miliary Abscesses of the Heart in a Case of Hip-joint Disease.—This specimen was also exhibited by Dr. NORMAN MOORE. The hip-joint showed denudation on both surfaces, and the ligamentum teres was detached from the femur. The joint was full of pus, and so was the right sternoclavicular joint. The heart showed growths on and destruction of the aortic valves, and one large endocardial ulcer on the upper part of the ventricular wall. Both ventricles showed white specks looking like tubercles, and there were similar specks on the pericardium and in the liver and mucous membrane of the small intestine. On the surface of the brain were similar specks surrounded by injected patches. The spleen, kidneys, and right lung contained softened infarcts, and there were pleurisy, pericarditis, and peritonitis. The little specks were not tubercles; they had no reticulum and no giant-cells, and yielded (on Ehrlich's method) no bacilli. They consisted of contiguous leucocytes, and were in fact very small and early abscesses. The patient was a boy, aged 16. He had a fall on November 11th, which was followed by fever. Two days before death he became hemiplegic, with symptoms pointing towards tubercular meningitis. Probably, the hip-joint disease was of long standing, and the fall set up acute inflammation. This was followed by ulcerative endocarditis, and to it the infarcts and miliary abscesses were due. Thus he had pyæmia with its results associated with ulcerative endocarditis and its consequences.—Dr. GOODHART said that he had observed that cases of ulcerative endocarditis occurred in groups. This was a point which he had previously discussed before the Society, and during the past two months he had seen three fresh instances. Was there some connection between such examples and the time of the year?—Dr. CURNOW had observed three cases since October, 1882, at the Seamen's Hospital. In all these, the mischief was sequent to chronic valvular disease.—The PRESIDENT stated that he believed it was the general rule that the recent action in such cases ensued on old valvular mischief. There was much interest in the specimen brought forward by Dr. Moore, because it showed how at least three diseases were allied; for he (Dr. Wilks) presumed that the pyæmia was supposed to have started an endocarditis, and this again had produced embolisms in various parts of the body. Had tubercle also resulted, this would make the series even more remarkable, especially if micrococci had been detected. The relations of the pyæmic endocarditis to rheumatic affections of the heart was also alluded to.

Chronic Inflammation of the Glottis, Trachea, and Larynx.—Dr. NORMAN MOORE showed this specimen, which was taken from a woman, aged 25, who died with phthisis, under the care of Dr. Church, in St. Bartholomew's Hospital. Her death occurred in a sudden attack of dyspnœa. The vocal cords, arytænoid cartilages, arytænoepiglottidean folds, and epiglottis, were all greatly thickened. A slight additional œdema completely occluded the glottis. At the root of the epiglottis there was a small erosion, and there was a long ulcerated patch in the trachea, but no tubercles were visible except in the lungs, where there were also cavities.—Mr. WALSHAM asked whether a microscopical examination of the laryngeal disease had been conducted with a view to determine whether there was a deposit of tubercle, and what was the state of the muscular fibres.—Dr. NORMAN MOORE said that a histological investigation of that case had not been made. He certainly regarded the infarcts in the spleen and kidneys, and elsewhere, as secondary to the ulceration of the aortic valve. The white specks or miliary abscesses, both from the pericardium and liver, had been examined after Koch's method, but with negative results; there were clearly no bacilli in these foci. So far as he knew, the disease called ulcerative endocarditis was not endemic at any period in St. Bartholomew's Hospital.

Fibrinous Coagula loose in the Auricles of the Heart.—Dr. F. C. TURNER exhibited these specimens. There was stenosis of the mitral valve, with vegetations at the lines of contact and on the adjacent wall of the auricle. There was also dilatation of the heart; and in the left auricle, a fibrinous coagulum, of the size of a hen's egg, lying quite loose, with a surface in part smooth, in part rough; the clot had evidently formed some time before death. In the left auricular appendix, there was an adherent coagulum, whose exposed surface was rough and broken; but this did not seem to correspond with any other part in the neighbourhood The appearances described closely simulated those depicted by Dr. Ogle, in plate 1 of the fourteenth volume of the *Pathological Transactions*, in which case there existed a solid fibrinous spherical clot, and mitral stenosis. The second specimen was taken from a woman, aged 34, who was admitted into the London Hospital in a dying state. The history showed an attack of rheumatism two or three years previously. The patient had been ill for a month this time, with great weakness and sudden pain about the umbilicus. The heart was enlarged. There was a diastolic *bruit* along the left border of the sternum, and a double mitral murmur. The lungs were full of coarse *râles*. At the necropsy, the body was much wasted; there was œdema, and about a pint of serous fluid in the peritoneum. The heart weighed twenty ounces, and showed recent vegetations on the tricuspid valve. In the right auricle was a small fibrinous coagulum, almond-shaped, one and a quarter inches long, not sacculated. There were several hæmorrhagic infarcts in the lungs, and two in the right lung were softening, and had set up adjacent pleurisy. The base of the right lung was in a state of pneumonic consolidation. The spleen showed infarcts, and was hard and enlarged. The liver was granular, congested, and weighed two pounds nine ounces. The kidneys were also swollen. The specimens were of interest, from the part which they probably played in causing the death of the patient. Solid and sacculated coagula had, not unfrequently, been found lying free in the cardiac cavities, and always in association with mitral disease. One of the cases possessed additional interest, from the presence of recent inflammation of the tricuspid valve.

Fibrinous Coagulum attached to the Pleura.—This specimen was also shown by Dr. F. C. TURNER. The dendriform pedunculated growth was attached to the edge of the base of the lung by a narrow pedicle. In shape, the polypus resembled a piece of coral; it was white and smooth, elastic and firm, and looked like cartilage, for which it was mistaken till a microscopical examination proved it to be laminated fibrin. This polypus probably corresponded to those globular bodies, either attached or loose, which had been found in the pleura or peritoneum. Dr. Turner quoted Mr. McCarthy, who thought that this polypus might have been an altered and degenerated lobule of lung. There were some old pleuritic adhesions, but not in the neighbourhood of the dendritic growth. The man from whom the sample was taken, was aged seventy, and died of suppurative nephritis, secondary to an enlarged prostate with calculus.

Lardaceous Disease of the Liver—This example was also brought forward by Dr. TURNER. The liver was removed from a man aged thirty-four, who had had a hard chancre, with secondary affection of the throat and skin, ten years before. The liver weighed 11lbs. 3ozs.; it was firm, large, smooth, and apparently cirrhotic. Micro-

scopic study of sections showed that the disease was entirely lardaceous. There had probably been infiltration of lardaceous material along the capillary network of vessels, which had spread out the hepatic tissue, so that in places only an incomplete network of attenuated liver cells existed; the liver was not uniformly infiltrated, but the areas tended to take on a *discrete* appearance, so that separate islets or nodules of amyloid change existed. The kidneys also were lardaceous and swollen. The heart weighed sixteen ounces.—Dr. BARLOW asked whether the localised lardaceous changes might not be regarded as samples of retrograde gummata; he had seen a liver, taken from a syphilitic subject, which closely resembled the description which Dr, Turner had given. It was known that gummata did sometimes give the characteristic reaction with iodine, and he called to mind a specimen in the *post mortem* theatre at Guy's Hospital.—Dr. NORMAN MOORE spoke of two somewhat similar cases of lardaceous hepatic disease where there was a most distinct amyloid reaction; in those specimens there was no real evidence of syphilis. —In reply, Dr. TURNER did not know that gummata invaded a liver so extensively as in the specimen he had shown; moreover, there were always some liver-cells in the midst of the lardaceous change, and the liver was uniformly enlarged; for these reasons, he regarded the sample as one of general infiltration along the capillary vessels. —Dr, GOODHART remembered how Dr. Fagge, in a similar case, had rejected the notion of retrograde gummata, and how it was considered that lardaceous disease sometimes had a tendency to grow up in a nodular, rather than a diffuse form.—Dr. CURNOW asked whether it were possible to have gummata so numerous in one liver as the specimen apparently indicated. — Dr. TURNER said the white patches were remains of proper liver-tissue.—Dr. BARLOW admitted that Dr, Turner's specimen had some resemblances and some differences with the one of which he had spoken. It should be remembered that the boundary lines between gummata, fibroid infitration, and simple cicatricial patches were almost vanishing points. It was a question of degree, and there were no very sharp lines of demarcation.

Mucous Polypus of Bladder in a Child.—Mr. SHATTOCK said that the specimen came from a girl, and exactly resembled a nasal mucous polypus in its histological characters. A long process occupied the urethra. The pelves of the kidneys were dilated, but the renal substance was healthy. The case was a fit one for surgical treatment, but unfortunately the patient died from exhaustion before an operation could be performed.

Animal Rickets.—Mr. J. B. SUTTON demonstrated these specimens. The bones of a child, exhibited by Dr. Goodhart at the last meeting, were compared with some specimens from a baboon, which Mr. Sutton had already brought before the Society. The present animal died at the age of 18 months; it was a West African baboon. The liver was large, and gave a distinct reaction to iodine, showing lardaceous disease. The bones were exceedingly vascular. The natural curvatures of the bones were much exaggerated, but no fracture had occurred. The ends of the bones showed the characteristic deformity; cartilaginous islets were to be seen on section. The skull was remarkably thick, especially the vault, but this hypertrophy ceased at the superior curved line of the occipital bone; posterior to which, a condition not unlike cranio-tabes, was to be seen, but on comparison with the skull of a normal baboon this conjecture was not substantiated. The suture between the mastoid and occipital bones was very thin, and almost diaphanous. The right radius and ulna showed a peculiar deformity, so that the articulating surfaces of the radius and ulna, with the trochlea of the humerus, were much more extensive than usual, and of abnormal shape. There was also a detached nodule which resembled a carpal bone. With regard to the teeth, it was remarkable how soon monkeys cut their milk-teeth. Each dental follicle, which normally consisted of delicate connective tissue continuous with the pulp-cavity, became greatly thickened. This might serve to explain so characteristic a feature of rickets as the delayed dentition. In rickets, the line of advancing ossification was in a state of wild confusion, and thus processes of cartilage become pinched off from the general mass; to recognise this, Mr. Sutton would specially reserve the name of "diffuse epiphysis," this being typical of rickets.—Mr. EVE had paid particular attention to the bone-diseases of animals. There was in them the purest form of rickets. Many specimens of bones in the Royal College of Surgeons demonstrated an extraordinary porotic condition; the skull and long bones of lions might be extremely thickened, and all owing to a genuine osteoporosis. The cartilaginous islets which became separated from the advancing line of ossification, the so-called *epiphysal* line were parts of the growing bend of the *diaphysis*.—Mr. CLEMENT LUCAS inquired as to the diet of the baboon; and at what relative time rickets set in in these animals. No doubt, rickets might occur in all vertebrated animals, but Dr. Baxter had failed to produce it in puppies; possibly this was owing to a too severe mode of procedure, under which the animals died before the rickets could manifest itself.—Mr. LUCAS narrated the case of a greyhound which contracted rickets, probably from bad feeding; the deformities of the bones disappeared under the use of better diet.—Dr. GOODHART thought that the presence of a lardaceous reaction in the liver raised the question of syphilis.—Dr. BARLOW followed with the same notion, because there was a reaction with iodine, and so it was probably not the ordinary albuminoid enlargement first described in rickets by Sir William Jenner.—Mr. SUTTON, in reply to the President, said that ten years was the average duration of the baboon's existence, and six months would correspond to about three and a half years of human life. The ossification of course occurred at the end of the diaphysis, but the process in the epiphyses was not regular in rickets, as he had observed in the lower end of the femur and elsewhere. Baboons were fed on nuts, fruits, and soaked bread, and any other stuff given by the visitors of the Zoological Gardens. Mention was made of a lizard with cartilaginons tumours, of which the skeleton was so soft that it could be wound round the arm.—The PRESIDENT said that in the Anthropological Society's Museum there was a monkey, supposed to be affected with syphilis.—Mr. SUTTON had never seen any sign of syphilis in a great number of examinations made on the material furnished by the Zoological Gardens.

Card Specimens.—Dr. ANGEL MONEY showed a specimen of cirrhosis of the liver taken from a girl 8 years old. The fibroid overgrowth was extreme. The organ weighed 19 ounces. There was an alcoholic history.—Mr. R. J. LUNN showed a specimen of renal abscess, which had burst into the left pleura, in a man aged 65.—Dr. R. G. MORRISON exhibited a sample of crystalline deposit, chiefly of carbonate of lime, in the hepatic ducts of an ox.—Mr. R. J. LUNN also brought a ruptured stomach, in a male 4 years old, of traumatic origin. The patient had been run over by a cart. Death ensued in a few hours.

After the annual election of officers and other business had been transacted. the meeting adjourned.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 6TH, 1882.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

Deciduous Membrane.—Dr. CLEVELAND exhibited a fleshy finger-like sac, passed forty-eight hours after labour, by a patient who after a former labour had passed a similar substance, which he had then exhibited to the Society. After careful search, he had found no trace of a double uterus..—The PRESIDENT could think of no other origin for such an unbroken decidua than that it came from an uterus bicornis.—Dr. WYNN WILLIAMS described a case of double uterus at present under his own care.

Microscopic Sections of Carcinoma Uteri.—Dr. EDIS howed microscopic sections illustrating his case of malignant disease of the cerivx complicating pregnancy. The amount of stroma was small, compared with that of the cells, the appearance thus resembling that of medullary cancer.

Perimetric Abscess.—Mr. GRIFFITH showed a specimen of perimetric abscess, situated behind the uterus and left broad ligament, displacing and obstructing the rectum, and opening at three places into the cervix uteri, vagina, and rectum.

The Directions of Uterine Contraction.—Dr. GODSON showed an uterus removed by Porro's operation, which demonstrated well the wrinkles on its peritoneal surface caused by the contraction of its muscular fibres underneath.—Dr. ROUTH had heard the uterine *souffle* by the vagina or over the sacrum in cases in which he had failed to hear it by auscultating the abdomen.

Retained Placenta.—Dr. WYNN WILLIAMS exhibited a placenta retained for three months after abortion, and removed by him.

Fibroids removed by Abdominal Section.—Dr. BANTOCK exhibited five specimens of uterine fibroids, weighing respectively 3 lbs., 8 lbs., 13½ lbs., 3 lbs., and 2 lbs., removed by abdominal section. One patient died, four recovered. In each case, the pedicle was secured by Kœberlé's *serre-nœud*, upon the value of which Dr. Bantock remarked. He thought that, whatever might be the future of oöphorectomy for the cure of fibroids, it could not compete with hysterectomy in cases such as those exhibited, in each of which there were substantial objections to the former operation.—Dr. ROBERT BARNES thought fibroids such as Dr. Bantock had shown better dealt with by hysterectomy. At present, he inclined to think Battey's operation

best suited for hard fibroids in the wall of the uterus and projecting inwards. Malignant and myxomatous tumours it was better to extirpate. He could speak from clear observation of the remarkable effect of Battey's operation upon fibroids. Within a year after this operation, he had found a tumour the size of the fist practically gone.—Mr. KNOWSLEY THORNTON did not think hysterectomy should be performed for fibroids until oöphorectomy had been tried and failed. He had done the latter operation ten times: all the patients had recovered; all had been benefited; and in all the uterus had diminished in size, in some to a surprising degree. Not merely the ovaries, but the tubes, and the large vessels in the broad ligament, ought to be removed.—Dr. GODSON corroborated Mr. Thornton's statement as to one of the cases operated on by him.—Dr. CHAMPNEYS asked Mr. Thornton in what cases he thought the operation should be done.—Mr. THORNTON thought only in cases in which life was threatened.

New Lamp.—Dr. AVELING exhibited a modification of Swan's incandescent carbon lamp, so made that it could be introduced into cavities of the body for operative or endoscopic purposes.

Ruptured Perinæum: New Method of Operating.—A paper upon this subject, by Dr. WYNN WILLIAMS, was read. In this operation, the sides of the rent were first denuded in the usual way. Then a flap of elastic tissue, about two-thirds of an inch in width, about two lines in thickness, and long enough when on the stretch to reach as high as the denuded surface on the labia, was dissected up from the floor of the vagina. Sutures were then passed through the denuded surfaces, in such a manner as to keep the edges as well as the flat surfaces of this flap in contact with the raw surface. This being done, the sutures were secured in the usual way. When the rupture involved the sphincter ani, the flap was made, and the sutures passed through it in the same way as in the simpler cases; but the rent in the wall of the rectum was sewn up with sutures made to terminate within the bowel, and the deep sutures secured before those bringing the flap into position were tied.—Dr. AVELING asked what was Dr. Wynn Williams's practice with regard to the action of the bowels after operation.—Dr. BANTOCK objected to the practice of tying the knees together, and also to the use of vaginal injections after operation. He had performed Dr. Wynn Williams's operation once, but was not much impressed by it.—Dr. CLEVELAND thought that rupture of the perinæum could often be prevented by restraining the too rapid emergence of the child's head, which could be done by judicious counter-pressure.—Dr. SAVAGE thought the difference was overlooked between mere tegumentary lesions, and rupture extending through the perineal body. In Dr. Williams's operation, a narrow tongue of tegument was reserved in the course of denudation, and plastered over the crevice left after bringing the raw surfaces together. No additional strength resulted from this, because the tongue was merely tegumentary. Early operations were tegumentary, and failed altogether. The perineal body was the centre of attachment of the perineal muscles, and the mainstay of the floor of the pelvis.—Dr. ROUTH thought that rupture of the perinæum could not always be prevented, and sometimes a slight laceration was not so great an evil as prolongation of the labour. He had, in early practice, succeeded completely with ordinary sewing needles and thread. He concurred with Dr. Savage's remarks as to the perineal body; but had seen that the perinæum made by Dr. Williams's operation was remarkably strong and effective.—Mr. KNOWSLEY THORNTON thought this mode of operating gave remarkably good results; but it was not new, having been described by Mr. Teale of Leeds, and practised by many American surgeons.—Dr. MURRAY had seen the operation now described, and thought it gave a firm perinæum. It was not always prudent to retard the progress of the head. Laceration of the perinæum might often be prevented by making one or two lateral cuts.—Dr. CAMPBELL POPE said that primary union might often be obtained by applying a broad strip of plaster to hold the nates together.—Dr. EDIS said that rupture might often be prevented by straightening the legs while the head was emerging, and also by making a nick on each side of the perinæum. Union might be obtained by operation twelve or twenty-four hours afterwards. It was unnecessary, and rather jeopardised healing, to keep the bowels constipated after operation.—Dr. CULVER JAMES had in one case operated immediately after labour with a rather large common household needle, and obtained union.—The PRESIDENT had seen the results of many methods of operating, and could not say that one was better than another. He had stitched up a perinæum two weeks after delivery without denudation or cutting of any kind, and it healed sufficiently.—Dr. WYNN WILLIAMS did not confine the bowels after operation. The perinæum made without the flap he had described was apt to be too thin. He was not aware that his operation had been described before; it certainly was not alluded to in any work on gynæcology.

Pregnancy complicated with Cancer of the Cervix: Cæsarean Section: Recovery.—This paper, by Dr. EDIS, was read. The patient came to the Middlesex Hospital in November 1881. She had begun to suffer from pain, hæmorrhage, and discharge eleven months previously. She presented the signs of six months' pregnancy, and there was epithelioma, involving nearly the whole circumference of the cervix, and the greater part of the posterior vaginal wall. Palliative treatment was adopted until February 1882. Labour-pains then came on, and the os dilated to the size of a five-shilling-piece. It being judged impossible for delivery by the natural passage to take place, Cæsarean section was performed by Mr. Morris. The child was born in a state of suspended animation, but recovered. The mother recovered; and, when she was seen in September, the disease had made but little progress.

Two Cases of Labour complicated by Cancer of the Cervix Uteri.—These cases were related in a paper by Dr. HERMAN. In the first case, the diseased tissue was freely cut away with scissors and the actual cautery, and delivery effected with forceps. A vesico-vaginal fistula subsequently was formed; then phlebitis set in, and the patient died on the 18th. The fistula occurred at a spot which the cancer had invaded. In the second case, masses of diseased tissue were removed with the *écraseur*, the fingers, and scissors, with only trifling hæmorrhage, and delivery was effected with forceps. The mother recovered well. The author thought that, in the management of labour obstructed by cancer, the first alternative to be considered should be whether it was not possible to break down, and tear or cut away (the former preferably), the obstructing diseased masses.—Dr. BATE had had a case of labour, with commencing cancer, in which delivery was effected by natural efforts, but the patient died from septicæmia.—Dr. CHAMPNEYS said that, in these cases, it was, perhaps, most important that there should be healthy tissue at the sides of the cervix, for it was there that laceration most often occurred.—Dr. GALABIN inquired as to the method of suture of the uterus adopted in Dr. Edis's case. He had in four cases of cancer delivered by the natural passage, in only one there being great difficulty in doing so; but two of the mothers died: in one of the latter, the disease was almost entirely removed with the galvanic cautery.—Mr. JENNINGS thought that rupture of the bladder, during parturition, was not so rare as might be supposed.—Dr. FANCOURT BARNES thought that, in these cases, Cæsarean section offered a chance of probable recovery to the mother, and certain safety to the child. An important point was that, in this operation, healthy tissues were cut through, while in natural delivery diseased tissues were torn, thus favouring blood-poisoning.—Dr. EDIS said that, in his case, interrupted sutures of silkworm-gut were used.

ACADEMY OF MEDICINE IN IRELAND.

SURGICAL SECTION.

FRIDAY, DECEMBER 8TH, 1882.

J. K. BARTON, M.D., in the Chair.

President's Address.—The PRESIDENT, in opening the proceedings, remarked that the old Surgical Society of Ireland, which for over fifty years held its sessions in the College of Surgeons, had voluntarily laid aside its separate individual existence, in order to be foremost in supporting the new Academy as its Surgical Section. While the name of the Society was changed, it would, in all important and useful respects, remain the same as before; the organisation, of which it formed part, giving completeness to its work. In effecting the transformation, little change had been involved, the Council of the Society being the Council of the Section. A happy selection had been made of a secretary, in the person of a gentleman (Mr. Stokes) whose interest in the Surgical Society was proved by his many contributions to it. For himself, he was President in virtue of his office as President of the College of Surgeons. Reviewing the history of the Surgical Society on the present occasion, was suggestive of a funeral oration rather than a triumphant wedding song, which was more appropriate to its union with the medical, pathological, and obstetrical societies; and, therefore, in his inaugural address, he preferred instituting a comparison between the system of clinical surgery pursued in Dublin, and that which obtained in Paris, Berlin, and Vienna. Dublin stood second to no other city in the thoroughness with which the students were trained in the diagnosis and treatment of disease. At the same time, little was done to clear up those disputed surgical problems, which could be determined only by the powerful logic of accurate statistics. The con-

ditions of the Dublin hospital system favoured completeness of individual work and good clinical teaching, while the results which might be gained from the variety, value, and number of all the cases put together were, for want of unity, lost. This want could be overcome by the new Academy. In Paris, the classes went round with the surgeons as in Dublin; and in addition, the interns there, corresponding to the residents in Dublin, took private classes, with permission to examine cases, of which there were a great many to illustrate each subject. In Berlin, special clinical teaching could be had in almost any branch of surgery, and therefore advance in special directions was favoured; though it might well be doubted if the system of speciality produced the best informed practical surgeon, and gave to the State and the army men able to use skilfully all the resources of their art. In Vienna, the same system was carried to a very high degree of perfection. The advantages of the Continental system, with the vast hospitals, were obvious in stimulating original investigation, and facilitating the collection of reliable statistics, and so arriving at sound conclusions as to the result of different modes of treatment or operation. In Dublin there were, in proportion to the population, quite as many beds available for clinical instruction as in Paris, Berlin, or Vienna. There were fifteen hospitals in Dublin, the average number of beds in each being 130, or nearly 2,000 beds, of which 900 were available for surgical cases and for clinical instruction, but divided among eleven different hospitals with an average of 87 beds each, and these divided amongst not less than three surgeons, leaving each an average of from 20 to 30 beds. This resulted in thorough and practical instruction; but the experience of each surgeon was limited without co-operation, and thus the Dublin School of Surgery was prevented from taking its place in the van of progress. By the new Academy, this defect could be met. Here, as in a common centre, might be lodged the records of the cases in all the hospitals, each case under its proper heading, and thus would be formed a most valuable collection of reliable statistics. He hoped the Council would adopt his view and invite contributions.

Trephining for Intracranial Abscess.—Dr. KILGARIFF exhibited a patient on whom he had performed trephining, on account of an abscess resulting from a fall in the hunting field. The patient was unconscious for two hours after the accident. At the end of a fortnight he was removed to Dublin, suffering much from pain over the upper part of the occipital bone on the right side, and also much gastric irritability and general debility. Any motion, such as driving, intensified the pain, and caused nausea. On examination, a shallow depression of the size of a florin, bounded by a well-defined margin, was found at the situation where he complained of the pain. The diagnosis of fracture, with the subsequent formation of an abscess within the cranium at the seat of the lesion, was made. An exploratory incision was made down to the bone, and a small purulent collection was opened. On exploring the bone, a small circular opening through the skull, about two lines in diameter, was discovered. Through this opening, situated on the upper part of the occipital bone, some purulent matter oozed. A circular piece of bone was removed with the trephine, to provide free exit for the pus. An abscess-cavity, from which almost half-an-ounce of pus welled up, was opened. The inner surface of the piece of bone removed was deeply eroded. The cavity of the abscess was washed out with a weak solution of carbolic acid. Subsequently, the patient experienced an attack of erysipelas of the head and neck, from which, however, he recovered; and nothing further occurred to interrupt the progress of complete recovery.

Morbid Specimens.—Messrs. Kendal Franks, H. G. Croly, A. Benson, W. Stokes, W. I. Wheeler, and P. S. Abraham exhibited specimens.

Nephrectomy.—Mr. STOKES, sectional secretary, on behalf of Mr. F. J. O'REILLY, exhibited a kidney, which Mr. O'Reilly had removed by lumbar section from a patient, aged 26, in the Trim Union Infirmary, who suffered from symptoms of disease in the right kidney and pus in her urine, together with a constant desire to pass urine. The quantity passed daily was fairly normal, and the specific gravity ranged from 1015 to 1020. A favourable opinion was thus entertained of the capabilities of the left organ to discharge the increased functions with which it was about to be taxed. The operation was by the vertical lumbar, or postperitoneal method, and was performed antiseptically. The vessels and ureter were secured by a whipcord ligature. The external wound was closed with interrupted sutures, and antiseptic dressing was applied. The patient suffered from vomiting during the late stages of the operation. The gland weighed eight ounces, and an abscess-cavity at its superior extremity contained about two ounces of pus. The vomiting and depression, which manifested themselves during the operation, continued, and the patient sank and died forty hours after the operation. About an ounce of urine was drawn off with the catheter previously to death, and did not contain a trace of pus. The kidney was a specimen of primary tubercular disease. A *post mortem* examination was not obtained, but the wound was investigated, and found free from blood-clot and perfectly aseptic.—Mr. ABRAHAM said there were small tubercles visible below, on the external surface of the specimen.

Dissecting Aneurysm.—Mr. J. F. KNOTT read a communication on dissecting aneurysm. The specimen exhibited was one removed from a body in the dissecting-room of the Royal College of Surgeons. It was described by the student who first noticed it as presenting the appearance of a double-barrelled gun. Examination showed that two parallel tubes, almost exactly equal in shape and dimensions, were found inclosed in a common sheath, separated by a septum which presented but a very slight convexity to one side. More extended search showed a dissecting aneurysm of the aortic arch, which had originally engaged the transverse and descending portions, and from which the injection-mass had passed between the middle and external coats, separating these along the whole length of the thoracic and abdominal segments of the vessel. It had also coursed along the whole length of each common iliac artery to their termination. It was remarkable that both the normal and adventitious tubes had reserved about equal portions of the injection-mass. A portion of the laminated coagulum was found to project into the space between the external middle coats of the vessel along which the injection had travelled. This form of aneurysm, first noticed by Maunoir, and afterwards fully described by Laënnec, in typical cases allowed the blood, after tunnelling some distance between the middle and external coats, to pass again into the vessel at some distance. Other forms had also been described (*a*) where the blood merely separated the coats over a greater or lesser area, and (*b*) where it perforated the tunica adventitia at some distance, and became diffuse. The doctrine of the primary formation of aneurysm, and the classification of these tumours into true and false, was next discussed; then that of the organisation of the clot, and of the treatment of aneurysms in general, in which Irish surgery had attained so many triumphs.—Mr. TUFNELL said treatment might prolong life, but in the case of a dissecting aneurysm restoration of health was impossible.

MEDICAL SECTION.

FRIDAY, DECEMBER 15TH.

WILLIAM MOORE, M.D., in the Chair.

President's Address.—The PRESIDENT delivered an inaugural address. Having alluded to the absorption of the Medical Society of the King and Queen's College of Physicians into the Academy of Medicine of Ireland as its Medical Section, he reviewed at considerable length the advances made in the diagnosis of diseases, particularly within the last twenty-five years. He referred first to affections of the chest, the differential diagnosis of which was now well-nigh perfect. In certain cases, clinical observations on the temperature had proved of great use; and the most recent advance was the demonstration by Dr. Robert Koch of the germ-origin of pulmonary tuberculosis. To Laënnec was due the elucidation of cardiac disease, and to Traube, in great measure, the knowledge of the relations which might exist between these and renal affections. The diagnosis of valvular diseases had become very exact; but the precise value of murmurs as regards diagnosis and prognosis was apt to be overestimated. Nor was the diagnosis of abdominal aneurysm always an easy matter. Great advances had also been made in the study of specific fevers, especially of the endemic fever of Ireland, enteric or typhoid fever. Again, much had been done in the localisation of cerebral and spinal diseases, among the more interesting of this class of maladies being hysteria, hystero-epilepsy, and hemianæsthesia. As regards the treatment of some of these affections, he mentioned remarkable instances in which good results had followed the practice of metallo-therapy.

Living Specimens.—Mr. ARTHUR BENSON exhibited a case of well marked retinitis albuminuria in a boy, aged 16, without constitutional disturbance; Dr. CHARLES F. MOORE, a case presenting neuralgic symptoms in a man having remarkable patches of white hair, some of which were congenital; and Mr. STORY, a case of double zonular cataract.

Morbid Specimens.—Dr. J. W. MOORE exhibited, by card, specimens of diphtheritic inflammation of the throat; and Mr. P. S. ABRAHAM, microscopic sections showing (1) diphtheritic deposit in the muscular tissue of the pharynx, (2) mycelium of fungus, and (3) degeneration of muscular fibre in diphtheria.

The Causation of Pain in the Left Side.—Dr. WALLACE BEATTY

read a paper on this subject, drawing special attention to a form not sufficiently recognised, which was due to fæcal accumulation, and removed by getting rid of the accumulation. The pain was felt over the lower few ribs on the left side, was associated with extreme tenderness on pressure upwards of the tenth or eleventh rib, scarcely any pain being felt on pressure of these ribs downwards, and was relieved when the side was pressed inwards with the flat of the hand. He explained its occurrence by the drag of a loaded colon on the pleuro-colic ligament, this constant drag setting up a state of extreme irritability in the nerves of that ligament, so that a painful impression was carried upwards along the left lesser splanchnic nerve to the spinal cord, and was transferred, by the law of irradiation of sensations, to the tenth and eleventh intercostal nerves.—Dr. WALTER SMITH said the pleuro-colic fold had not received the attention it deserved. It certainly was of considerable importance in the investigation of abdominal disease Dr. Beatty's arguments were valid as explaining certain kinds of left-side pain, but did not explain all kinds.—Dr. WALLACE BEATTY did not wish it to be understood that he considered left-side pain was caused in every instance by fæcal accumulation, but only in cases presenting the symptoms he had mentioned.

Unilateral Paralysis of the Soft Palate.—Dr. WALTER SMITH related two cases of paralysis of the left half of the velum palati, and raised the question whether paralysis of the palate was invariably to be regarded as a characteristic sequela of diphtheria, or whether it might not occasionally supervene upon non-diphtheritic forms of angina. CASE I occurred in a young lady aged 24, and the paralysis developed six weeks after an apparently simple ulcerated sore-throat, for which she had been treated by Dr. Smith.—CASE II, in a young lady, aged 26, was affected with what was considered to be a simple relaxed sore-throat unattended with ulceration. She remained in a weak and nervous condition, and shortly afterwards the left half of the palate was found to be paralysed. In each case, the symptoms were similar—viz., difficulty of swallowing, nasal twang in the voice, and regurgitation of fluids through the nose. Both cases recovered completely. Dr. Smith submitted that it was not unreasonable to hold that catarrhal sore-throat might now and then give rise to slight motor paralysis through partial implication of the nervous system, or otherwise.—Dr. HENRY KENNEDY said that diphtheria might exist without exudation. He had seen such cases in which paralysis followed.—Dr. HENRY related a case which he had observed corroborating Dr. Smith's views.—Mr. H. G. CROLY said that the large majority of cases described as diphtheria were really cynanche.—Mr. WILLIAM THOMSON asked, if paralysis occurred in the palate as the result of specific inflammation, why similar effects did not follow in other parts of the body where nerve-filaments were concerned.—Dr. J. W. MOORE alluded to the specimen which he exhibited, describing it as one of phlegmonous erysipelas of the throat in which diphtheritic conditions had supervened. He believed that paralytic symptoms occurred only in true diphtheria.—Dr. FINNY considered that the fact that other diseases were associated with paralytic symptoms confirmed Dr. Smith's view.—Mr. W. STOKES doubted that paralytic symptoms followed inflammation in other than those of a diphtheritic nature.—The PRESIDENT regretted that no information had been given as to the presence of albumen in the urine in Dr. Smith's cases.—Dr. R. A. HAYES mentioned, in support of Dr. Smith's view, a case in which chronic inflammation of the palate, resulting from excessive tobacco-smoking, gave rise to paralysis of the palate.—Dr. WALTER SMITH, in reply, said that the paralysis in these cases might be the result of myelitis or of muscular degeneration. He answered Mr. Thomson's question, by pointing out the rich nervous supply of the palate and the muscles being open to attack from both sides.

THE PARKES MUSEUM.—Sir Henry Thompson has promised to subscribe £40 to this institution, towards the initial expenses connected with its installation in new premises, 74A, Margaret Street, Regent Street, W.

BEQUESTS AND DONATIONS.—The Hon. Charles James French of Merrion Square, Dublin, bequeathed £500 to the Hospital for Incurables at Donnybrook, and £500 to the Convalescent Home at Stillorgan.—The Salop Infirmary, Shrewsbury, has received £400 under the will of Miss Sarah Martin of Forsbrook, Staffordshire.—Baron Ferdinand de Rothschild has given £100 to the National Hospital for Consumption at Ventnor.—The Ladies Association of the Great Northern Hospital have subscribed £40 to its funds for the half year.—The Home for Incurable Children, Maida Vale, has received £38 14s., the proceeds of a private subscription ball at the Town Hall, Kensington, on November 29th.—"A. E. S." has given £50 to the North West London Hospital.

REVIEWS AND NOTICES.

LES HYSTÉRIQUES: ÉTAT PHYSIQUE ET ÉTAT MENTAL. Par le DR. LEGRAND DU SAULLE, Medicin de la Salpêtrière, etc. Pp. 625. Paris: J. B. Baillière et fils. 1883.

ON THE PHYSICAL AND MENTAL CONDITION OF HYSTERICAL SUBJECTS. By Dr. LEGRAND DU SAULLE.

BEFORE us is the most recent work on hysteria. Indeed, if we may use such an expression, it is more than recent, for the publishers, evidently determining that their production shall have all the advantages of novelty, have affixed to its title-page the date, A.D. 1883, although it was issued in November 1882. The work of M. LEGRAND DU SAULLE is excellent, and well worthy the attention of our readers. The author is one of the physicians to the Salpêtrière Hospital of Paris, a vast institution devoted to diseases of the female sex, where, of course, every facility and opportunity is given for extensive experience and investigation, as is evidenced by the well-known researches of his colleague, M. Charcot. As may be expected, for this reason, as well as from the eminence of the author himself, the work contains most valuable information, which is conveyed in a manner so clear, and in a style so elegant, as leaves little to be desired. The book professes to give a succinct, and at the same time a comprehensive, view of the whole question of hysteria, its symptoms, pathology, and treatment, according to the most recent views and observations.

In discussing the etiology of the affection, the author protests against the too exclusive idea of the uterus and sexual organs constituting the essential element in its causation. While admitting that derangement of these may occasionally act as excitants, he maintains that this is by no means necessary for the production of the symptoms. Hysteria, according to him, is a general neurosis, chiefly the result of hereditary transmission, or due to any continued depression of mind or body. In a predisposed condition of nervous instability thus developed, any exciting cause, whether psychical or physical, may originate the primary manifestations of the disorder. Hence, amongst other irritations, those of the genital organs may excite hysterical phenomena, but these are not essential, as painful impressions in other directions may be equally potent in the same way. That women are chiefly affected is explained on the ground of their greater liability and peculiarity of nervous organisation as compared with men, who, however, are not altogether immune from the disease. The age at which hysteria flourishes may be accounted for in the same manner. The period of puberty is the beginning of a critical change, both mental and physical; at adolescence the troubles of woman begin, her passions are excited, and the competition of life is entered upon. In later years, the tendency of the disease is to diminish in proportion to the progressive formation of stable ideas, to the absence of excitement, and to the calmness of middle and advanced life. The author, finally, in a clear and logical manner, indicates the influence which hereditary transmission, education, moral training, physical constitution, and the general conditions of life, all have in the production of the disease under consideration.

A description of the manifestations is then systematically furnished, from the simplest to the gravest forms, and special stress is laid upon the severe type to which the name of hystero-epilepsy is given; this is apparently not uncommon in France, although it is rare in this country. In connection with this subject, the writer enters at considerable length on the interesting question of hypnotism as occurring spontaneously, or produced artificially, in hysterical persons. He describes at length the class of cases in which these manifestations are seen, the methods in which they are produced, and the various phenomena which ensue. This is especially interesting to us, as we see little of it in England, where the type of hysteria does not seem to be so readily liable to the production of this remarkable peculiarity, although Braid and others long ago described somewhat similar conditions.

The author devotes a chapter to hysterical insanity, which will well repay careful study; he directs attention to a consideration of an important practical question in connection with it, namely, the medico-legal aspect of the disease. It is noted that hysterical subjects are frequently brought into contact with the judicial authorities, accused of various crimes and misdemeanours. The author enters at length into the various conditions of mind under which transgressions may be committed, as well as the many forms of misconduct perpetrated by such persons. He points out that, while many hysterics may be perfectly responsible for their actions, there are others who may commit even crimes without being capable of judging between right and wrong. This is a question of much im-

portance; one which has been greatly overlooked. M. Legrand du Saulle treats it in a practical manner, giving in illustration of his position a large number of typical and highly interesting examples.

The forms, progress, duration, terminations, and nature of hysteria are each and all, in course, clearly and ably discussed, and its diagnosis, prognosis, and treatment are given in detail; a critical comment on these would lead us beyond the limits of a review. It will be sufficient to state that these subjects, as well as the entire contents of the volume, are treated in a scientific and masterly manner; and those who desire a sound and at the same time a facile acquaintance with the subject of hysteria, cannot do better than carefully peruse the work of M. Legrand du Saulle.

Typhoid Fever at Whittlesea (Australia). By William Thomson, F.R.C.S. Melbourne: Bands and McDougall. 1882.

In this small pamphlet, Mr. Thomson continues to preach the doctrine, of which he has made himself the apostle in Australia, that enteric fever is a contagious disease. Of this Mr. Thomson gives an instance of a kind similar to that given by the late Dr. William Budd. It is as follows. The first case of enteric fever which broke out in Whittlesea, occurred in the Callander family, "and there is sufficent evidence to show that it was brought there by Agnes Morley, Mrs. Callander's sister, who had been ill with typhoid fever at South Yarra, and was just recovering when she returned to her sister's house at Whittlesea. Soon after her arrival, Mrs. Callander and her son, about two years old, were at the same time taken ill with the fever; and about two weeks later her baby sickened, apparently of the same disease, and died after a fortnight's sickness, while Mrs. Callander and her boy were laid up for about seven weeks. It is important to note that during Mrs. Callander's illness she was sent to the Melbourne Hospital, where her case was pronounced to be typhoid fever. About the time of the baby's death, George Morley, a brother of Mrs. Callander's, came to the house, and stayed for a week, and soon after leaving he was taken ill with typhoid fever. This disease afterwards appeared in Mrs. Downie's family, residing about two miles from Whittlesea, on the Glenvale Road, where a girl about seven years old was taken ill, and is yet unwell, but recovering. The disease seems also to have been communicated to the McKimmie family, where two children are laid up, both cases progressing favourably. Mr. McKimmie is married to Mr. Downie's sister. The three families are closely related, and the unprejudiced will at once observe how the contagion has been conveyed from one family to the other. In the Johnson family, some distance north-east of Whittlesea, two cases have occurred, now nearly convalescent. The McKimmie family reside outside of the Yan Yean watershed. With the exception of Mrs. Callander's baby, none of the cases mentioned have been fatal. The officer of health for the district attributes the origin of the disease to the unsanitary condition of the premises occupied by these families. If such be really the case, it is difficult to comprehend how anybody can enter or even approach such premises as those of the Willow Tree Hotel, situated at the other side of the township, and outlive the event. On the other hand, it seems easy to understand how readily any contagious disease, if once introduced, would seriously affect dwellings and surroundings such as those referred to. Mrs. Callander's cottage has a small shaft, or kind of well-tank, roughly lined with bricks, which catches the rainfall from the iron roof of an adjoining disused old school-house. This tank is quite close to the cottage door, and is unprotected from the inflow of surface drainage, so that refuse-water containing contagion-germs, from the washing of linen or clothing, thrown out on the yard, would easily reach the tank and pollute the drinking water used by the family. Besides this possible and very probable source of contagion, the water-closet is of the vilest kind of arrangement, having no receptacle whatever. At Mrs. Downie's dwelling on the Glenvale-road, where there are eight or nine children, there is no closet at all. Neglect of this kind is a disgrace to a civilised community, for the Australian aboriginals, and even the lower animals, instinctively adopt more healthful habits of cleanliness and better means of self preservation. It is to be presumed that the officer of health and the inspector of nuisances for this district will greet with intense satisfaction the passing of the proposed new Health Act, which would empower them to compel the observance of sanitary regulations in keeping with the advance of civilisation."

Here, as in the cases pointed out by Dr. Budd, there were unsanitary conditions in abundance, but there was no enteric fever until the seeds of enteric fever were introduced. In this country, hardly anyone, we believe, now holds the pythogenic theory; and no doubt before long we shall be able to say the same of Australia.

Catalogue of the Pathological Museum of Medical College, Calcutta. By J. J. F. McConnell, M.B., etc., Curator of the Museum, Calcutta, Bengal Secretarial Press, 1881.

This is a volume of seven hundred pages, of which the author may well feel proud, for it is one which must not only prove of great value to all who labour in the special field to which it is devoted, but also as a work of reference for the pathologist in every part of the world, and especially for anyone who may be investigating the nature of any one of the subjects of which it treats. The museum of the Medical College, Calcutta, appears to be of very respectable size, containing, as it does, close upon three thousand specimens; and most of these, so far as can be judged from the descriptions, are good characteristic teaching specimens. The series which are most fully illustrated are morbid growths, the chylopoietic viscera, the heart and vessels, calculi, and diseases of bones; nor is there any undue preponderance of special diseases, as might have been supposed probable. Thus, taking series 9, we find, amongst others, diphtheritic tonsillitis, acute and chronic gastritis, gastric ulcer, cancer, rupture of intestine, amyloid degeneration, tubercular enteritis, typhoid ulceration, dysentery, intussusception, internal strangulation, polypi, mesenteric diseases, and so on. The specimens show good variety in most of the series, and appear to have received clear and adequate description. In this matter, a catalogue can proceed upon either of two distinct plans. Some think that the specimen should be left to tell its own tale, while much of its inaccessible details of history, and so on, should form the mainstay of a catalogue. Others, and these the more numerous, hold that the description of the specimen should be made as full as possible, and the history of the case put in the shortest outline. The author of this volume has adopted the latter plan; and we are inclined to think he has done wisely, for, although mere description lacks interest, yet for the medical student there can be no doubt it is the most useful where familiarity with such things is required before the points of a specimen can be detected, when in the condition of a "pickle." We do not think Dr. McConnell has acted so wisely, but this is perhaps a matter of opinion, in adopting a separate numbering for each series. We are convinced, after some experience in several museums, that the simplest plan, and that which facilitates reference the most, is to number the entire museum in a continuous series. By all means let separate series exist, that is obviously advantageous; but this need not, and we think should not, interfere with a continuous system of numbering, such as is adopted in the Hunterian Museum, the Royal College of Surgeons, of England. We are glad to notice one very good feature in this volume, namely, the index; in all good catalogues there should not only be some sort of general index, which is remarkably full and good in the present instance, but also, as here, a preparatory index to each series. The preparation of these, while involving much labour, to the author, will nevertheless much enhance the value of the work he has done, and done, be it added, to his credit, entirely single handed. And we willingly add that we believe Dr. McConnell is fully justified in the hope which he expresses, that this volume will assist an earnest student to a deeper and more precise knowledge of Medicine and Surgery.

Our last duty, and it is a pleasing one, is to record the fact that but for the support giving to the undertaking by the Government of Bengal, it could never have been accomplished. What enlightened mind was behind the scene here? The author states in the preface, that Sir Ashley Eden was pleased to accord his sanction, and to issue orders for its publication by the Secretarial Press; moreover, during the progress of the work, the author's efforts to do justice to it have been keenly stimulated by the kindly interest taken in it by the Lieutenant-Governor. We beg to assure his Honour that in furthering the work with such kindly interest he has done a far reaching service to the people committed to his charge.

On Cancer of the Breast. By Thomas William Nunn, F.R.C.S., Consulting Surgeon to the Middlesex Hospital. With coloured illustrations. Pp. 230. London: J. and A. Churchill. 1882.

Mr. Nunn may fairly boast that his book is illustrated, for it contains more than twenty large and well-executed chromo-lithographic plates, six of which are devoted to clinical appearances, the remainder to microscopic characters. In the letterpress an inverse proportion is observed; for to the first part (clinical and practical), more than 110 pages are given, while to the second part (pathological and speculative), only forty-seven pages are devoted. Although pathology may thus in some degree appear to have been slighted, it

must be remembered that the author has never desired to be regarded as an eminent pathologist, and that this work is really the outcome of a long clinical experience, especially derived from the cancer wards of the Middlesex Hospital. As the result of this experience, operation is recommended in almost all cases, with certainty that, though cure is rare, relief is frequent. The knife is preferred to any other method of removing the breast, on account of the greater precision of effect which can be ensured. This opinion is the more valuable, because it comes from one who has seen caustics largely employed by more than one surgeon in the Middlesex Hospital. We trust that the necessarily high price of this book will not prevent it from obtaining the large circulation which it certainly deserves.

NOTES ON BOOKS.

The Botanical Atlas: a Guide to the Practical Study of Plants, containing representatives of the leading forms of plant-life. By D. M'ALPINE, F.C.S. Vol. i: Phanerograms. (W. and A. K. Johnston, Edinburgh).—This atlas, as admirably executed as its zoological predecessors, already noticed in our columns, is intended as a guide to the practical study of flowering plants, and for this purpose selected types of the principal natural orders are dissected, carefully drawn, of life-size, and beautifully coloured. The descriptions are brief and practical, and this book will serve a peculiarly useful purpose, in that its arrangement is such as to encourage to the utmost practical work by selecting common forms of flowering plants, dissecting their parts in regular order, with enough detail to illustrate their leading characteristics; and by colouring the drawings in their natural colour the student is enabled readily to compare the flowers of the field which he can gather for himself with the drawings and explanations which teach him what can be seen, and how to see it. In this form the flower in its various parts passing into fruit and seed is mainly considered, leaves copied from nature being introduced for the purpose of comparison with the floral leaves. This affords the best introduction to practical and morphological botany. In a subsequent volume it is proposed to deal with the minute forms of plant-life, requiring histological examination and nicer manipulation. Such an atlas as this is of the utmost value in encouraging students to go to nature, and to observe and work for themselves instead of trusting to that broken reed, mere book knowledge. The beauty and delicacy of illustration are as remarkable as the cheapness of this valuable volume, which we warmly recommend to botanical teachers and students.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

WYLEY'S CHINOQUININE.

WE have received from Messrs. Wyley and Co., Manufacturing Chemists (Coventry and London), a specimen bottle of a salt, prepared by them from the cinchona succirubra, or East Indian red-bark, to which they have given the name of Chinoquinine, and which they allege to be made of quinine, cinchonidine, and cinchonine, in the form of muriates. In appearance, it resembles the disulphate, but is more soluble, its solubility being rendered complete by a minute addition of acid. The dose is the same as that of quinine, of which it may for many purposes take the place, seeing that its bitter tonic properties are undeniable.

BRAND AND CO.'S ESSENCE OF MALT.

MESSRS. BRAND AND CO., of Mayfair, have recently introduced a new preparation—to be called Brand and Co.'s Essence of Malt—which deserves special notice. It consists of the essence or soluble portion of the best English malt, without admixture or flavouring of any kind, and is made by the "Dence and Mason" process. It is a thick light brown liquid, having an agreeable odour and taste. It mixes readily with fluids of all kinds. It is an useful addition to our list of articles of invalid diet, being of value, not only for its nutritive properties, but as an aid to the digestion and assimilation of other foods. It is best taken immediately after a meal. It may be given with advantage in phthisis and almost all forms of wasting disease.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 6th, 1883.

THE COMMUNICABILITY OF PHTHISIS.

THE Collective Investigation Committee of the British Medical Association have thought it advisable at this moment, when the question of the contagiousness of pulmonary consumption is prominently before the profession, to issue two or three simple questions to all the members of this Association, with the object of collecting trustworthy evidence bearing on this subject.

The question is such an important one, from every point of view, that we feel it incumbent upon us to call the attention of the Association, in a special manner, to this investigation. And we do so the more readily, because the subcommittee entrusted with the conduct of this inquiry has—most wisely, we think—limited the amount of information asked for to two or three simple questions which can be answered, by those who have any information to give, with the greatest brevity and with little or no trouble.

It is scarcely necessary we should point out that the chief value of an investigation of this kind must depend on the thoroughness with which it is taken up, and the extent of the area from which observations are gathered; we therefore venture to express our earnest hope that no member of the Association into whose hands these questions fall, if he feel he has any information to give, whether positive or negative, will neglect to return a reply to them.

It may be of use, if we take advantage of the present opportunity to put before the Association a few considerations on the question whether there be or be not any contagious quality in pulmonary consumption.

In order that we may be perfectly clear as to the issue before us it is essential, in the first place, that we should be agreed as to what we are to understand by the word "contagiousness;" and it will be advisable for the purposes of this inquiry, that all should regard the term as identical in meaning with the word "communicability." Any narrower acceptation of the term in the present state of our knowledge would be unphilosophical and prejudicial to the investigation.

Scarlet fever, typhoid fever, and syphilis, are all communicable diseases. It is universally admitted that they each possess a special "contagion;" and it is important to remember that, if there be a contagion of phthisis, it is not necessary that it should resemble either the contagion of scarlet fever, or that of typhoid, or that of syphilis, in any other quality besides that of being under certain conditions communicable from one person to another. The argument that phthisis is not contagious, because it is not conveyed by casual contact with a phthisical patient or with his clothes, as scarlet fever is, would have applied with equal force to typhoid fever and to syphilis. And when it is advanced as a reason against the communicability of phthisis that in an institution devoted to the reception of cases of the

disease, the occurrence of phthisis amongst the officers and attendants has been so rare, that it might fairly be regarded as accidental, it is obvious that the real question has here been lost sight of, which is—not: "Is phthisis communicable under the conditions that prevail between the patients and the attendants in a particular institution?" to which question alone the above statement supplies an answer, but: "Is phthisis communicable under any conditions? and if so, Under what?" to which would follow the further inquiry, "Is phthisis communicated by a special contagion? and if so, What is it? and What are its properties?" An American writer, in pointing to the fallacy of this argument, has called attention to the following statement of Liebermeister with regard to Typhoid fever in Ziemssen's *Cyclopædia:* "Up to the year 1865, I have never seen in the hospitals which I visited a single hospital patient, physician, or nurse attacked with typhoid fever, although such cases are placed in the general wards. Other observers have had the same experience. According to Murchison, during a period of fourteen and a half years in the London Fever Hospital, 2,506 patients with typhoid fever were treated, and during that time, only eight cases originated in the hospital." But no one would think of putting this forward as a proof that typhoid fever was not communicable.

A number of cases have been observed, by trustworthy and careful observers, which have left on their minds the impression that phthisis is, under certain conditions, an infectious disease. What it is desired to know is, are such impressions widely entertained? and if so, what are the circumstances under which they have arisen? The following case, which has lately been communicated by an eminent provincial physician to one of the members of the committee, may serve as an example of what may be brought forward on one side of the question.

"A lady, about 30 years of age, the wife of an officer in the army, left Calcutta with her husband to go by sea to Southampton. At the time of leaving Calcutta, *she* was in *robust health*, whilst he was in an advanced stage of consumption. They had a single close cabin, and she performed all the duties of a nurse for her husband. The weather was stormy, and the hatches were more than once battened down. The husband died off the Cape, and was buried at sea. About three days after the lady landed at Southampton, I was called to see her professionally. I found her with both lungs stuffed with tubercles; and she died in about six weeks afterwards. The painful duty was cast upon me of acquainting her with her condition, which I did, when she said 'Impossible; I was never better in my life than when I stepped on board at Calcutta.' I knew the lady well and all her family, and there was no hereditary predisposition. In this case, all the necessary conditions for the propagation of the disease were fulfilled; *a high temperature* in a close, ill-ventilated cabin, where the exhalations from the diseased lung were inhaled by the sound lung, with the well nigh inevitable result I have described."

Some such brief account as that here given is what the Committee would like to receive from those who believe that they have observed cases in which phthisis has been communicated. The remarkable series of cases of apparent communication of phthisis from husband to wife, carefully observed and ably reported by Dr. Hermann Weber in the *Transactions of the Clinical Society*, now ought to be well known to the profession. It is impossible to desire more careful observation and record than we find there. In most of the instances noted by Dr. H. Weber, like the one we have just related, the disease, when communicated (assuming, for the sake of argument, that it was communicated), ran a florid course, and was rapidly fatal, a circumstance which had been observed and noted by Richard Morton two centuries ago. This, also, is a point on which the Committee would be glad to receive evidence, viz., as to the course followed by cases which were supposed to arise from contagion.

It is well known that, in Italy, it has always been believed that consumption is contagious. In a letter recently received from Florence, the writer states: "Consumption is considered by all here to be contagious; anyone dying of consumption in a house, the bed is entirely destroyed, and also all the clothes of the deceased, and the room thoroughly cleansed and fumigated, and often shut up and never used." It is worth while to consider how this belief arose, and why it has been maintained; and it certainly is not logical to set it aside without inquiry, and with the mere assertion that it is "a prejudice". Not long ago, we had an opportunity of mentioning this subject to Dr. Henry Bennet of Mentone, whose long experience in the South would naturally, we thought, give his opinion much weight; and he stated that his own experience confirmed the belief that, amongst the Italians, consumption was really communicated from the sick to the sound, and that this communication depended on the conditions which surrounded the phthisical patient in Italy.

We have before us "An Etiological Statistical Report on Tubercular Pulmonary Phthisis," by Dr. Playter, editor of the *Sanitary Journal*, Toronto, and founded on answers to an elaborate series of questions which he had distributed amongst practising physicians in Canada and the United States. "The report," he says, "is actually based upon the early history of over 250 cases of well marked tubercular pulmonary consumption." And under the head of "Contagion" he states: "In about 28 per cent. of the cases, the patients had been more or less with relatives who had been suffering from the disease—attending, nursing, or sleeping with them." And amongst his deductions occurs the following. "Consumption is doubtless a contagious disease, though the evidence herein of this is not strong..... Besides the exciting cause of a disease, there must be, before the disease can be developed, a predisposing cause—the seed must have favourable conditions for its development and multiplication."

Cases of phthisis which have appeared to the observer to have arisen from contagion have been put on record, or referred to by the following:—Richard Morton (1697): "A contagious principle," he says, "also propagates this disease: for, as I have often found by experience, an affected person may poison a bedfellow by a kind of miasm like that of a malignant fever."

Heberden (1802) says: "I have not seen proof enough to say that the breath of a consumptive person is infectious; and yet I have seen too much appearance of it to be sure that it is not, for I have observed several die of consumption in whom infection seemed to be the most probable origin of their illness."

Sir Alexander Crichton (1823) had seen many cases in which he believed the disease had been communicated. Dr. Mason Good (1825) observes: "I have myself been witness to various cases which could not be ascribed to any other cause" than contagion. Trousseau (1845) expressed a hope that "the communicability of phthisis may again become at least a matter of dispute". Copland (1859) stated his belief that "the disease is caused by infection". Bowditch of Boston (1864), after narrating eight cases in his own practice, concludes that it may be "infectious" under certain circumstances, but not "contagious in the usual acceptation of the word". He, however, believes that he has seen it communicated. Dr. Bowditch had issued questions and had received replies from 210 physicians as to the causes of phthisis, and with respect to *contagion* as a cause; 110 answered in the affirmative, 45 in the negative, 27 were doubtful, and 28 did not feel able to answer the question. Dr. Wm. Budd's (1867) article on this subject is well known. Dr. Parkes, alluding to Dr. Bryson's "Cases in the Mediterranean Fleet", observes: "There is some evidence of a pneumonic phthisical disease being contagious." Many others might be mentioned, as Peterson of Copenhagen, Perrouet of Bordeaux, Alexander Harvey of Aberdeen, Jules Guérin of Haris, Buhl of Munich, Professors Alfred Stillé, J. M. Da Costa (who says, "I have met with a number of instances which seemed to prove the contagiousness of phthisis"), J. Solis Cohen, etc. On the other hand, we have opinions expressed in opposition to this view by Dr. Cullen (1791), Dr. Benjamin Rush (1809), Dr. T. Young (1815), Laënnec (1818), Sir Thomas (then Dr.) Watson (1836-37), Dr. Walshe, and Dr. Cotton.

But Koch's recent discovery, together with the modern investigations into the infective properties of tubercle, open a new phase in the study of phthisis. The discovery, by Dr. Ransome, of bacilli in the condensed exhalations of patients in advanced phthisis is also of considerable interest in connection with this discussion. But the Collective Investigation Committee desire especially to draw the attention of practitioners throughout the country, who, they feel, have the best means of following closely the histories of their patients, to the practical problem which must be, to a great extent, solved by clinical observation, viz., whether phthisis is, or is not, communicable under certain conditions from one person to another; and, if so, what are the conditions under which this communication takes place.

Very many of the cases hitherto recorded which have appeared to be due to contagion have occurred between near relatives—many in the case of husband and wife; and the evidence in favour of communication in the latter case is very strong.

The Committee desire to point out that evidence of communication between other than blood-relations would be especially interesting and important. It will be observed that the Committee, in asking for information as to the possible coexistence of family predisposition, are careful to distinguish between direct inheritance from parents or grandparents, and the collateral occurrence of the disease amongst brothers and sisters; for it is always within the limits of possibility that, in the latter case, the disease may have been communicated to more than one member of a family from a common source. A very little care will be sufficient to avoid any ambiguity under this head.

We desire again, in conclusion, to express a hope that the importance of this investigation, and the very small amount of trouble it will involve, will commend it to the attention and co-operation of every member of the Association who can, in any way, further the object it has in view.

COLLECTIVE INVESTIGATION.

THE Birmingham and Midland Counties Branch have shown a spirited example in organising a large representative meeting of the Branch to consider and discuss the collective investigation of disease. This meeting was attended by a very large number of the leading men in the chief towns of the Midlands, including the President of the Association (Dr. Strange), and many others from Worcester, Wolverhampton, Derby, Nottingham, Leicester, etc. The meeting displayed great interest and enthusiasm in the enterprise, and it is evident that the Birmingham Branch intends to be second to none in its contributions to the inquiries that are on foot. The honorary secretary of the local committee (Dr. Saundby) stated that a large number of returns had already been sent in by members in his district, and he was anxious to know when the number of returns already received will be published. It is hoped that the first list of contributors will appear in an early number. This will, it is to be anticipated, provoke a healthy spirit of friendly rivalry among our Branches, for the first place on such a list will afford evidence of the activity and reality of scientific work among the members of the Branch. The plan which is being adopted in the Branches, of selecting so many of their ablest and most energetic men to act on committees to aid in this work, is rapidly forming a *corps d'élite* of practitioners, all of whom have pledged their efforts to advance the science of medicine on this method. Into this *corps* will, we trust, ultimately be enrolled all who find the necessary energy and ability; for there can be few indeed who have not the time to contribute observations to these investigations. There is no doubt that it is by this means that in this way our Branches and their individual members can promote our knowledge of medicine with singular efficiency; for though, as Sir James Paget pointed out in his Bradshawe Lecture, the collection of rare and interesting cases is most valuable, yet it is not by these alone that knowledge can advance. Our knowledge of common things is still lamentably deficient in accuracy and in breadth, as every thoughtful man has frequent occasion to remark in his daily work. Observations on subjects such as these fall within the experience of every practitioner. To gather the common every-day facts, and by massing large numbers to interpret their meaning, is perhaps as valuable and important work as any that can be done just now for medicine. We trust that the example which Birmingham has set will be followed by several of our large Branches. Unfortunately, Professor Humphry was prevented by indisposition from addressing this meeting, as he had been invited to do; but his place was ably filled by Mr. Macnamara, who, at twenty-four hours' notice, went down and delivered an earnest appeal to those present. These great gatherings do more to inspire enthusiasm in collective work than can be achieved in any other manner, and we hope to see several of them organised during the winter session.

ON MORTALITY AT SEA.

A RECENT and well timed resolution, adopted unanimously by the Manchester Medico-Ethical Association, together with an exhaustive communication on the same subject, published in our issue of last week, have directed attention to an important branch of vital statistics, which, heretofore, has held probably less prominence in the public mind than many others. Until comparatively recent years, the more vivid dangers of ocean travel completely overshadowed those dependent upon the neglect of sanitary precautions. The hygiene of passenger ships was looked upon as an impossible and unnecessary study. From the report of Lords Carlisle, Ashley, and others, presented to Parliament in 1849, we learn "that when the system of transportation was first adopted, in some of the eastern voyages full one half of those embarked were lost," while, later on, the loss of from thirty to forty per cent. was by no means unusual, nor was it looked upon as either surprising or disgraceful; on the contrary, we are told that: "The skippers were no doubt honourable men, chargeable with no conscious designs against the lives of the human beings committed to their care, and with no unusual omissions, but their thoughts were directed, by their interests, exclusively to profits. They got as much freight as they could, and they saw no reason why convicts and emigrants should not put up with temporary inconvenience to make room for cargo."

On December 7th, 1853, the Senate of the United States appointed a Select Committee "to consider the causes and extent of the sickness and mortality prevailing on board the emigrant ships on the voyage to this country." The report of this committee shows that, "during the four last months of 1853, 312 vessels arrived at New York with 36,950 passengers. On these vessels, 1,933 passengers had died at sea, while 457 were sent to the hospitals on landing, there, in all probability, to terminate their miserable existence." Then, for the first time, "the propriety of employing regular physicians, and nurses, and hospital assistants on board of passenger ships" became a matter for serious consideration; and the conclusion arrived at is sufficiently remarkable, especially as it embodies reasons which may be reproduced in opposition to now necessary reforms, to be quoted. "The committee are decidedly of opinion that such an arrangement would be desirable; but, taking into view the uncertainty of the number of passengers that may be on board, and other circumstances, they cannot see how it can properly be made the subject of effective legislation."

That 2,518 deaths should occur among 1,563,644 passengers to New York during the ten years ending December 1880, or 185 among the 315,850 persons who, during last year, embarked upon English ships for North America, may appear comparatively insignificant were it not that, as our correspondent points out, there are many cogent reasons why the death-rate among these people should be most exceptionally small. "They are *à priori* a healthy and a hopeful people," else we may fairly assume that the majority would never leave the certainties of home to face the unknown difficulties

OF THE
UNIVERSITY OF ILLINOIS

of a foreign land. Among emigrants, one seldom sees an aged person, and but one-fifth are under twelve years of age, and one-third females. They are all subject at embarkation to "three distinct medical examinations, and passed as healthy." In fact, a majority of emigrants to America are healthy adult males, of whom but an infinitesimal proportion would be likely to die within eight or ten days, unless subjected to extreme hardship; while among the balance of women and children there seems no legitimate reason why the mortality should much exceed the ordinary death-rate of the same class living on land. When, therefore, we find that the death-rate among transatlantic emigrants at least equals the average mortality among all classes of the stationary population, we are disposed to endorse the statement of our correspondent that even now "there is among passengers a much larger amount of sickness, and a far higher mortality than is justified by the necessities of transit."

Our information as to the causes of death is limited to the first five months of 1880, when 44 deaths are reported as having occurred among passengers on English ships during the voyage to New York. These were registered under twenty-two different causes—bronchitis being by far the most fatal; from which it may be assumed, no special epidemic having occurred, that either there was an unusually large amount of general sickness, or that among those attacked there was an exceptionally high mortality. In connection with this subject, we notice in the Registrar-General's last report a point which seems to call for some explanation: that, while in the Royal Navy during 1880 the death-rate from all causes (including the loss of the Atalanta) was 12 per 1000 per annum, among merchant seamen it was 21 per 1000 per annum for the same period. This subject, and the collateral ones of our Mercantile Marine Medical Service, and the hygiene of passenger ships, should in future engage more attention.

THE PELTZER TRIAL.

THE protracted trial of the brothers Armand and Léon Peltzer, for the murder of M. Bernays in Brussels on January 7th, 1881, has at length been brought to a conclusion, with the anticipated verdict of guilty against both the accused. The plot seems to have been cunningly devised, and carried out with great skill. Had it not been for the proverbial stupidity attributed to great criminals, it is possible that this hideous crime might have remained enveloped in obscurity.

The theory of the prosecution was a double one; that Armand was the lover of the wife of M. Bernays, and had thus a motive for getting rid of the latter; and that M. Bernays, a barrister of some eminence, was in possession of secrets affecting the character of Armand, who, on this account, resolved to rid himself of his enemy. For one or other of these purposes, he summoned to his aid a younger brother, Léon, a ne'er-do-well, and an elaborate plan was concocted for carrying out the murder, so as to avoid detection. Léon, furnished with money from some unknown source, returned from South America, purchased a wig and other disguises in Paris, and also pistols, most of which were found to be too noisy for his purpose; and it was an important link in the chain of circumstantial evidence, that the bullets of these disused pistols were found secreted in a drain in the house of Armand. At length a pistol, sufficiently muffled in the sound made by its discharge, was purchased in London. The next step was to secure the house No. 154, Rue de la Loi, Brussels, for Léon, who passed himself off as one Vaughan, agent for one Murray, both Englishmen. It is needless to say that no such a man, or firm, as Murray, has been found to exist. An apartment was specially fitted up in the house with heavy curtains, so as to deaden the sound of a pistol-shot; and into this den, from which, on the fatal day, all workmen were carefully excluded, M. Bernays was allured by an ingenious device. It was known that Bernays, who resided and carried on his profession in Antwerp, and was eminent in mercantile law, was fond of money. Léon, the assumed Vaughan, accordingly wrote, making an appointment at 154, Rue de la Loi, on business relating to the fictitious house of Murray, shipping agents, and a fee of twenty pounds was sent in advance. Bernays fell into the trap, and it is supposed that, as he entered the prepared room, he was met by Léon, who presented a pistol to the nape of the neck as Bernays stooped to enter the room, a thick curtain having been dexterously drawn behind him so as to deaden the sound. Bernays fell dead from the pistol-shot. It is probable that the Peltzers returned on the second or third night, removed, so far as they could, all traces of the crime, and placed the body of the deceased in an arm-chair, so as to simulate an act of suicide, or an accident. A week later Léon wrote a letter in English, in the name of Vaughan, to the Brussels coroner, stating where the body would be found, and that he had shot Bernays by accident during an altercation. It was this letter that led to the arrest of the prisoners; its translated Gallicisms, and the use of a broad nibbed pen, after the English fashion, forming important links of evidence.

On January 18th, eleven days after death, the body of the murdered man was found in a chair in a sitting posture. There were two wounds, one on the right temple, of a simple nature; the other in the nape of the neck, which had been the cause of death. This was a perfectly clean wound without any burn. The ball had gone through the neck from left to right, slightly ascending, and perforating the skull. The principal part of the projectile (from a Gaupillar cartridge) was found in the right temporal lobe. On the body were stains of blood and cadaveric livid patches. The blood-stains were on the nape of the neck and on the right side of the head. On the nostrils and moustache were streaks of blood. There were livid patches on the right leg and forearm. No blood was found in the pharynx. The wound in the nape of the neck could not have bled much externally. The bleeding had been internal; there was little blood on the clothes. A spot of blood on the carpet weighed nearly nine ounces; and there was an alleged footprint upon it, which could not have been made by the deceased. Experiments were made showing that the footprint could not have been produced earlier than two hours and a half after the blood, already gelatinised, had flowed on to the carpet, and probably it was twenty or twenty-five hours afterwards; and it was certain that the footprint was not made on January 18th, the day of the first judicial investigation—eleven days after the death of Bernays. Dr. Stienon, who made the *post mortem* examination, stated that the cadaveric lividity was important, because experiments showed that the livid patches could no longer be displaced when the body had remained in the same position for twenty-eight or thirty hours. Therefore, the body had not become cold in the same position in which it was found. The body might have been displaced after twenty-eight or thirty hours; but, taking the cadaveric rigidity into consideration, it was probable that the body had been moved after the rigidity had disappeared, perhaps after sixty or seventy hours, or some days after the commission of the crime. Death must have been instantaneous, and the shot fired at a distance of at least four inches from the wound. The wound on the temple was probably due to Bernays, when shot, falling against the writing table and then on to his face. It was thought that Bernays must have been shot as he entered the room, as there were some drops of blood spurted upon the inner side of the door. The victim had probably bled through the nose for perhaps five or ten minutes, and it was impossible that Léon Peltzer could have bestowed any care on the body during the ten or fifteen minutes after death. If he had raised the head of the deceased, blood would have flowed upon the clothes; but there was no blood upon them. The footprint on the clotted blood, which had flowed on to the floor, accorded with the footprint made by an old discarded boot found in Armand Peltzer's room. This was Dr. Stienon's evidence for the prosecution, and he was confirmed by Dr. Vleminckx.

For the defence, Dr. Guillery, a member of the Medical Commission, was called, and deposed that he believed what Dr. Stienon held

to be a footprint of Armand on the carpet had been produced by a knee, not a boot; and that the impression might have been made ten or fifteen minutes after the blood had flowed. The cadaveric lividity permitted no conclusion to be drawn, as, twelve days after death, it was accompanied with putrefaction. He thought, moreover, that the blood had flowed from the nape of the neck, not from the nose of the deceased. In this, he disagreed with the other four members of the Medical Commission, who said that dogs, shot in a similar manner to M. Bernays, bled from the nape; but Dr. Guillery denied that a man would bleed in the same manner. He thought the statement of Léon, that he knelt near the body and raised the head, probable enough. Dr. Schönfied agreed with Dr. Guillery.

Dr. Vleminckx was hereupon recalled for the prosecution. His evidence as to cadaveric lividity was based upon three months' experiments upon corpses in hospitals. Cadaveric lividity was, he stated, a physical putrefaction, a chemical phenomenon. Dr. Steinon also reasserted that the blood had flowed from the nose, and not from the nape of the neck; and that the absolute evidence of blood from the pharynx proved that the body of the deceased had been left quiet after the fatal shot. An extraordinary and undignfied scene ensued, the medical men for the prosecution and defence being, on the application of the Advocate-General, confronted in court; the President remarking that it was the first time this had been done, but that it was necessary for the purpose of ascertaining the truth. The discussion between the contending medical men, as to whether the mark on the stain of blood on the carpet was a foot-print or a knee-print, became very violent, and the President had much difficulty in maintaining order; and he at last declared the discussion useless. It is stated that five medical men stood together in the centre of the court, and disputed violently.

The medico-legal questions raised in this extraordinary case are of extreme importance. It is impossible, however, to form a final opinion upon them until we have before us something more than mere newspaper reports. The admission of Léon Peltzer, subsequently to his conviction, that he was rightly condemned, tends to support the views of the prosecution. If the deceased fell on his back, it is certainly more probable that he bled from the nape of the neck than from the nose, and the unsullied state of the front of the deceased's shirt bears out this supposition. The profession will await with interest the publication of a more detailed account of Dr. Vleminckx's experiments upon cadaveric lividity than those reported in contemporary newspapers. One of the chief links connecting Armand Peltzer with the actual perpetration of the crime—or rather of the disposal of the body—was the alleged imprint of his boot made on the blood-clot after this had become set. Evidence from footprints is a kind of evidence peculiarly liable to error; and in this case the production of the prints by a boot was vehemently denied by the medical experts for the defence; and in the face of this contradictory testimony, it is open to the gravest doubt as to whether the supposed probative value of the prints in question was not entirely illusory. Certainly, in a case where medical men differ as to whether a mark on blood has been produced by a trowser-covered knee or a boot, a prisoner is entitled to the benefit of the doubt.

THE LEEDS GENERAL INFIRMARY.

THE governors of the Leeds Infirmary have lately taken a step which deserves to be carefully weighed by the managing committees of many of our general hospitals. A special meeting was held on the 15th ultimo, to consider the expediency of appointing two assistant-surgeons. But, in reality, the question thus raised had very wide bearings, and materially affected the position of the existing staff. The surgical work of the infirmary has hitherto been carried on by four surgeons, who were appointed for life, and who, in some instances, retained their office for forty years and more.

It is obvious that this system is attended by serious disadvantages. When men reach middle life, and are busily engaged in private practice, they cannot adequately attend to all the demands which a great institution like the Leeds Infirmary must make upon their time. They may, indeed, look well to the interests of their thirty or forty in-patients, but, in addition to this, to attend the out-patient department four days a week is more than ought to be expected from them. If this be true of middle-aged men, it is still more true as life goes on.

These difficulties have no doubt long been felt by the surgeons of the Leeds Infirmary, but it is only lately that they have been able to take any steps in the matter. At the recent special meeting of the governors, the chairman proposed a series of resolutions, which had already been sanctioned by the weekly board, and which, after due consideration, were unanimously adopted. These resolutions may be briefly summarised as follows:—1. That two honorary assistant-surgeons should be appointed; 2. That the full surgeons should retire after twenty years' service, and should then be appointed consulting surgeons; 3. That the consulting surgeons should each retain six beds, to enable them to follow up any particular line of inquiry in which they might be interested; 4. That these regulations should not apply to the surgeons in charge of the Eye and Ear departments; 5. That all members of the honorary staff be governors of the institution during their continuance in office.

In proposing these changes, it is obvious that much more is involved than the mere appointment of assistant-surgeons. The present staff, having been elected for life, are sacrificing their own vested interests, and deserve much praise for thus giving up their personal advantage in order to promote a public and professional benefit. By the plan now adopted, we may hope that much good will be effected. *a*. The casual and out-patient department will receive greater attention. *b*. The full surgeons will, after twenty years of active service, be relieved of their more onerous duties. *c*. As consulting surgeons, with a few beds, they will retain an interest in the work of the infirmary. *d*. A regular promotion will take place in the staff, by which junior practitioners will know, with tolerable certainty, when a vacancy will occur. *e*. By constituting the members of the staff *ex officio* governors, their legitimate influence in the management of the institution is secured.

The generous concessions which have been made by the seniors in favour of a junior staff are likely to have a most beneficial effect, in promoting still further the good feeling which already exists among the medical men of Leeds.

The Leeds General Infirmary has long held a high place among provincial hospitals. Many eminent men have been connected with it. It will assuredly lose nothing of its lustre by the changes which have been introduced into its constitution, for they are calculated to raise still higher its good name, and to increase materially its efficiency.

The Queen has presented six birch lounge chairs, provided with shifting backs and soft crimson covered cushions, to Netley Hospital, for the use of the invalids in that establishment.

WE are requested to announce that the eighth session of the International Medical Congress will commence in Copenhagen on August 10th, 1884, closing on August 16th.

WE are informed, on good authority, that the Egyptian Government have been so gratified with the working of Lady Strangford's Hospital at Cairo, that they have promised a yearly grant of £2,000 towards its maintenance. An influential and zealous local committee has, we learn, already been formed, and held its first meeting. European residents and officials welcome the establishment of this hospital.

THE French Minister of Foreign Affairs has just appointed a French sanitary agent in Mecca, where the pilgrimages are a fruitful cause of outbreak of cholera. The Government has chosen for the post an Arab physician, Dr. Taïeb-Ould-Morsly.

OUR readers will learn with regret of the very dangerous illness of a very old associate and former General Secretary, Mr. Watkin Williams, of Birmingham. His professional brethren in attendance entertain no hope of his recovery.

THE Queen has been graciously pleased to nominate and appoint Surgeon-Major James E. T. Aitchison, M.D., Indian Medical Department, Bengal, and Surgeon-Major George Bidie, M.B., Indian Medical Department, Superintendent of the Central Museum at Madras, to be Companions of the Order of the Indian Empire.

THE vacancy in the office of Physician in Ordinary to the Queen, vacant in consequence of the death of Sir Thomas Watson, has been filled by the appointment of Dr. Wilson Fox; and Dr. Owen Rees has been appointed Physician Extraordinary in succession to Dr. Fox.

THE returns of the Cairo hospital for December show that the daily average of fresh entries has been under forty-six, against over sixty-five in November. The total number of deaths in December was twenty, against fifty-five in November.

PROFESSOR Carl Braun has performed Porro's operation in Vienna nine times. In eight cases, the pedicles were treated by the extraperitoneal method, and five recoveries were recorded. These five women are living now in Vienna, and are exhibited annually at the clinic. The ligatures in Professor Braun's last case were of strong silk, prepared antiseptically, and were most carefully applied.

THE death of Dr. Robert Elliot, of Carlisle, is announced this week. He was an earnest, able, highly energetic physician, deeply interested in the sanitary progress and social welfare of his town, and who up to the latest day of his life was incessantly thinking and working for the improvement of the sanitary and social condition of his fellow citizens. Dr. Elliot was a frequent attendant at the annual meetings of the Association, and took a lively interest in its progress.

OLD St. George's men will read with regret the announcement of the death of Dr. James Arthur Wilson, for many years physician at the St. George's Hospital, at the ripe age of 87, at Holmwood, Surrey. Dr. Wilson has out-lived so many of his contemporaries that he will be remembered chiefly by his older pupils. He belonged to the earlier generation of physicians of St. George's Hospital, and the memory of him will long remain in the minds of those who were his pupils or his friends, as of a physician distinguished by his learning, by his grace and gentle kindliness, and by his able, painstaking and thorough investigation of his cases. Dr. Wilson was especially an authority in his day on the subject of fevers, to which he had given great attention, and on which his lectures and teachings were much esteemed. He had in a high degree qualities of culture, erudition, kindness of heart and amiability of thought and manner.

FAITH AND FUNDS.

THE "Faith Cure" Establishment of Buffalo has, the *Philadelphia Medical News* reports, been broken up by reason of lack of funds. The inference is unavoidable that the power of faith may be equal to such a trivial work as the cure of disease, but is not equal to the more arduous task of raising a sufficient supply of money to keep the institution in operation.

TREATMENT OF MENIERE'S DISEASE.

DR. GRAZZI, in an article (*Gazzetta degli Ospitali*) on this subject, extols the use of quinine. He gives the valerianate in combination with extract of aconite. At first, the noises in the head are made worse by the treatment; but after a short time great improvement takes place. In 1875, Charcot recommended quinine in the same disease. He gave from seven to fifteen grains daily for two months and a half.

THE CHOLERA.

A TELEGRAM from Alexandria states that the report telegraphed to Madrid by the Spanish Consul at Suez, stating that cholera was raging among the pilgrims on the road between Medina and Mecca, and that there was great mortality at the former place, is discredited there. The Sanitary Commission has no knowledge of the reported outbreak, but an order has been sent to enforce strict quarantine at Moses's Wells. Reports of the same tenour were received during November, but it is declared that there are now no more pilgrims at Mecca or Medina.

QUARANTINE.

THE Board of Trade have received, through the Secretary of State for Foreign Affairs, a copy of a Despatch from Her Majesty's High Commissioner of Cyprus intimating that, in consequence of contagious disease in the Red Sea, all vessels arriving at Cyprus from any port in the Red Sea with foul bills of health will have to proceed to the port of Larnaca, to undergo a quarantine of ten days, with such extension as may be deemed necessary, but that vessels with clean bills of health will be admitted to free *pratique* after a medical inspection.

SUICIDE OF A MEDICAL MAN AT HOUNSLOW.

MUCH excitement has been caused at Hounslow by the lamentable death of Dr. William Whitfield Edwardes, who committed suicide on Wednesday of last week by taking hydrocyanic acid. The deceased was the partner of Dr. W. M. Whitmarsh; and, from the evidence given at the inquest, it appears that he had been much depressed. In a letter which he had written before his death, he spoke of some horrible charge having been made against him by a woman, without foundation, and accused his partner, Dr. Whitmarsh, of complicity. The reading of this letter, and other evidence given, have caused a great outburst of local popular feeling against Dr. Whitmarsh. The windows of his house have been broken by a mob, who have threatened still further violence, but have been restrained by the police. As the whole evidence is probably not yet before the public, we abstain from making any comment on this most unfortunate case.

PARKES MEMORIAL PRIZE.

THE triennial Parkes Memorial Prize of £100, with Gold Medal (value £15), has been awarded to Mr. R. J. Polden, B.A., M.B.Dub., Officiating Surgeon to His Excellency the Viceroy and Governor-General of India, for his essay "On the Effects of Hygienic Measures in Arresting the Spread of Cholera." The subject for the next prize is the following:—"On the Prevention of Disease among Troops during Military Operations in Tropical and Subtropical Climates."—The essay is to be illustrated as far as possible from the personal experience of the author. Essays are to be sent in to the Committee of the Parkes Memorial Fund, to the care of the Secretary (Surgeon-Major G. E. Dobson, M.B.), Royal Victoria Hospital, Netley, on or before the 31st day of December, 1885. Each essay is to have a motto, and to be accompanied with a sealed envelope bearing the same motto, and containing the name of the competitor. The competition is open to the Medical Officers of the Army, Navy, and Indian Services, of executive rank on full pay, with the exception of the Assistant-Professors of the Army Medical School during their terms of office.

THE COLLEGES AND CONJOINT EXAMINATIONS.

THE Committee of conjoint examination of the College of Surgeons and the College of Physicians is constituted as follows:—Mr. Spencer Wells, Sir James Paget, Professor Marshall, Mr. Cooper Forster, Mr. Erichsen, Mr. Savory, and Mr. Holmes, delegates from the Royal College of Surgeons; the President of the Royal College of Physicians (Sir William Jenner), Sir Risdon Bennett, Sir William Gull, Dr Acland, Dr. Sieveking, Dr. Ord, and Dr. Pitman, acting for the College of Physicians. Our only regret is that such a committee should have been appointed at all, at a moment when the mere fact of its appointment is open to serious misconstruction, and when its labours can hardly be expected or hoped to produce any practical effect, seeing that it is in every sense profoundly to be desired that the labours of such a committee will be superseded by the action of the Government in the new Medical Bill, which is being drafted, and which no one ought more strongly to desire to see brought into operation than the bodies which are thus, at an inopportune moment, taking upon themselves to try a little tinkering on their own account.

BANTING OUTDONE.

A SOMEWHAT novel plan of reducing corpulency to graceful dimensions has been devised by a German medical writer. The author, in a small pamphlet (*Corpulency and its Cure according to Physiological Principles*, by Dr. W. Ebstein, Wiesbaden, second edition, 1882), points out defects in the various treatments in vogue—Banting's and the mineral-water system. The curious thing, however, is his own method, which, he says, has the venerable authority of Hippocrates. In the author's opinion, corpulency is caused by too great a quantity of albuminoids and of sweets; and the cure is, to diminish these and to increase the quantity of fat in the food. He gives an example of the success of his dietetics. A healthy man, forty-four years of age, who, from his twenty-fifth year, had begun to grow very stout, owing to a sedentary life and to the dietetic use of an excess of alcohol, of albuminoids, and of sweets, lost twenty pounds in six months of following the prescribed diet. It may be added that, though the proportion of fatty matters was large, the diet altogether was little better than starvation fare.

THE CONTAGIOUS DISEASES ACTS.

IN determining not to recommend the extension of the Contagious Diseases Acts, the Parliamentary Committee has, in the opinion of the *Broad Arrow*, arrived at a most unfortunate conclusion. Indeed, practical reformers will altogether fail to understand the logic of maintaining the Acts because of their demonstrated utility, and at the same time consenting to paralyse their efficiency. The opponents of the Acts have some reason to congratulate themselves upon the concessions they have extorted, for all the evidence goes to prove that it is the very partial application of the remedial law which impairs it. Were every military station properly protected, the beneficial results, already so overwhelming as to have secured a favourable report from the Committee, would be simply enormous; and in yielding to influential clamour, the old favourite weapon has been left in the hands of the reactionaries. The old arguments, derived from the influence exercised upon the returns by the unprotected districts, will be periodically revived, and a method—though of course, an unsuccessful one—of assailing the Acts will be kept open. Meanwhile, wherever troops are quartered away from the operation of the Acts great mischief ensues, and is likely to ensue. Although the common sense of the country condemns this, it appears that it must be tolerated; as for the present, at any rate, the report of the Committee cannot be reopened, and it may be assumed that the Government will act upon it. There is, however, this hope left to us—namely, that the Secretary of State for War, knowing the injury wrought to young soldiers and recruits in the unprotected districts, may be induced to recommend that authority be taken for a further diminution of the evil by an extension of the remedy.

LORD COLERIDGE ON COTTAGE HOSPITALS.

AT a recent meeting at Ottery St. Mary in support of a movement to raise £5,000 for a hospital which has been built for the district by Mrs. Gilbert Elliott, Lord Coleridge, after paying a high tribute to the generosity of Mrs. Elliott, alluded to the great value of cottage hospitals in the particular districts in which they were established. Compared with the great London and country hospitals they might seem small, but unquestionably the work they did was very great and important. Speaking of hospitals generally, Lord Coleridge observed that it was a mistake to suppose that they by any means existed for the benefit of the poor alone. Sickness and bodily evils, requiring the attention of medical men, fell upon rich and poor alike. All were subject to the strokes of fate and to disease, and there were many thousands of people who might never have seen the inside of a hospital, but to whom, nevertheless, the existence of such institutions had been of the greatest value. He was, of course, alluding to the important part these institutions played in increasing the general knowledge of medical men, in augmenting their power of usefulness to rich and poor alike, and in enabling them to bring the highest possible skill to bear in their efforts to alleviate suffering wherever it might be found. Cottage hospitals, as well as the country or great metropolitan hospitals, had their value, even from this point of view. In passing, he paid the highest testimony to the generosity of the medical profession for the ready help they always gave gratuitously to the institutions raised by the generosity of persons residing in various parts of the country. Having drawn attention to certain old local charities, the original purpose of which had, to some extent, passed away, Lord Coleridge expressed a hope that some of their funds might be applied to more modern requirements, such as those represented by this hospital, and, in conclusion, strongly appealed to the generosity of all to aid in maintaining the institution on behalf of which they had met.—The Bishop of Oxford, in reviewing the entire hospital system, said he could not but feel that the very greatest moral advantage was gained by the erection of hospitals throughout the land. They were monuments of generosity—of kind thoughtfulness for the wants of others; and the country was richer for having in its midst institutions pointing to kindness, generosity, and self-sacrifice.—Sir John Kennaway and other gentlemen having spoken, sums amounting to £600 were promised in the room.

DEVELOPMENT OF LIVING GERMS IN WATER.

AT a recent meeting of the Manchester Literary and Philosophical Society, Dr. R. Angus Smith contributed some interesting facts on this subject. Dr. Smith stated that he had learned, from Dr. Koch of Berlin, the use of gelatine in preserving the indications of organic vitality. About 2½ per cent. of gelatine well heated in a little water is mixed with the water to be tested, and the mixture forms a transparent mass, which is not movable like the water itself. When soluble or unobserved matter develops from the organic matter of the waters and makes itself visible in a solid and insoluble form, it does not fall to the bottom, but each active point shows around it the sphere of its activity, and that sphere is observed and remains long. The gelatine preserves the whole action, so far as the more striking results are concerned, and keeps a record for a time both of the quality and of the intensity of life in the liquid. Dr. Smith speaks of the more striking effects, which are clear and abundant, every little centre of life making itself apparent to the eye, and sometimes expanding its influence to reach both sides of the tube. It seems to him now essential that all chemical examination of water should be supplemented by an inquiry, like this of Dr. Koch's, into the comparative activity of the living organisms. When a centre acts, it makes around it a sphere in some waters; and the sphere, which has the appearance of a thin vesicle, is filled with liquid. These spheres form in a day or two, according to the water, and at the bottom is a white mass, chiefly containing active bacteria. The liquid fill-

ing the spheres may be taken out by a pipette and examined, as also the bacteria which lie at the bottom. Dr. Smith has not yet examined a sufficient number of specimens of water to give general rules, but hopes to do so. For example, he has as yet examined no chalk water, but his observations have been confined chiefly to the Manchester district, hill water, impure brook and pond water, Mersey, Irwell, and Medlock water, and canal water. In certain specimens of Manchester water the spheres appear on some days very few; on other days the amount is enormous and heavy, the whole of the tube in which the experiment is made being filled with spheres. At such times the water is highly impure and complained of by the public. The globules do not show themselves in strong sewer water, but the whole mass becomes turbid, and the surface of the gelatine becomes liquid and full of life. This liquid condition gradually increases, until the whole is reached. Dr. Smith says that, when the tests are sufficiently developed, chemists must prepare for a new condition of things.

FATALITIES FROM FOOTBALL.

A YOUNG lad, aged sixteen, was recently knocked over, while playing football on Wandsworth Common, by a blow from the ball, which struck him full on the chest; he did not appear to be much injured at the time, and continued to play until the end of the game. After his return home, however, he complained of his fall, passed a very restless night, and, on the following morning, remained in bed, owing to headache. On the second day after the accident, on attempting to rise, he became very ill; and the surgeon, who was then called in, found him unconscious. No improvement in the symptoms occurred, and the patient died on December 6th, the fourth day after the accident. An inquest was held by Mr. William Carter, and a verdict of "Accidental death" was returned, the evidence of an eye-witness proving that the ball, when it struck the deceased, had been kicked in the ordinary course of the game. The case is a rather obscure and unusual one, and we are inclined to think that the evidence of the surgeon is wrongly reported, when he is made to say that the cause of death was "concussion"; the symptoms point, we believe, to some gradually established compression. Roughly speaking, there may be said to be two categories, into one or other of which all these cases of slowly developed unconsciousness, after injury to the head, fall. Of these, one class is constituted by cases in which there has been meningeal extravasation. Cases are on record where there has been little or no loss of consciousness at the time of an injury, which has yet been severe enough to produce a fracture of the skull, traversing the groove in the inner surface of the parietal bone, in which the middle meningeal artery lies deeply; the artery, ruptured by the fracture of the bone, has gradually bled, slowly giving rise to a large extravasation. A certain slight increase in the contents of the cranium can take place without giving rise to symptoms; but, at first slowly, and afterwards more rapidly, coma becomes established. The second class of cases to which we refer are those where the injury to the brain and its membranes has not been sufficiently severe in quantity to produce unconsciousness, but has been of such a quality as to lead to inflammation and softening; urgent symptoms, due to traumatic encephalitis, may not appear for forty-eight hours after the accident, but are seldom delayed longer. It would seem probable, from the reported evidence, that the case of the young football player falls into this latter category. On the obvious moral to be drawn from such a case, we shall forbear to insist; it is hopeless to attempt to argue on the subject with an enthusiastic football player; such an one takes pride in the sprained ankle, or the broken leg or collar-bone, which, by its crippling effect, never lets him forget the prowess he has exhibited, and the feats of legs and shoulders which he has performed, on many a hard fought field. But there is one piece of advice that may be tendered; and we would appeal to our younger brethren, in whose ranks many ardent players are to be found, to spread the advice, by precept and by example, and this is: that, when a severe fall or blow on the head has been received, it is only wise and prudent for the injured player to withdraw and rest, and on no account to neglect the earliest symptoms of possible intracranial mischief. Much may be hoped for in an early stage of such injuries from proper surgical attention; little or nothing can be done when the symptoms have once become well established.

THE PATHOLOGICAL SOCIETY.

AT the annual meeting held on January 2nd, the Secretary (Mr. Henry Morris) read the annual Report of the Council, which showed the continued prosperity of the Society, both as regards the number of its members and the state of the finances. Graceful allusions were made to the memories of the many eminent men, members of the Society, who had died during the past year. Amongst them was one honorary member, Professor Schwann, well known as the creator of the cell-doctrine. The names of Sir Thomas Watson, Dr. Peacock, and Dr. Crisp were specially mentioned by the Secretary, because of their former intimate association with the Society. The Secretary alluded to the establishment of a committee for comparative pathological work, a subject in which Dr. Crisp had been the pioneer. The suggestion of Mr. Jonathan Hutchinson that uncompleted cases reported in previous volumes of the *Society's Transactions*, should be finished as far as possible, had this year been carried out, and the result had been incorporated in the thirty-third volume of the *Transactions*, which was already in the hands of all the members. The following gentlemen were elected to serve in the Council of the Society for the ensuing year:—*President*, *J. W. Hulke, F.R.S.; *Vice-Presidents:* W. Bowman, F.R.S.; Thomas Buzzard, M.D.; William H. Broadbent, M.D.; Andrew Clark, M.D.; John Croft; *Arthur Edward Durham; Jonathan Hutchinson, Samuel Wilks, M.D., F.R.S.; *Treasurer*, George Johnson, M.D., F.R.S.; *Honorary Secretaries*, *J. F. Goodhart, M.D.; Henry Morris; *Council*, *Robert Barnes, M.D.; John Cavafy, M.D.; John Curnow, M.D.; *Frederick A. Mahomed, M.D.; *Joseph Frank Payne, M.D.; *George Vivian Poore, M.D.; R. Douglas Powell, M.D.; *Frederick Thomas Roberts, M.D.; George Henry Savage, M.D.; Reginald Southey, M.D.; *W. Morant Baker; *William Harrison Cripps; Alban Henry G. Doran; *Alfred Pearce Gould; Thomas Ridge Jones, M.D.; John Langton; *R. Clement Lucas; Edward Nettleship; Robert William Parker; William J. Walsham. The gentlemen whose names are marked with an asterisk (*) were not on the Council, or did not hold the same office during the preceding year. Votes of thanks to the retiring president, secretary, and other officers, were proposed, seconded, and unanimously carried.

THE CAUSE OF M. GAMBETTA'S DEATH.

THE history of M. Gambetta's case may thus be summarised, judging from the report published below which we have received from some of the authorities who attended him. The great Republican leader had been subject for some years to symptoms of chronic perityphlitis, with inflammatory mischief extending upwards around the ascending colon. The report that he was also subject to diabetes does not appear to be correct. About five weeks before his death he received a pistol-shot wound in the palm of the right hand, the bullet passing under the skin, and making its exit a little above the middle of the limb. The wounds healed readily, but three weeks after the injury symptoms of inflammation of the intestines appeared, soon assuming the local features of the disorder to which he had long been subject. The old standing disease, aroused to great activity by the depression of health, caused through the accident, became so acute and severe as to prove fatal, after extending to other parts of the abdomen. The physicians and surgeons, who examined the body of the illustrious deceased, consider that this explanation is sufficient, without the necessity of supposing that the bullet-wound caused pyæmia, which is not a rare sequel of gunshot injuries. The extension of inflammation to

the peritoneum, with suppuration, was slight and confined to the neighbourhood of the old intestinal disease so as to warrant, to a great extent, this supposition; though there are many who will believe that old inflammatory deposits, such as existed in this case, may become poisoned by the changes produced in the blood after a bullet-wound, and then set up a true pyæmic inflammation within the abdomen; this, however, is but another interpretation of the nature of the appearances of the abdominal organs as seen after death. No operation of any kind could have averted the fatal termination of the case. M. Gambetta died in the prime of life, being but in his forty-fifth year. It is well known that his right eye was removed in 1867 by Dr. de Wecker for panophthalmitis. We are, informed that the physicians and surgeons who were first called in consultation did not consider the abdominal symptoms as very serious, and all expected he would recover. It was not till two days before death that M. Gambetta's attendants became seriously anxious. Two nights before the patient's death, M. Lannelongue proposed to make an exploratory incision into the abdominal walls, to search for pus, but the other medical attendants strongly opposed this proposition.

NECROPSY OF M. GAMBETTA.

ACCORDING to information forwarded to us from Paris, the necropsy performed on the body of the late M. Gambetta completely justified the diagnosis of his medical attendants, and the expectant treatment which they pursued. The wounds in the hand and forearm were perfectly cicatrised, and are considered to have played no part in the cause of M. Gambetta's death. The termination of the ileum was found so much contracted, that the finger could hardly be passed into it. Bands of adhesion bound down the vermiform appendix, and there were traces of old inflammation in the cellular tissue around the cæcum. Along the course of the ascending colon the cellular tissue was infiltrated with pus, which nowhere formed a distinct abscess. In the substance of the abdominal wall, immediately adjacent to the ascending colon, but not communicating with the collection of pus around that portion of intestine, were sloughs of connective tissue, and also purulent infiltration around them, but no true abscess. There was no visible disease of the mucous membrane of the intestines. A "certain quantity of, but very little," purulent fluid was found lying free in the peritoneum, due, it was considered, to local extension of inflammation from the region of the cæcum and colon. This explains the symptoms observed during the last few days; lowering of the previously high temperature to 98.6°; pulse, 130, flatulence, hiccough, and coldness of the limbs. Intelligence was retained up to the last moment; and M. Gambetta never realised that his life was in danger. Our informant remarks that the bulletins relating to M. Gambetta's illness have been much criticised here as being too sanguine in their tenour: but M. Gambetta up to the last day of his life read, or had read to him all the newspapers, and it was therefore necessary to give somewhat vague information to the public as to his real condition. For many years, M. Gambetta suffered from symptoms of chronic perityphlitis extending along the ascending colon (hence the confusing term "pericolitis", which has appeared in the daily papers, and become all the more confusing through being sometimes misspelt pericholitis, as though the bile-duct were involved). This caused him much pain in the right flank and iliac fossa. Under the influence of the constitutional disturbance produced by the pistol-wound in the hand, but in no way through direct traumatic or pyæmic inflammation, the old-standing inflammation around the cæcum and ascending colon became acute, and assumed the form of diffuse phlegmonous inflammation; and the abdominal walls also became the seat of the same kind of inflammation. The extension of inflammation to the peritoneum around the affected intestine completed the final result. It is perfectly evident from the facts revealed by the necropsy, that surgical intervention would but have hastened the fatal termination. All the remaining viscera were examined, notwithstanding their advanced state of decomposition, hardly checked by injection of some preservative fluid on the previous day. The lungs and heart were perfectly healthy. The liver was fatty, but not very large; there were no metastatic abscesses in any part of the body; the brain and its meninges were normal; there was no atheroma of the arteries, and only a small calcareous patch in the arch of the aorta, above the semilunar valves. The authorities present were Professors Paul Bert, Brouardel, Charcot, Cornil, Trélat, Verneuil; Doctors Lannelongue, Siredey, Fieuzal, Lionville, Mathias-Duval, Laborde, Guerdat, Gille, and M. Paul Gibier, house-surgeon. After the necropsy, performed by M. Brouardel and Cornil, the brain of M. Gambetta was removed, in order that it might be weighed and preserved, under the directions of Dr. Charcot. This brain will ultimately be deposited in Dr. Broca's Museum of Comparative Pathology. The operation of embalming the corpse proved to be very difficult, on account of the great corpulence of the subject, and the troublesome dissection necessary before the carotids could be exposed for the introduction of the nozzle of the injecting-syringe.

HYPERTRICHOSIS UNIVERSALIS.

A CURIOUS case of this somewhat rare condition is being exhibited at the Royal Aquarium, Westminster, in the person of a child which has been brought to England from the Maiyong-gyi district of Laos, in Burma. The abnormality, as the name implies, consists of an abnormal development of hair over the whole body. The child, Krao by name, is as nearly as can be ascertained about seven years of age, and is a well-marked example of the yellow coloured races found inhabiting the eastern parts of India. The hair of her head is jet black and quite straight, there being not the slightest tendency to curl. A transverse section of the hair would doubtless show each hair to be nearly circular in form, hence the entire absence of any tendency to curl. The form of the nose is markedly platyrhine, that is, short from the root to the nasal spine in proportion to the head; and the nasal bones are not directed forwards and downwards to the extent that we are accustomed to see in European skulls; consequently, the nose has a flattened appearance, a characteristic common to many different races possessing dark or yellow skins. The cheeks are normal, a fact of importance, since we are informed that they resemble the pouches found in some monkeys, in that they are used as receptacles for food. Careful examination was made as to the condition of the mouth, but no enlargement even of the space between the gums and the cheeks could be detected. The fulness of the cheeks is entirely due to their thickness; or more strictly speaking, to the amount of subcutaneous adipose tissue. The milk dentition is, present and the only permanent tooth which has been acquired is the first molar. Some of the milk-teeth are by no means in a good condition, and are of small size. Indications are present that the permanent incisors may shortly be acquired. There is no foundation, however, for the statement that there are two rows of teeth, or that there is any other permanent dental deformity at present, though this is not unfrequently an accompanymeut of this condition of extra development of hair. The maxillæ are not projected forward, giving to the lower part of the face that prominent character met with in the black races, but they are orthognathous or slightly mesognathous as in most yellow races. The body is proportionate, and absolutely normal in form; the hands and feet are well formed; the hands and fingers exhibit a great degree of mobility; the toes have not been as yet, deformed by the unnaturally shaped boots usually supplied to the public. The second toe is slightly longer than the great toe, a condition which frequently occurs in savage races, and not unfrequently also in our own. What is of most interest, however, is the abnormal development of hair all over the body. The hair of the head is continued down over the brow, so as to be continuous with

the eyebrows; across the centre of the forehead, the hair is shorter and increases in length towards the eyebrows; laterally, it is prolonged downwards on to the face, in front of the ear, in the form of well marked whiskers; and on the greater part of the face there is more or less hair developed, though most developed on those parts where it normally exists in adult males; over the body, hair of a soft straight character is developed, but not to such an extent as in any way to hide the skin. It is increased around the nymphæ, but its augmentation is not continued up towards the umbilicus. The direction in which the hairs lie or grow in different parts of the body can, from its increased quantity, be well studied in this child; and it is worthy of notice that on the forearms the hair is directed outwards and upwards, while that on the upper arms is downwards and outwards. On the back it is generally directed from the spine, but courses in various ways. Cases of hypertrichosis have been known and recorded as far back as the sixteenth century. They occur in various races, and in different parts of the world, widely separate, such as Russia, Burma, and Mexico. A large number of these cases have been collected by Bartel, in an exhaustive memoir on the subject, published in the *Zeitschrift für Ethnologie* (1879), and have been divided into two kinds, hypertrichosis universalis and hypertrichosis partialis, according as the hair exists over the whole or part of the body. Several cases have also been published by Hildebrandt and others; so that, though rare, the condition is well known. In many of the published cases, the development of hair has been much greater than in the child at the Aquarium, though it is possible that as she grows older there may be an accompanying increased hair development. From a morphological point of view, the case has little or no interest, though in our daily contemporaries we find it universally entitled "The Missing Link." Such is altogether a misnomer, there being no ape-like characters present, nor any that would indicate specific difference of any kind. The abnormal growth of hair might, however, have an atavistic origin, in which case it might be classified as belonging to the Palæogenetic form of Gegenbaur.

SCOTLAND.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending December 23rd, it appears that the death-rate in the eight principal towns was 30.8 per 1,000 of estimated population. This rate is 6.3 above that for the corresponding week of last year, but 1.3 below that for the previous week of the present year. The lowest mortality was recorded in Perth—viz., 17.2 per 1,000; and the highest in Glasgow—viz., 37.5 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 5.1 per 1,000, or 0.2 above the rate for the previous week. In Glasgow, the death-rate from zymotic diseases was 7.5, and in Paisley 7.3 per 1,000. From acute diseases of the chest, 228 deaths were registered, or 3 less than in the previous week. The mean temperature was 40.5, being 14.9 above that of the week immediately preceding, and 5.6 above that of the corresponding week of last year.

THE GLASGOW HOSPITAL FOR SICK CHILDREN.

THE progress made in the erection of this hospital has from time to time been noted in the JOURNAL; but the formal opening of it took place on December 20th, and was very largely and influentially attended. Without going into any detail as to the structural arrangements of the building, it may be said that the hospital contains fifty-five beds, arranged in three wards, placed one above the other. Special attention has been given to the ventilating of the wards, and every precaution has been taken to make the sanitation of the building perfect. The intention is to admit only children from two to twelve years of age, although special cases will meet with attention. The hospital will meet a great want in Glasgow, and no doubt the wards will soon have their full number of occupants. We hope that funds will soon be forthcoming to free the institution from the large building debt incurred; and that there will be no lack of annual contributions for the yearly maintenance of the inmates.

THE HOURS OF DUTY OF RAILWAY-SERVANTS.

IT has long been admitted that a fertile cause of railway-accidents are the long hours of duty which many of the railway-officials are subjected to for days together. As a consequence of this excessive strain on their nervous system, bodily and mental exhaustion shows itself, and, at a critical moment, some mistake is committed, leading to most disastrous results. No doubt, public opinion has done a good deal to bring pressure to bear on the railway-companies to have this state of things remedied; but some recent meetings held in Scotland, and attended by all classes of railway-servants, show that there is still need of reform in this matter on the Scotch railway-lines. The statements made by the different *employés*—engine-drivers, guards, drivers, breaksmen—all bore testimony to the long stretch of hours they had to work, and this not occasionally, but constantly. So excessive are some of the hours of work given, that we would have been pleased to see some denial given to them by the railway-authorities, but as yet none has been forthcoming. We sincerely hope that, in the interests of the travelling public, as well as on the ground of humanity to the men employed, the railway-directors will give early attention to a condition of matters which is decidedly detrimental to their own interests, as it must be a fruitful source of accidents, disease, and death.

IRELAND.

CHRISTMAS AT THE BELFAST HOSPITALS.

THE various wards and passages of the Belfast Royal Hospital were decorated by evergreens arranged in the form of mottoes, wreaths, and emblems. A substantial dinner was provided for the inmates and resident staff. At the Ulster Hospital for Children the usual dinner was given, the wards being decorated with flags, etc., the entire cost being subscribed by Mr. David McConnell.

NIGHT LECTURES.

THE Council of the Royal College of Surgeons in Ireland, as stated in the JOURNAL of December 23rd, passed a resolution postponing the giving effect to their former resolution, refusing to receive certificates from any school in which evening lectures are delivered, until April 1st, 1883, in consequence of a memorial on the subject presented by a deputation from the students attending such lectures. Encouraged, probably, by this success, a second deputation waited on the Council last week, praying that the first-year and second-year students who were pursuing their studies at night might be permitted to continue them under that system, and thus be placed on an equal footing with the third-year men, whom the College had permitted to finish their education in the way in which they had commenced it. The Council, however, refused the application.

LONDONDERRY COUNTY INFIRMARY.

ON the 29th ultimo, the distribution of presents from the Christmas-tree to the inmates of the various wards took place. The corridors, staircases, lobbies, and wards, were decorated with various mottoes, including "Faith, Hope, and Charity", "Long Life to Sir William and Lady Miller", and Christmas and New Year mottoes of various kinds. Nearly every ward had a Christmas-tree, and all were tastefully decorated with wreaths of evergreen put up by the nurses. Through the exertions principally of Lady Miller, the donations and presents this year were very numerous, so that a substantial present

was bestowed on each inmate, and everything done to render the season a happy one to the sick poor under treatment in the infirmary.

DR. F. J. R. IRWIN.

DR. FITZJOHN ROBERT IRWIN, whose untimely death by typhus fever is sincerely lamented by a large circle of friends, held the posts of medical officer to Kilkeel Workhouse and Dispensary. Previously to this, he was medical officer for seven years to Scotstown Dispensary, and on leaving that place was presented with an address and piece of plate as a token of the esteem with which he was regarded. He also, at the time of his death, was surgeon to the Monaghan Militia. He contracted typhus, and from the eighth day of the fever the nervous symptoms predominated, the pulse and temperature being both high. He died comatose on the seventeenth day, leaving a widow and two children to mourn his untimely decease. The following extract from a Monaghan paper shows the high esteem in which he was held:—"Both as physician and surgeon he was most highly thought of, while his kind, bright face, and feeling manner, endeared him to many a sufferer, who welcomed his visit as the brightest portion of the day. His genial manner and ready wit made him the life and soul of every social gathering, for he possessed the enviable art of always looking happy himself, and making those he was with feel happy. We have rarely known anyone so universally beloved. All who knew him will miss him. His many friends have lost one whose loss can never be replaced; those he was most intimate with especially, for no other friend can fill his place—that must be a blank for ever."

CHRISTMAS AND NEW YEAR FESTIVITIES AT THE METROPOLITAN HOSPITALS.

FOLLOWING the time-honoured injunction of Thomas Tusser, "At Christmas, play and make good cheer", the authorities of all the London hospitals, without, we believe, any exception, either on Christmas Day itself or on some day during the week, made special efforts to amuse and gratify the inmates of the various institutions over which they preside. Governors, doctors, residents, students, and nurses, all combined to afford delicacies for the palate or relaxations for the mind. That their efforts were highly appreciated by those towards whose amusement and benefit they were directed, we cannot doubt. We are indebted for the accounts published below to the kindness of the members of the medical staffs of the several hospitals.

GUY'S HOSPITAL.

Christmas Day was celebrated, in the whole of the twenty wards comprising Guy's Hospital, by a substantial dinner, for every patient who could partake of it, of roast beef and plum-pudding. A good-natured rivalry between the staff of nurses and students attached to each ward had been going on for some days in the matter of decorations; and, as a result, the wards were festooned from end to end, gay with Christmas mottoes and happy devices, and hung with rows of fantastically shaped Chinese lanterns. At early morning, a distribution of cards and toys was made amongst all the children, and in every ward there was a gigantic Christmas-tree, loaded with useful articles, to be distributed amongst the adult patients, as well as a great display of toys, to be stripped from the tree, and shared by the young people in the course of Christmas week. In one ward were a life-size toy lamb, which bleated on its head being touched, and a soldier in full uniform, which was also capable of certain movements. Many of the toys were presented by the proprietors of *Truth*. The familiar cotton-wool of the surgery was pressed into many uses by the decorators; it formed the white letters of many of the devices, the snow round the windows, the white furry-looking garbs in which the statuary in the wards were clad for the occasion; and was utilised also in the making of sundry toy dogs and sheep. At the conclusion of the dinner, a rich dessert of fruits, sweetmeats, cake, and wine was served round; and, in the men's wards, presents of tobacco and pipes were distributed, and the luxury of a smoke was permitted. In the evening, the Chinese lanterns were all lit, and in some of the wards there were entertainments provided. Arrangements were made for a series of concerts, which occupied each evening of the week, to go the round of the wards of the institution. As we have hinted above, the dissensions between the medical staff and those who have charge of the domestic arrangements, which were at one time serious, and unfortunately prominent, have now entirely disappeared, and have given place to an *entente cordiale*, which leaves little more to be be desired.

"Amantium iræ, amoris redintegratio!"

THE HOSPITAL FOR CONSUMPTION, BROMPTON.

The celebration of Christmas, always an event of much importance for the inmates of this great institution, began at an early hour, the patients being awakened by the voices of the choristers and nurses, who sang carols in the corridors. The wards and galleries had been gracefully decorated by nurses and patients with evergreens sent by several friends. Various designs, fashioned with these materials, assisted by the judicious intermixture of gay-coloured flags, and embellished by certain devices cunningly wrought in paper, lent to the somewhat stern architectural beauties of the building an unwonted charm. The chapel, though standing in no such need of embellishment, was yet made to put on a festive appearance, and at the morning service a large congregation assembled within its walls. The management of the hospital has always been distinguished by a liberal table; and adverse circumstances of financial difficulty—for this hospital has suffered as severely as any from recent "hard times"—have not been allowed to interfere with this essential element in the treatment of wasting diseases. Turkeys, pheasants, oranges, and "a cask of strong ale", were among the presents received, and served to the patients at their Christmas dinner. Further, for the first time in the annals of Brompton, plum pudding was distributed with a generous but discriminating hand; and, as a final concession to the spirit of the season, smoking was permitted in the male wards. No one, we learn from the resident medical officer, Dr. Hicks, "was in the least degree the worse for this or any other little enjoyment". On Tuesday evening, a very amusing entertainment was given by some of the resident staff, the inmates by their continuous merriment testifying to the complete success of their entertainers' efforts to please them. By the kindness of some of the lady visitors to the hospital, a Christmas tree was provided on Friday evening; so that the patients in Brompton Hospital will have been well cared for.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

The "Christmas Tree" entertainment took place at the above institution on Tuesday, January 2nd, at 5 P.M. A monster tree, tastefully and abundantly decorated, formed the central attraction, when its numerous candles were lighted up. A chorus of nurses and convalescent children sang some Christmas carols. When the good things on the tree had been distributed to the children, another diversion was furnished them in the form of a "new fairy Christmas pantomimic Punchinello entertainment, entitled *Beauty and the Beast*," which was received with hearty bursts of applause by all the little patients. The next proceeding consisted in the distribution of a number of special presents, each selected to suit the individual, whose name was affixed to the gift; amongst these were many articles of utility, as well as those of mere amusement. The hospital was gaily dressed with Chinese lanterns, and many distinguished subscribers honoured the occasion by their presence.

THE LONDON HOSPITAL.

An extra effort has been made at the London Hospital this year to give the patients "the merriest Christmas" that their unfortunate circumstances would allow; and, as is proverbially the case, the givers have been as blessed as the receivers, for the promoters of the festivities have derived great enjoyment in the preparation of the entertainment. Each ward was gaily decorated with evergreens, devices, banners, and mottoes; and a delightful and commendable rivalry existed between the sisters and nurses of the various wards to secure the best display; the result being that where all were so pretty there was little or no discernable difference in merit. In addition to the usual Christmas dinner, each set of wards, during the last week, has had its tea party, after which some of the following attractions were offered for the amusement of the patients—charades, vocal and instrumental music, conjuring, exhibitions with a magic lantern, etc. The children, as might be supposed, have not been forgotten. Two large Christmas trees have been prepared, much to the delight of the youngsters, and each little patient is endeavouring

to prolong its convalescence, and to remain in the hospital until the day when the presents on the trees will be distributed amongst them. The round of festivities will be brought to a termination at the end of the week, when the annual entertainment which is arranged by the resident medical staff for the nursing staff will take place; at which there will be a concert, theatricals, and perhaps a little dancing.

ROYAL FREE HOSPITAL.

The wards of the hospital were tastefully decorated, and on Christmas Day the patients were enlivened by the singing of Christmas carols by the nursing staff. The inner man of those patients who were sufficiently convalescent was also gratified by various additions to the ordinary diet.

ST. THOMAS'S HOSPITAL.

The convalescent patients in St. Thomas's Hospital were regaled with the time-honoured fare of roast beef and plum pudding. It was found necessary to provide 500 lbs. of the latter and 650 lbs. of the former. For some days previously, large presents of evergreens and flowers had been received, and the sisters and nurses had been busily engaged in decorating their wards with them. All the wards looked cheerful; but the Leopold ward rendered itself conspicuous by a model of the hospital ship the *Carthage;* this and Albert ward having patriotically lent their "sisters" to act as nurses on this ship during the late war in Egypt. After dinner, the children in the Victoria, Elizabeth, and Alexandria wards were presented by Mrs. Wardroper, the matron, with a quantity of toys and suitable Christmas books and cards. Divine service was performed by the Rev. Mr. Mills in the handsome chapel, situated over the main entrance to the hospital. In the afternoon, the institution was visited by a number of friends of the patients; and in the evening the probationary nurses from the Nightingale Home sang carols in the various wards.

ST. MARY'S HOSPITAL.

Christmas was celebrated at this hospital on December 27th. The wards were decorated with evergreens, and hung with Chinese lanterns. The centre of the accident ward, the first to be entered by a visitor, was occupied by a Christmas tree, which bore on its branches a present for each patient in the ward; in the children's wards, also, there was a Christmas tree, and for each of the small patients there was a suitable present. These presents for the patients were provided by the kindness of various friends of the hospital, who had evidently devoted much time and trouble to their preparation. An additional evidence of the desire on the part of several kind hearted ladies to render the children's wards as bright and cheerful as possible, is to be found in the fact that the walls of these wards have been entirely painted by their hands; their efforts have had a picturesque and successful result. Every ward in the hospital partook of the generosity of the various friends of the institution, and the officers and nurses devoted themselves *con amore* to the work of distributing the presents, and rendering the occasion a memorable and joyful event.

THE MIDDLESEX HOSPITAL.

Mainly owing to the kind exertions of the Lady Superintendent, Miss Thorold, the children and patients in this hospital will have good cause to remember the Christmas of 1882. For some weeks past, preparations had been making to provide a large Christmas tree well laden with toys, bonbons, etc., for the amusement of the children, and many friends had been sending contributions of gifts and money for this purpose. In the evening, this tree was exhibited in the board-room, and all the children and convalescent patients that could suitably be present were brought in. When the gifts had been distributed to those in the room, then those who were left in the wards were not forgotten, for "something off the tree" was taken to each one. In addition to this, every patient, nurse, and servant in the hospital was presented with some more substantial and useful seasonable gift.

UNIVERSITY COLLEGE HOSPITAL.

The annual Christmas entertainment was held at this hospital on December 28th, and was attended, in addition to the medical staff, by a number of supporters of the institution, and friends of the patients, who had been specially invited. All the wards had been tastefully decorated by the medical and nursing staffs, who had spared no pains to give the wards a cheerful aspect. In the centre of each ward, was either a brilliantly lighted Christmas tree, or some ingenious models representing such tales as "Little Red Riding Hood", or "Jack and Gill." In one of the wards was an artistic representation of the loss of the Arctic exploring vessel, the *Eira*, designed and carried out by one of the house-physicians; this idea, no doubt, had its origin in the fact that Dr. W. H. Neale, the surgeon to that ill-fated vessel, was, a few years ago, himself a very popular house-physician to the hospital. The walls were covered with suitable mottoes and decorations of evergreens and flowers, while in every ward was a large pile of presents for the patients and attendants. The whole scene was very bright and cheerful. Those who could leave their beds witnessed an exhibition in one of the lower wards with a magic lantern, lent for the occasion by Mr. Labouchere, M.P. The children's wards are closed in consequence of alterations, but the little patients, who were scattered about the other wards, all received their due share of the presents and amusements of the evening. For the adult patients, the presents included suitable gifts of clothing, in accordance with the necessities of the case, or the number of the sufferer's family. During the evening, the choir of All Saints, Acton, sang some carols and concerted pieces outside the wards. The financial position of the hospital is at present most unhappy, and the Christmas festival was entirely carried out by special gifts, mostly obtained through the sisters of All Saints, Margaret Street, who undertake the entire nursing of the hospital.

WESTMINSTER HOSPITAL.

Christmas was observed this year without the Christmas tree, and very successfully. On Christmas Day, at 6.30 A.M., and again at 8 P.M., Christmas carols were sung in the corridors by Miss Pyne, the excellent lady superintendent, and some of the nurses and probationers, and gave great pleasure to the patients. The Christmas cards were very numerous, Messrs. Eyre and Spottiswoode and the Religious Tract Society each sending one to each patient. All the children had toys in their stockings. Teas and entertainments were given on successive evenings in the various wards, and distribution of warm clothing, the entertainers in succession being Lady Alcock, the Hon. Mrs. Gage, Mrs. Whitbread, Mr. and Mrs. Troutbeck, Mr. and Mrs. Helder, Mrs. Northcott, Miss Farrer, Mrs. Barry, Mr. and Mrs. John Thynne, Mr. and Mrs. Bowman, Mr. Shepperd, Mrs. Yorke, the Misses Flood Jones, Mrs. Bedford, Captain and Mrs. Gray, and Lieutenant Boyle, of the Coldstream Guards. The amusements consisted of music, crackers, magic lantern, snapdragons, and, where the condition of the patients permitted, blind man's buff. The concert and dramatic entertainment annually given in the board-room by the resident medical officers comes off next week, and never fails to give great pleasure to all those patients that are not confined to their beds. The Christmas fare of the patients has been very kindly supplemented by presents of forty pheasants from the Prince of Wales and Mr. W. H. Smith.

THE WEST LONDON HOSPITAL.

The patients at this hospital were provided, by the kindness of numerous friends of the institution, with various additions to the ordinary dietary, in shape of certain viands esteemed of a seasonable nature, such as pheasants, hares, turkeys (with a proper garnishing of sausages), plum puddings, and oranges. Other friends catered for intellectual cravings by sending illustrated newspapers, books, and Christmas cards, while, for the younger patients, toys were provided, partly through the enterprise of our contemporary *Truth*, and partly by private generosity.

ALTERATIONS OF THE SPINAL CORD IN POISONING BY PHOSPHORUS.—The results of the researches of Dr. Danillo (*Gazette Méd. de Paris*, 1882) on this subject are as follows. 1. The alterations of the spinal cord in phosphorus poisoning belong to the class of myelitis, either central or diffused. 2. In cases of acute poisoning, the central nervous system contains deposits of pigment of hæmatic origin. This has, heretofore, not been noted. 3. Large doses of phosphorus give rise to a central myelitis, along the whole length of the cord, with the formation of extravasation and pigment. Smaller and repeated doses give rise to a diffused myelitis, affecting the gray and the white matter. 4. Phosphorus thus presents us with a powerful means by whose aid we may excite, at will, an inflammatory irritation in the spinal cord, either localised in the gray matter, or diffused. 5. A certain number of morbid nervous phenomena, observed during life, are to be attributed to the effects of one or the other of these two kinds of myelitis.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, January 17th, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., December 26th, March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 17th day of January next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 21st, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All of these inquiries will be continued during the present year, 1883.

The list of the returns already received is unavoidably postponed till next week, on account of pressure on the space of the JOURNAL *for this week.* F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—The next quarterly meeting will be held, at 2.30 P.M., on Thursday, January 11th, 1883, in the Board-room of the Devon and Exeter Hospital, Exeter. Members intending to make communications or show specimens are requested to give notice to S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The fourth ordinary meeting of the session will be held in the Medical Institute, Edmund Street, on Thursday, January 11th. The chair will be taken by the President, Dr. Dewes, at 3 P.M. *Business:* Election of members. To consider the circular and questions from Committee of Council, and to pass such resolutions on the subject as the meeting may determine. *Notices of Motions:* Mr. Hugh Ker will move, and Dr. Fowler Bodington will second, the following resolution: "That, in the opinion of this Branch, no change in the laws which regulate the election of Members of the Council will be satisfactory, which does not provide for the election, by the Branches, of one or more representatives from each Branch, in proportion to the numbers of its members." Mr. Gamgee will move, and Mr. Sawyer will second, the following resolution: "That this Branch is not satisfied with its present method of representation in the Committee of Council, and is of opinion that the principle of direct representation, which the British Medical Association insists upon in the constitution of the General Medical Council under a reformed Medical Act, should be applied to the government of the British Medical Association."—E. RICKARDS, M.B., 14, Newhall Street; A. H. CARTER, M.D., 51, Newhall Street, Honorary Secretaries.—January 4th, 1883.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The first meeting of the session will be held in the Board-room, Worcester Infirmary, on Monday, January 8th, at 4.30 P.M. *Business* · Ballot. To discuss the question of the representation of Branches on the Committee of Council. Discussion on Collective Investigation of Disease. Dr. Strange will give details of some interesting cases —GEORGE W. CROWE, M.D., Honorary Secretary

METROPOLITAN COUNTIES BRANCH.—A general meeting of this Branch will be held in the Theatre of the Royal School of Mines, Jermyn Street, W., on Wednesday, January 17th, at 8 P.M. Sir James Paget and Sir William Gull will address the meeting on the Collective Investigation of Disease; and resolutions in connection with the subject will be proposed.—Alexander Henry, M.D., W. Chapman Grigg, M.D., Honorary Secretaries.—132, Highbury Hill, N., January 3rd, 1883.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE third meeting of the session was held on December 14th; Dr. BALTHAZAR FOSTER in the chair. The members and visitors present numbered seventy-five. Among those present were: Mr. Macnamara and Dr. Mahomed (London); Dr. Strange, Dr. Crowe, and Dr. Stallard (Worcester); Dr. Totherick, Dr. Malet, and Mr. Manby (Wolverhampton); Mr. Baker (Derby); Dr. Thursfield (Leamington); Dr. Nason (Nuneaton); Dr. Pike (Malvern); Dr. Lynes (Coventry); Dr. E. Underhill (Dudley); Mr. H. L. Browne (West Bromwich); Dr. Heale (Warwick); Dr. Ker (Halesowen); Dr. Smith (Redditch); Dr. Atkinson (Kenilworth); Dr. Phillips (Walsall); Dr. Hart (Har- borne).

Communications.—The following communications were read:

1. Dr. Malins, Dr. Hickinbotham, and Dr. Edgington showed specimens of Ovarian Cysts which they had removed.
2. Dr. Thursfield showed a specimen of a Round-celled Sarcoma.
3. Mr. Bartleet showed a case of Periarticular Inflammation of the Ankle-joint in a child. The disorder was the result of manipulation by a bone-setter after a sprain, and much simulated arthritis of the ankle-joint, from the fact that the entire capsule of the joint and the sheaths of the tendons all round were affected.
4. Mr. Webb (Coleshill) showed a modification of Sir James Simpson's Axis-traction Forceps.
5. Mr. Bennett May showed a man on whom he had performed the operation of Nephrolithotomy.
6. Mr. Lloyd Owen showed a patient with Sarcoma of the Iris.

COLLECTIVE INVESTIGATION OF DISEASE.

DR. FOSTER said that he had, with extreme regret, to announce that Professor Humphry was unable to be present, as he had intended being detained at Cambridge, in consequence of indisposition. It was a great disappointment to the meeting to miss an address from Professor Humphry on Collective Investigation; and he (Dr. Foster) felt that it was an attempt to play *Hamlet* with the part of Hamlet left out. He trusted, however, that by the kindly help of Mr. Macnamara and Dr. Mahomed, the subject would be fully laid before the Branch. After referring to previous efforts made by the Association to create a spirit of co-operation among the members in carrying out therapeutical and pathological inquiries, he pointed out that the presidential address at the Cambridge meeting in 1880 was the origin of the present movement for the collective investigation of disease. The previous attempts had failed from defective organisation, and from the inability of the Association formerly to make a considerable grant of money. This was now all changed; a very complete organisation, with Dr. Mahomed as Secretary, had been created, and the Association had voted ample funds. Under these favourable circumstances, much might be expected from the present scheme, if individual members would do their part. Certain subjects had been selected for investigation; and, on the basis any experience, however slight it might seem to the observer, would be valuable. The Collective Investigation of Disease Committee aimed at gathering together the fleeting experience of individual members and, by analysing it and comparing it with that of many others, observers, to give it a scientific value. A more fruitful or a more important work could hardly be imagined. It aimed at gathering together a multitude of facts from many sources for the elucidation of certain obscure problems. Every member could help; and he hoped the Birmingham and Midland Counties Branch would do a good share in thus advancing our knowledge of the causes, relations, and treatment of disease.

Mr. C. MACNAMARA addressed the meeting, and said: It is about four years now since I commenced to take an active part in the work of the British Medical Association, in connection with the subject of medical education. That was my object in first joining the Committee of Council; but, as I have come to learn something of the work of the Association, I feel more convinced that it is capable of effecting a real improvement in the status and position of our profession. Doctors proverbially disagree. Anything, therefore, which brings us together, which leads us to know one another and work for the common good must be useful. Consequently, when I received a kind invitation from

Dr. Foster yesterday, asking me to come here to-day, I felt it not only a pleasure, but a duty, to accept his hospitality. I remarked just now that I joined the Committee of Council mainly to advance, if possible, the cause of medical education; and what is the movement we have met here to consider to-day, but a matter of education? It is largely to enable us to educate ourselves that the Investigation Committee is established. It is in the hopes of making each one of us contribute our individual efforts to advance the knowledge of the whole body, that the movement has been set on foot by Professor Humphry and others. It is not, in fact, until we are engaged on work of this kind, that we discover how much we have to learn, or that we set about acquiring the knowledge necessary to enable us to keep up to the standard of the day. It is for this reason, I say, this is an educational work. We were told by our President at Worcester that men write far too much now-a-days; but this is an old cry. Juvenal said the same thing; he thought the world was being deluged with books; nevertheless, we none of us seem to feel the burden. The truth is, a vast amount of what is published is misdirected energy; it is the outcome of men's ideas frequently based on a certain substrata of facts, but mixed with a vast deal of fancy. And so these ideas are no sooner propounded than they are attacked by some one holding different views, and the battle of words then goes on, and the world is full of folios containing little more than arguments for and against, which often all are very far from being near the truth. The medical literature of this country is full of this kind of work, and what we now honestly desire is to turn from the subjective to the inductive method of research; to attempt to collect a vast number of well ascertained facts, and from these facts to endeavour to build up cautiously, step by step, knowledge which, because it is the truth, will bear to stand the assaults of those who may attempt to oppose its teaching. We ask for facts, and not for opinions.

We propose, for instance, to gain sound information as to the effects of syphilis in the civil population of the kingdom. If we can acquire that knowledge, depend upon it the time will not be far distant before we shall see our way to apply remedial measures to its alleviation. A work of this kind can only be carried out by means of the combined efforts of the general practitioners scattered throughout the kingdom. You can trace the life-history of the disease in a manner which no one else can possibly do. For instance, a young man comes to consult you suffering from a primary sore. You probably know something of the man's family, very likely have attended one or both of his parents. You order your patient mercury, and he seems to be cured, perhaps leaves his home, and you hear nothing more of him for several years; then he returns, suffering from a complication of disease, and dies. Or this patient may have married, and has a family. Do his wife and children suffer from the effects of the disease for which you have treated him? If not, how long did he take mercury, and what form of it? And here a most interesting series of questions arises, which you alone can solve by means of your united efforts. How far does a rheumatic, scrofulous, or gouty diathesis influence the course of syphilis, especially in the children of those who suffer from these affections? The diseases we have to treat are very largely due to a combination of hereditary and other causes; and it is only possible to trace out these causes, and the relation they bear to one another, by means of a large number of facts such as we urge you to give us. I need hardly dwell on the subject of the great importance of an investigation of this kind upon the welfare of our fellow-creatures. I refer especially to the subject of syphilis, because I happen to be the chairman of the subcommitte appointed to preside over this branch of our investigations. I will not dwell upon the memorandum we have drawn up, explaining the series of questions bearing upon this subject; whatever merits it possesses is due to my valued friend and colleague, Dr. T. Barlow. But I think you may rest assured that, if you will only supply us with facts, that they will be turned to the best advantage; and, when I mention that our committee consists of Messrs. Jonathan Hutchinson, H. Lee, Berkeley Hill, H. Butlin, and J. W. Palmer, together with Drs. I. Burlow and Stephen Mackenzie, I think you may be assured that any efforts you may make to help us will not be thrown away. Lastly, let me repeat that, in making these returns, you will be called upon to think over subjects which many of you may have allowed to slip from your notice for years. Depend upon it, if you take part in these investigations into disease, while giving invaluable information, you will do much to brush up your own knowledge; so that, in proportion to the help you afford in carrying on this great work to a successful termination, you will receive back quite as much as you give; and, at the same time, aid in what, to my mind, is one of the most eminently useful movements yet initiated by the profession, and for which we are so largely indebted to Professor Humphry.

Dr. MAHOMED read a paper on Medical Life-Histories, which was published in last week's JOURNAL.

Dr. SAUNDBY said, that there was every reason to believe that this Branch, at any rate, would not fail to co-operate in the work. He had met with a very hearty response from the members of the local committee, and had already received a satisfactory number of cards duly filled up. These had been forwarded to Dr. Mahomed, and he complained that they had not been acknowledged, as promised, in the JOURNAL. He would suggest that it was very desirable to do this without delay; because, 1, it announced the fact that work was actually being done, and the knowledge of this was a great incentive to others to work; and, 2, it afforded proper encouragement to members who had shown zeal in the work, and promoted a healthy spirit of emulation. He thought the present cards erred by asking information on too many points, and he was glad to notice that the committee had selected for investigation the single question of the contagiousness of phthisis; but as the profession generally was not very well posted up in the nature of the rather rare evidence that supported this view, he thought it would be well to supply some information on the matter. A member of the local committee had asked him to say that the cards became soiled when carried in the pocket, and, therefore, should have no printing on the outsides.

Mr. KER (Halesowen), speaking as a representative of general practitioners in this district, had very little doubt that the filling up of the cards issued by the local investigation committee would be actively carried out by the members, though at first the results would probably be small. Alluding to the remarks made by Mr. Macnamara, he said that there could be little doubt that they would themselves learn a great deal by the steady recording of facts observed at the bedside; and that, at the same time, their patients would benefit by the increased attention paid to their cases. They would thus be amply rewarded for the time spent by the increased knowledge they would gain, and the gratitude their poorer patients would show for the extra attention paid to them. Much good had occurred from the constant reporting of cases admitted into some of the large hospitals This being so, might we not look for splendid results from so largely extended a field of observation, and from such an increased number of workers as one might hope to obtain among the members of the British Medical Association? He believed that much enthusiasm might be excited in this matter by each member of the Committee considering himself a sort of centre in his particular district, and urging his fellow-practitioners to help in the movement. He intended, with this object in view, to institute occasional meetings at his own house; he should do all he could to help on the movement, and also to induce his professional brethren around him to do the same.

Professor HAYCRAFT urged the necessity of medical co-operation. In his own case, he had often to ask the help of medical friends in investigations which he was at present carrying on, and which would fall through but for their kind assistance. Were enough public spirit evinced, and sufficient facts collected, he felt sure that these would produce their full value in the hands of those whose duty it was to sift them. He was very rejoiced that the secretaryship was in the hands of his friend Dr. Mahomed, whose acquaintance with exact scientific methods, and the means of applying them, no one who was acquainted with the sphygmograph, and with Dr. Mahomed's work on urea and Bright's disease, would doubt.

Dr. CARTER explained the details of the organisation for collective investigation, with a view of showing the completeness of the arrangements which had been made. He went on to say that too much must not be expected at first. These matters always took time to develop fully; but if every member present would at least interest himself in the subject, and occasionally contribute information, ultimate success was certain.

Dr. RICKARDS thought that the cards already issued went too much into detail, especially those on diphtheria; they were so elaborate, that busy men, feeling that they could not fill them up satisfactorily, would hesitate to fill them up incompletely. To answer some of the questions, inquiries, which would be inconvenient, would have to be made. He hoped the Committee would consider whether better results would not be obtained if future cards were not quite so exhaustive.

Dr. MAHOMED, in his reply, stated that there were no fewer than fifty-three committees at work all over the United Kingdom, and that if each committee gave only ten returns on each subject, a minimum below which they could scarcely fall, no fewer than 530 replies would be given to the questions for which answers were sought. He thanked Dr. Saundby for his suggestion that the returns obtained should be announced at frequent intervals in the JOURNAL. He explained that at pre-

sent these returns were in the hands of the local secretaries, and that it was proposed to call them all in by the end of the year; after this, more frequent announcements should be made. In reply to Dr. Rickards, he explained that the diphtheria cards were necessarily long on account of the complexity of the subject. Several epidemics of diphtheria had been traced to milk, and in some cases other articles of diet were suspected; it was, therefore, necessary to take note of the source of articles of food, that any community of supply of any article among infected persons might be recognised. These cards were not for general distribution, and the sanitary cards would be placed chiefly in the hands of medical officers of health. Thanking Professor Haycraft and Dr. Carter for their suggestions for combined observations between those in charge of patients, and those more skilled in scientific methods both chemical and instrumental, Dr. Mahomed stated that a most important suggestion had been made by Dr. Thompson of Croydon, that skilled pathologists should be appointed in the various great centres of the country whose services should be at the disposal of practitioners who wished to obtain *post mortem* examinations of their patients; that in each case a certain fee and travelling expenses might be paid for the services rendered. This proposition awaited further consideration, it would no doubt greatly facilitate such examinations and prove of very great service in our collective inquiries. In conclusion, Dr. Mahomed impressed upon the members present that incompletely filled cards were often as valuable as others; that they should not omit to send cards because they were unable to furnish all the details asked for. Thus it mattered little about the symptoms present during an attack of rheumatism or chorea, or the condition of the heart at the time of observation, if the observer could give details of the preceding illnesses and minor ailments of the patient, for these were the points on which information was most wanted.

A vote of thanks to Mr. Macnamara and Dr. Mahomed for their addresses was proposed by Dr. STRANGE, and seconded by Mr. GAMGEE, and carried unanimously.

CORRESPONDENCE.

THE NURSING AT KING'S COLLEGE HOSPITAL.

SIR—It is barely eight years ago since more than half the Committee, with probably the most competent secretary a hospital ever had, were sacrificed, and very many of the most influential of the governors of King's College Hospital were offended. At this cost, the sisters of St. John's House were enabled to control the nursing and the management of this excellent charity. At that time, there was a balance at the bankers of £2,440, and the invested property amounted to nearly £40,000. Many cautious friends of the hospital urged in vain that the price paid for the doubtful blessing of an *imperium in imperio* was beyond the possible value received. To-day, there is a deficiency in the current account of £9,500, whilst the invested funds of King's College Hospital are almost entirely exhausted. This state of affairs is bad enough; but it must further be recorded that the rule of the sisters has proved so intolerable, that, at a recent meeting of the Committee, it was decided to give the authorities at St. John's House notice that, unless a definite change were made, the Committee would be compelled to cancel the agreement, and undertake the nursing themselves. Much as we may regret it, we need hardly be surprised at such a result, and can only wonder the staff have so long submitted to so undesirable a system.—I am, &c.,

ADMINISTRATOR EXPERS.

BATH AND THE BATH MINERAL WATERS.

SIR,—Puffing is not my forte; and even if it were, I should not attempt to puff that which, upon careful and personal observation, speaks so regally for itself. A circular has been, I know, only recently sent to numbers of the medical profession both at home and abroad, setting forth the value of the mineral springs of Bath; statistics prove their value. I need not, therefore touch on that point, my only object being to testify from personal inspection to the many improvements and additions made to the various baths, and the good accommodation provided at the Mineral Water Hospital for those poor suffering people, so many almost motionless from rheumatism. Any thing more perfect, or calculated to relieve and give comfort to suffering humanity it is difficult to conceive. There are baths in various localities adapted to the means of all classes, but all possessing the same properties. One thing is, I think, still wanting. and to which I would venture to draw the attention of the profession of Bath, as well as the public at large. I allude to the necessity of a self-supporting hospital, a system which would give a certain class above the poor the means of availing themselves of the baths and waters. How often have we all met with numbers of that class, and to whom we have advised a trial of these springs, how often, alas! met by the reply, "How can I afford it?" Why should not Bath have its self-supporting Mineral Water Hospital, as Ventnor, Bournemouth, etc., have their self-supporting Consumptive and Sanitarian Institutions? At the annual meeting of our Association held in Bath, under the presidency of our ever to be regretted friend, Dr. Wilbraham Falconer, a full description of the springs, etc., was given in his address, and must have impressed all his hearers; but since that period many valuable improvements in the accommodation have been made. I can only say that seeing is believing, and if any doubt my observations, let them go and see for themselves. Independently of the medical aspect, there is, for those fond of antiquarian and archæological pursuits, now going on a most interesting excavation of a large Roman bath, and which was evidently used by a large population. No doubt, I think, can exist but that there was a considerable Roman settlement, probably a large village or town, of which the bath alluded to formed a part; the discovery of Roman pavements in different directions, and some distance from the bath, tends to this conclusion. The bath must have been most luxurious, being supplied by the same warm springs as those now existing, which have so beneficial and desirable an influence upon certain classes of disease.

Trusting that I have not trespassed too much upon your space, I am, sir, yours faithfully, B. BARROW.

Southlands, Ryde, December 18th, 1882.

THE MEDICAL PROFESSION IN NICE.

SIR,—I have recently seen in print, both in medical and non-medical journals, the statement that:

"The French doctors in Nice are, it appears, up in arms against their English and other foreign brethren established in that favourite health resort, etc."

Now, as this gives a very incorrect notion of what has actually occurred, I beg leave, with your permission, to explain the real state of the case.

There exists in France a Mutual Provident Medical Society, or, to give it its proper name, "Association Générale de prévoyance de protection et de secours mutuels pour tous les médecins de France," which has branches through the whole country, and at Nice, as elsewhere. In addition to its functions as a provident society, giving help to distressed members of the medical profession and their families, it occupies itself with all questions concerning the interests of the profession in its relations with the public.

Accordingly, at the last general meeting, four important papers were read, which were published in the annual report, or "Annuaire":—

1. How best to reconcile the duty of the accoucheur, which obliges him to give notice of the birth of a child, with shielding the reputation of the mother when that child is illegitimate.
2. On the duty of the doctor with reference to testamentary dispositions in his favour.
3. On the degree in which the State should have the right to compel a doctor to take part in a medico-legal investigation.
4. On the regulations with reference to the interment of prematurely born children.

A question certainly of no less importance than these was that which occupied the attention of the Nice branch of the Society namely:—

"How best to deal, in the interests alike of the public and the profession, not with their English and other foreign brethren, but with a set of men, many of them having no qualification to practise in any country, a sort of Bedouins, a kind of medical pirates, who, in defiance of the law, come to a place during the season, advertise themselves as doctors, and, after a stay of a few months, go to exercise their trade elsewhere."

Against these people the law provides a remedy as it does in England, but it has been laxly administered. The Medical Provident Society considered how best to insure its more effectual exercise.

The law requires that every medical practitioner shall, on settling in a place, take or send his diploma, or other qualification recognised by the French law, to the office of the Prefect for verification, and to have it there registered.

The best means of enforcing the law, was the question before th

meeting; and in the resolutions they adopted, I, who was present, and am a member of the Society, most cordially concur.

I will just add that there are three ways open to anyone who desires to practice medicine in France:—

1.—To undergo all the required examinations, and to take the degree of Doctor of Medicine, for which anyone holding a *bonâ fide* English qualification is eligible.

2.—To pass the minor examinations as Officier de Santé, which grade qualifies only for practice in one department of the country, but which authorisation, on complying with some formalities and passing a very simple additional examination, would be transferred to another department in the event of change of residence. A large number of foreign practitioners in France hold only the qualification of Officier de Santé, but are not on that account in the least looked down upon by their French colleagues. The reputation which a man brings with him from his own country, is the standard by which he is judged.

3.—To have the direct authorisation of the Minister of Public Instruction, which is now very rarely given, and which I owed to the fact of my having some years ago received the exceptional honour of being nominated a foreign correspondent of the National Academy of Medicine of Paris.

Compelled to pass my winters at Nice, I should make but a poor return for the kindness with which I have been received by my French colleagues, if I did not give a true version of the incorrect statement which has been widely circulated, and which certainly could not have originated with any real member of the medical profession.

I will merely add that in what passed at the meeting there was no question of any English practitioner.—I am, sir, yours faithfully,

Nice, December 27th, 1882. CHARLES WEST, M.D.

MILITARY AND NAVAL MEDICAL SERVICES.

DEPUTY Surgeon-General J. Irvine, M.D., A.M.D., head of the sanitary and statistical branch on the headquarters' staff, will, we understand, succeed Surgeon-General Sir J. A. Hanbury, K.C.B., as principal medical officer to the army of occupation in Egypt, with the local and temporary rank of Surgeon-General. Deputy Surgeon-General Irvine will be succeeded at the War Office by Deputy Surgeon-General J. A. Marston, who has been recently promoted for his services during the late campaign, and who for some years held the junior appointment on the staff at head-quarters.

THE form of the report of the medical survey held on naval officers invalided from foreign stations, has been revised, and all surveys are to be reported in an amended form. In future, the surveying officers are not to express an opinion as to the disability being attributable to the service, but are to state in full the causes of the disability. Should their lordships consider that the disability is not attributable to the service, or should the reasons for sending the officer home be in other respects unsatisfactory, the officer will be required to defray one-third of the expense of the passage.

THE Greenwich Hospital pension of £50 a year, vacant by the death of Retired Deputy Inspector-General of Hospitals and Fleets, Alexander Cross, on December 3rd, has been awarded to Retired Deputy Inspector-General of Hospitals and Fleets, Andrew Murray, from that date.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

SCHOOL-CERTIFICATES.

SIR,—In my letter, which you kindly replied to in the JOURNAL of November 18th, I am afraid I have not made myself quite clear. I do not refer to pauper children only, but to all classes.

When any child, under a certain age, does not attend school, the School Attendance Committee (composed of guardians), as a School Board authority, demand a certificate from the parent, under threat of proceedings at law. In many cases, the parent cannot pay for this certificate; and, in any case, does the law compel them to obtain one? and are the School Board authorities legally entitled to pay for it if they do? I give at least twenty each week, and I do not get pay for more than one or two, and that not always.

I will be glad to have your valuable opinion on the matter.—I am, sir, yours faithfully,

DISTRICT MEDICAL OFFICER.

*** We have made inquiries into this matter, but cannot find that there is any general rule on the subject. Undoubtedly, such a certificate is required by law, but whether the School Board could defray the cost, is a question which, according to the dictum of the Local Government Board, "must depend upon the actual facts of each case."

OVERCROWDING OF WORKHOUSES.

IN urban districts, the need for extension of workhouse accommodation usually keeps pace with increase of population. When guardians resist, and prevent such necessary extension, their course is extravagant rather than economical, for overcrowding is inevitable, especially in the winter months,; and overfilled wards bring difficulties and dangers, and often diseases, which can only be overcome by increased expenditure.

We are glad that at last something is to be done to remove the overcrowding which has so long existed in the union workhouse at Dudley. After being repeatedly discussed by the guardians, the subject has been brought before Parliament, and it has been taken up by the Local Government Board. The Report of Mr. Longe, the Government inspector, which was made public last week, puts the question so urgently, that further delay in finding an adequate remedy is impossible. The inspector records that the beds in the wards for imbeciles are so closely placed, that they actually touch each other. He properly asserts that such a state of things is neither creditable nor even decent, and he very justly tells the guardians that the condition of their workhouse has "become a public scandal".

It appears that, when the present Dudley Workhouse was built, the population of the union was thirty thousand less than it is now. In the face of an immediate necessity for a considerable outlay, possibly the Dudley guardians might profitably follow the example of their neighbours in Birmingham, by sending their pauper infants to cottage homes in the country, and so gaining room for more adults in their workhouse wards. Some years ago, the Birmingham guardians had to deal with a difficulty similar to that which now exists in Dudley. They relieved the pressure upon their workhouse by establishing an extensive series of cottage homes at Marston Green, in a rural district some miles from their town. This experiment has proved an unqualified success. It has effectually remedied the pressure it was designed to relieve, and it has obviated the necessity for a large extension of accommodation at the workhouse.

Pauper children, removed from a workhouse in town to cottages in the country, benefit physically and morally from their improved surroundings, and they acquire occupations and habits which tend, in no small degree, to raise them above pauperism.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—B.S. Examination, 1882. Examination for Honours. Surgery.

First Class.

Walters, Frederick Rufenacht (Scholarship and Gold Medal), St. Thomas's Hospital.
Sutton, Samuel Walter (Gold Medal), St. Thomas's Hospital.

Second Class.

Scharlieb, Mary Ann Dacomb, Madras Medical College, London School of Medicine, and Royal Free Hospital.
Buxton, Dudley Wilmot, University College.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, December 28th, 1882.

Baber, John James Yarrow, 122, Brompton Road, S.W.
Beaumont, Albert William, 2, Delamere Crescent.
Cock, Frederick William, 1, Westbourne Park Terrace.
David, Evan Thomas, Upton Road, Downham Road.
Hitchcock, Alfred John, St. Helen's, Jersey.
Hunter, Mitchell, Marghera, County Derry.
Sarzana, Ettore, High Street, Kensington.
Smith, Henry Strode, Axbridge, Somerset.
Tilly, Alfred, Gilbert Terrace, West Hampstead.

The following gentlemen also on the same day passed their Primary Professional Examination.

Foot, Ernest George, Middlesex Hospital.
Gittings, Alfred, Middlesex Hospital.
Robertson, James Sprent, Middlesex Hospital.
Wingrave, Thomas, London Hospital.
Walter, Ernest Walter, Charing Cross Hospital.

UNIVERSITY OF DUBLIN.—WINTER COMMENCEMENTS.—At a meeting of the Senate, held on Wednesday, December 20th, in the Examination Hall of Trinity College, under the Presidency of the University Caput, the following Degrees and Licences in Medicine and Surgery were conferred.

Bachelors in Surgery.—William Hallaran Bennett, Joseph Bulfin, William Alexander Carte, Francis Richard Cassidi, Arthur Wellington Fenton, John W. Gowland, George L. M. Lloyd-Apjohn, Francis A. de T. Mouillot, Henry W. Peard, Augustus Mayberry Whitestone.
Bachelors in Medicine.—John Armstrong, Francis R. Cassidi, Eugene Cormack, Richard G. Hanley, Arthur W. Fenton, John FitzGerald, Denis W. Freeman, Augustus M. Whitestone.
Master in Surgery.—Charles Gorman.
Doctors in Medicine.—Charles Gorman, Edward Gordon Hull.
Licentiate in Medicine, and in Surgery.—Joseph P. Finegan.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on December 11th and following days, the under-mentioned gentlemen passed their final examination for

the Letters Testimonial, and having taken the declaration and signed the roll, were admitted Licentiates of the College.

Arthur Cottew, Michael Cleary, Thomas B. Clune, Walter W. S. Corry, John Craig, Francis J. Cruise, Cornelius Daly, Michael O'F. Dolphin, Percy J. Drought, Jas. E. Fitzgibbon, John W. Gormley, Francis B. Hawes, George B. Heffernan, David W. Kennedy, Richard T. King, Thomas Lane, Edward E. Lennon, John J. Lyons, Hercules L. Miles, Henry J. O'Brien, Denis M. O'Callaghan, John J. O'Hagan, Peter J. O'Reilly, Francis F. Peet, Francis E. Pim, Alfred E. W. Ramsbottom, George P. Ridley, James D. Ryan, George P. Torney, George A. Walpole, William H. Waterfield, and Robert Wright.

MEDICAL VACANCIES.

CHORLTON UNION.—Assistant Resident Medical Officer. Salary, £120 per annum. Applications by January 24th.

CITY OF DUBLIN HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by January 6th.

DENTAL HOSPITAL OF LONDON, Leicester Square. Dental Surgeon. Applications by January 8th.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—Out-patient Clinical Assistant.

ECCLESALL BIERLOW UNION, Rural Sanitary Authority.—Medical Officer of Health. Salary, £30 per annum. Applications by January 16th.

ECCLESALL BIERLOW UNION. — Medical Officer and Public Vaccinator. Salary, £40 per annum. Applications by January 16th.

GENERAL INFIRMARY, Northampton. — House-Surgeon. Salary, £125 per annum. Applications by January 8th.

GENERAL INFIRMARY, Northampton. — Assistant House-Surgeon. Salary, £80 per annum. Applications by January 8th.

GOREY UNION.—Medical Officer. Salary, £100 per annum, and £20 as Consulting Sanitary Officer. Applications by January 6th.

KILKEEL UNION.—Medical Officer for Workhouse and Fever Hospital. Salary, £50 per annum. Applications by January 8th.

KILKEEL UNION, KILKEEL DISPENSARY.—Medical Officer. Salary, £100 per annum. Applications by January 8th.

LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Salary, £120 per annum. Applications by January 15th.

LONDON LOCK HOSPITAL, Male Hospital and Out-patient Department, 91, Dean Street, Soho, W.—House-Surgeon. Salary, £50 per annum. Applications by January 23rd.

OWENS COLLEGE, Manchester.—Demonstrator and Assistant Lecturer in Zoology. Salary, £150 per annum. Applications by January 6th.

PAROCHIAL BOARD OF AUCHTERGAVEN. — Medical Officer, Officer of Health, and Vaccinator for the Western District of the Parish. Salary, £40 per annum. Applications to Mr. Donald Cumming, Inspector of Poor, Auchtergaven, Bankfoot, Perth, by January 30th.

PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £40 per annum. Applications to Captain Stewart, Shambellie, New Abbey, Dumfries.

ROYAL EDINBURGH ASYLUM.—Junior Assistant-Physician. Applications to Dr. Clouston.

SEAMEN'S HOSPITAL (late Dreadnought), Greenwich, S.E.—Resident House-Surgeon. Salary, £50 per annum. Applications by January 19th.

ST. ASAPH UNION. Medical Officer. Salary, £83 per annum. Applications by January 10th.

ST. BARTHOLOMEW'S HOSPITAL.—Casualty Physician. Applications by January 9th.

UNIVERSITY COLLEGE, London.—Jodrell Professor of Physiology. Salary, £264 per annum. Applications by January 24th.

UNIVERSITY OF EDINBURGH.—Examiner in Medicine in each of the Departments of Chemistry, Anatomy, Midwifery, and Practice of Physic. Applications by January 15th.

VICTORIA HOSPITAL FOR CHILDREN, Queen's Road, Chelsea, S.W.—Medical and Surgical Registrar. Salary, 60 guineas per annum. Applications by January 9th.

MEDICAL APPOINTMENTS.

BEEVOR, Hugh, M.R.C.S., L.S.A., appointed Assistant House-Physician to King's College Hospital.

HERON, G. A., M.D., M.R.C.P., promoted to the Senior Assistant-Physiciancy at the City of London Hospital for Diseases of the Chest, *vice* S. West, M.D., M.R.C.P., promoted to a Physiciancy in the same Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

JEFFREYS—DILLON.—On the 3rd of January, at St. George's Bloomsbury, by the Rev. J. Montagu Cadman, Richard Jeffreys, M.R.C.S., of Eastwood House, Chesterfield, to Elizabeth Catherine Dillon, of Ballinasloe, daughter of the late Thomas Dillon, Esq., M.D., F.R.C.S.I., and J.P. for co. Mayo, and Poor-law Medical Inspector. No cards.

MACDONALD—TRUMAN.—January 3rd, at All Saints, Nottingham, by the Rev. M. J. Truman, vicar of Arnold, brother of the bride, assisted by the Rev. A. Pearson, and by the Rev. R. C. Macdonald, brother of the bridegroom, Henry Murray Wylde Macdonald, surgeon, son of the late Major-General William Pitt Macdonald, Madras Staff Corps, to Mary Matilda, youngest daughter of the late Becket Truman, surgeon, Nottingham.

DEATHS.

ELLIOT.—December 31st, at Carlisle, Robert Elliot, M.D., F.R.C.P., in his 72nd year.

HILL.—On the 19th ultimo, at Lambton, New South Wales, John James Hill, J.P., L.R.C.P.Edin., L.F.P.S.Glas., Mayor of Lambton, and Honorary Surgeon to the Newcastle Hospital, eldest son of the Rev. R. Hill, vicar of Rayton, Lancashire, aged 39. (By telegram.)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Annual General Meeting. Valedictory Address by the President. Casual communication by Mr. Sewill (Discussion on the Theory of Caries), Messrs. Stevenson Storer Bennett, and Van Der Pant, etc.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Colcott Fox On two cases of so-called Erythema Gangrenosum. Dr. Percy Kidd: Contribution to the Pathology of Diphtheritic Paralysis.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown Mr. Knowsley Thornton: Case of Extirpation of Uterus and Appendage for Epithelioma of the Cavity. Mr. W. S. A. Griffith: Notes of a Specimen of Anteflexion of the Uterus. Mr. C. E. Jennings: Transfusion. Dr Galabin: Notes of two cases of Transfusion of Blood.—Hunterian Society 7.30 P.M., Council Meeting. 8 P.M., Dr. Charlwood Turner will show Heart of Two Cavities. Mr. J. McCarthy: Cases of Fracture of the Skul —Royal Microscopical Society, 8 P.M. Mr. A. D. Michael: Notes on th Anatomy of the Oribatidæ.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. M Priestley Smith: On the Growth of the Crystalline Lens. Dr. David Lee Case of Paralysis of Third Nerve in a Child. Dr. Abercrombie: Case Paralysis of Sixth Nerve in a Child. Dr. Hughlings Jackson: On t Movements of the Eyes in a Case of Ear-Disease. Dr. E. Maddox (communicated by Dr. Greenfield): A New Method of Determining the Rel tion between Convergence and Accommodation. Mr. Rockliffe; Case Epithelial Tumour growing from a Hair in the Anterior Chamber. Livi specimens at 8 P.M.

FRIDAY.—Clinical Society of London, 8.30 P.M. Annual General Meeting. I port of Council. Election of Officers and Council for 1883. Dr. Coxwe On the Case of a Child with Symptoms resembling those of Myxœden Mr. Davies-Colley: On a Case of Enormous Enlargement of the Lower I cured by Operation. Dr. Southey: On Tachetée and Symmetrical Gangrene.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL SICK BENEFIT ASSOCIATION.

SIR,—The question of forming an association for mutual help in times of sickness has been brought forward many times in your valuable JOURNAL, but, so far, no satisfactory result has followed.

I have carefully looked into the returns of several friendly societies, and find that the amount of sickness varies with the age of the club, that is to say: in a club established nearly fifty years since, the sickness amounts to 2.4 weeks per member; in a younger club of four years' standing, the sickness amounts to 0.3 week per member. Taking the average of several clubs, I get the figures 1.53 weeks per member. If we take these figures, or say one and a half weeks, per member, to base our calculations upon, it would mean that every member of the proposed association would have to pay £7 10s. a year to entitle him to receive £5 per week during sickness. I do not think that we can say a much less sum as annual subscription, if we wish to build up the association on a firm basis. In reducing the annual fee, there are several points that might be considered, such as the diminished liability to accidents among medical men as compared with the labouring classes, the unlikelihood of their going on the club for trivial complaints, and other too well known forms of "sponging", etc.

If a meeting of medical gentlemen interested in the matter were held, a committee might be formed, to make inquiries, draw up rules, and otherwise start the association. I for one, and I think there are many others, would be pleased to pay a part of the preliminary expenses.—I am, sir, faithfully yours,

J. BAIN SINCOCK.

Bridgwater, December 26th, 1882.

SPES.—It would, we fear, serve no good purpose to publish such a letter in a medical journal at the present moment, but, if the general press could be induced by our correspondent to advocate this reform, it would, no doubt, serve a good purpose.

THE CONTAGIOUS DISEASES ACTS.

SIR,—In your issue of December 23rd, you refer to the circulation of the Minority Report of the Select Committee on the Contagious Diseases Acts, and you add, "Many people are, no doubt, induced to accept it as the genuine article." I take it for granted that no covert insult is intended by the word "induced" towards the Repeal Society, under whose auspices and at whose expense the reprint of the Minority Report is circulated. I would be extremely sorry, in fact very much ashamed of myself, if I were capable of even the careless or accidental use of a word that might be interpreted into an insinuation that those who are circulating the Majority Report of the Select Committee are "inducing" many people to accept it as an undisputed article. I forward a copy of the reprint of the Minority Report, and ask you to see for yourself that no sane person can be "induced" to accept it for anything but what it is—the adopted report of a minority of six to ten of the Committee. Indeed, if the presence and actual voting of members of the Committee upon the reports be taken as a guide to the facts of the case, the minority is six to nine only.

I venture to submit that the object of all persons, and especially of members of the medical profession, is to arrive at a sound conclusion on this grave question; and I venture to believe, I hope rightly, that you, sir, in your valuable JOURNAL, are disposed to deal fairly and justly with those who differ on the subject.

On these grounds, then, as you have given gratuitous information that the Majority Report may be had of the Society for Extending the Acts, and of other persons, I ask you to be good enough to state that the Minority Report, which goes with great elaborateness into the medical and scientific evidence of both sides, may be had for sevenpence, post free, either of the publisher, Effingham Wilson, Royal Exchange, or of the National Society for the Repeal of the Acts, 2, Westminster Chambers, S.W.—I am, sir, yours obediently,

FREDERICK CHARLES BANKS, Secretary to the National Association.

2, Westminster Chambers, Victoria Street, London, S.W.,
December 29th, 1882.

DR. ROBERT CONNELL.—If specimens and details be forwarded in the ordinary way, they will be submitted for examination.

WARMING BEDROOMS.

SIR,—If "Inquirer" will look at the fourth page of the advertisements at the end of the JOURNAL in which my letter appeared (December 16th, 1882), he will find what he needs; if, however, he be within reach of Worcester, he would get a stove from Messrs. Hall, ironmongers, of that city.—Yours truly,

Dudley, December 30th, 1882. D. BRADLEY.

ITCHING IN ICTERUS.

SIR,—Your correspondent "Justitia" will find that a similar question to his own is asked in the JOURNAL for 1879, page 882, and that, in reply, Professor Maclagan of Edinburgh recommends the subcutaneous injection of one-third of a grain of hydrochlorate of pilocarpine every day (page 919). The same matter is also alluded to at page 960.—I am, sir, faithfully yours,

Salisbury. JAMES KELLAND, M.B.

AN APPEAL.

SIR,—I regret to say, since my appeal in aid of the orphan children of the late Dr. Handsel Griffiths, which appeared in your issue of the 23rd ultimo, I have only received the sum of £18 6s. I am surprised at this, for, in the United Kingdom, there are considerably over fifteen thousand practitioners; and surely, out of that large number, it might be expected that more would have come forward to help such a deserving object. The three little orphan boys I appeal for are brought to their present destitute position through no fault or negligence of their parents, who were both removed by death by the All-wise hand of Providence at an early age. Those who have merely perused my former letter without paying much attention to the claims it seeks to advocate, I would ask to read it again, in the hope that their benevolent feelings would lead them to assist in some small way in providing for the fatherless and orphans of a deserving brother. I do not want large contributions, but I would wish, if possible, something from each member of the profession who could afford it. A cheque or P.O.O. for any amount, no matter how small, will be thankfully received and acknowledged.

I have received already the following sums. From Dr. H. M. Tuckwell, Oxford, Dr. R. E. Burgess, Kettering, Dr. Henry Stear, Saffron Walden, £2 2s. each; from Dr. Frederick Robinson, Eastbourne, "Eva", Ilkley, £2 each; from Dr. John R. Kirkpatrick, Dublin, Dr. Lombe Athill, Dublin, Francis Currie, Dublin, Stewart Woodhouse, Dublin, H. J. Waller Barrow, A.M.D., Shooter's Hill, Kent, G. W. T., London, James Archer Thomson, Brighton, J. R. Swanton, Bantry, £1 each.—I am, sir, yours, etc.,

LAMBERT ST. ORMSBY, M.D., F.R.C.S.

4, Merrion Square West, Dublin, January 2nd, 1883.

THE report of resolutions relating to the circular issued by the Subcommittee of Council on the question of constitution of the Committee of Council is not published, at the request of the Chairman of the Committee of Council, until the whole of such resolutions, proceeding from the various branches, are in the hands of the Subcommittee.

"O. H." asks: 1. Where he can see some good reports of medical officers of health, which may be taken as models; 2. Whether a supplement to the Registrar-General's Report, similar to that printed in 1875, has been published since.

*** 1. Certain reports of medical officers of health were reprinted as "models" in the annual report of the Local Government Board for 1880-81. We believe that, on application to the department, our correspondent will be able to obtain a copy of the reprinted reports. 2. No supplement to the Registrar-General's Report, similar to that published in 1875, has since appeared; but one may be expected in due course for the decennial, 1871-80.

INDIA-RUBBER BANDAGES.

SIR,—In reply to Mr. Luscombe's letter, which appeared in your issue of December 16th, I would suggest that he should employ glycerine and water, in the proportion of one of the former to three of the latter, as a local application. I have found it a very valuable remedy in allaying the irritation of the skin consequent on the use of India-rubber bandages, and equally efficacious in alleviating the intense itching of the ear, etc., frequently complained of by patients of a gouty diathesis.—I am, sir, yours faithfully,

J. H. GIFFROAT, Surgeon-Major A.M.D.

Chatham, December 20th, 1882.

INTOXICANTS IN WORKHOUSE AND ASYLUM DIETARIES.

SIR,—A lay journal laments the hard-heartedness of the Devonshire magistrates, as evinced in their withdrawal of beer from the pauper lunatics in the Exeter County Asylum. The judicious will rejoice at, rather than mourn over, this humane and thoughtful procedure. Dr. Bucke, in a large Canadian asylum, found that the cessation of the beer allowance steadily improved the health of the insane inmates, and the same result was observed by Dr. Davies at the Kent County Asylum. Of course, at Exeter, beer or any other intoxicating drink will be supplied to a patient, when such a beverage is prescribed medicinally by the surgeon in charge, so that the legitimate use of alcoholic drink will be amply provided for. Accumulated experience in workhouses, infirmaries, and asylums, has shown that the presence of an intoxicant in the daily dietary is provocative of disorder, while the absence of this disturbing agent is conducive to good order and discipline, as well as to the health and comfort of the inmates. Hence, the discontinuance of strong drink is in the interests of the sufferers; and, for their new departure, the Devonshire magistrates are to be commended, and not condemned.—Yours, etc.,

KALISTON UDOR.

T. F. F. has been unable to obtain the oxygenated oil, about which Mr. Kingzett has been writing recently in the JOURNAL, and would like to know where it is to be procured.

THE TIPS OF CIGARS.

MR. A. G. Klugh, secretary of the National Dental Hospital and College, has, with a view of meeting some of the expenses of that institution, invited smokers to save for the hospital the tips cut off the ends of cigars before lighting them. This plan is, he points out, adopted in Germany and Austria, and he understands that in Berlin £45 was thus collected last year. He says: "I have had special cigar cuttings' boxes, as used in Germany for the purpose, sent over, while I have made satisfactory arrangements for the sale of the tips. There are two kinds of boxes, one acting as a fusee-box as well as a cigar-cutter, for gentlemen to carry in their waistcoat-pockets, and these, following the practice of the Berlin Association, who on no account give the boxes away, I shall sell at 1s. each; the other is a larger one, for clubs, shops, etc., which will cost 7s. 6d. Most shops already have the larger boxes, but without the saving clause, 'Please save and send the tips to support the National Dental Hospital'; but I shall be glad to send labels gratis, printed with these words. Of course, it is not necessary to have these boxes, but, as they both cut off the tips and act as receptacles for them, they save trouble. My plan is to ask that boxes may be placed in tobacconists' shops, clubs, hotels, refreshment rooms and bars, and smoking-rooms of private houses—in fact, everywhere where they can be of service—and to invite gentlemen to become secretaries of the "Cigar Thrift Fund", who would take the clearing of these boxes under their charge, and forward the collection to me when it had attained any weight. If I could secure the help of three or four energetic gentlemen in all our cities and towns, a wonderful result might be obtained."

A Question of Diagnosis and Treatment.

SIR,—I should be greatly obliged if some of your numerous readers would inform me if they have ever had a similar case to the following; and, if so, what was the line of treatment adopted, and what was the result.

A lady, aged 35, weighing about 7½ st., indifferently nourished, has a nearly complete loss of motive power in the lower extremities, partial loss of motion in the arms, particularly the right. There is no loss of sensation, no pain anywhere, no tenderness along the spine; the appetite is very poor, with a tendency to take stimulants in lieu of food. The mental powers, as noticed in house-management, memory, and sharpness or quickness, are unimpaired; but the articulation is slightly slow and wanting in strength. The father and mother both died of apoplexy, aged respectively 70 and 54; one sister died at 33 years of age, having had six children rather rapidly, and having been paralysed in the lower limbs for six years; the last child being born three years previously to her death; one brother died at 33 years of age, from pneumonia and general dissipation.

My patient married in April 1874. She had previously a slight dimness in the left eye; the medical attendant said it was want of tone. In May 1874, she first noticed a loss of power in the right leg, which passed away in two days. In January 1876, she was confined of a female child. In June 1876, she had a miscarriage. In January 1878, she was confined of a male child. In April 1878, she went on a tour in Ireland, seemed weak, and gave evidence of loss of power on the right side. In May 1878, she consulted a London physician, and stayed in London six weeks. A building-up treatment was prescribed, with bromide of potassium, tonics, and vin de Boudoux. The loss of power gradually increased. In October 1879, she was confined of a male child. In March 1881, she stayed at the Matlock Baths for three months, undergoing electricity, and dieting with an absence of alcohol. In July 1881, she consulted another London physician, and was recommended the continuance of the hypophosphites. He suggested that the disease was a functional one, which it has proved not to be. In September 1881, she was confined of a female child. The eldest child died of pneumonia, aged 13 months. All the confinements have been easy and straightforward, particularly the last; all the children are healthy, the last being a very strong and healthy girl, now aged 15 months. Three years ago, she displayed great nervousness about her state of health, but this has entirely passed away. She takes exercise in an open carriage whenever the weather is fine.

She has at different times taken Easton's Syrup, Fellowes's Syrup of the Hypophosphites, Parrish's Syrup of the Phosphate of Iron and Quinine. One of the London medical men suggested that there might be a deterioration of a portion of the spinal cord.

In conclusion, I may say that my patient would be only too glad to know from any medical man, that he has so treated such a case as I have described, as to justify her in seeking further advice.—I am, etc., A PHYSICIAN.

Davos Platz.

SIR,—Allow me space for a few words *à propos* of the favourable notice of Mr. Maddock's "Davos Platz", that appeared in your issue of December 2nd. It is clear to me, on reading the notice, that your reviewer, quoting Mr. Maddock's remarks on the inefficient state of the drainage of Davos, has given his attention to the first edition of the book, now twelve months old, instead of to the last.

In the "J. E. M." guide to Davos Platz., 1882, on pages 10 and 11, the editor, speaking of the drainage and water-supply, now says: "We are glad to be able to state that, by next year, there will no longer be any cause for complaint, as, during the present year, some definite steps have been taken to establish an efficient state of drainage. We have been favoured with a plan of the scheme.....There will be a main sewer commencing at the Hotel d'Angleterre, and from this sewer various branch-pipes will run, having a common outlet in the river far below Davos. The plan also comprises an elaborate arrangement of traps to prevent the escape of sewer-gas.....In addition to the drainage improvements, the slaughter of cattle in scattered slaughter-houses is to be prohibited, and a general *abattoir* erected outside the village, at an estimated cost of 35,000 francs; and, in order to keep the air of the village free from smoke, the bakers are to be encouraged to carry on their work during the night-time only. No refuse of any description will be allowed to be placed near the village, and on this point the utmost vigilance will be exercised." The water-supply, copious as it is, will shortly be further supplemented from a source in the Flüela Valley, whence the water will be brought to Davos by a conduit."

I may remark that the authorities have been stimulated to this energetic action, in some measure, by the severe strictures Mr. Maddock passed when writing on the sanitary state of the valley twelve months ago; and, in justice to the Davosians, as well as for the information of intending visitors, it is desirable that these facts should be known.—I am, yours faithfully,

PHILIP HOLLAND.

Analytical Laboratory, 18, Exchange Street, Manchester.

R. A. O. CALLAGHAN will find full information on the subject in Mr. H. C. Burdett's book on Cottage Hospitals, published by Churchill.

Medicine and Pharmacy.

SIR,—I would suggest that clauses should be inserted in the proposed new Medical Act, to the following effect:

1. That no registered medical practitioner residing within, say, half a mile or a mile of a pharmaceutical chemist, should, between 8 A.M. and 9 P.M., except in a case of emergency, supply or dispense medicines.

2. That a prescription, unless ordered to the contrary, should not be dispensed by a chemist on more than one occasion, unless redated and signed by a registered medical practitioner, with full name and address.

3. That stringent regulations should be inserted to prevent counter-prescribing by chemists: that they should not be allowed to recommend any medical preparation of their own, or patent medicines of any kind; and that all patent medicines should merely state on their wrappers and labels the ingredients and quantities of which they are composed, without any reference to their medical uses or effects.

Unless non-dispensing by medical men be made, as on the continent, contrary to law, it will be difficult to abolish it. Many patients, when a prescription is proposed, decline, probably to save the druggist's account, but say they have no faith in medicines supplied by the druggist, and wish to have it from the surgery of the medical attendant; while those medical men who perpetuate the public opinion of the trading association of the profession by charging for their medicines, will object to the non-supplying of medicines as a reduction to their profits.

In consideration of the increased business which non-dispensing by medical men would give to the druggists, they would probably be induced to charge less for dispensing prescriptions, and be satisfied with 25 to 50 per cent. profit on the retail price of the drugs used.—Yours faithfully, A NON-TRADER.

THE Editor will be obliged to correspondents if they will address communications relating to corrections in the list of members, advertisements, addressing of the JOURNAL, and other business matters, to the General Secretary and Manager, Mr. Francis Fowke, 161A, Strand, and not to the Editor.

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BOOKS, ETC., RECEIVED.

Harness as it has been, as it is, and as it should be. By John Philipson. With Remarks on Traction and the Use of the Cape Cart, by Nimshivich; also Appendix by the same Author, containing some very important directions to grooms and coachmen respecting their duties, their dress, hints on driving, etc. Newcastle-upon-Tyne: Andrew Reid, 32, Collingwood Street; Mawson, Swan, and Morgan, Grey Street. London: Edward Stanford, 55, Charing Cross, S.W. 1882.

Clinical Lectures on Diseases peculiar to Women. By Lombe Atthill, M.D. Seventh Edition, revised and enlarged. Dublin: Fannin and Co. 1883.

Year-Book of Pharmacy; comprising Abstracts of Papers relating to Pharmacy, Materia Medica, and Chemistry, contributed to British and Foreign Journals from July 1st, 1881, to June 30th, 1882: with the Transactions of the British Pharmaceutical Conference at the Nineteenth Annual Meeting, held at Southampton, August 1882. London: J. and A. Churchill. 1882.

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ABSTRACT OF LETTSOMIAN LECTURES
ON
THE TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

Delivered before the Medical Society of London.

By ARTHUR ERNEST SANSOM, M.D.Lond., F.R.C.P.,
Physician to the London Hospital, Senior Physician to the North-Eastern Hospital for Children.

Lecture I.—Endocarditis.

The Rational Bases of Treatment—Morbid Anatomy—Clinical Investigation—Origin and Progress of Endocarditis—Study of Endocarditis occurring in Children—Pathogenesis—Existing Methods of Treatment—Preventive Treatment.

In this course of lectures, my plan will be to enunciate very briefly the bases on which I believe our therapeutics ought to rest. These are, in my opinion (1) the teachings of morbid anatomy; (2) clinical observation of disease-processes, and their correlations. Then I propose (3) to review the lessons of the past as to treatment; and (4) to adduce towards the elucidation of the various problems the arguments from analogy afforded by experimental investigation—a mode of inquiry rendered difficult, alas, by the stumbling-blocks which a false sentimentalism has placed in our way.

I. *Morbid Anatomy.*—I will consider the teaching of morbid anatomy as to lesions of the valves of the heart. I shall do this very briefly, for my object is merely to note them in so far as they may afford a guide to treatment; and, when I speak apparently dogmatically, I do not make an assertion *ex cathedrâ*, but in the spirit of an inquirer after truth. We will first consider the disease which most commonly affects the valvular apparatus of the heart and the adjacent endocardium—the disease known as endocarditis. In briefly reviewing its morbid anatomy, much will remain unsaid; but I shall treat it first from the standpoint of mere observation, leaving all speculative questions.

I would classify the first changes in the endocardium, which I shall notice, as exudative. The curtains or cusps of the valves may be seen to be slightly swollen, and the endocardium to contrast by its dulness with the healthy portions adjacent. But the changes are most noticeable at the free edges of the valves, where may be seen isolated or agglomerated bead-like processes. Upon such processes may be observed sometimes little caps of fibrin. A thin section of a valve thus affected is seen, under the microscope, to differ from healthy valve-structure, in that its cellular elements are more numerous, and, especially towards the free edge, are closely aggregated. I wish to insist on the fact that, in a valve so affected, even the portions which seem to the naked eye unaffected are really infiltrated with cells. Only the aggregation is greater at the free edge, where small caps of fibrin are often found attached. The bead-like eminences observed by the naked eye are, according to my view, ndications of a more widely spread inflammatory change in the valve than might be at first suspected.

2. The second form of endocarditis, or, properly speaking, valvulitis, to which I shall call attention, is that which I would term the sclerous, or fibrotic form. Here the valve—and it is the mitral which is affected in by far the greatest frequency—is thickened, but the thickening is not due to swelling of the soft tissue; it is felt to be hard and firm. The endocardium of the auricle near the valve is found to be dense and white. The valve-curtains, and often the cords and fleshy columns, are, more or less, rigid. A patch of the endocardium lining the left ventricle, and leading up towards the aortic cusps, is sometimes also found white and thick, and the aortic valves themselves may be seen to have undergone similar changes. In this form, microscopic observation shows that there is a gradual fibrous transformation of the neoplasm, resulting in the production of a quasi-cicatricial tissue.

3. A third form of endocarditis, which I think of practical importance to distinguish, is that which is secondary to endoarteritis (atheroma). In this form, it is the aortic valves which are affected in a large majority of instances. Patches of soft flabby swelling may be seen in the lining membrane of the aorta, close to the aortic cusps, involving them in the change, and, perhaps, causing the inversion of one or more; or yellowish patches may be observed in some cases, covered by a soft, pulpy material, the blood, perhaps, forcing its way in some softened spot between or within the arterial coats; or the root of the aorta may be hard and thick, the thickening being of cartilaginous consistence, and, in such thickening, the cusps of the valve may be involved; or, in like situation, and with like deformity of valves, there may be a bony or stony hardness, a calcareous change. The evidence obtained by microscopical investigation is to the effect that, in the swollen soft patches are abundant exudation cells, with hyaline, or slightly fibrillar matrix. These occur mostly as swellings of the internal coat, but Dr. Wilks has observed them in all the coats of the vessels. The yellow patches show fat-granules and cholesterine-crystals. There is evidently a ...ty degeneration of the inflammatory neoplasm. In the fibrous, or semicartilaginous variety, there is more fibrillation and fewer cells; and, in the hard and bony form, there is a deposit of earthy salts in the interstices of the fibrous tissue.

4. The fourth form of endocarditis to which I shall call attention is that termed ulcerative endocarditis. Swollen and dull portions of the endocardium of the valve may be seen to present, here and there, a yellowish or greyish discoloration, and to be covered by a finely granular *débris*. The superficial endocardium in such situations has become necrosed. Through such breach blood may find its way, and, spreading between the layers constituting the valve, may form an aneurysm thereof; or, the ulceration extending through both layers, the valve may be perforated. More commonly, a considerable portion of the valve is eroded, and, upon the eroded surface, fibrine is deposited in the form of single or multiple vegetations. The finger regularly detaches these vegetations, and the surface below them is found to be covered by a friable material.

II. *The Rise and Progress of Endocarditis as evidenced by Clinical Observation.*—The fact which stands out pre-eminently in this connection is the association with rheumatism, acute and subacute. Amongst English observers (Fuller, Sibson, Budd, Latham, and others), the figures approximate tolerably closely, and indicate that, in acute rheumatism, endocarditis becomes manifest in one out of every two or three cases. Continental observers, however, record a less proclivity; the figures of Bamberger, Lebert, Wunderlich, and Roth showing a proportion of one in five to eight cases. The statistics collated for me by Dr. Gabbett from the records of the London Hospital show that, in 1880, 113 cases of valvular complications were noted in 244 cases of rheumatic fever—a proportion of 46.3 per cent.; and, in 1881, 170 in 295, or 60.6 per cent. The increasing proclivity to valvular complications with repeated attacks of rheumatic fever is well shown.

The first sign by which endocarditis is rendered probable is, in my opinion, a prolongation of the first sound of the heart, which may afterwards develop into a distinct systolic murmur. Such murmur is, however, not absolutely pathognomonic, for it may be due to regurgitation from adynamia of the left venticle. Such modification is commonly heard directly the patient comes under observation. I have observed also, as indicatory signs, reduplication of heart-sounds; and, in these cases, a presystolic murmur subsequently develops Rarely, a diastolic aortic murmur is the declaratory sign.

Endocarditis is by no means necessarily attended with pyrexia, nor even by any sign or symptom whatever referred to the heart.

I will now inquire concerning those cases of endocarditis which are not associated with a history of acute or subacute rheumatism. These may conveniently, for purposes of investigation, be divided into two classes; (1) those which are observed in early life; (2) those which develop after maturity. In the latter class are those cases of gradual onset which involve the aortic orifice, and sometimes the mitral subsequently, which are traceable to subinflammatory changes at the root of the aorta, and degeneration subsequently. In these cases the endocarditis and valvulitis are consecutive; they have no necessary connection with rheumatism, and their consideration may be conveniently deferred. The study of endocarditis, as it occurs in the early periods of life, is a matter of very great importance. Almost every practitioner is familiar with the fact that cases of disease of the valves present themselves which have shown evidence of such disease from many years, from very early periods of the life of the patient, and yet inquiry fails to elicit that the subject of such disease has ever suffered from rheumatism in any form. It is surely of importance, therefore, that we should endeavour to learn how such disease originates in the period of childhood.

In acute and subacute rheumatism in the child, the proneness to endocarditis is greater than in the adult. Typical rheumatic fever is much less common in the child than in the adult; the articular

manifestations are slighter, but I consider the tendency of the endocardium to disease to be greater. Of thirty-two cases of acute and subacute rheumatism occurring in children under twelve years of age, admitted into the North-Eastern Hospital during the past three years, twenty, or 62 per cent., presented signs of endocardial affection. The development of endocarditis, however, in the child has not so close a relation with the other phenomena of rheumatic fever as in the adult. It may precede, or may succeed, even after long periods, the attack.

But there are other diseases, besides rheumatism, in the child, with which endocarditis stands in close relation; these are chiefly scarlatina and measles. In relation with scarlatina, endocarditis may occur either with or without the intervention of articular symptoms. Postscarlatinal rheumatism is well known, and bears a close similarity to ordinary rheumatic fever; associated endocarditis is, therefore, rendered probable. But I have shown from recorded cases that such endocarditis may become manifest after scarlatina, not only without the intervention of articular phenomena, but long after the period of fever has passed, and during a time when there is no elevation of the temperature of the body, no pyrexia whatever.*

Again, there is evident proof that endocarditis can arise in close relation with measles. I have recorded a case in which both pericarditis and endocarditis occurred a fortnight after the commencement of convalescence from measles. At this time, a perilous attack of chorea developed. There was here no obvious manifestation of rheumatism, nor hereditary tendency thereto. It appears to me that the influence of measles in predisposing to endocarditis has been much underrated; and *à fortiori* the frequent sequence of these diseases, as observed in children, becomes an agency, and that, as I think very probable, not only to the production of endocardial disease, but to acute rheumatism itself.

Excluding these causes, there yet remains a considerable minority of cases of endocarditis in children on whom no traceable disease has led up to the deterioration of the valve. The condition is only betrayed by various morbid conditions—the results, or concomitants, of the valvular disease. I have noted twenty-seven of such cases. They have been marked by (*a*) disorders of the nervous system—hemiplegia, hemianæsthesia, epilepsy, chorea; (*b*) disorders of nutrition—wasting, anæmia, etc.; (*c*) disorders of respiration or circulation, cough, dyspnœa, or the usual phenomena of progressive cardiac failure. Sufficient is this evidence to prove, I think, that, in the child, endocarditis can arise and progress without special symptoms, without pyrexia, without the disturbing influence of any acute disease.

As regards the pathogenesis of rheumatic endocarditis, I do not think the evidence at all justifies the conclusion that its first cause is extrinsic to the body, or that it is of malarial origin, and of the nature of an organised germ. On the other hand, there is much to prove that the "poison" is generated by a perverted metamorphosis, by retention of effete products in the blood. It is quite probable, I consider, that lactic acid is one, but not the only, product capable of acting on the pathogenetic agent. Such agents may be many, between fibrin on the one hand, and the excreted morbid acid on the other. It is not proven, but yet not improbable, that disturbance of a tract of the spinal cord—a postulated chemical co-ordinating centre—may be a mode in which the disorder can be originated and prolonged, as Dr. P. W. Latham has argued.

I must now approach another part of my subject, and inquire concerning the efficacy of extant methods of treatment in regard to rheumatic endocarditis. It has been claimed of almost all methods of treatment of rheumatism that have been advocated, that they have been instrumental in controlling or preventing the cardiac complications of the disease. The individual experience of observers has been cited again and again to point the efficacy of this or that remedy or method in mitigating the chief danger of rheumatic fever. Yet proof of such vaunted efficacy has soon been found to be unsatisfactory, and it may be confidently asserted that no antidotal treatment is yet known—that we have, for instance, no drug which can influence endocarditis, as quinine influences ague, or as mercury and iodide of potassium influence syphilis. The discussion which was so ably sustained in this Society during the last session, which has been fully reported, has put the claims of various forms of treatment of rheumatic fever to a numerical test. The results of treatment by rest and mint-water; by alkalies; by blistering, and by administration of salicin and its compounds, were compared; and it is fair to assume that, if any agent other than these had been efficient in the treatment of rheumatic fever, or of endocarditis, evidence would have made this apparent.

* Lectures in *Medical Times and Gazette*, October 25th, 1879, p. 472.

The result of the discussion, which it is unnecessary to epitomise,* was to show a strong concurrence of testimony, to the effect that the administration of salicin or the salicylates was to very decidedly reduce the suffering and the fever of rheumatism, but in no marked degree to influence the development of endocarditis, and other cardiac complications. *Primâ facie*, this seems to be a strange conclusion, for one might imagine that an agent that reduced in such marked degree the pain and fever which must contribute to disturb the heart, even if it had no decided effect upon the rheumatic process within the heart, would with great probability influence for good the inflammatory process in pericardium as well as in endocardium. The conclusion is forced home, however, alike by individual experience—for we find that pericarditis and endocarditis are shown by physical signs to arise and progress in patients who are fully under the salicin treatment—and by statistical inquiry from large numbers of cases treated by the salicin compounds, compared with those treated in the presalicylic era, such as has been carefully followed out by Dr. Gilbart Smith.† Dr. Maclagan, to whom the profession and public are indebted for the introduction of agents which have at any rate been proved to contribute to the comfort of suffering patients, himself allows that the hopes that they would ward off cardiac complications have not been realised. I consider that there are strong reasons why a mode of treatment which is efficacious in rheumatic fever, is powerless as regards cardiac complications. To put the matter clinically or practically: we observe, let us assume, a patient in a first attack of rheumatic fever. He presents (*a*) a murmur indicating an endocardial complication. I think I must have convinced you that such endocarditis may have arisen, not during the attack from which he is at present suffering, but from the disease acquired insidiously at any time previously. It is obvious that any remedy would fail to influence the cardiac complication in such a class of cases. Or (*b*) a modification of sounds or actual systolic murmur developing at the apex makes us suspect the present rise and progress of endocardiac inflammation. But such may have had its commencement long before the advent of the other symptoms, for no sign will betray the gradual swelling of a valve. A swollen valve is not necessarily incompetent. On the other hand, a veritable systolic murmur at the apex is no conclusive proof of endocarditis, for it may be due to adynamia of the cardiac muscle. Here, then, is a double source of fallacy in the statistics of the cardiac complications of rheumatism. Or (*c*) the patient, manifesting no evidence of valvular impairment, is, at the termination of his attack of rheumatic fever, discharged as free from cardiac disease. I do not think that such conclusion is to be justified. A valve may be inflamed, and give no evidence of incompetence; the patient may be discharged, and show no signs of cardiac trouble; but a slow process of shrinking or of sclerosis may be going on, and, when the patient next presents himself, there may be undoubted evidence of endocardial mischief. This is, I consider, by no means of unfrequent occurrence; and this is one reason why a second attack of rheumatic fever is attended with such notable numerical evidence of a highly increased ratio of cardiac complications.

For such reasons as these I think it impossible—the sources of error being so numerous—that we can get from statistical inquiry satisfactory evidence as to the efficacy of different plans of treatment in warding off endocardial disease; and I dissent from those who hold that a remedy which is efficacious in the treatment of acute rheumatism ought to show, on numerical inquiry, a favourable influence on the correlated heart-disease. I consider the treatment by salicin and the salicylates, even though no favourable results are manifest as regards cardiac complications, to be the most favourable to the patient of all forms of treatment hitherto known. In such cases, it may be legitimately asked whether I adopt an altogether pessimist view of the treatment of endocarditis. Can nothing be done? My answer is, Much; but it must be in the direction of *preventive treatment*. My own experience is strongly towards the conclusion that endocarditis is more prevalent, as well as more extensive and severe, among the poor than among the well-to-do. This question is one that might with advantage be put to the numerical test. We greatly want the evidence of the family practitioner to compare with that afforded by our hospital statistics. The predisposing causes to the advent of endocarditis, which, as I have shown, can arise without the intervention of obviously rheumatic phenomena, are most probably, (1) exposure to vicissitudes of temperature; (2) an irregular and improper dietary. These are the im-

* *Vide Lancet*, December 17th, 24th, and 31st, 1881, January 7th and 28th, 1882.

† *Lancet*, January 28th, 1882, p. 135.

pulses to a perverted nutrition, resulting in the retention within the blood of the excrementitious products, which we may call "the rheumatic poison". Attention to the clothing and proper feeding of infants and children constitutes, in my mind, therefore, the treatment of the first importance as regards endocarditis. There is no need now-a-days to insist on the importance of preventive treatment as regards the zymotic diseases; this is well recognised. Is it not quite as important as regards the subtle disease we are now considering? I would, whilst recognising the difficulties of such proceeding, strongly recommend the periodic medical examination of children, even though they present no obvious signs of disease.

Of no less importance is the treatment in regard to the zymotic diseases, which are correlated with the endocarditis, viz., scarlatina and measles. The subject of an attack of scarlatina should be watched with great care for long periods after convalescence. Moreover, the slightest sign of throat-ailment, especially with children, should be looked upon with suspicion. I have no doubt whatever that, in a large number of instances, ulcerative tonsillitis of zymotic type occurs in children unnoticed and unknown, and that in many such a renal complication is instituted which is also neglected. The rise of endocarditis in such cases is, as I have said, not during the period of fever. I do not recognise the influence of morbid germs in directly occasioning the inflammatory change in the valves, but subsequently, it may be after long periods. The teaching I would enforce, therefore, is that the subject of scarlatina, or of the allied forms of throat-affection, should be watched, protected, dieted, and treated for periods much longer than is now usual. And as regards measles, there is unfortunately a widely spread tendency to regard measles as a very slight ailment, that requires little or no treatment. Experience tells, however, that it is often not only the immediate precursor of bronchopneumonia frequently and heart disease occasionally, but that it effects upon the powers of nutrition a deleterious change which lasts, as in the case of scarlatina, for long periods. The subsequent treatment, therefore, of the subjects of measles, should, in my opinion, be much more protracted than it is at present.

Such is an outline of what I consider the common-sense treatment of the first causes of endocarditis. During its rise and progress in an attack of rheumatism, I prefer the treatment by salicin, or the salicylates, in sufficient doses (usually 20 grains every four hours till the pain and pyrexia have subsided, and afterwards the same dose thrice or twice a day). From the evidence of Dr. Isambard Owen, there is a good case in favour of combining with this the administration of full doses of alkalies.* Vesication, by application of liquor vesicatorius in the left axilla, I think also of service.

It now only remains for me to allude to the clinical significance of ulcerative endocarditis with regard to indications for treatment. It happens sometimes that this affection arises and runs its course, with little or no evidence that the endocardium is impaired. (Such cases often present a strong resemblance to typhoid fever.) Here treatment is of no avail; the disease is uniformly fatal. By far the most frequently, the disease is ingrafted, as it were, on chronic disease of the valves. It appears to me that such cases can be divided into two classes: the infective and the non-infective. In the infective cases, there are extraordinary disturbances of temperature, multiple emboli, and septicæmic signs, or even abscesses. It is in such that micrococci are discovered. Their origin I believe to be due to specific organisms—derived from some subtle zymotic influence, or from absorption of virus, as in the puerperal cases. It is not that the micrococci induce the endocarditis, but they complicate the already existent endocarditis by necrosis of the diseased tissue.

In other cases, though nearly all are characterised by embolism, the proof of infection and, as I think, the probabilities thereof are wanting. In a case lately under my care in the London Hospital, there was no marked pyrexia whatever, the temperature never exceeding 101° Fahr., and, for the most part, keeping close to the normal. I consider it most probable that, in some such cases, the ulceration is induced by mechanical causes. Drs. Wilks and Moxon have pointed out that a great mass of vegetation may cause ulceration of the heart-wall by direct pressure, or a fibrous clot swinging in the blood-current, coming sharply into contact with the muscle, may, by friction start an ulcer.† In like manner, I think it very probable that a weighty vegetation, or mass of vegetations, upon a valve may, by agitation in the blood-current, so disturb the nutrition of the endocardium which constitutes its base, as to start the process of necrosis. The lessons taught by a study of the cases are these. 1. More than ordinary care should be exercised to keep the subjects of valvular disease of the heart from possible sources of infection. 2. Any threatening of endocarditis should be treated by the most perfect physiological rest attainable. 3. Nutrition should be sustained to the highest degree practicable.

* *Lancet*, January 28th, 1882.

† *Pathological Anatomy*. 2nd Edition. Page 129.

ON THE EXTRACTION OF SENILE CATARACT IN ITS CAPSULE.*

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WHILST I feel highly honoured by having been asked to open a discussion on the extraction of senile cataract in its capsule, an operation in which I have taken considerable interest for some years, and relating to which I have performed a number of experiments, which, I trust, may help to remove certain difficulties in its performance, I cannot but fear the subject may lack interest from not having been placed in more able hands.

Out of the numerous operations employed, at the present time, for the removal of senile cataract, no one has reached that state of perfection which can claim for its use universal application, or the general approval of ophthalmic surgeons. A perfect extractive operation, I consider, should effect the following results. It should make a moderate opening in the cornea, so as to lessen as little as possible the normal tension; it should remove the cataract at one sitting, and prevent the possibility of a secondary cataract and the necessity of a second operation; it should preserve the iris intact without irritating its structure, thereby avoiding inflammation, exudation of lymph, closed pupils, and other evils, or prolapsus with its great disadvantages; it should leave a round central contractile pupil; it should restore and retain the full visual power of the retina; it should tend to rapid healing without discomfort; and it should require little or no after-treatment except short rest.

Although no operation can yet attain to this high standard, yet, believing as I do, that the chief cause of failure in cataract-extraction is the irritation set up by cortico-capsular matter left behind, I think the nearest approach will be the successful performance of the operation now under discussion; and whilst acknowledging that failures during the steps of this method of extraction are of serious import and may lead to the destruction of the whole eyeball, still it is doubtful whether such a disaster is of more frequent occurrence than by any other mode of operation.

Although a great number of surgeons, Beer, Richter, Sperino, etc., have practised this operation, I shall only refer to two, who after some years' experience, still continue to uphold and select this procedure in the majority of their cases. I refer to Pagenstecher and Macnamara.

Pagenstecher, after operating in several hundred cases by this method, states that he obtained greater acuteness of vision than by any other operation, whilst he lost no more eyes than by ordinary linear extraction.

He formerly operated by a large flap downward, and chiefly in the sclerotic, with a large iridectomy under chloroform; but he has recently made a linear incision upwards with an iridectomy without an anæsthetic, generally removing the lens with a scoop and with antiseptic precautions, which, he says, renders the loss of vitreous humour, when it occurs, of little importance.

Macnamara reports that he has obtained far better vision and far greater success by this than any other means. He uses anæsthetics and operates, as is well known, by a large temporal flap, and the removal of the lens by a scoop; performing iridectomy should the dilatability of the pupil be slight, or should the capsule be ruptured in the proceeding.

Whilst such good observers and operators as the above have championed thus strongly this operation, it has been no less strongly condemned by one of no mean reputation, De Wecker, who says, in his lecture, "This operation has been as many times taken up and as many times abandoned. It is employed at present by no one except Pagenstecher, who in his operations violates all the rules which have been laid down for his guidance in extraction operations; to whom I will mete out this praise, that by his sincerity and truthfulness, he has certainly warned off all inexperienced persons who might purpose to adopt such a method of extracting a cataract."

* Introduction to a discussion in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Worcester, August, 1882.

This is strong language for one so gifted in eye-surgery, for one who, after himself practising the operation, must have given it up owing to the danger accompanying it; but it must not be forgotten that in every surgical department some of the most dangerous operations of the past, denounced then in no measured terms, have become the most successful of the present day.

Of the plans proposed hitherto for removing the lens in its capsule, I consider Macnamara's the best, safest, and easiest; and, while I thank him greatly for the advantages which it has conferred on myself and patients, and while in his experienced hands probably few failures occur, still I hope he will excuse my saying that his operation (as well as the others introduced for the purpose) has defects, which, although they may be greatly lessened by the skill of the originator, are sufficiently serious to prevent either his or the other methods from becoming the operation of the many, unless they be materially modified.

These defects are the tendency to cause loss of vitreous humour and the evils thereof; the large corneal opening required for the easy escape of the lens, and when the scoop is used, which is the rule, too frequently rupture of the capsule and bruising of the iris and vitreous. body. Loss of vitreous humour certainly occurs in the larger number of these operations, but the amount depends greatly on the skill of the operator and the instruments employed.

When the vitreous humour is of a good consistency, as we find in the eye of the lower animals, there is some difficulty in pressing it through even a large corneal opening. Again, in children, as is well known, the whole front of the eyeball may be abscised with little or no loss, but as age advances it certainly becomes more and more fluid, and with the formation of cataract this fluidity seems to increase at a greater rate, especially behind the hyaloid fossa.

Putting aside great tension, when loss of vitreous humour may occur in any operation requiring a corneal opening, and may appear before the escape of the lens, with the lens, or after its expulsion, there is little tendency to escape of vitreous substance, even if fluid, except from diminishing the internal capacity of the ball by engorgement of the choroidal vessels, or from external pressure due to spasmodic action of the muscles, or, far too frequently, from the instruments made use of, as the sclerotic is not contractile, and possesses slight, if any, elasticity.

Although every endeavour should be made to prevent escape of vitreous, I consider the injurious effects of a moderate loss have been much exaggerated by the opponents of the operation. Most eye surgeons of the present day, I think, will allow that a small loss of vitreous humour is of no importance. Indeed, some operators consider it an advantage; and Professor Hasner deliberately punctures the centre of the posterior capsule and hyaloid fossa, to allow vitreous substance to project through, as a valuable addition to extraction, and giving better results. When again we refer to the "reports" of the old flap-operators on which reliance ought to be placed, we find that with the extra disadvantage of capsule and cortical masses left behind, they frequently obtained excellent vision, even after considerable loss—one-fourth, Wharton Jones; one-half, Lawrence; two-thirds, Middlemore.

It appears further that the bad effects of loss of vitreous humour depend not so much on the amount of that loss, as on the condition of the other structures of the eye. When the choroidal vessels are weak, when the iris and vitreous body have been previously diseased, or when either or both of them have been bruised by the instruments, or the latter of them continues to be irritated by the embedding of cortical capsular matter in its substance, the ill effects become much more grave. Again, the state of the coats of the eyeball is of great importance; when these are soft and accommodating, a large quantity may be lost without greater injury than temporary hyalitis or persistent muscæ; but when they are rigid and unyielding a small quantity, by lessening the normal tension, rendering the further steps of the operation more difficult, and encouraging the admission of air may produce the direst evil; such as immediate rupture of choroidal vessels or suppuration of the globe, or later, low inflammation destroying the vitreous body as a clear medium, or producing detachment of the retina.

The large corneal opening is almost essential, for the lens in its capsule, with the addition of the scoop, requires considerable room for its exit; and the avoidance of any bruising of the other structures of the eye in the passage of the lens, is of far more importance than the extent of the corneal opening. Pagenstecher lessens the necessity of such a large corneal section by making a large iridectomy; but, by thus mutilating the iris, he destroys the conservative principle of the operation, which has been its chief recommendation to many surgeons. Again, by making the section upwards, he has considerably increased the difficulty of using the scoop, and increased the tendency to loss of vitreous humour.

When the scoop is used, the temporal section of Macnamara seems by far the best, from the ease with which the instrument can be used in extracting the lens, and the less liability to loss of vitreous.

To Macnamara's broad triangular knife, for making the section, I cannot give equal praise, as it is rarely so finely set as to cut equally well at the point and the base; and, therefore, with a tough cornea or a soft eyeball, the point may reach the opposite margin before a sufficiently wide opening is made, the coats of the eye being pressed in before it, while, from its width, should the incision be begun in a faulty manner, it cannot be remedied at a later stage.

A sufficiently large section having been made at any part of the cornea which the operator may choose, an endeavour is generally first made to expel the lens by gentle pressure, and thus avoid the use of any instrument. Failing in this, scoops of different forms are employed; but the preference, I think, should be given to Taylor's rather than Pagenstecher's or Macnamara's, as it takes up the least room where space is most desirable; but as, in some instances, the cataract so sinks into its hollow, that the instrument guillotines a portion of the posterior capsule, I have made a modification, by adding two fine bars, which, in my hands, have proved an advantage.

When no iris is removed, I believe all operators pursue the same method. With the scoop, the margin of the pupil is drawn back to the edge of the lens nearest the corneal opening, when it is thrust through the suspensory ligament, along the posterior surface of the posterior capsule, until it reaches the ligament on the opposite side, through which again it forces its way. The end of the scoop is now gently raised, making the sclerotic edge of the wound a fulcrum, so as to press the lens gently against the cornea, when it is slowly extracted in its capsule. The lid is shut and rubbed to produce a round pupil; the eye is bound up, and, if there be no complication, the operation is over. No further treatment is required, and an excellent result, if not the full visual power of the retina, may be expected.

Referring again to the operations in use, it seems that pressure and bruising are the chief defects. Pressure is kept up throughout by the speculum; and although Noyes's of New York seems the least injurious, all produce indirect pressure on the eyeball, which may be easily proved by puncturing a diseased eyeball about to be extirpated, when vitreous humour generally escapes, but ceases on removal of the speculum. Again, in the eyes of persons immediately after death, some fluid vitreous humour may be induced to escape through an opening by introducing a speculum; at a later date, the mere collapse of the ball is sufficient.

Considerable bruising must take place at that part of the operation when the scoop is used to extract the lens in its capsule; for, in spite of every precaution, the iris is pressed on when drawn back by the scoop; and, when sensitive (for the tolerance of injury varies much in individuals), it must be slightly bruised; and although primary iritis is rarely set up, still, dislocation of the pupil on the side of the incision is much more frequent than operators care to confess. Again, by forcing the scoop through the suspensory ligament, especially in the upper section, it must be pushed more or less into the vitreous body; and in any section, in its passage behind the lens, it must tear or bruise the substance of this structure, and a second time force its way through the ligament, thus doing violence throughout.

In this proceeding, the whole of the ligament is frequently not torn, and, when tough, the portion left by its resistance has caused rupture of the capsule during its removal, thus destroying the intrinsic value of the operation.

Without dwelling further on the minor points, I will now lay before you the various means which I have used at the Shrewsbury Eye Hospital, with the design of rendering the operation more easy of performance, and more certain of being successful.

Previous Examination.—The eye is tested, some days before operating, with regard to its sensitiveness to atropine and eserine, so as to ascertain the weakest solution of atropine which will produce the greatest dilatation of the pupil; and, secondly, the percentage of eserine which will overcome, if possible, that dilatation; as we thus learn the dilatability of the pupil, whether the lens will pass through it without bruising, whether an iridectomy would be requisite, what power we possess to overcome a tendency to prolapse, or, what is more frequent, dislocation of the pupil. The lens is examined with special reference to size of corneal opening required for its easy delivery, whether large or small, flat or arched

whether containing a large or small nucleus, surrounded by much or little, soft or semi-hard cortical matter, *e.g.*, a milky white lens with a small nucleus, surrounded by fluid cortical matter, will require a much smaller corneal opening than the opposite condition.

The state of tension of eyeball and of the vessels in other parts of the body with regard to elasticity or hardness, is carefully studied; for, if ossified vessels exist with increased tension, this operation is not advisable, lest the large corneal opening required, and removal of the posterior part of the capsule should induce rupture of the choroidal vessels, frequently weak under such conditions.

The size of the anterior chamber, the diseased or healthy condition of the other structures of the eye, the congestion or otherwise of the conjunctival vessels, the patency or obstruction of the lachrymal apparatus—all are noticed with regard to the future steps of the operation.

Previous Preparation.—The canaliculus is slit up if there be any lachrymal obstruction; the eyes are bandaged for some days, so that the patient may become accustomed to the feeling; the morning and evening temperatures are noted; the night before operation, atropine of sufficient strength is instilled to produce moderate dilatation next day. On the morning of the day, a very light breakfast is given, such as may be digested before the operation at midday.

Anæsthetics, generally ether, are almost always employed; and, should a large corneal opening be made, they are most desirable, if not essential. Their effect should be complete; there should be no reflex action on the eye being touched; if difficult to be accomplished, they should be aided by a hypodermic injection. In those rare cases, as in intemperate patients, where still ineffective, and especially when ether being used is accompanied by blueness of face and congestion of the superficial veins, and probably engorgement of the choroidal vessels, chloroform should take the place of ether, or the operation should be modified, or, better still, another chosen.

To entirely prevent the action of the muscles is to remove one great cause of the loss of vitreous. As a strenuous advocate of anæsthetics for many years, my experience is, that loss of appetite in old people has been their chief evil, sickness being of little importance if the stomach has been previously kept empty, and if moderate pressure be kept up on the eye by a bandage; whilst their advantages in this operation are so great compared with their disadvantages, that their use is strongly urged.

Antiseptics are not employed. Many operators, especially Pagenstecher, say they render the danger of an eye operation, especially this one, very much less, and in particular, remedy the disaster of a large loss of vitreous humour. On the other hand, De Wecker finds the results are on better with than without. In my own practice, perhaps from imperfect application, or a difficulty in carrying it out, they have been found objectionable rather than otherwise. For years, I have carried out a plan which I can recommend to all, viz., to have a small tin of water always kept boiling by a gas-jet, into which every instrument is dipped before use; this, if it do not destroy every germ, must at least, I should think, check their ardour, and has this advantage, if no other, of keeping my instruments in beautiful condition.

Specula.—None are used, owing to the indirect pressure on the eyeball mentioned above. In lieu of these, at first the upper lid was raised by a retractor held by an assistant, but it was found to be in the way, and easily slipped; next, a *serre-fine*, to which a thread was attached to seize the skin of the lid, but it too often tore the skin away, and became detached; but now, and for a considerable time past, a carbolised ligature has been introduced through the skin of the upper lid, which, without inflicting any appreciable injury, forms a most perfect speculum (if I may so call it) for the use either of the operator or of his assistant; it is entirely out of the way, it causes no pressure, and it allows the eye to be instantly opened or shut as frequently as may be desired. The same may be used on both lids, but for the lower it is rarely required.

Section of Cornea.—This has commonly been made in or near the corneo-sclerotic junction, the extent of the incision generally varying from five-twelfths to one-third of the circumference of the cornea, according to the condition and size of the lens; when hard, a large corneal opening being required, and *vice versâ*. If in doubt, the larger section has been always made. All these corneal sections have been made with a modified Gräfe's or Beer's knife, even on the temporal side, in preference to Macnamara's triangular knife; this being accomplished by using a double forceps rotating the ball, and thus allowing the knife to be used. When, however, with a widely dilated pupil, the temporal section has been determined on, the triangular knife has been used so as to prevent the almost certain injury by the ordinary knife. The upper section is generally selected if the eyeball be in good condition, if there be no intention of using the scoop, or if an iridectomy is to be performed.

The lower section is made, if the eyeball be diseased, especially if the tension be lowered; the temporal or the outer and lower section if the scoop be used, as in either of these positions the instrument can be most easily passed under the lens without rupturing the vitreous body to any great extent.

The corneal section of Liebreich and Lebrun also readily allows the removal of the lens in its capsule, with probably less tendency to escape of vitreous humour, but with the disadvantage common to all such openings, the great liability to anterior synæchia. A nasal section has been made with a bent triangular knife, but it possesses no advantages.

Iridectomy, which diminishes the conservative aim of this operation, is only practised when there is considerable tension, posterior synechia, a very shallow anterior chamber, or when the pupil is not dilatable by atropine, or only slightly so. In the first four of these conditions, a moderate or a large portion of the iris is removed. When slightly dilatable, a minute portion is taken away, or a simple incision is made through the iris by a capsular or other scissors. Under these circumstances, iridectomy is generally performed at the time of extraction; but when the eye is much diseased, it should be done a few weeks previously.

Extraction.—To render the use of the scoop the exception rather than the rule, the suspensory ligament of the lens has been detached by a new method. With a piece of stiff wire, about one inch in length, mounted on a handle, having the point smooth and rounded, and a line to half a line of its extremity bent at a right angle, an instrument has been formed, to be used in the following manner, either before or after the section. If before, a minute opening is made in the corner close to its margin by a small bent broad needle; the instrument is passed into the anterior chamber sideways over the lens and under the iris until it reaches its distal margin; the point is now turned downwards, the ligament pierced with ease, and, following the edge of the lens as a guide, it may be torn to any extent the operator may desire by rotating the ball. If, after the section, the instrument is introduced through any part of the opening found most convenient, and whichever course is followed, being under the iris, that structure is scarcely touched. The endeavour is to tear the ligament with the slightest injury to the vitreous body; and, to accomplish this in the manner above mentioned, the bent portion is made of different lengths, in order to adapt itself to an arched or a flat cataract. The wire is also fixed in a light handle, such as cedar-wood, so that the slightest resistance at the point is communicated to the fingers. The lens being thus quite freed from its attachments—for the slight adhesion to the hyaloid fossa is of no importance—and the patient perfectly quiescent, the lens, by slight pressure with a tortoiseshell curette, may be generally eased through the corneal opening without the aid of any extracting instrument.

Pressure failing, should the vitreous body be of moderate consistence, as shown by its projecting with a glass bead-like appearance, instead of the ordinary scoop, another has been used which I had made some years ago, with the shaft bent backwards near the end, so that the loop may be passed in front of the lens to catch it at its distal margin, and to draw it forwards, raising the cornea at the same time without the scoop touching either iris or vitreous body. Should the vitreous humour be very fluid, the ordinary scoop passed under would be preferable. In other cases, where moderate pressure causes the lens to project without escaping, elongated scoops formed like the blades of a diminutive midwifery forceps, of different curves, have been applied to the edges of the lens to assist its exit, with great advantage.

Again, in order to lessen, especially in diseased eyes, the evil of a large corneal opening, and the diminution of the natural internal support of the ball, modifications of this operation have been and are being tried, but not sufficiently often to give the results that weight required in an assembly like this; I shall therefore content myself by mentioning them.

As the lens becomes slightly wider, when pressed between the scoop and cornea on its passage outwards, thereby necessitating a rather wider corneal opening, and as pressure on the edges of the lens can so compress the cortical matter, without rupturing the capsule, as to render the lens oval instead of round, so as to be capable of passing through a smaller corneal opening, straight and curved forceps with minute scoops at their ends have been constructed to effect this purpose.

The suspensory ligament has been detached, and the lens left loose in the eye for several weeks before extraction. As the eye has been found to suffer no appreciable injury from the freed lens within it, the detaching instrument has been used diagnostically to

indicate the best means of removing the separated lens, the size of the corneal opening required, and the advisability or not of an iridectomy; and again, in exceptional cases, the desirability of depressing, as has been explained more fully in my paper on Dislocation of the Lens. (BRITISH MEDICAL JOURNAL, December 30th, 1882.) A small corneal section has been made, the suspensory ligament has been detached, except adjacent to the section; a portion of iris has been removed, the edge of the capsule has been divided after the manner of Knapp, the cortical matter and nucleus have been pressed or scooped out, and the empty capsule previously detached, in great part has been removed at the same time or at a later date.

The lens, with its capsule entire, being removed by one or other of these methods, the upper lid is slightly rubbed and then raised, when, if the pupil be round, central, and of normal size, no application is used; if dilated, eserine is applied; and should the pupil show irregularity, eserine is continued for several days; a strip of isinglass plaster is first put over the lid, followed by a piece of lint dipped in carbolised glycerine, and over that a pad of cotton-wool; the whole is kept in position by as much pressure as is agreeable to the patient by a carbolised gauze bandage. If there be pain, which is rare, it occurs generally the first night, when relief is usually obtained by applying a leech, followed by an opiate pill or a hypodermic injection. The patient progressing, no treatment is required except the daily reapplication of the dressings for his comfort; he is allowed to get up the third day, and generally commences using his eye about the tenth or twelfth. If the various steps of the operation have been performed satisfactorily, a successful result is almost certain, provided the retina retains sufficient visual power; but, as in other operations, difficulties arise, which at times, with every care, mar these results.

The anæsthetic may act imperfectly, causing struggling or muscular spasm; or, when an anæsthetic is not used, the patient may have too little self-control, causing unsteadiness; in either case inducing too great loss of vitreous humour, or bruising the structures from the consequent difficulty of using the instruments with the required delicacy. In such circumstances, dislocation of the pupil is the least evil; as, although it disfigures the eye, it still allows of good vision. Pushing forward of the whole iris against the cornea is more serious, as it shows disorganisation of the vitreous structure, necessarily with diminution of sight, and often ending in total blindness. Prolapse of the iris is rare, primary iritis still more rare; but, at a later date, when much vitreous humour has been lost, permanent hyalitis, with secondary iritis, too often destroys vision by exudation of lymph. Suppuration I have never seen, unless, with other injuries to the eye, cortical capsular matter have been left behind.

Putting aside senile cataracts of old standing, with increased tension and diminished anterior chamber, this operation is suitable to almost all other cases of senile cataract, especially when joined with synechia, myopia, irido-choroiditis, and other conditions, where it is particularly desirable to avoid all irritation after extraction. I look forward to the time when, rendered safer by experience, it will be employed to remove cataract at a much earlier date, before the vitreous body and other structures of the eye have been weakened; so that, instead of allowing a patient to grope about waiting for his cataract to mature, we shall feel justified in advising its removal as soon as it becomes a decided inconvenience.

In concluding these remarks, I claim for my operation that it lessens external pressure, and prevents internal bruising; that it requires no specula, but provides an easy and safe mode of opening the lids; that it does not mutilate the iris; that the use of the scoop is the exception; that it seldom, if ever, ruptures the capsule, the preservation of which is the chief safeguard in all such operations; and that this mode of operating gives visual results equal, if not superior, to any other mode of extraction, with the impossibility of a secondary cataract.

In a future paper, I hope to give full statistics, with an analysis of the cases.*

* The various instruments mentioned were exhibited at the meeting.

SCARLET FEVER AT ACCRINGTON.—The borough of Accrington has just got rid of one of the most serious epidemics of scarlatina that has occurred in England for some years, and frequent reference to this outbreak has been made in our columns. The day-schools have been closed for over three months, the loss in school-pence alone being £1,000 in the same period. About one hundred and twenty children have died from the fever. The schools, including the Sunday-schools, have been reopened.

ON EXTRACTION OF CATARACT BY A SHALLOW LOWER FLAP; WITH A RECORD AND ANALYSIS OF 121 OPERATIONS.*

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AN apology is seldom necessary for recording a series of cataract-extractions, and I trust none will be needed for my bringing before you the mode of operation performed by me, and the results achieved in 121 cases. The days of old, when every one followed with military precision the method of extracting by the flap-operation, have long since vanished, and have given place to a period in which each one does that which seemeth right in his own eyes. The Gräfian operation has been variously and ingeniously modified by different ophthalmologists, and it has been alleged that "nothing now remains of the original operation but the knife." Be this as it may, however, the introduction of this instrument, and its substitution for the older knives, has rendered a valuable service to the extraction of cataract.

Before proceeding to describe the operation performed in these cases, I would say that only in three instances (one further on excluded from consideration) has an anæsthetic been administered. In each of these, ether was given, though in one, owing to the excitement produced, chloroform was substituted. I have always avoided the use of anæsthetics, because the comparative brevity of the operation not only generally renders their employment unnecessary; but I fancy the dangers resulting from the movements of the patient less, instead of greater, than those from the sickness and retching after the administration of chloroform or ether, to say nothing of the general upsetting which, I think, must sometimes exert a deleterious influence. Passing reference may be made to the recently recorded statistics of Hasket Derby, both with and without anæsthesia, and to the superior results achieved under the latter.

As to the operation, no speculum or fixation-forceps is employed. The eyeball is steadied only by the operator's fingers in the following manner. The patient, lying flat on his back, either on the operating table or on a bed, the surgeon stands behind, and, with the fore and middle fingers of the left or right hand, according as it is the right or the left eye which is to be operated upon, gently draws upwards the upper lid. This being done, the middle finger is allowed to descend somewhat, until by gentle pressure on the inner side of the sclerotic, it steadies the globe. At the same time, an assistant draws away the lower lid, and fixes it against the malar bone. An ordinary Gräfe's knife is now used; sometimes, however, I employ one narrower and shorter, the operator using the left hand for the left eye, and the right for the right eye if he be ambidextrous, and the puncture made in the sclero-corneal junction just below the centre of the pupil. The knife is entered flat, or nearly so, and the counter-puncture having been completed, it is carried downwards for a little distance, and then the edge of the knife is turned directly forwards, and the section finished. The summit of the flap will thus lie about the middle of, or a trifle below, the centre of the space between the pupillary edge and the lower corneal border. The capsule is freely torn with a bent cystotome, and the lids freed from all moisture by portions of lint The lens now finds a ready exit by means of pressure on the upper lid by the fingers, and by the same plan on the lower, but, generally speaking, with the vulcanite curette. Any remaining cortex is got rid of by gently rubbing the lid over the cornea, and what is well known as the "lid manœuvre," and the operation now finished, over each eye is placed a fold of lint, that over the one which has undergone extraction is moistened in cold water, and desired to be kept so for the next few days, and then a thin bandage † completes the dressing. The eye is, usually speaking, left undisturbed until the fourth day. At this time, a peep is made to see that everything is favourable; and, if so, the patient is allowed to sit up, for a little, on the fifth or sixth day.

With respect to the performance of iridectomy, it will be presently shown that, in less than half the cases, a portion of iris was removed. The rule I follow is simply this. Should the iris show signs of clinging about the wound after the escape of the lens, and not readily receding, a small piece is cut off; or, indeed, sometimes I excise a por-

* Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Worcester, August 1882.

† The bandage here referred to is the one first suggested, I believe, by the late Mr. Dunnage. It is of open texture, and at each temple two tapes are joined to its extremities at each angle; these pass over the ears, and, continued on each side as one tape, are carried round the head and tied in front.

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tion before the removal of the cataract, or the rupturing of its capsule. If, for various reasons, I fancy there be a little more risk in the operation in a given case, an iridectomy is performed. Generally speaking, it is almost a matter of indifference as to whether a segment of iris be removed or not, as I am not certain that cases do better for the iridectomy. For cosmetic reasons, one would avoid it as much as possible.

Sponges, however clean, and however antisepticised, I have, for some time, entirely discarded, and in their places used portions of lint, either dry or moist. In a small number of cases, I adopted, with slight modifications, the antiseptic plan suggested by Alfred Gräfe, and which I recorded in the BRITISH MEDICAL JOURNAL (1880, vol. i, p. 241). The eye in these cases was well washed with a 2 per cent. solution of carbolic acid, and was then, until the time of the operation, covered over with a sponge wetted in the same solution. The instruments were dipped in alcohol and dried on lint before their use; only carbolised sponges were employed during the operation, and a pad of lint, soaked in a 4 per cent. solution of boracic acid, applied subsequently. The carbolic acid caused such irritation and swelling of the conjunctiva, with thick gummy discharge, that I was soon led to abandon its use, and in one instance substituted thymol for it. The convalescence of these cases, treated with such care, appeared to me somewhat prolonged; and I saw no reason to relinquish a procedure with which I was in no way dissatisfied, and to which I was accustomed, and I therefore returned to it. For some time, however, I have dipped the instruments into alcohol before use, and, still more recently, have adopted also a very modified antiseptic plan in substituting for the moistened lint pad one of salicylic silk, suggested by my friend Mr. McGill of Leeds for general surgical use, and which I have found very serviceable in various ocular and aural cases. Its lightness and softness makes it a convenient pad, and thus far I am pleased with its use. The importance of absolute cleanliness in the instruments, the nurse, the patient, and his surroundings, are points which are daily testified to, as of the highest importance towards attaining a high percentage of successes in cataract-extractions.

As to the advantages and merits attached to the operation here described, it would, in the first place, seem that the exit of the lens is more ready downwards than through an aperture situated above. This partly depends, no doubt, on the ease with which the lower lid is kept free from the wound, contrasting thus with the greater difficulty, except with the use of speculum, that the upper lid is retracted. The operation I have mentioned is, moreover, soon completed, and not fraught with any great discomfort to the patient, to which end the absence of speculum and forceps lends a conspicuous aid. There is thus also no necessity for an anæsthetic.

It has the merit, besides, of being easier of performance than many other modes of procedure, and, the flap being the section of a much larger circle than the circumference of the cornea, gives more space for the exit of the lens, than one made more peripherally would do. The section is confined entirely to the cornea, and, as has just been stated, yields an aperture of sufficient size without encroaching on the dangerous ciliary region. Escape of vitreous humour is only of rare occurrence; but this will be referred to again in the statistical analysis.

Various operators have during recent years advocated the removal of cataract downwards, with shallow flaps. Liebreich and Bader have both suggested and practised it. The operation I have described differs from the former of these, not to go into other points, in which the puncture and counter-puncture are made in the sclerotic, beyond the sclero-corneal junction. It resembles Bader's, in that the section is strictly corneal, but differs in the formation of the flap. Quite recently, Mr. Lloyd Owen, of Birmingham, has described an operation with the lower section, and by a small angular flap. This would seem more to resemble the operation I have practised for several years. The summit of the flap is, however, more peripheral, I fancy, than in the one I have described. Among the disadvantages said to belong to extraction, in the manner just mentioned, is the adhesion of iris to the wound. This undoubtedly does occur sometimes; but not so often, however, in my experience, as has been alleged, and probably not more frequently than when rags of iris were left entangled in the corners of a Gräfe section.

The importance of getting rid of the entire cataract is, of course, of the first moment, and any particles of cortex are generally readily removed by means of the "lid manœuvre." The introduction of instruments is strictly avoided; and, generally speaking, the only ones introduced during the operation are the knife and the cystotome; and, when a portion of iris is removed, it is seized by forceps as it lies prolapsed at the wound. Should the lens for any reason not readily escape, and it be necessary to facilitate its removal, I have found Taylor's vectis of the greatest value; and I fancy an advantage will be noticed in having the instrument made entirely of platinum—the loop as well as the stem. By this means, it is not only possible to bend it into any position desired; but it is readily cleaned by passing it through the flame of a spirit-lamp.

Passing now to the record of cases, I may say that I had sometimes performed the operation prior to the time embraced in this series, but have no record save of the solitary one which stands earlier than the others.

I may here state that, in the cases of the very few young patients, three or four in number, in which the lens was expected to be of soft consistence, the cornea was more encroached upon in making the section, and which was consequently smaller.

Of the total number of one hundred and twenty-one operations, thirty-one submitted to the operation in both eyes—thus making the actual number of individual patients ninety.

Out of the thirty-one who had cataract removed on each side, only in four instances were they operated upon in both eyes at one sitting; in each of these, however, a satisfactory result ensued. Otherwise, a longer or shorter interval elapsed, after one operation, before the other was extracted. In two instances only, of the thirty-one cases of double extraction, sixty-two eyes, did a failure occur—viz., Nos. 11 and 116.

I think I may very fairly exclude from our consideration of the record of cases No. 49, a woman, aged 79, who, I only learnt after the operation, had been removed to the infirmary direct from the imbecile ward at the workhouse. Ether in this case was administered. Not long after the operation, whilst the nurse's back was turned, she commenced pulling off her bandage and pad of lint, and carefully reapplying them to her eyes after she had dipped them in her own urine. Of course, the case failed, suppuration setting in; but such a case is, I imagine, of no value in judging the relative success and failure in a given series of operations, and I therefore shall speak only of 120 operations; but of this number we must refer to eight as failures.

Of this series (120), there were 70 males and 50 females. Their ages were as follow: under 20, one; between 20 and 30, two; between 30 and 40, ten; between 40 and 50, ten; between 50 and 60, eighteen; between 60 and 70, forty-nine; between 70 and 80, twenty-nine; at 80, one.

There were 63 right eyes operated upon, and 57 left.

As to the season of the year, the first three months include 28 operations, the second 31, the third 31, and the last quarter of the year 30. It will thus be seen that the different seasons vary very little, the slight advantage in numbers occurring in the warmer six months. This appears to me somewhat odd, as I have been accustomed to suggest to patients, in accordance with the prevailing impression that the warmer months are not so favourable to cataract-operations, to wait for the cooler weather. That the season exerted in this series but little influence on the success or otherwise of the operation, will appear when one deals with the failures.

In fifty-five cases, iridectomy was performed at the time of the operation; in no instance did it precede it.

Vitreous humour is credited with loss in eleven cases. Four of these, however, were associated with the employment of the vectis to remove the cataract. The eleven cases are recorded as follows.

No. 19. Slight escape of vitreous humour.
No. 25. Slight escape; lens removed with vectis.
No. 30. Fluid vitreous, resulted in phthisis bulbi.
No. 34. Slight escape.
No. 41. Escape of vitreous humour; vectis employed.
No. 57. Escape of lens immediately on completion of section; small loss of vitreous humour.
No. 58. Iris fell over knife whilst making section; and was cut through; the pupillary margin remained, and attempts at its removal resulted in loss of vitreous humour.
No. 67. Quantity of vitreous humour escaped.
No. 70. Escape of vitreous humour.
No. 76. Small loss of vitreous humour; vectis was employed.
No. 106. Vectis used; lens removed in capsule; small escape of vitreous humour.

Excluding the cases in which the vectis was employed, as the insertion of such an instrument, or other for like purpose, almost necessitates the loss of vitreous humour, there remain seven instances which must be fairly credited to this series of cases. This is a small number, something over 5 per cent.; and it may be mentioned that only in No. 30, which resulted in failure, and No. 70, which recovered excellent sight, was there escape of vitreous humour in any quantity. Most of these instances also occurred in the earlier cases; and, with one

TABLE.

No.	Sex, Age, and Date of Operation.	Right or Left Eye.	Incidents of Operation.	Secondary Operation.	Result.	Remarks.
1	F. 47. Mar. 1877	R.	... ...	...	V = $\frac{20}{40}$, reads J. 1	Same case as No. 7.
2	M. 58. June 1877	R.	... ...	...	Good	Tremulous iris. Vision excellent on leaving infirmary, July 27th. Iridectomy for acute glaucoma, of five days' duration. V = shadows. Iridectomy satisfactory as to pain and tension; no return of vision.
3	M. 72. June 1877	R.	... ...	...	Good; no scholar; sees time by watch	
4	M. 58. May 1877	L.	... ...	...	V = $\frac{20}{30}$, reads J. 1	Other eye had been successfully operated on elsewhere previously.
5	M. 60. July 1877	L.	... ...	...	V = $\frac{20}{40}$, reads J. 1	Same case as No. 18.
6	M. 67. July 1877	R.	... ...	...	Failure (*vide* remarks)	Healthy but irritable man. Suppuration at edges of wound. Left the infirmary within a week of the operation; dispute with nurse.
7	F. 47. Sept. 1877	L.	A good deal of soft cortex	...	Reads J. 1. (V = $\frac{20}{70}$, July 1882)	Same case as No. 1.
8	F. 55. Sept. 1877	R.	Iridectomy ...	Capsule needled December 3rd	V = $\frac{20}{70}$, reads J. 1	Other eye successfully operated on previously elsewhere.
9	M. 76. April 1878	R.	Iridectomy (small)	...	No scholar; says, with glasses, he sees as well as ever	Same case as No. 15.
10	F. 64. April 1878	R.	... ...	...	V = $\frac{20}{70}$, reads J. 1	Same case as No. 11.
11	F. 64. May 1878	L.	... ...	...	Failure	Panophthalmitis. May 20th, enucleation. Same case as No. 10.
12	F. 66. April 1878	L.	... ...	...	V = $\frac{20}{30}$, reads J. 1	
13	F. 63. Aug. 1878	R.	... ...	...	V = $\frac{20}{30}$, reads J. 1	
14	M. 63. Aug. 1878	L.	... ...	...	V = $\frac{20}{40}$, reads J. 1	Same case as No. 19.
15	M. 76. July 1878	L.	Iridectomy ...	...	No scholar; says he sees as well as ever he did with glasses	Same case as No. 9.
16	M. 17. July 1878	L.	Iridectomy ...	...	Has never seen to learn to read. With + 2½ makes out fingers on watch, and is improving Oct. 28, 1870	Purulent ophthalmia in infancy. Right eye wasted, never seen with left. Pyramidal cataract; notched and peggy teeth.
17	M. 62. Sept. 1878	R.	Iridectomy ...	...	V = $\frac{20}{20}$, reads J. 1	Antiseptic series. *Vide* BRITISH MEDICAL JOURNAL, 1880, vol. i, p. 241. Same case as No. 21.
18	F. 47. Sept. 1878	R.?	... ...	...	V = $\frac{20}{70}$, reads J. 1	Antiseptic.
19	M. 63. Oct. 1878	R.	Slight escape of vitreous	...	V = $\frac{20}{40}$, reads J. 1	Antiseptic. Same case as No. 14.
20	F. 63. Oct. 1878	L.	A good deal of soft cortex	...	Reads J. 6	Antiseptic. A small point of iris adhered to wound. Same case as No. 13.
21	M. 62. Oct. 1878	L.	... ...	...	V = $\frac{20}{70}$	Antiseptic. Same case as No. 17.
22	M. 56. Oct. 1878	L.	... ...	...	V = $\frac{20}{50}$, reads J. 1	Antiseptic.
23	F. 69. Oct. 1878	L.	... ...	May 1879. Iridectomy	J. 20, and improving	Antiseptic. Thymol used instead of carbolic acid for this case. Pupil was closed, and adhered to wound, owing to fretting of wound by inturned lower lid (entropion). Same as No. 31.
24	M. 70. Nov. 1878	R.	Iridectomy ...	...	Failure	Decrepid old man. Suppurative iritis (?). Eye lost.
25	F. 39. April 1879	L.	Lens removed with "Vectis"; slight escape of vitreous	...	V = $\frac{20}{30}$, reads J. 1	
26	M. 45. Mar. 1879	R.	... ...	...	Not mentioned	
27	M. 71. Aug. 1879	R.	... ...	...	Failure (*vide* remarks)	Decrepid; not acute perception of light; other eye atrophy of optic nerve and floating films in vitreous. Result, phthisis oculi. After operation, patient's powers seemed to fail.
28	M. 62. Sept. 1879	R.	Iridectomy ...	...	V = $\frac{20}{50}$, reads J. 1	Same case as No. 5.
29	M. 63. Oct. 1879	R.	Iridectomy ...	...	Good result	Followed by a little iritis. Left infirmary on account of illness of wife, and did not return to be tested visually.
30	M. 67. Oct. 1879	L.	Escape of fluid vitreous	...	Failure (*vide* remarks)	Perception of light not perfect. Blind in other eye from nerve-disease. Result: hyalitis, and wasting of globe.
31	F. 70. Nov. 1879	L.	Iridectomy ...	...	V = $\frac{20}{50}$	Same case as No. 23.
32	M. 55. Dec. 1879	L.	Iridectomy; small nucleus; quantity of soft cortex	...	V = $\frac{20}{50}$	Same case as No. 41.
33	M. 70. Jan. 1880	R.	Iridectomy ...	...	V = $\frac{20}{200}$, reads J. 8	Same patient, who is an Albino. Vision was always defective. He says he sees now as well as ever he did.
34	M. 70. Jan. 1880	L.	Iridectomy; slight escape of vitreous humour	...	V = $\frac{10}{200}$, reads J. 8	
35	F. 69. Feb. 1880	R.	Iridectomy ...	...	V = $\frac{20}{60}$, reads J. 1	
36	F. 55. April 1880	R.	... ...	...	Excellent result, apparently; did not return to be tested	
37	F. 78. April 1880	L.	Iridectomy ...	...	V = $\frac{20}{70}$	Same case as No. 74.
38	M. 62. May 1880	R.?	Iridectomy ...	...	Good	Died shortly after leaving the infirmary; suffered from slight iritis after the operation.
39	M. 46. June 1880	R.	Iridectomy ...	...	V = $\frac{20}{40}$, reads J. 1	
40	M. 45. June 1880	R.	Iridectomy; a good deal of soft cortex	Opaque capsule, needled Oct. 25, and repeated Dec. 28, 1880	V = $\frac{20}{30}$	Same case as No. 53.
41	M. 55. June 1880	R.	Iridectomy. Vectis employed to remove lens, escape of vitreous, and some cortex left	July 19th. Paracentesis for + T Feb. 7th, 1881; capsule needled	When last seen, could read good-sized type	Same case as 32. Operation was followed by a good deal of irritation, which was slow in subsiding.
42	M. 74. June 1880	L.	Iridectomy ...	...	V = $\frac{20}{100}$	Same case as next.
43	M. 74. July 1880	R.	... ...	...	Read J. 19, improving	Some *débris* left in operation, and followed by iritis. Same case as No. 42.
44	M. 34. July 1880	L.	Iridectomy ...	...	V = $\frac{20}{50}$, reads J. 1	Traumatic cataract, two years' duration.
45	M. 60. Aug. 1880	R.	... ...	...	V = $\frac{20}{40}$, reads J. 1	Same case as No. 22.
46	M. 69. Aug. 1880	L.	Iridectomy ...	Iridectomy for closed pupil	Sees J. 4; poor scholar	Operation followed by iritis.
47	M. 66. Sept. 1880	R.	... ...	...	V = $\frac{20}{40}$, reads J. 1	Same case as No. 109.
48	F. 68. Oct. 1880	R.	Iridectomy ...	...	V = $\frac{10}{100}$ (a good deal of opaque capsule)	Same case as No. 56.

TABLE—*continued.*

No.	Sex, Age, and Date of Operation.	Right or Left Eye.	Incidents of Operation.	Secondary Operation.	Result.	Remarks.
49	F. 79. Nov. 1880	L.	... ...	...	Failure (suppuration)	Ether was given in this case. Patient came direct from imbecile ward at workhouse—unknown at time of operation. She removed bandages from eyes, soaked them in urine, and then reapplied them, and was demented and uncontrollable.
50	M. 70. Nov. 1880	L.?	... ...	...	Failure (Panophthalmitis)	Ether was given.
51	F. 68. Dec. 1880	R.	Iridectomy ...	...	$V = \frac{20}{100}$	Old choroidal patches.
52	M. 39. Jan. 1881	R.	Iridectomy (cataract fluid)	...	$V = \frac{20}{30}$	Traumatic cataract.
53	M. 45. Jan. 1881	L.	Iridectomy ...	Capsule needled in April 1881	$V = \frac{20}{30}$	Same case as No. 40.
54	M. 35. Feb. 1881	L.	Iridectomy ...	...	Fair sight; no precise record, beyond it is known to be successful	Traumatic. (?)
55	F. 69. Feb. 1881	R.	Iridectomy ...	...	Satisfactory, and leaving infirmary, did not return	
56	F. 69. Feb. 1881	L.	Eserine inserted at completion of operation	...	$V = \frac{10}{70}$, some opaque capsules still remaining	Same case as No. 45.
57	M. 63. Mar. 1881	R.	Tremulous iris. On completion of section, immediate escape of lens in capsule, and a very little vitreous	...	$V = \frac{20}{70}$	
58	M. 73. Mar. 1881	L.	Iridectomy. On making section, iris was cut through; and, after removal of the cut portion, a small papillary portion was found left; in attempting its removal, vitreous escaped	Iridectomy for closed pupil	$V = \frac{5}{100}$, and improving	Operation followed by iritis and closing of pupil. Patient suffered from ectropion, and consequent welling up of tears against wound.
59	M. 34. Mar. 1881	R.	... ...	...	$V = \frac{20}{50}$	Soft lens; urine free from sugar. Same case as No. 97.
60	F. 64. April 1881	R.	Iridectomy ...	...	$V = \frac{20}{30}$	Same case as next.
61	F. 64. May 1881	L.	... ...	...	$V = \frac{20}{30}$	Same as No. 60.
62	M. 71. May 1881	R.	... ...	...	$V = \frac{20}{50}$	Same case as No. 64.
63	M. 60. May 1881	R.	... ...	...	$V = \frac{20}{40}$, reads J. 1	Other eye lost years ago—accident(?).
64	M. 71. May 1881	L.	Iridectomy ...	Capsule needled May 22, 1882	$V = \frac{20}{70}$. Better result after needling capsule not recorded	Same case as No. 62.
65	F. 36. May 1881	L.	Iridectomy ...	...	$V = \frac{20}{30}$	Same as next case.
66	F. 36. June 1881	R.	Iridectomy ...	...	$V = \frac{20}{30}$	Same case as No. 65.
67	F. 78. July 1881	L.	Quantity of vitreous escaped	...	$V = \frac{20}{40}$, reads J. 1	Same case as next.
68	F. 78. July 1881	R.	A good deal of soft cortex. On removing this by lid-manœuvre, a bead of vitreous presented in wound, but did not escape	...	$V = \frac{20}{40}$, reads J. 1	Same case as No. 67.
69	F. 66. Mar. 1881	L.	... ...	August 2nd, iridectomy	Reads J. 16	
70	M. 72. Feb. 1877	L.	Escape of vitreous humour; incursion of eyeball before completion of section	...	July 1882. Is still alive, and nephew tells me sees capitally	
71	F. 54. Feb. 1877	L.	... ...	...	Reads J. 1	Same case as next (at same sitting).
72	F. 54. Feb. 1877	R.	... ...	...	Reads J. 1	Same case as No. 71
73	M. 57. April 1877	R.?	... ...	...	$V = \frac{20}{100}$	
74	F. 75. June 1877	R.	... ...	*Vide* Remarks	Reads J. 16 (*vide* remarks)	Prolapse of iris. Punctured once or twice without benefit; repeated and subsequent shrinking of eyeball. Same case as 37.
75	F. 70. Aug. 1875	R.	... ...	...	Reads J. 1	
76	M. 65. June 1877	L.	Lens removed with Vectis. Small escape of vitreous	...	Reads J. 1	Other eye operated on elsewhere unsuccessfully.
77	F. 56. July 1878	R.	... ...	...	$V = \frac{20}{50}$, reads J. 1	
78	F. 57 (?). Oct. 1878	R.	Iridectomy ...	...	Reads J. 1	Same case as next (both eyes operated upon at the same time).
79	F. 57 (?). Oct. 1878	L.	Iridectomy ...	...	Reads J. 1	Same case as No. 78.
80	F. 74. Oct. 1878	L.	Iridectomy ...	...	Reads J. 1	
81	F. 65. July 1878	L.	... ...	...	Reads J. 1	
82	M. 64. Dec. 1878	R.	Iridectomy ...	...	Reads J. 1	Same case as next (both eyes operated upon at the same time).
83	M. 64. Dec. 1878	L.	Iridectomy ...	...	Reads J. 1	Same case as No. 82.
84	M. 63. Aug. 1876	R.	Iridectomy ...	...	$V = \frac{20}{70}$, reads J. 1	Same case as next (both eyes operated upon at the same time).
85	M. 63. Aug. 1876	L.	Iridectomy ...	...	$V = \frac{20}{70}$, reads J. 1	Same case as No. 84.
86	F. 64. Feb. 1879	L.	... ...	...	Reads J. 1	Had small cancer in breast at time of operation. Died a year or more after; desired operation rather than remain blind.
87	F. 78. Feb. 1879	R.	Iridectomy ...	...	Reads J. 1	
88	M. 68. Aug. 1879	L.	... ...	...	$V = \frac{20}{70}$ (?)	
89	M. 65. Oct. 1879	R.	Iridectomy ...	...	$V = \frac{20}{50}$, reads J. 1	Same case as next.
90	M. 65. Oct. 1879	L.	Iridectomy ...	...	$V = \frac{20}{300}$ ($\frac{20}{100}$?), reads J. 1	Same case as No. 89.
91	F. 70. Jan. 1880	R.?	Iridectomy ...	...	Reads J. 1	
92	M. 56. April 1880	L.	Iridectomy ...	...	$V = \frac{20}{50}$, myopic always	Ether administered; excitement; chloroform substituted.
93	F. 65. June 1880	R.	Iridectomy ...	...	$V = \frac{20}{100}$	
94	M. 77. Sept. 1881	R.	Iridectomy ...	...	$V = \frac{20}{40}$	
95	M. 80. Sept. 1881	L.	Iridectomy ...	...	$V = \frac{20}{30}$	
96	M. 74. May 1881	L.	Iridectomy ...	...	Failure, panophthalmitis	
97	M. 34. April 1881	L.?	... ...	...	$V = \frac{20}{50}$	Same case as No. 59.
98	F. 78. Sept. 1881	R.	Iridectomy; considerable hæmorrhage at time of operation	...	$V = \frac{20}{70}$	Same case as No. 100.
99	F. 64. Sept. 1881	R.	Iridectomy ...	...	$V = \frac{20}{50}$	
100	F. 78. Sept. 1881	L.	... ...	...	$V = \frac{20}{40}$	Same case as No. 98.
101	M. 61. Oct. 1881	L.	... ...	...	$V = \frac{20}{70}$	
102	M. 24. Oct. 1881	L.	Soft cataract ...	...	$V = \frac{20}{30}$	
103	M. 66. Oct. 1881	R.	... ...	...	$V = \frac{20}{40}$	

TABLE—*continued*.

No.	Sex, Age, and Date of Operation.	Right or Left Eye.	Incidents of Operation.	Secondary Operation.	Result.	REMARKS.
104	F. 55. Oct. 1881	L.	Iridectomy ...	Capsule needled, subsequently to result given with improvement, May 15th	V = $\frac{20}{70}$	Same case as 108.
105	F. 53. Nov. 1881	L.	... ...	...	V = $\frac{20}{50}$	
106	M. 63. Nov. 1881	L.	Iridectomy. Vectis used, and lens removed in capsule; small escape of vitreous	...	V = $\frac{20}{70}$	
107	M. 20. Dec. 1881	R.	... ...	...	Good operative result	Poor light-perception before operation; condition unaltered
108	F. 56. Dec. 1881	R.	... ...	...	V = $\frac{20}{70}$	Same as 104.
109	M 68. Dec. 1881	L.	... ...	...	V = $\frac{20}{40}$	Same case as No. 47.
110	M. 48. Dec. 1881	L.	A good deal of soft cortex	...	V = $\frac{20}{50}$	Same case as No. 112.
111	F. 43. Jan. 1882	R.	... ...	...	V = $\frac{20}{70}$	Same as case 110.
112	M. 48. Jan. 1882	R.	... ...	...	V = $\frac{15}{70}$	Other eye operated on elsewhere; lost by glaucoma.
113	F. 62 (?). Jan. 1882	R.	... ...	...	V = $\frac{20}{50}$	Followed by iritis, with result of closed pupil. Under treat
114	F. 36. Feb. 1882	L.	... ...	Iridectomy	...	ment at time of report.*
115	F. 50. Mar. 1882	L.	... ...	...	V = $\frac{20}{70}$	Same case as No. 18.
116	M. 63. Mar. 1882	R.	... ...	...	Failure	Suppuration at edges of wound; shrinking of globe.
117	M. 36. Ap.(?) 1882	L.	Iridectomy ...	...	V = $\frac{10}{100}$ (*vide* remarks)	Left infirmary with capital result; got drunk twice or thre times daily for some time, and readmitted with pus in ant chamber. This has cleared; and up to time of writing visio is as stated, and improving.
118	M. 62. Jan. 1882	R.	Iridectomy ...	...	Good (*vide* remarks)	Visited for me by my late clinical assistant, Mr. Banham; an at time of making report, found patient dead, but learn that "the operation was satisfactory".
119	M. 77. April 1882	R.	... ...	...	V = $\frac{20}{70}$, reads J. 1	
120	M. 65. Jan. 1882	R.	Iridectomy ...	...	Reads J. 16	
121	F. 77. April 1882	R.	... ...	...	V = $\frac{20}{200}$	Patches in choroid (?).

exception, there has not been such an accident for a considerable time. In all cases in which there was loss of vitreous, a good result ensued, except in No. 30.

The vectis was employed to facilitate the escape of the lens in four cases.

Secondary operations are recorded as performed in twelve cases. The number, 10 per cent, is small, but I dare say other cases would have received additional benefit by a further procedure. The operations consisted of iridectomies, needling opaque capsule, and puncturing prolapsed iris.

This last condition (prolapse of iris) occurred once only, No. 74. Pressure had little influence over it; and, some time after the operation, there remained a small cyst at one extremity of the wound. Sight was very fair. Puncture with a needle did some good, and it was repeated. Still, a considerable time after the operation, sight still remaining very fair, I yielded to importunity, and again punctured, with the result that the eye dwindled quickly to a small stump.

Failure is recorded in eight cases. One of these (No. 6) left the infirmary before the expiration of a week after the operation, with the wound sloughy-looking; nothing more being seen of him. None of these patients were younger than sixty, and four were seventy and over; the exact ages being 67, 64, 70, 71, 67, 70, 74, and 63. Two of them occurred in May, and two in November; the other cases coming in July, August, October, and March—the cold and warm seasons being equally balanced as to the time of the occurrence of the failures. In three instances, there were complications which rendered a satisfactory issue a somewhat remote possibility. They are thus recorded.

No. 24. Decrepid old man, aged 70; failing, want of vigour.

No. 27. Decrepid, aged 71; not acute perception of light; other eye, atrophy of optic nerve, and floating films in vitreous body. Result: phthisis oculi; after operation, the patient's powers seemed utterly to fail.

No. 30. Perception of light not perfect. Blind in the other eye from atrophy. Escape of fluid vitreous, hyalitis, and wasting of globe.

In the last two cases, the blind condition of the opposite eye induced me to afford the chance of operation. With respect to the first, however, I have no record of what induced me to operate on, as he is above described, such a highly unpromising patient.

Taking the whole series of eight failures together, they yield a loss of $6\frac{2}{3}$ per cent.; or, if the three above detailed be exempted, it will cause a reduction to 4 per cent.

Referring to the successful cases, it may be mentioned that the results recorded were nearly all ascertained a brief period after the operation. Knapp has pointed out, in his very elaborate reports of cataract operations (*Archives of Ophthalmology*), that a better visual result is noticeable at a more remote period; this I have myself observed when, for instance, $\frac{2}{7}\frac{0}{0}$ has risen to $\frac{2}{3}\frac{0}{0}$. The cause of this difference is no doubt, the consolidation of the wound, and the obliteration or diminution of any irregular astigmatism which at the outset is present. These results are, moreover, only recorded with spherical glasses; in no case has the astigmatism been corrected and accounted for. As far as they are given, the results are perfectly accurate; but it is to be regretted that, in some instances, circumstances have prevented their being recorded with the exactness the majority have permitted.

The result in this series of cases may be summed up thus: Ninety-nine good and ten moderate results; one good operation result; two are unmentioned, one being uncertain and the other still under treatment (Nos. 26 and 114); and eight failures.

They may be tabulated thus: Successes 109, and good operative result 1, 110 = 91.6 per cent.; failures 8 = 6.6 per cent.; or, excluding the 3 complicated cases 5 = 4.1 per cent. One case uncertain, one case still under treatment, 2—1.6 per cent.; total 120.

An albino, who underwent the operation in both eyes successfully (Nos. 33 and 34), is included in this series.

Eserine was only used in one or two cases at the time of operation.

* Subsequent iridectomy, followed by suppuration of globe.

SLAUGHTERHOUSES.—At a recent meeting of the Slaughterhouse Reform Society, held at the office of the Royal Society for the Prevention of Cruelty to Animals, in Jermyn Street, Dr. Richardson, the President of the Society, delivered an address, in the course of which he stated that the primary object of the Slaughterhouse Reform Society was to suggest means of slaughtering animals in the most painless manner, but as the originators progressed in their work, they found the necessity of many more reforms. They therefore determined to come before the public with a much more extended programme, and among the objects they had in view were the following: to establish in London a model slaughter-house, from the designs of which others might be constructed; to advocate the erection of public *abattoirs*; to illustrate and teach the most rapid, skilled, and humane methods of slaughtering animals; to improve the methods for the dressing of carcases of animals, so that the flesh might enter the market in the purest condition; to insist on the importance to those engaged in the slaughterhouses having proper convenience for washing and cleansing themselves; to bring into use the completest means of removing the offal, blood, and other organic substances, so that it might be removed with expedition; and to institute a systematic and scientific inspection. On the motion of the Hon. Rollo Russell, the following resolution was passed: "That the sum of £1,300 having now been subscribed to establish a small model *abattoir*, the committee of the society be empowered to take such steps as they think desirable for the attainment of the object." Other resolutions were passed approving of the objects of the society and thanking the subscribers for their support.

ON CERTAIN MODIFICATIONS OF VON GRÄFE'S LINEAR OPERATION FOR THE EXTRACTION OF CATARACT.*

By GEORGE COWELL, F.R.C.S.,
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I BELIEVE that most ophthalmic surgeons agree that the modified form of linear extraction, which was introduced by the late Professor von Gräfe, has been attended with a larger average of success than any other form of operation that has been devised. Whilst nothing could be more perfect than a completely successful flap-extraction, the risks of that operation were so many and so great, that a comparatively small percentage of perfect results could be obtained, and many eyes were lost. Von Gräfe's operation was devised to minimise, by its iridectomy and smaller wound, most of the dangers that were inseparable from the large wound of the flap-extraction; and it fulfilled its objects so well that nearly ninety per cent. of the eyes operated upon were attended with success, having an acuity of vision of from $\frac{1}{6}$ to $\frac{5}{6}$. Of the ten per cent. that were unsatisfactory, the majority were improved by subsequent operation. Von Gräfe's own conclusions, after a considerable trial of his operation, and without any selection of his cases, were these.

1. In eyes favourable for flap-extraction, the prospect of success is certainly equally great by the new method.

2. In eyes unfavourable for flap-extraction, the prospect of success is considerably greater.

3. In consideration of the diminution of inconvenience to the patient, and of duration of treatment, the new method of operation may be accepted and practised to the entire exclusion of the flap method.

These conclusions were accepted by the great majority of ophthalmic surgeons, and the main features of von Gräfe's operation are still very largely followed. It is true that numerous modifications have been introduced and tried with the view of counteracting the difficulties of individual operators, but few of them have been accepted as general improvements. There has, however, been a very general desire to accept the proposal of making the section entirely in the cornea. With the sclerotic section, or even with the sclero-corneal section, it happened to some operators that vitreous was frequently lost; and in unsuccessful cases, when a sclerotic section has been followed by destructive inflammation of the eye, sympathetic mischief in the other has not been altogether unknown.

It may perhaps be thought an act of presumption on my part to say that I confirm the conclusions with regard to this operation announciated by so great a master as Von Gräfe; but I speak after a lengthened practical experience of the method, and after comparing it with such other methods as have from time to time offered a reasonable promise of success. Of these, the best has undoubtedly been the operation of Dr. Warlomont of Brussels. I need not describe it. I will only say that I tried it in thirty cases, and that the following reasons led me to abandon it. 1. There is a considerable risk of iritis. 2. The margin of the pupil frequently becomes adherent to the corneal wound. This anterior synechia, with greater or less distortion of the pupil, occurred in no fewer than sixteen out of the thirty cases. 3. A white cicatricial opacity often remains in the line of the corneal section. 4. There is an increased liability to a varying amount of irregular astigmatism, sometimes very considerable, depending apparently upon the nearer position of the section to the central portion of the cornea, and seriously diminishing the acuteness of vision. I called special attention to the amount of astigmatism in these cases in a paper I had the honour of reading before the Surgical Section at the meeting of the Association in London in 1873.

I have then, from each new method, reverted with satisfaction to von Gräfe's modified linear extraction; but I was early induced to introduce certain minor modifications of my own, or, rather, I would refer to call them attentions to minor, yet important, details, for every surgeon knows that it is on these that the success of all operations, in a large measure, depends. These modifications, if such they may be called, may not suit everyone's mode of operating; but careful attention to them will minimise dangers, and, in my own hands, they have been attended with a very considerable success, as I shall show by giving an analysis of 100 consecutive cases. But, first, let me describe the points to which I attach importance, and the modifications that I have followed.

1. I always have the pupil well dilated with atropine on the morning of the operation.

2. I always give an anæsthetic, unless it be contraindicted, or unless I can be sure of the complete quietude of my patient. Only six per cent. have been operated on without.

3. The section is corneal, but sufficiently peripheral to be subconjunctival; the puncture and counter-puncture, which are a little lower than in von Gräfe's operation, alone being just outside, or in the sclero-corneal junction, according as there is reason to believe that there is a large or a small nucleus.

4. The section is made with extreme deliberation, with scarcely more pressure than the weight of the knife; and, in making the middle of the section, the edge of the blade is not turned much forwards, the desire being that the middle of the section should be only just within the margin of the cornea. It is important that the knife be sharp, in order that no force be used in making the section, thereby avoiding all risk of disturbing the coats and contents of the eye.

5. Sometimes, but not always, after the section has been made, the end of the section answering to the counter-puncture is just touched by the end of the blade of von Gräfe's knife, so as to make the section of the internal surface of the cornea correspond with the section of the outer surface, as is already the case at the point of puncture. This is important only when the section is somewhat small, or the nucleus large.

6. A period of rest of at least one minute is taken after each step of the operation, to give the eye time to adapt itself to the new conditions of circulation and tension.

7. A free crucial incision is made in the anterior capsule.

8. A gentle coaxing out of the nucleus and all the soft lens matter is made with the smooth back of the curette, taking care that the surface of the cornea is moist before passing the curette over it, avoiding, at the same time, all force, and using the hook at once if the nucleus does not readily escape.

9. A careful tucking-in is made with the end of the curette, of any portion of iris or uvea that may be occupying the angles of the section. A neglect of this precaution sometimes postpones the healing of the wound, and leads to the formation of a cystoid cicatrix, which may, at some future time, be a cause of irritation in the eye. It is also important carefully to adjust the conjunctival flap over the wound.

I use the same instruments as were recommended by von Gräfe, except that I prefer the iris-forceps curved at the points, instead of straight, and the iris-scissors made in the form of forceps, as they are then as convenient for use with the left hand as with the right. As a result of an attention to these points, I claim:

1. An immunity from rupture of the hyaloid, or what does duty as a hyaloid, and, therefore, from loss of vitreous humour except when the latter is very unhealthy, about five per cent.;

2. Diminished frequency of the occurrence of iritis and other inflammatory conditions;

3. A more rapid convalescence, twelve to twenty days; average fifteen days;

4. An increased proportion of cases, in which the patient is able to read "brilliant" type.

The after-treatment is that recommended by von Gräfe. It is rarely necessary that the patient should be kept in bed beyond the third day, or confined to the house beyond the twelfth or fourteenth, I most rigidly abstain from looking at the eye before the fourth day, and often wait until the sixth or seventh. I have for many years given up the practice of keeping my cataract patients in a dark room. A curtain, or screen, placed between the patient's head and the window or light is sufficient, the eyes, of course, being tied up with pads and bandage. I need hardly say that the healing of the wound takes place more readily, and that the health of the patient is better maintained if, whilst the eyes are carefully shielded from the light by the proper pads and bandage, and a light shade of good size, the body be placed under the usual conditions of light and air.

Of a hundred consecutive cases of extraction of cataract, in which the details of the operation described in the paper were observed, thirty-one eyes could read "brilliant" .3 (No. 1); six acquired $\frac{6}{6}$ ($\frac{20}{20}$), the rest were astigmatic, the distant vision at the last examination varying from $\frac{6}{9}$ to $\frac{6}{24}$ ($\frac{20}{30}$ to $\frac{20}{70}$). Relying upon the gradual diminution of the astigmatism, I do not attempt to correct it until twelve or eighteen months after the operation. The majority of patients, content, I suppose, with their spherical glasses, do not return for further examination. I believe that nearly all the eyes that could read "brilliant" type could have been brought to $\frac{6}{6}$ with proper cylindrical glasses. Sixteen could read "pearl" .6 (No. 2); fourteen, 9 (No. 3)

* Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Worcester, August 1882.

eight, 1.2 (No. 4); four, 1.5 (No. 5); seven, 1.8 (No. 6); three, 2.4 (No. 8). In five the result was good, but the acuteness of vision was not recorded. Two eyes could read 4.8 (No. 16); five could count fingers; two had perception of light; three were lost—one from sloughing of cornea (great feebleness), and two from general inflammation (alcoholic excesses). In twenty-one cases, a subsequent needle-operation was required, resulting improvement recorded in only a portion of the cases; in five cases, a slight amount of vitreous humour was lost; in eleven cases, some iritis occurred, not counting the three eyes that were lost.

NOTE.—The test-types referred to are those for determining the acuteness of vision, drawn up by the author of this paper, to correspond with the series of large types of Dr. Snellen and others. The limbs are, in diameter, as nearly as possible, one-fifth of the height of the letters, and the figures over each size give the number of metres and feet at which the letters are seen by a standard eye. Words of one syllable are chiefly chosen, as facilitating the testing of the eyes of those who read imperfectly. They were printed and published by Harrison and Sons, St. Martin's Lane.

THE CHANGES IN THE RENAL GANGLIA IN BRIGHT'S DISEASE.*

BY ROBERT SAUNDBY, M.D.,

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IN the *American Journal of Medical Sciences* for July 1880, there is a very able paper, by Drs. Da Costa and Longstreth of Philadelphia, entitled "Researches on the State of the Ganglionic Centres in Bright's Disease."

They give the particulars of nine cases of Bright's disease, with microscopical details of the changes in the kidneys and semi-lunar ganglia. They divide their cases into three groups: the first includes two cases of well-marked contracting kidney; the second, three cases of the mixed type of chronic Bright's disease; and the third, one case of large white kidney, one of recent nephritis after typhoid fever, and two of chronic Bright's disease, with large coarse diffusely diseased kidneys.

It is impossible to avoid feeling somewhat confused by the heterogeneous composition of these groups; and, in order to place the results of their investigations in a clearer light, I have ventured to summarise the conclusions which I think may be fairly drawn from these nine cases.

(a.) In acute or subacute nephritis (Case IX), the only change met with in the ganglia was an increase of the cell-elements of the stroma.

(b.) In the large white kidney (Case VII), the connective tissue of the ganglia was loose and swollen, and its cell-elements increased. The ganglionic cells were generally normal, degenerative changes being present in about one third. There were no vascular changes.

(c.) In the mixed forms (Cases III, IV, V, VI, and VIII), the connective tissue was increased, and its cell elements were numerous; the ganglionic cells were more or less fatty and pigmented; the blood vessels were dilated and thickened in two cases.

(d.) In typical contracting kidney (Cases I and II), the stroma of the ganglia was increased in amount, but contained few cell-elements; the ganglonic cells were generally shrunken, deformed, fatty, and pigmented; the blood-vessels were dilated and hypertrophied.

After giving these descriptions, the authors proceed to consider the relations of the ganglionic lesions to the renal disease; and, after stating that they may be regarded as either causes, concomitants, or results of one another, accept the view that the changes in the ganglia stand in some way as causes to certain forms of Bright's disease, especially the contracting form. In explanation of this view, they propound the following theory of the *modus operandi*. "The specific cause, whatever may be its unknown form or character, acts in such a manner on the ganglion-cells presiding as centres of innervation to the kidney, and whose fibres, distributed to the vessels of these organs, regulate, not only the calibre of the vascular trunks by changing the state of contraction of their muscular fibres, but also probably the conditions of osmotic action between the blood and the tissues, that the collective phenomena known as Bright's disease are brought about."

They also express the opinion that the hypertrophy of the heart is the result of similar changes in the cardiac ganglia, though they offer no evidence in support of it.

I have examined the semilunar ganglia in fifteen cases of Bright's disease, viz.: Acute Bright's disease (1); Large white kidney (3); Mixed large white and waxy kidney (1); Mixed fatty and contracting kidney (7); Small contracting kidneys (3). I possess microscopical preparations and drawings of each of these.

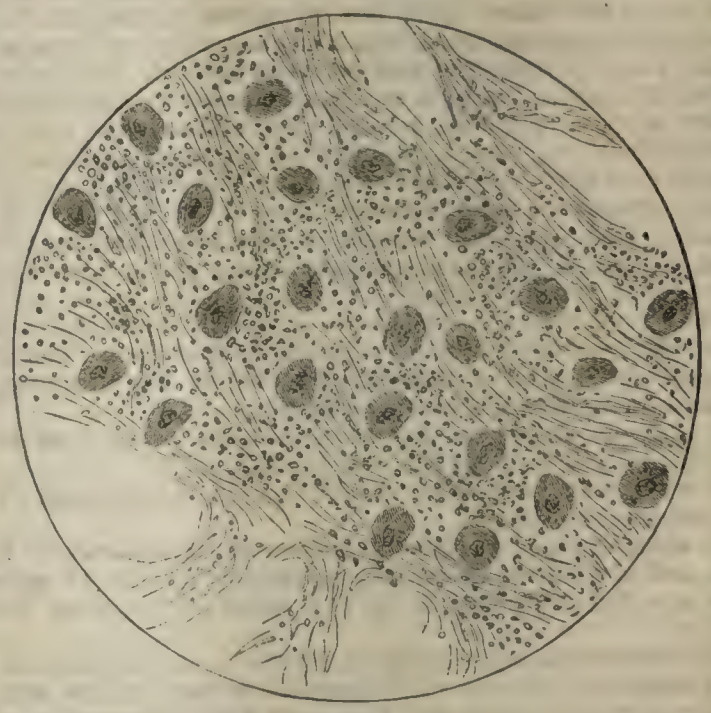


Fig. 1.

Fig. 1 is a drawing of part of a semilunar ganglion from a case of acute nephritis in a boy, aged 5, which was probably postscarlatinal; but my knowledge of the case is limited to the fact that it came to the *post mortem* room with the diagnosis "acute nephritis". In this preparation, the only change to be observed is the increase of round-cell elements in the stroma. The ganglionic cells stained well; they are well formed, and show no trace of pigment. The vessels were normal.

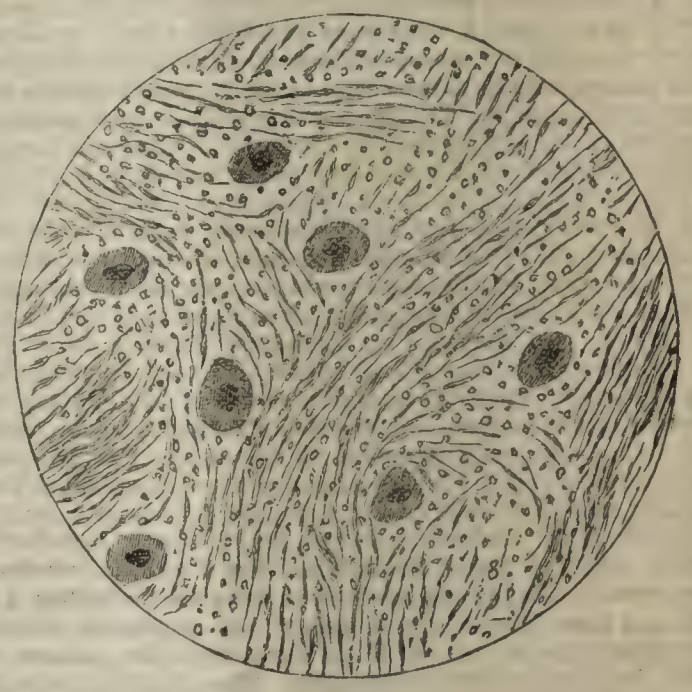


Fig. 2.

Fig. 2 shows the state of the ganglia in a case of large white kidney in a young man, aged 28, who died under my care. The stroma is very much increased, the cell-elements are fairly numerous; the ganglionic cells are pale, but for the most part free from pigment and well formed. The vessels are not thickened.

In the mixed forms, the lesions in the ganglia occupy an intermediate position between those seen in Figs. 2 and 3. The stroma

* Read in the Pathological Section of the British Medical Association at Worcester, August 1882.

was increased, its cellular elements were abundant; the ganglionic cells were more or less deformed, undergoing various degrees of pigmentary degeneration; the vessels were dilated and hypertrophied in two cases.

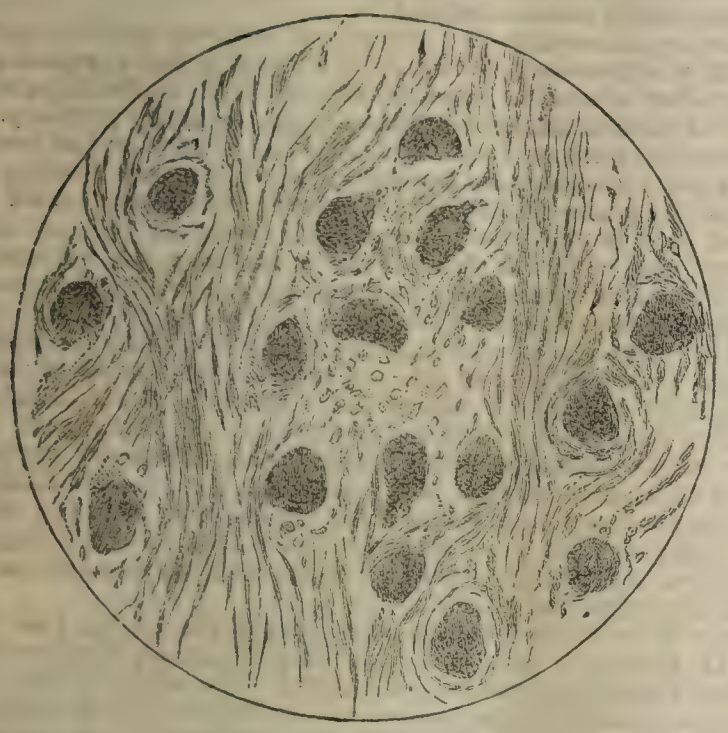


Fig. 3.

Fig. 3 is taken from the ganglion of a typical case of contracting kidney, which had been under my observation for two years. The kidneys weighed together four ounces. The stroma of the ganglia was much increased in breadth, but contained very few cell-elements, either round or spindle-shaped; the ganglionic cells were few in number, shrunken, and undergoing advanced pigmentary degeneration. The vessels were dilated and hypertrophied in every case.

It will probably be allowed that the vascular dilatation and hypertrophy formed part of the general affection of the vessels in granular kidney, so that they need not be again referred to in discussing the significance of these changes. The process appears to begin in the stroma of the ganglion, and in its acuter forms is characterised by infiltration of this tissue with lymphoid cells; this is followed by increase in the connective tissue, and finally by the formation of a hyaline stroma, poor in cell-elements or nuclei. The ganglionic nerve-cells are affected secondarily, and as a result of this chronic disturbance of nutrition. They undergo pigmentary degeneration, which destroys their protoplasm, and converts them into masses of dark granules obscuring the nuclei, which are also probably eventually destroyed. These observations confirm the accuracy of the description in the original paper, but I must dissent from the use of the term "fatty" to express the change in the ganglionic nerve-cells. In my preparations, the change is that generally called in this country pigmentary degeneration, a common lesion of nerve-cells in chronic diseases of the nervous system, and probably a normal factor in the senile decay of these elements; but I am disposed to think this difference to be merely verbal. The point upon which I join issue with Drs. Da Costa and Longstreth is on the significance of these lesions.

As I have already shown by quotation, they regard the ganglionic lesions as the cause of Bright's disease, or some form of it, especially the contracting kidney. We might reasonably inquire why it was that, having found changes in so many different types of Bright's disease, they are disposed to restrict this relation to the contracting kidney. It is not for me to suggest an answer to this question; but this restriction makes their meaning less clear and their reasoning less logical.

I think we cannot escape from the conclusion that the ganglionic lesions stand in the same relation to all the forms of Bright's disease. There is nothing to suggest that they are more likely to be primary in one form than in another; so that, if we hesitate to regard acute Bright's disease as primarily a disease of the renal ganglia, any objections which weigh with us in this case should hold good in all. It may be thought that the insidious mode of origin of the contracting kidney makes it a fairer field for speculation than the other forms of Bright's disease; but I would earnestly protest against the assumption that the obscurity of a problem justifies the introduction of crude hypotheses resting on ambiguous facts and doubtful analogies. A moment's reflection, moreover, will assure us that we really know no more of the actual mode in which the kidney is affected by, for example, the poison of scarlatina, than we do of that of gout.

But I may be asked, Are not Addison's disease and Graves's disease analogous cases? To this I would answer, that it has never been proved that the changes in the sympathetic ganglia in these still very obscure diseases are primary, and that quite similar changes have been described in the ganglia in diffuse eczema (Marcacci), pseudo-hypertrophic muscular paralysis, and pernicious anæmia (Brigidi), gliosarcoma of the brain (Morselli), general paralysis of the insane (Ponicaré and Bowset), cholera (Pio Foá), and diabetes. Moreover, Giovanni (*Patologia di Simpatica.* Milan, 1876) found cellular infiltration of the sympathetic ganglia in an immense variety of visceral and general diseases, showing that structural changes in the organs is very generally accompanied by signs of irritation in the ganglia. One of my cases of contracting kidney, in which the ganglionic changes were in every way typical, was a death after ovariotomy, in which the pelves of the kidneys were dilated, and there was reason to believe that the disease originated from pressure on the ureters. If this were so, the ganglionic changes would only be the results, or at most the concomitants, of the renal mischief.

It is probable that, in all inflammations, the vaso-motor centres may be affected practically immediately in point of time; and it is possible that structural alterations take place in the ganglia as early as in the inflamed part. It is also quite possible, that some poisons may act directly upon the ganglia, and not reflexly through the tissues of the organs; but this is a point upon which we have no definite information. No doubt, there is a tendency to ascribe greater influence to primary functional disturbance of nerve-cells than we were used to do; and, for my part, I cannot but think this tendency exists to an inordinate degree, considering the very slender basis of fact upon which it rests.

Though I dissent from their conclusions, I wish to acknowledge the accuracy of the observations of Drs. Da Costa and Longstreth, and the importance of their contribution to the data of Bright's disease.

SPONGE-GRAFTING.

By P. W. PERKINS CASE, M.B. & C.M.Edin.,
Assistant Resident Medical Officer, Whitechapel Infirmary, E.

THE very interesting articles, in the JOURNAL of December 16th, by Drs. Sanctuary and J. Ferguson, will, I hope, help to bring sponge-grafting before the profession, that it may get as extensive a trial, as, I think, it deserves.

My notes furnish six successful cases of sponge-grafting done here, and others have been done by my senior colleague, Dr. Ilott. All I have tried have had the sponge completely transformed before the patient's discharge, with one exception, viz.: a woman who before complete transformation had taken place, went out to see her soldier son on his leaving for Egypt.

Our method is to get the finest Turkey sponge, free from grit, etc., and slice it as thin as possible, soak it in acid nitro-hydrochloric oil for two or three weeks, till all the calcareous and silicious matters are dissolved, then after repeated washings with water, it has a very soft, velvety feel; this, neutralised by washing with liquor ammoniæ and steeping in carbolic acid solution (1 to 20) for twenty-four hours, is ready for use.

A healthy granulating surface is required for it; we prefer that of a burn, especially if there have been loss of subcutaneous tissues. First, we gently scratch the granulations till they bleed slightly, then place pieces of this sectioned sponge about the size of a shilling on the bleeding granulations, and they soak up blood, which, coagulating in the meshes of the sponge, forms thereby a temporary adhesion. The superficial wound-surface, if less than two inches square, we entirely cover with sponge; if more than about two inches square, we cover it about half irregularly, with pieces of that size, and dress it after the Listerian method with oiled silk, six or eight piles of sanitas gauze, gutta percha tissue, and bandage. Sanitas lotion is generally used afterwards at the dressing, it being not so irritating as carbolic acid. The dressings are usually taken down the second day, and the grafts are then found firmly adherent by the coagulum, and comfortable; afterwards dressed every second day; but great discharge requires daily dressing.

Dr. J. Ferguson mentions one of his cases that went wrong. He says: "The patient complained of much pain extending up the limb, and the appearances of erysipelas were found spreading from the

ulcer upwards," and "the patient declared himself the subject of idiopathic erysipelas." Three similar cases I have seen, two of them being Dr. Ilott's. I have no notes: but with these, from the seventh to the tenth day the same occurred locally, and in each there was a febrile state of the patient, but, in addition, the sponge with the pus in its meshes was putrefying, and only removal of the sponge by charcoal poultices, complete cleansings, and saline medicine reduced these symptoms; we, therefore, considered each to be local blood-poisoning; and afterwards, when treating a large granulating surface, we placed grafts irregularly (as before mentioned), to obtain the best possible means of cleansing the grafts and lessening the surface of sponge for absorption. I fancy Dr. Ferguson's may have been similar.

Like him, we also found, after the removal of the grafts by poulticing, and a healthy state restored "that what had been the type of indolence and obstinacy among such sores, was now the picture of healthy action—the surface abundantly vascular, and standing well up towards the level of the skin. The simplest dressings were now sufficient to promote repair." What was the cause of this sudden change? The change was, I think, due to the fact, that the loops of capillaries entered the sponge from the granulations below, proceeding upwards, and between the time of the placing the sponge on the wound and its general removal by poulticing, some of the sponge was secured and held on by the granulations; and when the mass of sponge was removed, some very minute portions were left, which were veritable grafts, producing the effects he describes.

The sponge, like a catgut ligature, appears to become completely organised. The graft, partially filled with clot, becomes paler in colour, and especially so at its edges, then, more of a jelly-like and homogeneous consistence; and at the margin, it will become lost in granulation-tissue having no line of demarcation; this invasion continues from without inwards until the last little central-island of sponge-texture, as such, disappears.

As far as I have observed, sponge does not appear to be transformed into epidermis; if eventually to cutis vera I have, so far, had no means of determining; but in a patient, whose ulcer of sixteen years' existence I grafted on August 9th last (it then being fiddle-shaped, over the front of the lower third of his right leg, six inches long, and about two and three-quarter inches wide at each side, and one and three-quarter inches at the middle,) it duly transformed to granulations-sponge grafts equal to about half its superficial area; but I am yet waiting, and I fear in vain, to see the transformation into epidermis completed. Cuticular covering has gone in considerably from the margins, but now proceeds very slowly. In a small wound, and especially in a recent burn, if small, this want of cuticle is rarely experienced over the soft parts, because of marginal growth and drawing on the surrounding skin.

Lastly, I must acknowledge Professor Hamilton's valuable paper on sponge-grafting in the *Edinburgh Medical Journal* of November 1881, as the source of my ideas, and would recommend those interested in the subject to read it.

OBSERVATIONS ON RECENT OVARIAN CASES.*

By W. H. FOLKER, F.R.C.S.,
Surgeon to the North Staffordshire Infirmary.

Shortly before our last meeting in the spring, I operated for ovarian disease on a woman aged 45. The disease had existed for a considerable time, and she was such an enormous size, as hardly to be able to move about without assistance. When operated on, the cyst was found to be so intimately adherent at every part, that it was quite impossible to separate it from any part to which it was attached. A Keith's glass drainage-tube was, therefore, inserted, and the wound closed. At the end of a week, the cyst was syringed out with a weak solution of iodine in water, and the patient made a steady and uninterrupted recovery.

When she left the infirmary, the cyst was firmly consolidated, but a small opening still existed; and, though I have seen her several times since, and tried many applications, the small granular spot remains, giving out a slight discharge, which proves an inconvenience, but nothing more; it is now about as big as a shilling.

In August last, I operated on a single young woman, aged 25, for ovarian disease, which had been increasing rather rapidly; her opposite ovary was found to be becoming cystic, and was removed at the same time (which I now show you).

On the third day after the operation, her temperature suddenly went up, and the day after a rash appeared resembling measles, which lasted four days, appearing to be at the height on the third day. She also had a discharge resembling the catamenia, but with all, recovered in about a fortnight.

A few days afterwards, I operated on a private patient, married, aged 52, who recovered in six days, without a bad symptom; and shortly after on another, aged 46, who recovered in five days, but in whom a sort of catamenial discharge appeared pretty profusely.

At our last meeting, I showed the ovaries I had then just removed from a patient, whose case I promised to relate at this meeting; but our late house-surgeon having mislaid my notes, I am unable to do so; but in this case also a catamenial discharge occurred rather smartly; and in two of these cases, a sensation has subsequently been felt as if it were coming on again, though it has not done so.

I have not troubled you with any details, the object of the paper being to record the peculiar appearance of a catamenial discharge in patients when both ovaries are removed; and I also wish to mention the method I adopt of closing the abdominal wound, to which I attribute in a great measure the rapidity of recovery in these latter cases. Formerly, when closing the abdominal wound, I passed all sutures through the peritoneum, and, I now think, left them in too long; for I several times noticed that, after the stitches were removed, there was a little tenderness, and, when the finger was pressed on the part, a drop or two of pus was perceived at the place where the suture had been.

I now close the wound with five stitches, the second and fourth only of which are passed through the peritoneum; the three others include everything but the peritoneum. The edges of the wound being clean, and sponges removed, the second and fourth stitches are first tied, seeing that the two opposing surfaces of the peritoneum are brought well and firmly together; the others are tied afterwards, and the dressings applied.

On the third day, the stitches passing through the peritoneum (the ends of which had been left long for distinction) are removed, as by this time the peritoneum should be pretty well glued together, and its cavity closed; the other three stitches hold the abdominal walls firmly together without interfering with the peritoneum.

By this method, we get the peritoneal cavity perfectly closed with the smallest amount of interference, and in the shortest possibl time, and are able to leave the remaining sutures any time that circumstances may require without the slightest detriment.

Boroglyceride was used in all the cases.

REPORT OF THE BRITISH LYING-IN HOSPITAL FOR 1881 AND 1882.

By HEYWOOD SMITH, M.D., and FANCOURT BARNES, M.D.,
Physicians to the Hospital.

In the year 1881, there were 160 deliveries in the hospital, with death, giving a mortality of 0.625 per cent. There were born 6 male children, or 31.875 per cent.; 96 female children, or 60 pe cent.; 4 twins, or 2.5 per cent. Of the mothers, 32 were primipara or 20 per cent.; and 128 were multiparæ, or 80 per cent.

Of the children, 6 were still-born, or 3.75 per cent. There were breech cases, or 5 per cent.; 4 forceps cases, or 2.5 per cent.; 3 case of *post partum* hæmorrhage, or 1.875 per cent.; 1 case of turning, 0.625 per cent.

There was one case of atresia of the vagina, which was divided b the metrotome by Dr. Fancourt Barnes, and in which delivery wa then effected by the forceps. This case recovered without any ri of temperature. The child, a male, survived.

The morbility in the hospital was unusually small. Among th primiparæ, the temperature did not exceed 100° Fahr. in 14 case or 8.75 per cent.; among the multiparæ, in 42 cases, or 26.25 p cent.—making a total of 56 cases, or 35 per cent. of the total de veries in the hospital, in which it did not exceed 100° Fahr.

In 5 primiparæ, the temperature was over 100° Fahr., but not ov 101° Fahr, or 3.125 per cent.; in the multiparæ, 18, or 11.25 per cer —giving a total of 23 cases, or 14.375 per cent. of the total deliveri in which the temperature did not exceed 101° Fahr. In 12 cas only did the temperature rise above 101° Fahr.

In the year 1882, there were 172 deliveries, with 1 death, or mortality of 0.58 per cent. Of the children, 85 were males, or 4 per cent.; 88 were females, or 50.5 per cent. There was one case hermaphroditism, which survived three weeks, and which proved, *post mortem* examination, to be a female. Seven children were sti born, or 4.7 per cent. (2 males and 5 females).

* Read before the Staffordshire Branch.

Of the mothers, 40 were primiparæ, or 29.069 per cent; and 132 were multiparæ, or 76.73 per cent. There were 7 breech cases, or 4.07 per cent.; 4 deliveries by the forceps, or 2.3 per cent.; 1 case of *post partum* hæmorrhage, or 0.58 per cent.; 1 case of accidental hæmorrhage, or 0.58 per cent.; 1 case of craniotomy, delivered with the craniotomy-forceps; 3 cases of induction of premature labour, or 1.7 per cent., in one of which delivery had to be effected by turning, followed by craniotomy. Tarnier's forceps was used in two cases.

The morbility among the mothers was as follows. In 19 primiparæ, the temperature did not exceed 100° Fahr., or 11.04 per cent.; in the multiparæ, it did not exceed 100° Fahr. in 91 cases, or 52.9 per cent.—giving a total of 110 cases, or 63.94 per cent., in which it did not exceed 100° Fahr.

In four primiparæ, the temperature was over 100° Fahr., but did not exceed 101° Fahr., or 2.3 per cent.; in twelve multiparæ, it was over 100° Fahr., but did not pass 101° Fahr., or 6.97 per cent., making a total of sixteen cases, or 8.27 per cent., in which it did not exceed 101° Fahr. In seventeen primiparæ, the temperature rose above 101° Fahr., or 9.88 per cent.; in twenty-nine multiparæ, it rose above 101° Fahr., or 16.86 per cent., making a total of forty-six cases out of one hundred and seventy-two deliveries, or 26.74 per cent., in which the temperature rose above 101° Fahr. Among the twelve cases, in the two years, in which operations were necessary, there were no deaths. The total mortality for the two years was 0.6 per cent. Of the two deaths, one resulted from unavoidable hæmorrhage; the other was in the case of a widow, who had been starving for three months before admission, and who was in an extremely emaciated condition at the time of her labour.

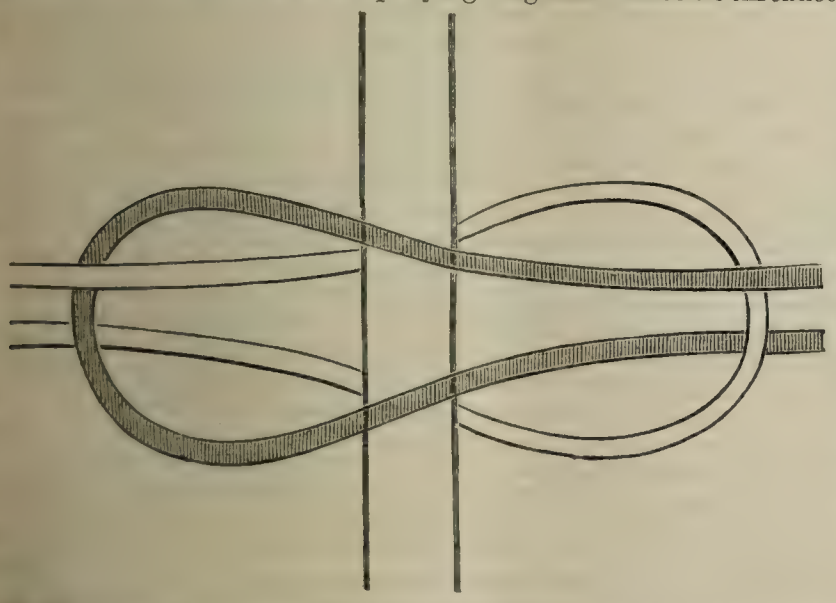
Since the beginning of the year 1881, a strictly antiseptic plan of treatment has been adopted. It is as follows. Each patient is delivered under a carbolic spray of 1 in 60; she is twice daily syringed out with a 2 per cent. solution from the first day after labour. Every patient receives three times a day, a mixture of extr. ergotæ liquidi. ♏ x, tinct. opii. ♏ v, quiniæ sulph. gr. 2, acidi phosphor. dil. ♏ x, aquæ ℥i; according or not to idiosyncracy, this mixture is modified. In each ward of the hospital, there is continually playing a carbolic spray of 1 in 80; this plan of the spray, in each ward, so impressed Professor Tarnier, at his visit to the hospital during the International Medical Congress of 1881, that he has since adopted it in his wards at the Maternité in Paris. All washings of the genitals are done with a 1 in 60 carbolic solution. Ordinary linen diapers are used. The beds consist of horsehair mattresses, on either the Excelsior or Smee spring mattress. Each ward contains four beds, and is disinfected with burning sulphur, the floors being washed over with carbolic solution after three relays of four patients.

The above favourable results are greatly due to the faithful way in which we have been assisted in carrying out antiseptic treatment by the matron, Miss Freeman.

SURGICAL MEMORANDA.

A METHOD OF TREATMENT FOR VARICOCELE.

For some time past I have used a subcutaneous ligature, formed in the manner shown in the accompanying diagram. A needle threaded



with silk or catgut is passed between the vas deferens and spermatic vein, and a loop left on one side, and the free ends on the opposite. A second needle, similarly threaded, is then passed in the opposite direction between the vein and the skin, and withdrawn, leaving a loop as before. One of the threads is then passed through the loop on each side, the ends drawn together and firmly tied. The threads are then cut off short, and the ligature sinks away from the skin punctures. The small wounds made by the needle heal quickly, the ligature remains, and consolidation takes place in the ordinary way. The advantages of such a subcutaneous method are obvious; and the plan described is simpler and quicker than that of attempting to pass a single thread round the vein.

W. D. Spanton.

PATHOLOGICAL MEMORANDA.

MOVABLE KIDNEYS.

In the British Medical Journal of November 18th, Mr. Lawson Tait stated he had never seen a floating kidney, either in life or in a museum. He can now see a specimen (containing also a calculus) which I have recently given to the museum of the Royal Berks Hospital, Reading. The particulars of the case are as follows. S. B., aged 67, had suffered from albuminuria for several years. Six months ago she consulted me about a tumour, which she said, both she and her daughter could move from "front to back." On examination, I found a floating kidney lying close to the right anterior superior spine of the ilium, and I could readily replace it to its proper position. It had never caused her the slightest pain or inconvenience. On November 17th she died, after a few days' illness from pneumonia. On November 19th I made a *post mortem* examination in the presence of a pupil of my partner and our assistant. I found the kidney that could be moved several inches without detaching it. On section it presented the following appearances. The kidney-structure had entirely disappeared, in its place was a sacculated cavity. The pelvis of the kidney was occupied by a calculus, weighing four drachms, shaped like a map of Italy. The left kidney was enlarged and congested.

Egerton C. A. Baines.

Henley-on-Thames.

SALIVARY CALCULUS, WEIGHING THIRTY-SIX GRAINS.

Henry R., aged 38, a mechanic, living in Chester, and suffering from epilepsy, presented himself for the third or fourth time for treatment as an out-patient at the Chester General Infirmary, on Tuesday, December 13th, 1881. The patient stated that he felt quite as usual, until two days before. He then found himself to be rather hoarse, but did not notice any fulness in his mouth. The following evening he obtained some liniment to rub his throat with before going to bed, and, some hours later, he suddenly felt his tongue lifted up, and immediately putting his hand to his mouth, was surprised to find a hard substance in it. This he now showed to me. I found it to be a salivary calculus, slightly nodular, almond-shaped, about an inch and a half long, composed of carbonate of iime, and weighing, when dried, thirty-six grains. Upon examining the patient's mouth, an oval aperture was seen on the left side, two or three lines in diameter, placed at an angle to, and almost touching, the frænum liuguæ, being, in fact, a much dilated Wharton's duct. Through this opening the blunt bone-shield of a No. 2 trocar, passed easily backwards for a distance corresponding to the length of the calculus. The patient had been taking average doses of bromide and iodide of potassium, three times a day, for the last two years, and this might have produced some anæsthesia of the floor of the mouth. Otherwise it were difficult to understand how a foreign substance of so large a size, and which must have taken many months to form, could have been in the mouth, and have gradually forced an exit, without causing more discomfort than the patient says he suffered. I believe the cases of salivary calculus spontaneously evacuated are of somewhat rare occurrence. Bryant, in his *Surgery*, second edition, vol. 1, page 496, mentions the case of a salivary calculus weighing forty-eight grains, removed from the sublingual duct by Mr. L. Sells, of Guildford. Erichsen, in the seventh edition of his *Surgery*, vol. ii, page 532, states that the largest salivary calculus he had removed was about the size of a small damson-stone; it was loose in Wharton's duct.

Henry W. King, M.D., M.R.C.S.,
House Surgeon to the Chester General Infirmary.

Deputy Surgeon-General J. Ekin, M.B., C.B., Surgeon-Major Ferguson, and Surgeon Bourke, have been ordered to Aldershot for duty.

OBSTETRIC MEMORANDA.

PREMATURE LABOUR FROM SEPARATION OF PLACENTA.

A LADY, aged 22, at the eighth month of her third pregnancy, whilst attending to her household duties incidentally stretched over a table in order to reach some object. She felt something give way, and, presently, there was a moderate discharge of blood, which caused her to send at once for medical aid. On lying down this stopped; but eight hours after, it returned—again without any pain. The os was flaccid and open, and by pressure on abdomen the membranes could be rendered tense. Rupture of the membranes with friction over fundus soon induced uterine action, and by the aid of ergot the labour was soon terminated with the birth of a still-born child. On examining the placenta, there was a large clot of about the size of a man's hand adherent to the uterine surface, thus giving a clue to the cause of the patient's untimely confinement.

J. MACKENZIE BOOTH, M.A., M.B., Aberdeen.

POST PARTUM HÆMORRHAGE.

A. P., aged 34, a very stout woman, was delivered of her fourth child on Sunday morning, 2 a.m. (31st ultimo). She was attended by a midwife. Flooding followed the expulsion of the placenta, (which was entire) but not so as to cause alarm, until she was removed to a prepared bed. I was called about 3.30 a.m., and on examining patient, found her faint, bloodless, etc., suffering from the usual symptoms of *post partum* hæmorrhage; the bleeding, however, had ceased while I was in the room. Being assured by the nurse that all the clots were removed, I contented myself by giving two drachms of liquor secalis, ordering cold cloths to be applied to the vulva and over the lower part of the abdomen, and by forbidding stimulants, (the midwife had previously given her half-a-quartern of brandy); but did not further examine the patient, as she complained of great soreness. I was again called about 5 o'clock a.m. as the bleeding had returned and the patient expected "she should die every minute." I found her very blanched, gasping for breath, aud drenched with blood. I immediately proceeded to introduce my left hand into the uterus; having cleared away all the clots, I excited contraction by the presence of the hand in the womb, which stopped the bleeding. The patient got on very well after this; she took all her food cold, and rested. On January 4th, she felt very ill, and expected a return of the bleeding; was very feverish, craved for cold water, etc. She had had half a pint of stout that day (unknown to me). On the 5th the bleeding returned to an alarming extent. I again introduced my hand into the womb, removed the clots, and pressed a large ridge of fæces through the rectum. This stopped the bleeding, and produced a good contraction of the uterus. The patient experienced great relief. Since (9th), she is getting on favourably, the pulse being 104—but is very weak.

I do not know of any case where the hæmorrhage recurred after five days. I am happy to say that I have never seen a case of *post-partum* hæmorrhage, except in cases attended by midwives.

JOHN JOSEPH STACK, L.R.C.S.I.,

112, St. John's Road, Hoxton, N.

HYDATIDIFORM DISEASE OF THE CHORION.

ON October 23rd, I was sent for to see Mrs. R., of this town. She complained that she had vomited everything she took since September 26th. The lady is forty-eight years of age, and had her last child six years ago. She menstruated regularly up to the middle of August. Shortly afterwards, she began to feel a fulness in the abdomen, and had slight discharges of blood. She thought that she was pregnant. The vomiting continued, and she was much prostrated. Dr. Oliver saw her with me on October 14th. There was tenderness over the liver, and she was passing small quantities of urine deeply coloured with bile. We found uterine enlargement; the uterus nearly reaching to the umbilicus. Her condition was grave

On October 22nd, Mr. Wheelhouse saw her, and gave it as his opinion that she was pregnant. Mr. Wheelhouse suggested rectal feeding and ergotin. She became worse; the patient became very prostrate. Mr. Wheelhouse saw her again on November 3rd. Externally, there was the smooth globular enlargement in the median line, reaching to the level of the umbilicus. It being now clear that, if pregnancy existed it must be in some way abnormal, and that, if life was to be saved, the uterus must be emptied, Mr. Wheelhouse introduced the uterine sound to the extent of seven inches and a half; it passed without any difficulty. Thus it was evident (1) that the enlargement was due to distension of the interior of the uterus, and (2) that the enlargement did not correspond with the duration of pregnancy.

Mr. Wheelhouse introduced a flexible uterine sound into the uterus. Seven inches passed in, and left the end coiled up in the vagina, so that it might act as a spring. This was done at 5 P.M.; and Mr. Wheelhouse directed me to leave it in for twenty-four hours, and then to remove it, whether it had excited uterine action or not. If not, a laminaria-tent was to be used on its removal.

At 2 P.M. on November 4th, I was hastily summoned to see Mrs. R. She had a severe rigor, the temperature rising to 103° Fahr., and the pulse to 126; there was some slight uterine contraction. I did not remove the flexible sound then, but waited until 5 P.M., at which hour the temperature had fallen to 101° Fahr. Dr. Oliver was with me, and introduced the laminaria-tent. Mr. Wheelhouse saw the patient at 7.15, and left things as he found them, for he felt confident it was the proper course to pursue.

On November 5th, I was summoned in great haste at 4 A.M. The patient had a very severe rigor about half-an-hour before, and this was quickly followed by strong uterine contraction. I found that a large mass of hydatid cysts had been expelled. The mass would more than fill a felt hat, and looked like a jelly made with cranberries. I gave her a third of a grain of ergotin in pill. The patient steadily recovered without any untoward symptom.

ALEX. FORD, F.R.C.S.Edin., Harrogate

CLINICAL MEMORANDA.

TREATMENT OF INTERNAL HÆMORRHOIDS.

THE following case, coming under the above heading, aptly proves the use of its subsequent treatment.

J. F., aged 60, a farm-labourer, having previously been under medical treatment for some time, was transferred to my care. I found him suffering from internal piles, accompanied by prolapsus ani, with severe hæmorrhage on defæcation, or even on walking out of doors. Consequently, he had given up all work. I at first prescribed the ordinary remedies in such cases, which were continued for three weeks; but, as it was quite useless, and the man became so weak from the pain and loss of blood, and the prolapsed bowel, with its congested mucous tissue, so difficult to return, I determined upon undertaking the following measures. On the next occasion he sent for me, I applied a ligature steeped in carbolised oil to the base of a large hæmorrhoid, and touched the surrounding vascular membrane with nitric acid, anointed the parts with simple lard, and then with firm pressure replaced the bowel. I kept him on fluid nourishment, with opiates occasionally for a short time; and in a month he was about again, in good health.

REMARKS.—This case, one amongst many, shows that, though, in these days, bleeding and calomel are not pushed to such an extent as formerly, yet, in surgical practice, an active agent is essential, if properly used.

T. WELLS HUBBARD, M.R.C.S.Eng., L.M., L.S.A., Bromley.

PROPOSED MEMORIAL OF MR. GOYDER.—A meeting of the friends, professional and others, of the late Charles McIvor Goyder, Surgeon, was held in the library of the Newcastle-on-Tyne Infirmary, on Friday, December 29th, for the purpose of considering the question of a memorial to that gentlemen. There was a large attendance under the chairmanship of Dr. Philipson, Senior Physician to the Infirmary, and after passing a resolution expressive of sympathy with his relations, the following resolutions were passed:—"That with a view of perpetuating the memory of Mr. Charles McIvor Goyder, surgeon, and of inciting medical students to emulate his meritorious example, it is desirable that a scholarship should be founded at the Newcastle-on-Tyne Infirmary in clinical medicine and surgery, which should bear his name." "That a subscription be forthwith commenced for the purpose of procuring the funds necessary for such an undertaking." A large and influential committee, including the members of the Infirmary House Committee, was formed, with Dr. Philipson as chairman, Mr. T. A. Dodd treasurer, Mr. J. D. Dixon and Mr. P. H. Watson honorary secretaries. Upwards of £100 was collected in the room. The death of Mr. Goyder, who was formerly Senior House-Surgeon to the Newcastle Infirmary, from typhus fever, has created great sympathy throughout the city, and a desire to render such aid as will make the undertaking a success.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

EDINBURGH ROYAL INFIRMARY.

SEVEN CASES OF REMOVAL OF LARGE UTERINE FIBROIDS AT THE VAGINAL JUNCTION.

[Reported by SKENE KEITH, M.B., lately House-Surgeon to the Clinical Surgical Wards.]

[*Concluded from page 12.*]

CASE VI.—Mrs. D., aged 46, a Frenchwoman, sent by Dr. Thomson of St. Hiliers, was admitted in August last with a very large fibro-cystic tumour. Dr. Thomson had aspirated in various places without getting more than two or three drachms of fluid at any point. The serum always coagulated in the syringe. Since menstruation passed away, the growth of the tumour was rapid, her size having doubled within the last twelve months. She had applied for relief at various London hospitals.

She was a little woman, thin and worn. The tumour uniformly distended the abdomen, elevating the ribs; no movement could anywhere be detected. The cervix uteri was very hard; it lay low in the pelvis to the right side, and was quite fixed. The upper pelvis was occupied by the tumour, and it felt very hard on pressing upwards; no movement of the abdominal portion in any way affected the part felt in the pelvis. Posteriorly, and better felt by the rectum, was a hard cystic body, of the size of a small orange. This was supposed to be one of the ovaries. In prospect of an operation, the state of the parts in the pelvis was far from satisfactory, and repeated examinations threw no light on it.

Operation on August 28th.—The incision was gradually extended to twenty inches, and the tumour was slowly pushed towards the opening. By taking time it moulded considerably, but could not be brought out on account of its extensive connections. It arose from the left side of the uterus, pushing aside the layers of the broad ligament, and forcing everything before it as it grew, so that the descending colon was found on its right side; only about two thirds of the tumour had a peritoneal covering, the rest required to be separated from its cellular attachments. The separation was begun by dividing with the scissors the serous covering at the edge of the colon, which was pushed over to the right side of the abdomen. Large vessels were secured by locking forceps; and, when the tumour was turned out, the iliac vessels, the psoas muscles and the loose cellular tissue, nearly as high as the diaphragm, were lying quite bare; there was nothing like a neck or pedicle. A temporary ligature was screwed tight, as low down as possible, and the mass cut away. Nearly an hour was taken in stopping bleeding, and in hunting out vessels amongst the numerous thrombi that had formed everywhere in the cellular tissue. The base of the tumour could in no way be secured externally, and it was only by the use of special compressing clamps, which destroyed the elasticity of the thick uterine tissue, that ligatures could be used with any hope of keeping a hold. The uterus was divided obliquely. Some vessels were secured singly, but the greater part were tied in seven or eight portions with strong silk. The great difficulty at this stage was to avoid injuring the bladder, which was of great size, and was drawn up to the left on the abdominal wall. It was only by keeping in a catheter, and moving it about, that it escaped injury. It had already been separated from the tumour, and had got very rough handling. The gap left in the peritoneum was very large; the descending colon and sigmoid flexure were left lying quite loose. A drainage-tube was left in, and the wound closed. The patient, when put to bed, was cold and collapsed, the operation having lasted one hour and three quarters. Clover's small inhaler was employed; one ounce and three quarters of ether only was used. After drainage, the weight of the tumour was 34 lbs.

Recovery was for long doubtful. The after progress contrasted greatly with that of those cases in which the extraperitoneal method was carried out. The utmost vigilance was taken to prevent the stagnation of fluids in the pelvis; this was the more necessary, as the cavity of the uterus was opened, and the quantity of strangulated tissue was great. No very unfavourable symptoms appeared till the end of the first week. Fortunately, at that time, a collection of putrid blood-clot was detected and opened by using the drainage-tube as a probe and pushing it about in the proper direction. In the second and third week, the pulse and temperature were sometimes high. Little could be taken except stimulants; for a long time nourishment was given by the rectum, and the feebleness was sometimes great. Many silk-ligatures were washed away; the discharge, though never great in amount, continued for three months. Long before this she was up and going about. After a residence of nearly four months in the hospital she left for Jersey, the picture of health and contentment.

CASE VII.—Mrs. W. aged 40, sent by Dr. Black, was admitted in the end of April, 1882. She was married at 28, and had had six children, the youngest was under three years old. She was aware of the tumour some years before this, when there were frequent floodings. After her confinement, these were profuse, and plugging had often to be resorted to. Two years before, she was a long time in the Infirmary under Dr. Angus MacDonald. Treatment by ergot, both hypodermically and by suppositories, was tried with little or no benefit. She was first seen by Dr. Keith two months before her admission, when she was recovering from an attack of hæmorrhage which nearly proved fatal. As soon as she was able to be moved, she was admitted. She was kept in bed, was well fed, and gained strength rapidly. Still she was so anæmic and feeble, that operation seemed hardly possible. At this stage, the tumour reached half way between the umbilicus and ensiform cartilage. There was a double systolic murmur, the heart having suffered from an attack of acute rheumatism in her youth. By the advice of Professor Fraser, operation was delayed. She was put upon a liberal diet, and iron was given in large quantity. After a time she went to the country. Examination of the blood showed only 50 per cent. of hæmoglobin; hæmocytes, 5,680,000; many of the red cells smaller than natural.

After three months and a half, she was again brought to the hospital. The hæmoglobin was now 85 per cent., hæmocytes, 5,010,000; the red cells were now of a very uniform size. There had been no sign of menstruation for four months, and while her general condition had improved, the tumour had enormously increased. It had now pushed under the ribs and sternum, and there was a large projection on the right side, forcing outwards the loin and raising the ribs. Pain was now severe on the right side, and tension was great. She was confined to bed, suffering greatly from facial neuralgia in addition to her other troubles. She had taken so much morphia at former periods of her illness, that opiates scarcely afforded any relief. The abdominal wall was œdematous all over. There were some swelling of the labia, and general œdema of the vagina and pelvis. After some weeks there was no improvement. The œdema and tumour seemed rather to grow every day, and, though the case was in every way an unpromising one, operation was advised as holding out the chance of saving life.

This was done on September 28th. The incision was upwards of twenty inches, and was as near the ensiform cartilage as was of any use. No line of demarcation could be made out between the peritoneum of the tumour and the wall; adhesion was everywhere most intimate. The tumour was then cut into without any better result, and bleeding was free. The omentum also came in between the tumour and wall, adherent to both; and, as all the tissues were œdematous, this only increased the difficulty. The wall was rapidly cleared off the tumour by the free use of the scissors. The transverse colon was firmly attached all along the upper margin; and, in separating this, it was deprived of its omentum and partly of its mesentery. Much force was necessary to tear out the tumour, on account of the firmness of the adhesions everywhere. These were temporarily secured by every available pair of locking forceps, about forty in number. About seventy ligatures, partly of silk and partly of catgut, were left. The omentum was so lacerated that most of it was cut away. In some places the vascularity was great, especially where the bladder was separated downwards off the tumour. Finally, the stump was fixed in the lower angle of the wound along with both ovaries, and the incision was closed by thirty-five sutures. The peritoneum was so adherent to the tumour that it was nearly all stripped off the wall, and in places the intestines were in contact with the muscles when the wound was closed. The operation lasted nearly two hours. The weight of the tumour was 35 lbs., and on examining it after its removal from the body, it was impossible to separate the adherent peritoneum, even by careful dissection. Nearly the whole of the parietal peritoneum, and in places cellular tissue, remained on the tumour. No spray was used during this operation.

Very profuse perspirations followed the operation, and stimulants were freely given. By evening, she was quite warm. There was some hæmorrhage going on, and, on removing the dressing, a large clot was found over the pubes and between the thighs, and three or

four ounces of pure blood were removed from the pelvis through the drainage-tube. The discharge from the tube for some days consisted of almost pure blood. The tube was retained for a week, an unusually long time. Convalescence was slow, on account of her extreme feebleness, and the presence of some bed-sores which existed at the time of operation. The wound healed by first intention, and there was nothing unusual, except that there was more trouble from flatulence and distension, arising doubtless from the amount of intestinal adhesion to the wall.

An eighth case might be added, as the operation in no way differed from the others, except that the cavity of the uterus was not opened. The tumour was operated on as a case of fibroid. It was in reality a case of interstitial pregnancy at the full time. The fœtus had remained in its bed for more than four years, and, two years before operation, a child was born alive at the full time. The sufferings of the woman had all along been, and continued to be, great, and it was in the hope of giving relief to the excessive pain that operation was advised. A healthy uterus and a healthy ovary were left. Recovery was rapid, and pain ceased with the operation.

Cases of removal of the ovaries to check the growth of bleeding fibroids, and a case of removal of the uterus by the vagina, will be reported on in due time.

REMARKS.—The substance of the observations on the surgical treatment of uterine fibroids made at various times at the bedside, by Dr. Thomas Keith, was much as follows.

It is often said that the operation of hysterectomy is in much the same position now that ovariotomy was twenty or twenty-five years ago. It is not so. It never will be so. The natural history of ovarian disease and uterine fibroid is different. As a rule, ovarian disease is a merciless one. It goes on, and kills. As a rule, the active existence of an uterine fibroid is limited. It rarely interferes directly with life. When menstruation ceases, the troubles of the patient soon begin to pass away, while the tumour itself, after a time, becomes smaller, and in a year or two no trace of it is sometimes to be found. The patient gets along, lives more or less comfortably, generally not aware even of its existence, and dies of something else. Indeed, the greater proportion of fibrous tumours do not even interfere with a woman's comfort during the whole menstrual life. Patients become anxious about large growths, of the presence of which they were unaware till an increase of their size called the attention of their friends. But in a certain proportion—and that not necessarily in cases of large tumours—life is a long weary burden; a little respite is got only during the short interval between the periods, and often there is not even that. These unfortunates live on somehow—a burden to themselves and to their friends; but they rarely die from the tumour. The greatest immediate risk seems to be from hæmorrhage, yet a death from this cause is extremely rare. Long ago, I was present at a *post mortem* examination of a young woman who had rather rapidly bled to death. Suspicions had arisen. There was only a large fibroid; the cavity of the uterus was large, and there was a crack in a surface-vein from which the fatal bleeding came. Except two cases of sudden death from embolism from inflamed uterine veins, this is the only time in which I have seen death directly result from an uterine fibrous tumour of a simple kind. Of the sarcomatous and malignant growths, I have seen many prove fatal. Indirectly, however, simple fibrous tumours, especially those of a large size, and those that bleed, may be a cause of death oftener than we think, for they seem to be often the fertile cause of paralysis from the anæmia that they produce. Much may be done by proper treatment to carry the patient on to the menopause; and there is hardly a day in which I do not pass in the street women I have had as patients, who are now in perfect health, and whom years ago I have seen suffering and ill, in as bad and hopeless-looking a state as could well be. Then the submucous fibroids may be removed by a rough obstetrical sort of operation. Of these, I have taken away a great number, and only once had a fatal result. The patient was at the time suffering from septic fever—previous attempts having been made some weeks before to remove a very large tumour filling the vagina, and extending to the umbilicus. An inflamed mass of nearly six pounds was somehow removed, but the fever did not subside. The treatment of such cases did not, however, come into my department in this hospital.

A knowledge of the natural history of these tumours will thus help you much in arriving at a proper treatment of them. It is evident that the number to be treated by abdominal section is limited. If you have to think twice before advising a patient to have ovariotomy done, you must think fifty times ere you recommend her to have an uterine tumour removed in this way. In an advanced case of ovarian disease—be the local difficulties what they may—you can honestly encourage a woman to run any amount of risk. She has not much to lose; a few months only, it may be, of ever increasing suffering; and she may gain much by operation. It is quite different in the case of nineteen-twentieths of those who have a simple uterine fibrous tumour. These have many years of fair health before them; and even in the worst of them the chances are that they will live on—not in comfort, certainly, some perhaps in misery—but still they will live and not die. These have not much to gain by chancing a dangerous operation, and they may lose much having much to lose.

The cases in which I would sometimes advise operation are these. 1. In cases of fibro-cystic tumours. These often grow to an enormous size, and some of them go on growing long after menstruation has passed away, rendering life miserable from their size alone. 2. In very large tumours in young women, of which the first case is a good illustration. 3. In cases of large bleeding fibroids of any age, provided that the patients are not approaching middle life, and provided that the lives are practically useless, and that further experience in operation shall show that the mortality of hysterectomy be a small one. A mortality of 50 per cent. ought to banish the operation from surgery altogether; so ought a 20 or even a 10 per cent. mortality. For my own part, considering everything in connection with these tumours—and I have worked amongst them for five-and-twenty years—I should say that this operation is not justifiable if the mortality exceed 5 or 6 per cent. My present rate is one death in seventeen operations. Without the experience that ovariotomy has given me, I shrink from thinking what the mortality might have been.

The new operation of removal of the ovaries and tubes to check the growth of uterine tumours promises well, if it turn out to be almost free of danger. Its proper field will be in cases of small or moderate sized bleeding tumours. When the fibroid is very large, this operation will rarely be applicable; for, if there be much adhesion, it will be no easy matter to reach the ovaries; and in certain cases even, when reached, it will be found that they cannot be removed at all. In about one-third of the cases on which I have operated, one ovary was lying imbedded in the very substance of the growth, elongated sometimes seven or eight inches. In most large tumours, the ovaries are enlarged, diseased, and useless; but in small fibroids, pregnancy is far from being an uncommon occurrence, and it is wonderful how little trouble the tumour causes, either during gestation, or at the end of it. I can recall only one accident at the time of parturition in which a large fibroid was present. Death took place with puerperal convulsions, and it might have been accidental; only absolute safety of operation will justify the removal of pediculated fibrous outgrowths, or removal of the ovaries, in patients over forty-five years of age. Some women are intolerant in anything wrong with their bodies, and are unwilling to wait even for a year or two. It is no easy matter to persuade some of them that you will do no operation, simply because no operation is necessary in their case. They are easily advised to the contrary, and it is no difficult matter to find an excuse for an operation, if the operator want to find one. If you do any of these operations in women approaching the menopause, or take away small fibrous outgrowths that have not given, and that will never give, your patient the slightest trouble, then you are simply surgical speculators, and speculators of the worst kind. The operation may be little to you; it is much to the patient. I fear we all sometimes forget the misery that any surgical operation costs the patient and friends—especially the severer ones, that directly risk life. May you never, in yourselves or in yours, experience what it is. But, whatever you do, never let the healthy enthusiasm of your youth tempt you into advising any operation, however small, that is not absolutely necessary; far less one that directly involves life in the very doing of it.

The removal of a large adherent uterine fibroid is one of the hardest operations in surgery, and some of them will try you to the uttermost ere you finish them in a proper surgical manner. It is not an operation with which to begin your surgery, though now-a-days many act as if it were so. If I chose to tell what I know of this operation; of the mistakes of diagnosis, where there was no difficulty; of unfinished operations, that could easily have been completed; of wounded bladders; of deaths from hæmorrhage, arising from the want of proper instruments, or from not knowing how to use them; and of, after all this, ignorance and self-conceit remaining perfectly satisfied—I am sure you would agree with me in thinking that, so far as hysterectomy has thus gone, it would have been better that this operation had never been.

[In the first part of this report, published in last week's JOURNAL, at page 10, column 2, line 19 from bottom, "10 per cent." should be "2 per cent."]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 9TH, 1883.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Two Cases of so-called Erythema Gangrænosum.—DR. T. COLCOTT FOX contributed a paper, of which the following is an abstract. The term *erythema gangrænosum* had been applied to cases belonging to the same category, but the inflammatory patches in these instances presented very different degrees of severity, and were not all gangrenous. The term was used in this paper simply to draw attention to the class of case to be discussed. Case I was a lady, aged 47, in whom gangrenous patches continued to evolve, off and on, from June 1877, until the present time. The patches were limited to the regions of the chest and the arms, and occurred over and over again about the site of the former patches, sometimes for a time forming only on one arm, then on the other, and then about the chest, but a sort of symmetry was often kept up. The formation of patches was very frequent at first; but, as the general health improved and the habit of intemperance was avoided, the patches were seen less frequently. She showed none of the ordinary signs of hysteria, but at one time had an attack of paraplegia lasting two or three months. Case II was a girl, aged 17, of an extremely hysterical and neurotic temperament, in whom severe inflammatory vesicating areas (not gangrenous) continued to form for many months. They occurred with fair symmetry over the body and extremities, but there was here also a marked tendency for the patches to recur about the sites of former lesions. In neither of these cases was there any cachectic condition sufficient to account for the severity of the lesions, and the surfaces healed fairly well. The author said that the question at issue was, whether there existed an idiopathic affection consisting in the continued evolution of inflammatory areas of different degrees of intensity and often gangrenous, such as had been described under the term erythema gangrænosum, or whether these cases should not invariably be pronounced to be artificial. In support of the first proposition there were only five cases on record of a similar nature in which malingering had not been actually proved, but these cases were all surrounded by the greatest suspicion, for they occurred in females, generally young, and decidely hysterical or eccentric. The sites of attack and mode of evolution of the patches were most peculiar; there was an entire absence of any enfeebling condition sufficient to account for the occurrence of gangrene, and at the same time a healthy reparative process went on; and the patches were such as might be produced by a caustic agency. Dr. Fagge's case of gangrenous patches occurring in a man in the last stage of tubercular phthisis, Charcot's acute bed-sores, and varicella and vaccinia gangrænosa were, examined in support of the possibility. In opposition to the first proposition, and in support of the second there were a number of cases on all fours with the others as regarded site and mode of evolution of the eruption, the sex and character of the patient, etc., in which malingering had been proved from the simple erythema produced by mustard, and the excoriations, brought about by rubbing, on the gangrenous patches caused by the application of nitric or sulphuric acids —The PRESIDENT thanked the author, and mentioned that Dr. Goodhart had sent from Guy's Hospital Museum models of Dr. Fagge's case, which had been alluded to in Dr. Fox's paper.—Dr. THIN said that the same question raised in the paper had been lately discussed at Vienna. A young girl there had local gangrenous patches, which first consisted of redness of the corium, followed by increased mobility of the cuticle, and then by bullæ, sloughing, and eventually, after some days, cure. The dermatologists of Vienna thought it a case of spontaneous gangrene of the skin; but the surgeons would not credit that, in a healthy young woman, certain portions of the skin could slough. No trace of any material, however, could be found in the slough, which could have produced it, though the sloughs were carefully examined by a most competent chemist.—Mr. SAVORY said that there was in some persons a tendency to fall easily into gangrene upon very slight irritation. A man, between 30 and 40 years old, now in St. Bartholomew's Hospital, and admitted for a crush, had a much larger sloughing of the skin than the accident itself could account for. Another man, aged between 40 and 50, admitted that day for slight bruise of the outside of the leg, had now two large patches of gangrene. Some people also easily developed bed-sores, even in middle age. But these cases were usually those of persons who had partaken freely of alcohol, which was not, of course, likely to be the case in these young girls mentioned in Dr. Fox's paper. If these cases were carefully observed, it was extremely difficult for the impostor to keep up the original shape of the sores; the caustic was almost certain to run, so that the lower margin of the sore continued to increase. That margin should, therefore, in doubtful cases, be most carefully watched.—Dr. BUZZARD felt himself to be in the same state of doubt respecting these cases as the author of the paper. He had seen two cases; the first of which was a girl suffering from hysterical paraplegia. On her feet were patches, erythematous, with hæmorrhagic bullæ at the centre. The girl had not noticed them at all; and Dr. Buzzard thought them due to an atrophic disturbance. Three or four months ago, he had seen a woman, also with paraplegia, whom he thought to be malingering. She had a sore, not a bed-sore, but artificially produced. She was watched, and the sore then healed very rapidly, though the paraplegic symptoms remained unaffected. —The PRESIDENT thought that the state of the urine and of the blood, and such facts should be ascertained before one could decide as to the nature of the cases. Erythema was not like the cases described. It began as a small point, and then spread to a larger patch; whereas the patches began over a large surface from the first.—Dr. FOX considered that the case mentioned by Dr. Thin was doubtless similar to those described in the paper. The cases of Mr. Savory were very interesting, as were those of Dr. Buzzard, though they did not come under the category of cases described in the paper. He had had great difficulty in testing the blood and urine in his two cases.

A Contribution to the Pathology of Diphtheritic Paralysis.—Dr. PERCY KIDD furnished this paper. Facts were brought forward in support of the view that diphtheritic paralysis was founded on a distinct anatomical lesion of the spinal cord. The lesion affected the anterior horns, and consisted in alterations in the shape of the motor nerve-cells, and in changes in their cell-protoplasm. The affected cells were, as a rule, more or less globular in shape and devoid of processes. The changes in the cell-protoplasm were divisible into two groups. In the first, which was more common, the cell substance had become pale and indistinct, and the nucleus was either absent or only faintly visible. In the second, the cells were more granular than usual, and often showed a well-marked nucleus. In both cases, the cell-degeneration had an atrophic tendency. In some cases, sections from special parts showed a numerical atrophy of motor nerve-cells. These changes were not found throughout the spinal cord, but were limited to certain regions. The localisation of the nerve-lesion corresponded with the distribution of the muscular paralysis during life. There was no distinct affection of the neuroglia. The changes were purely parenchymatous. A similar degeneration of the motor nerve-cells had now been found in fifteen cases; viz., by Vulpian in two cases, by Déjerine in five cases, by Dr. Abercrombie in seven cases, and, lastly, by the author in one case, which was the subject of the present paper. The disease might be described as a "poliomyelitis anterior." It was considered highly probable, if not actually proved, that the above lesion was a constant one, and was the immediate cause of the paralysis.—The PRESIDENT said that the facts which Dr. Kidd had contributed were valuable, as was the summary of remarks of other authors. They had also to thank Mr. Horsley for certain microscopical specimens on the table.—Dr. BUZZARD thought he could see sufficient in the microscopical specimens to affirm the existence of the changes which Dr. Kidd had described. Probably poliomyelitis had occurred. He, nevertheless, thought that Dr. Kidd's conclusions, taken from one case alone, were too general, because, in his experience, paralysis of sensation was as often a symptom of diphtheria, as paralysis of motion. In his cases, the tests of electrical currents showed no change in the faradaic excitability, which would show that the pathological changes were not very serious. Dr. Buzzard thought, therefore, there were other changes anterior to the poliomyelitis, for instance, in the trunks of the spinal nerves.—Mr. R. W. PARKER asked how the changes described as occurring in diphtheritic paralysis differed from those found in the spinal cord in infantile paralysis. The clinical aspects of the cases, of course, differed, and yet, in some respects, they resembled one another in several particulars. Cases of diphtheritic paralysis recovered, whilst the muscles affected with infantile paralysis rarely, if ever, recovered. What would Dr. Kidd give as the pathology of those cases of diphtheritic paralysis which recovered?—Dr. SEMON would inquire also if all cases of diphtheritic paralysis were instances of poliomyelitis anterior. There was often, for example, paralysis of sensory nerves. Again, he had seen a case of recurrent laryngeal paralysis after pharyngeal diphtheria. Aphonia, in that case, occurred twelve months after the diphtheritic disease. The explanation of this was, perhaps, that it

was due to lesion of the afferent branches of the pneumogastric nerve spreading to the nervous centres in the brain, and there affecting the centres of the laryngeal motor nerves. In such cases, the change would be found in the area of the fourth ventricle. Other cases of paralysis seemed to be due to paralysis of the inhibitory centres of the cardiac plexuses. The methods of observing the microscopical appearances of the cord, and nervous centres generally, had of recent years so vastly improved, that, he thought, in the future, the changes now described in the cord alone might be found in other nerve-centres.—Dr. D. POWELL thought that death, in various fatal cases, was due to lesion of various parts of the nervous system. In the cases of death from cardiac failure that occurred, the fatal termination seemed due rather to peripheral than central lesion. The extreme pallor in such cases was also much marked; and Dr. Powell had found extremely fatty degeneration of the heart substance.—Mr. HORSLEY had also observed vascular engorgement of the kind described. His specimens also showed atrophy of the inner group of cells of the anterior cornu in the lumbar enlargement; blood-pigment in the pia mater; with increase of density of the substantia gelatinosa.—Dr. KIDD thought himself open to Dr. Buzzard's charge, that he had generalised too much; but in all his cases there was one and the same change of the anterior cornu. There might have been other changes, but that one was always found; and other observers also had found it. The changes in the spinal cord were almost similar to those found in the cord in infantile paralysis. Probably slight cases of poliomyelitis might be recovered from. Dr. Semon's objections were pertinent ones, and Dr. Kidd was not quite prepared to answer them. As Dr. Powell had said, some of the cases of paralysis might be peripheral, and the muscles possibly fatty. The changes in the chord were not very marked, and required good examination to make them out.—The PRESIDENT said there were also cases of strabismus due to diphtheria, in which the lesion, if central, would not be in the spinal cord, but in the brain.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 6TH, 1882.

GEORGE BUCHANAN, M.D., F.R.S., President, in the Chair.

The Influence of Small-Pox Hospitals, illustrated by the Recent Behaviour of Small-Pox in Nottingham.—Dr. EDWARD C. SEATON read a paper on this subject. He commenced by giving a description, illustrated by photographs, maps, and plans of the hospital accommodation at Nottingham. It was situated in the heart of the populous part of the borough. It was erected in 1871, and consisted of wooden huts, capable of receiving eighty patients, built in a space of five acres of ground, and divided from frequented thoroughfares only by a wooden fence six feet high. Much care and attention had been given by those who were concerned in the management; but, with such materials, it was an impossibility to carry out perfect isolation. There was no suitable provision for a resident medical officer to exercise control. Again, it being very centrally placed, some of the private practitioners continued attendance on their own cases at the hospital; and, though most of them were very careful to adopt all requisite and practical precautions, some were not so. The chief drawback was due to the facilities for communication between the convalescents, and persons outside, over the wooden fence; and, when the hospital was full, it was exceedingly difficult to prevent this. Another drawback was, that the Poor-law authority had a kind of joint proprietorship with the Sanitary authority, which, at one time, seriously interfered with proper medical management. It was evident that hospitals of this temporary character, especially in the centre of a town, did not allow of isolation being carried out in a sufficiently complete manner. Dr. Seaton had strongly urged the town council of Nottingham to build a permanent hospital away from the central part of the town; and they were now proposing to go to Parliament for compulsory powers to enable them to obtain a suitable site in accordance with the recommendations of the Royal Commission. After dwelling on the great difficulty in tracing cases in town populations, he gave a narrative of the early part of the epidemic, which arose from cases imported into different parts of the town from London, Derby, and elsewhere, accounting for all the cases which came to his knowledge during the first two months. With one exception, each could be so dealt with, as to allow little room for the spread of the infection. The exception occurred during the fifth week of the epidemic. It formed a centre of infection in a direction north-east of the hospital, and at a distance of more than half a mile. He then referred to other cases which came to his knowledge about this time, and which must have been prolific centres of infection. One of these was at a little barber's shop. The mother and wife of the barber were attacked with small-pox severely, and must have been lying within a few feet of where the customers were shaved. He had good authority, too, for saying that the barber himself suffered from a rash, which was believed to be that of modified small-pox, his illness not being sufficient to prevent his pursuing his avocation. Another centre was at a tripe-shop, where the person who nursed the patient also waited in the shop. Another, close by, was that of a man, who refused to be removed to the hospital, and was afterwards found, with the crusts of small-pox upon him, conversing with people, for which offence he was prosecuted and fined. These cases occurred within the quarter mile radius of the hospital. There was another at a distance of about half a mile east of the hospital, an antivaccinator, who, being also a tailor, had the opportunity of disseminating the disease broadcast. This last-mentioned case, together with the other centre to which he had referred as having occurred during the fifth week of the epidemic, formed the starting points of an outbreak a long way off, just as the barber's shop and the tripe-shop must have been starting points of the outbreak close to the hospital on the east and north-east sides. This and other points he elucidated by a series of hand-maps which he had prepared, showing the gradual development of the epidemic. The cases were shown by spots of three different colours, dark blue indicating those which were kept at home badly isolated; light blue, those kept at home fairly well isolated; red, those removed to hospital. This division was, of course, somewhat arbitrary. The different coloured spots served to indicate roughly the relation of cases. There were in all eight hand maps; five of these referred to different periods of the epidemic, the first comprising cases 1 to 100, from November 24th, 1881, to March 8th, 1882; the second 100, to 200, March 8th to May 1st; and so on. Between the first and the second, there was an intermediate map, A, showing the first 183 cases, November 24th, 1881, to April 26th, 1882. There was also a map, showing those of the whole 500 cases from November 24th, to November 7th, 1882, which occurred within the mile radius. The eighth map referred to the epidemic of 1871-72. By the help of these maps, a lesson might be learned as to the value of an isolation-hospital in checking the spread of small-pox. Map A showed the 183 cases occurring during the first five months; they were grouped near to badly isolated cases. A blue spot was almost always followed by a crop of other spots. On the other hand, red spots occurring in other localities stood alone. The cases east of the hospital were arranged in two principal groups, which had relation to recognised centres of infection. These groups were separated by a broad belt of populous district, almost entirely clear, with the exception of one little secluded terrace of houses, about which the disease hung for months. The relation of this cluster of spots to a blue spot as a starting point seemed very evident. These groups, two large and one small, had occurred on the east side of the hospital, and the prevailing wind, during the first five months of the epidemic, was from the west. This had given rise to the supposition that the infection was carried in the atmosphere from the hospital as a centre; and, in view of Mr. Power's admirable report, it was necessary to examine the facts closely. Apart from the relation the cases bore to recognised centres of infection, there were other considerations which negatived this supposition. In the first place, the number of cases was greater in the group near to the half mile ring, and between that and the three quarter mile ring, than close to the hospital. There had been no simultaneous outburst of cases, such as might have been expected had the semina of small-pox been widely scattered, in a still active state, amongst a population which was proved to be susceptible. Five maps, on a large scale, showed the position of each case as it occurred, the date of its occurrence being also indicated by a number. He would select one group as illustrating the others, that in the little secluded terrace, and in houses immediately adjoining already referred to. The cases recorded here, within a few yards of each other, were numbered 39, 44, 57, 68, 94, 99, 136, 153, the corresponding dates being January 30th, February 8th, 16th, and 22nd; March 4th, 8th, and ,29th; April 3rd. This little cluster formed, up to the end of the first five months of the epidemic, a small independent group between the two large groups. The whole of the circumstances pointed to the fact that they arose from direct or intermediate communication between infected and non-infected persons. On the other hand, the hypothesis of atmospheric dissemination required the supposition that the small-pox material, in process of being conveyed by the atmosphere in an easterly direction to the locality at

the extremity of the half-mile radius, passed over unharmed the belt of populous district which intervened between the two large groups, and showed a special affinity for this particular spot; and not only so, but that it should have attacked the persons living there at different times. The opportunities he had of seeing the way in which the cases arose, led him to attach much importance to these considerations. He drew attention to a large map of the Borough, into which glass-headed pins were stuck to indicate the cases where they occurred. The first 183 were shown by black-headed pins, and the rest of the 500 by pink-headed pins. There were very few black-headed pins near the hospital on the south side, not so many as those beyond the mile radius, which indicated some of the earliest cases of the epidemic. East and north-east of the hospital, they were massed in groups. The pink pins were pretty thick south of the hospital, and also plentifully interspersed among and between the groups on the east. It would be seen then that, during the first five months, the south side was nearly free from small-pox, but that subsequently it became invaded. To account for this, much importance had been attached to the direction and force of the wind, which was chiefly from a westerly direction till the end of March; and, during April and May, from a northerly quarter. But, independently of all other considerations, which were entirely opposed to this view, there was the fact that, though the wind blew sometimes from the north, the susceptible population near the hospital on the south were more free from the disease during all these months than localities widely distant. Besides, according to recent observations, it was not windy, but calm, misty, foggy weather, which was favourable to the dissemination of small-pox material; and, assuming this to be so, the difficulty was to explain the immunity of the south side, seeing that there were twenty-eight days recorded as calm, misty, or foggy during the five months. The reason for the exemption of this district was, that the few cases that occurred south of the hospital within the quarter-mile, half-mile, and three-quarter-mile rings, were promptly reported, and removed to hospital. At the end of April, a case of small-pox was imported into the district; it was kept at home throughout the illness. He drew the attention of the Health Committee to this case when it occurred. For certain reasons, it could not be removed to hospital, and the isolation was about as bad as it could be. Three other unvaccinated children in the same house were subsequently attacked. This group of cases, at the end of April, constituted a prolific centre of infection on the south side, just as the barber's shop in January must have been on the east. He told the committee they must anticipate a spread of the disease in this direction, and, during the summer, a large proportion of the cases appeared on this side. He then described the hand maps further in detail. As a rule, the blue spots were followed by a crop of other spots, but there would be seen to be some exceptions, due to the influence of vaccination controlling the spread of small-pox. Whenever small-pox made its appearance in a locality, the sanitary authority urged revaccination not only on the householder, but on the neighbours. Lymph freshly taken from well chosen cases was furnished to practitioners for the purpose of revaccinating those who required it, and who were likely to be exposed to infection; and, where medical men had certified that the persons were not in a position to pay the fees for these revaccinations, the sanitary authority had made it a rule to pay for them at the rate of 2s. 6d. each. There was, however, great difference in the way in which vaccination was pressed by medical practitioners; and this fact constituted an element of high importance. Again, the occurrence of a death from this disease would sometimes arouse the people of a neighbourhood to a sense of their folly in neglecting vaccination, especially when the case was kept at home, and the people became acquainted with small-pox in all its hideousness as it occurred amongst the unvaccinated or the badly vaccinated. One disadvantage attending the removal of the worst cases to hospital was, that it tended to encourage indifference and repugnance to vaccination, which was so sedulously cultivated by antivaccinators. Besides the action to which he had already referred, he had himself done what he could single-handed towards promoting revaccination, by addressing meetings of the working people at the factories, and at the same time providing exceptional facilities for good "arm-to-arm" vaccination, free of cost, at the factories. In some instances, being backed up enthusiastically by large employers of labour, he had succeeded in getting numbers of lace-girls over fifteen years of age and other factory hands revaccinated; and in this manner they must undoubtedly have interfered considerably with the progress of the disease. With all these disturbing elements, it was not to be expected that the spread would be uniformly in proportion to the badness of the isolation, or that there should be any mathematical relation between the number of blue spots to the total number of spots in a given locality. Still, on looking through the series of maps, it would be seen that the localities in which badly isolated cases occurred almost always became the seats of a further outbreak. The exception to this general rule seemed to be most marked in the fourth map of the series, which comprised the one hundred cases occurring between June 12th and July 7th; and also in the fifth, which comprised the last hundred, most of which occurred in July. The season of the year was another important controlling influence. Though during July and August nearly all the cases were promptly removed to hospital, there were a few outside, which, at another period of the year, would certainly have proved active centres of infection. He could not, therefore, ascribe to hospital influences more than a share in bringing about the almost complete cessation of the epidemic in September, though he was disposed to think that share was a very large one. How was it that small-pox did not spread so rapidly at one time of the year as another? How was it that in one epidemic it would assume a much more malignant form than at another? How was it that measles, a few years ago, attacked Plymouth with such virulence, and at the same time the same disease prevailing extensively amongst a population of presumably the same susceptibility at Nottingham caused many deaths, it is true, but still by comparison few? Why was scarlet fever so terribly fatal in Hull about a year ago? By the light of present knowledge, these anomalies could be only partially accounted for. In the meanwhile, with regard to small-pox, it could be said for certain that it was practically preventable by vaccination and revaccination properly performed, if the people would only avail themselves of these safeguards. Isolation-hospitals furnished another means of prevention, which must at the present day be considered indispensable. The last map of the series showed the whole of the cases which occurred from November 24th, 1881, to November 7th, 1882, within the mile radius, in relation to cases kept at home as well as in their relation to the hospital. Though the total number of cases appeared to show a relation to their distance from the hospital, they also bore a relation to the number of centres of infection within the four circles. The relation was not definite, and would not be expected to be so; but it was obviously a prime factor for consideration in determining the question of atmospheric dissemination. A very probable source of infection in some of the first cases to which he had referred as starting points of the outbreak near the hospital, was one of those very slight cases, but described as "ambulatory small-pox," and which were often fruitful sources of mischief. The man who lived near the hospital, and also close to where the subsequent cases arose, must have taken small-pox at the end of November or beginning of December 1881, when there was only one case of small-pox in the hospital. Unless it were supposed that this man contracted his illness from this one case through the atmosphere, he must have got it independently of the hospital, seeing that prior to November 24th it had not been used for small-pox for months, and then only for one case at a time. It would be seen then that, at the very commencement of the epidemic, there was outside the hospital an independent source of infection, and that very erroneous conclusions might have been arrived at had it been overlooked. He then proceeded to draw attention to certain remarkable exemptions. The west side of the hospital had been comparatively free from the disease as compared with the south and east sides; and though it was possible that the population was better protected by vaccination, there was no proof that it was so. Close to the hospital on the west was the union workhouse. The disease first appeared here on November 24th, the case being removed to the hospital at once. At the workhouse, the patient was in the "skin ward" with fourteen others. Of these fourteen, seven contracted the disease. There were a few other cases at the workhouse about this time, and one person died there. But after the commencement of the epidemic, the workhouse with its 618 inmates was free from the disease, notwithstanding its close proximity to the hospital, and notwithstanding that there had been very little revaccination. In May, another case or two having occurred, revaccination was extensively resorted to. On the other side of the road, on the north, was a large board school. In the boys' department, which was nearest the hospital, there were 410 scholars. Two of these only were attacked, and in each there was ample opportunity for the illness to have been contracted in the ordinary way. This immunity, however, did not go for much, seeing that primary vaccination would protect the vast majority of those at school age. But by far the most remarkable case was that of Mr. Hodgson's factory on the south side. This building was virtually in the hospital ground, the distance being only thirty yards from the nearest hut to the factory wall. Some of the windows on the second and

third floors overlooked the hospital ground, and were very near the hospital huts in which some of the worst cases were during the epidemic. The factory buildings, however, were inclosed in such a way that there could be no personal communication between the workpeople, and the hospital convalescents. During the year two persons working at this factory had been attacked. In one case the source of infection might be said to have been traced with a considerable amount of probability; in the other it would be quite impossible for any one to ascertain with anything like certainty the various chances of the infection having been incurred twelve or thirteen days prior to the commencement of illness. He visited this factory a few days ago. It was not one of those at which he had himself addressed the workmen, but having regard to its very close proximity to the hospital, and to the danger which was supposed to exist in consequence, he fully expected to find that nearly every one was protected by revaccination. To his great astonishment, he found that (excepting the Messrs. Hodgson) so far from being the rule, revaccination had been the rare exception, that a large number of the work-people were very badly vaccinated, and that some were unvaccinated. In order to show the proportion of persons who might be looked on as susceptible to small-pox, he had drawn up a table. The number of persons examined was 113, and four refused to be examined; of these, three were said to have good primary vaccination, and one to be unvaccinated. The number employed during the whole epidemic (November 1881 to November 1882) was 90; and 27 had been taken into employ during the epidemic (20 before September 1st, and 7 afterwards). The total number employed during the whole, or chief part of the epidemic, was 110. Of the 90 employed during the whole time, 51 were completely or partially protected; 39 were unprotected or very slightly protected. Of the 20 employed during the chief part of the time, 11 were completely or partially protected, and 9 unprotected or very slightly protected. The number of patients at the hospital huts was at one time 78. In one week there were 32 fresh cases admitted. At the lace-factories the work was carried on at night as well as in the day-time. During the eleven months the workpeople must have been under every conceivable variation in atmospheric conditions, during the cold foggy weather of December and January; during the early spring when the high winds blew from the west, in June and July, in damp and dry states of the atmosphere. In conclusion he exhibited a map, which showed the localities in which all the fatal cases occurred during the epidemic of 1871–1872. At that time there was no registration or notification of cases of sickness. This map however had not the same signification as the other; but it was remarkable that the deaths from small-pox, indicated by black spots, were chiefly aggregated in localities far removed from the hospital, the immediate vicinity of which, especially on the north and east sides, was remarkably free. This quite coincided with the facts given by Dr. Thorne (Report of the Medical Officer Local Government Board, 1882, p. 210), and with the very important statements recorded of Mr. Burnie and Dr. Bury, who practised in the neighbourhood at the time, which went to show that though the hospital was fuller during the epidemic than it had ever been, on this occasion there was less small-pox in the neighbourhood than in other parts of the town.

THE TREATMENT OF INTUSSUSCEPTION.—In the September number of the *New York Medical Journal and Obstetrical Review*, Dr. W. R. Gillette, physician to Bellevue Hospital, relates a case of intussusception in a child nine months old, relieved by injections of water, the administration of chloroform by inhalation, and manipulation of the tumour felt through the abdominal wall. This, he states, is the third case of intussusception in infants which he has seen, and which he has been able to reduce by these means. He thinks that these cases, from the philosophy of their condition, and the necessary measures for relief, are best managed in the way indicated. In two other instances, in which he saw and advised this treatment, reduction was utterly impossible under the other methods tried. The children, in each of these cases, were held while struggling, and the injections forced into them against all voluntary and involuntary efforts which they could make. He deems the administration of chloroform almost absolutely necessary in these cases. The reason is not difficult to find, inasmuch as, while it gives us such perfect control of the patient, it also eliminates the element of muscular spasm. Moreover, massage is a powerful adjuvant to the hydrostatic pressure of water in these cases. In the first two cases, the obstruction was not overcome until massage also was employed.

REVIEWS AND NOTICES.

LEHRBUCH DER GESCHICHTE DER MEDICIN UND DER EPIDEMISCHEN KRANKHEITEN. Von H. HAESER, Professor in Breslau. Dritte völlig umgearbeitete Auflage. Jena: Erster Band, 1875; Zweiter Band, 1881; Dritter Band, 1882.

[Compendium of the History of Medicine and of Epidemic Diseases By H. Haeser, Professor in Breslau. Third edition, completely revised. Jena, Vol. i, 1875; Vol. ii, 1881; Vol. iii, 1882.]

THE third edition of HAESER'S important work, which has recently been completed, exhibits the same scope and plan as the previous editions. What alterations there are, consist chiefly in additions made with a view to the further development of the idea —which according to the author forms the distinguishing feature of the work—that in writing a history of medicine, the progress of the science should be viewed in its relation to the progress of general civilisation.

The history of medicine, to which the first two volumes are devoted, is divided by the author into three periods:—(1) the period of antiquity, and (2) the period of the middle ages, together occupying the first volume; and (3) the period from the middle ages to the present time, which occupies the second volume.

History of Medicine in Ancient Times. (Vol. i, Book 1).—The history of ancient medicine naturally begins with an account of the medicine of the East; and, first, with that of India, the cradle of western civilisation. Indian medicine is divided into two periods. In the first—the mythic period, or the period of the Vedas—of which our knowledge is gained from the Vedic hymns, diseases were looked upon either as manifestations of evil spirits (Rakshasa) who had taken possession of the victims, or, in somewhat later hymns, as punishments sent by the gods, or the result of witchcraft. The chief means of cure, therefore, consisted in propitiatory sacrifices, and the physician was the priest. In the second, or Brahminical period, medicine had become in great measure divested of the supernatural character it had hitherto possessed. The literature of this period is extensive, and shows no mean knowledge of anatomy, as well as of medicine, surgery, and materia medica.

The author next gives an account of the state of medicine among the Medes and Persians; among the ancient Chinese (among whom medicine is said to have been systematised by the Emperor Houang-Ti, as early as the year 2637 B.C.); among the Egyptians; and among the Hebrews.

The remainder of the first book is devoted to the history of medicine among the ancient Greeks and among the Romans. In the history of the old Greek medicine, Hippocrates stands out as the grand prominent figure; and this period is therefore divided into pre-Hippocratic and Hippocratic. In the pre-Hippocratic period, a brief account is first given of the medicine of the Homeric poems, and of the worship of the gods of healing. Then, passing to the historic age, the author, after briefly noting the scientific knowledge of the old Greek philosophers—Thales, Pythagoras, etc.—proceeds to a description of the state of medical science before the advent of Hippocrates; and of the ancient medical schools of Croton, Cyrene, Rhodes, Cnidos, and Cos, of which, according to Herodotus, the most important in his time was the school at Croton, that at Cyrene ranking second.

Of Hippocrates and his works, a full account is given. The writings which bear his name (*Die Schriften der Hippocratischen Sammlung*) are carefully described, and an exhaustive analysis is made of the teaching contained in them. The medical aspect of the Aristotelian writings is next discussed, and brief notices are given of the Greek physicians from the time of Hippocrates to the founding of Alexandria. The history of ancient Greek medicine closes with an account of the Alexandrian school, whose greatest teachers were Herophilus and Erasistratus.

The medicine of the Romans is dealt with in much the same manner as that of the Greeks. Here the prominent names are Celsus, Cælius Aurelianus, and Galen; and the writings and influence of these teachers are fully described.

History of Medicine during the Middle Ages (sixth century to the sixteenth century, Vol. I, Book II).—In an introductory chapter, the author traces the influence of Christianity on philosophy and on practical life. He shows how, on the one hand, it modified and blended with the old philosophies and led to the pseudo-sciences of magic, astrology, and alchemy, which, in later times, gave place to the true sciences of medicine, astronomy, and chemistry; and how, on the other, it introduced the sentiment of mercy and of brotherly

love, and thus led to the foundation of hospitals and other institutions of a like nature.

The Byzantine period—the history of medicine during the Byzantine empire—is first dealt with. The medical literature of this period is briefly noticed; the only works of great importance being those of Paulus Ægineta, which are carefully analysed

The history of medicine among the Arabians is next described. Among the principal writers of the Arabians were Rhazes, the author of the well-known treatise on *Small-pox*, and Avicenna; the writings of both of whom are fully described.

The last chapter in the volume is devoted to the medicine of the western nations. After a brief account of the mythical medicine of the Germanic peoples, and of the state of medicine among them during the first century, the author narrates the progress of western medicine from the third to the eighth century. An account of the foundation of the older universities is then given, as well as an interesting sketch of the medical teaching of the oldest of these—the University of Salerno—which occupied the first place among the medical schools during the supremacy of Greek medicine in the west.

The author next describes the medicine of the scholastic period, of which the most prominent names are those of Roger Bacon, the Englishman, and Renaldus de Villanova, the Spaniard. This is followed by a general review of the state of medicine, and of the medical profession, during the middle ages. The volume closes with a brief history of the foundation of hospitals in Europe, the oldest being founded in Rome by Fabiola, and the oldest of the large hospitals—the San Spirito, in Rome—being founded in A.D., 718; and of the institution of the order of St. John of Jerusalem, the German "Ritter Order," and the order of St. Lazarus.

History of Medicine in Recent Times (Vol. II).—The second volume of the work deals with the history of medicine from the sixteenth century to the present time. In narrating it, the author takes each century separately, and in discussing its medicine follows an uniform plan. After introductory remarks on the social and political conditions of the century, he describes the state of anatomy and physiology, and then gives an account of the progress of practical medicine, surgery, and the chief special departments of each.

In the seventeenth century—the century which boasted Bacon, Descartes, and Spinoza—physiology became raised to the dignity of a veritable science, through the discovery, by Harvey, of the circulation of the blood. The author points out how Harvey probably received the first hint towards his great discovery from the description of the venous valves (first discovered by Cannani, in 1546), by Fabricius of Aquapendente, whose pupil, at one time, Harvey was. Full credit, however, is given to our countryman, nothwithstanding the nationality of the author, and the far-reaching influence of the discovery is fully recognised; and the prominent figure in this century is that of Thomas Sydenham, whose works, for generations, swayed the medical opinion of this country, and exercised, also, no small influence on Continental medical opinion.

The eighteenth, the "philosophical century," saw the birth of systematic medicine. The fathers of systematic medicine were Boerhaave, Hoffmann, and Cullen, and in the latter part of the century, our countryman Cullen. The writings of these authors are fully analysed. To the so-called "Brownian system," the author devotes more space than seems to us to be warranted by its importance. The chapter on medicine during the nineteenth century describes the progress of the science in its various branches up to quite a recent date. All the principal authors receive notice, and their writings are briefly discussed. In this chapter some errors have come under our observation. Thus the author describes the county of Durham as being in Ireland, where also he locates the town of Derby. These, however, are minor mistakes in a work which so far as we have observed is singularly free from gross errors.

History of Epidemic Diseases (Vol. III).—In dealing with epidemic diseases, the author follows the same plan as he has adopted in the history of general medicine, and divides it into three periods, the period of antiquity, the period of the middle ages, and the period from the sixteenth century onwards. In the first period, the earliest and most important epidemic of which we have any considerable record is the "Plague of Athens", of which Thucydides has handed down to us a history. This plague raged in Athens between the years B.C. 430 and 425, and created great havoc among the Athenian population. The description given by Thucydides of the symptoms manifested by those affected with the disease does not permit of its certain identification with any of the epidemic diseases known to moderns, and much controversy has consequently existed regarding its nature. One author, while pointing out the chief views on this question, seems to incline to the opinion that the disease was a form of typhus.

In the middle ages, the most important epidemic was that known as the "Black Death", which occurred in the fourteenth century, and was probably the most awful epidemic which has ever swept over the face of the earth. It was universal—"magna et generalis mortalitas per totum orbem," and Gabriel de Mussis tell us, that all the inhabitants of the East, the inhabitants of Cathay, of Persia, of Arabia, etc., were visited by it. It seems to have begun in the East, and thence passed to Europe. In 1346, it appeared in Sicily and South Italy; in 1347, in Greece, Sardinia, and the South of France; and in the two following years it had swept over all Europe; after which it disappeared. Some idea of its ravages may be gathered from a table the author gives of the deaths caused by it in different places. Thus in Sicily, 530,000; in Naples, 60,000; in Paris, 50,000; and in London, 100,000 persons are said to have perished from the disease; and other cities and towns suffered in like proportion. The nature of the disease is not by any means clearly made out.

In the third book the author deals with more recent times. He begins by giving a history of syphilis, and of its introduction into, and diffusion throughout, Europe. Then follows an account of the "Sweating Sickness" (der englische Schweiss), which raged epidemically in England and other parts of Northern Europe at several times during the last years of the fifteenth, and the beginning of the sixteenth centuries. The author next proceeds to describe the various epidemics as they occurred, in chronological order, from the sixteenth century to the present time. In the account of the nineteenth century a very exhaustive history is given of the four great epidemics of cholera which have swept over Europe since the beginning of the century.

Such is the scope and character of the work before us. It contains in a condensed form an enormous mass of information, which is well digested and clearly set forth, while abundant references are supplied under each heading. The one great fault of the work, it seems to us, is the want of a general index. There is a tolerably full table of contents at the commencement, and a complete index of authors' names at the end of the work, but no general index. For such a work as this, which is essentially a work of reference, a good index is a necessity, and it is to be hoped that in future editions this very serious omission will be rectified. With this qualification, we can heartily recommend the book as well worthy a place on the bookshelves of the practitioner.

NOTES ON POISONS. By J. MAYNE, M.D., L.R.C.P.Edin., L.S.A. London: J. and A. Churchill. 1882.

THIS is a toxicological chart or table, "designed for ready reference." It contains a great deal of information in a small compass, the only drawback being that the information is, in many places, far from reliable. The author's ideas on the subject of emetics seem to be somewhat confused. He speaks of apomorphia as an emetic, "long known in America," but is evidently ignorant of the fact that it is not an American preparation at all, but was discovered by Matthiessen and Wright in this country; and that its action was first investigated by Dr. Gee, at St. Bartholomew's Hospital, in 1869. No mention is made of the fact, that, when apomorphia is required to act promptly as an emetic, it must be given hypodermically. Possibly, the author objects to this mode of administration; for he says: "*Mem.*—Hypodermic injection of remedies has become much resorted to of late, but is not always free from objections." He mentions casually that curari is "supposed to come from bark of a convolvulus species." We were under the impression that Schomburgk's account of the origin of curari was generally accepted; and that the only barks used in its preparation were from Strychnos toxifera, Strychnos Schomburgkii, and Strychnos cogens. Dr. MAYNE may, of course, have special information on this point, or he may think that Strychnos is a "convolvulus species." His classification, we must admit, is unintelligible, and his treatment undoubtedly vague. Thus, in the case of opium, he directs its use as follows: "As immediately as possible, attempt rinsing out the entire *primæ viæ* by means of bland fluids of starchy consistence;" but not a word do we find about atropia as an antidote, nor is there mention of the injection of coffee into the rectum, or of the immense importance of the cold douche in these cases. For poisoning by sulphate of copper, or perchloride of mercury, the appropriate antidotes seem to be "starchy drinks of barley, or of rue, or any sort!" In the case of poisoning by drugs contained in Class III, "the specially irritating class," we are told: "The after-treatment must be directed in compliance with the varied circumstances subsequently presented by individual cases." These "Notes", we

fear, will be of very little use as a guide to the treatment of cases of poisoning, where definite directions and general correctness are so absolutely imperative.

PRACTICAL TREATISE ON THE DISEASES OF CHILDREN. By J. F. MEIGS, M.D., Consulting Physician to the Children's Hospital, Philadelphia; and W. PEPPER, M.D., Lecturer on Clinical Medicine in the University of Pennsylvania. Seventh Edition, revised and enlarged. London: H. K. Lewis. 1882.

A SYSTEMATIC treatise, which has reached its seventh edition, and has passed through three during the course of twelve years, may almost be considered as a work now lying beyond the pale of adverse criticism. The publication before us is stated to be "revised and enlarged", and we find that it contains about 150 pages more than than the fourth edition. According to the preface of this last edition, the section on skin diseases "has been rearranged, and in large part rewritten"; the chapter on thrush has likewise been rewritten; while "a short article on Rötheln has been added", and "a new article on Food, in which the subject of condensed milk is carefully considered". On comparing, however, the "Table of Contents" in this new edition with that in the fourth edition, we find several sections added. For example, under Class II, we have new articles on Emphysema and on Pneumothorax; under Class III, articles added on Food, Affections of the Tonsils, and on Retropharyngeal Abscess; under Class IV, a section on "night terrors"; while here and there, in the subsequent chapters, we have several additions, and some alterations in position. On the whole, we can congratulate our authors on the revision exercised in the Table of Contents for the seventh edition.

It would be impossible and undesirable in the review of such a large volume as the one before us (containing 1,055 pages), to attempt to criticise more than one or two of the sections into which it is divided; and to illustrate our remarks, we have selected the pages treating of Pneumonia. The description of the "anatomical lesions" characterising this pathological condition in children, has been remodelled somewhat into modern form, and additions are met with in pages 161 and 162. There is, however, a shallowness evident in these pages, due, in part, to an insufficient acquaintance with recent works on pathology, and, what is more obvious, an absence of a familiarity with the appearances furnished by the *post mortem* examination of this disease among children. On the other hand, we gladly observe, at page 177, some excellent remarks (not in the fourth edition) on the range of temperature in pneumonia among children; and in page 178 we find the experience derived from the authors' individual practice, carried up to the latest date. All through this chapter we are glad to see several paragraphs added, and others extended. When the portion on treatment is reached, we find too much space devoted to the weighing of evidence with respect to blood-letting, the present edition containing, indeed, a mere reprint of that in the former editions. But the value of mercury in combating the intestinal disturbance accompanying pneumonia in children, has very properly received more attention in this volume. So, also, there are added some excellent remarks on the exhibition of quinia, and of muriate of ammonia, in the pneumonia of children.

The chapter on skin diseases is greatly improved in this edition as regards its fulness; but our authors seem unable to recommend decidedly any definite line of treatment. Much advance might be made by their careful clinical study of different methods in treating such cases. Further, they seem to be behind the age, both as regards the pathology and the treatment of such affections, when they extol arsenic unduly, and make no mention of chloral given as an internal remedy for herpes.

The volume may, however, be cordially recommended to practitioners; but we hold that there is still wanting a treatise on children's diseases from the pen of an author conversant with recent advances in pathology, based on clinical study, and on the necroptic observation of such cases. While C. Gerhardt's *Handbuch der Kinderkrankheiten* (Tübingen, 1877) provides us with an encyclopædia analogous to Ziemssen's *Medicine*, and T. Holmes's *Surgery;* and while F. L. Meissner's *Grundlage der Literatur der Pädiatrik* (Leipzig, 1850) presents a volume of 246 pages, containing merely the names of authors and their works on children's diseases, from 1472 to that date (1850), and gives the names of twenty-seven writers on the subject of pneumonia and bronchitis only, we consider that the time has arrived when a really able and complete work on children's diseases should be forthcoming.

NOTES ON BOOKS.

Papers read before the Medico-Legal Society of New York, 2nd series. (New York, 1882.)—This is the revised edition of the papers read before the above society up to the year 1874. The first series was published in 1874. No clear reason is assigned for the delay in the publication of this second series. It is announced that a third volume will be shortly ready for publication. The papers before us form a handsome volume of 530 octavo pages, and they form a record of the zeal and energy of our transatlantic *confrères*, worthy of imitation in Britain, where we have no analogous society. The New York Society has already done excellent work, and our columns have from time to time testified to the value we set upon its proceedings. The volume of papers under review embraces a wide range of subjects, which are treated of in the form of lectures or addresses given by various members of the society. Being printed apparently exactly in the form in which they were delivered, they are necessarily discursive, and it would have been well for the editor to have pruned their diffuseness of language. The subjects treated of are Criminal Abortion and the amendment of the Law relating to Infanticide; Toxicology; Legal Responsibility; Testamentary Capacity; Experts as Witnesses; *De Ventre Inspiciendo;* Homicide; Morbid Impulse; The Use of the Spectroscope in Forensic Analysis, etc. It would be impossible within the space at our command to do more than notice these; and we commend the volume to those of our readers who are specially engaged in forensic practice.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

HYPODERMIC INJECTOR.

SIR,—In a recent issue of the JOURNAL, is figured a subcutaneous injection syringe by Dr. Ward Cousins. Messrs. Salt of Birmingham made an almost identical one for me April 22nd, 1881, which possesses one or two points of superiority, I think, to Dr. Cousins's instrument. The India-rubber ball holds thirty minims, but I keep my solutions in graduated small bottles, the base of the needle forming a stopper; the needle, being gold, is not corroded by the constant immersion in the fluid; the bottle and needle are contained in a small metal case, with a screw top, which is very compact. If the surgeon uses gelatine discs, then the instrument can be made smaller, and different discs arranged in a small case. I can fully indorse Dr. Ward Cousins's remarks as to the utility of the little instrument. I beg to inclose a letter from Messrs. Salt.—I am, etc.,

P. H. MULES, M.D.,
Surgeon Royal Manchester Eye Hospital.

THE TYPHOID EPIDEMIC AT BANGOR.—The local board at Bangor have issued a summary showing the additional expenses thrown upon the borough consequent upon the outbreak of typhoid fever, which played such havoc in the town last summer. The expenditure for the current half-year is estimated at about £4,000. £1,600 of which is covered by a public subscription initiated by the bishop, who from the outset earnestly co-operated with the local authorities, and gave his park for the erection of tent-hospitals. To meet the deficiency a half-year's rate of 3s. in the pound, or quadruple what has been imposed for many years, has been found necessary, and the necessity is likely to continue some years. The board will also have to apply to the Local Government Board for a loan to carry out the recommendations of the inspector as to the improvement of the drainage and water supply. The proposal to apply for a charter of incorporation is being actively taken up, and a guarantee fund has been raised, towards which Lord Penrhyn, who is the chief landowner of the district, and Major Platt have each given £5.

THE NON-IDENTITY OF CROUP AND DIPHTHERIA. Dr. McGillavry of Sydney, N.S., writes to the *Philadelphia Medical News* as follows, in regard to the above subject. In your issue of October 21st there appeared a lecture delivered by Dr. Morell Mackenzie, of London, at Bellevue Hospital Medical College, on "Diphtheria." In that lecture the learned Dr. pronounced croup and diphtheria one and the same disease. This is an utterance *ex cathedra*, and deserves more than passing notice.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 13th, 1883.

LIFE AND DEATH IN ENGLAND.

THE true value of the death-rate—that is, of the proportion of deaths to population—as a test of the health of a population, has been a fertile source of discussion and contention in recent years. The disturbing influences which operate to prevent the gross death-rates of two populations, in which the age and sex proportions materially differ, from being strictly comparable, are obvious, and are now beginning to be better understood. The opponents of the "national system" of death-rates, however, have failed to prove that the actual effect of these disturbing influences is such as seriously to detract from the value of death-rates as a test of comparative health-condition. Above all, no successful attempt has yet been made to provide a worthier substitute of the death-rate, which has been so invaluable as a stimulus to sanitary progress.

Convinced, however, that this subject is one of which further discussion might prove useful, we have, during the past few months, opened our columns to several papers and letters dealing with death-rates, and the various inferences that may be drawn from them. Many of the contributions to which we have given space have shown but a limited acquaintance with the science of vital statistics, and therefore contain much that is unsound and fallacious. We have held, however, that the opportunity to expose a paradox or fallacy is sometimes both desirable and useful.

One of the main points under discussion has been whether the recent reduction of the death-rate in England really signifies an increase in the duration of life. Dr. Rabagliati attempted to test this by calculating the mean ages at death, as published in the Registrar-General's Annual Reports, in two periods of five years, thirty years apart. This attempt, however, was more or less unsatisfactory, as all attempts must be to estimate the duration of life from the mean age at death in populations where there is a constant but variable excess of births over deaths. The only trustworthy method for arriving at the mean duration of life is the construction of a life-table, which alone eliminates all the disturbing elements connected with the birth and emigration rates. The Statistical Society promises a paper on this subject during the present session, which proposes to discuss the true effect of the recent reduction in the English death-rate upon the duration of life in England. This paper will doubtlessly throw additional light upon the subject which has been discussed in these columns.

Mr. Biddle, in a most laborious and elaborate paper, boldly attacks, as others have done before, the "national system" of mortality statistics. All interested in this important subject owe a debt of gratitude to Mr. Biddle for his paper, the very fallacies of which will lead others to a better understanding of this complicated question. The relation between birth- and death-rates has proved a stumbling-block to many writers upon vital statistics, including, among others, Dr. Watt, Dr. Letheby, Dr. Tidy, and Dr. Tyson, all medical officers of health. Dr. Bristowe also, in 1876, read a paper before the Metropolitan Society of Medical Officers of Health, upon the "Mutual Relation of the Birth-Rate and Death-Rate," which, partly through a confusion of terms, has been much misunderstood, and has led many students of vital statistics astray, Mr. Biddle among the number. Dr. Bristowe asserted in his paper that the mean duration of life is the same (namely, 81 years) with a death-rate of 5 per 1,000 and a birth-rate of 25 per 1,000, as with a death-rate of 10 per 1,000 and a birth-rate of 15 per 1,000. The whole of Dr. Bristowe's conclusions were based upon impossible hypotheses; and the mean age at death of a population with imaginary and impossible birth- and death-rates, is constantly referred to as the mean duration of life. It is quite true that a similar mean age at death might be maintained in two distinct populations, with widely different birth- and death-rates. But without a serious distortion of the generally accepted meaning of the term "mean duration of life," a similar statement (which Dr. Bristowe made) with regard to a hypothetical mean duration of life, involves an obvious fallacy. In vital statistics, as in all other exact sciences, precision of terms is, above all things, essential to useful discussion. The accepted term, "mean duration of life," signifies the mean lifetime of a generation traced by means of a life-table from birth to its extinction by death. The disturbing influence of birth- and emigration-rates can, therefore, have no possible effect upon a true "mean duration of life." The mean age at death, however, is fully subject to these disturbing influences, and is in great measure dependent upon the age-distribution of the living population, which is in turn dependent in great measure upon the mutual relation of the birth- and death-rate. Therefore, while the mean duration of life is a trustworthy test of health and sanitary condition, the mean age of death is comparatively valueless for such a purpose. A life-table is, however, necessary for ascertaining the mean duration of life, and by no other method can the disturbing influences of birth- and immigration-rates be completely eliminated.

Failing a life-table, however, the death-rate, or rate of mortality——that is, the proportion of deaths to the number of the population in which they occur—is now all but universally accepted as a trustworthy test of health and sanitary condition. The gross death-rate of a population—that is, the proportion of deaths at all ages to the population at all ages—is naturally subject to the same disturbing influence as is the mean age at death; but if (as should always be the case in mortality statistics) rates of mortality are separately calculated for several groups of ages, the extent of this disturbing influence is reduced to a minimum. For instance, the gross death-rate of a population with an excessive proportion of young adults, with a consequently high birth-rate, and a small proportion of elderly people, understates the true rate of mortality, after correction for age-distribution. On the other hand, the gross death-rate of a population with a small proportion of young adults, a consequent low birth-rate, and a high proportion of elderly people, would overstate the true rate of mortality. If, however, the rates of mortality at similar groups of ages were given for each of these differently constituted populations, the rates would be fairly comparable. For instance, the proportion of deaths under five years to the number living under five years of age, in the two populations, would be strictly comparable. Their value, for comparison, is not disturbed by the fact that the proportion of children living under five years, to the number living at all ages, is much larger in one than in the other population. Thus, while the value of the gross death-rate is, within certain moderate limits (which were fully discussed in a paper read before the Statistical Society a few years ago), impaired by disturbing influences, the same objections cannot be urged against death-rates at several groups of ages, such as are published in the Registrar-General's Annual Reports.

Let us now consider Mr. Biddle's recent suggestion for a new system of mortality-statistics in substitution of the Registrar-General's method, which is stated to be, "though useful in some respects, unsatisfactory as an index of the comparative health and vitality of the people at different epochs." It will be scarcely necessary to do more

than to consider carefully what Mr. Biddle suggests, as an exaggerated instance of how fallacious the results of the Registrar-General's method might be, in order to show the transparent fallaciousness of Mr. Biddle's argument and suggested method.

He supposes that on an island, at the beginning of a given year, 800 males were alive, each 66 years of age, but that some fearful pestilence arose which carried off 400 of them before the close of the year. The surviving 400 would be aged 67 in the following year; and it is further supposed that 200 of them died during that year. Mr. Biddle's complaint of the Registrar-General's method, and its fallacious results, is based upon the undeniable assertion that by this method the rate of mortality of males aged 66 and 67 years on this island, in each of the two consecutive years, would appear to be equally 500 per 1,000. Mr. Biddle says nothing about a "fearful pestilence" in the second year, but it is clear that an equally strong fatal influence is necessary to kill 200 out of 400, as that which killed 400 out of 800, without regard to a natural law which causes a low rate of mortality to follow an epidemic year. However, Mr. Biddle regards the experience of these two years from an entirely different point of view, and declares that "the second of the two years would gain a bad name simply from the fact that it was preceded by a bad year; which is manifestly unfair." Such reasoning is entirely incomprehensible, because, even if a larger number had survived the first year, there would be no pretext for assuming that the additional survivors would not have died in the same proportion as did the 400 in the example. In order to obviate what Mr. Biddle supposes a manifest injustice, he adds, "If, in the above instance, the deaths were compared properly with the births, the death-rate in the latter year would rightly appear as only half that of the number."

Here we have Mr. Biddle's proposed substitute for the proportion of deaths to persons living. He suggests that, as an index of the comparative health and vitality of the males aged 66 and 67 on his imaginary island, in the two successive years, the deaths should be measured by the number of births sixty-six and sixty-seven years before, of which these 800 and 400 were the survivors, instead of by the number of the survivors in each year. It is strange that Mr. Biddle should not see that if half of those living died in each year, the rate of mortality must have been the same; and it is still stranger that he should express a belief that, because the number of deaths in the second year was half the number in the first year, therefore, "the death-rate in the latter year would rightly appear as only one-half that in the former."

Mr. Biddle's method, tested by his own example, gives so fallacious a result that it is useless seriously to discuss its value as a substitute for the death-rate to persons living. The difficulties of ascertaining or estimating the number living in a given year, out of which the deaths in the year occur, are undoubtedly great, but those in the way of ascertaining the numbers born forty, fifty, or sixty years ago, of which those dying are survivors, are fairly insurmountable. It is, moreover, evident that these numbers, if they could be ascertained, would yield proportions which would be in no ordinary sense death-rates, and which could be of no value for the purpose of measuring "comparative health and vitality" at the present time.

We have no hesitation in expressing our deliberate conviction that to surrender the "national system" of death-rates for Mr. Biddle's proportion of deaths to births, without regard to rates of mortality and emigration in intervening years, would be disastrous, both from a statistical and a sanitary point of view.

THE MEDICAL AND SANITARY DEPARTMENTS OF OCEAN STEAMSHIPS.

THE existence of an excessive mortality among passengers by Atlantic steamers being determined, it is a manifest duty to investigate the cause. Ocean travel has become an important element in our national life. All classes of society partake of its advantages and share its dangers; and, although the health of emigrants should be a sufficiently weighty consideration, it may also be wise to anticipate a time when the sacrifice of some more valued life or lives would force the matter upon public attention. For days, sometimes weeks together, multitudes of men, women, and children are assembled within the narrowest possible compass, and with them are crowded cargoes of various kinds, stores, cooking arrangements, water-closets, and other necessities for 1,500 to 2,000 persons. One might suppose that such evidently dangerous conditions would insure the early adoption of improvements in sanitary mechanism; and that they would suggest to those responsible the necessity of placing every ship carrying a large number of passengers under the unquestioned control of a thoroughly independent and efficient sanitary authority.

It is, therefore, with some surprise that we learn that "few, if any, ships are furnished with proper ventilating apparatus, or other sanitary appliances;" that the newest Atlantic vessels are still dependent on the antiquated bell-ventilator, which is frequently almost useless when most required—during heavy weather; and that no effort has yet been made to apply to these steamers the more effective systems of fan and tube ventilation, or any of the modern devices for purifying the air, and maintaining an equable and healthy temperature. We hear, too, of old-fashioned water-closets which almost constantly smell, and are frequently neglected throughout the voyage; of foul gases from the bilge being conducted by scupper-pipes into the sleeping compartments of passengers; of basins communicating with offensive receiving-pipes and water-closets; of inferior food, ill-cooked and ill-served; of a general want of cleanliness; and of a variety of other abuses which could never exist under a competent and unbiassed sanitary administration. The explanation seems to be that, upon Atlantic steamers—indeed, upon all other ships, except those under charter by the Queensland or other colonial governments, from whom we may learn a lesson in guarding the health of passengers—the sanitary authority of the vessel rests almost exclusively in the hands of the captain. As a consequence, hygienic requirements are left pretty much to haphazard, or certainly made subservient to all other considerations. The medical officer's sanitary responsibilities are wholly undefined. There is no written law for his guidance. Each ship has a varying custom, dependent apparently upon the combined opinions of the owners, captain, purser, and steward, and possibly in some measure upon the habits of their predecessors; and in this the surgeon seems expected to acquiesce. This much he is given to understand pretty plainly: that neither captain nor owners require any suggestion from him; that a policy of non-interference will be that most consistent with his own comfort; and "that, in finding any fault or encouraging any complaint, he will be treading on the corns of some one, and preparing for himself 'a hot time' while on board and likely dismissal at the termination of the voyage." To these extraordinary conditions might fairly be referred an excessive mortality among both passengers and crew.

We fear, however, that even more must be attributed to a culpable deficiency of assistance in attending the sick, and to shortcomings in the medical department itself. The position of surgeon on an Atlantic steamer is more important to the public than is generally supposed, and there can be no greater fallacy than to believe that his medical duties are either light or easy. On the contrary, the death-rate proves the existence of much serious sickness; and it must be borne in mind that, in dealing with it, the ship-surgeon has many difficulties to contend against—not least among which is the popular assumption of his inefficiency—from which practitioners on land are wholly exempt. Persons embarking in apparent good health too often feel secure from all dangers but those incidental to storm and shipwreck, forgetful of the fact that they may have within them the germs of some serious malady; that ten days is ample time for almost any disease to prove fatal; and that, once clear of the land, whatever may occur, whether unforeseen illness or accident, they are cut off from all external assistance, and entirely dependent on the

skill of the medical officer of the ship. A correspondent has stated "that the most healthy individual embarking at Liverpool for America is probably a hundred times more likely to lose his life in transit by disease than by shipwreck." From this it may fairly be argued—and we believe that, if anything, our correspondent underrates the proportion — that to each individual passenger the qualifications of the surgeon are, *cæteris paribus*, a hundred times more important than those of any other official. Certainly one might expect that the shipowner, who is the only responsible person, would exercise as much care in selecting the medical officer for a large passenger ship, as we know he does in making choice of an engineer or steward; or, as is admittedly necessary, in making appointments to other positions of medical trust. This, however, is far from being the case. "The market is overstocked with an article, the quality of which is of little object to the purchaser," and, as a natural consequence of this abnormal condition, the ship surgeon is appointed almost exclusively by the interest of some commercial friend, "with little reference to age, experience, qualification, or character," and, "when he enters on his duties, he is badly paid, badly accommodated, and badly treated." In the commercial world, this law of demand and supply is fully appreciated. When a market is overstocked prices naturally fall; but when the prices have continued persistently low—so low that the goods cannot be produced with legitimate profit, the quality will certainly deteriorate, until, ultimately, it adapts itself to the standard of prices. This principle is, we fear, exemplified in the ship-surgeon "market"; and, unfortunately for the public, so long as the indifference of the purchaser as to the abnormal condition of the quality is permitted to exist, there is small hope of such salutary reaction as would be expected in other circumstances of a like nature.

It would be more than ridiculous to expect that, under the present most unfavourable conditions, any medical man of such attainments as would insure success in more promising walks of the profession can be induced, without the strongest and most exceptional private reasons, to devote his life to the service of the mercantile marine. A miserable ten pounds per month is the highest salary to which he can aspire. While engineers and others are given fairly good cabins, he is allotted some dark noisome den, scarcely fit for a dog-kennel; and here, too, he must often struggle through his professional work. He has no hospital assistant, no nurse, no attendant of any kind, no dispenser, often no dispensary; and therefore a conscientious man has the worry of knowing that, however hard he may labour himself during those frequently recurring times of general sickness, he cannot possibly accomplish satisfactorily one-half of the work which he believes essential to the safety of those placed under his care. Even the hospitals which the law requires "shall be kept as such throughout the voyage" are not unfrequently taken from under his control and occupied by passengers or members of the crew. We have before us the instance of a large Atlantic emigrant ship which habitually carried a crew of two more men than could be accommodated in the forecastle, and these were allotted by the captain one of the deck-hospitals, which was therefore practically unavailable for medical purposes. It may well be inquired, how such a state of affairs could continue without the cognisance of the Board of Trade Inspector; it may even be said that a determined resistance on the part of the ship-surgeon would prevent such an occurrence. No doubt it might for the current voyage; but well he knows the consequence of interfering in such arrangements. Indeed, so little is an efficient medical officer appreciated by shipowners, that we are assured that in most lines, even after a lengthened and faithful service, he may lose his position through the jealous caprice of his captain or the ill will of some underling. Under these circumstances, we ask, Is it surprising that comparatively few surgeons, in every way suitable, can be found in the Mercantile Marine Medical Service?

THE PATHOLOGICAL SOCIETY'S SUPPLEMENT.

WE made some reference to the valuable appendix incorporated with the thirty-third volume of the *Transactions of the Pathological Society*, in a recent number of the JOURNAL (December 30th, page 1,324), where we spoke of Mr. Jonathan Hutchinson's suggestion, which gave origin to the "Supplementary Reports in Continuation of the Histories of Cases Recorded in the Transactions of the Pathological Society of London, volumes I to XXXI, compiled by a Committee of the Society," giving the names of the members of that Committee, who have discharged their duties most ably. In the same article we briefly noticed the preface to these reports, where the method by which they were prepared will be found to be described in full. We will now enter into more special details with regard to the valuable stores of information included in this remarkable supplement.

A letter bearing the signatures of the President of the Society, and two members of the committee, was sent out to every exhibitor whom it was deemed likely to be able to add to the facts contained in his original report. In this manner, no fewer than two hundred and sixty-six answers were obtained, many being unfortunately, but not unexpectedly, to the effect that no further information was obtainable. On the other hand, many valuable after-histories have been procured and arranged so as to form the Supplement. They are placed, of course, after the order of the volumes of the *Transactions;* but we have prepared for the benefit of those that are interested in general and special departments of pathology, but are not members of the Society, nor have ready access to its publications, the following classification of histories, so that they may see, at a glance, in what manner they can be assisted in their labours by procuring the thirty-third volume of the *Transactions.*

Diseases of the Nervous System.—Encephalocele, 1 case; compound fracture of the skull and loss of brain-substance, 1; pulsating tumour on the seat of previous trephining, 1; supposed rupture of most of the roots of the brachial plexus, 1.

Diseases of the Organs of Respiration.—Fibrous cast expectorated in case of hæmoptysis, 1; tumour of larynx, 1.

Diseases of the Organs of Circulation.—Ruptured popliteal aneurysm, 1.

Diseases of the Organs of Digestion.—Parotid tumour, 2; cancer of tongue, 2; papilloma of tongue, 1; hypertrophy of tongue, 1; epithelioma of tonsil, 1; hydatid of liver, 1; gallstones passed *per anum*, 1; casts passed from the intestines, 1; intussusception; evacuation of the involved portion of intestine, 1; polypus of rectum, 1; cancer of rectum, 1.

Diseases of the Genito-Urinary Organs.—Uric acid calculus, 2; cystic oxide calculus, 1; cystine calculus, 1; cystine and oxalate of lime calculus, 1; phosphatic calculus, 1; encysted calculus, 1; urine containing cystine, 1; phosphatic diabetes, 1; chyluria, 1; ectopia vesicæ, 1; fibrous cast of penis and front of bladder, 1; epithelioma of urethra, 1; cancer of penis, 1; melanosis of penis, 1; fibrous tumour of penis, 1; tumours of scrotum, 2; cyst in tunica albuginea, 1; cyst of testis, 1; malignant disease of testis, 2; hernia testis, 1; myxofibroma of spermatic cord and epididymis, 1; cancer of os uteri, twice removed, 1; cyst of cervix uteri, 1; papilloma of Fallopian tube, 1; cystic tumours of ovary, 3.

Diseases of the Osseous System.—Excision of elbow, 2; of knee-joint, 2; of tarsal bones, 1; necrosis of frontal bone, 1; of jaw, 2 (including one case of recovery from cancrum oris); tumours of jaws, 4; tumour of scapula, 1; fibro-cystic tumour of femur, 1; malignant tumours of special bones, 3; fracture of bone in cancer, 1; aneurysmal tumour of bone, 1; bone-lesions in congenital syphilis, 1; loose cartilages in joints, 1.

Morbid Growths and Tumours, excluding all classed in the other sections. "Fibrous growths," or fibroid tumours, 3; fatty tumours, 2; neuroma, 1; lymphadenoma, 2; enchondroma, 3; osseous tumours 1; nævi and erectile tumours, 3; sarcoma (round-celled, spindle-

celled, or mixed), 11 (bone, 3; subcutaneous tissue and muscles, 4; face, 1; sclerotic, 1; nerve, 1; multiple sarcoma, 1); melanosis, 5; myeloid tumours, 3; myxoma, 1; scirrhus and "tuberous cancer,' 6 (five of these histories are very complete); "medullary cancer, 3; epithelioma, 6; colloid cancer, 5 (breast 4; neck, 1); papillary growth of abdominal wall, 1; solid tumours, nature unspecified, 8; multiple sebaceous cysts, 1; warty tumour in sebaceous cyst, 1; cyst, in neck, 3; in leg, 1; in peritoneum, 1; blood cyst, 1.

Diseases of the Breast.—Hypertrophy, 1; milk-cyst, 1; cystic disease, 4; mammary glandular tumour, 4 (including one that had recurred seven times); myxoma, 1; tumour of male breast, 2.

Diseases of the Spleen and Sympathetic System.—Enlarged spleen in congenital syphilis, 1; lymphangiectodes, 1.

Diseases of the Muscles.—Enlargement of the temporal and masseter, 1; also several cases included among "tumours."

Diseases of the Skin.—True keloid, 1; rodent ulcer, 1; ulcer of eyelid, 1; morphœa, 1; molluscum fibrosum, 1; scleroma adultorum, 1; xanthelasma multiplex, 1; pigmented mole, 1; elephantiasis, 2.

This is a very good show of after-histories, when we bear in mind what a large proportion of the cases occurred in hospital patients, who are, as a rule, very difficult to trace after their discharge. In future, patients with remarkable disorders might be induced, by very simple methods outside the domain of science, to furnish their hospitals with reports of their progress after leaving the institutions whence they have received medical and surgical benefits. Certain surgeons, more especially the ovariotomists, have already succeeded in insuring occasional reports from even the most illiterate of their old patients; those whose scholarship is as low as that of the early Plantagenet kings will readily find some more educated friend to write to their surgeon, and to read his communications, if it be made worth their while; and special papers might be given to hospital patients on their discharge, to be returned with the necessary information, one, two, or three years later.

Want of space completely prevents us from entering into minute details concerning this large collection of after-histories; we will content ourselves by observing that, in the case of specimens described in the later volumes of the *Transactions*, the answers received to the request for after-histories show how thoroughly the present generation of British pathologists understand their work, and recognise the value of constantly watching a case that they have already studied. Nobody can deny that particular credit is due to seniors, who have set a good and early example in taking pains to insure, as far as possible, the perfecting of their reports by the addition of complete after-histories; and, in this respect, the Supplement shows that Mr. Hutchinson, Mr. Birkett, and Mr. Gay stand honourably in the first rank. Mr. Hutchinson's care in completion of clinical reports is well known; Mr. Gay can claim the personal observation of a case of tumour of the breast through seven recurrences; and, for completeness and conciseness, nothing can excel Mr. Birkett's report on the after-history of five cases of tuberous cancer of the breast, illustrating the natural history and progress of the primary growth, originally described in the ninth volume of the *Transactions*. Lastly, we must not omit the name of Mr. Le Gros Clark, who is enabled to furnish a complete history to a case of colloid cancer of the neck, described in the first volume of the *Transactions*, which was published as long ago as 1846; he is now able to inform us that the patient is still living, at the age of about seventy-three, without any sign of recurrence of the disease. The "Supplementary Reports" of the Pathological Society show what can be accomplished, and what medical men in every department of the profession are ready to do towards supplying valuable information to an organised scientific society. The Collective Investigation Committee of the British Medical Association can claim that it is carrying on good work of a very similar kind, over a still wider field, and with a promise, already partly fulfilled, of equally satisfactory results.

WE are requested to announce that the library of the Royal College of Surgeons will be closed on the 19th and 20th of this month, for the purposes of the examinations for the pass membership.

THE honour of Companion of the order of the Indian Empire has been conferred upon Surgeon-Major George Bidie, Superintendent of the Central Museum at Madras.

THE *Official Messenger* publishes a decision of the Medical Council of St. Petersburg, condemning the homœopathic remedy for diphtheria, which has lately been tried there in the hospitals of the Red Cross Society, as false and dangerous.

AT the next meeting of the East London and South Essex District of the Metropolitan Counties Branch, on Thursday evening, January 18th, at 8.30 p.m., Dr. Andrew Clark will given an address on Renal Inadequacy. The meeting will be held at the New Town Hall, Hackney; Francis Toulmin, Esq., in the chair.

IT is announced that Mr. Steet, Senior Assistant Medical Officer, is appointed Medical Officer of the Post Office, in the room of the late Dr. Walter Lewis; and it is stated that the Postmaster-General intends to appoint a qualified medical lady to attend the female employés of the Post Office.

THE death of Dr. Francis Ker Fox, took place at Brislington Asylum, near Bristol, on Sunday, after an illness lasting only about ten days. Dr. Fox was the son of Dr. Edward Long Fox, the founder of the asylum, and for nearly sixty years he has been identified with that establishment. Dr. Fox was twice married—first to Janet, daughter of the Rev. John Simson, formerly vicar of Congresbury and afterwards of Keynsham, by whom he had several sons and daughters; and, secondly, to Mary Bradley, the sister of the present Dean of Westminster, by whom also he had several sons.

PRIZES OF THE ROYAL COLLEGE OF SURGEONS.

IT is stated that only one essay each for the collegiate triennial and Jacksonian prizes, offered by the Royal College of Surgeons, have been sent in this Christmas, when the time for so doing expired. These prizes are only offered for competition to members of the College.

THE MEDICAL SOCIETY.

ON Monday, Dr. A. E. Sansom delivered the first of the three Lettsomian Lectures on Forms of Valvular Diseases of the Heart. The lecture, which dealt with endocarditis, is published in our present number. The next lecture, on January 22nd, will be upon "The Morbid Anatomy and Treatment of Mitral Regurgitation."

THE VICARAGE OF BROMSGROVE.

THE Dean and Chapter of Worcester have elected the Rev. F. Paget, Senior Student and Tutor of Christ Church, Oxford, to the Vicarage of Bromsgrove, void by the resignation of the Rev. G. W. Murray. The new Vicar of Bromsgrove is the eldest son of Sir James Paget, Bart., and is a very distinguished scholar and able preacher.

BIRMINGHAM EYE HOSPITAL.

WHEN the new buildings of the Birmingham Eye Hospital, which are rapidly approaching completion, are opened, it is proposed to increase the acting staff, which at present consists of four surgeons, by the addition of two assistant surgeons. This change will give increased development to the out-patient department, and will leave the charge of the wards to the full surgeons.

VARIOLA AT WALSALL.

STAMPED out at Wednesbury, small-pox is appearing in the neighbouring town of Walsall. Last week five fresh cases were admitted into the Walsall Workhouse Epidemic Hospital, three being from Walsall, one from Darlaston, and one from Great Barr. The guardians complain that their efforts to stamp out the disease are impeded by cases not being reported to them. An outbreak in Long Street, Walsall, which extended to fourteen cases, is attributed to this cause.

COLLECTIVE INVESTIGATION OF DISEASE.

SIR JAMES PAGET and Sir William Gull have promised to deliver addresses on the Collective Investigation of Disease, at a meeting of the Metropolitan Counties Branch, which will be held at the Royal School of Mines, in Jermyn Street, on Wednesday next, January 17th, at 8 p.m. At the same meeting, the action to be taken by the Branch in regard to this important subject will be considered.

PORRO'S OPERATION.

DR. HEYWOOD SMITH performed Porro's operation in St. Giles's Workhouse on Monday afternoon, on a woman, aged 20, with a conjugate diameter of about an inch and a half. Before he saw the case, the head had been perforated, the child having died with prolapsed funis. An attempt was first made to extract with the cephalotribe and craniotomy-forceps, but without success. The uterus was drawn out of the abdominal wound before it was opened. The stump was secured at the lower angle of the wound. The patient was, on Wednesday night, doing fairly well; temperature 99° Fahr., pulse 116. She has been, however, greatly distended with flatus. She is a weak, strumous subject.

COMMUNICABILITY OF PHTHISIS.

IT will be seen by Mr. Sheild's paper in another column, that questions relating to this subject, similar to those issued on the fly-sheet in this JOURNAL last week, have been issued to the members of the Cambridge Medical Society, and that the replies and the discussion upon them were not devoid of interest and importance. More, of course, may be anticipated from the replies of the numerous members of the Association. Anything like certain information upon this great question can only be obtained by the collection and careful sifting of a large number of data. We trust, therefore, that those members who have not filled in and returned the fly-sheet, will be good enough to take the trouble of doing so without loss of time.

QUADRUPLE BIRTHS.

IN a recent report on the health of Mile End Old Town, Dr. Bate mentions two instances of the births of four children at one time. In one case, the first, a male, lived twenty minutes; the second, a male, two hours; the third, also a male, eighteen hours; and the fourth, a female, twenty-two hours: the mother partially recovered, but died thirty days after delivery from blood-poisoning, due to the breaking down of a uterine fibroid tumour. In the second case, two of the infants died shortly after birth, and the other two survived nearly three days; the mother also died during the week.

LIVERPOOL MEDICAL INSTITUTION.

AT the annual meeting on Tuesday, January 9th, 1883, the following list of Officers and Council, and Microscopical Committee, was adopted. Those marked thus (*) did not hold the same office last year. *President:* Mr. T. Shadford Walker. *Vice-Presidents:* Mr. E. A. Browne; *Dr. W. Macfie Campbell; *Mr. Rushton Parker; Dr. H. G. Rawdon. *Honorary Treasurer:* *Dr. James Barr. *Honorary General Secretary:* *Dr. Frederick Pollard. *Honorary Secretary Ordinary Meetings:* Mr. F. T. Paul. *Council:* *Dr. W. Alexander; *Dr. R. S. Archer; *Dr. W. Carter; *Dr. T. Clarke; Dr. A. Dunbar; *Dr. T. R. Glynn; Dr. J. Lambert; *Mr. W. McCheane; Mr. J. Kellett Smith; Dr. S. Spratley; Dr. J. H. Wilson; Dr. A. Wiglesworth. *Microscopical Committee:* Dr. Alexander Braidwood: Mr. Briggs; Dr. Glynn; Dr. Grossmann; Dr. Hicks; *Dr. McClelland; Mr. Newton; Mr. Rushton Parker; Mr. Paul; *Dr. Rich; Dr. Whitford; and Dr. W. Williams.

ROYAL COLLEGE OF SURGEONS.

A QUARTERLY meeting of the Council of the College was held on Thursday last the 11th inst. The minutes of the last meeting, held on the 14th ult., were read and confirmed. Reports were received from the several annual committees. The vacancy in the Court of Examiners, occasioned by the resignation of Mr. Luther Holden, was filled up by the appointment of Professor Christopher Heath, of University College Hospital. Mr. Holden being also a member of the Board of Examiners in Dental Surgery, a vacancy was likewise occasioned in it by his resignation; this was filled up by the appointment of Professor John Wood, F.R.S., of King's College Hospital.

MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

WE beg to draw the attention of our readers to the advertisement which appeared in our columns last week announcing that the President, on the occasion of the reopening of the Museum, after extensive repairs, will hold a reception in the Museum of the College this afternoon (Saturday, the 13th), from 2 to 4 o'clock, at which all Fellows and Members of the College, and Licentiates in Dental Surgery, are cordially invited to be present. Cards of invitation have been sent to Fellows of the College of Physicians holding staff appointments in the Metropolitan Hospitals. Should, however, any of those have been omitted, we are desired to intimate that their presence will be welcome.

HARVEIAN SOCIETY.

THE next meeting of the Society will be on January 18th, it is the annual meeting for the election of officers and the delivery of the President's address, which will be followed by a *conversazione*. The following is the list of officers proposed by the Council for the year 1883: *President:* *E. Symes Thompson, M.D. *Vice-President:* W. B. Cheadle, M.D., H. Cripps Lawrence, Esq., *G. P. Field, Esq., *Percy Boulton, M.D. *Treasurer:* *Thomas Buzzard, M.D. *Honorary Secretaries:* W. H. Lamb, M.B., *J. Ernest Lane, Esq. *Council:* Henry Power, Esq., D. Ferrier, M.D., J. Knowsley Thornton, Esq., H. W. Kiallmark, Esq., J. H. P. Staples, M.D., *H. Allen Aldred, M.D., *W. Hickman, M.B., *S. H. Davson, M.D., *W. R. Gowers, M.D., *Charles Vasey, Esq., *James E. Pollock, M.D., *Malcolm Morris, Esq. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

COMPENSATORY HYPERTROPHY OF THE KIDNEY.

PROFESSOR GOLGI has recently communicated to the Lombardy Institute the results of his experiments on this subject, showing the changes in one kidney when the other has been removed. The author points out that Valentin in 1839, basing his opinion on experiments, held that the increase in size and weight of the organ was due only to the increase of its contents through dilatation of the blood-vessels and of the canaliculi. In 1871, Rosentein supported almost the same view, attributing only a trivial portion of the augmentation to increase of the epithelium, or of the interstitial tissue. Of recent authors, Ribbert held, but without proving it, that proliferation of the epithelium accompanies the dilatation of the canaliculi. Tizzoni and Pisenti, on the other hand, asserted that the epithelium of the tubules was altogether passive. These last

authors, however, had overlooked the only criterion by which it was possible to say whether the cells were passive or not, namely, the series of changes they undergo in multiplying. Taking these changes as his guide, Professor Golgi found that the increase of a kidney after the removal of its fellow should be ascribed, at least in part, to a development of the pre-existing glandular tissue. Whether new canaliculi are formed, he does not as yet feel authorised to say; and on this point he thinks further researches are desirable.

LORD MORLEY'S COMMITTEE.

It is understood that the increase in the Army Hospital Corps, which has just been resolved on by the War Office, is one result of the evidence which has been laid before Lord Morley's Committee at the War Office on the Hospital Service of the Army, respecting the limited number of the hospital attendants relative to the demands for their services in home and foreign hospitals, as well as in transports conveying military invalids. This deficiency was one of the points chiefly insisted on in the report by Mr. Ernest Hart, published in this JOURNAL, on the alleged defects in the working of the Army Medical Department in the Egyptian campaign. The fact of returning to the system of recruiting the corps from the ranks of regiments, instead of continuing the plan of direct enlistment, we understand to foreshadow changes in the training depôt at Aldershot, so far as the teaching of military drill there is concerned. The circular issued from the War Office calls for volunteers from regiments for this service. Volunteers must not have served less than one year in the ranks, nor more than three years. Non-commissioned officers up to the rank of sergeant, who may volunteer for service in the hospital corps, will be allowed to retain their rank, instead of commencing as privates, as formerly was the rule.

THE NEW "VICTORIA HOSPITAL," CAIRO.

Our letters from Egypt announce that, by desire of the Khedive, the hospital started at Cairo, by Lady Strangford, for temporary war purposes, will have a final and permanent establishment there; and will henceforth, by special direction of the Khedive, bear the name of the Victoria Hospital. Mr. Alonzo Money has communicated to the committee the intention of the Egyptian Government to make a subsidy for next year of £2,000. The hospital will have sixty beds for in-door patients, and will provide for as many out-door patients as can be treated during two hours daily. Facilities will be given for students of medicine, and ladies desirous of learning the art of nursing. The accounts will be open to Government audit, and any surplus will be held at the disposal of the Government. On the 29th ultimo, Lady Strangford and Mr. Herbert Sieveking, the medical officer who has, from the first, had medical charge of the hospital, were received by the Khedive for a farewell audience. He received them in a room alone, chatting with them for some time, and expressing a warm sense of the value of the work done. In the course of the interview, the Khedive presented Mr. Sieveking with the Order of the Medjidie, fourth class, as a *souvenir* of his services.

MEDICAL JOURNALS IN AMERICA.

Medical journalism in America shows great activity. The most recent addition to the ranks of weekly medical journalism is the *New York Medical Journal*; this had hitherto appeared as a monthly magazine, and has long been known for its literary and scientific excellence, and the care with which it is conducted. The first number of the new weekly issue is a very good one, and the papers are by some of the best known names among the profession in New York. The *Philadelphia Medical News* continues an apparently prosperous and an eminently vigorous career, and begins its second year of existence with every promise of strong vitality. These journals have, however, powerful and able rivals, already in possession of the field, in the well established and able weekly, *Philadelphia Medical Times*, and in the *New York Medical Record*, which still maintains its position as a weekly medical journal of great resource and large circulation. Still, the progress of American medical journalism during the last few years has been very remarkable; and the new accessions to its ranks have at once assumed to themselves a very high standard of excellence, and compare favourably with the medical journals of any country. Against so many and such powerful and ably conducted rivals, the proposed medical journal of the American Medical Association, which lies still in the womb of time, will have much to do to hold its own.

PROPOSED MEMORIAL TO DR. C. MOREHEAD.

A committee has been formed in Bombay for the purpose of raising funds to endow a Scholarship or Exhibition in the Bombay University in memory of the late Dr. Morehead, C.I.E., whose eminent services as the first Principal of Grant Medical College, whose researches on Indian diseases, and whose successful labours in the cause of medical education in Western India are universally acknowledged. It is thought that, not only members of the medical profession generally, but many former friends and contemporaries, who were acquainted with the valuable work Dr. Morehead performed, should have an opportunity of testifying their regard for his memory, and of joining in the only useful way now possible of perpetuating his name as a great benefactor to the Natives of India. At the request of the Bombay Committee, Dr. Giraud (Shanklin, Isle of Wight), or Dr. W. C. Coles (Bourton-on-the-Water, Gloucestershire), will receive and acknowledge subscriptions and forward them to Bombay. Subscriptions of £5 each have been paid by Dr. Giraud, Dr. Coles, Mr. Peele, Mr. Carter, Dr. Hyslop, and Dr. Sanderson, and others are promised.

DEATH FROM INHALATION OF COAL-GAS.

Another death from the inhalation of coal-gas has occurred in Birmingham. On January 5th, Mr. Henry Hyman was poisoned by gas at his residence in Belgrave Street in that town. When the deceased came home the previous night, he complained of being unwell, and asked his wife to sleep in their nursery. This she did, and her husband slept alone; but he was found in an unconscious state when called in the morning, and he died in an hour and a half afterwards, his death being attributed to poisoning by an escape of gas in his bed-room. It appears, that the gas-supply of the house was turned off at the meter before the family went to bed, but not at the tap of the burner in Mr. Hyman's room. The servant turned the gas on again at the meter in the morning, to get light to enable her to do her work downstairs, not knowing it had not been turned off in her master's room. At half-past eight, she went to call deceased, and she found him insensible, there being an overwhelming smell of gas in his room. This is the third fatal case of poisoning by coal-gas which has been reported in Birmingham within twelve months. In the present instance, there appears to have been extraordinary negligence. A considerable escape of gas in a bed-room which is inhabited is extremely dangerous. The inhalation of air freely charged with coal-gas by a sleeping person is not likely to rouse him, but rather to deepen his sleep into a fatal coma. In the two other cases of poisoning to which we have referred, the result was due to defective gas-pipes and gas-fittings in sleeping-apartments.

HARVEIAN SOCIETY.

Mr. Noble Smith read a paper on January 4th, upon Lateral Curvature of the Spine, illustrating it by morbid specimens and several diagrams. He urged the importance of dealing with each case according to its cause and the stage at which it has advanced; moreover the general health, he thought, nearly always required attention. The most interesting part of the paper was that in which was described a plan of muscular exercise, founded upon

the fact that rotation of the vertebræ is the point of greatest difficulty in dealing with curvatures of the spine. The system advanced aims at rotating the vertebræ back into their normal position by use of the muscles. Mr. Noble Smith alluded to a plan of exercises which has been recommended for acting directly upon a dorsal curve by drawing out the concavity; and he demonstrated in a very practical manner that, while such exercise tends to increase the rotation of the vertebræ, the exercise which he advises acts in a contrary manner. He also advocated general exercises of the erector spinæ muscles and other appropriate treatment. Spinal instruments were referred to. He objected to all those instruments which interfere with the action of the muscles of the trunk, and he demonstrated how the spine could be supported in an upright position during rest of the muscles, and how the deformity could be acted upon with a lightly constructed instrument, which does not interfere with the use of the muscles. He is of opinion that by means of such an apparatus, in addition to the excellent system of exercises already referred to, a more rational plan of treatment is offered to us than any hitherto described.

MR. GLADSTONE.

WE are happy to be able to state, on the best authority, that Mr. Gladstone is only suffering from fatigue and some nervous exhaustion, from which he already shows signs of early recovery. The announcement that Mr. Gladstone's medical adviser has felt compelled to lay upon him the strictest injunction to allow himself a period of absolute mental rest, or, at least, an abstinence from all public exertion, will not have been received with surprise, however much the immediate occasion for it is, and must be, a source of regret, as indicating that the stress of unusual and protracted political labours has tried, more than could be borne, the marvellous physical and intellectual strength of the illustrious statesman. It is satisfactory to know that Mr. Gladstone's worst trouble has been loss of sleep, and its consequent fatigue. The last session, it will be remembered, was not only an unprecedented addition to Ministerial labours, but, as there were no private members' nights, it necessitated the nightly and continuous attendance in the House of Commons of the Prime Minister, on whom the heat and burden of the strife fell chiefly and most heavily. During a long and marvellous career of public work of unexampled magnitude and importance, Mr. Gladstone has always enjoyed in a special degree the invaluable privilege of sleeping well and soundly, and thus restoring, by the calm slumber of the night, the waste of energy involved in the physical and intellectual expenditure of the day. An interruption of this all-important function of restorative rest was necessarily to be regarded with anxiety, and gave the strongest grounds for the caution which Dr. Andrew Clark has felt called upon, for medical reasons, firmly and judiciously to prescribe. Powers so great, and a devotion to the public service which knows no bounds, find at last their limit. But a season of rest will, there is the fullest reason to believe, restore Mr. Gladstone to the ability soon again to resume those burdens of the State which he carries with such remarkable lightness and strength, and to recommence his splendid public labours as of old.

THE ETHICS OF CHRONIC LUNACY.

A NEWSPAPER paragraph announces that there has just died, in Barming Heath County Lunatic Asylum, near Maidstone, a lunatic named Elizabeth Wright, chargeable to the parish of Greenwich. She has been in the asylum since 1845, or nearly forty years, and her cost to the ratepayers has during that time been £982. This, however, is merely the cost of her maintenance; and the establishment charges would bring the cost up to considerably more. She had not been visited by friends for many years. Such a case as this is apt to make those medical reformers who, on medical and scientific grounds, are anxious to sweep as many cases of obvious lunacy as possible into asylums under skilled care and well regulated charge, pause somewhat in the universal application of these principles. No doubt, during the long life of this unfortunate person, she was secured good medical care, official kindness, and adequate diet; and thus far the State has done its duty, and the conscience of the country is satisfied. On the other hand, if it be permissible to speculate on both sides of the question, moralists will be apt to think that one of the main reasons which make it imperative to show the utmost kindness and solicitude for preserving, throughout a protracted series of years, the existence of a helpless and afflicted person, has not here been satisfied. The very act of performing personal duties, to one so afflicted and so helpless, is in itself a wholesome discipline, and education of the better kind, to those on whom such duties naturally fall. It may be doubted whether the official nurse is thus influenced, to the same extent and in the same degree; it may be questioned whether the friends and relatives of such a person would not be morally benefited, were it found possible to devise a system whereby, instead of being wholly relieved of their burden, they might be assisted to perform their natural duties; and it may certainly be doubted whether a harmless lunatic would not, on the whole, be at least as happy and as well cared for, if left in the charge of friends, assisted by the State if necessary, with due supervision, rather than by systematic immurement in a great institution. On the whole, such a case as this would tend to revive in many minds a feeling in favour of a reinvestigation of the question of boarding-out of lunatics, under the charge of local committees, on the same plan as that by which pauper children are now successfully boarded-out in Ireland, Scotland, and in many parts of England.

PROTECTION OF INFANT LIFE.

ANOTHER example is supplied by the police reports this week of the mischief which was done by those advocates of individual liberty, who maimed the Infant Life Protection Act by exempting women taking not more than one child at a time for gain, from registration and inspection. The provisions of that useful Act have proved successful in putting an end to baby-farming on a large scale, and have compelled the registration of all places in which it is proposed to take more than two children at a time for gain; but it is to be feared that to some extent this system has been superseded by a method of slow starvation, of neglecting infants in single file, so to speak. There is at present, thanks to the disturbing vigilance of certain ladies who constitute themselves the advocates of liberty of the baser members of their sex, great facility to commit systematic manslaughter amongst the helpless beings in whose behoof the Infant Life Protection Act was promoted by us and by the Infant Life Protection Society. This measure was so maimed as to afford no facilities for protecting infants put to nurse singly, with however bad designs, and under the care of women however unscrupulously criminal. The following report is but one of many examples which indicate how widespread and how dangerous is this abuse. It is only the exceptional cases, which come by chance to light, that can indicate the extent of the evil. A woman, named Amelia Evans, of Rotherhithe, has been brought before the Greenwich magistrates, charged on remand with wilfully neglecting to provide proper food and nourishment for a child named Albert Blackman, aged six months, who had died since the prisoner was taken into custody. Mr. S. Babey, Inspector under the Infant Life Protection Act, was present. Mr. R. J. Shepherd, surgeon at St. Olave's Union Infirmary, gave the result of his *post mortem* examination of the body, and expressed the opinion that death was not caused by starvation, although neglect had accelerated it. He found the kidneys diseased, but thought that under proper treatment the child would have lived. There was no hope for its life when he first saw it. There were bruises on the face and body, and gangrene had commenced; but these had nothing to do with the death, and were probably caused by the struggles of the child. The fact of its lying long in its cradle

in a filthy condition would irritate the diseased kidneys. He found a clot of blood on the heart.

GERMAN CRITICS OF M. GAMBETTA'S PHYSICIANS.

If Dr. Neumeyer, of Berlin, be indeed responsible for the utterances which are ascribed to him in the daily press, on the subject of the treatment of M. Gambetta, those observations are greatly to be regretted on his own account and for the sake of the reputation of the profession in Germany. In this country, a more careful adherence to fairness and courtesy is generally displayed, and always expected. It was impossible that at the time he spoke he should be at all accurately acquainted either with the details of the actual circumstances of the present illness, or with the previous constitutional conditions and life history of the patient. He is alleged to have "ascribed the decease of M. Gambetta, like that of President Garfield, to the incompetency of the attendant doctors." The rash attack which was made by an eminent German surgeon upon the surgeons and attendants upon President Garfield, did nothing to raise the opinion of the profession throughout the world, either as to the skill or the judicial capacity of the critic. Nothing could be more shallow or more unjust than were those criticisms, unless it be those observations now attributed to Dr. Neumeyer. Even where all the facts of all the conditions are presumably well known, it is eminently unsafe for a critic at a distance to sit in judgment on the professional advisers of any public man, and to censure them for not taking steps which might, in the opinion of their critic, seem disadvantageous. In a case such as this, where the information was imperfect, and the criticisms are obviously shallow, and based on the most incorrect data, they are especially to be deplored. With the utmost ill-will it would be difficult to find fault with the accomplished and able body of consultants who sought to save M. Gambetta from the fatal issue of his formidable disease. The details of the *post mortem* examination, and the past clinical history of the patient, have amply justified every step that was taken; and however much and greatly France has to deplore the loss of her illustrious son, there is at least nothing to regret in respect of the skill and the professional care with which he was attended during his last fatal illness.

INJUDICIOUS FEEDING.

We are very glad to see that Dr. Danford Thomas made very sensible comments *à propos* of the death of a child in the Central District of London this week, found dead in bed, and whose death was attributed to atrophy from non-assimilation of food, and apparently also from injudicious feeding. It is one of the many advantages of the appointment of medical men as coroners that they are able to fulfil what is really the essential function of the coroner, that is, to determine the cause of death irrespective of the criminal applications of the inquiry, and of turning their knowledge in their judicial position to great public advantage by conveying information and advice which comes with a better grace and with more force from them than from any other quarter. It is unquestionably true that there still exists a vast amount of ignorance among mothers of all classes—the richer as well as the poorer—on the subject of the feeding of infants, and that the untiring energy of advertisers in puffing starchy foods for children, and the somewhat injudicious assistance which they occasionally receive from medical friends who have imperfectly acquainted themselves with the composition of such articles, lead extensively to the use of various so-called foods for infants, which are very ill suited for the purpose of nourishing children in early life. The difficulty with which farinaceous food is assimilated by infants is well known, as a rule, to medical men, but apparently they have not succeeded in instilling this information with sufficient force into the minds of mothers generally. A complete elimination of three-fourths of the infants' foods now extensively sold would, probably, lead to a remarkable diminution in the present infant mortality. There is no food for infants, in ninety-nine cases out of a hundred, where they have to be brought up artificially, which can be compared to ordinary condensed milk properly diluted.

WORKING MEN'S CLUBS AS PROVIDENT DISPENSARIES.

A movement, originated by a spontaneous combination of the friendly societies of the town, is on foot in Birmingham, which may possibly result in considerable modifications in the medical service of working men's clubs, by their practical conversion into provident medical dispensaries under the exclusive control and management of the club-members. A short time ago, a committee of representatives of friendly societies in Birmingham was appointed, to consider and report upon the best system of providing medical attendance and medicines to the members of such societies. The committee have just printed their report, in which they state that, having fully considered "the old club-doctor system", they recommend an amalgamation of the various societies to carry out a scheme for establishing provident medical institutions throughout the town, for the exclusive use of members of the constituent friendly societies, their wives and families; and to provide stipendiary surgeons, who shall devote the whole of their time to the professional work of the societies. The committee calculate that, to ensure the success and satisfactory working of the scheme in Birmingham, it will be necessary that there should be an amalgamation of societies sufficient to guarantee twenty thousand members. The contributions for this number of members would cover the liabilities of establishing six branches of the institution, and support the medical officers connected therewith. Amongst the advantages which the committee claim for their project, they give the following: that the societies would be able to purchase all drugs and medicines at the best market, and be able to command a supply of the best and purest drugs that can be obtained; and would also be able to supply the members with cod-liver oil, quinine, and other expensive medicines, whenever the case required it.

MINIMAL MIDWIFERY MORTALITY.

We publish a report of two years' results of the ward work of a metropolitan lying-in hospital, which will deservedly attract some attention. It will be seen that the mortality of the British Lying-in Hospital, Endell Street, during 1881 and 1882, has not exceeded 0.6 per cent. on a total of 332 cases, including twelve cases of obstetric operations, all of which had a successful ending. This may fairly be considered, *pro tanto*, or to a great extent, a tribute to the value of the rigid observance of antiseptic precautions in midwifery. Dr. Fancourt Barnes and Dr. Heywood Smith have during these two years introduced the use of the carbolic spray as an essential part of the daily routine, and of the ordinary obstetric service of the wards. It is needless to say that the concurrent antiseptic precautions, of which this is the corollary, are also carried out with scientific exactness, and that the discipline of the nurses is carefully controlled by the medical officers, and not left, as in some other institutions, to the more or less enlightened common sense of the matron and nursing staff. Of course allowance must be made for fortunate series, but the cases appear to have been of at least average severity; some of them being indeed unusually threatening at the outset. The record is one which is highly satisfactory, and which may prove to be pregnant with future professional instruction. M. Tarnier, chief surgeon of the Maternity of Paris, has, we notice, in a recent lecture, mentioned that he was so much impressed with the advantages of the carbolic spray in the wards, and the excellence of the clinical results which he observed in his visit to the British Lying-in Hospital during the session of the last International Medical Congress in London, that he forthwith adopted precautions framed after this model, and including the routine use of the carbolic spray in the wards at the Maternity, and he congratulates him-

self and the institution on the success which he thus obtained in securing a considerable reduction on the morbidity as well as in the mortality of his patients—both mothers and infants.

THE MCGILL COLLEGE AND ITS FOUNDERS.

An interesting monograph, giving the history of the establishment of this, the first medical school in Canada, in the year 1822, records that it will ever be memorably associated with the names of Stephenson, Holmes, Robertson, and Caldwell, who, in October 1822, when constituting the Medical Board of the General Hospital at Montreal, then recently organised, adopted resolutions in favour of the establishment of a medical school, to be called the Montreal Medical Institution. The measures to be adopted for carrying the same into effect were submitted to His Excellency the Governor-in-Chief of Canada, who signified his entire approbation of the plan. The following was announced as the first list of lecturers: Anatomy and Physiology, J. Stephenson, M.D.; Chemistry and Pharmacy, A. F. Holmes, M.D.; Practice of Physic, W. Caldwell, M.D.; Midwifery and Diseases of Women and Children, W. Robertson, Esq.; Materia Medica, H. P. Loedel, Esq.; Surgery, J. Stephenson, M.D. In the course of the summer, 1824: Botany, A. F. Holmes, M.D. The first session of which there is any record is that of 1824-25, at which twenty-five students attended. The Medical Institution continued for five sessions, and in 1829 became the Medical Faculty of McGill College, thereby preserving for educational purposes the bequest of the Hon. James McGill. In 1823, an attempt was made to organise McGill College, and five professors were appointed, one, Dr. Fargues, to the Chair of Medicine; but they never entered upon their duties. Up to 1853, there was only one professorship in the Medical Faculty. At this date, the various lecturers were made professors. The lectures were suspended during the political troubles of the rebellion; there was no sessions in 1836-37, 1837-38, and 1838-39. It was not until 1872 that the present building in the University grounds was erected by the governors, to be wholly set apart for the purposes of the school.

A LAMENTABLE MISTAKE.

Dr. Danford Thomas last week held an inquiry at the Oporto Stores Tavern, at St. Giles's, touching the death of Sarah Hitterton, aged 18, a single woman, a flower seller, who lived with her aunt at 11, Sardinia Place, Lincoln's Inn Fields. The evidence went to show that the deceased, on the previous Friday afternoon, complained of a pain in her stomach, and her aunt went to the London Medical Mission, St. Giles's, in order to procure assistance. Mr. Pybus, the medical officer at the institution, gave her some medicine, and on the following morning visited the deceased, whom he found lying on a sack, with two sacks covering her, on the stone floor of the kitchen, which was lighted only by a window about a foot square. The place was destitute of fire and furniture, and was in a most wretched condition altogether. Mr. Pybus, on his arrival, found that the deceased had given birth to a child, which was lying dead by her side; but as his Mission did not deal with midwifery cases, he did not help the mother in the necessary way, but told her aunt to call in the parish doctor at once. The aunt then saw the assistant relieving officer of St. Giles, who visited the deceased, whom he then believed to be in a dying state; but he said he could not remove her to the workhouse infirmary until he got a doctor's certificate. He supplied no nourishing food of any kind, thinking this was being done by Mr. Pybus. The deceased expired on Saturday night without having been treated by a medical man in the way a woman in her condition required. Ultimately the police were called in, and Mr. Mills, divisional surgeon of the E division, saw her dead. He afterwards made a *post mortem* examination, and found that the cause of death was syncope consequent upon loss of blood. No nourishment, he said, would have saved her life. She required a medical man to do what was necessary in order to prevent her from bleeding to death. The jury, after deliberating in private, returned a verdict to the effect that the deceased died from syncope consequent upon internal hæmorrhage; that Mr. Pybus should not have left her until she was out of danger and another medical man had arrived; and that, in the circumstances of the case, the relieving officer should have exercised a wiser discretion and have given an order for immediate medical attendance when he discovered her perilous condition. This decision of the jury appears to us to have been in accordance with the soundest common sense. No medical man brought face to face with a case where life or death may depend on his action or inaction, is at liberty to disregard the dictates of humanity. If the rules of his "Mission" forbid Mr. Pybus to exercise his professional charity in such cases, they should be amended; and in the meantime they would be more honoured in the breach than in their observance.

PRESCRIBING BY DRUGGISTS.

In reference to the inquest on the body of Mary Wernhurst, on which we commented on December 23rd, Mr. Wooton writes to *The Times* denying that he was cautioned by Dr. Danford Thomas, the coroner, as to any statements he might make, or that Dr. Thomas said "Mr. Wooton had taken upon himself to prescribe for a patient, who died from his prescription." Mr. Wooton states that the jury did not return a verdict of "Death from poisoning by opium"; and goes on to say—"Moreover, I was not censured for prescribing such opium. It is true that, without consulting me, my assistant was 'led into the error,' as the Coroner remarked, of prescribing what he conceived to be a simple harmless sleeping draught. This contained ten grains of bromide of potassium and six minims of laudanum, scarcely equivalent, as Mr. Blyth, the medical officer of Marylebone, said 'to half a grain of opium;' and this 'he hardly thought would be likely to accelerate the deceased's death, unless her blood had been already poisoned from the state of the kidneys.' The verdict recorded by the Coroner described death as resulting from bronchitis, accelerated by a dose of opium prescribed by William Armstrong, assistant to Mr. Wooton." Mr. Wooton is entitled to whatever benefit arises out of this statement; but we do not see that it makes the matter any better, but, on the contrary, makes it rather worse. It seems to indicate that Mr. Wooton, like many other druggists, allows counter-prescribing, under the idea that rule of thumb serves for the practice of medicine. The case in point is, according to his explanation, precisely an illustration of the extreme danger of the practice. Even harmless doses under ordinary circumstances become, under special constitutions and conditions, extremely dangerous. For example, it is when kidney-disease is present that even moderate doses of opium become dangerous. A druggist or assistant prescribing over the counter, not having the medical knowledge or insight into the case, or the opportunity of making a minute examination of the general constitutional and organic conditions, such as a medical practitioner makes in ninety-nine cases out of a hundred, would be entirely unaware of this complication, and prescribe blindly in the dark; and a harmless dose, or what would be a harmless dose under ordinary circumstances, would unconsciously but surely hurry his patient to the grave.

HOSPITALS AND FUNERALS.

The Misericordia Hospital, which is the chief hospital of Rio de Janeiro presents in its constitution certain altogether unique elements. It is a large building capable of accommodating two thousand patients, magnificently situated on the Praia de Santa Luzia, and overlooking the entrance to the Bay of Rio. Entering the hospital by a long flight of marble steps, the visitor arrives at a large vestibule, and finds on his left hand a spacious dispensary filled by a motley crowd of out-patients, of all ages, of both sexes, and of every nationality. Corridors extend from the vestibule, and one of them leads to a set of offices and workshops such as are not, we believe, to be found in any other hospital in the world. By an arrangement, at once ingenious and

cynical, the institution enjoys a monopoly of undertaking; it makes all the coffins, and organises all the funerals for the town of Rio de Janeiro, and derives a large part of its income from this source A great number of hands are employed in the coffin manufactory; the coffins are of the lightest description, roughly nailed together, and closed by a lid which opens on hinges; when the body has been placed in the coffin, the lid is locked. Coffins of all sizes are constantly kept in stock, ranged on shelves according to their size, so as to be ready at a moment's notice; they are covered with a thin black, red, or violet material, are bordered with gilt tinsel, and altogether have an appearance rather suggestive of bon-bon boxes. The coffins vary slightly in quality; and the funerals, also, are of the first, second, and third class, according to the sum the friends of the deceased are willing to expend. The funeral department of the hospital also supplies the candelabra, the altars, catafalque, and all the other paraphernalia of a *chapelle ardente*. The hospital has an additional source of revenue in a tax on every ship entering the harbour; in return, it is entirely free to every nationality, so that Englishmen, Germans, Italians, Spaniards, Russians, Chinese, and Negroes, are constantly to be found within its walls. There are special wards for women, for ophthalmic cases, and for children. In connection with the last, there is a small orphan school. The floor of every ward is of polished wood, and a dado of blue and white tiles runs round the walls; each wing has its own garden and special staircase leading into it. There are also private rooms for paying patients; containing one, two, or three beds, according to the tariff paid. The ventilation is carefully attended to, and is considered to be very successful. The nursing is in the hands of the Order of St. Vincent de Paul, who maintain about sixty Sisters of Mercy in the hospital. They not only nurse the patients, but render assistance in the dispensary, and have charge of the instrument room. There is a medical school attached to the hospital, and for its use a library, museum, dissecting-room, and other necessary accommodation are provided; the weekly average of in-patients is said to be about 1800, the yearly 14,000, so that there are about 230 new patients admitted weekly. The death-rate is 13 per cent.

POISONING BY STRYCHNINE.

A PARAGRAPH has been going the round of the daily press stating that the evidence given on a criminal trial some time ago in Germany shows the inadequacy of scientific notions as to strychnine poisoning, and the detection of the poison in putrefying bodies. As the published evidence of the four experts—Ranke, Buchner, Gorup-Besanez, and Wislicenus, who made an experimental study of the subject, does not bear out this statement in its entirety, we publish it in the form in which it has reached us. Seventeen dogs were each caused to swallow a pill of five centigrammes (three-fourths of a grain) of strychnine nitrate. The first tetanic attack supervened in from five to eighty-three minutes, and the average interval was eighteen minutes. The tetanic fits were few, generally two or three; these lasted, on the average, one minute, and death almost always supervened during a tetanic attack. The average period between the administration and death was thirty-five minutes, but varied greatly. On the other hand, the interval between the first access of spasm and death varied little, never reaching half an hour; and the average was eleven (?) minutes (*sic*). The race, and the weight of the animal, had no influence on these intervals. Immediately after death there was complete muscular resolution, and rigor mortis set in from 21 to 97 minutes after death; the average interval being fifty minutes. It began in the fore-limbs. The duration of rigor mortis was the same as in other kinds of death; and sixteen hours after death it was rapidly diminishing. The alkaloid was searched for in bodies exhumed after 100, 130, 200, and 330 days respectively, by Stas's method (modified); but the experimenters were unable to find strychnine, even when a decigramme (a grain and a half) had been taken. This is the more remarkable, inasmuch as, even in the longest buried dogs, the products obtained had a bitter taste. Dragendorff has, however, objected to the method employed, and states that by his own method 1-65,000th part of a grain of strychnine may be detected; whereas the physiological method requires 1-16,000th of a grain of the alkaloid. Ranke and his colleagues think the physiological reaction to be infinitely the most delicate. Frogs were employed; and on these animals the tetanising action was more pronounced the shorter the time that the animal furnishing the extract had been buried. The extracts from highly putrefied bodies produced in frogs torpor, with weak and sluggish cardiac movements, which might retard and partly mask the action of strychnine. It has been suggested that ptomaines might exaggerate or simulate the action of strychnine; but we find no foundation for such a suggestion in the above experiments. While the action of putrid matter is most conspicuous with extracts from the intestines, the action of strychnine is most pronounced with extracts from the liver and spleen. It appears to us that these experiments show that there may be a failure to detect strychnine by either chemical or physiological reactions; but that there is, with due care, little likelihood of strychnine reactions being obtained where none has been administered.

SUDDEN DEATHS IN THE FOOTBALL FIELD.

TWO young men have recently died in the football field, but in neither case does death seem to have been due to any of those peculiar qualities of the game which have, from time to time, called down the censures of the moralist. If football be not a brutal game, it yet betrays certain brutalising tendencies; as at present played, some of its more ferocious features are mitigated, and we are pleased to learn that a further movement in this direction is now being made by the football legislature. It is not our province to discuss the ethical aspects of the question, but cases such as those to which we refer must raise the question—Is the game indeed worth the price it costs? Both the recent victims were young men. One was acting as umpire; he suddenly fell and expired, and his death was attributed to the effect of excitement on a diseased heart. The other was the captain of the "Old Blues of Dulwich," a young man of twenty-three; while running after the ball, he was seen to stumble, and fall to the ground; when medical assistance arrived, he was dead. The death was attributed to heart disease, on what grounds we know not; but evidently the probabilities are in favour of this hypothesis. It would not be just to make too much use of such cases as these, as an argument against football, for evidently in either case death might have been brought about by any similar violent exertion. Of all outdoor sports, football calls for the severest exertion; this is tacitly admitted by the short duration of matches, for, whereas a cricket match may last for three days, a football match is not prolonged beyond an hour and a half, or two hours; herein probably lies one of the most dangerous elements of the game. A young man, who for five days and a half is chained to an office-desk, or confined to the lecture-room, or to the wards of a hospital, devotes the afternoon of the sixth day of the week to a game, which makes a sudden and unaccustomed call on his physical powers. This is to put his system to a very severe test; the severest that can well be imagined. That mischief results, we have the evidence of such exceptional cases as those which have given rise to these remarks; but they are exceptional only in regard to their termination. There is no doubt that in a multitude of cases the beginnings of structural disease of the heart may be traced to strain and over-exertion at football, occurring in young men whose manner of life does not qualify them to make such occasionally severe exertion as the sport entails. We could put our finger on more than one instance of hypertrophy of the heart, with all its attendant dangers and discomforts, occurring within the circle of our own acquaintance, and distinctly traceable, as distinctly as anything of the kind can well be, to football playing. It is not so much the severity of the

game itself that we quarrel with, but the fact that the exertion has to be made by young men and lads whose ordinary mode of life does not at all prepare them for such exertion. If the game were followed every afternoon, the evil would be lessened, or would cease; it is the concentration of a whole week's exercise into two hours of fierce strife, that is so mischievous.

TEMPERANCE.

IMPORTANT traces of the progress of the temperance movement are deduced by the *Daily News*. This progress, it says, may be seen in the records of home consumption of wines, spirits, and beer this year. Enthusiastic supporters of the movement have been disposing of their wine-cellars; and, while the consumption of spirits has distinctly fallen off this year, the increase in the quantity of beer charged with Excise duty is small, when the steady growth of population is taken into account. Moreover, the beer duty is too new, having begun to operate in October 1880, to allow a proper comparison over years. From the following comparison it may be learnt that the consumption of imported wine is nearly 8 per cent. less this year than last, and 9 per cent less than in 1880; in imported spirits, the decline is at the rate of 1¼ per cent. on last year; in home-made spirits, for which the returns are only made up for nine months, the decrease is 1 per cent. The following tabulation of these results is from official data:

HOME CONSUMPTION.

	1880.	1881.	1882.
Wine (for 11 months), gallons	14,597,000	14,389,000	13,309,000
Spirits, foreign (same period), gallons	7,507,000	7,374,000	7,289,000
Spirits, home (nine months), gallons	19,856,000	29,394,000	20,563,000
Beer charged with duty (do.), barrels	—	20,185,000	20,169,000

Allowing for increase of population, the rate of decrease in the home consumption of spirituous liquors is very distinct indeed. It is also interesting to observe the remarkable growth of the consumption of tea at the same time. So far, this year compared with last, the growth has been at the rate of 3 per cent.; in cocoa it is 8 per cent. Were there any means of getting at the quantity of aerated waters consumed in place of alcohol similar results would no doubt appear. The figures available are these:—

HOME CONSUMPTION.

	1880.	1881.	1882.
Tea (11 months), lbs.	146,886,000	148,308,000	152,797,000
Cocoa (same period), lbs.	9,863,000	10,278,000	11,113,000

The foregoing comparison further helps to strengthen the conviction that happily the will, not the power, to consume spirituous liquors is weaker in this country. From the standpoint of the mere financier, it is satisfactory to find evidence that the diminished popular expenditure on alcohol does not imply a diminished spending power, or a feebler tax-bearing power on the part of the nation. Meantime, statesmen are called to take serious note of the fact that the revenue accruing from taxes and duties on exciseable liquors in this country has been diminished by nearly three millions in the years 1881 and 1882.

FROST AND FEVER.

IN dealing with an outbreak of enteric fever that occurred in the Midhurst Rural District during 1881, Dr. Kelly refers specially to the lengthened period of incubation, and suggests the probability of its having been caused by the severe frosty weather which prevailed at the time. There were three deaths from the disorder in a small and dirty cottage at Heyshott, which, at the date of the outbreak, was occupied by seven persons, whose ages ranged from seven to fifty-two years. A daughter, Mary M., was at service in Eastbourne at a time when there were several cases of enteric fever in that town. She fell ill with that disease, and was taken to the infirmary in the first week of September 1880; she was there eight weeks, and returned to her parents' home on November 5th. Rose M., another daughter, came home from service on March 19th to aid in the nursing; she escaped the disorder. Lily M., aged nine years, was first taken ill, and then the other inmates were attacked one after the other, but at considerable intervals of time. There were no other cases in the neighbourhood at the time, and the fever was confined to this cottage. The healthy inmates could not be removed, as no one would take them in, and there was overcrowding when the daughters came back from service. The origin of the outbreak seemed to be due to Mary M. returning home while she was in an infectious state. If this were the case, then the incubation period must have been much longer than what is usually stated. It must be remembered, however, as Dr. Kelly observes, that from Christmas 1880 to Janury 26th, 1881, there was a spell of very cold and dry weather; no rain fell during the first seventeen days of January, but the ground was dry and frozen. Then came the great snowstorm of January 18th, succeeded by a thaw on January 26th, when the frost broke up and the air and soil became damp. It seems possible that the outbreak was due to the excreta, in the case of Mary M., remaining infectious for some time after she came home, and that the frosty dry weather aided in checking any noxious emanations. The excreta were not buried separately, but an ordinary closet was used by all the members of the family. The mild damp weather after January 26th would be favourable for the further development of any infectious germs, and a fortnight after the change in the weather the first case occurred. The disease being once established in the cottage, the other inmates caught the disorder either from the foul state of the air and clothing, or from the excreta.

PREVENTIVE FAMILY PRACTICE.

THIS subject, which is one of peculiar interest to the general practitioner, and has of late received much attention, is especially considered by Dr. J. Wilkie Burman, in an article which lately appeared in the *Practitioner*, and comprehends a much larger number of subjects than are usually included in the words "preventive medicine." The duty of affording patients the information necessary to prevent ordinary illness, by means of proper diet, clothing, avoidance of late hours, undue indulgence in sedentary habits, and other cognate matters, has always been acknowledged by the profession. In addition to this, most medical men have made it part of their ordinary routine to point out defects of drainage, ventilation, etc., when they have come under their notice. These duties have long been carried out so efficiently and disinterestedly, that the Rev. Charles Kingsley said, in one of his interesting addresses, "that, if the medical men of this country were what the world calls alive to their own interests, they would oppose, instead of encourage, the delivery of lectures and the giving of advice on sanitary matters." It is, therefore, by no means necessary, as advised by Dr. J. Wilkie Burman, that medical men should, in consequence of a diminution in their emoluments from this kind of advice, contract with families at a certain sum per head. There is no doubt that occasional calls from the medical attendant, and a chat about the health of the family, assist in keeping away severe attacks of disease by early treatment, which would otherwise have been omitted. Dr. Burman, however, goes much further than this, as he recommends, amongst other things, that the family practitioner should give advice about marriage, or, as he terms it, "judicious marriage," and point out the kind of person a lady should accept, or a gentleman select, so as to have healthy offspring. In evidence of the value of such advice, he points out the great improvements that have been effected in breeds of cattle and other animals; but we think that the English people must be much more advanced in knowledge of hygiene and physiology, and more exclusively devoted to the class of considerations to which these sciences are related, than they are at present, before such advice would be taken, except in special instances. No doubt, if an opinion be asked it will be given; but to advise, unasked, a young lady as to the physical and family characteristics of the man she should accept, is certainly a step considerably in advance of what is deemed to be a duty at present. There is

however, another point upon which useful advice can be given, viz., how to assist in assuring a healthy progeny after marriage. This advice is more often tendered than Dr. Burman supposes, and is very frequently disregarded, as the careful attention to hygienic rules necessary to be observed, especially in the early stages of pregnancy, is comparatively rarely kept in mind or carried out, especially when circumstances or pleasure lead in an opposite direction. Still, there can be no doubt that, when a medical practitioner is spoken to about attending a woman in her confinement, he should always point out the necessity for the mother bestowing due care on hygienic rules. In addition to a careful supervision of young children as regards diet, clothing, and avoidance of the "hardening process," so injurious to them, medical advice, both to males and females at the age of puberty, more often than is at present given, would, undoubtedly, assist in preventing many evils which conduce to nervous and other affections. But the question arises, should this advice be tendered if unasked? Dr. Burman, without absolutely stating that it should, at any rate leans to this opinion. There is, however, one period of life when medical advice, rather than treatment by drugs, is of great importance: namely, in advanced years, when the power of assimilating food, of resisting cold and other external influences, is less than the individual believes, and when undue hurry is likely to cause most injurious effects. Errors of diet, especially eating too much, and the taking of indigestible food, cause much more injury to health at that time than at middle age; so that many a life would have been prolonged by attention to these matters that has been cut short by apoplexy, or by fainting from cardiac defect.

ALL THE OLOGIES.

AMONG the agenda of the next meeting of the Convocation of the University of London, on January 16th, is one dealing with a subject of so much importance, that we propose to make a few remarks with regard to it, in the hope of exciting some of that interest among the graduates of the University, in the proceedings of Convocation, which is too often wanting. Dr. J. W. Meek, and Dr. Horrocks, have given notice of their intention to move a resolution in the following terms:—"That in the opinion of Convocation it is desirable, that a *clinical* examination in diseases of the eye and ear (to be conducted in each case by special examiners) should be added to the subjects of the M.B. examinations." (The italics are not ours.) Now, we fully sympathise with the motive which has led two young and distinguished graduates to put this notice on the paper, but we very much question the expediency of the proposal; there can be no question that a competent working knowledge of both ophthalmology and otology is a most desirable attainment for every medical graduate, but we are decidedly of opinion that only so much knowledge should be required as is really necessary in ordinary practice. It is true that, in the wording of the resolution, the word clinical is underlined, so that it appears that the movers are alive to this danger; but if the examination be conducted by specialists in these subjects, there can be no certainty that the word "clinical" may not attain a very wide interpretation. Above all things, it seems undesirable to further load an examination which is already long and onerous; as it is, a candidate who sits for honours, is under examination for about a month; and this, in the case of an examination which only recurs once a year, and which must be passed as a whole, is a serious consideration. Again, what position are these subjects to hold? Is proficiency in them to be necessary for success? We presume so, otherwise there cannot be much use in introducing them into the examination at all After all, the examination is one for a degree in medicine, and diseases of the eye and ear are much more the concern of surgery than of medicine; if the proposal had been to acquire a knowledge of these subjects from candidates for the degree of Bachelor of Surgery, we believe that it would have commanded more general approval. That examination is by no means long or tedious, or its subjects numerous; it only lasts altogether about seven hours, divided over three separate days, and may be passed at any time after taking the M.B. degree. It is with the ophthalmoscope, and the signs to be observed by its use, that medicine has most to do; the examiners in that subject are fully alive to the importance of a knowledge of the pathology of the fundus oculi, and in their hands the matter might fairly rest. We believe, however, that Convocation may usefully direct its attention to any project which would tend to strengthen, and render more valuable, the degree of Bachelor of Surgery; and to add to the subjects already required these now under discussion would be, undoubtedly, a move in the right direction. To add to the burdens of the already overburdened candidate for the degree in medicine, to add to the eight subjects in which he is now examined two more, would, probably, merely result in diminishing the efficiency of the examination. Again, if we are to have examinations, by specialists let it be remembered, in ophthalmology and in otology, why not in laryngology, and neurology, and dermatology? Candidates ar already examined in this latter subject by the examiners in medicine; and, surely, all the other subjects may be safely left to their care, and to that of their surgical colleagues.

HEALTH OF INDIA CIVIL SERVANTS.

THE public have been looking with some anxiety for an authoritative statement from the India Office, either in confirmation or in contradiction of the positive statements on the health of India civil servants made in the *Times*, based, apparently, on good information supplied from India by those who have special knowledge on the subject. Anxious not to be the channel of propagating inaccurate statements on a question of so much importance, not only to the Government of India, and the parents and friends of intending candidates, but to the public generally, we have abstained from any editorial reference to it, in the hope that either the India Office or the Civil Service Commission would take some steps to allay anxiety. Concealment in a matter of this kind is impossible. Public attention has been awakened to the subject; and, if the truth be not voluntarily told by those who can speak with authority, questions will be put in Parliament in such a shape as to compel an answer. The allegation is, that the strain put on the mental powers of successful candidates for appointments is such that, when they go to India, and are subjected to hard work and unfavourable climatic influences, they break down in health, in a far larger proportion than any other class of Europeans in the service of Government, and develop mental disease to an extent hitherto unknown in any branch of the public service at home or abroad. Now, either this is true, or it is false. It is a remarkable fact that, up to this hour, as we have already hinted, the India Office has made no sign. It is absurd to say that governments are not obliged to affirm or contradict newspaper reports. But this is not an ordinary newspaper report: it is a grave statement appearing in an authentic shape, supported by statistics; and the plain truth is, that the statement is generally believed to be in the main true, and, until authoritatively contradicted, this belief will daily sink more deeply into the public mind. It is futile to attempt to conceal the fact, that the demands made by the Civil Service Commissioners on the immature brains of the young men who come before them are, to put it plainly, enormous; and we must, in considering the extent of this demand, remember that it is made at a time of life when the structure of the frame is far indeed from being completed. The result—the inevitable result—is, that, in a great many instances, this immense consumption of nerve-energy in mental work is subtracted from what is needed for purely physical purposes—the growth and nutrition of the tissues. One fact is notorious—we need not wait for official confirmation of it—the natives of India noted it on the first appearance of the "competition-wallah" amongst them; he was, as a rule, incapable of the amount of physical exertion required of him. He could not ride, or at least in such a way or to such an extent as to enable him to see and know the

people in his district, and to look at things with his own eyes; and we must add another and very unfortunate outcome of inordinate and premature brain-work, a certain impatience and irritability of temper in his intercourse with the people, and a degree of petulance and want of courtesy in his correspondence with his own countrymen, which was quite unknown, or at least rarely seen, in the old India civilian. There is another point which throws a side light on this subject. Those who have had to do with the modern India Civil servant when he returns to his own country, broken down in health after a brief service in India, know well that, of all tropical invalids, he is the one who shows the least recuperative powers. This is a very serious fact, it cannot be denied, and it should be well considered by those on whom the responsibility rests of making a remedy for a very serious evil. It is a notable fact that candidates for the India Civil Service, unlike those for the Forest and Medical Services, are not subjected to any physical examination until they have been successful in their examinations. It is hinted that the medical examiners, unwilling, after all the candidate has gone through at the hands of the civil service examiners, to disappoint him, are more lenient than they would be if the medical examination was held before the candidate entered on his mental tests. This may be so, but, even if true, it touches only the fringe of the matter. In conclusion, we think the public have a right to some official information on this subject, which requires, and we doubt not with reason, the careful consideration of the India Office and the Civil Service Commission.

SCOTLAND.

THE students of Marischal College, Aberdeen, gave a dramatic performance on Saturday evening in aid of the funds of the Royal Infirmary. The attendance was good.

A PORTRAIT of the Lord Rector, Dr. Bain, has been presented to the University of Aberdeen. The portrait was subscribed for by Dr. Bain's pupils and friends.

THE epidemic of typhus fever in Aberdeen seems to have been promptly and effectively stamped out by the energetic measures taken by the local authority, as no new cases have been reported for some time.

MONTROSE INFIRMARY AND ASYLUM BOARD.

THE monthly meeting of the above board was held last week, Provost Lackie in the chair. The medical superintendent of the asylum (Dr. Howden) stated in his report that the number of patients in the house was 506, an increase of thirty-one over the previous year. The Earl of Dalhousie, who was present, made some pointed observations as to the strained relations now existing between the asylum and the county authorities as to the rate to be paid for pauper patients, and gave some practical suggestions as to the settling of the question.

DR. J. G. LYON.

WE regret to have to announce the death of Dr. James G. Lyon, of Glasgow, which took place on the 6th inst. The cause of death was phthisis pulmonalis, and the sad event has not come unexpectedly or with any suddenness, as it has been known for some weeks that his condition was hopeless. At the early part of last year he felt his health failing, and change of air was tried, followed by a voyage to the Cape, but no improvement followed, and for some months he has been laid aside from all professional work. Dr. Lyon held several public appointments in Glasgow; and in the discharge of his duties as dispensary surgeon to the Western Infirmary he had shown considerable skill as a surgeon. He acted for some years as Honorary Secretary and Treasurer to the Glasgow Branch of the British Medical Association, and he always showed a warm interest in all matters connected with the profession. Latterly he met with a severe trial in the loss of his intimate friend, Dr. David Foulis; and more recently he experienced a severe disappointment in connection with the Western Infirmary, where, after years of faithful discharge of duties in connection with the out-patient department of the hospital, his claims to promotion as visiting surgeon were somewhat unfairly passed over, by the appointment of one of the staff of another hospital. He felt keenly this rejection, and the circumstances connected with it. By his genial disposition, kindliness of heart, and obliging manner, coupled with genuine honesty of character, Dr. Lyon had made himself a general favourite, both among his patients and the profession; and his early death is regretted by all, while those who were more intimate with him feel that they have lost a friend, not soon forgotten and not easily replaced.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending December 30th, it appears that the death-rate in the eight principal towns was 30.1 per 1,000 of estimated population. This rate is 5.4 above that for the corresponding week of last year, but 0.7 below that for the previous week of the present year. The lowest mortality was recorded in Aberdeen—viz., 22.7 per 1,000; and the highest in Dundee and in Perth—viz., 36.1 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.8 per 1,000, or 0.3 below the rate for the previous week. Whooping-cough was the most fatal zymotic disease in Glasgow and Dundee. From acute diseases of the chest, 199 deaths were registered, or 29 fewer than in the previous week. The mean temperature was 37.9, being 2.6 below that of the week immediately preceding, and 6.7 below that of the corresponding week of last year.

HEALTH OF GLASGOW.

THE reports of the medical officer of health for the closing weeks of the year show that the deaths in the city have been unusually numerous, reaching as high as 35 and 38 per 1,000. From the report for the fortnight ending December 23rd of last year, it seems there were 718 deaths registered, representing a death-rate of 36.5 per 1,000 living. In the corresponding fortnight of the previous year the death-rate was only 24 per 1,000. The mortality was therefore fully 50 per cent higher during the last fortnight, and an examination of the figures shows that, while this increase is distributed over all classes of diseases, half the total amount is contributed by diseases of the lungs. There were 104 deaths of children from infectious diseases, viz.:—52 from whooping-cough, 32 from scarlet fever, and 20 from measles. There have not been so many deaths from scarlet fever since the autumn of 1880, or from whooping-cough since the spring of the same year. Of the total fatal cases of scarlet fever, 22 have occurred in the eastern district of the city. Speaking generally, it may be said that the fortnight has been marked by that extraordinary mortality which always accompanies cold in Glasgow, and to which, if the cold continues long enough, and especially if it be accompanied by fog, there scarcely seems any limit. The report points out that the phenomenal and startling death-rates of Glasgow have never arisen from epidemic disease, at least during the last 20 years, but from cold, and that the very highest ones have been due to the accumulation over the city of smoke in the foggy calm of continuous frost.

EFFECT OF EDUCATION ON HEALTH.

THE schoolmasters of Scotland held their annual meeting in Marischal College, Aberdeen, on January 4th and 5th. The chief point of interest to medical men was the discussion of the question of the effect of the present educational demands upon the health of children. The discussion was opened by Dr. Farquharson, M.P., by an able speech, in which he contended that the present educational de

mands may be fairly considered as prejudicial to the general health of children. With a view to securing that the hygienic condition of schools be rendered as favourable as possible, he advocated the institution of regular inspection of school by properly qualified medical men, an excellent machinery already existing for this in our medical officers of health. Dr. Farquharson is right. There can be no doubt that his suggestion is a most valuable one, and we hope to see it carried out very soon. Bearing in mind the different tendencies exhibited by different brains, he suggested that the teacher ought to be allowed to exercise a certain amount of discretion to temper the rigidity of the code rules, and give a little more elasticity to the rigid regulations of the code. Professor Stephenson agreed with Dr. Farquharson, on the ground of a study of the rate of development of children. The statistics of Bowditch in America, and others, show that, in body, the period of most active physiological growth in boys is from eleven to sixteen years, while, in girls, the eleventh, twelfth, and thirteenth years are the years of greatest growth. Dr. Beveridge, from comparing the death-rate in the decade before the Education Act, and since it passed, found that the death-rate from brain-diseases was exceptionally high in Aberdeen. The motion that the present educational demands are prejudicial to the health of children was carried.

HEALTH OF THE PRINCIPAL SCOTTISH TOWNS.

THERE were registered in the eight principal Scottish towns, during the month of November, the deaths of 1,173 males and 1,247 females; the total (2,420) is 52 under the average for the same month during the preceding ten years, due allowance having been made for proportional increase of population. The respective mortalities were, per 1,000 of the population of each town: in Edinburgh, Aberdeen, and Greenock 20, in Leith 21, in Perth 22, in Dundee 25, in Paisley 26, and in Glasgow 27. Exactly one thousand, or 41.3 per cent., were deaths of children under five years of age, and the respective percentages were: in Perth 31, in Edinburgh 32, in Aberdeen 33, in Paisley 38, in Leith 39, in Greenock 43, in Glasgow 45, and in Dundee 30. Zymotic diseases caused 15.9 per cent. of the entire mortality in Glasgow. In Perth and Dundee, however, a lighter rate prevailed. Whooping-cough was, as usual, most fatal: in Glasgow 5.2 and in Dundee 4.3 per cent. of all the deaths having been caused by it. Of 31 deaths due to fever, 19 were registered as enteric, 9 as typhus, and 3 as simple continued fever. Scarlet fever occasioned 57 deaths, diphtheria and croup 45 each, diarrhœa 43, measles 27, metria 13, and dysentery 4; choleraic diarrhœa only one. To apoplexy were ascribed 61 deaths, to paralysis 58, to hydrocephalus 41, to debility from premature birth 67, and to cardiac diseases 155 deaths. Phthisis pulmonalis contributed 223 deaths, or 9.2 per cent. of the whole; while inflammatory affections of the respiratory organs, other than those already referred to, caused 644 deaths, or 26.6 per cent. of the entire mortality. Of 95 deaths due to violent causes, 8 were of suicides. Five males and five females were over ninety years of age at their deaths; the oldest of these was a widow, and was ninety-seven years of age. The meteorological characteristics of the month were the excess of wind, the unusually low barometric pressure, the low mean temperature, and the excess of rain. The mean barometric pressure was less by 0.305 inch, and its monthly range less by 0.061 inch; the mean temperature was less by 1.1°, and its mean daily range greater by 0.9°; the mean humidity less by 1; the rain in number of days greater by 6, and in depth by 1.97 inch; and the wind-pressure greater by 0.49 lb., than the average of the same month for the preceding twenty-five years. The lowest mean temperature (39.0°) was recorded at Dundee, the highest (40.4°) at Greenock; while the greatest rainfall (8.40 inches) was at Greenock, and the least (3.25) at Dundee.

MR. LAWSON TAIT has been elected an Honorary Fellow of the American Gynæcological Society.

IRELAND.

IRISH PRISONS.

A ROYAL COMMISSION has been appointed to inquire into the administration, discipline, and condition of prisons in Ireland, both local and convict. Drs. McDonnell and Sigerson are members of the Commission.

LONGEVITY IN IRELAND.

AMONG the deaths registered in the September quarter were those of six persons who were reported as being 100 years of age and upwards. Of these, four were 100, one 102, and one 106 years respectively. The registrar who records the last mentioned, states that the deceased was working in the fields two days before his death.

ULSTER HOSPITAL FOR CHILDREN.

IT is gratifying to learn that the funds in hand have enabled the committee to extend their operations, and that a department for women is being provided, which will shortly be filled up and furnished. Last Saturday the Christmas tree occupied a central position in the lower ward of the hospital, and the greatest interest was exhibited by the inmates, who were presented with the numerous gifts placed upon it.

FEVER IN WATERFORD.

AN outbreak of fever of a virulent type has taken place in this town and several deaths have already occurred from the disease. The first case was that of a man who contracted the disease; and, when he died, his bedclothes, without being disinfected, were removed into the next house, with the result that three of the inmates also died from the fever. The disease then spread, and the medical officer has been requested by the Waterford Board of Guardians to report on the outbreak.

CORK FEVER HOSPITAL.

A SPECIAL meeting of the subscribers to this hospital was held last week, for the purpose of electing an extraordinary physician to the institution. The committee recommended the election of Dr. Cotter, who, being unopposed, was appointed. We congratulate Dr. Cotter, whose collegiate career has been a very distinguished one, and who for two years had been connected with the North Infirmary, with benefit to the inmates and advantage to himself, on being unanimously elected to fill a post occupied at various periods by most eminent physicians in Cork.

HEALTH OF BELFAST FOR DECEMBER.

SINCE last report, 87 cases of zymotic diseases were reported by the medical officers of health for the various dispensing districts. One case of small-pox, fourteen of typhus, and nine of scarlet fever, were removed to the hospital for contagious diseases. During the four weeks ending the 23rd December, 119 deaths were registered from zymotic diseases, of which 60 were due to scarlet fever. Diseases of the respiratory organs caused 278 deaths, or a rate of 12.2. The births numbered 468, and the deaths 633, or a death-rate of 39.56 per 1,000. It will be noticed that the death-rate has reached a very high average, a result which may be attributed to the extreme variations of and the low temperature, and other rapid atmospheric changes, along with the prevalent moisture. The deaths from zymotic affections were 7, of which scarlet fever shows 3.7.

HIGH DEATH-RATE IN BELFAST.

DURING the last few months, the death-rate in Belfast has been unusually high. Last week it was 40.8 per 1000, and it has fully maintained that average since the beginning of winter. While other towns in Ireland occasionally show a high death-rate fluctuation,

Belfast has kept steadily at or about the average stated. Scarlatina, though still prevalent, caused fewer deaths last than previous week. The other districts in Ireland, in which the highest rate of mortality was registered, were:—Galway, 64.0; Queenstown, 53.4; Dundalk, 48.0; Wexford, 47.0; Drogheda, 38.1; Dublin, 31.7; Newry, 28.1; Londonderry, 25.1. The average annual death-rate, represented by the deaths in the 16 principal town districts of Ireland, was 34.6 per 1000 of the population, while the corresponding English death-rate was only 24.9 per 1000.

A CASE OF MANSLAUGHTER.

AN extraordinary scene took place at the late Ulster Assizes, on the occasion of the trial of Francis Carten for the manslaughter of a man named Jamison. The case shows the serious results which may ensue from the absence of a *post mortem* examination. It appears that the prisoner struck the deceased man, Jamison, while the latter was sitting on a window-sill with a Dr. Lane. The latter took the deceased into his surgery, and, "thinking his head was a little on one side, gave it a push". Jamison died next morning, as was stated, from concussion of the brain, caused by the fall. An inquest was held; but no necropsy was made, the coroner refusing a request for one, on the ground that the grand jury would not present for the doctor's fee. The result of this improper omission was that, at the trial, Dr. Lane was submitted to a severe cross-examination as to whether death was the result of the fall, or of the pull to which the deceased's head had been subjected. Though we cannot approve of the style of the cross-examination, the suggestion that death was the result of the force used by Dr. Lane by way of treatment was a proper and obvious one. In vain did Mr. Justice Harrison tell the jury that the case was a plain one, and that they should have no hesitation in returning a verdict. The foreman said that the jury had no evidence as to whether death resulted from the blow or from the pull of the neck; and, after retiring three times to consider their verdict, the jury were discharged without coming to a decision. The scruples of the jury were no doubt excessive, and the probabilities are vastly greater that death resulted directly from the blow than from Dr. Lane's treatment. Moreover, had death resulted from the pull, and were this given by way of *bonâ fide* treatment, as was no doubt the case, the responsibility of the accused for the death of the man would not have been removed. An abortive and costly trial has taken place, and much pain has no doubt been inflicted upon Dr. Lane, merely because a coroner did not see fit to order a *post mortem* examination at the cost of a guinea.

THE INQUIRY CONCERNING THE COMMUNICABILITY OF PHTHISIS.

A LARGE amount of very valuable information has already been received on this subject, but it is felt that this is only a very small part of that which should be at the disposal of the Association. It has, therefore, been determined to keep the inquiry open for another week, and it is hoped that those members who have not already done so, will duly fill up and forward the inquiry sheet, which they will find in the JOURNAL for January 6th, to the Secretary of the Collective Investigation Committee, who should receive them by Monday, January 14th, at the latest. *The reply need not pledge the writer to any opinion on the question raised;* each member is asked, either to record any case or cases in which it appeared to him that the disease was communicated from one person to another; or, for a statement that he has not hitherto attributed to contagion any case that has come under his own observation.

THE *Ceylon Observer* reports that the practice—now pursued for some years—of "shaving" bark off living cinchona trees has not been productive of any ill effects. On the contrary, the bark "renews" with even a larger percentage of alkaloid. Some trees have been thus treated on five successive occasions without their vitality having to all appearance been in the least impaired.

THE COMMUNICABILITY OF PHTHISIS PULMONALIS.

AT the meeting of the Cambridge Medical Society on Friday, January 5th, Mr. Sheild, House-surgeon to Addenbrooke's Hospital, made a report upon the Communicability of Phthisis, founded upon the replies to the following questions, which had been sent to each of the sixty members of the Society, upon a reply post-card:—"Will you state by 'Yes or No,' on the reply card, whether you have known any case or cases in which pulmonary phthisis appeared to be communicated from one person to another. In the event of your having known any cases, state how many, and give any brief particulars you may think worthy of note. Mention especially *(a)*, the date of the observation; *(b)*, the relationship between the individuals concerned; *(c)*, the family predisposition."

After considering the number of replies in the negative and affirmative a little in detail, the report terminated as follows.

"It now remains briefly to reflect what conclusions may be fairly drawn from these replies. In the first place, the fact that thirty-four gentlemen, who have most of them seen large numbers of cases of phthisis, have met with no instances of communicability of the disease, would go far to prove that such instances are certainly not common, that the disease is not contagious, as are the eruptive fevers; that cases of its communicability are to a certain extent accidental. But in drawing such a conclusion as this, the suggestion naturally arises, are all these replies in the negative quite satisfactory? May they be taken as trustworthy and reliable evidence? Is it not possible, nay likely, that cases in point may have slipped the memory of the busy practitioner, happening years ago perhaps, when the possibility of the contagiousness of the disease was scarcely thought of in this country; and so facts which now might strike attention, as being strong proofs of the communicability of phthisis, might then have escaped observation, and be consigned to oblivion. More especially is this likely to have occurred, when we consider that too many of us regard phthisis as a hopeless disease, and hence less worthy of close observation, study, and regard, than other more curable maladies. In glancing at the affirmative replies, the statements mentioned are of importance. They strongly imply the communicability of the disease between husband and wife. Cases like these, if observed in number, and by reliable persons, would go far to prove the occasional communicability of the disease. Those gentlemen who have observed cases, but yet are unable to furnish particulars as to names, dates, and circumstances, give us, nevertheless, a most useful lesson. They teach the importance of keeping short notes of cases, and the futility of trusting to memory alone, as an agent to furnish reliable and trustworthy data. I venture to suggest that, if the practitioners of this neighbourhood were, for a period of three or four years from this date, to observe acutely all cases which might throw a light upon the question in point, there would be a larger number of trustworthy affirmative replies to the query, 'Is phthisis communicable?' All, however, we have learnt from the present replies, I think amounts to this: That communicability of the disease is not, at any rate common, but, in some instances, seems likely and probable. There are sayings that most people will allow; at the same time they are only to be confirmed by long, patient, careful observation. We must feel a little regret at not being able to come to a more satisfactory conclusion than this, after a number of answers and inquiries. We must console ourselves with the reflection that every little information reliably gained, is a drop of water in the ocean of truth, and that exaggerated conclusions and statements, though they sound well at the time, are still only means of building up tangled masses of false evidence, which, by giving future investigators trouble to unravel, merely cast stumbling-blocks and impediments in the path of progress."

A long and interesting discussion ensued, during which other instances of probable communication of phthisis were given by members who had omitted to reply; and the importance of taking into account the closeness of the room or dwelling, the sanitary state and drainage of the house and district, the hereditary predisposition of the persons regarded as being infected, etc. It was remarked that in the Northern regions the communicability may be less than in the South where, especially Italy, the belief in it has long existed; and that though the possibility of contagion was scarcely admitted in this country a few years ago, the question was now entertained, and deserved serious consideration, and the careful collection of facts bearing upon it.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED UP TO JANUARY 10TH, 1883.

BATH AND BRISTOL BRANCH. (13)

BATH DISTRICT. R. J. H. Scott, Esq., *Local Secretary.*

Names of Observers.	Acute Pneumonia.	Chorea.	Acute Rheumatism.	Total.
A. B. Brabazon, M.D., Bath ...	1	—	—	1
T. Cole, M.D., Bath	1	—	—	1
R. J. H. Scott, Esq., Bath ...	—	—	1	1
J. Wigmore, M.D., Bath ...	1	—	1	2

BRISTOL DISTRICT. E. Markham Skerritt, M.D., *Local Secretary.*

J. E. Alford, Esq., Weston-super-Mare ...	—	1	—	1
E. Crossman, Esq., Bristol	—	—	4	4
G. F. Rossiter, M.B., Weston-super-Mare ...	1	—	1	2
E. M. Skerritt, M.D., Clifton	—	—	1	1

BIRMINGHAM AND MIDLAND COUNTIES BRANCH. (36)

R. Saundby, M.D., *Local Secretary.*

J. Bellingham, Esq., Dudley	1	—	—	1
G. Birt, M.B., Stourbridge	—	—	1	1
G. F. Blake, Esq., Birmingham	—	1	1	2
D. Bradley, Esq., Dudley	1	—	—	1
T. Buxton, Esq., Tamworth	1	1	1	3
J. V. de Denne, Esq., Cradley Heath ...	—	—	1	1
G. W. Homan, Esq., Lichfield	—	—	2	2
H. R. Ker, Esq., Halesowen	1	—	2	3
W. Lattey, M.D., Southam	—	—	2	2
C. A. McMunn, M.D., Wolverhampton ...	—	—	1	1
M. Messiter, Esq., Dudley	—	2	4	6
K. Millican, Esq., Kineton	1	—	2	3
B. Rice, M.B., Leamington	—	—	2	2
S. J. Smith, M.D., Bilston	—	1	—	1
I. W. Thursfield M.D., Leamington ...	1	—	—	1
T. Underhill, M.D., West Bromwich ...	—	—	6	6

BORDER COUNTIES BRANCH. (3)

H. Barnes, M.D., *Local Secretary.*

H. Barnes, M.D., Carlisle	—	1	1	—
J. F. Le Page, Esq., Durham	—	—	1	—

CAMBRIDGE AND HUNTINGDONSHIRE BRANCH. (21)

Bushell Anningson, M.D., *Local Secretary.*

J. P. Atkinson, M.D., Saffron Walden ...	1	—	1	2
J. B. Bradbury, M.D., Cambridge ...	1	—	1	2
J. Bridger, Esq., Cottenham	2	1	—	3
E. C. Bury, M.D., Wisbeach	1	—	—	1
W. H. Copley, Esq., Wisbeach	1	1	—	2
W. Easby, M.D., March	2	1	1	4
W. R. Grove, M.D., St. Ives	2	—	—	2
E. Harle, Esq., Lakenheath	1	—	—	1
H. Lucas, Esq., Huntingdon	2	1	—	3
H. Stear, Esq., Saffron Walden	—	—	1	1

DUBLIN BRANCH. (2)

G. F. Duffey, M.D., *Local Secretary.*

J. W. Moore, M.D., Dublin	1	—	1	2

GLOUCESTERSHIRE BRANCH. (3)

F. T. Bond, M.D., *Local Secretary.*

D. H. Forty, Esq., Wotton-under-Edge ...	2	—	1	3

LANCASHIRE AND CHESHIRE BRANCH. (54)

LIVERPOOL DISTRICT. F. T. PAUL, Esq., F.R.C.S., *Local Secretary.*

W. C. Barnish, Esq., Wigan	1	—	—	1
W. Bell, M.D., Liverpool	—	—	1	1
W. M. Campbell, M.D., Liverpool ...	1	—	—	1
A. Craigmile, M.D., Egremont	—	1	—	1
J. Farrar, Esq., Morecambe	—	—	1	1
J. E. Garner, M.B., Preston	1	—	—	1
R. Forrester, M.B., Preston	—	1	1	2
J. H. Jackson, M.B., Wigan	—	1	1	2
J. M. H. Martin, M.D., Blackburn ...	1	—	—	1
F. Pollard, M.D., Liverpool	—	3	—	3
W. Sinclair, M.D., Barrow-in-Furness ...	2	—	—	2
G. W. Steeves, Esq.	1	1	1	3

MANCHESTER DISTRICT. J. S. Bury, M.D., *Local Secretary.*

Names of Observers.	Acute Pneumonia.	Chorea.	Acute Rheumatism.	Total.
J. S. Bury, M.D., Manchester	2	—	1	3
G. H. Darwin, M.D., Didsbury	2	—	1	3
W. Donie, M.B., Manchester	—	4	—	4
H. R. Hutton, M.B., Manchester... ...	6	—	—	6
C. J. Renshaw, M.D., Ashton, Mersey ...	1	1	1	3
A. Ransome, M.D., Bowden	1	2	1	4

BOLTON DISTRICT. De Vere Hunt, M.D., *Local Secretary.*

J. Barr, Esq., Great Bolton	1	—	1	2
C. Dawson, Esq., Leeds	1	—	—	1
De Vere Hunt, M.D., Bolton	1	—	—	1
J. Johnston, M.D., Bolton	1	1	2	4
F. B. Mallett, Esq., Bolton	1	1	2	4

MIDLAND BRANCH. (13)

LINCOLN DISTRICT. C. Harrison, M.D., *Local Secretary.*

J. Hadden, M.D., Horncastle	—	1	—	1
C. Harrison, M.D., Lincoln	—	5	3	8
W. J. Pilcher, Esq., Boston	—	1	—	1
F. Sutton, Esq.	1	1	1	3

NORTH OF IRELAND BRANCH. (12)

A. DEMPSEY, M.D., *Local Secretary.*

W. Bernard, Esq.	1	3	2	6
A. Dempsey, M.D.	2	—	—	2
A. Harkin, M.D.	—	2	2	4

NORTH WALES BRANCH. (14)

W. Jones-Morris, M.D., *Local Secretary.*

James Edwards, Esq., Liverpool ...	1	—	—	1
S. Griffiths, M.D., Portmadoc	1	—	—	1
F. H. O. Grosholz, Esq., Aberdovey ...	1	—	—	1
J. T. Jones, Esq., Corris	—	—	1	1
W. F. Jones, Esq., Bala	1	—	—	1
A. E. Lloyd, Esq., Rhyl	—	—	1	1
H. V. Palin, M.B., Wrexham	—	1	—	1
D. M. Williams, Esq., Liverpool ...	1	—	—	1
Edw. Williams, M.D., Wrexham	—	—	1	1
Evan Williams, Esq., Llangefni ...	1	—	1	2
E. Williams, Esq., Bala	1	—	—	1
Owen Williams, Esq., Holyhead ...	2	—	—	2

NORTHERN COUNTIES OF SCOTLAND BRANCH. (8)

WESTERN DISTRICT. Ogilvie Grant, M.D., *Local Secretary.*

W. Bruce, M.D., Dingwall	1	—	3	4
A. Finlayson, Esq., Inverness	1	—	—	1
A. R. Mackenzie, M.D., Fortrose ...	—	1	1	2
A. Sutherland, M.B., Invergordon ...	—	—	1	1

SHROPSHIRE AND MID WALES BRANCH. (17)

E. S. Scott, M.B., *Local Secretary.*

J. P. Cartwright, Esq., Oswestry ...	1	—	1	2
C. A. Corke, Esq., Baschurch	1	—	1	2
E. Cureton, Esq., Shrewsbury	1	—	1	2
A. Eddowes, M.D., Market Drayton ...	—	—	1	1
C. Jordison, Esq., Malpas	1	—	—	1
J. W. Lane, M.D., Bishop's Castle ...	1	—	1	2
A. C. Malley, M.D., Munslow	1	—	—	1
W. H. Packer, Esq., County Asylum, Salop	1	—	—	1
E. S. Scott, M.B., Shrewsbury	2	—	—	2
A. P. Smith, Esq., Shrewsbury	—	—	1	1
M. Thomson, Esq., Newport	1	—	—	1
H. O. Wertwood, Esq., Prees	—	—	1	1

SOUTH-EASTERN BRANCH. (48)

EAST KENT DISTRICT. T. Whitehead Reid, Esq., *Local Secretary.*

R. L. Bowles, M.D., F.R.C.P., Folkestone...	—	1	1	2
E. Garraway, Esq., Faversham	—	—	1	1
C. Parsons, M.D., Dover	1	—	1	2
T. F. Raven, Esq., Broadstairs	8	1	1	10
G. Rigden, Esq., Canterbury	—	1	1	
O. G. Bradshaw, Esq., Sandgate	—	—	1	1

WEST KENT DISTRICT. A. H. Hallowes, Esq., *Local Secretary.*

C Boyce, M.B., Maidstone	2	—	—	2
A. H. Hallowes, Esq., Maidstone ...	—	—	1	1

EAST SUSSEX DISTRICT. J. C. Uhthoff, M.D., *Local Secretary.*

Names of Observers.	Acute Pneumonia.	Chorea.	Acute Rheumatism.	Total.
W. A. Hollis, M.D., Brighton ...	2	—	—	2
A. H. Newth, M.D., Hayward's Heath ...	—	1	—	1
G. J. Malcolm Smith, M.B., Hurstpierpoint	—	1	—	1
R. L. Stokes, Esq., Ditchling ...	1	—	—	1

WEST SUSSEX DISTRICT. G. B. Collett, Esq., *Local Secretary.*

G. B. Collett, Esq., Worthing ...	3	—	—	3
Thos. Fuller, M.D., Shoreham ...	—	—	4	4

EAST SURREY DISTRICT. J. H. Stowers, M.D., *Local Secretary.*

C. M. Campbell, M.D., S. Kensington ...	—	2	—	2
H. H. Dearsley, Esq., Croydon ...	—	1	1	2
S. Parsons Smith, Esq., Croydon ...	—	—	1	1
H. G. Thompson, M.D., Croydon... ...	2	—	1	3

WEST SURREY DISTRICT. A. A. Napper, Esq., *Local Secretary.*

W. A. Berridge, Esq., Redhill ...	1	—	—	1
A. C. Brock, Esq., Dorking ...	1	1	—	2
W. Chessell, M.D., Horley ...	—	—	1	1
C. Ede, Esq., Guildford ...	1	1	1	3

SOUTH MIDLAND BRANCH. (7)

G. F. Kirby Smith, Esq., *Local Secretary.*

J. More, M.D., Kettering	2	3	2	7

SOUTH OF IRELAND BRANCH. (1)

T. Gelstone Atkins, M.D., *Local Secretary.*

W. Bernard, Esq., Derry	—	—	1	1

SOUTH WALES AND MONMOUTHSHIRE BRANCH. (40)

A. Sheen, M.D., *Local Secretary.*

J. Bevan, M.B., Mumbles	1	2	—	3
S. E. Bligh, M.B., Neath	—	2	2	4
G. A. Brown, Esq., Tredegar	1	1	—	2
G. A. Davies, Esq., Newport	2	—	—	2
C. M. Jones, Esq., Merthyr	1	1	—	2
Evan Jones, Esq., Aberdare	1	1	1	3
A. P. Fiddian, M.B., Cardiff	5	—	—	5
J. Farrant Fry, Esq., Swansea	1	1	—	2
O. E. B. Marsh, Esq., Newport	1	1	—	2
J. W. Mulligan, M.D., Abersychan ...	1	1	1	3
T. H. Redwood, M.D., Rhymney... ...	1	1	1	3
W. D. Sheppard, Esq., Merthyr	2	—	—	2
J. L. Treharne, Esq., Cardiff	—	2	—	2
T. Wallace, M.D., Cardiff	1	—	—	1
J. L. W. Ward, Esq., Merthyr	2	2	—	4

SOUTH-WESTERN BRANCH. (14)

CORNWALL DISTRICT. R. S. Hudson, M.D., *Local Secretary.*

R. S. Hudson, M.D., Redruth	2	1	2	5
T. Sanctuary, M.D., Hayle	1	1	1	3
W. Whitworth, Esq., Cornwall	1	—	—	1
R. Erskine, M.B., Camborne	1	—	—	1

SOUTH DEVON DISTRICT. H. Davy, M.D., *Local Secretary.*

H. Davy, M.D., Exeter	—	—	2	2
A. Kempe, M.R.C.P., Exeter	—	1	—	1
L. Shapter, M.D., Exeter	—	1	—	1

SOUTHERN RRANCH. (26)

ISLE OF WIGHT DISTRICT. W. E. Green, Esq., *Local Secretary.*

H. M. Barker, M.B., Sandown	2	—	1	3
A. G. Davey, M.D., Ryde	—	2	—	2
W. E. Green, Esq., Sandown	2	—	2	4
H. Hex, Esq., Ryde	1	—	—	1
J. Neal, M.D., Sandown	—	—	1	1

DORSETSHIRE DISTRICT.

W. H. W. Parkinson, Esq., *Local Secretary.*

L. Anderson, Surgeon-Major, Dorchester ...	1	—	1	2
J. G. D. Douglas, M.D., Bournemouth ...	1	1	—	2
W. Vawdrey Lush, M.D., Weymouth ...	1	1	1	3
C. H. W. Parkinson, Esq., Wimborne ...	4	—	1	5
W. H. Williams, M.D., Sherborne ...	1	—	1	2

SOUTH HANTS DISTRICT. T. W. Trend, M.D., *Local Secretary.*

T. W. Trend, M.D.	—	—	1	1

THAMES VALLEY BRANCH. (1)

F. T. Atkinson, M.D., *Local Secretary.*

Names of Observers.	Acute Pneumonia.	Chorea.	Acute Rheumatism.	Total.
A. R. Graham, M.B.	—	1	—	1

WEST SOMERSET BRANCH. (6)

W. M. Kelly, M.D., *Local Secretary.*

G. Cordwent, M.D., Taunton	—	2	—	2
J. Meredith, M.D., Wellington	4	—	—	4

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH. (1)

G. W. Crowe, M.D., *Local Secretary.*

G. W. Crowe, M.D., Worcester	—	—	1	1

YORKSHIRE BRANCH. (2)

Arthur Jackson, Esq., F.R.C.S., *Local Secretary.*

J. W. Martin, M.D., Sheffield	—	—	2	2

Returns received by Secretary of Collective Investigation Committee. (18)

R. W. Barrow, Esq., Liverpool	—	1	2	3
R. Batho, Esq., Burnley	2	—	—	2
C. H. Hill, M.D., Islington	1	—	2	3
R. H. Lloyd, M.D., Lambeth	—	—	1	1
B. G. Morison, M.B., Camden Town ...	2	—	2	4
A. B. R. Myers, Esq., Caterham Barracks...	—	—	2	2
F. Pearse, M.D., Liverpool	—	—	3	3

DIPHTHERIA CARDS. (23)

	No. of Cases.	Sanitary Details.
D. B. Balding, Esq., Royston ...	1	... —
J. Bridger, Esq., Cottenham ...	1	... 1
J. M. Bright, M.D.	1	... 1
C. A. Corke, Esq., Baschurch ...	1	... —
W. H. Evans, Esq. ,, ...	1	... —
E. H. Greves, Esq., Liverpool ...	1	... —
J. Johnston, M.D., Bolton	1	... 1
W. Lattey, M.D., Southam... ...	1	... 1
A. H. Newth, Esq., Hayward's Heath	1	... 1
C. H. W. Parkinson, Esq.	1	— —
T. F. Pearse, Esq., Liphook ...	1	... 1
W. B. Rigby, Esq., Shrewsbury ...	1	... —
C. S. Richardson, Esq., Oughtibridge	1	... —
T. W. Thursfield, M.D., Leamington...	1	... —
G. G. Whitwell, Esq., Shrewsbury ...	2	... —
E. Williams, M.D., Wrexham ...	—	... 1

TOTAL RETURNS RECEIVED ... 382.

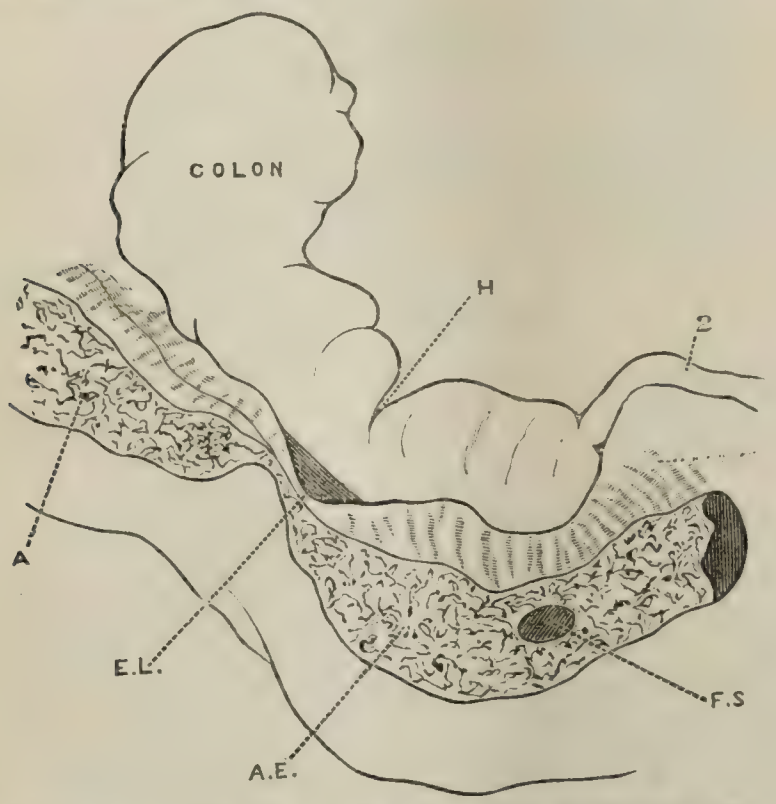
Some returns are still in the hands of Dr. Handford, Local Secretary for Nottingham.

THE NECROPSY OF M. GAMBETTA.

DURING the last few days, we have received, from authentic sources, the further results of a medical investigation of the parts removed, which has followed the *post mortem* examination of M. Gambetta. In our notice last week, we reported how the wounds in the hand and forearm were reported as perfectly cicatrised, and were considered to have played no part in the cause of M. Gambetta's death. The termination of the ileum was found so much contracted, that the finger could hardly be passed into it. Bands of adhesion bound down the vermiform appendix, and there were traces of old inflammation in the cellular tissue around the cæcum. Along the course of the ascending colon the cellular tissue was infiltrated with pus, which nowhere formed a distinct abscess. In the substance of the abdominal wall, immediately adjacent to the ascending colon, but not communicating with the collection of pus around that portion of intestine, were sloughs of connective tissue, and also purulent infiltration around them, but no true abscess. There was no visible disease of the mucous membrane of the intestines. A "certain quantity of, but very little," purulent fluid was found lying free in the peritoneum, due, it was considered, to local extension of inflammation from the region of the cæcum and colon. The lungs and heart were perfectly healthy. The liver was fatty, but not very large; there were no metastatic abscesses in any part of the body; the brain and its meninges were normal; there was no atheroma of the arteries, and only a small calcareous patch in the arch of the

aorta, above the semilunar valves. The authorities present were Professors Paul Bert, Brouardel, Charcot, Cornil, Trélat, Verneuil; Doctors Lannelongue, Siredey, Fieuzal, Lionville, Mathias-Duval, Laborde, Guerdat, Gille, and M. Paul Gibier, house-surgeon. After the necropsy, the brain of M. Gambetta was removed, in order that it might be weighed and preserved, under the direction of Dr. Charcot. This brain will ultimately be deposited in Dr. Broca's Museum of Comparative Pathology. Since the publication of this report, which we partly repeat for convenience of reference to the following further details, we have been informed that the morbid parts, comprising the ascending part of the colon, the cæcum, and the end of the ileum were removed to the laboratory of M. Cornil, who together with M. Brouardel, had made the necropsy, and submitted to minute study. The vermiform appendix, which we have already stated was found adherent to the colon by adhesions, presented at its extremity (which was in contact with the inflammatory products outside the cæcum) two small ulcers. Lying over these ulcers were little concretions, of which minute examination has not yet been made. Thus the illustrious deceased apparently succumbed to a disease of the vermiform appendix, a part of the economy which has no recognised physiological function, and which is only of interest from the point of view of comparative anatomy, and of the doctrine of evolution. Accepting the view, of M. Gambetta's medical attendants, who are of opinion that the appearances found at the necropsy prove that the pistol-shot wounds had no share in the fatal result, beyond causing a fresh attack of perityphlitis, through the debility which they induced, then his case would be very similar to one of a not unknown kind described by Dr. W. H. Day, in a letter published in our present number; the possibility of purulent peritonitis following perityphlitis in a non-pyæmic case is an important fact in the argument about the proximate causes of M. Gambetta's death.

The woodcut accompanying the present notice shows the area of inflammatory deposit around the cæcum and part of the ascending colon; and the seat of the sloughy tissue in the abdominal walls, the vermiform appendix, was concealed by the deposit; this sketch was taken during the necropsy.



A Adipose tissue. AE Adipose tissue, thickest portion. EL External limit of the inflammatory infiltration of the cellular tissue. FS Sloughy tissue. H Fold between the cæcum and colon. 2 Ileum, contracted.

The right upper extremity, which had been wounded, was very carefully examined by Dr. Lannelongue, and the result has been to show that the cure of the two wounds of the hand and forearm was absolute and complete. A detailed and minute account of the necropsy, with the clinical notes of the case during the course of illness (which were taken from day to day with the greatest care by Drs. Lannelongue and Siredey) is, we understand, now being prepared, and will shortly appear in a well-known French medical journal. Everyone is agreed that the course pursued by MM. Lannelongue and Siredey, who were the immediate personal attendants on M. Gambetta during the earlier course of his illness, and remained so throughout its continuance, was in every way excellent and correct. They both lavished on the case the utmost devotion and highest scientific knowledge and skill. The management of the case may be declared beyond reproach. M. Gambetta's immediate friends, and especially his medical advisers, have long been aware of his altered state of health. This had been especially a cause of anxiety to them since his mother's death, which had profoundly grieved him, and had left him in a state of mental and physical suffering.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days fore each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary*.

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 17th day of January next, at two o'clock in the afternoon.

MEETINGS OF SUBCOMMITTEES.

Tuesday, January 16th, 1883.—Representation Subcommittee, 4 P.M.; Office and Printing Subcommittee, 5.30.

Wednesday, January 17th, 1883.—Arrangement Committee, 11 A.M.; Journal and Finance Subcommittee, 12 noon.

FRANCIS FOWKE, *General Secretary*.

161A, Strand, December 21st, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All of these inquiries will be continued during the present year, 1883.

The replies received to the inquiry concerning Phthisis will be acknowledged in next week's JOURNAL.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH.—A general meeting of this Branch will be held in the Theatre of the Royal School of Mines, Jermyn Street, W., on Wednesday, January 17th, at 8 P.M. Sir James Paget and Sir William Gull will address the meeting on the Collective Investigation of Disease; and resolutions in connection with the subject will be proposed.—Alexander Henry, M.D., W. Chapman Grigg, M.D., Honorary Secretaries.—132, Highbury Hill, N., January 3rd, 1883.

SOUTH OF IRELAND BRANCH.—The annual meeting of the Branch will be held in the Royal Cork Institution, on Saturday, the 27th instant, at 4.30 P.M. Members wishing to exhibit pathological specimens, read papers, etc., will intimate

their intention to the Honorary Secretary at once. It is hoped that Dr. Mahomed, Honorary Secretary of the Collective Investigation Committee, will attend and give an account of the work of his Committee.—T. GELSTON ATKINS, B.A., M.D., Honorary Secretary, January 8th, 1883.

DUBLIN BRANCH.—The sixth annual general meeting of the Dublin Branch will, by the kind permission of the President and Fellows, be held on Thursday, January 25th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The Officers and Council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. Banks, President-elect, will deliver the annual address; and Dr. Mahomed, Assistant-Physician to Guy's Hospital, has kindly consented to attend the meeting, and will explain the objects of the Committee of the Association (of which he is Secretary) for the Collective Investigation of Disease, and the functions of the Local Subcommittee of the Branch recently formed in connection therewith. The annual dinner of the Branch will be in the College Hall, at 7 P.M., on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 23rd instant, 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—GEORGE F. DUFFEY, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin, January 8th, 1883.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held on Thursday evening, January 18th, 1883, at half-past 8 o'clock, at the New Town Hall, Hackney, Francis Toulmin, Esq., in the chair. Dr. Andrew Clark will give an address on Renal Inadequacy. —FREDERICK WALLACE, Honorary Secretary, 96, Cazenove Road, January 9th, 1883.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE first general meeting of this session was held at the Railway Hotel, Stoke-upon-Trent, on Thursday November 33th, 1882; present, Dr. Totherick, President, in the chair, and thirty-three members.

New Member.—Mr. James Scott Russell (Walsall) was elected a member of the Branch.

Representation of the Branches of the Association on the Committee of Council.—A letter (see JOURNAL December 2nd, page 1111) from Mr. Wheelhouse, the President of the Committee of Council, was read and discussed; and the questions asked having been answered, the President appended his signature to the document previously to its return.

Communications.—The following communications were made.

1. Dr. C. Orton showed two young men with Wrist-drop, both well marked. The one was a case of musculo-spiral paralysis of the left arm, attributed to cold or pressure, but in which there was a specific history. On flexing the left arm the supinator longus was quite flabby, while that of the right arm became tense and showed up well. The other was from lead poisoning, both hands being affected. The supinators acted well. The point of interest in this case was the fact that the inability to extend the fingers was the first symptom of lead poisoning which the patient remarked. There had not even been colic. The case was a very severe one and had come on suddenly.

2. Dr. Orton also showed a chart of a case of Typhoid Fever, where on several days the morning varied from the evening temperature as much as six degrees and on the nineteenth morning marked 105.6°; when a dose of twenty grains of quinine was given. In a few hours the temperature fell nine degrees, but rose again in the evening to 103.2°. The case promised to do well.

3. Mr. West showed microscopical sections of a Scirrhous Pylorus which occurred in a man, aged 62, who during life exhibited no symptoms whatever of either cancer in general or disease of the stomach in particular. The patient was admitted into the North Staffordshire Infirmary on September 2nd, with a history of cold followed by pains in the joints. There was no vomiting, no hæmatemesis, no pain, no symptoms even of dyspepsia, and no tumour could be felt; nor was there any pain on deep pressure over the abdomen. A month after admission the man was seized with a rigor, followed by a rise of temperature to 103.2°, and gradually sank, dying October 8th. The necropsy revealed a distended stomach overlapping the pylorus, which was the seat of new growth, extensively ulcerated; the passage into the duodenum being very narrow. The transvere colon was adherent to the pylorus, and infiltrated with new growth, there being at one place a small perforation into it.

4. Dr. Hatton showed some Microscopic Specimens of Tubercle Bacilli in the cheesy matter of a lung cavity, of a patient who died of Tubercle Phthisis.

5. Dr. Hatton also exhibited for Dr. Orton Specimens of a peculiar kind of Entozoon (length about one-twentieth of an inch), which were obtained in large numbers from the fæces of a female patient under Dr. Orton's care in the North Staffordshire Infirmary, who presented no particular symptoms.

6. Mr. Vincent Jackson exhibited a Surgical Needle with a spring eye, and he demonstrated how easily, the needle being armed with a double ligature, could convey the ligature wherever and for whatever purpose required; and then how by simply passing the loop of the thread beneath the spring it became detached, and was left in the wound. The needles are made either curved or straight and of any size.

7. *Observations on recent Ovarian Cases.*—Mr. FOLKER read a paper entitled "Some Observations on recent Ovarian Cases." (*See* page 52.)

8. Mr. Spanton described a case of Removal of the Uterine Appendages.

9. Mr. Spanton also described a method of Treatment for Varicocele. (*See* page 52.)

10. Dr. McAldowie read notes of two cases of Menière's disease depending on chronic labyrinthic otitis. In one case the patient apparently felt herself falling backwards; in the other, the patient experienced a sensation as if her body were rotating on its vertical axis. In both cases the crises were well marked. Dr. McAldowie referred to the recent researches of Cyon which have shown the dual nature of the portio mollis, and proved the semicircular canals to be the peripheral organs of the sense of space.—January 1st, 1883.

SOUTH EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of the above was held on Thursday, December 14th, 1882, at the Greyhound Hotel, Croydon; WALTER ROSSER, M.D., of Croydon, in the Chair.

Management the Perinæum in Labour.—Dr. ROSSER opened a discussion on the "Management of the Perinæum during Labour," and spoke of the practice of early writers, who employed lubricants and emollients, and later of the practice of stretching and dilatation of the vaginal orifice. The question of support was one of comparatively recent date, and writers were much divided as to the benefit to be derived from it. On the whole, some support was advocated, although when excessive and injudicious, it had produced the very state of things it had been sought to prevent; whilst some writers, as Leishman, maintain that "the practitioner who never" puts his hand to the perinæum will have "fewer cases of rupture than he who admits support in any form as applicable to every case of labour." The straight-bodied position was referred to, which, according to Dr. Macdonald, of Liverpool, by "extension of the limbs relaxes the perinæum and straightens the vaginal part of the passage preventing the sacral segment of the floor from being converted into a valvular lid for the pelvic box in its coccygo-pubic plane." Incision was spoken of as being most beneficial at times, and in the discussion was much advocated by Dr. GERVIS, and others. On the whole, gentle support was practised by the majority present, whilst others had no belief in its efficacy.

The following papers were also read:—

Dr. GERVIS: on "Chronic Ovaritis."

Dr. SAVILL: on "The Use of Anæsthetics during Labour."

Dr. STOWERS exhibited a coloured drawing of a case of Paget's Disease of the Nipple and Areola, and gave an account of the history of the patient, with treatment.

CORRESPONDENCE.

THE TREATMENT OF RHEUMATIC FEVER BY CANTHARIDES.

SIR,—In answer to the question put by Dr. Ashburton Thompson as to the constitutional effect of the blister treatment of acute rheumatism, I beg to say that I have never attributed the good results of the plan to the absorption of cantharides from the blistered surfaces. On the contrary, the well established fact of the rare occurrence of strangury shows that the cantharides did not find its way into the system, although very many square inches of surface had been exposed to its action. Supposing even absorption had taken place, how did it come to pass that the urine usually lost its characteristic morbid acidity, and even in some cases exhibited an alkaline reaction? To my mind, had the cantharides been the active element, the urine would have shown an intensely increased acidity in consequence of the acid *materia morbi* being directed from the tissues of the affected joints with the renal secretion. Clinical observation proved that the reverse was the satisfactory result. In describing the *modus operandi* of the plan, I said it was (1)—Local in relieving quickly and effectually the pain and swelling of the inflamed joints, and (2)—that it was *constitutional* in renducing the temperature of the body and protecting the heart from mischief.—

I have the honour to remain, yours obediently,

HERBERT DAVIES, M.D. Cantab.

SPINA BIFIDA.

SIR,—In your issue of November 18th, there appeared a report of a discussion before the London Clinical Society on the subject of spina bifida, and I am gratified to notice that some cases successfully treated are mentioned. My object in noticing the discussion is not to criticise the remarks of any of the speakers, but rather to name one or two observations or reflections which an increased experience has enabled me to make. Let me state *in limine* that I never treat a case without previously informing the parents of the extreme danger, and of the possibility of even instant death, and my assistants are instructed in regard to the certainty of death if the cerebro-spinal fluid drains away. It is now my impression that many cases are lost from delay in the treatment; the tumour grows and becomes large, and thus the interior presents a much greater surface; so great, in fact, that the infant's system is unable to bear up against the local excitation requisite to effect a cure, and exhaustion follows. Pressure also, but very gentle pressure, ought to be useful, when dealing with large tumours of this kind. Again, although very many lumbar cases have been successfully treated, I am satisfied that the injection ought to be made with greater care than usual in low lumbar cases, or those almost coccygeal. This is the opposite of what might be expected, but from dissection, I have learned that the openings into the spinal canal are there large, allowing the injected fluid to run further than is desired; and the shock is apt to be greater and more immediate. In regard to hydrocephalus, it will occur occasionally in such cases; yet the history of at least two cases, known to me, shows that there was a threatening of hydrocephalus before operation, which afterwards permanently disappeared, as the patients are still alive and well. After injecting a spina bifida, we should wait usually three weeks, longer if the tumour be shrinking. The necessity for earlier interference might arise from circumstances too varied to be noted here.

One case of meningocele was presented to me, which I injected not fewer than eight times with a solution of double strength (twenty grains of iodine and sixty grains of iodide of potassium in an ounce of glycerine), and which became perfectly consolidated. Nearly two years thereafter, the child died hydrocephalic. I have been much pleased with the numerous successes of which I have been informed (now about forty), and my object in now writing is to lead, if possible, to greater security in an operation so critical.—I am, yours faithfully,

JAMES MORTON.

199, Bath Street, Glasgow, November 20th, 1882.

THE CIVIL HOSPITAL AT CAIRO.

SIR,—In a letter from one of your correspondents (I presume a military medical man) dated from Cairo, November 27th, and appearing in the BRITISH MEDICAL JOURNAL on December 16th, there are certain charges brought against civil nurses, and civil medical men in the civil European hospitals, which I think deserve to be speedily answered, and I trust you will give me the opportunity of doing so; for, as Viscountess Strangford's hospital is the only European civil hospital existing in Cairo, the paragraph in question can only refer to it. I can assure you that there is no foundation for the report conveyed to your columns beyond the "fears" of your correspondent. Nurses belonging to this hospital were lent, at much inconvenience to attend the sick beds of officers at the earnest request of a military chaplain, followed by those of the military surgeons attending these cases, which cases they continued to attend after their removal to Lady Strangford's hospital. Another military surgeon came here daily, till he left for England, kindly assisting me in operations on Arab soldiers, and performing some of them himself. Every officer received into the hospital was free to choose his own attendant, civil or military, and did so choose; my own time being fully occupied with the wounded Arab soldiers. "The female portion of the medical staff," as your correspondent calls them, have been much too hard worked to pay visits to other hospitals, and were too busy in their own homely wards to think much of other hospitals. But if your correspondent believe that the expressions of these good women have been powerful enough to raise a "public cry," he certainly pays them a most stupendous compliment at the expense of the whole staff of the medical officers of the army. It has undoubtedly been a matter of regret to us that the medical staff did not endeavour to overfill our comfortable house, while hundreds of poor fellows were lying on the ground unnursed; but this is their own affair, and we do not suppose that they imparted any of their reasons to the exceedingly superficial gentleman who has such an acute "fear of the spirit of jealousy."—I remain, sir, yours obediently,

HERBERT SIEVEKING.

Cairo, December 26th, 1882

THE CASE OF M. GAMBETTA.

SIR,—In the report of the necropsy on M. Gambetta, it is noted that "a certain quantity of, but very little, purulent fluid was found lying free in the peritoneum, due, it was considered, to local extension of inflammation from the region of the cæcum and colon". In a case in which I was recently consulted (which will be found fully reported in the forthcoming volume of the *Medical Society's Proceedings*) inflammation of the vermiform appendix, in a boy, fourteen years of age, was set up by the impaction of three small pieces of fæcal matter, the largest being about the size of a bean. Fatal peritonitis supervened, and at the necropsy made by Mr. Pocklington and Mr. Irving Page of Wimbledon, a pint of pus was found in the peritoneal cavity, without any sign of perforation of the peritoneum. In this case, there was no question of pyæmia. I cannot help inferring that in M. Gambetta's case, where still less peritoneal mischief was found, the cause of death was due to recurrence of the old disease around the cæcum and colon, without any pyæmic complication due to the pistol shot injury, as the presence of pus in the peritoneum might, at first sight, suggest.—I am sir, your obedient servant,

WILLIAM H. DAY, M.D.

10, Manchester Square, W., January 9th, 1883.

THE CONTAGIOUS DISEASES ACTS.

SIR,—You are certainly right in pointing out the inconsistency of the Parliamentary Committee in reporting in favour of the Contagious Diseases Acts, and at the same time in recommending their non-extension. You further remark that, wherever troops are quartered away from the operation of the Acts, great mischief is likely to ensue. Certainly it will be so, if the new Secretary of State for War allows the practice to continue of sending out diseased soldiers from the towns supplied with State-guaranteed brothels, into parts of the country not so blessed, and, at the same time, isolating carefully diseased soldiers entering the protected towns; thus not cooking statistics, but cooking conditions on which to found statistics. I join you in hoping that the new Secretary of War may recommend an extension of the system. Government has already defied public opinion; practically they have struck every Nonconformist in England in the face, oblivious of the fact that it was the holding back of the Nonconformists in 1874, which left their party out in the cold for six years. Let them, if they dare, challenge again the Nonconformists of the Northern Counties, and the people of Scotland; then, neither the Irish Land Act, nor the grand Egyptian campaign, will save them from the wrath to come.—Yours, etc.

EWING WHITTLE, M.D.

Parliament Terrace, Liverpool, January 6th, 1883.

THE TREATMENT OF INFANTILE PARALYSIS.

SIR,—Dr. Lee objects to the designation "Regressive Paralysis," that it is not pathological. Neither, I would remark, is the term Infantile Paralysis; but the former name has the advantage over the latter, of being so far correct, that it does not predicate a limitation which has no existence in fact. It seizes upon the most prominent and distinguishing characteristic of the disease, and uses this as its denominator, at once clearly marking it off from the progressive paralysis. A pathological and technical name already exist, the "polio-myelitis anterior acutissima," of Kussmaul; but it is cumbrous and inconvenient to use these technical names, with frequency; and in all modern medical writing we find, that what may be called the colloquial or English name is as much a requisite as the minutely accurate pathological or technical one. Thus it is that the term infantile paralysis has itself obtained currency, and because of its apparently greater accuracy, superseded the once popular "Essential Paralysis" of Rilliet; and, for the same reason, I hold, that it should now yield, in consequence of increased knowledge having proven its deficiency, to the one which I have proposed. And I would also point out, that we have, besides, the acute, a chronic form of polio-myelitis anterior, known as "progressive muscular atrophy," or more tersely and more accurately, as "wasting palsy;" and I venture to think that the term I propose is useful, as preventing a confusion between the two, which might arise from the pathological designation alone, and serving to accentuate the distinction between the two classes of disease. In the latter, the paralysis is first of small extent and gradually *progresses*;—in the former, the greatest effect of the attack is visible at the first onset, and afterwards the palsy quits, steps back, *regresses* from a greater or smaller number of the muscles affected. So much for the name "Regressive Paralysis."

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As to Dr. Lee's opinion, that the case cited by me would have recovered quite as well without electro-therapeusis, I must continue to differ from him. I had the advantage of seeing the child daily and of myself applying the electric current, and also the joy of watching through long months and years, muscle after muscle, become gradually, slowly, and little by little responsive to the will, from the first feeble tremors, only to be excited by a strong continuous current until that was again lost, and the response to faradisation, became, first feeble and afterwards normal. I chose this case, only because it is the one which has been most closely under my own observation, but it is but one of many. I have now notes of over two hundred of these cases, and though it is quite true that when they are brought to us, too often it is too late for much to be done, yet whenever the case is seen sufficiently early, we may be very hopeful, with patience, perseverance, and judgment, of saving from the more serious degrees of wasting and deformity. I use the word judgment because, though I have myself never seen any serious ill consequences from the application of electricity, I am prepared to admit that some such results may occur in careless or inexperienced hands.—I am, etc.,

Manchester, January 9th, 1883. W. H. BARLOW, M.D.

FATALITIES FROM FOOTBALL.

SIR,—In your article on the above subject, in the JOURNAL for January 6th, you justly surmise that the surgeon is wrongly reported, when he is made to say that the cause of death (in this case) was concussion. As the case is somewhat obscure, further details may be of interest. The lad was pale and strumous-looking. For some time he had been working very hard to get up a part he was to take in a theatrical entertainment, given by the members of the Church Institute, to which he belonged. On the afternoon of the day fixed for the representation of the play, the accident took place. The ball struck him on the chest, and he fell backwards, striking his head on the ground. He soon got up, and continued the game; but, on coming home, he complained much of headache. He went to the entertainment and got through his part well, although suffering from his head all the time. On December 3rd, he felt very ill, but took his class at Sunday school as usual. On December 4th, instead of going to work early, he remained in bed, feeling too ill to rise; but, at 9 A.M., he went downstairs to the water-closet, and was found there after a short time in a state of stupor. I was then sent for, and saw him about 10 A.M., about forty-two hours after the accident. I found him lying, curled up on his left side, in bed. He could not be roused by shaking or loud speaking. Pulse 60 to 70; temperature 103°; pupils equal, but contracted. Towards evening, the breathing became stertorous, and large quantities of churned up mucus kept oozing from his mouth. On December 5th he was much in the same state; he had not swallowed anything; motions and urine were passed under him. Pulse 80 to 90; temperature 104.5°; respirations 30 to 40, "Cheyne-Stokes". On December 6th he had convulsions during the night, which were repeated several times before he died. These were bilateral, and occurred in the face and upper extremities. Pulse 120, very feeble; temperature 102.5°.

Without a *post mortem* examination, which was not obtained, it is only possible to guess the exact cause of death. It might be due, as you suggest, to meningeal extravasation; perhaps the straining at stool caused the extra hæmorrhage, which produced the insensibility when he was found in the closet, and from which he never recovered. I agree, however, with your view of the case. My idea was, that the shaking of the brain of a factory lad, already hyperæmic from the unusual strain thrown upon it of learning a part, and the excitement of performing it, had given rise to encephalitis. In my evidence before the coroner, I said the death was probably due to inflammation of the brain.—I am, sir, your obedient servant,

CHARLES J. B. CLUBBE, L.R.C.P.Lond.

Lower Tooting, S.W., December 9th, 1883.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE ROYAL MONTROSE ASYLUM.

R. HOWDEN, the Medical Superintendent of the Royal Lunatic Hospital at Montrose, in his brief but thoughtful annual report, reviews the history of that institution, which has now entered on the second century of its existence. Originating in the benevolence of the inhabitants of the town of Montrose and neighbouring country, it was the first public hospital in Scotland devoted to the treatment of the insane. Commencing with thirty beds, it now contains 500; and at every stage of its progress it seems to have kept well abreast of every improvement in the management of the insane and administration of lunatic asylums. "The present improved treatment of the insane," Dr. Howden justly observes, "is the result of a more intimate knowledge of insanity, and has been brought about mainly by the attention which has been brought to bear on it by members of the medical profession. It was the result of no sudden revolution, and though we are more attracted by the prominence of men like Pinel, Gardiner, Hill, and Conolly, we can trace its gradual evolution during the century in the writings and work of many earnest men. When I read over some of the older asylum reports, especially those of the now venerable Dr. W. A. F. Browne, who was the first Medical Superintendent of the Montrose Asylum, I am reminded how little there is that is new under the sun, and it is with a sense of humility that I recognise in many of our modern advances and improvements, but the realisation of views and aspirations ably advocated fifty years ago."

MILITARY AND NAVAL MEDICAL SERVICES.

HOME AND FOREIGN SERVICE.

SIR,—As a committee is sitting on various matters relating to the Army Medical Department, will you permit me to ask attention to the disproportion which exists at present between the home and foreign service of medical officers. The average home service for some years past has been two years or less in succession to foreign service of five and six years. When the Egyptian war broke out, several medical officers were ordered out who had returned from Indian service less than eighteen months previously, and whose constitutions had not recovered from the effects of exposure in a tropical climate. Such a disproportion as two-thirds of tropical or subtropical service to one-third of home service used not to exist, I am informed, in former years, and it seems to be a fair subject of inquiry why it is the case now.—I am, sir, etc., A.M.D.

MILITIA SURGEONS.

DR. JAMES SMYTH asks: Does a civilian medical practitioner's appointment under the old militia regulations, hold good under the new, when a medical practitioner in the same town has charge of the regular troops, with the station hospital attached, for many years; the permanent staff of the disbanded militia being now part of a linked battalion of a regular line regiment, consequently really connected with the regiment of which it is a link? Are not any of the permanent staff, when sick, obliged to be removed to the station hospital, as they have no regular quarters or hospital, to be attended by the medical officer in charge of the regular troops? Should not the medical officer in charge of the regular troops attend the permanent staff of the linked battalion, now part of regular troops?

1. The first question is too vaguely worded to enable us to answer it. No doubt, later regulations overrule all previous ones.
2. Permanent members of the staff are eligible for readmission to station hospitals.
3. If permanent staff at head-quarters of a brigade depôt, they are obliged to be attended by army surgeon.

MILITARY MEDICAL JOURNALISM.

SIR,—Will you kindly excuse the liberty I take in referring to you for information concerning the publication of a periodical which, I think, would be called in English the "Military Medical Review". Such a journal is published in every capital in Europe; and I cannot believe but that a similar one is also published in London; it is devoted to military alone. I am anxious to make myself acquainted with it, and it is for this reason that I venture to appeal to your courtesy to inform me where I can obtain it. It is possible that you may not be aware of its existence, it is so completely military; but you will know, of course, to what source to refer for information on the subject.

Hoping you will excuse my informality in the matter, and my ignorance of English etiquette, I am, sir, your obedient servant,

SR. DON MANUEL SIERRA, Medico Militar.

Portugalete, Viscaya, Spain, December 28th, 1882.

*** We regret to say no such journal or review is published in England. A few years ago, a periodical of the kind was started, but, owing to fewness of subscribers, collapsed after the first year. The very scattered condition of British medical officers all over the globe, and their constant movement, cause the regular publication of a medico-military journal in England to be a far more difficult matter than it is in Portugal and other countries where the military medical staff is comparatively stationary.

INDIAN ARMY.—The following promotions have been made:—To be Deputy Surgeon-General—Brigadier-Surgeon William Walker, M.D. (Bengal). To be Brigade Surgeons: Surgeon-Major Robert S. Bateson (Bengal); William H. Morgan (Madras); and H. Vandyke Carter, M.D. (Bombay).

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

COMPULSORY NOTIFICATION OF DISEASES.

PROFESSOR GAIRDNER has written a very able and very temperate letter to the *Glasgow Herald* anent the subject of the compulsory notification of infectious diseases by medical men, and we venture to quote largely from it, because it seems to us to set forth more clearly than has been elsewhere done, some important aspects of this much vexed question.

"The advantage to the public" says the writer, "of the notification, and early notification, of all infectious disease is, practically, undisputed, and there is a plausible simplicity and completeness about the means adopted in the Bill to secure this which recommend the clauses in question to the official mind as adequate, and alone adequate, for the purpose in view. Hence we have the hitherto unwonted phenomenon of a sanitary movement, and legislation in accordance therewith, proceeding directly in the teeth of the convictions, and still more of the instincts, of a large body of honourable men in the medical profession. Unhappily, it is much easier to deal with this opposition by attributing it to improper motives than to deny the fact.....The 'interests of the patients' are, in fact, placed absolutely as a first charge in the hands of the medical man by those who call him into attendance; and it is equally clearly a duty on his part to respect these interests, even when there is an apparent conflict between them and those of the public. The mutual confidence thus implied is so far from being an improper or a shameful fact, that every one in Glasgow knows it is the unwritten law which governs the medical attendance on his own family, and that, without this unwritten law strictly followed, *in foro conscientiæ*, medical services would very soon be discredited, and would, in fact, become a delusion and a snare. Is it to be held in future that the sanitary or official conscience is to be for ever acting the part of Mephistophiles towards the private or medical conscience, with a bribe of 2s. 6d. in one hand and a penalty of 40s. in the other? Or is it of no account that the medical conscience generally, if not universally, recoils from a law which prescribes to it a duty so equivocal and so provocative of mistrust and misunderstanding? Let us assume for a moment that the popular personal view of 'the interests of the patient' is wholly wrong; that unwillingness to notify is simply and always an error of ignorance and of stupidity, and that the poor man, who may be both deprived of his bread and hurt in his feelings by sanitary interference, has no moral right to feel aggrieved. Still, the fact remains, that he does, in certain cases, feel aggrieved. Sanitary inspectors are not always polite and conciliatory in dealing with ignorant obstruction.....Is it nothing, that the man who is to be called upon in the name of the law, and at his own peril in case of neglect or refusal, to set the ball of officialism a-rolling in such cases, is also the man whom the patient or his friends have voluntarily called in expressly to guard 'the interests of the patient?' Grant that they are wrong in desiring the privacy of the sick room to be respected, and that they themselves ought to be compelled by law to divulge what they would rather conceal. Are they equally wrong in supposing that the man who will first take their fees, and then secure an extra half-crown by peaching upon them to the sanitary authorities, is guilty of very much the same dereliction of duty, so far as they are concerned, as an engineer or a lawyer who accepts a double commission?

"Such are a few only of the considerations which, I believe, have had some weight with the medical profession here in opposing that clause of the Bill which compels, under penalties, direct notification by the medical attendant. I venture to affirm that the ethical bearings of these considerations have not been duly gauged either by Dr. Littlejohn or Dr. Russell, still less by those irresponsible persons who so glibly allude to 'medical trades' unionism' as the source of the difficulty. The unwritten law above referred to is the only security these persons themselves have against grave abuses of medical confidence in their own families; and, to weaken its force, either in the eyes of the profession or of the public, is a disaster for the one as much as for the other. I fully admit that occasions may arise when the unwritten law of medical reserve ought to yield to a clearly proved, or judicially affirmed, public necessity. But to bring the law of the land into even an apparent conflict with private medical duty in a large class of cases, admitting of almost infinite differences of opinion in detail, is a step in legislation hitherto unprecedented, and which may surely be challenged and discussed on public grounds, without subjecting the profession at large to imputations of the kind referred to.

"In dealing with this difficult subject in presence of the Town Council and elsewhere, I have always remarked that any kind of legal compulsion exercised upon the householder, has its justification in the fact that he is, legally speaking, the 'author of the nuisance.' Were the nuisance, or danger to the public, one of an ordinary kind—*e.g.*, a foul drain, a noisy or fierce dog, a bad smell, fire, or smoke—this fact would be clearly recognised. But the medical man is not in this position. He is merely the accidental witness—accidental, I say, because it rests absolutely with the householder or sick man whether to call him in or not. In Glasgow, if not in Edinburgh, one of the greatest of evils is that, in hundreds of cases of epidemic disease among the poor, the medical practitioner is not called in at all, or only casually, and at a very late stage of the disease. In the very cases in which it is most urgent to discover such diseases early—the cases in which there is the greatest ignorance, or the most deliberate intention to hush up the facts—the mere idea getting abroad that the doctor is bound in law to notify, to become the 'servant of the public' (as it is called) as well as the adviser of the sick man, will be sure to lead to his services being dispensed with altogether, or as long as possible. No doubt the machinery works smoothly enough as long as the householder and the doctor together are agreed as to the public duty of notification. The doctor takes the trouble and the responsibility, writes and sends on his certificate, and gets his half-crown, and the thing is done. But I have been long enough a sanitary medical officer to know that these are not the cases that most require looking after. Proof of this would be readily forthcoming, were it not that I am bound to have some kind of consideration for your space. When Dr. Littlejohn affirms that the law works so entirely well in Edinburgh, I give him full credit for sincerity. He is speaking of what he knows, not of what he does not know. He does not, and cannot, know the number of cases in which a part of the plan of concealment consists in not sending for a doctor at all.

"How are we to get at these cases, and, in general, how are we to defeat the practical conspiracy of ignorance and indifference with selfishness and recklessness, as regards the spreading of epidemic disease in the houses of the poor? Plainly not, for the reasons above mentioned, by converting the doctors wholesale into informers, and obliging them to accept a 'double commission' in this character. The suggestion I made on the spur of the moment at the Philosophical Society would, I think, go some way towards meeting the difficulty; and it has this advantage, at least, that the sanitary officials might try it in Glasgow to-morrow without waiting for an Act of Parliament. No town that I know of has nearly so perfect an organisation of inspectors, ready at all times to follow up every hint as to a new locality or case of epidemic disease. All that is wanted is a first information, and even that needs not to be in set form of words, or such as to imply, or to contain, a diagnosis. Although the doctor may not have been sent for, and although the householder may be ever so reticent, someone in the neighbourhood will be almost sure to hear that there is 'infection,' or the suspicion of infection, in such and such a stair, or house, or 'land.' Indeed, it is clearly the personal interest of every one living near such cases to know of their existence so as to avoid them, and the only thing wanted to bring this early, though possibly vague, information straight to the sanitary office, is the indefinitely small inducement which is necessary in all cases to induce lazy people to take a very little trouble in their own and in the public interest. I therefore proposed that it should be made widely known, especially in localities where epidemic disease is likely to be concealed, that one shilling, at least, would be given by the sanitary authorities for every first information leading to the discovery of infection, or infectious or epidemic disease, in any house, or tenement of houses, in Glasgow. The reward, such as it is, might be earned by a mere verbal communication to the sanitary inspector of the district, or by a more formal and written one addressed to the sanitary office; and it ought to be paid at once, so soon as the sanitary inspector is satisfied that the information is not idle—*i.e.*, that it is given in good faith, and in the public interest. Were this plan faithfully followed for a few months, in the face of such difficulties as might be expected to follow at first, in the shape of blunders and practical jokes (which, however, I think would be easily disposed of by such a staff as ours), the effect would surely be a vast amount of wholesome education, in a sanitary sense, of those most concerned. The more ignorant and poor the neighbourhood, the greater would be the forcing power of the shilling; indeed, very soon there would come to be a competition in the art and science of giving early, or first, information, which is precisely what is wanted. The verification of the information so obtained would be the business of the Sanitary Officer. If a doctor was in attendance, it would be right to apply to him in the first instance; and he would then be in a very different position from the one he occupies under compulsory notification, when he has to give the first impulse to the sanitary authorities. If no doctor was in attendance, it would be, and ought to be, the business of the medical officer and his staff to make the diagnosis, and, at the same time, provide all necessary securities for the public.

"I have thus deliberately formulated, for the information of your readers, the plan which Dr. Littlejohn seems to think is sufficiently disposed of by an allusion, which only shows that he has not taken it into his mind at all. To this, my only reply is, let him try it, and perhaps he will then discover how it has happened that, after several years of compulsory notification in Edinburgh, the death-rate of several of the leading epidemic diseases is not lower, but higher than before, and this while he still holds out to us that the plan adopted in Edinburgh has been an unqualified success."

In thus almost reproducing Dr. Gairdner's letter in its entirety, we have been actuated not only by the consideration mentioned at the outset, but as well by the difficulty which we felt in omitting without inquiry, and by the fact that, in a previous number, we alluded to his chance suggestion at the Philosophical Society, without, however, offering any opinion as to its wisdom or otherwise. It seemed but right, having done this, to avail ourselves of the opportunity afforded us by this letter, of setting forth fully the reasons which seemed to him to justify the suggestion, and give it force.

THE CONTINUED PREVALENCE OF FEVER AT ST. HELEN'S.

IN his report to the Local Government Board on this subject, Mr. Spear gives an account of the sanitary condition of St. Helen's, an account which, from our knowledge of the place, we should say is rather understated. Unsanitary conditions of all kinds abound in St. Helen's, and the wonder is, if there be any truth in the view that general unsanitary conditions are largely responsible for the prevalence of infectious fevers, that there is anybody now alive there. Taking into consideration the character of the population, it may be doubted if there be more "fever" in St. Helen's than in similar populations elsewhere. What the actual prevalence of "fever" is, cannot be accurately estimated, because, "with only few exceptions, the fever deaths have been recorded under one or other of the synonyms of enteric and typhoid fever." Now, if the interpretation of the term "fever" be as liberal at St. Helen's as it is in London, no accurate conclusion can be drawn from Mr. Spear's tables. In London practice "fever" means anything, from the dislocation of a joint up to true blue typhus, and the nature of the typhus is sometimes of the most remarkable kind. Only the other day, a brilliant authority on fever certified as typhus a well marked acute necrosis of the humerus, a condition which was very evident at a glance on admission, and which was confirmed afterwards by *post mortem* examination. So that if all the cases of acute necrosis, of acute tuberculosis, of pneumonia, pleurisy, phthisis, bronchitis, syphilis, alcoholism, disease of the heart, of the kidneys, of the skin and "various" were allowed for, St. Helen's, as regards the four deaths of infectious fever, and notwithstanding its abominable unsanitary conditions might be no worse than its neighbours. Mr. Spear makes certain recommendations to the sanitary authority,

which we think they would do well to carry out. To which we would add one of our own, that things be called by their right names; in particular, that enteric fever be called enteric fever, and not by one or other of its many and contradictory synonyms.

ENTERIC FEVER AT SOUTHBOROUGH.

Mr. John Spear has presented to the Local Government Board a report, of which an abstract is subjoined, on an outbreak of enteric fever in the urban sanitary district of Southborough.

The report gives a graphic description of the sanitary condition of Southborough, a charming district near Tunbridge, situated geologically on what is known as the Wealdon formation, a series of strata lying between the upper beds of the oolite and the lower beds of the chalk, a formation which is supposed by some to belong to the upper group of the oolite system, by others to the lowest of the chalk formations. Regarding it as the upper group of the former it consists of the Weald clay and the Hastings sand. Its natural advantages of soil and climate are good. Its sanitary condition, however, is deplorable; and deplorable in respect of a condition of things easily remediable. Take the following as a specimen.

"The sewers are carried for the most part down the front streets, and as the greater number of houses stand somewhat back from the road, and are built in detached blocks, some considerable length of private drain is generally required. In the construction of these private drains the most unfortunate mismanagement has been shown. Judging from what I myself saw, it may be taken that a considerable proportion of them allow of the deposition and retention of much of the sewage matter; that defective and leaky joints are the rule rather than the exception; that right-angle junctions (I could find no other) are generally provided. Such drains, moreover, are scarcely ever ventilated; and they receive all the excreta, for a system of pan-closets—*i.e.*, waterclosets without the water—is the one generally in vogue. These closets are supposed to be regularly flushed by hand, but the duty here, as elsewhere, is neglected, and excrement collects at the bottom of the pan. With its retention here, and its retention again in the defective drain it is, when it, reaches the sewer, a highly putrid mass, resembling the ooze of a cesspool. The sewers are consequently highly charged with offensive gases; and, as one result, the surface ventilators are much and justly complained of.

"In the cottage property the closets are built, with a few unfortunate exceptions, external to the main wall of the dwelling, but direct air communication between the houses and the sewer by the slop-water drain is frequent. These connections, as well as the gulleys in the yards, are, moreover, commonly only protected by a bell-trap—for that form of trap is in almost universal use; and in not a few cases it was found to be wholly inoperative.

"The condition of the drainage, leading to the deposit of sewage and its leakage into the surrounding soil, is all the more hazardous since the water-supply of the district is solely derived from local wells. Each house or group of cottages has, with few exceptions, its well; this sometimes a mere "sump-hole or catch-pit," at others sunk to a depth of from twenty-five to seventy or eighty feet; but then rarely protected from immediate surface pollution, although often standing within a few feet of drains such as I have described. I shall have to speak later on of special instances, but it may be said at once that investigation led me to the conclusion that the majority of the wells of the district are liable to most dangerous contamination."

There is more of a like kind; but we hope enough has been set forth to show how pressing is the need for improvement, Mr. Spear does not appear to have traced the origin of the enteric fever, and we have not, therefore, ground for concluding that the manifest unsanitary conditions of which he speaks were the cause of it. But whether they were or were not, they ought to be remedied at once, as being injurious to health generally. Mr. Spear speaks of the precautions used to prevent the spread of infection, but it does not appear what positively he means by this. It has been recently argued, amongst others by Dr. Sharkey, that enteric fever is infectious in the ordinary sense, that is, passes from person to person without the intervention of decomposition. It may be that sufficient attention has not been given to this point, and it is just one of those points upon which the medical inspectors of the Local Government Board might gather information.

The Lord Chancellor has appointed Thomas Salt, Esq., M.P., to be an Honorary Commissioner in Lunacy, without salary.

OBITUARY.

ANTHONY DAVISON, L.R.C.S.Ed.

By the death of Mr. Anthony Davison of Seaton Delaval, Northumberland, which occurred on December 27th, a member of our profession, of remarkable powers, experience, and usefulness has been removed. Born in 1807, near Morpeth, and educated in Edinburgh, the deceased gentleman has spent his whole professional life in the neighbourhood of Delaval. His practice and influence extended for many miles in the thickly-peopled coal-fields, over which he had distributed a number of assistants, which it scarcely seemed possible could be effectually managed by one man. But Mr. Davison's activity and power of organisation were of a very high order; and the reverence with which he was looked upon by all classes among his clients showed how well satisfied they were with his arrangements. It is as a surgeon that the deceased will be chiefly remembered, and in this department there are few men in private practice who could boast of such experience. If a comparison of cases and results could be instituted, Mr. Davison's would stand well against those of many hospital surgeons. As medical officer, officer of health, and vaccinator in the Cramlington district, he was ever attentive and zealous in his duties; and whether the public gaze was directed towards him, as when he stood for days in vain expectation of saving the victims of the terrible calamity at Hartley Colliery in 1862, or in assuaging the grief of the lonely widow, Mr. Davison was ever the high-minded physician, the sympathetic and generous friend. In the affections and remembrances of the people among whom he lived for fifty years his memory will be most warmly cherished; and numerous medical men throughout the country, his former assistants, and others, will feel that one of whom they felt proud has been removed. Mr. Davison was unmarried. At his funeral a numerous concourse assembled; and the evidences of regard from all ranks of society were sincere. For the past nine years, the deceased gentleman had Mr. Anderson as his partner.

ROBERT ELLIOT, M.D., F.R.C.P.

In the death of Dr. Robert Elliot, which terminated a long illness, at his residence at Carlisle, on the last day of the old year, we regret to record the loss to the profession of one of the oldest, most energetic, and most respected physicians in the north of England. Dr. Elliot belonged to a family, the members of which have, for three generations, been eminent in medicine. His father, after practising at Haltwhistle, went to Carlisle in the early part of the present century, where his three sons, William, Thomas, and Robert, succeeded him in practice. The two former died in Carlisle many years ago, where the renown of Thomas as a surgical operator is still remembered. Robert was born in 1811. Educated in Edinburgh, he graduated as M.D. in the University of that city in 1836. He spent the next three years in extending his studies at Paris and Heidelberg. Upon his return to England from the continent in 1839, Dr. Elliot entered upon general practice at Gateshead, where, and in the neighbouring town of Newcastle, he acquired considerable repute. Appointed to the chair of materia medica and hygiene in the Newcastle Medical School, he soon became known as an able teacher, and exhibited his remarkable powers as a fluent and impressive lecturer. About thirty-five years ago, he removed to Carlisle, to share in the large practice which his family had long enjoyed. There he at once threw himself with energy and generosity into many local movements for the amelioration of the physical and moral condition of the poorer classes, and for the propagation of sanitary reform. Reading-rooms and libraries sprang up and flourished under his influence; while he acted as leader in these enterprises, he studiously abstained from joining in the management of institutions for the working classes, lest he should impair their feature of self-government, which he held to be an essential factor in their success. In season and out of season, with pen and tongue, and up to his last illness, Dr. Elliot was untiring in his advocacy of the principles and practice of public and private hygienic reform. Amongst his writings on this subject are a series of papers on ventilation, sewerage, and water-supply, contributed to the *Transactions* of the Social Science Congress. The annual reports, which he published as a medical officer of health, with their exhaustive statistics, are monuments of his thoroughness in work and his mastery of his subject.

In 1855 Dr. Elliot was elected Mayor of Carlisle, and shortly afterwards his name was placed upon the commission of the peace

In 1873 he was appointed coroner for the city, and in 1874 he was chosen as the first medical officer of health; these offices he occupied until his death. Gradually retiring some years ago from general practice, he restricted his medical duties of late years to those of a consultant. He was admitted a member of the Royal College of Physicians of London in 1859, and the fellowship of that body was conferred upon him in 1873. He was Consulting-Physician to the Carlisle Fever Hospital, and to the Carlisle Dispensary. Dr. Elliot was an active member of the Association, and a frequent attendant at the annual meetings; and he was one of the first presidents of the Northern Counties Branch.

GEORGE GREGORY, M.D.

THE very sudden death of Dr. Gregory, of Brackley Park, near Bolton, has cast a gloom over that district where he lived, and where he was much respected by all with whom he came in contact. The deceased gentleman, it appears, retired to rest about eleven o'clock, apparently in his usual health, and on the following morning he was found lying on the floor. face downwards—life being quite extinct. Dr. Clarke, who was summoned, found the deceased quite cold, and judged that death must have ensued six hours before he arrived. Dr. Gregory, who was in his 49th year, was born at Westhoughton, received a portion of his early education at Rivington Grammar School, and the greater portion of his medical studies were made at Manchester. He was M.D. of the University of St. Andrews, was a Member of the Royal College of Surgeons, and also of the Apothecaries' Company. After studying at Manchester, he commenced practice in Westhoughton, but afterwards removed to Little Lever, and about twenty years ago he took up his abode at Great Lever, in which district he has since resided, holding the post of medical and vaccination officer for the Lever district. He was also Medical officer of Health to the Rural Sanitary Authority from its formation up to a short time ago, when he resigned, and was succeeded by Dr. Johnson Martin. Dr. Gregory leaves a wife and one child, a son, about twelve months old. The deceased was a churchman of pronounced views, and was also a staunch conservative, and was one of the best known gentlemen of the district.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 4th, 1883.

Bruce, Robert Marston, Carenton House, Lordship Lane, S.E.
Dowsing, Herbert Leopold, Argyle Villa, Hull.
Knapton, George, 29, Wimpole Street, Cavendish Square.

The following gentleman also on the same day passed his Primary Professional Examination.

Reeks, John, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 8th instant; viz.:

Messrs. E. Russell Wawn, J. Lancelot Atkinson, G. Abraham Holroyd, and G. Spencer Greenwood, of the Leeds School; James Hamilton, Alfred Williams, and J. Moore Young, of the Glasgow School; H. Wessen Husbands and E. Henry Meaden, of the Bristol School; G. Ernest Roach, of the Birmingham School; C. Robert Battersby, of the Dublin School; Herbert Skelmerdine, of the Edinburgh School; W. Mulrea Fisher, of the Galway School; Herbert Lund, B.A.Cantab., of the Cambridge School; M. Percy Holt, of King's College; J. R. Isaac Raywood, of Guy's Hospital; A. Foster Keyworth, of the Manchester School; and Bertram F. Read, of St. George's Hospital.

Four candidates were referred for three months, and one for six months.

The following gentlemen passed on the 9th instant; viz.:

Messrs. J. Michell Clarke, E. Duguid Ritchie, H. Elliott Browne, R. Robert Whisham, and W. Percival G. Graham, of the Cambridge School; Frederick Edge, J. Fullerton Aspinwall, T. Francis Higgins, and Edgar Swindells, of the Manchester School; Arthur Badcock and F. Burnard Musgrave, of the Leeds School; H. B. Wetherell Plummer, of the Newcastle School; D. Mathewson Nairn, of the Glasgow School; F. Neel Gandin, of University College; C. Edmund Lister, of Guy's Hospital; A. Thomas Peachey, of the London Hospital; J. Bathurst Okell, of St. Thomas's Hospital; W. W. Baldock Fry, of the Edinburgh School; and H. Edward Brodrick, of the Liverpool School.

Five candidates were referred for three months, and one for six months.

MEDICAL VACANCIES.

BROMYARD UNION.—Workhouse Medical Officer. Applications by January 22nd.
BROMYARD UNION.—District Medical Officer and Public Vaccinator. Salary £105 per annum. Applications by January 22nd.
CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Resident Surgeon. Salary, £180 per annum. Applications by February 1st.
CHILDREN'S HOSPITAL, Birmingham.—Resident Assistant Medical Officer. Salary, £40 per annum. Applications by February 1st.
CHORLTON UNION.—Assistant Resident Medical Officer. Salary, £120 per annum. Applications by January 24th.
DUNMOW UNION.—Medical Officer and Public Vaccinator for the Hatfield District. Salary £95 17s. per annum. Applications by January 15th.
ECCLESALL BIERLOW UNION, Rural Sanitary Authority.—Medical Officer of Health. Salary, £30 per annum. Applications by January 16th.
ECCLESALL BIERLOW UNION.—Medical Officer and Public Vaccinator. Salary, £40 per annum. Applications by January 16th.
LEICESTER INFIRMARY AND FEVER HOUSE.—House-Surgeon. Salary, £120 per annum. Applications by January 15th.
LIVERPOOL DISPENSARIES.—Assistant House-Surgeon. Salary, £108 per annum. Applications by January 22nd.
LONDON LOCK HOSPITAL, Male Hospital and Out-patient Department, 91, Dean Street, Soho, W.—House-Surgeon. Salary, £50 per annum. Applications by January 23rd.
NEWCASTLE-UPON-TYNE INFIRMARY.—Junior House-Surgeon. Salary, £50 per annum. Applications by January 17th.
NEW ROSS UNION.—Fethard Dispensary District Medical Officer. Salary, £115 per annum. Election on the 18th instant.
PAROCHIAL BOARD OF AUCHTERGAVEN.—Medical Officer, Officer of Health, and Vaccinator for the Western District of the Parish. Salary, £40 per annum. Applications to Mr. Donald Cumming, Inspector of Poor, Auchtergaven, Bankfoot, Perth, by January 30th.
PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £40 per annum. Applications to Captain Stewart, Shambellie, New Abbey, Dumfries.
RANGOON MUNICIPALITY.—Health-Officer. Salary, 600 rupees per month. Applications to the President by January 31st.
ROYAL EDINBURGH ASYLUM.—Junior Assistant-Physician. Applications to Dr. Clouston.
ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary £75 per annum. Applications by January 6th.
SEAMEN'S HOSPITAL (late Dreadnought), Greenwich, S.E.—Resident House-Surgeon. Salary, £50 per annum. Applications by January 19th.
UNIVERSITY COLLEGE, London.—Jodrell Professor of Physiology. Salary, £264 per annum. Applications by January 24th.
UNIVERSITY OF EDINBURGH.—Examiner in Medicine in each of the Departments of Chemistry, Anatomy, Midwifery, and Practice of Physic. Applications by January 15th.
WEST RIDING LUNATIC ASYLUM, Wakefield.—Pathologist and Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Herbert Major, the Medical Superintendent.

MEDICAL APPOINTMENTS.

BLAIR, C. S., M.B., appointed Resident Surgeon to the Memorial Hospital, Jarrow-on-Tyne.
BUTTERWORTH, S., M.R.C.S.Eng., appointed Assistant House-Surgeon at the Metropolitan Free Hospital, *vice* J. R. Annes, M.R.C.S., resigned.
CAHILL, T. E., L.R.C.S.I., appointed Medical Officer to the Callan Union, Ballingarry.
CASEY, Edward, M.D., B.S., appointed Medical Officer of Health for the Borough of Windsor, *vice* S. Turrell, M.D., deceased.
COCKEY, E. P., M.R.C.S., appointed Assistant House-Surgeon and Apothecary to the London Lock Hospital and Asylum, *vice* P. P. Whitecombe, M.R.C.S., resigned.
COSGRAVE, E. MacDowel, M.D., L.K.Q.C.P., appointed Physician to Whitworth Hospital, Bishop's Road, Dublin.
COXWELL, C. Fillingham, M.A., M.B.Cantab., appointed Medical Registrar to the London Hospital.
EDWARDS, A. R., M.R.C.S., appointed House-Surgeon to King's College Hospital.
FIRTH, R. H., F.R.C.S.Eng., appointed Demonstrator of Anatomy in University College, London, *vice* A. Q. Silcock, M.D., resigned.
GROSVENOR, Alfred Octavius, M.D., appointed Divisional Surgeon to the Metropolitan Police, West Hampstead District.
HADDEN, W. B., M.D.Lond., M.R.C.P., appointed Medical Registrar to St. Thomas's Hospital, *vice* C. E. Sheppard, M.D., resigned.
HOBSON, Lewis John, M.D.Lond., B.S., appointed Honorary Physician to the York County Hospital.
HOPKINS, H. Culliford, M.R.C.S., Bath, appointed Surgeon to the Police, *vice* G. E. Lawrence, deceased.
HORSFALL, T., M.R.C.S., appointed Resident Medical Officer to the Leeds Public Dispensary.
IRVINE, J. J., L.R.C.S.I., appointed Medical Officer to the Inishowen Union, Londonderry, *vice* F. McLaughlin, M.D., resigned.
KEMPE, C. M., M.R.C.S., L.S.A.Eng., reappointed Medical Officer of Health for the Urban Sanitary District of New Shoreham.
KERSHAW, H., M.R.C.S., appointed Resident Medical Officer to the Leeds Public Dispensary.
LESLIE, Ogilvie, B.Sc., M.B.Edin., appointed Physician to the North-West London Hospital, *vice* S. H. T. Armitage, M.D., resigned.

LYNAM, R. G., M.R.C.S., L.S.A., appointed House-Surgeon to King's College Hospital.

LOWE, G., M.B., appointed Medical Officer and Public Vaccinator to the Fourth District and Workhouse of the Forehoe Union, *vice* B. R. Boast, L.R.C.P., resigned.

PERRY, A., L.S.A., appointed Junior House-Surgeon to the Poplar Hospital, Blackwall, E.

PORTER, Guy D., M.R.C.S., appointed Assistant House-Surgeon to King's College Hospital.

RIDPATH, D., M.D., appointed Medical Officer of Health to the Rural Sanitary District of the Great Driffield Union.

RIDPATH, D., M.D., appointed Medical Officer of Health for the Great Driffield Urban Sanitary District.

RIDPATH, D., M.D., appointed Acting Surgeon to the 2nd East Riding Volunteer Rifles, Driffield.

ROBERTS, O., M.R.C.S., appointed Assistant Medical Officer and Dispenser to the Parish of Lambeth, *vice* J. Thomson, M.D.

ROCHE, John, M.D., appointed to the Commission of the Peace, County Dublin.

ROUNTREE, G. A., M.D., appointed House-Surgeon and Apothecary to the Cork South Charitable Infirmary and County Hospital, *vice* W. E. A. Cummins, M.D., resigned.

RUSSELL, R. H., M.R.C.S., appointed Assistant House-Accoucheur to King's College Hospital.

RYAN, J. N., M.D., appointed Public Vaccinator for the Borough of Weymouth and Melcombe Regis, and to the Weymouth Union.

SELLERS, Richard Burdett, M.R.C.S.E., L.R.C.P.Ed., appointed Honorary Surgeon to the Rochdale Infirmary, *vice* R. C. M. Pooley, resigned.

SILCOCK, A. Q., M.D., appointed Pathologist and Curator to the St. Mary's Hospital Medical School, *vice* G. C. Henderson, M.D., resigned.

SPENCE, W. J., L.R.C.P., appointed House-Surgeon to the Bradford Infirmary and Dispensary.

STIVENS, B. S., M.R.C.S., appointed House-Accoucheur to King's College Hospital.

STOKER, George, M.R.C.S., L.K.Q.C.P., appointed Surgeon to the Out-post of the Hospital for Diseases of the Throat and Chest, Golden Square.

SUTHERLAND, John A., M.B., C.M.Edin., appointed Certifying Surgeon for the Cleckheaton District, *vice* E. J. Wallace, M.D., resigned.

THOMPSON, G., M.D., appointed Medical Officer for Bellaghey Dispensary District to the Magherafelt Union, *vice* D. A. Charles, M.D., resigned.

THOMSON, St. Clair, M.R.C.S., L.S.A., appointed House-Physician to King's College Hospital.

WARLTERS, W. S., M.R.C.S., appointed House-Surgeon to the Belgrave Hospital for Children.

WILCOX, Henry, M.B., M.R.C.S., appointed Surgeon to the Woolwich District of the London Steamboat Provident Society.

WILLIAMS, E. R., M.R.C.S., appointed Second Assistant-Surgeon to the Derby Amalgamated Friendly Societies Medical Association.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

GLOVER.—On Januury 1st, at Dorrington House, Dorrington, near Shrewsbury, the wife of John Glover, M.R.C.S., L.S.A., of a son.

RING.—On January 5th, at Cliftonville, Belfast, the wife of Surgeon J. Ring, M.D., Army Medical Department, of a daughter.

MARRIAGES.

LOYD—UNDERHILL.—On the 10th instant, at Christ Church, West Bromwich, by the Rev. Percy L. Underhill, M.A., brother of the bride (assisted by the Rev. R. Hodgson, M.A., Vicar of the Parish, and the Rev. Harold J. Underhill, M.A., cousin of the bride), Wilson Lloyd, J.P., F.R.G.S., of Myvod House, Wood Green, Wednesbury, to Margaret Emily, second surviving daughter of Thomas Underhill, M.D., J.P., of Summerfield, West Bromwich.

PTON—BRINTON.—On the 10th inst, at All Saints, Wribbenhall, Worcestershire, by the Rev. J. L. Chesshire, Vicar, Alfred Upton, L.R.C.P.Lond., M.R.C.S.Eng., of Brighton, Sussex, to Norah, only daughter of the late Alfred Brinton, Esq., of Kidderminster.

DEATHS.

ULLIMORE.—On December 22nd, at Yole Grove, County Wexford, John R. Cullimore, L.R.C.P., M.R.C.S.Ed., Medical Officer Feehard Dispensary District.

EARNE.—On December 25th, at the Lawn, Cinderford, William Hearne, F.R.C.S.Eng., aged 72 years.

YON.—At 276, Bath Crescent, Glasgow, on the 6th instant, James George Lyon, M.A., M.D., aged 43.

YBRANTS.—January 1st, at Shepton Mallet, after a short illness, Jonathan Wybrants, M.D., F.R.C.S., Coroner for the South Eastern Division of Somerset, aged 65.

HEALTH OF FOREIGN CITIES. — Statistics, published in the Registrar-General's weekly return for Dec. 30th, show that the death-rate eraged 29.2 per 1000 in the three principal Indian cities; it was 0 in Bombay, 31.1 in Madras, and 33.0 in Calcutta. Cholera caused deaths in Calcutta, showing a further increase upon the numbers recent weeks, and small-pox 6 in Bombay and 5 in Madras. According to the most recent weekly returns, the average annual death-te per 1000 persons estimated to be living in twenty-two of the rgest European cities, was 27.3, and 2.4 above the average rate last ek in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 34.4, and differed but slightly from the rate in the previous week; the 613 deaths in the city included 41 from diphtheria, 23 from small-pox, and 19 from scarlet-fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 22.0, the highest rate being 23.6 in Copenhagen; 3 of the 71 deaths in Stockholm resulted from typhoid fever. The death-rate in Brussels was equal to 21.5, 4 fatal cases of small-pox being recorded. The Geneva death-rate was 30.8, and showed a marked increase upon that which prevailed in recent weeks. In Paris, the rate was 25.9, and the recorded deaths included 66 fatal cases of typhoid fever and 11 of small-pox. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.2; the rate ranged from 23.6 in the Hague to 33.7 in Rotterdam. Measles showed fatal prevalence in Rotterdam and the Hague, and the deaths in Amsterdam included 10 from croup and 4 from diphtheria. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.3, and ranged from 20.3 and 25.0 in Berlin and Vienna, to 29.3 and 29.7 in Prague and Munich. Small-pox caused 3 deaths in Vienna and 4 in Buda-Pesth; diphtheria showed fatal prevalence in most of these German cities, but especially in Berlin, Dresden, and Hamburg. The death-rate averaged 28.4 in three of the principal Italian cities; diphtheria caused 10 deaths in Turin and 6 in Rome. In four great American cities, the death-rate averaged 23.9; the lowest rate was 20.7 in Brooklyn, and the highest 28.0 in Baltimore. Diphtheria showed considerable fatal prevalence in each of these American cities; small-pox caused 23 deaths in Baltimore and 4 in Philadelphia, and 12 fatal cases of typhoid fever were also recorded in the latter city.—According to last week's returns, the death-rate in the three principal Indian cities recently averaged 30.9 per 1000; it was equal to 25.9 in Bombay, 33.1 in Madras, and 37.5 in Calcutta. Cholera caused 47 deaths in Calcutta, and small-pox 6 in Bombay and 4 in Madras; fevers showed the largest proportional fatality in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1000, in nineteen of the largest European cities, was 28.3, and exceeded by 6.5 the mean rate last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 39.5; the 703 deaths included 43 fatal cases of diphtheria, 28 of small-pox, and 21 of scarlet fever. In two other northern cities—Copenhagen and Stockholm—the death-rate was 20.7 and 31.8 respectively; the deaths in the latter city included 5 fatal cases of scarlet fever. The usual return from Paris does not appear to have come to hand. The 184 deaths in Brussels, of which 6 resulted from small-pox, were equal to a rate of 23.8. The death-rate in Geneva was 25.6. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean rate was 26.9, ranging from 19.0 in the Hague to 39.0 in Rotterdam; 15 deaths were attributed to croup in Amsterdam, and measles were somewhat prevalent in both the other Dutch cities. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.0; the lowest rates were 21.0 and 22.5 in Dresden and Buda-Pesth, and the highest 30.2 in Munich and 33.7 in Prague. Small-pox caused 6 deaths in Buda-Pesth, and diphtheria was more or less fatally prevalent in most of the other German cities. The death-rate was equal to 24.8 in Rome, and 30.5 in Venice; diphtheria caused 9 deaths in Rome, and measles 6 of the 79 in Venice. In three of the largest American cities, the mean death-rate was 26.3, the rate ranging from 22.2 in New York to 34.4 in Baltimore. The 219 deaths in Baltimore included 41 fatal cases of small-pox and 20 of diphtheria—the deaths from small-pox showing an increase upon recent weekly numbers.

METROPOLITAN CHARITIES.—The next issue of "The Classified Directory to the Metropolitan Charities," will contain the following details of the income of medical charities and societies having offices in London for the year 1881-82:—24 charities for the blind, £55,872; 8 charities for the deaf and dumb, £16,692; 9 charities for incurables, £36,447; 3 charities for idiots, £55,724; 17 general hospitals, £274,159; 8 consumption hospitals, £53,070; 5 ophthalmic hospitals, £9,454; 3 orthopædic hospitals, £5,541; 4 skin hospitals, £5,092; 20 hospitals for women and children, £64,704; 5 lying-in hospitals, £7,235; 27 miscellaneous special hospitals, £109,042; 33 general dispensaries, £25,206; 13 provident dispensaries, £9,916; 2 institutions for vaccination, £2,700; 5 ditto for surgical appliances, £14,130; 44 convalescent institutions, £43,137; and 16 nursing institutions, £7,400,

THE Cambridge University Board of Biological and Geological Studies have nominated Mr. Arthur Shipley of Christ's College to study at the Zoological station at Naples for a period of six months from January 1st, 1883.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Fowler: A Case of Intestinal Obstruction treated by Abdominal Section, with Remarks on the Operation. Dr. Wiltshire: Abdominal Pulsation.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Berridge: Epithelioma of the Bladder. Dr. Sharkey: Syphilitic Disease of Cerebral Arteries; Syphilitic Capsulitis of the Liver. Mr. Kesteven: Spina Bifida in a Child. Mr. Clutton: Keloid after Lupus Scraping (living specimen). Dr. Mahomed: Clot from Pulmonary Artery; Cancer of Undescended Testis. Dr. Norman Moore: Deep Ulceration of Cranium; Rheumatoid Arthritis. Dr. Samuel West: Tubercle Bacilli; Aneurysm of Arch of Aorta. Mr. Sutton: Rickets in a Lizard. Mr. Godlee: Unilateral Anophthalmos (living specimen).

WEDNESDAY.—Meteorological Society, 7 P.M. Annual General Meeting.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORPORAL PUNISHMENT IN SCHOOLS.

SIR,—A gentleman, whose communication in the JOURNAL of December 16th is signed a "School-Manager", wishes to know whether the practice of caning on the hand is objectionable, and whether it is likely to lead to evil in after-life; and, if so, of what nature?

Let us first deal with the occasional early consequences, in confirmation of which I will mention that, in the year 1839, when I attended the surgical lectures at Guy's Hospital, given in part by the late Mr. Morgan, one of the senior surgeons, he related a case of fatal tetanus caused by blows on the hand with a schoolmaster's cane. Such a consequence, however infrequent, should be the means of abolishing the use of the cane on the hands.

The second question, relating to the probable evil consequences in after life, is hardly worth seriously going into, seeing what before now has been the early consequence; but I may say that it is not at all improbable that there may be remote consequences hardly traced to their origin, when we consider that the whole palmar surface of the hand consists largely of tendons and fasciæ, and comparatively slightly protected.—I am, sir, yours faithfully,

Croydon, Kirby Bedon, January 6th, 1883. EDWARD BERNEY, F.R.C.S.

MEDICAL ADVERTISEMENTS.

A MEMBER (Ashton-under-Lyne).—1. It is certainly not usual for medical men to allow a list of their names to be advertised as guaranteeing the efficacy of patent crystal spectacles, a name in itself more plausible than scientifically accurate; or the efficiency of their vendor, "who has made the defects of the eye his special study". 2. Dr. Wilson's "card" is an advertisement of the most palpable kind, and as such contrary to the professional rules.

OUR PUBLIC HEALTH COLUMN.

DR. CORNER.—The notice has long been written and ready for publication, but has been delayed for some months, together with similar notices of at least fifty other reports, owing to continuous pressure on our space. We hope this year to be able to make arrangements which will afford more space for the abstracts of reports of medical officers of health.

MEDICAL PRACTICE ABROAD.

SIR,—I am at present assisting a medical gentleman, and am a Doctor of Medicine. My health is such that I must go abroad. Will you kindly give me the name of any book which describes places abroad where there are openings for medical men, as well as the College and University regulations of the various countries, as I shall not object to pass any foreign board as a means of practising.—Yours truly, J. M. SMITH.

Driffield, December 23rd, 1882.

*** We do not know of any book which supplies the information desired. A qualified English practitioner, before settling in France or Belgium, has to pass a State examination. In Italy, this is unnecessary. In Germany, we believe that it is not compulsory, but it is better to pass it. At this moment, there are openings in Rome, Florence, and at Pegli, near Genoa. Medical men, whose health is doubtful, should recollect that the long stairs in most foreign cities are very tiring.

LEAD.—Mr. C. J. B. Johnson, of Kirkby Overblow, Yorkshire, writes to us, pointing out the great benefit resulting from the use of filters for the removal of lead from drinking-water; and the advantage derived from the examination of the gums of patients whose symptoms are obscure. He instances one patient, drinking a lead-contaminated water, and suffering from arthritic symptoms, but having no colic, whose gums showed a well marked blue line. There is no doubt that lead-poisoning is often overlooked when colic forms no part of the symptoms in a given case; and the connection between lead-poisoning and arthralgia is not sufficiently recognised in the profession. Where a lead-contaminated water must of necessity be drunk, the use of a filter may afford safety; but no one should, if possible, ever drink a once-lead-polluted water, even after filtration, which is not always an efficient remedy.

E. J. B.—By sending to the Secretary of each Society for forms of application and a list of members; and obtaining the signature of two or three members to whom you are known. Your old lecturers and hospital teachers would probably sign your papers.

A NOVEL METHOD OF SUFFOCATION.

SIR,—I have had one case here of suffocation by impaction of a wedge of flannel in the throat. On referring to the case-books, I see the following entry: "J. S., an epileptic, admitted for the third time October 27th, 1870; was on the 27th November 1873, found dead in bed at 9.15 P.M., lying on his back with a round pebble in each nostril, and a strip of flannel rolled up and stuffed into the throat." I mention this, as I see in the issue of the BRITISH MEDICAL JOURNAL of December 23rd, page 1246, the word "novel" is applied to the method of committing suicide.—I am, sir, yours faithfully,

HEURTLY SANKEY, Medical Superintendent.

Oxford County Asylum, Littlemore, December 29th, 1882.

INDIA-RUBBER BANDAGES.

IN the JOURNAL of December 16th, your correspondent, Mr. T. B. Luscombe, desires to know of some remedy which might prevent the irritable condition of skin induced in two of his patients from the wearing of "Martin's elastic bandage". I have found pure glycerine answer the purpose very well. It is smeared over the limb, after the removal of the bandage at night. A cotton or silk stocking is then drawn on, to protect the bedclothes. The glycerine is washed off in the morning, and the bandage reapplied. A few days' repetition of this method is often sufficient to remove all traces of irritation.—I am, etc.,

D. W. CURRIE.

Tillicoultry, N.B., December 25th, 1882.

CROTON-CHLORAL IN INSOMNIA.

SIR,—Will you allow me to draw the attention of your correspondent Dr. Collier to the fact that, in your JOURNAL of May 1879, p. 667, Dr. Riddell contributes an able paper upon the use of croton-chloral in cases of insomnia combined with a weak heart.—Yours truly,

MEDICAL DIGEST, Section B 68 : 4.

T. F. F. will be able to obtain the desired information by writing to Mr. Kingzett, 12, Oriel Road, West Kensington.

CARE OF THE INSANE.

SIR,—In answer to "M.B.'s" application, I beg to enclose the following addresses of medical gentlemen who are, as far as I know, willing to take an insane patient at not exorbitant terms: Dr. E. Walford, Paragon, Ramsgate; Dr. Burman, Ramsbury, Hungerford, Berks; Dr. Weatherley, Portishead, Somersetshire.—I am, faithfully yours,

H. SUTHERLAND, M.D.

6, Richmond Terrace, Whitehall, S.W.

A MEMBER.—In the event of the facts being as you state them, you should apply to Mr. B. for a fee.

DIFFICULTY OF PRODUCING ANÆSTHESIA.

SIR,—I write to thank Dr. Wright for his letter of the 18th ultimo. I had never seen or read of a case where any difficulty in producing anæsthesia was experienced; therefore, I was much puzzled to account for it. I should like to know if it would be advisable to try to give this child chloroform again. The operation is a very simple one, but the father insists on his being anæsthetised. I should not attempt ether again, as I am sure it would be useless. The case, occurring as it did in one's private practice, is most annoying, as, of course, I had told the parents the child would soon be insensible. I should like to know if other gentlemen have met with such cases.—I am, faithfully yours,

RUSTICUS.

THE GOLD COAST.

SIR,—I should be very much obliged if any of your numerous readers, who have been themselves, or who have known people who have been, to the Gold Coast, could give me any information with regard to the diseases prevalent, and the best modes of prevention and cure of the same. I have a brother (non-medical) going out in a week or so, and am wishful to furnish him with medicines, etc., so that he may, to a certain degree, be able to look after his own health. Perhaps some member would be good enough to communicate with me direct, as the time is short.—I am, sir, faithfully yours,

Heighington, Darlington. JOHN GEORGE HARDY.

MEMBER OF SANITARY INSTITUTE OF GREAT BRITAIN.—The questions had better be put by and through a physician.

HYPATIA is misinformed, and should address Dr. Waters, Chester, Chairman of the Medical Reform Committee, on the subject.

SENEX.—Our correspondent should at once forward a full statement of the facts on which he relies to the Registrar of the College, who will no doubt, if the legal advisers of the College are satisfied that sufficient grounds exist for taking that course, be directed to proceed against the individual who is accused of having procured his diploma by means of personation at the examinations. The Executive Committee of the General Medical Council had a somewhat similar case before them last year; and our correspondent might very well forward to them a copy of the letter which he addresses to the College.

ITCHING IN ICTERUS.

SIR,—In reply to "Justitia", I would suggest frequent sponging with vinegar and water or acetic acid baths (half a pint of acid to three gallons of water). If this fail, a lotion of chloroform (one part) and glycerine (five parts).—Yours faithfully,

J. FRANK NICHOLSON, M.D.

29, Albion Street, Hull, December 23rd, 1882.

I. S. (Med. Superintendent).—We have carefully read the letter and report you favoured us with respecting the making of *post mortem* examinations in lunatic asylums. We can find nothing that militates against our observations on the question of making *post mortem* examinations on "bodies awaiting inquest" (see JOURNAL, December 23rd, 1882), by which we mean "bodies on whom the coroner has decided to hold an inquest." The asylum report deals with the making of *post mortem* examinations on bodies prior to the decision of the coroner, and after he has decided not to hold an inquest. The coroner receives a formal notice of death, with the assigned cause of it, in every case of death occurring in a lunatic asylum; and unless he (the coroner) replies per return, it is understood by the authorities that no inquest will be held.

R. MAKUNA.—We regret that we do not see our way to assist our correspondent in the matter. We do not think an inquiry such as that to which the papers relate, should be undertaken by a single individual. There could be very few persons indeed whose special position and qualifications would justify such an undertaking, or give any promise of its being carried out with satisfactory success.

TREATMENT OF MENIÈRE'S DISEASE.

R,—I saw in the number of January 6th ult. a note with regard to Menière's disease.

Would any of your readers kindly give me information as to the more successful treatment of this somewhat obscure disease of the semicircular canals? I have seen a case treated by the naso-pharyngeal method, with counter-irritation and a moderate diet. But the treatment has been *in toto* palliative, and not curative. I think Menière himself, in his *Traité des Maladies des Oreilles*, etc., mentions the use of aconite and quinine.

I trust, sir, that you will bear with me in these disconnected statements, etc.; but I am very desirous to know a more successful line of treatment, as the text-books on aural diseases do not too fully supply the want as to therapeutics.—I am, dear sir, yours faithfully,

PERCUNCTARI A PERITIS.

PRESCRIBING AND DISPENSING.

SIR,—In reply to "Nobilis", who asks how I arrange with the druggist who dispenses my prescriptions for me, whether I "pay him so much per bottle, etc., or a slight advance on cost price of drugs, with a fixed charge on each article for time and trouble," I beg to say that I adopt the former method as the simpler of the two. The sum I pay gives the druggist an average profit, probably, of cent. per cent. But I always find that, if a thing is to be well done, it must be well paid for. Moreover, whilst the druggist gets his 100 per cent. on what the drugs, etc., cost him, I get 300 per cent. on their cost to me. This is probably too low a ratio to indicate the relative values of prescribing and dispensing; but the greater care insured on the part of the druggist, besides subserving the public interest, relieves the practitioner of much anxiety, and spares him a great deal of trouble. I now speak more particularly of the dispensing of "repeats", which require very little additional trouble on the part of the prescriber, but bring a just reward to his hands for the skill and care which he exercised in the first instance. For visits and attendance, in the case of those who can afford to pay, and in proportion to their supposed ability, the general practitioner makes a distinct charge.

But I am anxious to say that the scheme propounded in my former letter was tried by me only as a temporary expedient. I have always been accustomed to dispense my own prescriptions (excepting such drugs as castor-oil, cod-liver oil, etc.), and believe that, in so doing, I benefit my patients in several ways. In the first place, their ailments are not made public property; they consult their medical adviser, and with him it is only right that their confidence should terminate. To relieve ourselves of a burden, by an arrangement detrimental in any way way to our patients' interests, is not consistent with the honour and integrity of our noble profession. I need not mention the suspicions likely to be aroused in a druggist's mind on seeing "potiod." or "hydrarg. perchlor." in a prescription handed to him. Much distress to patients and their friends may be caused by simpler things than those. But this is all avoided when the privacy of the consultation is preserved in the way described in my former letter, or by the practitioner dispensing his own prescriptions. In the second place, there are the many advantages to be derived from personal supervision. And, in the third place, there is no doubt that the prescriber is greatly assisted in framing his prescription by the presence of his drugs, and even by his measure- and drop-glass, just as a writer is assisted by the pen and ink and paper he uses. Many a literary man thinks more methodically with the pen in his hand, and many a practitioner of medicine "prescribes" as he dispenses, the potion taking shape under his hand, as he almost intuitively adds one after another of the requisite elements. The general practitioner who dispenses his own prescriptions, generally makes his medicines palatable; but it is not an unfrequent occurrence for London physicians, who are in the habit of prescribing drugs which they have rarely handled since their student days, to order compounds of the most crude and nauseous character, and doses which are out of all reason.

It is difficult to see why it should be more derogatory to a physician to dispense his own prescriptions, than for a surgeon to carry out his own operative treatment. The benefit to the patient would be little less. Besides, to talk of its being *infra dig.* to dispense medicines, when it can be shown to be for the direct benefit of our patients, but tamely to submit, at an accouchement, to outrages upon every sense, because our patients would suffer from our neglect, is a palpable inconsistency.

We have very high authority for the act of dispensing being performed by the physician's own hands; and I believe it would be a great loss to the public, and but small gain to the profession, were dispensing practitioners to exist no longer. At present, there is great danger of the physician degenerating into a cross between a cook and a sanitary reformer. But the public still believes in physic; and, if the public requires physic, it is only right that the physic should be supplied in the best possible form, and under circumstances most advantageous to the public, within reason.—I am, sir, yours faithfully,

A GENERAL PRACTITIONER.

MR. JAMES DAWSON (Blackburn).—There is no disease specially called "Rheumatic" apart from "Rheumatism".

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.—Mr. Ernest Hart's *Truth about Vaccination*, published by Smith, Elder, and Co., Waterloo Place, S.W. Apply to the Secretaries of the Small-pox Hospitals.

L. W.—As regards etiquette, we think it is of little consequence which course is followed.

"THE GILDED PILL."

SIR,—Your reply to Dr. Arthur brings to my remembrance a conversation I had in 1866 with a Fellow of the College of Physicians. The old College in Warwick Lane, after passing through many vicissitudes, was then being pulled down, and I said to my friend, "I hope the College will secure the gilded pill." His dignity seemed hurt, and he replied loftily, "The College has nothing to do with gilded pills." This "shut me up"; but I was sorry, and have always regretted that the "pill" was not rescued from the stone-mason's yard, and placed in the College museum as a relic of old times.—Your obedient servant,

F.R.C.S.

THE COLA BEAN.

SIR,—On p. 1289, "Justitia" asks for hints on anything to cure itching. I would advise him to try fresh Cola beans—a small slice, given at first twice a day. I know of a case of obstinate eczema on the hands entirely cured. During last week it was discovered that a preparation from this bean, if placed in very small quantities in thick beer, would fine the whole down in a few hours. It is an antidote to effects of stimulants in the shape of spirits; and I want some one to try its effects in a bad case of delirium tremens.—Yours, truly,

155, Fenchurch Street, December 27th, 1882. THOS. CHRISTY, F.L.S.

IGNOTUS might apply to Miss Firth, 62, New Bond Street.

THE ALLEGED POISONING BY MALE FERN.

WE have received a copy of the *Ceylon Observer* of November 21st, containing a long letter from Dr. Coghill with reference to the death of Mr. Aitken, noticed by us in the BRITISH MEDICAL JOURNAL of October 14th, 1882. Dr. Coghill attempts to justify the administration of such a large dose as six drachms of oil of male fern; and states that he for many years prescribed the oil in doses varying from three drachms to one ounce. We cannot recommend our readers to follow this practice. The same newspaper, in a London letter from "Our Own Correspondent", indiscreetly quotes some remarks asserted to have been made by Dr. Cobbold in deprecation of Dr. Coghill's action. Nothing could possibly be in worse taste than this "Own Correspondent's" letter.

Treatment of Warts.

SIR,—In answer to "B. C.", I beg to say that I have found the application, three or four times, by means of a camel-hair pencil, of a strong solution of chromic acid, the most efficient and easy method of removing warts. The solution causes the wart to become black, and ultimately fall off when it is not reproduced.—I am, etc., J. M.

Decay of Memory.

SIR,—I read your JOURNAL with great interest, and have been rather surprised that none of your correspondents seem to me to give attention to the phenomenon of memory, concerning which there is a very able review of a book on this subject in a recent number of *Nature*. I should like to have a good opinion in your JOURNAL as to the question whether memory can be restored when it has suffered from epilepsy or senile decay?—Yours faithfully, O. H. A.

R. D.—Your patient would probably derive benefit from hypodermic injections of iron. Dialysed iron is the best preparation to use. It is a recognised mode of treatment, and presents no difficulty.

Vaccination.

SIR,—Can you inform me whether a qualified medical man, who is not a public vaccinator, can make any charge for certificates of postponement of vaccination? or does the statute prevent him from so charging.—Your obedient servant, VACCINE LYMPH.

*** The labourer is worthy of his hire; and we therefore see no reason why the gentleman referred to should not charge for the examination of the infant, and the necessary certificate postponing the vaccination, always remembering the capability of the parents to pay the same. There is no statute on the subject.

SIR,—Can you or some of your readers inform me what treatment to adopt (or if any treatment is possible) for a faint red splash on the forehead of a female infant, five months old; it increases in intensity on the child's crying, but is not elevated above the skin? No local treatment has hitherto been of service, and any suggestion would be gratefully received by the parents, and yours faithfully, J. J. M.

MR. FREDERIC HALL.—Evidently some more prompt and definite notice should have been taken of your complaint than it appears to have received; but we should be disposed to regard the vestry clerk's letter as ignorantly brusque, and not intentionally uncivil.

MR. D. A. O'SULLIVAN.—The mistake having been frankly acknowledged, further reference to it had best be avoided. The error of judgment must, nevertheless, be regarded as a serious one.

SIR,—Will you kindly answer the following through the JOURNAL? 1. Is a general practitioner obliged to give items of account to a patient who disputes his bill on any ground? 2. Will you kindly give me the addresses of the best associations for collecting debts of medical men by letter or by legal process?—I am, sir, yours faithfully,

H. O. BAYFIELD, Surgeon, Mem. Brit. Med. Assoc.
1, Somers Villas, Lavender Hill, S.W.

*** Our correspondent, if he has occasion to sue, must give two bills of items, one for the use of the judge, the other for the defendant. He may, however, elect to charge for attendance, inclusive of medicines, for attendance and medicine, or for medicines only; but, whatever he does in this way, it is well that the charge for his daily visits, etc., should show a fair average. We have no information which enables us to recommend any medical debt collecting association, if there be any such in existence, for our correspondent to apply to; but there are, we believe, sundry trade protection societies which undertake such matters; and there are to be found connected with most county courts some solicitors with whom our correspondent can enter into arrangements, care being taken to ascertain the respectability of the said solicitor.

Primary Examinations.

THE first examination for the present session in Anatomy and Physiology for the diploma of membership of the Royal College of Surgeons was commenced on Friday last, the 5th instant, when 196 candidates presented themselves, against 179 at the corresponding period last year. The following were the questions on anatomy submitted them at the written examination, when they were required to answer four, and not more than that number, out of the six questions between 1 and 3 o'clock, viz.: 1. Describe the fourth ventricle of the brain. 2. The tongue. Describe its attachments, surfaces, muscles, vessels, and nerves. 3. Describe the attachments and relations of the scalenus medius muscle. 4. Describe the articular surfaces of the bones entering into the formation of the elbow-joint. 5. Describe the excretory apparatus of the liver. 6. Describe the dissection required to expose the great sciatic nerve external to the pelvis.

The following were the questions on physiology to be answered the same day between the hours of 4 and 6, viz.: 1. What are the gases of the blood? What is the average percentage of these gases in arterial and venous blood? In what condition do these gases exist in the blood, and how may this be determined? 2. Describe the principal varieties of epithelium, state where they are found, and the functions they discharge. 3. Describe the structure of a lymphatic gland. How is the movement of the lymph maintained? 4. Describe the distribution of the blood-vessels in the kidney. State and explain the effects on renal secretion of increased arterial supply. 5. State the results of complete intracranial section of the fifth pair of nerves. 6. What is the composition of the atmospheric air? What are the changes effected in it by respiration? Give the average amount of oxygen absorbed by a healthy adult in twenty-four hours.

Universities in the United States.

OUR correspondent, "J. H. B.", will find information respecting these institutions in the *London Medical Record* for September, and in Hardwicke's *Medical Education and Practice in all Parts of the World*. Among those of highest repute are: Harvard University, Boston; the College of Physicians and Surgeons, New York; the University of Pennsylvania (to be distinguished from the so-called "University of Philadelphia"); Jefferson Medical College, Philadelphia; the University of the City of New York; and Bellevue Hospital Medical College, New York.

ERRATA.—In the JOURNAL of January 6th, page 13, column 2, the first and second lines have been accidentally transposed. In the same column, line 6 from bottom, *for* "extrusion" *read* "exesion".

COMMUNICATIONS, LETTERS, etc., have been received from:
Mr. G. W. Wigner, London; Mr. C. Hurford, London; Dr. T. J. Barnardo, London; The Honorary Secretary of the Cremation Society; Mr. F. Dorrell Grayson, Rayleigh; Mr. E. Bainbridge, Sheffield; Mrs. Black, Ballyclare; Captain Hobson, London; Dr. Macpherson, London; Mr. W. B. Kesteven, Enfield; Dr. Haynes, Malvern; Dr. C. A. Cameron, London; Mr. Shirley F. Murphy, London; Mr. W. C. H. Eave, Cinderford; Mr. James J. Edge, Burslem; Dr. J. Lucas-Championnière, Paris; Mr. R. Burdett Sellers, Rochdale; Messrs. Wyman and Sons, London; Mr. W. Jones-Morris, Portmadoc; Dr. D. Embleton, Newcastle-on-Tyne; Mr. Sydney R. Lediard, Hull; Dr. A. T. Bown, Evercreech, Bath; Mr. H. B. Runnalls, Saltash; Mr. R. D'Oyly Carte, London; Mr. M. M. Bradley, Jarrow-on-Tyne; L. W.; Mr. R. S. Archer, Liverpool; Dr. W. H. Day, London; Mr. Long Jacob, Birkenhead; Dr. Whittle, Liverpool; Dr. Le Bey, Paris; Mrs. Mary Pardal, London; Mr. Berney, Croydon; Mr. R. H. A. Hunter, London; Dr. Danford Thomas, London; Dr. Niven, Didsbury, Manchester; Dr. Quinlan, Dublin; Our Aberdeen Correspondent; Mr. A. H. Young, Manchester; Our Birmingham Correspondent; Dr. Yandell, Louisville; Dr. T. Savill, London; Mr. Frank Salter, Knottingley; Mr. T. Wells Hubbard, Bromley; Mr. W. A. Berridge, Redhill; Dr. Gourley, West Hartlepool; Mr. Arthur Jackson, Sheffield; Mr. F. Rawle, Tichfield; Viator; Dr. W. White, Manchester; Dr. Carter, Liverpool; Mr. E. Azer Jones, London; Dr. Jas. Whitson, Glasgow; Mr. William Marriott, London; Dr. Sieveking, London; Mr. Thomas Parker, Brough; Sir Erasmus Wilson, Westgate; Mr. H. O. Bayfield, London; Mr. F. Thorne, Leamington; Dr. Heywood Smith, London; Mr. M. D. Makuna, London; Mr. Frederick Wallace, London; Dr. Althaus, London; Mr. George Croxton, London; Dr. F. H. Daly, London; Mr. Malcolm Morris, London; Dr. A. Ernest Sansom, London; Dr. W. H. Barlow, Harpurhey; Mr. N. H. Forbes, Barnstaple, Devon; Dr. Quain, London; Prof. Humphry, Cambridge; Dr. Newman, Glasgow; Mr. F. J. Davys, Swords; Mr. T. Warner Lacey, London; Mr. Bellamy, London; Messrs. Mappin and Co., Birmingham; Mr. C. P. B. Clubbe, London; Mr. A. Moos, London; Dr. D. T. Masson, Edinburgh; Dr. T. Gelston Atkins, Cork; Mr. H. W. Roberts, Lewisham; Mr. R. Salmond, London; Mr. P. W. P. Case, London; Our Glasgow Correspondent; Dr. Priestley, London; Dr. Keith, Edinburgh; Dr. W. B. Haddon, London; Dr. A. Simpson, Perth; Messrs. William Hatchman and Co., London; Mr. J. J. Slack, London; Dr. Huggard, London; Mr. J. B. Martin, Ventnor; Mr. Joseph Pollard, Cambridge; Mr. P. B. Wybrants, Wincanton; Mr. E. L. Freer, Birmingham; Mr. F. H. Vertue, Southwold; Mr. R. G. Bailey, London; Mr. T. M. Stone, London; Dr. A. Dempsey, Belfast; Mr. H. Nelson Hardy, London; Hypatia; Mr. J. Mackenzie Booth, Aberdeen; Mr. G. D. Thane, London; Dr. F. de Chaumont, London; Dr. C. Parsons, Dover; Dr. Murrell, London; Dr. Sawyer, Birmingham; Mr. T. A. Ravenhill, Birmingham; Mr. W. T. Marchant, London; Dr. Fairlie Clarke, Southborough; Mr. J. Cassan, Gainsborough; Dr. Wm. Clibborn, Birmingham; Mr. G. N. Stephens, Marseilles; Mr. Rushton Parker, Liverpool; Dr. Philipson, Newcastle-on-Tyne; Dr. Mackie, Alexandria; The Secretary of the Devonshire Hospital, Buxton; etc.

BOOKS, ETC., RECEIVED.

Transactions of the Pathological Society of London. Vol. 33. Comprising the Report of the Proceedings for the Session 1881-82. London: Smith, Elder, and Co. 1882.

The Essentials of Bandaging, with Directions for Managing Fractures and Dislocations. By Berkeley Hill, M.B.Lond., F.R.C.S. Fifth Edition, revised and enlarged. London: Smith, Elder, and Co. 1883.

A Practical Treatise on Hernia. By Joseph H. Warren, M.D. Second and revised Edition, fully Illustrated. Boston: James R. Osgood and Co. 1883.

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LECTURES
ON
CYSTIC TUMOURS OF THE JAWS, AND ON THE ETIOLOGY OF TUMOURS.

Delivered at the Royal College of Surgeons of England, June 1882.

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Lecture II.—On Some Points in the Etiology, General Characters and Relations of Tumours.

The term, tumour, formerly employed in the wide sense indicated by the signification of the word, a swelling, is now exclusively applied to the various overgrowths of parts of the nature of new formations, the origin and increase of which is unattended by the course of events known as inflammation.

From the hypertrophies and inflammatory new formations, true tumours are chiefly distinguished by the diversity from the type of the normal tissues which they exhibit in their structure and relation to surrounding parts. Possessing in the highest degree a proliferative capability, they grow as a general rule continuously, with slight power of development, and without serving any purpose or utility in the economy. A true tumour may therefore be shortly defined as an atypical new formation not correlated with or adapted to the surrounding parts, and the causation of which cannot be solely referred to an ordinary inflammatory or reparative process.

In order more completely to comprehend the special characters of the tumours, let us briefly compare them with the other overgrowths of parts.

Taking the more common examples of hypertrophy, as of the voluntary muscles, the heart, urinary bladder, and kidney, we find that the overgrowth in each case is the result either of increased exercise of the part or the necessity of greater power. The hypertrophy in all cases serves a definite purpose, and adapts the organ to the emergencies occasioned by disease or stress of work; and "to whatever extent it may proceed, the part will maintain its normal form and structure." A familar example of the contrast between a physiological hypertrophy and a tumour, is an hypertrophy of the uterus, and a myo-fibroma occurring within its walls. The enlargement of the uterus takes place throughout the entire organ, and the newly formed muscular fibres preserve their normal order and arrangement; whereas the tumour affects only a small, and, even from the commencement of its growth, a distinctly circumscribed area; the muscular fibres are arranged irregularly, often interlacing, and are intermixed with a large quantity of fibrous tissue. Again, the hypertrophy of the uterus has a direct purpose, either the expulsion of a fœtus or of a pedunculated fibroid, as the case may be; and the organ subsides to the normal size after its accomplishment. A tumour, on the other hand, is characterised by its continuous and purposeless increase.

Some tumours are atypical in their form and relation to surrounding parts rather than in their minute structure. For example, the fatty tumours are indistinguishable in their minute stricture from normal accumulations of fat, yet they present a remarkable diversity in type from the rest of the adipose tissue in their particular and characteristic shape, and in their isolation by a capsule. The excess of growth observed in the hypertrophies of limbs and various organs, is distinguished from tumour-formations, in that it is normal in the amount rather than in the kind of tissue produced. The part or organ maintains its natural form, but on a larger scale; and, in its minute structure, the component elements preserve closely their normal type and relative position. These distinctions, although of general application, lose much of their force when applied to some forms of tumour, which occupy an intermediate position between the hypertrophies and new formations. Among these, are the fatty growths described by Sir B. Brodie, which have "no distinct boundary; you cannot say where the natural adipose structure ends, and the morbid growth begins." They most commonly occur beneath the chin and symmetrically placed on each side of the back of the neck, and are sometimes amenable to treatment.

When we turn to the malformations by excess, difficulties are met with in distinction and classification, which we shall find in the highest degree suggestive in considering the causal relation of the anomalies and variations to which the body is liable. It is none the less difficult to draw a sharp line of separation between the tumours and inflammatory new formations, in fact, Cohnheim * states that it is only by means of their etiology or causation that they can be sharply and precisely divided.

It is not easy, for example, to distinguish with the naked eye some flat over-growths of bone or osteophytes from a heaping up of callus, and with the microscope this is impossible; there is even a strong resemblance in general architecture as seen under the microscope, between the tissue of growing and incompletely formed callus and that of an osteo-sarcoma.

There are, however, some other less distinctly marked characters by which the inflammatory new formations may be distinguished from the true tumours. The inflammatory process is capable of producing the common connective tissues, as fibrous tissue, fibro-cartilage, and bone, and even epithelium, as is seen in the production of the ordinary verrucæ and condylomata; but its potentiality does not extend to the production of many of the higher forms of tissue, such as muscle, gland, and brain-tissues, which form the constituents of some tumours.

Again, the inflammatory new formation ceases on the subsidence of the cause which gave rise to it, and then may become reabsorbed. Or, if conservative in its action, and formed for the repair of some injury, it tends to assume a higher type of organisation, conforming in its structure to that of the surrounding parts.

But, just as gradations exist between the tumours and the hypertrophies, so are forms also observed intermediate between the tumours and the inflammatory new formations. By what means other than their causation are we capable of determining to which group keloid belongs, or the fibrous tumours in the lobules of the ears following irritation from the wearing of ear-rings? Both of these new formations of connective tissue tend continuously to increase, and both may recur locally after removal.

Much stress was formerly laid on the independence of tumours of the nutritive and physiological processes of the body generally. In some instances, this is strikingly manifested, as in the case quoted by Sir James Paget, in which fatty tumours of considerable size were found in the mesentery of a patient "from whom, in the extreme emaciation of phthisis, nearly all the fat was removed".†

Some other observations, however, point equally strongly in an opposite direction. I met with a case in which an encapsuled adenoma of the breast was filled with milk having a normal appearance and microscopic characters. The tumour was removed shortly after lactation, and the breast itself contained no milk; so that I think, there can be no doubt of the milk being formed within the adenoma itself. Virchow records a similar case. I have also observed mucus-secreting goblet-cells lining the gland-tubes of a mucous polypus of the rectum.

The well-known fact that the multiple exostoses and enchondromata of bones cease to increase at the period of cessation of the growth of the bones, indicates that their nutritive activity is closely bound with that of the osseous tissue. The acceleration of the growth of uterine and ovarian tumours which, Leopold‡ observes, occurs during pregnancy, is another instance of the influence of a physiological stimulus upon the growth of tumours.

A distinct relation, can be shown to exist between the physiological and nutritive conditions of the different organs at certain periods, and their liability to tumour-formations and even with the variety of tumour occurring at each particular period.

In investigating the pathogeny of tumours, each organ must, therefore be taken as a separate unit, and considered in relation to its own life-history, as well as with the nutritive condition of the body generally, as indicated by age. For it is superfluous to remark, that the period of most active development and of greatest functional activity, as well as of commencing atrophy and degeneration, varies according to the purpose which each organ or tissue serves in the economy. This is especially exemplified at the period of puberty, when an immense acceleration is given to the development of the genital and allied organs; and to the skin, as shown by the growth of hair at various parts of the body. With this developmental activity, the appearance of certain tumours is coincident.

The dermoid cysts of the skin, Lücke§ observes, nearly always first

* *Allgemeine Pathologie* p. 631.
† Paget, *Op. cit.*, p. 378.
‡ Leopold. *Experimentelle Untersuchungen über die Aetiologie der Geschwülste, Virchow's Archiv*, Band xxxv, p. 318, 1881.
§ Pitha's and Billroth's *Handbuch*, Band ii, Abth 1, p. 127.

excite attention by their rapid increase at the period of puberty, although their rudiments are probably formed during embryonic life, by an involution of the epiblast. Multiple warts on the skin sometimes, according to the same author, appear in women at puberty.

The adenomata of the breast are concurrent in their appearance with the accelerated development and awakening of functional activity in that organ, being almost invariably observed between puberty and the age of thirty years. They often show themselves after the functional activity of the generative organs has been stimulated by marriage, or during the first pregnancy.* According to Thomas,† cystic adenoma of the ovary shows itself during the period of the most vigorous activity in the sexual organs; and, from the statistics of Chereau and Lee, it is shown to be most common between the ages of seventeen and eighteen and forty. The onset of symptoms of this disease, at a later period than the appearance of adenoma of the breast, is probably in a great measure explained by the situation of the affected organs rendering the detection of the disease at an earlier period most improbable. Myo-fibromata of the uterus, according to Leopold‡ never have been seen before puberty; while, on the other hand, Bayle estimated that, of all women dying beyond thirty-five years of age, 20 per cent. were thus affected.§

These facts, I think, distinctly indicate that the appearance of the highly organised or innocent tumours is, as a rule, coincident with the development and greatest functional activity in these organs. In fatty tumours, it might be thought are an exception to this rule, because they most often are observed in middle age. But their origin may be referred with much probability to an earlier period of life, for Cohnheim has found small fatty tumours many times in fœtuses. They, therefore, may remain unnoticed until growth is brought about in association with the accumulation of adipose tissue throughout the body occurring chiefly in middle age.

Turning to the bones, the period of active growth of which is entirely different from the organs just considered, we find that the innocent tumours appear, as a general rule, at an early age. The multiple enchondromata are occasionally congenital. Both these and the multiple exostoses are generally met with in early life, and are said invariably to occur before puberty.

The sarcomata of bones are, on the contrary, met with at a later period. In a table of sixty-three cases of central tumours of bones, collected by Mr. Butlin,‖ only two occurred before the age of sixteen, and one of these was in a child aged five years. Of the sixty-three cases, forty, that is, over three-fifths, occurred between the ages of sixteen and forty years.

In the table of fifty-six cases of subperiosteal tumours, there was a gradually increasing frequency from sixteen years upwards. Of the fifty-six cases, forty-three, or nearly four-fifths, occurred between the ages of sixteen and forty, inclusive.

Of the total number of one hundred and nineteen cases, seven-tenths occurred between the ages of sixteen and forty years. It must be remembered in connection with these figures, that the union of the epiphyses to the diaphyses, in the long bones, commences at fifteen or sixteen years of age, and ceases at twenty-five.

From a further examination of these tables, it is seen that, as regards the central tumours, not only those bones of which the sum¶ of growth is greatest are most frequently affected with sarcoma; but also that the parts of bones, in which growth last ceases,** are, to a remarkable degree, liable to the disease. This is observed in the lower epiphysis of the femur, and upper epiphyses of the tibia and humerus. Of seventeen central tumours of the femur, ten were situated in the lower epiphysis; of thirteen in the tibia, eleven originated in the upper epiphysis; and of eight affecting the humerus, all but one were in the upper epiphysis.

These facts may, perhaps, be taken to indicate that the longer continuation of growth in these parts, after the cessation of the period of most active growth in the skeleton generally, renders them much more liable to sarcoma, and possibly connects the manifestation of the tendency to tumour formation with a decline of nutritive activity in the part, such as is observed in the breast during the cancerous age. And, further, the coincidence previously pointed out in the period when sarcomata of bones begin to appear in large numbers, and in that of the union of the epiphyses may show also, that the imperfect nature of the tissue of the sarcomata depends in part on the period of their occurrence, viz., during the decline in the activity, and after the cessation of growth in the bones.

But how are we to explain the occurrence of cancer at a much later period than sarcoma, since the conditions favourable to the development of both depend on a diminished formative and nutritive activity in the affected part? An answer is found when the difference in the function of the two structures is borne in mind. After the cessation of growth, it may be supposed that the nutritive power of the connective tissues is, under ordinary circumstances, only sufficient for their maintenance, and of a much lower degree than in the epithelial structures. These are constantly thrown off, or used up in secretion, when they are replaced by a constant succession of newly formed cells. This is also shown by the earlier atrophy of the connective tissue in advancing age, upon which Thiersch strongly insists.

The generative organs in the female are the first epithelial structures to become atrophied, for the obvious reason that they are no longer of utility after the period of child-bearing. And it is in these organs that we find cancer first manifesting itself. Numerous statistics show that cancer of the breast is by far most common between the ages of forty and fifty. In two tables given by Sir J. Paget,* the far larger proportion of cases was observed between 40, or 45, and 50 years, when they decreased in frequency. The more recent statistics of von Winiwarter † and Oldekop,‡ refer the maximum of cases to a slightly earlier age. The former computes the average age at which cancer of the breast occurs as 45.3 years. Of 108 cases of cancer of a closely allied organ, the uterus treated by Scanzoni,§ a greatly prepondering maximum was obtained between 40 and 45 years; the disease, like scirrhous cancer of the breast, being very rare before 30 years. If, however, we take a structure, such as the epithelium of the tongue, mouth, and œsophagus, which may be supposed, on the grounds already given, to maintain its nutritive activity longer than that of the breast or uterus, we find that cancer is most common in the decades between 50 and 70. Of 70 cases of cancer of the tongue collected by Mr. Butlin,‖ only 11 occurred before the age of 50, and of 57 cases of cancer of the œsophagus, only eight before 50. Of 31 cases of cancer of the kidney collected by Walshe, the maximum number occurred after the age of 50. The facts just stated are strongly supported by the statistical table of von Winiwarter, comparing the periods of greatest frequency of cancers in some different localities. The breast stands first, and is followed by cancer of the face, cancer of the mucous membrane of the mouth and œsophagus being last by many years.¶

It has long ago been pointed out that cancer is essentially a disease of degeneracy. Perhaps a nearer approach to truth is made in very broadly stating that, in the majority of cases, the origin of the innocent tumours corresponds to the periods of more active development, or, in some instances, of greatest functional activity in the particular organs; while the formation of the malignant tumours tends to occur during the decline of developmental activity (in the sarcomata), or subsequently to the completion of development (in the cancers), and extends throughout succeeding years. With the advance of life, the frequency of sarcoma decreases after the fortieth year, but the tendency to cancer increases until the sixth decennium when it also diminishes.

It is needless to remark that exceptions to this broad statement are met with; and especially in a few tumours, either congenital, or occurring in childhood. They are nearly always sarcomata, the eye, kidney, and testicle being affected most commonly, and rarely the bones. The early occurrence of these tumours may, perhaps, be referred, in some instances, to a tendency observable in hereditary variations to appear at an earlier age in the offspring than in the parent; and, in others, to some peculiarity in the formation and development of the part.

We pass on now to consider one of the many debatable points with regard to tumours, and especially cancer, viz., heredity. The facts range themselves in two classes; 1, those derived from statistics; and 2, those observed in individual cases. The statistics at hand solely refer to cancer.

Probably the most reliable statistics of the heredity of cancer are those obtained by Mr. W. Morrant Baker from Sir James Paget's note-books,** which included hospital and private patients, the proportion of about two-fifths hospital to three-fifths private

* Lucke, *op. cit.* p. 281.
† Thomas, *Diseases of Women*, p. 673.
‡ *Op. cit.*
§ Thomas, *op. cit.*, p. 507.
‖ H. T. Butlin, *Sarcoma and Carcinoma*, p. 110, 1882.
¶ See Table of C. Länger. *Deutsche Zeitschr. für. Chir.*, Band x.

* *Op. cit.*, p. 635.
† *Ueber die Statistik der Carcinome.*
‡ Langenbeck's *Archiv*, Band xxiv, s. 691.
§ Thomas, *op. cit.*, p. 553.
‖ *Op cit.*, p. 158.
¶ *Op. cit.*, p. 295.
** *Medico-Chirurgical Transactions*, vol. xlv, p. 339.

In 322 cancerous patients, there were 78, or nearly one-fourth, who were aware of cancer in other members of their families.* The term cancerous is here used in the old sense, to signify any malignant tumour.

Lebert, from 102 complete observations, computed the number of cases of cancer in which a hereditary history can be obtained as one in seven; Sir J. Paget places it as high as one in three.

Mr. Harrison Cripps, in an ingenious article† seeks to prove that cancer is not hereditary. If cancer be hereditary, then the percentage of deaths from cancer in the parents of cancerous persons should be greater than among the population generally. Mr. Cripps, therefore, compares the death-rate from cancer in the parents of cancerous patients included in Mr. Baker's table, with the death-rate of adults from cancer in the United Kingdom. The comparison shows that there is only a slight difference in the death-rate in the two cases; and Mr. Cripps draw the natural conclusion that cancer is not hereditary; or, as he puts it, "that cancer in the parent in no way increases the liability of the offspring to suffer from the same disease." This result is so completely at variance with facts derived from individual cases, that I think there must be some sources of error, among which the following may be pointed out. In the first place, the Registrar-General's returns cannot be considered the most accurate data on this point; and, secondly, by taking only the parents of the cancerous patients, the evidence of a family tendency to cancer derived from its existence in near relations is completely excluded; for the tendency may be transmitted from a grandparent to a grandchild, the parents being unaffected; while some of the brothers or sisters of the parent or their children may exhibit the family predisposition. The proportion of cases in which there is a hereditary history of cancer is diminished by the fact, which Sir James Paget has pointed out, that many of the parents may never have manifested the cancerous disposition which is in themselves, having died from some other disease before reaching the period of life most liable to cancer; and, in many cases, a parent may have died of a cancer, the true cause of death being unknown to the child, who becomes afterwards the subject of cancer.

We now turn from statistics—which must be regarded in the highest degree unsatisfactory—to individual instances, of which that recorded by Broca‡ is probably the most remarkable. Of twenty-two individuals, the descendants of Madame L., to the third generation, fifteen died of cancer. Broca computes the influence of hereditary tendency to cancer in this family in the following manner: calculating the death-rate from cancer in France as at least 4 per cent. in persons over 30, therefore, of twenty-six persons over 30 taken at random, a slight proportion over one would be cancerous; but, in the twenty-six descendants of Madame L., fifteen died of cancer; therefore the influence of heredity multiplied the chances of cancer by fifteen.

In regard to the heredity of cancer, the opinion of Sir James Paget must have, even from the nature of his practice alone, the greatest weight. He says, "every year's experience in practice among persons whose family histories are known, makes me more sure that inheritance is the great power in the production of all diseases which are not of distinctly external origin, and, among these, of cancer."¶ The hereditary character of certain innocent tumours is most clearly determined, and more especially of the multiple exostoses. Marle has a case in which he traced the disease through three generations. Sir James Paget gives a case in which a son and his father were affected. "None of this man's ancestors, nor any other of his children, had similar growths, but four cousins, children of his mother's brothers, had as many of them as himself." This last instance is interesting, as it shows that evidences of transmitted tendencies, if not in direct ancestors, must be sought for among relations of a corresponding generation. Virchow and Otto Weber have each observed cases of enchondromata transmitted through three generations. An instance of hereditary adenoma of the breast came under Broca's observation; a woman and her three daughters were all the subjects of tumours of this description.

I know a young gentleman who has several adenomata of the cutaneous glands scattered beneath the skin of various parts of the body.‖ His mother, his father, and a paternal aunt, had similar tumours beneath the skin. Cases have been observed in which the common wen or sebaceous cyst on the head was hereditary. Glioma has been observed in many members of the same family; viz., in four children out of a family of seven, and in four children of the same mother. Moles and nævi are also hereditary, and this, in some instances, extends to their site.

These facts, if they show nothing further, at least prove that the disposition to tumour-formation, however originating, is distinctly hereditary in certain cases; but it is as impossible to say how far heredity extends, as, on the other hand, to fix a limit to a tendency to reversion in these abnormalities.

There appears to be no fixed rule of transmission of tumours to any particular part or organ; but the same variety of morbid growth usually appears in the offspring, although perhaps in a different part.

Facts at present existing tend to show that, if organs especially predisposed to cancer be the seat of the disease, it will more commonly be transmitted to the same part in the same sex; and, in any case, the disease will be more likely to affect the same organ in persons of the same sex. Among sixty-one cases taken from Sir James Paget's note-book, Mr. Baker found that in twenty-seven the cancer in the offspring was in the same part as in that of the parent or grandparent; in thirty-four it was in a different part; but in the first-named group the breast and uterus were exclusively affected. Of the fourteen females who died with cancer in Broca's case, in nine the disease affected the breast, four the liver, and one the uterus; and in the only male who was cancerous the disease was situated in the stomach. Sibley met with a family in which a mother and five daughters had cancer of the left breast. Sir J. Paget observed cancer of the uterus in three generations—in a grandmother, mother, and daughter.

On the other hand, cases occur in which different organs are affected in almost each individual; but these are probably the exception, and the hereditary character of the tumours is open to doubt; perhaps the tendency may have been modified, in such instances, by a "cross" with a family predisposed to tumours in another part. In a case related by Sir James Paget, a lady had cancer of the stomach, her two daughters cancer of the breast; and, of eight grandchildren affected, in two the disease was situated in the breast, in two others in the uterus, and in the remaining four in the bladder, axillary glands, stomach, and rectum respectively. Warren saw cancer of the breast in a son, two daughters, and two grandchildren of a man who had epithelioma of the lip.

Very few facts* can be brought forward indicating a change or transmutation in the character of a tumour in transmission. Sir J. Paget records one in which the three daughters of a lady with scirrhus of the breast suffered removal of the breast for what was probably rapidly growing adeno-sarcoma.

The following case lately fell under my own observation. A female, aged 46, was admitted into St. Bartholomew's Hospital with a recurrent sarcoma of the breast. The following family history was obtained from her. A grandfather died with a tumour in the throat. Her father had a tumour removed from his cheek forty years before his death; it did not recur. A brother, then aged 46, had a tumour removed from his cheek when six years old. Her two sisters each had a tumour of the breast. One sister had a tumour, probably a sarcoma, of the left breast, of two years' duration; she was still living, but the tumour was rapidly growing, and her health was becoming affected. In the other sister, aged 48, a tumour had existed in the right breast for sixteen years, which was not growing, and she was still in excellent health; it is therefore most probable that this tumour was an adenoma.

From the instances of hereditary *multiple* exostoses, fibrous, fatty, and glandular tumours, and from the occurrence of transmitted cancers in different organs in individuals of the same family, the conclusion perhaps may be drawn, that a tendency to tumour-formation is sometimes diffused throughout a system of the body, such as the osseous, cutaneous, glandular, or epithelial, as the case may be; and that in cancer the morbid growth will be more likely to form in the organs most predisposed to cancer in each sex—viz., the breast and uterus in women, and the lips, tongue, or stomach in men.

A belief in the heredity of tumours does not necessarily imply an adhesion to the doctrine of their constitutional origin, premising that by the term constitutional a disease such as gout is signified, in which an error of assimilation or elimination leads to accumulation of urate of soda in the blood and its deposition in those parts, the nutritive condition of which is most favourable for its reception. It is true that when the cancer-elements, probably the nuclei of

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on Winiwarter's statistics, as regards the influence of heredity, are open to objection that the cases were drawn entirely from hospital patients, from an accurate and complete family history cannot be expected. Thus, in Baker's tables, the percentage of cases of cancerous inheritance was 37.4 the private cases, against 17.9 among hospital patients.

Bartholomew's Hospital Reports, vol. 14, p. 217.

meurs, vol. i, p. 155.

linical Lectures and Essays.

ans. Path. Soc., vol. 33, p. 336.

* Mr. Hutchinson has, I believe, cited some other cases in his unpublished lectures delivered at the Royal College of Surgeons.

cancer-cells, have become mingled with the blood, they may in a similar manner be deposited in different organs. But the analogy does not reach further, for in gout, the origin of the disease is probably functional, not structural, and may be referred to a faulty action of one, or more probably a whole group of organs. Cancer and other tumours must be considered as local aberrations in the structure of the part affected. When looked at in this light, the transmissibility of cancer or tumours in general is no more surprising than that of any other structural peculiarity or disposition, such as form and feature, colour, or the still more remarkable inheritance of habits, gait, and mental disposition. Or, again, than of certain local diseases and malformations which have been shown to run in families, such as hydrocele, hernia, hare-lip, club-foot, and supernumerary digits. For we might just as well attribute the form of the nose, or the colour of the eyes or hair, to a constitutional cause as the formation of an exostosis, a fatty tumour, or even a cancer. Even if the tendency to abnormal growth be diffused throughout different parts of a whole system such as is observed in the multiple exostoses, enchondromata, or fibromata, it is still localised in the cellular elements of a certain tissue.

The arguments supporting the doctrine that cancer is the result of a constitutional diathesis, or "the local manifestation of certain specific morbid states of the blood," chiefly rested on the frequent recurrences of malignant tumours after removal, and their tendency to multiply by dissemination throughout the system. In the absence of evidence of the transmission of tumour-elements by the blood-vessels and lymphatic vessels, it was most natural to suppose that the primary and the secondary disease were the result of the same morbid condition of the blood. The true explanation was found by Virchow, who taught that the general dissemination of tumours was, as he termed it, a deuteropathic phenomenon, that is, secondary to the formation of the tumour itself, and "the result of the introduction into the circulation of elements derived from the existing tumour."

This doctrine was one of the chief steps towards the establishment of the local origin of tumours, which is now supported by the following facts.

1. All tumours are the prototype of the adult or embryonic condition of the tissue or organ in which they originate, or from which they are derived.

2. The secondary formations are a more or less exact imitation of the primary tumour, which could not well be the case unless some of its formative elements were directly transferred to the new locality. Further, such a transference is proved by the occurrence of tumour-emboli.

3. Malignant tumours do not invariably recur after removal.

4. There is no indication of the existence of a general nutritive disturbance known as cachexia, preceding the formation of the malignant tumours, which might be taken to indicate an abnormal condition of the blood.

5. Many distinctly localised abnormalities, such as moles, nævi, warts, etc., which are physiologically and structurally imperfect, are especially liable to tumour-formations.

6. The heredity of tumours is not at variance with the theory of their local origin.

A belief in the local origin of tumours has led to many attempts to explain their formation by accidental causes acting locally, such as injury and inflammation or irritation.

Statistics collected by Tanchou, Marc d'Espine, and Virchow himself, showing the greater frequency of cancer in the stomach, rectum, uterus, and in certain special parts of these organs, led to the foundation of the theory of irritation by Virchow. He observes "that all the organs covered with a soft surface, which are frequently in contact with foreign bodies, develop tumours more often than those which are enclosed in the interior of cavities". And he continues: "if one goes further, that the malady affects precisely most often those points which are the most exposed by their situation to bruising and irritation, such as the lips, œsophagus, orifices of the stomach, rectum, and os uteri."

An injury, irritation, or inflammation is not rarely the precursor of the manifestation of a cancer, and therefore any attempt to explain the origin of malignant tumours must also account for the manner in which these act as exciting causes. Of all the tumours, the epitheliomata most commonly originate in connection with some form of irritation. Among 34 persons affected with epithelioma, Sir James Paget found that 19 were aware of an injury or a previous morbid condition of the part. A similar history, though in a lesser proportion, is also obtainable from the subjects of other forms of tumour. The statistics of F. Boll,* taken from 344 cases of cancer operated on in Langenbeck's clinic, show that in 42—viz., 12 per cent.—a traumatic cause preceded their formation. Oldekop found, among 250 cases of cancer of the breast in Esmarch's clinic, that in 18 only a history of injury was given; in 4 cases the cancer-formation immediately followed the injury; but in 36 cases the patient had been affected with inflammation of the breast. Calculating the percentage from 103 patients who had borne children, and were thus in a position to have acquired puerperal mastitis, he found that 34.9 per cent. of women with cancer of the breast had been affected with inflammation of the breast at some time previously.† It is true that the largest percentage from these last statistics still show a greatly preponderating proportion of cases in which no such exciting cause existed. For example, in Boll's statistics, these amount to 88 per cent. Any doubt, however, that may arise as to the influence of inflammation and irritation as occasional exciting causes of cancer, especially epithelioma, must be at once dispelled when particular instances are called to mind.

Soot or chimney-sweepers' cancer is the most familiar example; it is said to be much less common now than formerly, when boys were made to climb the chimneys. The loose and folded character of the skin of the scrotum, offering a surface to which the soot readily clings, and its liability to friction against garments, render this part the almost exclusive seat of the disease; but it also occurs on other parts of the body, for instance, the skin of the neck, or the back of the hand, as in the case of a gardener, related by Sir James Earle.‡

Epithelioma of the scrotum has also been observed in stokers and other mechanics whose skin becomes begrimed with coal-dust. Soot or coal has, however, no specific action, for I have seen an instance of the disease in a mason. The first effect of the irritation is shown by the appearance of a crop of warts, which do not differ from ordinary papillary growths. After existing sometimes for a long period, they become ulcerated, and then rapidly assume the characters of epithelioma.

Again, the great frequency of epithelioma of the lip and tongue in males has been generally ascribed to the prevalent habit among the lower orders of smoking short unwaxed clay pipes. Mr. Hutchinson§ found that, in 110 cases of epithelioma of the lower lip occurring in hospital patients, 106 were males, and four were females; of the females, two had contracted the habit of smoking. That the constant use of a clay-pipe is capable of producing an appreciable tissue-change, is shown in the lower lips of inveterate smokers of clay-pipes, where a whitish smooth patch, a slight callosity, or even a groove from atrophy, may be observed at a point shown to be that on which the pipe rested by the corresponding worn teeth.

Epithelioma of the lower lip is also met with in those much exposed to the weather‖, and a history of long continued and often repeated cracking of the part, from the moisture of the saliva, can usually be obtained; this is sometimes followed by the formation of a small wart, subsequently developing into epithelioma.

An epithelioma of the tongue is very commonly attributed by patients to the irritation of jagged teeth.

Epithelioma of the glans penis is almost invariably associated with congenital phimosis, and consequent irritation from retention of decomposed secretion.

An ordinary corn on the foot, or a callosity on the tongue, may, after existing some years, become warty, and develop epithelioma.

The long continued chronic inflammatory processes affecting the mucous membrane of the tongue very frequently give rise to epithelioma. The condition known as smooth-tongue commonly results in epithelioma; this affection is distinctly of a chronic inflammatory nature, and has been often attributed to excessive smoking and syphilis. Again, ichthyosis of the tongue possesses a similar and even stronger liability; for, among fifty-four cases of ichthyosis collected by Dr. Sangster¶, "30 per cent. eventuated in epithelioma after an average duration, in eight cases, of twenty-three years"; and, of

* *Die Princip. der Wachsthum*, Berlin, 1876.

† This proportion is probably somewhat too high, for it was not in all cases stated which breast had been inflamed. In von Winiwarter's cases, the number was lower—viz., 20 per cent.

‡ Pott's *Works*, ed. by Earle, vol. iii, p. 183, 1808.

§ "The Local Origin of Cancer", *Medical Times and Gazette*, 1881, p. 92.

‖ This has been also observed by von Winiwarter, who gives tables showing the very large proportion of persons affected with cancer of the lower lip, who either worked in the open air, or lived in the country; he estimates them as over 71 per cent.

¶ *Trans. Path. Soc.*, vol. xxxiii, p. 107.

forty-three cases of cancer of the tongue tabulated by von Winiwarter, "psoriasis had preexisted in at least ten.*

A simple ulceration of long standing may give rise to epithelioma; and Mr. Hutchinson has drawn attention to the fact that syphilitic ulcers of the tongue may become insensibly epitheliomatous, if allowed to remain unhealed.

Other instances of cancer following chronic inflammation are met with in the glandular organs and mucous membranes, such as the so-called eczema of the nipple, the association of which with cancer of the breast was pointed out by Sir James Paget,† who has also observed that chronic indurations of the breast sometimes become cancerous.

The statistics already quoted show that inflammation of the mamma is a common precursor of cancer. In rare cases, the irritation of calculi in the gall-bladder, kidney, and urinary bladder‡ may apparently excite the formation of a cancer.

Similar instances of tumour formation, in connection with an injury or chronic inflammation, are observed among the sarcomata, especially of the bones. A slight injury to a bone is occasionally followed by a rapidly growing sarcoma, sometimes exhibiting the heat and redness of inflammation; to these cases attention has recently been drawn, under the name of traumatic malignancy. And in most museums, specimens of sarcomata of bones may be found, which have developed after a fracture or a blow; cases of tumour formation in callus also have been recorded.§

Chronic inflammatory, and also some atrophic processes in bones, resembling mollities ossium, are occasionally associated with sarcoma.¶

Let us now turn to the microscopic appearances observed in cases of cancer, preceded by a chronic inflammatory, or "irritative" process, as it has been called. These show that the antecedent process is of a chronic inflammatory nature, and that the resulting hyperplasia passes insensibly into the tumour-formation.

A general thickening of the skin of the scrotum, and even of the perinæum, may be observed in cases of chimney-sweeper's cancer; this is produced by thickening of the epithelium, and a slight indipping of its interpapillary processes into the corium, which is infiltrated with leucocytes. The changes in the earlier stage of ichthyosis of the tongue are also indicative of an inflammatory hypertrophy, consisting in a thickening of the superficial epithelium, and a slight elongation of the interpapillary processes, with infiltration of the submucous connective tissue, with abundance of leucocytes or indifferent cells. Such a slight hypertrophic ingrowth of epithelium, gradually increasing, leads to the formation of club-shaped or irregular processes of epithelium, dipping deeply into the submucous tissue, and containing "cell-nests." In both of these cases, a direct transition is observed, from the simple inflammatory hypertrophy of epithelium to the widely extending ingrowth constituting epithelioma; and it is quite impossible to say where the inflammatory process ends and the malignant disease commences, the latter being apparently the direct outcome of the former.

When the ingrowth of epithelium in these cases has attained a considerable extent, the epithelial cells undergo certain characteristic changes; they become enlarged, irregular in shape from mutual pressure, sometimes multinucleated, and numerous cell-nests make their appearance; the small cell-infiltration of the connective tissue increases, and the normal distinct boundary line between the epithelium and the subjacent tissue becomes blurred, the apices of the ingrowing epithelial columns gradually fading into the small cell-infiltration.

The changes in mammæ, affected with eczema of the nipple, are somewhat analogous to those observed in ichthyosis of the tongue. The superficial intractable ulceration of the nipple is, in the majority of cases, evidently inflammatory; and it is accompanied, as Mr. Butlin found, by a proliferation of the epithelium of the ducts, and infiltration of the tissue in their vicinity with indifferent cells. This proliferation of the cells lining the galactophorous ducts may, probably, be considered in some measure analogous to the overgrowth of superficial epithelium in ichthyosis. The subsequent changes are also similar, consisting in the projection of buds of epithelium from the walls of the ducts into the surrounding infiltrated connective tissue; these buds grow into tortuous columns, which constitute the cancerous new formation.

The formation of the cancer in these cases may perhaps be largely ascribed to the long continued nature of the irritative process, for it may be supposed that infinitely numerous successive generations of cells, formed under altered conditions as regards nutrition from excess of blood-supply, might gradually become changed in their nature, and endowed with a more active power of growth, together with the capacity of living in the connective tissues. It must also be remembered that the small cells, infiltrating the subjacent tissues, are identical with granulation-cells, and thus a granulation-tissue may be said to exist into which the epithelial cells grow. For an instance of the capability of epithelial cells to grow in granulation-tissue, I have only to refer you to skin grafting. The important fact, however, must not be lost sight of, that cancers following some inflammatory or hypertrophic process, offer no exception to the general rule in the age at which they occur; although the antecedent disease may have existed many years.

In the formation of tumours in connection with some irritation or inflammation, so many factors exist regarding the nature of which little is known, that it is only possible to speak in the most general terms of the part they severally take in the production of a tumour. Probably an abnormal constitution of, or tendency in, the tissues of the part exists in all cases; it manifests itself in the formation of a papilloma or in the occurrence of an inflammatory hypertrophy such as ichthyosis from slight exciting causes; or in the persistence of a chronic inflammatory process, such as eczema of the nipple or smooth tongue, the exciting cause of which is equally disproportionate to the result. And the tendency to tumour formation in imperfectly formed parts is obvious in cases of nævi, angiomata, moles, congenital warts, and in parts affected with congenital hypertrophy.

In proportion as the abnormal tendency is slighter will the exciting cause be more apparent; and in all cases the increased blood-supply resulting from the inflammation or irritation doubtless plays a most important part. The different manner in which the tissues of individuals react to irritations is well illustrated by Otto Weber.† He relates the case of a *post mortem* room porter, whose hands were covered with warts, and wherever he pricked himself in handling the corpses a fresh wart appeared; in another man, the same irritation led to the formation of numerous ulcers. A predisposition is even observed in the formation of the fibrous tumours in the lobules of the ears from the irritation of ear-rings, for they are usually symmetrical,* and have been observed in individuals of the same family.

The tendency to overgrowth of epithelium presumed to exist in the cases under consideration, and excited by increased blood-supply, may be roughly compared to the latent properties of the cells forming the adventitious buds in plants. These buds may be produced from any part of the cambium layer, no trace or rudiment of them having previously existed. After injuries to branches, new buds grow immediately below the severed extremity, their formation being probably due to an increased supply of sap to that part; and pollarded willows become immediately covered with buds. Irritation from parasites may also cause the formation of hundreds of buds. The analogy between the adventitious buds of plants and the growth of epitheliomata is rendered more striking by the fact, to which Sir James Paget‡ called our attention, that the tumours of plants are buds, which have become displaced inwards instead of growing outward into shoots. In precisely the same manner, the epitheliomata are produced by epithelial cells, which have grown inwards, instead of being pushed outwards, and developing, on the squamous epithelial surfaces, into a protective covering of laminated cells. The comparison may be carried still further. The cells of the cambium layer of plants doubtless posseses a latent tendency to growth and higher differentiation, exhibiting itself, however, only on the application of a stimulus. In the same manner, the cells of an individual predisposed to cancer may be inferred to retain a latent tendency to growth above those of an individual not in the same manuer susceptible, yet, as in the cambium layer of plants there may be no morphological differences. The same comparison will hold good for other varieties of tumours.

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* *Op. cit.*, p. 207.
† *St. Bartholomew's Hosp. Rep.*, vol. x, 1874.
‡ See *Trans. Path. Soc.* Vol. xxxii, p. 139.
§ See Lücke (*Op. cit.*, p. 62.) and *Cat. St. Bart. Hosp. Museum*, No. 2454.
¶ See H. T. Butlin (*Op. cit.*, p. 106.)

* *Chirurg. Erfahrungen und Untersuch.*, p. 285.
† See *Cat. St. Bart. Hosp. Museum*, Nos. 3264 to 3266.
‡ *Elemental Pathology*, p. 31.

A Curious Proclamation.—Some alarm has been caused in Burslem in consequence of the crier being employed by a chemist in the town to announce that a customer had by mistake been supplied with poison instead of magnesia. It is not yet known whether the person who made the purchase has been made aware of the mistake.

ABSTRACT OF A CLINICAL LECTURE
ON THE
VARITIES OF ULCERATION OF THE TONGUE, THEIR DIAGNOSIS AND TREATMENT.

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SOME time back, about two years ago, if I remember rightly, it was suggested in the pages of the BRITISH MEDICAL JOURNAL that clinical lectures would be made much more useful if abstracts of the lectures were previously put into the hands of the students. The following abstract, and one or two others which will follow, were experimental endeavours to carry out the above suggestion. Their object is chiefly to put before students points which they can easily test in the out-patient rooms and wards; and also, by means of the abbreviations and headings, to encourage them to think and exercise their memories. The usefulness of giving out these abstracts previous to lectures has been abundantly proved; they are now published, in the hope that others may suggest improvements in the plan.

CLASSIFICATION.—I. Simple. "Irritable". (*a*) Due to tooth-irritation. (*b*) Due to dyspepsia. II. Aphthous. III. Diphtheritic. IV. Mercurial. V. Strumous. VI. Tubercular. VII. Syphilitic. VIII. Malignant.

1. SIMPLE. (A) *From Tooth Irritation.*—Position, sides, usually opposite to molars and pre-molars. State of teeth, 5. (*a*) Cusps; (*b*) tartar; (*c*) rough cavernous cavity, with sharp, crater-like opening; (*d*) stumps; (*e*) badly fixed artificial teeth. Appe. various, according to date, etc. If early, red superficial rough abrasions; later on, distinct ulcers, perhaps foul and sloughy, or well defined and callous, but without infiltration. *Treatment.*—Importance of early attention. Relation between epithelioma and ulceration and v. versâ.

(B.) WITH DYSPEPSIA.—Age and appe. of patient; history; ulceration, superf. slight, mult., sensitiveness. Influ. Site. Dor. sum near tip. *Treatment.*—Rest. Diet. Purgat. Pil. Hyd. in alter. doses. Decoct. Sars. and Dec. Al.; Bism.; Calumb.; Na.; Hydrocyan. A.; Locally, Caust. cautions, (Mr. Hilton's case *Rest and Pain*, p. 80. Other applns. Glyc. Ac. Tana; Mel. Bor.; Tr. Myrrh.; Aq. Calc.

2. APTHOUS.—Vesicr. origin. Ulcers in crops, 2. Colour. Size. Position on lips and inside of mouth as well after Causes, 3. (*a*) In children. Similarity to Exanth. Pyrexia, etc. Risk of ulc. stomat. *Treat.* Hyd. c. Cret. et Sod. Mel. Bor. (*b*) In adults.—Two chief indications (Sir T. Watson), (1) Debility. (2) Gastric dist. a sort of internal urticaria.

3. DIPHTHERITIC.—Site close to fauces. Chars. *Treat.*

4. MERCURIAL.—Rare. *Char.* Accompanying symptoms. *Treat.*

5. STRUMOUS.—Age. *Chars.*—"At first deep-seated, semi-elastic, ill-defined lumps" (Sir J. Paget). Later on, central suppuration and ulcerations, very chronic, with little pain. Shape. Contents. *Diag.* probably the "globular, encysted tumour" of Travers. Presence of other signs of struma. *Treat.*

6. TUBERCULAR.—Rarest. Usually other signs of tuberculosis. Ulcers similar to those of larynx and intestine. Tubercle ulceration of larynx often coexistent. *Depth.* Outline sinuous. Edge without eversion. Induration slight.

7. SYPHILITIC. *Two kinds.* (A) Superficial; secondary. *Site.* Usual limit to tip and sides of anterior half. *Chars.* Very various; little cracks and fissures; pale smooth bald patches without much ulceration or ulcers more defined but limited to mucous membrane. Other syphilitic affns. of the tongue (see below) usually coexistent. Secondary ulcer very common. May be very slight. Importance in women. Rely on objective symptoms rather than suspicions, and never ask suspicious questions. Great obstinacy of these ulcers. Why? *Treatment.* Hg. how best given for long. Sir J. Paget's Cal. gr. i. and Op. gr. ss., every night for months. Hg. I. Vir. with Op. and Ext.: Hæmat. Merc. Fumign., in cases of old and intractable ulceration. Advant. chief.: (1) No digestive disturbance. (2) Hg. is distributed over a large surface; skin, mucous membrane of mouth, nose, etc. (4) Admits of loc. admin. Netley lamp. Precautions in fumigation. Amount (gr. 15) and quality of Cal. Amount of water. Diet. Exer. Baths. Local treatment of these ulcers. Silv. Nitr. Blackwash, etc., in addition to those above given.

B—Deep Tertian: ulcer. *Site.* Often in posterior or middle part near centre, taking origin in e.t. of septum abundt. here. History of previous "lump"; its chars. Degree of hardness according to position. Period of Inertia. Absorption. Ulceration. Characteristics of slough and ulcer. Appe. of malignancy. Diagnosis.

CHIEF POINTS.	CARCINOMATOUS ULCER.	SYPHILITIC ULCER.
AGE.	Usually after 45 years. Excpns.	Usually before 45. Excpns.
SITE.	Usually on one side. Tends to invade floor of mouth.	On the upper surface; often in middle line.
EDGE.	Defined, infiltrated, hard, everted.	Less defined, may be excavated and sloughy, not infiltrated or everted. Another s. myositis interstitial and diffuse.
PAIN.	Constant. Darting into ear, etc.	Comparatively slight.
FIXITY.	Marked, from tendency to invade floor of mouth.	Not marked.
GLANDS.	Submaxillary lymphs. soon involved, and hard.	Glands affected less rapidly, and to a much less degree. Post. Cervic. as well as Submax. Goes less hard.
PROGRESS.	Steady. Often rapid. Resists treatment.	Slow. Often stationary. Amenable to treatment.
ORIGIN.	In a slight abrasion; a fissure or crack; wart (rare).	In a "lump".
PREVIOUS HISTORY AND CONCOMITANT SIGNS.	Perhaps of irritation.	Of syphilis.

Other Gummata in muscles. Vasti. St. Mastoid. Masseter, *i.c.*. Localised gummatous Myositis in biceps and flexors of forearm, Insidious course. Diags. from rheumatism. *Treatment* of S. Ulcer. *Locy.* Removal of slough. On of "Tongue Poultice," stale bread masticated, or pulped carrots packed into the ulcer. *Geny* K.I. Admn. with Ammonia—dilution. Precns. Duration of course. Often disagrees in the onset, and not afterwards. Other iodides. Hg. in Terty S. Precns. Hg. with or after K.I. Dr. O. Rees on its advantage (*Guy's Hosp. Rep.*, vol. xvii, p. 249). Impe. of treatment. Syph. Ulcer running into Epitha. Ulcer of tongue in Congen. S. (Holmes' *Dis. of Chn*, p. 358). Other Syphilitic affns. of tongue. (*a*) Chancre. Rare, as Fournier's cases quoted by Mr. F. Clarke. Dis. of the tongue. Signs. (*b*) Mucous tubercle, *i.e.*, lowly raised patches with extended bases, surfaces smooth, not warty or somewhat fissured as in Condyloma. Mic. stre. differ from Condyloma. *Treat.* Always constitutional. (*c*) Cracks and fissures usually Syphilitic, not so mere wrinkles. (*d*) Bald patches, from atrophy of papillæ. (*e*) Leucomata, *i.e.*, whitish patches from non-removal of accumulated epithm. (*f*) Psoriasis, irregular patches of heaped-up white epm., alternating with deep-red raw areas; may co-exist with Psor. palm. *Treat.* Not easy. Donovan's Soln. and Sarsap. (*g*) Ichthyosis, *i.e.*, patches often symmetrical, slightly raised, limited in depth to the muc. me., white or whitish-yellow like wet kid), most common in men, usually beginning before middle life, often in some irritation, *e.g*, tongue scraping, strong cigars, hot tobacco smoke, Syphilitic inflamn., etc. Often associated with Syphs. Often stationary for 10, 20, 30 years, but tending certainly to Epitha. *Treat.* Avoid irritn., scraping, paring, etc. Watch carefully, and operate at earliest sign of ulcrn. Mic. apps. Not characteristic. Papillæ enlarged, R. mucosum much developed. In submucous and muscular t. abundant nuclear cell-growth. Vessels increased in no. and size (F. Clarke, *Med. Ch. Trs.*, 1874).

MALIGNANT.—Term. Usual variety. Source of irritn. not always evident. Perhaps some chronic inflam. or irritn. of moderate intensity starts a slight epithelial ingrowth, and at the same time sets up hyperæmia; this brings about additional nutritive supply, and so hastens the ingrowth. *Commt.* Various. As a fissure, or as a nodule in the muc. me. (not deeper), and adherent to it. Early ulceration constant. Why? Appe. of ulcer. excavation. Base hard and uneven. Borders raised, everted, indurated (between fingers). Pain. Three sites, ear, jaw, temple. Fixity. Salivation. Speech. Diagn. Occasional difficulty. Admn. of K.I in full doses. How long advisable. *Duration.* In cases not operated upon, one year to eighteen months; if operated upon, one year and a half to two years. Qn. of comfort. Qn. of enlarged glands. Often due in part to ulcrn. Opn. for their removal may expedite that of tongue. *Termn. of case.* Exhaustion. Br. pneumonia. Hæmorrhage. *Operation.* Through mouth, if possible. Aids. Sir J. Paget's suprahyoid or submaxillary puncte. Ecraseur precns. Qn. of splitting the tongue. Time of hæmorrhage. Mr. Whitehead's method with

scissors. Advantages. Simplicity, and a small amount of subsequent sloughing, and thus less danger of septic pneumonia, anorexia, etc. Risk of hæmorrhage exaggerated? Gag. Reliable assistants; one for anæsthetic; a second to sponge out fauces and cavity of cheek, into which blood readily flows if patient's head be kept on one side. Relays of iced sponges. Order of parts cut through: (1) mucous membrane, between tongue and gum; (2) palatoglossus; (3) muscular structures in floor of mouth, the snips being deliberate and on one horizontal plane. Torsion of linguals. Nutrient enemata, if needful, first thirty days.

2. *Princ. and Pract. of Physic*, 4th ed., vol. i, p. 819.

3. Mr. H. Earle (*Med.-Chir. Trans.*, vol. xii, p. 286) described a severe case of this kind which occurred in a boy at the Foundling Hospital. It was caused by large doses of hyoscyamus, gradually increased to a drachm of the extract daily: a remedy which Mr. Earle recommends strongly in the case of "ragged irritable ulcers in the tongue".

4. *Med. Times and Gaz.*, 1858, vol. i, p. 819.

5. *Med.-Chir. Trans.* vol. xv, p. 258. Mr. Travers speaks of these as usually disappearing. It is, however, much more common for them to break down, with characteristic discharge, as in "strumous" abscesses elsewhere.

6. *Loc. supra cit.*, p. 501.

7. Mr. Cæsar Hawkins, *Contr. to Path. and Surg.*, vol. i, p. 214.

8. Mr. Earle (*loc. supra cit.*, p. 286) recommends the above as not only useful in cleansing and soothing the surface of an ulcer, but as having the further good effect of restraining the patient from talking. Mr. Earle further alludes to the comfort which the patient will derive from frequently cleansing the surface of the ulcer by gently throwing a stream of lotion or warm water on it when the effort of gargling is productive of great pain. At the present day, this recommendation may most easily be carried out by a modification of Dr. Thudichum's douche, a gum-elastic catheter fitted on to an India-rubber bag or bottle, or by one of the numerous throat-sprays.

9. Mr. Whitehead early drew attention to the fact that, owing to the unequal size of the linguals—a fact well known to anatomists—the surgeon will often have to tie or twist one only of these vessels. This was so in both of the cases in which I have removed the entire tongue by Mr. Whitehead's method. In each of these, the dorsalis linguæ and the lingual artery itself, on the left side, required torsion; hæmorrhage from the same vessels in the opposite half of the tongue being easily arrested by firm sponge-pressure.

REPORT

OF

A COMMITTEE OF THE HARVEIAN SOCIETY

APPOINTED BY THE COUNCIL IN PURSUANCE OF A RESOLUTION OF THE SOCIETY FOR THE PURPOSE OF ENQUIRING INTO THE MORTALITY REFERABLE TO ALCOHOL.

Read before the Society, November 16th, 1882.

.. THE inquiry intrusted to us is now complete, within the limits which, in view of the largeness of the subject, we have found it necessary to adopt, and we beg to report as follows.

2. The points to which, at the outset, we found it necessary to confine our attention were (1) the extent of the mortality referable to alcohol, and its proportion to the mortality from all causes; (2) the proportion in which it is distributed between the two sexes; (3) the ages at which, and (4) the occupations in which it chiefly occurs; and (5) the modes of death.

3. We also decided, early in the inquiry, to limit its scope to the metropolis, as affording a definite field which should be at the same time familiar to us, within the means placed at our disposal by the Society, and sufficiently large and varied to yield important results.

4. There are strong grounds for thinking that the returns of the Registrar-General are inadequate in reference to this subject, as they are based upon certificates whose terms do not require the mention of anything but the immediate cause of death, as distinguished from the cause of disease; and, in fact, only 164 deaths were referred to this cause in London in 1876, 180 in 1877, and 220 in 1878.

5. We decided, therefore, to address ourselves directly to the practitioners of the metropolis, to whom the facts are known, and to ask for information bearing upon the five points before mentioned.

6. The details of the plan upon which this was done are given in our first Report, presented in 1879, to which we beg to refer.

7. Our best thanks are due to the gentlemen who responded to this request, and who furnished altogether a statement of between seven and eight thousand adult deaths from all causes in private practice, of which they had preserved a record sufficient for our purpose.

8. As our first and principal object was to ascertain the proportion of deaths from alcohol to deaths from all causes, it was requisite that the collection of cases on which we proceeded should be not only as large, but as completely representative of the London mortality as possible.

9. The London mortality is peculiar in this respect, that so large a proportion of the deaths take place in public institutions, and a large number also become the subject of coroner's inquests, and are, therefore, not certified at all.

10. The proportions in 10,000 deaths may be stated as 7,505 certified by private practitioners, 1,183 in workhouse infirmaries and lunatic asylums, 646 in hospitals, and 666 inquests. Through the kindness of the medical officers of several of the metropolitan infirmaries, of the registrars of St. Mary's and St. George's Hospitals, and of the late Dr. Hardwicke, coroner for Central Middlesex, who placed his official records at our disposal, we have been able to supplement the cases contributed by private practitioners with very nearly the proper proportion of the other classes of cases, so that the total with which we have to deal amounts to 10,000 cases, constituted as follows—7,505 private cases, 1,172 infirmary and asylum, 646 hospital, and 677 inquest.

11. It is obvious that any conclusions based upon these 10,000 cases, will hold good equally for the total adult mortality of London, to which they correspond so very closely in composition.

12. The 10,000 cases as returned to us, and shown in Table I, are broadly divided into three classes—A, deaths in no wise due to alcohol; B, deaths accelerated, or partly caused, by its abuse; C, deaths wholly due to it; and their respective numbers are A, 8,598; B, 1,005; and C, 397, which gives 1,402 deaths, as nearly as possible 14 per cent., in the causation of which alcohol appears to have played some part. If this part were, in all cases, a leading one, it would correspond to an annual adult mortality of about 5,870 from alcohol in London, or 38,971 for England and Wales, assuming for the moment that the metropolitan figures would apply to the whole country.

13. But in dealing with returns such as these, it is eminently necessary that the facts should be weighed as well as counted; and an examination of the deaths returned under B and C respectively, speedily shows that the degree of weight to be attached to the two classes is very different. The latter is, with a few partial exceptions, entirely composed of genuine instances of death not only supervening on, but caused by alcoholic excess, and may be thoroughly relied upon. The former is a heterogeneous group of deaths, in the causation of which the share attributable to alcohol ranges from the almost exclusive to the scarcely appreciable.

14. We shall return to this point in discussing the modes of death with reference to Table II; but we would point out here that, whatever view be taken of this class of cases, the fact remains that they are all deaths of persons known, or reasonably suspected to be addicted to drink, in which the practitioner in attendance, or the coroner who investigated the death, or the registrar or pathologist of the hospital where it occurred, considered whether, on sufficient or insufficient grounds, that death was accelerated by, or partially due to, alcohol.

15. On the whole, the returns before us seem to show that, in London, a percentage of adult deaths, which may be variously estimated at from little more than 1.5 to 4, is directly due to alcohol; while a further proportion of 10 per cent. of those who die have injured their health in a greater or less degree by alcoholic excess.

16. In the set of cases derived from hospitals, where no case was admitted to Class C except upon evidence thoroughly satisfactory to us, and resting, in most instances, upon a *post mortem* examination, the proportion in this class was 1.55 per cent.; and it is probable that we are here upon more solid ground than in any other part of the inquiry. When, however, it is remembered that the antecedents of a patient are unknown to the medical officers, and that his own assertion of temperate habits cannot always be checked by a *post mortem* examination, we feel that it would hardly be safe to apply the figures derived exclusively from this source to the population generally.

17. On the other hand, the inquests, taken alone, would yield a proportion of 5.6 per cent.; but it is obvious that they include too large a proportion of the worst cases, and we should not think of applying a ratio calculated from them to the metropolis at large.

18. The percentages in the other two sets are between these two extremes, being 2.133 in the infirmary series, and 4.317 in the private cases.

19. These differences are evidence of the difficulties and uncertainties which beset the inquiry, depending as they do on the frequent difficulty of deciding to which category a case should be assigned, and the adoption of a more rigid standard by the Committee themselves in the hospital cases than they could enforce upon their informants.

20. It should, however, be remarked that, when all the deaths referred to alcohol, whether in greater or less degree, are placed differently in one category instead of two, their proportion varies comparatively little in each of the several sets of cases, being 11 per cent. of the whole in the hospital cases, nearly 13 in the infirmary set, and just over 14 in each of the others.

21. The proportion in which the numbers are distributed between the two sexes shows a remarkable preponderance of men over women in the alcoholic classes B and C. The 10,000 cases with which we are dealing show an accidental preponderance of women over men nearly in the proportion of 10 to 9, which is itself an exaggeration of the slight preponderance which exists of female over male adult deaths from all causes in London. But in Class B we find the male deaths nearly twice as numerous as the female—663, as against 342. In Class C, the male preponderance is still large, but not nearly in the same proportion—242, as against 155. These figures seem to suggest that, while disease from alcoholic excess prevails much more among men than women, its more aggravated forms are relatively more common among women.

22. The ages at which the deaths in B and C respectively occurred are shown in Table II in decades of years. It shows that deaths, in the causation of which alcohol is concerned, occur at a relatively earlier age than deaths from all causes. In Class B, two-thirds, and in Class C, three-fourths, of all the deaths, occurred between the ages of 30 and 60; whereas, in the adult population of the metropolis generally, little more than half occur between 35 and 65.

23. It will be observed that no less than 86 deaths of persons over 70 are referred to Class B, and 13 to Class C. It must, of course, be only in a modified sense that such persons can be said to have died of drink; but we give them as returned to us. One of the most extreme instances is reported in these words: "Widow, aged 82; congestion of lungs; was constantly drunk for years." Such cases as this might rather be quoted to show that excess in alcohol is consistent, as no doubt it is in exceptional instances, with the attainment of advanced age. Still it may, of course, be urged that such persons might, but for their intemperance, have figured as centenarians, of whom 88 were returned as dying in the year 1878 in England and Wales.

24. The information which has been furnished to us respecting the occupations of persons whose deaths have been hastened by intemperance, is not sufficiently complete or systematic to enable us to draw any trustworthy conclusions. The only salient point which seems to come out clearly from such analysis as we have been able to make of it is the large preponderance of persons engaged in the liquor trade. Out of 224 deaths of persons dependent for their living upon various trades, no less than 104 appeared to be publicans, hotelkeepers, wine merchants, their wives, and persons in their employ.

25. The modes of death may be studied in Table II. The 1,402 more or less alcoholic deaths in Classes B and C respectively are there set out under the various causes of death under which they were registered, and these will in most instances afford some guide to the events or morbid processes through which alcoholic excess proved fatal in the several cases.

26. In Class C, which contains much the most unequivocal and reliable set of cases, 397 in number, perhaps the simplest are 59 cases made up as follows: 5 deaths from asphyxia and 12 from other accidents occurring to persons in a state of intoxication; then 9 referred to "alcoholic poisoning" or "excessive drinking," and 30 to "alcoholism" or "chronic alcoholism;" to which should be added 3 others where the terms "general infirmity," "debility," and "syncope" were confessedly employed as euphemisms for the same thing.

27. In this group of 59 cases, it is difficult to single out any organ as being principally affected; but if the method of classification according to organs be applied to the remaining 338, it will be at once seen that diseases of the liver and chylopoietic viscera very largely preponderate; 116 deaths are referred to disease of the liver, 11 more to disease of liver and stomach; there are 8 from disease of stomach and hæmatemesis, which it is impossible to disentangle from the former; and, if we add 9 more referred to disease of liver and kidneys, 2 to disease of heart and liver, 3 to diarrhœa, and 3 to peritonitis, we get a total of 150 deaths, or three-eighths of the whole class, brought about by disease of the abdominal viscera.

28. Forty-six cases are referred under various names, to disease of the nervous centres, besides 38 to delirium tremens, and 1 to dipsomania, making a total of 85.

29. Twenty cases are referred to disease of the kidneys, albuminuria, and uræmia, besides the 9 mixed cases already mentioned in which the liver and kidneys were both affected.

30. Thirteen cases are referred to disease of the heart, besides 2 already mentioned in which both heart and liver, and 2 more in which heart, liver, and kidneys are all mentioned.

31. Twenty-two cases were registered as dying of phthisis, and as many more from other lung diseases, pneumonia, pleurisy, bronchitis and congestion. This gives a smaller proportion of deaths from phthisis than among the general population, a subject further considered in section 34.

32. Turning now to Class B, and taking first the deaths from lung diseases, we find that out of the 1,005 deaths, reported as partially referable to alcohol, which constitute this class, 70 or nearly 7 per cent. were registered as dying from pneumonia and pleurisy. The deaths from these causes among adults in London generally, only amount to 3.8 per cent. It would seem, therefore, subject to the qualification stated in the next section, that intemperance materially increases either the liability to, or the fatality of, the class of cases usually returned as pneumonia and pleurisy.

33. On the other hand, the deaths, 107 in number, referred to bronchitis, asthma, emphysema, and congestion of the lungs are only 10 per cent. of the whole, whereas these causes furnish nearly 15.5 per cent. of the adult mortality of London generally. Considerably more men than women are returned as dying of pneumonia and pleurisy, and more women than men of bronchitis, etc., in London generally; but among the intemperate, the preponderance of males considerably heightens the excess of that sex in the case of pneumonia and pleurisy, and completely reverses the excess of women in the other case. The significance, however, of this and all comparisons between deaths from bronchitis and from pneumonia is impaired by the fact that the distinction between bronchitis and pneumonia is somewhat loosely drawn in the death certificates in the case of old people.

34. The figures relating to phthisis in this Class B, lend no support to the theory that alcohol has any specific tendency to develop this disease; 162 deaths out of the 1,005 supposed to be partially caused by alcohol, were referred to phthisis, or 184 out of the 1,402. Classes B and C taken together. The former figures yield a per centage of about 16.1, the latter only 13.1, whereas it is well known that phthisis accounts for about 20 per cent. of the adult mortality of the metropolis. Not only do the deaths from phthisis thus seem to be fewer in the intemperate section of the metropolitan popula tion, but they apparently tend to occur at a somewhat later age The decades of years in which Table II is arranged, unfortunately d not correspond with those in the Registrar-General's tables; but a near a comparison as the tables will admit of, shows that, while 5 per cent. of the deaths from phthisis among intemperate person occur at ages between 40 and 60, the equal, but slightly earlie period, between 35 and 55, only furnishes 46 per cent. of the death from phthisis among the general population; and the equal, bu slightly later period, between 45 and 65, only 27 per cent. Three me seem to die of phthisis to one woman, among the intemperate

TABLE I.

—	A.			B.			C.			Total.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Private cases	2642	3779	6421	499	261	760	192	132	324	3333	4172	7
Hospital cases ...	352	223	575	56	5	61	9	1	10	417	229	
Infirmary and Asylum cases	481	540	1021	76	50	126	19	6	25	576	596	1
Inquests	370	211	581	32	26	58	22	16	38	424	253	
	3845	4753	8598	663	342	1005	242	155	397	4750	5250	10,

TABLE II.

No.	Certified Cause of Death.	B																C															
		20 to 29.		30 to 39.		40 to 49.		50 to 59.		60 to 69.		70 to 79.		80 to —.		Total.			20 to 29.		30 to 39.		40 to 49.		50 to 59.		60 to 69.		70 to 79.		80 to —.		Total.		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
1	Disease of heart	3	1	13	3	7	8	13	5	6	8	7	2	...	...	49	27	76	1	1	4	...	...	...	4	1	2	...	...	...	...	...	11	2	13
2	Disease of heart and liver	...	...	3	1	1	4	...	3	1	1	1	...	...	...	6	9	15	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	1	2
3	Disease of heart and lungs	1	...	...	...	1	1	1	...	1	1	...	1	...	...	4	3	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Disease of heart, liver, and kidneys	...	...	2	3	1	1	1	...	...	1	...	...	...	...	4	5	9	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	1	2
5	Disease of liver, with jaundice, ascites, and complications	3	3	10	9	21	10	21	18	17	12	10	5	1	1	83	58	141	4	2	5	16	19	14	17	18	10	9	...	2	...	...	55	61	116
6	Disease of liver and stomach	...	...	1	1	1	2	1	...	2	...	...	...	...	...	5	3	8	...	...	...	1	1	4	...	2	1	2	...	...	...	...	2	9	11
7	Disease of liver and kidneys	...	...	2	1	3	2	3	2	...	...	1	...	...	...	9	5	14	...	...	1	...	2	1	1	2	1	...	1	...	...	...	6	3	9
8	Kidney-disease, albuminuria and uræmia	1	1	8	8	17	3	12	7	8	8	1	1	...	...	47	28	75	1	...	3	...	8	4	3	...	1	...	...	...	...	...	16	4	20
9	Lungs and kidneys	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Phthisis and hæmoptysis	19	4	30	20	39	9	27	7	6	1	..	...	...	...	121	41	162	3	...	3	2	7	1	4	1	1	...	...	...	...	...	18	4	22
11	Pneumonia	1	1	8	3	14	1	8	2	4	2	2	...	...	...	37	9	46	...	...	2	...	1	1	1	...	...	...	...	...	...	...	4	1	5
12	Pneumonia and pleurisy	2	1	4	1	5	2	1	...	6	2	...	..	...	..	18	6	24	...	...	3	...	1	...	1	...	1	...	...	...	...	...	6	...	6
13	Bronchitis, asthma, and emphysema and complications	...	1	4	2	12	3	18	7	21	14	7	5	...	2	62	34	96	...	...	1	...	3	...	...	2	3	...	...	1	...	...	7	3	10
14	Congestion of lungs	1	...	1	1	3	1	1	...	...	1	2	...	...	...	8	3	11	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
15	Disease of larynx	...	...	...	...	1	...	1	1	1	...	...	...	...	...	3	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Apoplexy and paralysis	...	1	1	6	9	6	12	12	13	9	7	4	...	...	42	38	80	...	1	...	2	1	1	4	4	5	2	4	...	...	...	14	10	24
17	Softening of brain	1	...	1	...	...	...	2	...	2	3	1	...	...	...	7	3	10	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
18	General paralysis	...	...	3	...	1	...	1	...	...	...	...	...	...	...	5	...	5	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
19	Epilepsy	1	...	2	...	2	2	2	...	3	...	1	...	...	...	11	2	13	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1
20	Disease of brain and meninges	2	...	3	1	3	2	2	3	6	...	2	1	...	...	18	7	25	1	...	2	...	2	1	2	...	1	...	2	...	1	...	10	1	11
21	Effusion on brain	2	...	1	...	3	...	3	...	...	1	...	...	...	...	9	1	10	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	2
22	Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	1	1	2
23	Disease of spinal cord	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
24	Disease of stomach and hæmatemesis	...	...	1	1	...	2	4	4	1	2	...	...	...	...	6	9	15	1	...	...	1	1	...	1	1	3	...	...	...	...	...	6	2	8
25	Chronic diarrhœa	...	...	...	...	...	...	...	...	...	1	1	1	1	...	2	2	4	...	...	...	1	...	1	1	...	...	...	...	...	...	...	1	2	3
26	Peritonitis	...	...	1	...	1	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	2	3
27	Cæcal abscess	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Dysentery	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Ulceration of bowels	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Intestinal obstruction	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	Disease of rectum	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Disease of bladder	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Aneurysm	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	*Post partum* hæmorrhage, and miscarriage	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Anasarca	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	Diabetes	...	...	...	...	2	...	1	1	2	1	1	1	...	...	6	3	9	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	Purpura	...	...	1	...	1	1	1	...	2	...	...	...	...	...	5	1	6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
38	Syphilis	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	2	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	1
39	Typhoid fever	...	1	1	...	1	...	1	...	...	...	...	...	...	...	3	1	4	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
40	Epistaxis	4	...	3	...	...	1	2	2	1	...	...	...	...	...	10	3	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	Gout	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
42	Cancer	...	...	1	...	2	...	4	...	2	1	...	...	...	...	9	1	10	...	...	1	...	...	...	...	...	1	...	...	...	...	...	1	...	1
43	Tubercular disease	...	...	...	...	...	2	3	1	2	...	1	1	...	...	6	4	10	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
44	Pyæmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
45	Sloughing and gangrene	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
46	Phlebitis	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	Necrosis of bone	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	Caries of spine	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
49	Carbuncle	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Erysipelas	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51	Cellulitis	1	...	2	...	2	...	...	2	...	...	...	...	...	...	5	2	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52	Influenza	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53	Acute rheumatism	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
54	Leucocythæmia	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	Alcoholism and chronic alcoholism	1	...	...	1	1	...	1	...	...	1	1	...	...	...	4	2	6	2	...	2	2	8	3	5	3	3	2	...	...	...	...	20	10	30
56	Excessive drinking and alcoholic poisoning	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1	1	..	3	...	...	...	...	...	...	3	6	9
57	Delirium tremens	1	...	3	...	4	...	1	...	...	...	...	...	...	...	9	...	9	3	...	12	1	11	3	3	1	3	1	...	...	...	...	32	6	38
58	Dipsomania	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
59	Asphyxia when intoxicated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	...	...	...	...	...	...	...	...	2	3	5
60	Accident when intoxicated, fractured ribs and pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	1	3	1	1	1	1	1	...	...	...	...	8	4	12
61	Senile decay	...	...	...	...	...	...	2	...	2	...	...	1	...	...	4	1	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	General infirmity, debility and exhaustion	...	...	...	...	...	...	1	1	2	...	2	4	1	2	6	7	13	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2
63	Atrophy	...	...	1	...	1	1	1	1	1	1	...	1	...	1	4	5	9	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	1	2
64	Syncope	...	...	...	...	...	...	2	2	...	...	...	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65	Insanity	...	...	...	...	...	...	2	1	1	...	...	...	...	...	1	3	4	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66	Accidental injury	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
67	Suicide	...	...	...	...	3	...	...	1	1	...	...	...	...	...	4	1	5	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
68	Not stated	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
		44	15	111	66	170	68	165	86	119	75	48	28	4	6	661	344	1005	19	6	52	35	74	42	50	47	40	19	7	4	...	2	242	155	397
		59		177		238		251		194		76		10					25		87		116		97		59		11		2				

ereas the proportion among the general population is four men to ee women.

5. The high mortality among intemperate persons from diseases he liver and chylopoietic viscera is again illustrated in Class B a return of 164 deaths. These amount to more than 16 per cent. he whole; whereas the deaths from these causes form only 4 per t. of the adult deaths in the general population of the metropolis.

36. It is obvious that so large an abnormal increase in the death-rate cannot occur under the head of one disease without some reduction under the head of others; and it may be supposed that such a displacement of the mortality, analogous to what is observable in the returns relating to zymotic diseases when one of them is especially prevalent, reduces the proportionate mortality from the more common diseases among the intemperate.

TABLE III.

Causes of Death.	All ages over 20 in London in 1878.		Class B.		Class C.		Classes B and C.	
	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.
All causes	41,929	—	1,005	—	397	—	1402	—
Pneumonia and Pleurisy ...	1,717	3.8	70	7.0	11	2.8	81	5.7
Bronchitis, Asthma, Emphysema, and Congestion of Lungs	6,498	15.5	107	10.0	11	2.74	118	8.4
Phthisis	7,966	19.2	162	16.1	22	5.54	184	13.1
Heart-Disease	4,517	10.77	76	7.56	13	3.3	89	6.35
Chylopoietic Viscera (diseases of)	1,715	4.0	164	16.0	150	38.0	314	22.4
Nervous Diseases... ...	5,186	12.36	154	15.32	85	21.4	239	17.0
Kidney-Disease, Albuminuria, Uræmia	1,351	3.22	75	7.45	20	5.0	95	6.77

37. The deaths in Class B from diseases of the nervous centres amount to 145, or 154 if we include 9 from delirium tremens. The former figure corresponds to 14.42 per cent. of all the deaths, the latter to 15.32; whereas, in the adult population of London generally, these causes only account for 12.36 per cent. of the deaths.

38. There is also some evidence that deaths from these causes occur at rather earlier ages among the intemperate. They are mainly diseases of advanced life; and the number of deaths referred to them in London is highest in the decade from 65 to 75, the figures for the preceding decade, 55 to 65, being much lower; but the sample of mortality from these causes among intemperate persons, with which we are dealing, shows as many deaths between 50 and 60 as between 60 and 70, and a somewhat larger proportion of the whole at ages between 50 and 70 than the general mortality shows at the somewhat later ages, 55—75.

39. The deaths from diseases of the heart, 76 in number, amount to 7.56 per cent. of the 1,005 deaths of intemperate persons in Class B, which is considerably below the percentage, 10.77, prevailing among adults in London generally.

40. To kidney-diseases, albuminuria, and uræmia, are referred 75 of the deaths, or 7.45 per cent.; whereas, in the adult metropolitan population generally, such deaths are only 3.22 per cent. of the whole. It would seem, therefore, that disorders of the kidney are conditions whose frequency or fatality is notably increased by intemperance.

41. The figures relating to diabetes and erysipelas are too small to be of much value. There are only six deaths from the former, and seven from the latter. Both figures are higher than we should expect from the Registrar-General's tables relating to London.

42. The only remaining important cause of death among adults is "old age" or "senile decay", which accounts for about 6 per cent. of the adult mortality in London, all the instances being over 65 years of age. Only 13 of the 1,005 deaths in Class B were registered under this head, which would yield a percentage of 1.29, or, if 2 deaths of persons under 60 be eliminated, as we think they should be, 1.1.

43. On the other hand, the 17 deaths registered under the heads of atrophy, debility, general infirmity, and syncope, are just twice as many as we should expect. Nine of these are of persons under 60 years of age; and we think it probable that these, with the two cases of senile decay, also under 60, do not differ materially from six others registered under the heads of alcoholism and chronic alcoholism; and should be classed with them.

44. There are also ten accidental deaths, in which either the accident or the fatal result is supposed to have been brought about in some measure by intemperate habits.

45. We find, therefore, upon the whole, reason to think that, in the metropolis, the mortality among any considerable group of intemperate persons will differ from that generally prevailing among adults in the following important particulars, viz., a fourfold increase in the deaths from diseases of the liver and chylopoietic viscera; a twofold increase in the deaths from disease of the kidney, a decrease of half as much again in those from heart-disease, a marked increase in those from pneumonia and pleurisy, a considerable increase and an earlier occurrence of those from disease of the central nervous system; a marked decrease in those from bronchitis, asthma, emphysema, and congestion of lungs, a decrease nearly as great in those from phthisis, and a later occurrence, or at least termination, of the disease; a very large decrease in those from old age, with an increase in those referred to atrophy, debility, etc., and the addition of a considerable group referred in general terms to alcoholism or chronic alcoholism, or resulting from accidents.

46. Table III shows the number of deaths from some of the principal causes of death, and the rates per cent. in the 41,929 adult deaths in London in 1878, and in those comprised in Classes B and C respectively.

47. The figures to which we have throughout referred for comparison are those in the Registrar-General's Forty-first Annual Report, published in 1880, the year in which the bulk of our material was collected.

H. C. STEWART, *Chairman;* W. H. BROADBENT, W. SQUIRE, GEORGE FIELD, T. MORTON, WILLIAM HICKMAN, ROBERT FARQUHARSON, F. J. MARSHALL, HENRY POWER, HENRY JULER, WILLIAM SEDGWICK; MALCOLM MORRIS, W. H. LAMB, *Honorary Secretaries.*

COMPOUND FRACTURE OF THE FEMUR, ERYSIPELAS, PYÆMIA; AMPUTATION OF THE THIGH: SUBSEQUENT EXARTICULATION AT THE HIP: COMPLETE RECOVERY.

BY ARTHUR E. BARKER, F.R.C.S.,Eng.,

Assistant Professor of Clinical Surgery, and Assistant Surgeon at University College Hospital.

THE following case appears to present several points of special surgical and pathological interest, and to deserve particular notice. It illustrates, in the first place, what is, however, unfortunately rare in experience, namely, the possibility of recovery from pyæmia, even in a patient weakened by a most severe injury, prolonged suppuration, and an attack of erysipelas. Secondly, it illustrates the feasibility, in some cases, of amputating with the best results through the thigh for compound fracture, leaving a second compound fracture in the neighbourhood of the hip-joint to be treated otherwise later on, when the first amputation wound is healed. Thirdly, it shows that in such a case it is possible to exarticulate the whole of the remaining bone up to the hip joint, without re-amputation through the soft parts, but through a moderate opening in the outer side of the stump.

These last considerations lead one to speculate whether in certain cases of extensive disease or injury about the hip-joint with or without disease or injury lower down, where, under ordinary circumstances, amputation at the hip-joint would appear called for, but, where, owing to the great weakness of the patient, such would almost inevitably prove fatal from shock, it might not be proper to amputate through the thigh lower down as a preliminary; and on recovery from this operation, deal with the mischief at the hip-joint with the diminished risk (*quoad* shock) of operating on a stump instead of a whole limb. Apart from shock, the other dangers of the two amputations (if re-amputation be decided on) are probably almost equal in these days of antiseptic surgery. Be this as it may, I am satisfied that if I had amputated in the first instance through the hip-joint in the case now to be recorded, the patient would not have survived, so great was his weakness at the time; whereas, by removing the limb at a point lower down the thigh he was best prepared for subsequent treatment of the compound fracture at the joint by ex-articulation of the bone or even re-amputation, had this been necessary.

For the following digest of the very extended notes of the case in the hospital clinical register, I am indebted to Mr. John Walker, dresser to the patient.

W. W., a healthy man, aged 29, a rivetter, fell from a roof to the ground, on November 30th, 1880, and was at once placed in University College Hospital, under the care of my colleague, Mr. Berkeley Hill. On admission, he was suffering from the shock of the fall and an oblique compound fracture of the femur, a little below its middle was diagnosed. The external wound was only about an inch and a half long, but communicated with a cavity extending upwards for five or six inches, and full of soft clot, in which the bone lay partially bare. The wound was carefully washed out with carbolic lotion one to twenty, and was dressed according to Listerian principles, the limb being then placed upon a bracketed splint.

For the first few days, the patient went on fairly well on the whole, but, at the end of the week, began to complain of much throbbing and starting in the limb, the temperature rising to 101.6°. On December 10th, Mr. Hill found, on removing the dressings, considerable œdema from the wound to the knee, but no redness. The dressings were now re-applied, and the limb put up on a straight splint,

with the Scotch sheet and weight extension. At 6 P.M., the temperature was 103°, and the patient passed a very bad night, vomiting frequently.' For the next few days, the temperature ranged from 101° to 103°. On December 20th, pus was found in the dressings, doubtfully odorous. Two or three ounces came away from the cavity, into which a probe could be passed for about six inches in the direction of the great trochanter. Counter openings were now made close behind the latter for drain-tubes. On December 24th, there was much vomiting, with several rigors, rise of temperature to 104.6°, and severe pain; there was also carboluria. On examination, no calculus was found, but a large blood-clot breaking down. The wound was washed out with carbolic lotion, larger tubes were inserted, and a dressing of boracic lint and oakum applied. After this, the temperature gradually fell to 102°.

On December 28th, erysipelas set in round the wound, and the patient was removed to the infectious ward. For the next four days he vomited much; temperature 100° to 102.4°. The patches of erysipelas were painted over with tincture of perchloride of iron. On January 3rd, much drowsiness was noticed all day, and, on the 5th, a bed-sore commenced to form; pain was also noticed in the right arm.

On the 9th, the wound is described as rather "boggy," very foul, and discharging freely, with a blush around it; there was also a faint blush on the dorsum of the right foot. A small abscess now appeared over the extensor tendons of the right thumb, and yielded about a drachm of yellowish pus when opened; temperature fluctuated about 102°. On the 14th, the wound made on the 9th was reopened to evacuate pus. On the 18th, incisions were made into a small abscess on the outer side of the left forearm, and dark inodorous pus evacuated; also, into a small purulent collection over the external condyle of the right humerus, and into the right heel for fluctuation; in the latter situation, however, only serum escaped. On the 22nd, another small abscess had to be opened on the inner side of the right olecranon. On the 29th, the right elbow joint was found to be disorganised by suppuration, the bones grating freely. After drainage, it was fixed on an angle splint. From this, as the erysipelas disappeared, the various pyæmic abscesses gradually healed, and, on February 7th, the patient was removed from the erysipelas ward, and came under my care. A sinus, leading into the elbow-joint, was still open, and bare bone could be felt there. A few hyaline casts were found in the urine, but no albumen.

As the patient was now plainly running down from prolonged and profuse discharge from the wound round the fracture, and as the latter on being explored showed no signs of repair, and as there was much fever, I amputated the limb a little above the middle of the thigh, on February 16th, by two oval flaps. While these were being cut, pus poured out of the tissues around in large quantities. Having scraped away all granulations within reach of the face of the stump, especially those in the long sinus, reaching up to the great trochanter, and having secured a number of vessels with catgut ligatures, the whole wound was sponged with carbolic oil, and united by seven silver sutures, drain tubes being inserted in the usual way. It was then covered with lint dipped in carbolic oil, overlaid with a thick layer of salicylic wool. Over this again I packed, as high as the top of the pelvis, a quantity of ordinary wool, which had been freshly baked at a very high temperature. This being very firmly bandaged round the stump and up to the pelvis, completed the dressing. Although very little blood had been lost, the patient's pulse became bad several times during the operation, and the respiration almost ceased at one time. Brandy enemata and ether hypodermically, however, soon produced a much better state of things, and the patient passed a quiet night. The temperature at 9 P.M. was 102.6°, but the next morning had fallen to 99.4°.

On February 18th I dressed the wound for the first time, and found it looking well, though the discharge was free and offensive. On the 26th it was again dressed, and four stitches were removed, the flaps having united except at the drain openings. A good deal of offensive pus was found in the old dressing. After this, the amputation wound healed steadily and, on the whole, rapidly; but the old sinus leading from it to the trochanteric region, still discharged very freely. It was noticed now that the stump about the hip-joint was very œdematous and brawny, although there was no retention of discharge. The condition was such as to suggest the presence of dead bone near the joint (although I found nothing in the original notes of the case pointing to fracture there), and, on the other hand, from the state of the end of the stump, there was nothing to warrant the conclusion that death of the remainder of the stump had taken place after amputation. On March 3rd, therefore, I enlarged the sinus over the trochanter, and found a comminuted fracture of the femur there (not before suspected), and about six or seven loose fragments were removed. The line of fracture plainly ran into the neck of the femur. The question now arose, whether the dead bone should be left alone, to be cast off by the usual process, or whether reamputation at the joint should be performed. The first of these issues of the case could hardly be hoped for, however, in view of the fact that the man, whose condition had much improved after the first amputation, was now commencing to suffer much from the discharge and fever, consequent upon the extensive bone suppuration, and the œdema, on the other hand, was steadily increasing. But amputation at the hip joint also appeared, under the circumstances, a very great risk. I therefore determined on a middle course, namely, to attempt to exarticulate what remained of the femur, though the trochanteric wound still further enlarged downwards. This seemed feasible, as there was already a good sized wound over the broken bone, and also as the latter appeared separated to a considerable extent above by suppuration. I hoped that a vertical incision on the outer side of the thigh only would produce less shock than amputation at the joint, and would also admit of the freest drainage of the suppurating structures.

On March 30th, therefore, I enlarged the trochanteric wound downwards for some inches, thus gaining free access to the joint, and found the head of the femur loose and necrosed within the latter, the fracture having regularly comminuted the neck. Having lifted out the head, I then seized the upper end of the shaft, and, dragging strongly on it, gradually dissected it out of the stump from above downwards to its lower end. The only real difficulty met with in performing this exarticulation was in reaching and dividing the insertions of the psoas and iliacus muscles. This was, however, overcome by using a pair of curved scissors which reached the deep-seated small trochanter with less difficulty and danger than the knife. But little blood was lost during the operation, owing to the incision being external and in the long axis of the limb, and also to the fact that the enucleation was performed for the most part with a blunt elevator working close to the surface of the bone. The pulse and respiration, however, became at one time very rapid and feeble, and artificial respiration was resorted to for a minute or so. This and some brandy by mouth soon brought the patient round, and 6 P.M. he appeared very well. The large resulting wound was packed with strips of lint soaked in carbolic oil, and its edges were brought together temporarily with a few stout wire sutures. On the next day, under chloroform, the lint was removed, and the stitches were tightened, one deep supporting wire being passed through the whole thickness of the stump, and secured with lead buttons. The wound was now covered with lint dipped in carbolic oil, and a large sponge wrung out of carbolic solution was placed under it to receive the discharge, which was free at first; this sponge was changed every four hours. On April 5th, all the stitches were taken out except the deep supporting one, which was left in until the 19th, when it, too, was removed, and the drain tubes were shortened.

But little remains to be said after this, except that the healing process went on uninterruptedly, the patient being up in a chair, without any further need of drainage on the 30th. On May 15th, the man was rolling himself about in a wheeled chair, having gained flesh rapidly and looking well. On June 8th he left hospital for the convalescent home, using crutches. When he returned some weeks later, he was looking the picture of health, having become fat and strong. The long, boneless stump was soft and healthy, and gave him no trouble. A little later, I gave him a leather buckle splint and pin, with which he was soon able to walk fairly well. During the last year he has frequently shown himself at the hospital, and a healthier looking man could hardly be found in spite of the loss of the whole right lower limb and complete ankylosis of the right elbow. The latter is the only bad result of the pyæmic condition, from which his constitution does not appear to have suffered permanently in the least.

I cannot conclude these notes without saying that it appears probable, that the very satisfactory issue of the two grave operations just described may be in a great measure attributed to the complete rest, local and general, which was rendered possible by the use of the unfrequent, dry, antiseptic dressing in the subsequent treatment. Next to the thorough cleansing of the wound, it appeared to me urgently necessary that the very large raw surfaces should be kept firmly in contact, steadied, and compressed by strong elastic pressure, and by some material which would not readily lose its elasticity nor require to be changed soon. The wound would thus have continuous rest for some days, and the patient be spared the anxiety and extra shock of early disturbance. I therefore employed a form of dressing I have found perfectly adequate in a considerable number of serious amputations. This was, moreover, a case unsuited for

the Listerian dressing, however valuable in other cases, as the patient was peculiarly susceptible to the ill effects of carbolic acid, even in small quantities. The amount, therefore, that would have been absorbed had I performed these two very large operations with the spray, etc., would have probably been sufficient to produce grave danger and seriously to have complicated the case.

REMARKS ON INDIAN ENTERIC FEVER.

By RICHARD H. QUILL, M.D.,
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The very great divergence of opinion as to the etiology of enteric fever in India, which exists among medical men practising there, warrants me in thinking that any contribution (be it ever so small) towards the elucidation of this subject cannot fail to be of some interest to the profession at large. It is this belief, at any rate, which permits me to venture on the consideration of a subject already very fully explored by physicians so competent in aught that appertains to tropical medicine as Sir J. Fayrer, Professor W. C. Maclean of Netley, and Brigade-Surgeon Marston, A.M.D.

For the sake of clearness, I will commence by briefly stating what these opposite views on the etiology of enteric fever in India are.

On one side, it is held with much confidence that the entrance into the human system of fæcal impurity (though not necessarily of a specific character) is undoubtedly the cause of enteric fever in India, in just the same way as such a cause produces that fever at home; while an opposite sect of thinkers (and whose number, I would say, seems to be yearly increasing) hold that the great majority of cases of enteric fever in India are due to what they call "climatic causes"—a very loose term, it must be confessed, but one which, for the present, does not seem capable of being made more exact. It is very desirable to decide which of these beliefs is deserving of credence. Those who hold that every case of enteric fever in India owes its origin to some fæcal infection of the blood must, as a natural consequence, admit that the disease is then one which can be effectually guarded against by the exercise of sanitary vigilance; and further, that, by the introduction of additional and more perfect sanitary precautions, as time goes on, it may be eliminated almost completely from the diseases to which the soldier serving in India is subject. This, it must be acknowledged, is a very satisfactory and pleasant belief. But, on the other hand, if it be clearly proved that the most painstaking inquiry fails to connect the occurrence of cases of enteric fever in India with any fæcal impurity, and, moreover, that strong grounds exist for believing that the cause of this fever lies in the climate of India, then we must confess that the utmost perfection in the sanitary condition of a cantonment furnishes no guarantee against the presence in it of that which is capable of producing enteric fever. One thing, however, is very plain; and that is, that the giving of our adherence to the theory of the climatic origin of enteric fever in India in no way absolves us from paying the most thorough and anxious attention to the sanitary condition of any station in which we may be.

If enteric fever were a disease unfrequently met with in India, there might be some reason in not attempting the solution of a problem so surrounded by difficulties as is the etiology of that disease as met with in India; but, when the fact is forced upon us that (with the exception of cholera) there is no disease which causes so great a mortality among British troops in India, as does enteric fever, then there is, I consider, an obligation placed upon all who have the opportunity, to endeavour (as best they can) to shed light upon a question of so great an interest to the State.

Besides this mortality, the lengthened period of inefficiency which enteric fever entails upon its victims must not be forgotten. Only the very lightest duties can be safely undertaken by a soldier for a considerable time after convalescing from an attack of enteric fever. It leaves him anæmic, debilitated, and very prone to suffer from intestinal disturbances on the smallest exposure to chill or over-exertion. Indeed, I am so impressed with a consideration of the difficulty which convalescents from enteric fever in India experience in shaking off thoroughly that disease, that I think it would be wise to rule "that anyone who has suffered from a severe and well marked attack of enteric fever while serving in India shall be sent home for a change of air for a period of not less than six months". In the case of a soldier, he would be sent to the regimental depôt, where, under the influence of good food, plenty of fresh air, and prompt medical aid on the advent of any relapse, he would have a far better chance of complete restoration to health than at his own home, which, in nine cases out of ten, would be found to be anything but a desirable health-resort.

In relation to this question of change of air, I would say here, as my individual opinion, that change of air to a hill-station is (for enteric cases) in no way to be considered as an efficient substitute for a change to home. At all hill-stations, the difference between the temperature of the day and night-time is very marked; as a result of this, delicate men (especially if they happen to be convalescing from any abdominal affection) are very liable to become easily chilled; a sharp attack of diarrhœa or hepatic congestion follows, either of which tends in no small degree to doing away with the benefit the man's health may have previously derived from the comparatively speaking bracing hill-climate. Recovery from such attacks is, only too often, followed by a second or a third one; and in this way convalescence, instead of being hastened and consolidated by hill residence, is, I believe, in many instances absolutely retarded.

This subject might, with ease, be considerably enlarged upon, but I will not here pursue it further, as what I am especially desirous of considering is, the perplexing question of the etiology of Indian enteric fever.

No one protests more confidently against the climatic origin of enteric fever in India, and argues his case with greater acuteness, than does Professor W. C. Maclean of Netley; and the opinion of no one on tropical diseases, I may be permitted to say, deserves greater consideration than does his. As tending to corroborate the views held by Professor Maclean on this question, I am desirous of giving the result of an examination I have made of the annual returns of sick and wounded, from 1875 to 1881, of the troops at my present station, Assirgarh Fortress, Central India. I would first say that Assirgarh was unoccupied by British troops during the years 1876 and 1877 (I cannot, at least, find any returns for these years). I must not then be considered as referring to these years in the remarks which follow.

For the development of the purpose in view, some account of Assirgarh, in regard to its position and its sanitary arrangements, is necessary; hence the following brief description of the fortress is unavoidable. The fortress of Assirgarh is situated in the north-east angle of the Bombay Presidency. It is an isolated hill of the Sathpura range, and is elevated about 800 feet above the surrounding country. For miles around the fortress, in fact, as far as the eye can reach, nothing is to be seen but dense and luxuriant jungle, intersected here and there by irregular ravines. With the exception of a small native village at the foot of the fortress (outside the walls), and a small railway station about seven miles distant, there is, I may say, no human habitation within a radius of twelve miles. There are no drains of any sort in the fortress, with the exception of a few surface ones, made for the carrying off of the rain-water, and for the receiving of any refuse-water which may flow into the houses. All these surface-drains open outside the fortress.

The conservancy is carried out by the "dry earth system", all the details of which are strictly adhered to. The latrines are cleaned twice each day (morning and evening); their contents lowered from the walls in covered iron buckets, and then thrown into a large and deep ravine, about two hundred yards distant; from there, the sewage is quickly and efficiently removed by the denizens of the jungle, who, I have every reason to suppose, look with much favour on the method adopted at Assirgarh for the disposal of its sewage.

The water-supply is dependent upon the annual rainfall, which is received into three large tanks. One of these tanks is specially set apart for the supply of drinking water to the residents in the fortress; at the upper end of this tank is placed a species of filter-bed, which purifies the water fairly well. As a further precaution, however, the water, before being used by the troops, is passed through Macnamara filters, one of which is placed in each barrack-room. After this last filtration, the water is perfectly clear, and free from either taste or smell.

From this brief account of Assirgarh, it will, I think, be plain that the danger of the troops quartered there suffering from exposure to fæcal impurity is very small; and that, in consequence, we should expect those diseases which are known to be fæcal in their origin to be of very rare occurrence there. Such an expectation is, indeed, fully borne out by facts. I have carefully examined the sick returns of Assirgarh between the years 1875 and 1881, and during that period (the average strength of the troops being little over one hundred), I have not been able to discover one single admission for enteric fever, and but very few for remittent fever, none of which were of a severe type. When to this statement I add, that the great majority of the soldiers at Assirgarh, during the years I have named, were under twenty-five years of age, and had a service in India of less than

three years, I think it will be acknowledged that the whole tells, with considerable significance, against those who look to climatic influences as being the principal cause of enteric fever in India.

The believers in the climatic origin of cases of enteric fever in India very correctly point out, that the principal victims of this fever are young soldiers, with little Indian service; and that the older men, with an Indian service of four or more years, are rarely sufferers from it. Without gainsaying this observation, or attempting to account for it, I would simply say that, for a space of five years, Assirgarh has been occupied by successive batches of young and unseasoned soldiers without the occurrence among them of any type of fever, other than the mildest form of ague.

The climate of Assirgarh is no better than that of many other stations in the Bombay Presidency, where enteric fever is of only too frequent occurrence; but, as I have already said, its isolated situation, and the nature of its surroundings, lessen to a very great extent its liability to fæcal contamination of any sort; and herein lies (as it seems to me) the reason for the immunity it enjoys from the presence of enteric fever.

Before bringing these brief remarks on an important subject to a conclusion, and notwithstanding the evidence I submit I have adduced in favour of enteric fever being a fæcal disease in India as elsewhere, I would say that, personally, I am by no means convinced that a fæcal impurity must exist before cases of enteric fever can occur in India. I have seen many outbreaks of enteric fever, between which, and a fæcal impurity, it was not possible to trace any connection; and where, on the contrary, many things favoured the view of some climatic influence being the *fons et origo mali*.

The facts, however, which I have gathered from the sick-returns of this station, seem to me to point so very significantly in favour of the view which considers "enteric fever to be a fæcal disease in India as elsewhere", that I have felt it to be incumbent on me to place them on record.

ON TRANSFUSION.

By J. F. LE PAGE, L.R.C.P.E., etc., Durham.

Convinced that, in the conservative practice of the future, transfusion will hold a place of no little importance, and will be more and more extensively resorted to, and seeing that the means at present at our disposal for the performance of the operation are not altogether satisfactory, I have devised an apparatus in which there is an endeavour to combine absolute safety with great facility in use.



Of the transfusors which have been at our service, that of Dr. Aveling is, perhaps, all things considered, the most serviceable. But it has the disadvantage of requiring very complex manipulation. To put it concisely, each of them requires, in its use, for the surgeon to be aided by skilled assistance, whilst at the same time, there is no safeguard against the injection of a minute quantity of air, however careful an adept the operator may be, an accident which in all probability would prove fatal to the patient.

The accompanying illustration shows how these disadvantages are overcome. One hand alone is needed to operate the transfusor, and the other hand is at liberty to attend to the efferent tube, whilst the attention of the surgeon may be divided between the recipient and the donor of the blood. If any portion of air should at first remain adherent, and, of course, unseen, on the inner surfaces of the tubes, and, during the passage of the blood, be carried along with the stream, its course is with certainty arrested by the glass air-receiver, into which it must rise.

The case contains the apparatus, knife, forceps, and a small bottle, which latter is intended to hold a compound powder composed, say, as follows: carbonate of soda, ten grains; phosphate of soda, two grains; chloride of sodium, thirty grains. One fourth of the powder should be dissolved in about two and a half ounces of water at a temperature of 100° Fahr., a few drops of alcohol may be added, and the vessel containing the solution placed in another vessel partly filled with water at a temperature somewhat higher. Then, having attached the receiving and delivering tubes, the two extremities of the instrument must be placed in the inner vessel with the air chamber downwards. Now press the lever, press the elastic ball, release the lever, release the elastic ball, and after repeating that process once or twice, turn both taps. It is now ready for use. Raise the patient's arm to the horizontal position, so as to facilitate the transmission of blood to the heart, and having inserted both tubes, one into the supplying vein, and the other into the receiving vein, the right median basilic is perhaps the best, turn the taps, and in the same order press the lever, press the ball, release the lever, release the ball, and so on. Precisely one quarter of an ounce passes out each time. It is expedient, having commenced the transmission of blood, to complete the process without arrest, lest coagula should form.

The apparatus is made by Messrs. Arnold and Sons, and their name is quite sufficient guarantee for excellence of workmanship. I must, however, say that my thanks are due to them for so faithfully, so well, and with such precision and care, elaborating from my drawings an instrument of some elegance.

A word as to the cases in which transfusion is indicated. My special intention is that of supplying the obstetrician with a safe and easy means of transfusing blood after *post partum* hæmorrhage, where the diastaltic system is practically dead, and the heart is dynamically incapable of action in consequence of the absence of fluid to act upon. But transfusion is indicated in many other cases than that of uterine hæmorrhage leading to this condition. For instance, it is needed when after excessive hæmorrhage the vital fluid is not reproduced, and the nutritive process is so impaired that the persistent anæmia would be the forerunner of phthisis or other grave disease, did we not supply red corpuscles to carry oxygen, with which to re-establish those functions which are essential factors in the formation of hæmoglobulin. And it is certainly indicated in some cases of hæmorrhage from the bursting of an aneurysm, or where a main artery has been divided; with its aid, life may at least be prolonged when the stomach and rectum refuse to retain nutriment in the exhaustion from marasmic disease.

It may also be resorted to in the asphyxia of new born infants, the injection being made through the umbilical vein, having previously allowed a little blood to escape from the umbilical artery. For this purpose a small quantity of blood taken from the placenta and defibrinated will answer very well. In chronic as well as in acute anæmia we may transfuse, for where the whole blood is altered by toxic or pathological causes, it is manifestly advantageous to improve its quality by the admixture of healthy blood. It may also appear indicated after hæmorrhages from the stomach and intestines, hæmoptysis, and some surgical operations. I would go so far as to suggest, on physiological grounds, its occasional indication in hæmorrhagic fever. In the young, who are robust, absorption and nutrition will soon replace the normal quantity of fluid, although for a time it will be inferior in quality to that which was lost, containing less than the due proportion of oxygen carried by the red corpuscles. In those previously suffering from anæmia, and in the aged whose blood is very slowly reproduced, it appears to me that the operation may, with very great promise, be repeated more than once at intervals of a few days. In cases of poisoning, when the nature of the poison is unknown, or when an antidote would not be effective, or in pyæmia, might not occasionally a life be saved by alternate depletion and injections of pure blood? In epilepsy it has been used with marked success; and as in puerperal eclampsia we may presume an excess of carbonic acid and a deficiency of oxygen, may we not here also find it of no little service? I should remark that Prof. Schäfer has most conclusively shown that the action on the blood corpuscles of beef, peptones, and some other fluids, when used in lieu of blood, is most injurious.

It has been urged in disparagement of the operation that, during transfusion, very painful symptoms are experienced, followed after its performance by alarming prostration and hæmorrhagic fever. This we may admit as, in some cases, substantially correct. But what is the cause of all this, but that the vital powers are so stimulated to reassert themselves that the heart and arteries, certainly with intermissions, are making very violent efforts to drive along the small quantity of blood which the system contains?

The inference is clear, that this most valuable operation has not been so frequently performed as it should have been, and that many invaluable lives have been lost which might have been saved by the immediate restoration of the failing powers of the heart and nervous system which it most strikingly effects.

The dangers incident to the operation are the injection of particles

of air, and the formation of coagula. The first I have entirely overcome by the use of an air-receiver. The second, by preparing the blood of the donor before it is drawn from his vein. I have attested by repeated experiments that the administration of as large a dose of ammonia and of a saline as can well be tolerated, ten minutes before blood is allowed to flow, very effectively retards coagulation. The transfusor may be used either to inject whole blood or defibrinated blood; or saline solutions may be substituted where vital fluid is not obtainable.

NOCTURNAL ENURESIS TREATED BY VOLTAIC ALTERNATIVES.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

In June 1882, I was consulted in the case of a boy, aged 15, who had suffered from incontinence of urine during sleep, ever since he was nine years of age. He had been treated with belladonna and other medicines without relief; and as he was about to enter a public school, where a continuance of this trouble might have been particularly annoying, the parents were very anxious that something more should be done. The boy's general health was good, but he was considered a nervous child, and highly sensitive. There were no a carides, but he had a very long prepuce which could only with difficulty be retracted. There was, however, no suspicion of masturbation. Treatment by electricity having been recommended, I applied the middle-sized circular cathode over the region of the bladder, and the large oblong anode (five inches by two) to the lumbar portion of the spine. The current-strength 2.50 milli-ampères, for five minutes at a time. As after a few such applications no material benefit appeared to have been gained, I then added fifty voltaic alternatives produced in the metallic circuit. The night after this was free from the usual annoyance, and the boy has made an apparently uninterrupted recovery.

Sir Henry Thompson, in his article on Disorders of Micturition in Quain's *Dictionary of Medicine*, recommends the injection of a ten-grain solution of nitrate of silver to the prostatic portion of the urethra and the neck of the bladder, for that troublesome minority of cases in which belladonna has no influence; and he says not a single word about electricity. It appears to me, however, that the mode of using electricity which I have just described, and from which I have seen satisfactory results in a considerable number of cases, is much to be preferred, from being more manageable, and also painless. Nitrate of silver injected into the urethra of children, may cause considerable local pain and general systemic disturbance, more especially as these patients are generally found to have inherited the neurotic constitution, and to be unduly sensitive.

Seeligmüller and Erb likewise report good results from the use of electricity in enuresis. The former's method consists of the introduction of a wire-electrode, about one centimètre long, into the orifice of the urethra (whether male or female), this is connected with the negative pole of the secondary faradic current, the moistened anode being applied over the os pubis. Erb, in his recent *Handbook of Electro-Therapeutics* (Leipzig, 1882, p. 680) recommends, in addition to an external application of faradism to the spine, the os pubis and the perinæum, the insertion of a wire electrode, two centimètres long, into the male urethra, while in girls a small sponge-electrode is applied between the labia, close to the orifice of the urethra. He pronounces the results obtained by this method to be excellent. It will probably be allowed that the method I have described above, will, *cæteris paribus*, be preferable to those of Seeligmüller and Erb, more especially in the case of girls.

The affection arises, according to Sir Henry Thompson (*loc. cit.* p. 984) not from inability of the bladder to retain a small quantity of urine, but from its undue excitability and readiness to contract; and there can be no doubt that in many cases such undue excitability, not perhaps so much of the bladder itself, as of its centres in the spinal cord, is at the bottom of the affection. It is in such cases that belladonna proves serviceable. In others, however, the exceedingly profound sleep, which is so common in such patients, together with debility of the sphincter of the bladder, or rather of its centre in the lumbar enlargement of the cord, must be considered as conducive to the disorder. In such cases belladonna fails to relieve, while electricity, being a stimulant as well as a sedative appears suitable for both classes of cases, although more especially for the latter.

ON A NEW FORM OF INTRA-UTERINE PESSARY.*

By JOHN G. NEVITT, M.R.C.S.Eng., Chapel Allerton.

I have an old fashioned prejudice as to the sanctity of the intra-uterine cavity, but experience has shown me cases, whose only hope of relief lay in the proper application of an intra-uterine support. A very obstinate case of acute anteflexion, with bladder-symptoms, and mental trouble (which the pessaries I tried failed to relieve), set me to work, with the result I now bring to your notice. I was not, at that time, acquainted with the admirable instrument of Dr. Wynn Williams, or, possibly, I should have relinquished my self-imposed task as inventor, for the more agreeable, because less irksome, one of utiliser. However, having endured the pangs of maternity, it is now my pleasing duty to bring the offspring before you, and, like a fond parent, point out to you what I consider to be its superiority.

There are four main objects desirable in all pessaries: 1, efficiency when *in situ*; 2, few points for retention of secretion; 3, ease of introduction; 4, ease of extraction. I claim for the pessary I show you all these desiderata, plus a few other recommendations.

By the elasticity of the ring, it easily adapts itself to the surrounding parts, and thus takes a firmer hold. By means of the rubber bands, the position of the stem, in relation to the axis of the pelvis, can be altered as required. The spaces between the bands allow the free passage of vaginal injections, and thus ensure cleanliness. The bands are easily replaced if worn or broken. Each ring fits any stem. The ordinary Simpson's sound is the introducer. These advantages have only to be mentioned to recommend themselves.

I am sorry that the shortness of the time since the completion of the pessary, and my not being connected with any hospital for women, prevents my being able to give you a long list of results; but, in the two cases in which I have tried it, it proved satisfactory. I wish to record my opinion that the cases in which intra-uterine stems are absolutely necessary, are not of frequent occurrence, and in the necessary cases, they are not always permissible. There seems to be the same danger with surgeons as with nations, who having a very efficient armamentarium, make a case to utilise it.

The pessary is made for me by Messrs. Mayer and Meltzer, to whom I have to express my indebtedness for valuable hints.

Dr. Barron (Southport) said that the chief objection to the instrument described was, that the stem was not sufficiently firmly fixed, and might possibly slip out of place. The elastic bands allowed too much lateral and vertical motion; and thus by getting out of order the pessary might cause considerable mischief and difficulty.

Dr. Dewar (London) thought Mr. Nevitt's instrument had no advantage over those of Routh, Wynn Williams, or Meadows and Bisichs; it was too heavy and too long in the stem. A stem should never reach the fundus uteri, as it often did harm. The advantage of Mr. Nevitt's instrument might be the movable cross-bar of his transverse band.

Dr. McArthur (Anstruther) considered the pessary to be of very ingenious construction; and that, where an intra-uterine stem was absolutely necessary, it was likely to prove very useful. He objected, however, to the length of the stem, owing to the danger which might arise from ulceration or even penetration of the fundus. With care in the adaptation of the length of the stem, the instrument was likely to be both safe and efficient.

Dr. Cullingworth (Manchester) said one advantage of bringing new instruments before one's professional brethren was that, in this way, improvements were often suggested in points of detail. Doubtless the stem in the instruments exhibited was unnecessarily and undesirably long; but that Mr. Nevitt could very easily have altered. He thought the pessary was ingenious, and possessed many advantages; and he certainly should try it when an opportunity offered, although he quite agreed with Mr. Nevitt that the number of cases requiring intra-uterine pessaries was exceedingly small.

Mr. Donovan (Whitworth) had much pleasure in seeing that the use of the intra-uterine stem was being improved off the face of the earth. At the Manchester meeting, a stem was brought forward as a panacea for all the ills that the uterus was heir to. At Bath, also a similar stem was brought forward. In both instances, he opposed their use. Mr. Nevitt deserved the thanks of the section for the very moderate way in which he had brought the subject forward; and f

* Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Worcester, August 1882.

the acknowledgment that the intra-uterine stem was only to be used in a very small number of cases.

Mr. F. G. STEVENS (Bristol) asked if it were necessary, when using the intra-uterine stem, to have a ring, or anything else of the kind, to keep it in place.

Mr. NEVITT, in reply to Dr. Barron, said he did not find in practice that the stem became loosened from its socket. Dr. Dewar had pronounced it clumsy, and the stem too long, but members must bear in mind that the instrument was as yet in its crude form, and open to improvement in detail; and, with regard to the stem, the one exhibited was made for use in a particular case. The makers had been desired to prepare several sizes, but he preferred the one shown because of its length, as a few strokes of a saw would reduce it to the required size. He considered that, to have rendered it possible to alter the position of the stem, was a point of much practical importance. It was not the use but the abuse, of intra-uterine pessaries which was mischievous. Dr. Donovan heard the death-knell of such pessaries, but he might assure Dr. Donovan that the bell was being tolled by those who did not understand their proper use. In answer to Dr. Stevens, he said he looked upon the ring as indispensable. He was extremely obliged to Dr. Cullingworth and Dr. Edis for their appreciative and friendly remarks.

REMOVAL OF THE UTERINE APPENDAGES.

By W. D. SPANTON, F.R.C.S.Ed.,

Surgeon to the North Staffordshire Infirmary.

CASE I.—Mrs. B., aged 29, living in Hanley, married nine years, had three children, the last about five years ago; no miscarriages. Since her last labour, she had "never felt quite the same", having had more pain at the menstrual periods, and having been less apt for any exertion. In June last (24th) she was seized suddenly with a pain in the hypogastric region, which extended to the right inguinal and lumbar regions, and about a fortnight afterwards was exceedingly severe. She experienced similar, but less acute, pain in the left side. She was attended by Mr. Phillips, who described the attack as one of localised peritonitis, followed by typhoid symptoms, from which she very slowly and never completely recovered. I saw her in consultation on September 23rd, and found the right ovary very tender, and could distinguish a rounded hard swelling in connection with that organ, which felt like a distended Fallopian tube. On the left side, this could not be detected through the vagina. There was great tenderness on pressure in both inguinal regions. She had been many weeks in bed, and nothing seemed to afford relief to the constant pain. Her general health was rapidly failing, and we therefore advised removal of the uterine appendages, from which all the patient's troubles seemed to originate. The operation was performed on October 30th, 1882, by abdominal section, ether being administered by Mr. Phillips. It was well borne. Both ovaries and tubes were removed entire, though the right ovary was very firmly adherent, and the left contained a cyst of the size of a small orange. Silk ligatures were used for the pedicles; no other vessels required tying. Boroglyceride spray and dry gauze dressings were used; no sickness followed the operation.

On November 11th, slight metrostaxis came on, preceded by pain, which passed off soon afterwards. The highest temperature throughout was 100.2°, pulse 108. On November 12th, the wound was almost entirely healed, and all the sutures had been removed. Upon the 19th, she was feeling well, and quite free from the old pain; gaining flesh, and looking better than she has for a long time.

CASE II.—Mrs. T., aged 35, married, had five children, the last one four years ago, no miscarriages. Since her last confinement she has never felt as well as before, and, in February last, she had an attack of what was termed typhoid fever, but was probably one of localised peritonitis. From this she had suffered great pain ever since, and had been unfit for any duties. For some time past she has been confined to bed. No treatment had been of any real avail. The right ovary could be felt hard, and exquisitely tender to touch, and the left ovary could be felt enlarged but less tender. The uterus was normal; menstruation was irregular, frequent, and painful. She was admitted into the North Staffordshire Infirmary, and the operation performed on November 3rd, 1882, under boroglyceride spray. The left ovary contained a cyst the size of a small orange, quite free; the right ovary was adherent, indurated, and enlarged. The highest temperature after operation was 102°; and she made a good recovery.

CLINICAL MEMORANDA.

INCUBATION PERIOD OF TYPHUS FEVER.

LAST October, three isolated cases of typhus fever occurred in Stockton, there having been no other cases in the town either before or since. The disease was brought into the town from Sunderland, where it was then prevalent, by the first patient attacked, who had gone thither to see a relation who appears to have been suffering from the disease. The short history of these cases is as follows.

CASE I. J. C., male, aged about 35, went to Sunderland from Stockton on October 3rd. He returned on the 8th, and was taken ill on the 9th; so that, in his case, the greatest possible period of incubation was six days, supposing him to have taken the infection immediately on his arrival in Sunderland.

CASE II. His wife, who nursed him, sickened on the 12th, so that, in her case, the maximum period of incubation was three days.

CASE III. Mrs. A., living in the same yard, but in another house, had been in to see the previous patients on the 10th; and continued her visits till the 14th, after which she became alarmed, and did not go again. She became ill on the 17th; so that, in her case, the maximum period was seven days, and the minimum three days.

The first two cases were fatal, the third recovered. These three cases are interesting, first, as giving a period of incubation shorter than that usually assigned; but more so, as the last two emphatically refute Dr. Perry's dictum that "typhus is not contagious before the ninth day". Murchison mentions this opinion, and states that he has rarely seen typhus contracted from a patient in the acute stage. I venture to add these two cases to the exceptions, which go to show that too great care cannot be taken, from the very first, in the isolation of patients suffering from this disease.

E. GORDON HULL, M.D.Dub.,
Diplomate in State Medicine, University of Dublin;
Medical Officer, Stockton Dispensary.

ON THE DETECTION OF THE BACILLI OF TUBERCLE IN THE BREATH OF CONSUMPTIVE PATIENTS.

BY the following simple method, I have succeeded in demonstrating with facility the presence of the bacilli of tubercle in the breath of patients suffering from true tubercular consumption; for which purpose, I allow the patient to breathe, at frequent intervals during the day, through two thin sheets of pyroxylin, or fine cotton, one layer in front of the other, and both of which are placed in the outer compartment of an ordinary "pepper-duster" respirator. The layer of cotton, when so arranged, will act as a double filter, the external layer removing from the ingoing air all suspended particles, such as dust, micro-fungi, polur, starch, etc., which are always more or less present in it, and which it is desirable to exclude; that portion of cotton which has been next to the mouth at the same time retaining those only existing in the outgoing current, and which have been emitted from the lungs, viz., micrococci, bacilli, and some epithelial cells. It is in the latter layer only that I look for the organisms peculiar to this disease. This I do by converting the pyroxyline into gun-collodion by means of a mixture of ether and spirit. Every vestige of cotton-fibre is dissolved in the above menstruum, but other organic particles remain suspended in it. To render the bacilli manifest, my plan is to pour the thin collodion thus formed on a microscope-slide, and allow the fluid to run uniformly over the surface of the glass, then immediately placing the latter on one of its edges, that only the merest film of collodion may remain on the glass; the thinner the film produced, the more successful will be the experiment. The film is to be stained. This may be done by one of the methods well known to the profession for staining tuberculous sputum, such as that of Ehrlich or Heneage Gibbes. I have had excellent results from the former, for full details of which I refer to the last edition of Bristowe, in the Appendix. The latter method is described in the BRITISH MEDICAL JOURNAL of October 14th, 1882.

R. CHARNLEY SMITH, M.D., Doctor of Science in Public Health, University of Edinburgh.
Manchester.

SURGICAL MEMORANDA.

EPITHELIOMA.

THE three following cases of epithelial cancer, two of the lower lip and one of the cheek, may be interesting.

CASE I.—In January 1871, W. S., aged 74, a labourer, with epithelioma of the lower lip, came under my care. The history of the case was, that the disease had been twice removed by a good surgeon,

and had now returned a third time, occupying the entire centre of the lip, leaving barely a quarter of an inch of healthy tissue on each side. The man placed himself in my hands simply on account of the pain endured, and the difficulty of taking food and drink by the mouth. I strongly recommended him to undergo another operation, which I would have performed myself had he been in better circumstances, his wife being a great invalid. I procured a bed for him in Guy's hospital, under Mr. Bryant, who, in due course, removed the infiltrated mass, bringing the edges of the wound together, by no means an easy matter. W. S. returned into the country with a somewhat contracted mouth, and has remained free from the disease ever since.

CASE II.—In June of the same year, S. T, aged 72, wife of a labouring man, also came under my care. She had been troubled for a few years with a growth in the right cheek, which had lately spread close to the ala nasi, causing her great pain. I diagnosed epithelioma. As there was a reliable nurse living next door, I advised her to let me remove the ulcerating tumour, a proposition to which my patient gladly acceded. With the assistance of a medical man, who kept her well under chloroform, I freely dissected out the tumour, stopped all bleeding by applying one ligature, and by torsion brought the parts together with silk sutures supported by strapping. The case terminated most favourably, leaving an almost imperceptible cicatrix. The woman eventually dying in her 81st year, from senile decay, without the slightest recurrence of epithelioma.

CASE III.—In March 1874, J. N., aged about 70 years, a gardener, consulted me concerning an ulcer which was extremely painful, situated on the lower lip. As it was distinctly epithelial cancer, and though small, steadily increasing, I removed it by two free incisions, brought the edges of the gap in direct unison with steel pin and twisted suture, without the aid of an anæsthetic. There was no return of the disease when he was seen last, six years afterwards.

In all abnormal growths in tumours having a recurrent tendency, experience proves that early and free extirpation is the best treatment to be adopted. More especially does this apply to cases coming under the term of epithelioma or epithelial cancer, even though the subjacent glands are implicated; by carrying out this remedy many cases end in complete restoration to health of the sufferers, with credit to the surgeon.

T. WELLS HUBBARD, M.R.C.S.Eng.;
L.M., L.S.A.Lond.

Bromley.

OBSTETRIC MEMORANDA.

NATIVE MIDWIFERY IN RANGOON.

THE following case which occurred in my practice, illustrating the barbarous custom among the Burmese in accouchement, may be interesting, and may lead to stringent means being adopted to put a stop to it. On Saturday, November 25th, I was called to the accouchement of a woman across the river at Dallah; on arriving there, I found the woman very much exhausted, and in labour-pains. On inquiry, I was told that she was in strong pains for the past four days; and on making an examination of the abdomen, I found a tight band encircling the body above the umbilicus. It was with great difficulty that I could get that removed, and it was only by my threatening to leave that my order was obeyed. On examination by the vagina, I found the os dilated to the size of a shilling. I used manual dilatation and ergot, and ruptured the membranes, and rapidly brought the head down on the perinæum. As the woman wished to attend to the call of nature, I retired to the next room, and on returning found the woman again tightly bound up. As I could not get the people around to remove the bandage, I told them to give her a little rest, and retired to the next room, where I could hear everything that was going on. Hearing a good deal of noise and commotion, I went into the room, and witnessed but for an instant the process of stamping the child out. Several women were arranged alongside of the woman. One then jumped upon the body, and stamped vigorously upon the abdomen; the woman's legs were apart, and several women were watching the effect, and made an exclamation in chorus each time the head protruded from the vagina, amidst the shrieks of agony of the poor victim. In the short time I witnessed this, I saw that the perinæum was ruptured right up to the anus. I caught hold of the woman and swung her off, when the next woman jumped on. I removed her also, when a third took her place. They were so excited, that they were more like maniacs than sane people. When I found I could do nothing with them, I took up my midwifery-case, and walked out. In spite of such extraordinary treatment, the woman is still living, but far from well. Another case has just come to my notice of a primipara, in which the woman was in lingering pains for four days, and then the stamping process was adopted, resulting in the birth of a still-born child, and the immediate expiry of the woman. This occurred in the same place. In concluding, I may remark, that the result of death in the second case was, most probably, rupture of the uterus; whereas, in the first case, death was averted through the child being far advanced into the second step.

Rangoon. JAMES C. ADY, L.R.C.P., L.R.C.S., and L.M. Edin.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GUY'S HOSPITAL.

DIVISION OF FEMORAL ARTERY, VEIN AND INTERNAL SAPHENOUS NERVE.

(Under the care of MR. R. CLEMENT LUCAS.)

[For the report of this case we are indebted to MR. E. T. TREVOR.]

E. A. L., A Norwegian sailor, aged 35, was admitted into Guy's Hospital on October 10th, 1880. He was attempting to open a clasp-knife by catching the point of the blade in the heel of his boot, when the knife suddenly slipped, and the momentum carried it across the middle of his thigh. Profuse hæmorrhage followed, but the thigh was immediately bandaged by the ship's surgeon, who sent him at once to Guy's Hospital, with a message to the effect that the femoral artery was wounded. On admission, the patient was very weak from loss of blood, and Mr. Lucas was at once sent for. Chloroform was administered, and the thigh examined under the steam spray. A transverse incised wound was found, dividing Hunter's canal, and nearly reaching the bone; it was occupied by a large clot. A tourniquet was put on the upper part of the thigh, and Mr. Lucas then made a vertical incision about four or five inches in length over the vessels. The sartorius muscle was found divided as well as the femoral artery, internal saphenous nerve, and femoral vein. Both ends of the femoral artery were seized with torsion-forceps and twisted; the ends of the divided vein were ligatured with catgut, and a portion of the saphenous nerve found damaged was removed. During the operation six subcutaneous injections of brandy were administered to keep up the patient's pulse. The wound was closed by means of seven wire sutures, and carbolised dressings were afterwards applied. The limb was carefully wrapped up in cotton-wool and flannel, and raised on a pillow. Hot bottles were ordered, and half an ounce of brandy was to be given every hour. On the following day, October 11th, his temperature in the morning was 99.8°, and pulse 132. He had a restless night, and had disturbed his bandages. A little stain of blood had appeared through the gauze, so he was re-dressed. His evening temperature was 100.8°.

October 12th. The wound was dressed to-day, and looked healthy. His foot, which was kept enveloped in cotton wool, felt cold to touch. Morning temperature, 99.8°; evening temperature, 101.4°.

October 13th. He felt better after a good night, the result of a morphia injection. His ankle was warm, but his feet and toes were cold. There was anæsthesia in his great toe. Morning temperature, 100.6°; evening temperature, 99.6°.

October 14th. He felt better; the toes were somewhat warmer. Morning temperature, 99.8°; evening temperature, 101.6°.

October 15th. Below the knee, on the outside of the leg, was an œdematous red swelling, which was painful; it was close to an old scar. There were no enlarged glands, nor was the thigh swollen. The toes were blue and the foot cold, especially on the dorsum, where there were some permanent mottled red patches. His pulse was quick; tongue red and moist. Morning temperature, 102.1°; evening temperature, 102°.

October 16th. The patient slept badly; the wound looked well. Morning temperature, 102.4°; evening temperature, 104.2°.

October 17th. The mottled appearance on the dorsum of the foot was spreading, and the toes were bluer. The wound was dressed, and looked well. The swelling of the leg remained about the same. The patient was restless and very uneasy. Morning temperature, 102.9°; evening temperature, 103.8°.

October 18th. The foot was swollen, and more painful. Both dorsum and sole were very cold. The toes were blue, the remainder mottled. Temperature, 102.1°.

October 19th. The foot was much swollen. There was a bleb on the instep; and the dorsum was much darker in colour. He complained of pain about the ankle. Gangrene being now fully established, and the patient's constitutional condition being lower, Mr. Lucas determined to amputate at the seat of injury. An antero-external and a postero-internal flap were cut below the divided artery, so that the incision made to reach it might be between them. The deeper parts of the muscles were divided by carrying the knife between the ends of the artery, and very little blood was lost. Antiseptic precautions were used. Morning temperature, 102°; evening temperature, 100.5° after operation. On dissecting the amputated limb, all the muscles except the gastrocnemius were found very pale. The end of the popliteal artery contained a clot which extended into the anterior and posterior tibial, reaching the ankle in the former, but in the latter only a small way beyond the peroneal. This clot was slightly adherent. All the veins were plugged with coagulum, firm, a little brown on the surface, and adherent in places. The foot was œdematous.

October 20th. He was drowsy and restless at times. Pulse 120. Temperature in morning, 104°. The wound was dressed and well syringed. Evening temperature, 103°.

October 21st. He was very much better this morning. The leg was dressed, and there was but little discharge. There was no signs of gangrene in the stump. Morning temperature, 98.6°; evening temperature, 102°.

October 23rd. There was a greyish slough at the seat of the original wound, but the flaps showed no sign of gangrene. Morning temperature, 102.2°; evening temperature, 102.3°.

October 26th. There was some gaping at the site of the original wound, where the edges sloughed and the stitches cut out. There was no redness or swelling of the stump. He had a subcutaneous injection of morphia every night. Morning temperature, 100.6°; evening temperature, 102.2°.

October 28th. The wound on the inner side now gaped a good deal. He had had carboluria for two days, but no albuminuria. Morning temperature, 99.6°; evening temperature, 101.6°.

October 29th. The antiseptic dressings had been continued, and the urine was brighter in colour; the only change made was, that the dressings were more carefully wrung out before being applied. Morning temperature, 99.2°; evening temperature, 99°.

October 30th. Silver sutures were applied to bring the gaping edges together. Morning temperature, 98.8°; evening temperature, 100.8°.

November 3rd. The wound looked better, and much more inclined to heal. The edges were redder, and the stump less painful. Two more sutures were inserted. Morning and evening temperature, 99.4°.

November 10th. The wound was healing up rapidly, and the granulations looked bright. The patient felt better, and ate well. Temperature normal.

November 20th. All the stitches were removed to-day, and the patient sat up for the first time.

December 15th. The wound gradually cleared, and he left the hospital to-day.

REMARKS BY MR. LUCAS.—With division of both artery and vein, it was scarcely to be anticipated that the man would escape from gangrene; but, being well-nourished and healthy, he was one in whom we might hope, however little, for a sufficient collateral circulation to carry on the nourishment of the limb. Every precaution was taken to keep up the temperature of the foot and leg, and it will be noticed that gangrene did not appear till five days after the injury. His temperature then rose high, and he became restless, and in general condition weaker. It was still hoped that the gangrene might prove to be limited and superficial, but, four days later, as his condition became so serious, that it was resolved to amputate the limb. The immediate effect of the operation was to bring down his temperature, but the following day his temperature rose to 104°, which is probably to be accounted for by some of the products of decomposition having entered the system through the divided vessels. Great care was taken in the dressing of the case by Mr. Newnham, but it became very difficult to keep the stump sweet after the amputation, owing to partial gangrene of the skin occurring at the site of the original incision. His temperature, however, on the second day after the operation, fell to normal, and, though it again rose to 102°, we had no longer any great anxiety about his chances of recovery. It will be noticed that some darkening of the urine occurred on the eighteenth day from absorption of carbolic acid, which is apt to cause alarm in the minds of some surgeons; but I have long since learnt that this, unless accompanied by albuminuria, is of little moment, and disappears, though carbolic dressings be continued.

WOUND OF THE BRACHIAL ARTERY AND VEIN-TORSION: RECOVERY.

T. S., aged 27, was admitted into Guy's Hospital on October 10th, 1881. He was employed in a cane warehouse, and was using a knife to cut the binding of some canes, with the object of repacking them, when his knife slipped, and inflicted a wound above the internal condyle of his left arm, about three-quarters of an inch in length. Severe bleeding followed, which he checked by binding a handkerchief tightly round the arm till he reached the hospital. Mr. Clement Lucas was sent for, and arrived about 6 P.M.

The patient having been placed under the influence of chloroform, Mr. Lucas enlarged the wound under carbolic spray, the circulation being stopped by an Esmarch's bandage applied above the wound. After the deep fascia had been split up, a wound was found on the inner side of the brachial artery, and also of the brachial vein lying to its inner side. The artery was seized with two pairs of torsion-forceps, one on either side of the wound; the vessel was then divided at the site of the wound, and the two ends twisted. The vein was treated in precisely the same way. Carbolic dressings were then applied, and a rectangular splint to keep the arm quiet. The fore-arm and hand were covered up in cotton-wool, to keep up the temperature. No pulsation was to be felt in the radial artery.

October 10th. The patient's temperature was normal. There was no pulsation in the radial artery.

October 12th. Temperature, 97.2° in the morning, 98° in the evening. The movements of the hand and sensation were normal

October 13th. Temperature in the evening, 99.2°. The wound was doing well.

October 14th. Temperature normal. Pulsation was returning in the radial artery.

October 20th. The wound was healing well. The patient got up daily, and still wore the splint.

October 26th. The patient left to-day, the wound being almost healed. Pulsation was well re-established in the radial artery.

REMARKS.—The patient's common sense, which led him to bind up his arm tightly, and run at once to the hospital, probably saved him from considerable danger, and contributed to his rapid recovery. Though the artery and one of the brachial veins were injured, and required to be secured, little concern was felt as to the patient's condition. The provision made for the return of blood in the upper extremity is so admirable, that no œdema of the limb occurred, and the arterial anastomosis about the elbow is such as to give little anxiety on the ground of possible gangrene. Scarcely any fever occurred, and the wound rapidly healed.

CHARING CROSS HOSPITAL.

CASE FROM THE FIRE AT THE ALHAMBRA.

(Under the care of Mr. BELLAMY.)

[Notes supplied by Mr. S. WYBORN.]

WE have been asked to lay before our readers a detailed account of the case of the fireman, whose injuries were met with in the presence of His Royal Highness the Prince of Wales, who has since taken so lively a personal interest in the poor fellow by visiting him at the Charing Cross Hospital.

On December 7th, 1882, H. Berg, aged 24, fireman, was admitted, having fallen from an escape-ladder, at the burning of the Alhambra Theatre; the height of fall was said to be about thirty-five feet. He had received a lacerated wound of the scalp, over the posterior superior angle of the parietal bone, about one inch in length. He was perfectly unconscious; the skin was normal, the left pupil dilated, the right contracted, breathing stertorous; pulse weak and irregular. There was bleeding from the nose, pharynx, and left ear. He was placed in bed, and ice was applied to the head and warmth to the extremities. During the day, he vomited two or three times a quantity of blood. Nine hours after admission, no urine having been voided, a catheter was passed, and about twelve ounces drawn off. Seven hours later, a catheter was again passed; the urine was this time ammoniacal. Complete paralysis of the lower extremities was observed, and some irregularity over the position of the first lumbar vertebræ, and slight abrasion over the left kidney.

December 8th. He had been a little restless during the early morning, and vomited blood again, bleeding continuing from the left ear and pharynx. His urine was withdrawn, containing blood intimately mixed, and being ammoniacal.

December 9th. There was still slight bleeding from the pharynx, it

having ceased from the ear to-day. The urine was intensely ammoniacal and bloody. The patient drank eagerly; he was still unconscious; pulse regular, but full, and easily compressible. No motions having been passed, an enema was given. The urine was frequently drawn off, and the bladder washed out with acidulated water. The patient was ordered turpentine, fifteen minims, every four hours. Pulse 72.

December 10th. He was slightly conscious to pain to-day, upon pressure over the region of the bladder and the spine. He vomited blood again this morning. The urine was still ammoniacal, but contained a great quantity of blood. He was given a castor-oil enema, after which the bowels acted. He had great thirst, and readily drank milk and beef-tea. Pulse 66.

December 11th. The urine was not so bloody, but ammoniacal. Pulse 114.

December 12th. The urine contained less blood. The mucous coat of the bladder was evidently coming away in flakes; one piece was over one inch in length and half an inch in width. He was very restless, with brown and dry tongue. He had great thirst, and tympanites. Dulness in the flanks reached about two inches. Pulse 68.

December 14th. He vomited again to-day. He had momentary flashes of consciousness. There was pain when he was touched over the region of the bladder and left kidney. The urine contained more blood again to-day. Pulse 96. The bladder was now washed out with Condy's fluid. Opium fomentations were applied to the abdomen.

December 15th. He was in much the same condition. He was ordered ten grains of gallic acid and ten minums of dilute sulphuric acid every four hours. Pulse 84.

December 16th. He was slightly more conscious; and called out repeatedly for drink. Pulse 92.

December 17th. The abdominal distension was slightly less; the tongue was still dry and brown; thirst intense; he was very restless. The urine was less bloody, but contained a quantity of thick dirty purulent matter, and was intensely offensive. Pulse 92.

December 20th. He had this morning some cellulitis of the scalp. Pulse 96.

December 21st. The condition of the bladder was much the same. There was more œdema of the scalp. Pulse 96. The bladder was washed out with a solution of creasote and acetic acid.

December 22nd. The urine was clearer to-day. Cellulitis was increasing down the neck. There was occasional consciousness for about half a minute. He vomited to-day.

December 23rd. He was very restless. There was some blood in the urine, at least half a pint in twenty-four hours. Pulse 108. An ice-bag was ordered to be applied to the abdomen.

December 24th. He was quieter to-day, and more conscious, able to talk a little. The cellulitis was better. At 12.15 P.M. he had a rigor, rather a severe one. Pulse 112.

December 25th. He was quieter, and more conscious. The urine was less bloody, but very offensive. Pulse 112.

December 26th. He was very much quieter,

December 27th. The cellulitis had subsided. The urine contained more blood again this morning. He was much weaker. Pulse 120.

December 28th. During the night he was very restless, and refused to take his food. At 7 A.M. he became quieter, and weaker, and slight hemiplegia of the right side was noticed. At 10 A.M. hemiplegia was well marked; the right pupil was enormously dilated, the left one normal. He died at 12.25.

Post mortem examination, fifty hours after death. The first lumbar vertebra was fractured longitudinally, causing pressure upon the spinal cord. A portion of bone, about half an inch in length and a quarter of an inch in width, was found imbedded in the posterior columns of the cord. There was a partially organised blood-clot around the cord. The left kidney was lacerated, and very large, and filled with pus and purulent matter. There was a fracture of the base of the skull, extending from the jugular foramen to the posterior superior angle of the parietal bone on the left side. The other organs were healthy.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

INJURY TO THE KIDNEY AND OBSTRUCTION TO THE URETER: RETENTION OF URINE IN THE LOIN: REMARKS.

[By BENNETT MAY, B.S., F.R.C.S., Surgeon to the Hospital.]

IN recording this case, I wish to invite attention to the following quesions:—1. The possibility of early and rapid dilatation of the pelvis of the kidney and ureter, in a case of sudden obstruction to the latter; 2. The effects of a rent or laceration of either of these structures. The history of the case is given as it was transcribed from notes taken at the time, together with remarks the facts then before me seemed to invite. Further information, which has since become available, is added in the form of a sequel.

A man, 24 years old. was brought to the Queen's Hospital on the evening of October 1st, 1881. He had been found shortly before by the police lying in the gutter in a very drunken state. He complained of having been brutally kicked and assaulted, and told us afterwards that his principal assailant was the officer who arrested him, who knocked him down, and then kicked him heavily about the body. On admission, he was in a state of general collapse, with a scarcely perceptible pulse of 126. He writhed about, complaining of colicky pain in the lower part of the abdomen and hypogastrium, and of great tenderness. best marked in the left flank. There was no external bruising.

October 2nd. The abdomen was strongly retracted, and there was great tenderness in the left loin and hypogastrium. Pain was very severe, causing him to cry out loudly, and toss about in bed. He was straining to pass urine, but unable to do so, till a catheter was passed, and relieved him of about twenty ounces of a fluid which seemed to be nearly pure blood, and during the day he voided about fifteen ounces more of a similar fluid. The great suffering was, no doubt, due to the presence of so much blood and clot in the bladder, a very moderate quantity even being a well-known cause of great distress.

October 3rd. The peritoneal signs were less marked, but the abdomen was still painful and tender. The temperature in the morning and in the evening was normal.

October 4th. He had some castor-oil to relieve the bowels, and remained rather uneasy all day till 11.30 p.m., when he was seized with intense pain in the left side, extending upwards over the region of the heart. This left him in a collapsed and critical condition, for which brandy and opium were freely given.

October 5th. On the morning of this, the fifth, day, he was almost free from pain. The urine, which had hitherto retained its deeply blood-stained character, was of normal appearance, but was slightly ammoniacal and phosphatic.

October 6th. The morning temperature was normal, and he was easier; but the evening temperature went up to 103° Fahr. The region of the left flank was difficult to examine from the board-like hardness of the muscles. Percussion, however, appeared to give an increased area of dulness in the region of the kidney; but there was no tumour or swelling. The thigh was flexed on the abdomen.

October 7th. He remained quite easy till 11 a.m., when the pain returned with great severity. It appeared somewhat similar to what we are accustomed to find associated with renal calculus, but was most intense over the region of the heart. There was the same dulness and fulness in the loin, with hard, contracted muscles, but no tumour. The pain radiated down the thigh, and into groin and scrotum, along the branches of the lumbar plexus. The thigh was still flexed.

With these facts before me, viz. (1) injury to kidney as the evident cause of the hæmaturia; (2) the sudden and complete disappearance of the blood from the urine on the fourth day of the injury, and this supervening very quickly on (3) an attack of severe paroxysmal pain in this flank, with (4) the dulness and fulness in that region, I concluded that probably the ureter was blocked in some part of its course by a clot, and that blood and urine, unable to escape down it, were accumulating in the loin; but whether in the pelvis of the kidney, or outside in the perinephritic tissue, I could not determine. I thought, however, that it was probably within the former, and determined on the use of the aspirator for its relief.

Under chloroform, a long fine needle was introduced at the outer edge of the erector spinæ, close under the last rib, and passed onwards, in a direction upwards and outwards, through the substance of the kidney, and aimed for its pelvis. It entered a long way—several inches—and then tapped fluid; nearly seven ounces were drawn off, bloody, and of urinous and ammoniacal odour. Mr. Bendall, the house-surgeon, examined it and found it urine, identical with what the patient had been passing just before the cessation of the bleeding on Oct. 4th; and that it was so was evident to the senses. On recovering from the anæsthetic, he was quite easy; and early in the afternoon, he passed a large quantity of blood-stained urine, the colour, however, being lighter than formerly.

For the next few days, he steadily progressed, the urine becoming decreasingly blood-stained; and, on October 12th, the blood had disappeared from the urine, and never returned. On October 17th he said he was quite well, and left the hospital, though I wished to keep him under notice a little longer.

It is noticeable that the immediate effect of this withdrawal of fluid by the aspirator was, to give complete and permanent reli

and that within a few hours. Blood reappeared in the urine, showing that the obstacle to its transit into the bladder was withdrawn. One's first question here is, what was the nature of the obstruction? Was it a clot of blood? I thought so at the time, and that the removal of the pressure above permitted its recoil, or else that it was dislodged by the suction of the aspirator. Then comes the question, where was the fluid? Was it retained in the pelvis of the kidney? The opinion of all authorities is clearly against this. I may cite a few in evidence. Dr. Roberts (*vide Lancet*, June 1870), writing about a case of complete anuria from obstruction of the ureter, which lasted ten days, says: "Where the obstruction is situated in the ureter, a very small quantity of urine, not more than two or three drachms, accumulates above the obstruction, and no dilatation of the ureter and pelvis of kidney takes place. This latter only arises when the obstruction has been partial in degree, and of long duration, and it is to be regarded as a growth of the parts rather than a mere dilatation, the ureter and pelvis of the kidney being, unlike the bladder, incapable of rapid distension." In proof of this, he records the *post mortem* appearances of the case in question.*

A most remarkable case of obstructed ureter is recorded by Dr. Russell in 1879 (*Medical Times and Gazette*, 1879), occurring in a patient attended by himself and Dr. Rickards. Here complete anuria from an obstruction above the bladder (a small calculus afterwards voided) existed for twenty days, and yet the patient recovered. I believe Dr. Russell could find no sign of hydronephrosis, and for the absence of this he gives the accepted explanation. The position of the obstruction above the bladder, being felt at once by the renal tissues and checking the secretion of urine as soon as the pressure is equalised.

Evidence to the same effect is offered by Dr. Alexander James, as the result of a series of experiments on the dynamics of the bladder and ureters. (*Edinburgh Medical Journal*, vol. 24, 1878, pp. 293 and 406.) The experiments were instituted with the object of reconciling this seeming disagreement in physics. The urine is secreted at a pressure of 2·4 in. Hg., and the ureter can resist a pressure of 4 ft. Hg., without stretching or bursting.

It is a question of time, and he concludes with the statement; "The secretion pressure of the urine (2.4 in. Hg.) is not sufficient to cause any marked dilatation of the ureter in cases of sudden complete obstruction, but is so where the obstruction is partial or gradual."

Still nothing is definitely proved, and I find the most diverse opinions forthcoming as to the possibility and degree of early dilatation of these structures: for instance, whether it could amount to six or seven ounces in sixty hours. That the last word has not yet been said on the subject, and that the view asserted by Dr. Roberts may yet be modified, is clear from the results of the latest experiments. An abstract of these is to be found in the number of the *Progrès Medical*, for February 4th, 1882, under the title of a "Communication by MM. Strauss and Germont, on The Histological Alterations of the Kidney after ligature of the Ureter." Antiseptic ligature of the ureter was performed by M. Strauss on guinea pigs and the animals sacrificed at times varying from a few hours to six or seven months, with the following results. At a time varying from the fifteenth to twentieth day, there was considerable dilatation of the ureter with globular expansion of the kidney associated with thinning of its parenchyma and obliteration of the papillæ. At from four to six months, the renal substance was reduced to an eggshell in thickness, without any naked eye distinction of its cortical or medullary substance. Soon after the occurrence of this case, I made some experiments on the dead body with the object of ascertaining definitely the actual capacity of the ureter and pelvis of kidney under pressure. I cut the ureter close to the bladder, and, introducing the nozzle of a fine syringe, injected warm water towards the kidney. When about half an ounce had entered resistance became considerable, but by continuing the pressure moderately it lessened, and then water continued to pass freely—not however to distend the structures, for it speedily found its way into the renal vein and thence into the vena cava. It is evidently a reversal of what pertains during life; and though the experiment does not help the question, I offer it for what it is worth; it is a circumstance I was not myself previously aware of.

An alternative, and as I now think, more acceptable explanation of the case is, that the injury caused a small rent in the pelvis of the kidney or ureter, and that through this, when the obstruction occurred, urine infiltrated into the perinephritic tissue and became temporarily encapsuled there. Of this rarely recorded accident, rupture of the ureter, I can find only two or three cases reported at length; but it must be commoner than that would lead us to infer. Two of the cases are reported by Mr. Stanley in 1843. (*Med.-Chir. Trans.* 1843.)

In both these the most prominent feature was the collection of fluid in the cellular tissue behind the peritoneum, which had to be removed by tapping. In one of them, which recovered, a circumscribed swelling formed in the neighbourhood of the left kidney six weeks after injury to the abdomen. It became of great size; was tapped repeatedly (on one occasion to the amount of seventy ounces) and appears to have remained indefinitely. The contents were a very dilute urine, almost water, supposed to come from a rent in the ureter. It is notable, however, there was no hæmaturia throughout in the case. In the other, a woman was injured in the abdomen, and five days afterwards a circumscribed swelling formed in the right hypochondrium; it was tapped with a trocar and straw-coloured urine drawn off; it refilled and was retapped. She died in the tenth week, and *post mortem* examination showed a large cyst, with thickened walls, behind the diaphragm, full of fœtid urine; a passage extended from the upper part of the cyst into the pelvis of the kidney, through a large irregular aperture in this structure. Mr. Stanley concludes from these cases, "That rupture of the ureter or pelvis of the kidney may give rise to escape of urine behind peritoneum, and that some time may elapse before symptoms indicating the nature of the lesion may arise." Another case of complete rupture of ureter, fatal in a few days, is reported by Mr. Poland (*Guy's Hospital Reports*, 1869), and one by Mr. Harrison (*Lecture on Surgical Disorders of Urinary Organs*), fatal in a few hours. Commenting on Mr. Stanley's cases, Mr. Harrison suggests that, "perhaps nature provides for a lacerated ureter, by the induction of such changes in the corresponding kidney as will render its excretion least hurtful to the tissues with which it may come in contact." Thrombosis of the renal vessels, he says, commonly occurs with rupture of the ureter, and, as a consequence of this, the injured organ is scarcely anything but an aqueous percolator. If this were not so, how was it, he asks, that in these cases of Mr. Stanley's, the extravasation of urine was not accompanied by those signs which usually accompany extravasation of urine, and that it failed to arouse those active inflammatory changes which generally rapidly follow. I do not know that it is necessary to fall back on this hypothesis, or that healthy urine is under all circumstances so destructive. Where extravasation occurs as the result of rupture of the urethra, the invasion of the tissues is sudden and overwhelming, and when from stricture, the urine is probably putrid and purulent. In these cases of Stanley's, however, it is reasonable to suppose from the symptoms that the leakage was gradual, and that there was time for the tissues to form a protective barrier. My case, too, seems to prove the tissues more tolerant of urine than is generally supposed, though the subsequent history shows that it was not harmless. The urine, too, undoubtedly retained its full urinous character.

I had completed the record up to this point, and here I believed the case had terminated, till I accidentally learned that he had recently become an inmate of another hospital, and by the kindness of its officers I was permitted to examine him there, (January 1st, 1882). He told me that soon after leaving us his pains began to return, radiating into the scrotum, thigh, and lower part of the abdomen, along the branches of the lumbar plexus. After a time the thigh began to be flexed, and then he was sent into hospital. When I saw him, he had been there two or three weeks, and the pains were getting better; the thigh was half flexed; and deep in the iliac fossa (he was very thin), could be felt a hard indurated swelling. This was an important link, as it clearly indicated cellulitis,—of a chronic character, spreading down into the pelvis, behind the peritoneum and inducing contraction of the iliacus and psoas muscles; and is the strongest corroborative testimony to the view of extravasation from a torn ureter. I may add that he subsequently quite recovered without suppuration or further complication, the thigh straightening out under extension by means of weights and pulley.

A few other suggestions have been made to me by way of explanation of the case; one is, that urinary extravasation, in the first place, caused obstruction to the ureter by pressure on that tube, and that the obstruction ceased forthwith on the withdrawal of the fluid. This I am prepared to accept as a very probable explanation; another that bruising and extravasation of blood alone may have given rise to the cellulitis; and a third, that this resulted from the puncture with the aspirator needle; the urine, prior to that, being retained in the pelvis of the kidney as first suggested. This may be possible, though I do not know that it has happened in the cases in which the kidney has been punctured with a needle, the instrument being used in

* A calculus weighing 1½ grain had become impacted at the lower outlet of the ureter; but, although no drop of urine had escaped for eleven days, the parts were not in the least dilated, containing only two teaspoonfuls of urine. The other kidney had been previously destroyed by a large uric acid calculus.

these as a means of diagnosis, just as a sound in suspected renal calculus.

As far as I am aware this case is without precedent in its clinical history, and in the object for which the aspirator was used.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 12TH, 1883.

JOSEPH LISTER, D.C.L., F.R.C.S., etc., President, in the Chair.

Case of a Child presenting Symptoms resembling those of Myxœdema.—Dr. COXWELL read notes of a case which he had exhibited at the previous meeting. It was that of a child, aged 13, with symptoms resembling those of myxœdema. Until eight years of age, she differed in no way from other children, and could read a chapter out of the Bible or a story, as well as her mother; could write; and learnt arithmetic. A great change then came over her; she would often fall asleep, even when eating her meals; her memory became defective, and if sent to do anything she would wander about in an aimless fashion. Later, her speech became thick and indistinct; she suffered from headache; her head drooped forward on to her chest; her hands and feet became very cold; her legs became weak and her gait unsteady. She was lately a patient in the National Hospital for the Paralysed and Epileptic, under the care of Dr. Hughlings-Jackson. The appearance of her face was very suggestive of myxœdema, her skin being translucent, with a circumscribed patch of redness in the centre of the cheeks; the lower eyelids swollen; the nose broad; the eyes prominent and well formed. The thyroid glands seemed diminished, and there were no abnormal fatty tumours in the region of the neck or elsewhere. While under observation, her temperature was frequently as low as 95.6. She was often extremely restless at night, and had frequent attacks of screaming. Her power of speech became worse, till at last, she could hardly utter a single sound, the lips being seen to move ineffectually while she attempted to do so. She could not kiss her mother or puff out her cheeks, and her food would often remain seven or eight minutes between her teeth and lips. There was a general overclouding of the intellect. Dr. Coxwell drew attention to the fact that very pronounced mental disease had been reported in myxœdema, and that Dr. Ord had a patient suffering from that disease with marked affection of the medulla, a point of similarity with the present case of some importance. If the case was one of myxœdema, it was of interest, as being the first recorded in a child. If it was one of simple imbecility, it was remarkable on account of the bulbar symptoms and the likeness it bore to myxœdema. The arguments in favour of sporadic cretinism were few, and outbalanced by the absence of most of the characteristics of that disease.

A Case of Enormous Enlargement of the Lower Lip, Cured by Operation.—Mr. DAVIES-COLLEY read notes of this case. R. D., a clerk, aged 36, was admitted into Guy's Hospital in August 1881, with a remarkable swelling of the lower lip. Fourteen years previously he had a chancre on the penis, followed by soreness of the tongue and swelling of both lips, especially the lower. There was never any rash on the skin. He was a very great smoker. The lower lip was of enormous size, everted, and pendent, so that its border was on a level with the tip of the chin, while the lower teeth were, in front, completely exposed to view. The mucous membrane was fissured in parts, but otherwise natural. The tissues were a little firmer than usual, but not at all indurated. There was a little tenderness on pressure. From side to side it measured three inches, from above downwards one inch and a quarter, and, in thickness, seven-eighths of an inch. The upper lip and tongue showed signs of chronic inflammation. There was no enlargement of the adjacent glands. The patient left off smoking, and was at first treated with anti-syphilitic remedies. The mucous membrane became more healthy, but the lip remained the same size. Some reduction was then effected by pressure between thin slips of wood. The lip became swollen and flaccid, but was still coated and pendent. On November 8th, a V-shaped piece was removed from the centre of the swollen lip, and a rapid recovery ensued. When last seen, he had no longer any eversion of the lip, which had assumed a perfectly healthy and normal aspect. Mr. Davies-Colley brought the case forward as a striking example of the enlargement of the lip which occasionally resulted from chronic inflammation. There was nothing in the patient's family history to indicate a scrofulous tendency. The evidence of secondary syphilis was doubtful, and there was no record of mercurial salivation. On the whole, Mr. Davies-Colley was disposed to attribute the disease primarily to syphilis, and secondarily to the constant irritation of the inflamed surface by excessive smoking. The case was also interesting on account of the success which followed excision of part of the lip after the more or less complete failure of other remedial measures.—Mr. LUCAS had seen the case, and thought the interest in it rested rather upon the cause of the deformity than upon the treatment adopted. As to the cause, he thought it due to inherited or acquired syphilis, rather than to struma. Possibly, syphilis and smoking combined might have had to do with it. He never allowed patients with secondary syphilis to smoke, as it was likely to keep up the chronic ulceration of the tongue. Had the patient any carious teeth? In a patient of his own, who had carious incisor teeth, and who had been treated in all ways without good result, cure was at once effected upon the extraction of the teeth.—Dr. HADDEN thought the condition was not due to syphilis, because it was not cured by anti-syphilitic treatment, and that it was analogous in its nature to cases of lymphatic obstruction of the tongue, recorded by German surgeons, and that the microscopical appearances bore out this view. The PRESIDENT said the case was rare, and that the treatment had produced an excellent after-result. In this respect the treatment was analogous to the removal of enlarged tonsils. A prominent portion was lopped off, and the remainder then dwindled to the normal size. Other neighbouring parts also, which might have been prematurely thickened, as the Eustachian tubes, recovered their natural shape. Thus, a boy aged 15, who had been partially deaf from that cause since infancy, upon his tonsils being lopped off, in a few days heard again. The sympathetically affected mucous membrane of his Eustachian tubes at once became thinned. In another case, lipoma of the nose—"grog-blossom" for example—he had removed the chronic hypertrophy of the dermis by paring down the thickest portions, but had not touched the less thickened parts near by. As the result, the part pared was much improved, and the neighbouring parts were also much reduced in size, so that the patient's friends did not now recognise him, his appearance had so much improved.—Dr. A. MEADOWS related a case which appeared to him to bear out the same principle. A patient had an enlarged mons veneris and labia which he (the speaker) had removed with the *écraseur*. In a few months after the removal of this chronically hypertrophied tissue, menstruation had entirely ceased, although the patient was but thirty-two years of age. He supposed some sympathy existed between the ovaries and the external parts, which was deeply disturbed by the removal of the latter.—Mr. DAVIES-COLLEY had removed simply the pendent portion. He did not think the hypertrophy was due to carious teeth. The enlargement had lasted more than fourteen years, and was away from the roots of the incisor teeth. It was probably due to syphilis and tobacco combined.

Case of Transpatellar Excision of the Knee.—Mr. C. GOLDING-BIRD read notes of this case. The operation was on the person of a lad, aged 13, fairly healthy himself, but with a family history of phthisis. There was a year's history of articular arthritis of the right knee, with pulpy disease. Excision was eventually performed on May 9th, 1882. It differed from an ordinary excision, in that the transverse incision was made across the middle of the patella, which was then sawn in two—the two fragments, with the soft parts, being turned up and down. The excision was then completed as usual, the articular surfaces of the tibia and femur being removed. Some pulpy thickening was removed from the under side of the patella; and, when the limb had been straightened, two carbolised sutures were passed through its substance, and so its two fragments were united. Primary union was obtained, and nothing more was seen of the patellar sutures. Until the 12th of September, he walked about with a stiff bandage on the knee and with crutches; after that date, he was ordered to discard all support. He now had a movable patella, and half an inch shortening. He had all the advantages of retaining the patella; but, besides that, there was a gain by this method of operating, since the surgeon could freely examine and manipulate the joint, more freely, indeed, than where, with the idea of retaining the knee-cap, the lateral incisions were employed. Two great advantages remained to the patient by keeping the normal attachments of the patella. The quadriceps opposed the ham-strings, and so did away with the necessity of employing a stiff bandage for years, to prevent posterior displacement of the leg; and the rectus femoris, considered as arising below, had its full play upon the trunk in preserving equilibrium, whilst it also allowed of the perfectly natural forward motion of the limb in walking, and this last was not the case where the

ligamentum patellæ had been sacrificed.—Mr. MARSH remarked that all surgeons felt so dissatisfied with the results of ordinary excision, that they would possibly be pleased to follow Mr. Golding-Bird's suggestion.—Mr. GRANT thought it rare for the patella to escape, being implicated in cases of chronic disease of the knee-joint; and he had not seen any advantage in leaving the patella. In his practice, he had, in the average of cases, found union between the femur and tibia to take place in about three months; he had then put on a stiff splint, which the patients had generally worn for about two or three months more.—Mr. HEATH had seen Mr. Golding-Bird's patient; and thought that nothing could be prettier than the result. Nevertheless, he agreed with Mr. Grant that the patella was usually diseased; and, if it were not diseased, might not the patient be treated in some other less severe method, with the effect that in time the result might have been better; for, after a few years, the state of the patient's limb might not be so good as now, since the removal of the epiphysal cartilage was often a cause of want of future growth of the bone. If with disease of the knee-joint the patella were movable, it was rare that excision of the knee was required.—The PRESIDENT said that, as to excision of the knee, as formerly performed, without antiseptic precautions, the removal of all the articular surfaces was the only safe method of procedure. But, with antiseptic principles, one might proceed in an entirely different way. The surgeon might take away a much smaller piece of the femur, not all the articular portion even; he might take off none at all of the patella. It was now quite legitimate as a procedure; the lagging of subsequent growth was less likely to happen. The action of the quadriceps might keep up the nutrition of the limb after excision done according to the transpatellar method. But was excision required at all in that case? Where there was pulpy synovial degeneration free scraping of the membrane and scooping out of diseased bone led to equally good results.—Mr. GOLDING-BIRD must admit at once that the President in this case would probably have opened the joint and scraped the mucous membrane, and gouged out the diseased bone. The patient had no posterior displacement; but before the operation he had been growing worse, there was some lateral movement at the joint and some grating, and the cartilages at the time of operation were not to be recognised. In his experience, these cases in hospital out-patient practice went to the bad. Their surroundings were so badly hygienic. If the disease were far advanced, he admitted that the patella could not be saved. But the tendency to subsequent posterior displacement, particularly in young people, was so great, that he thought every effort to save the patella, by which the displacement was rendered less likely to occur, should be made.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 16TH, 1883.

J. W. HULKE, F.R.S., President, in the Chair.

THE PRESIDENT, on taking the chair for the first time, expressed his gratification at the honour the Society had done him in choosing him for that post. He did not intend to make any elaborate address, and would rather reserve any observations he might have to make for the conclusion of his term of office.

Report of the Morbid Growth Committee on Mr. W. H. Kesteven's Specimen of Cyst of the Spinal Cord.—The report, which was read by Mr. GODLEE, was to the effect that the tumour in this case was of the nature of a mixed round and spindle-celled sarcoma, into which a large hæmorrhage had occurred.

Bromide Rash.—The patient, who was shown to the Society by Dr. HORROCKS, was a young girl who, four months after beginning to take the bromide, began to exhibit a rash on the leg; this had since gone on developing, and now occupied an extensive surface.

Epithelioma of the Bladder.—Mr. BERRIDGE, who exhibited this specimen, said that the patient began to suffer from hæmaturia in the summer of 1880. He died on July 31st, 1882, the hæmaturia, before that, having become more severe, and finally continuous. At the *post-mortem* examination, the bladder presented an ulcer, with a ragged uneven surface; this ulcer was found, on examination by Mr. Moullin, to be undoubtedly carcinomatous. One curious feature in the case was that the patient kept on at his work as a railway-porter until within a week of his death.—The PRESIDENT said that the interest of the case was chiefly surgical, and commented on the difficulty of coming to a satisfactory diagnosis in such cases.

Cartilaginous Aortic Valves.—This specimen also was shown by Mr. BERRIDGE; it was obtained from a patient who dropped down dead without having presented any recorded symptoms during life. In reply to the PRESIDENT, Mr. BERRIDGE said that the man was a bricklayer's labourer, who had never been ill; when he fell, his face lay in a pool of wet paint, and death was probably due to suffocation supervening on syncope.

Syphilitic Disease of Cerebral Arteries.—Dr. SHARKEY exhibited some microscopical specimens of this condition. The patient first sought advice from Mr. Nettleship for obscure disease of the eye, probably cyclitis, leading to failure of sight; subsequently pain in the head and a coppery rash supervened, and he was transferred to the care of Dr. Payne. Shortly afterwards he was seized with convulsions and coma; he subsequently presented paralysis of the right arm and left leg, and slight facial paralysis on the right side; the left pupil was the smaller. There was no loss of sensation. The urine was highly albuminous. The temperature gradually rose, and the patient finally died, after a series of fits, with a temperature of 107°. At the *post mortem* examination, the dura mater was found to be thickened. The middle cerebral artery on the left was partially blocked by a hard whitish clot. On the right side, the middle cerebral artery was blocked by a more recent clot. The frontal lobe on this side was softened. The extraventricular nuclei on both sides were almost diffluent. The two arteries showed chronic fibroid thickening, together with extensive recent acute disease of the external coat. The vasa vasorum were dilated, but not otherwise diseased. The early date, after infection, at which these changes occurred was of interest. Death happened seven months after the contraction of a chancre. Another point of interest was that the external coat was the chief seat of the disease, whereas in most cases of syphilitic arteritis, it was the intima which suffered. —Mr. GODLEE referred to a case which presented similar symptoms. The patient was sixty years of age when he contracted syphilis; within seven months he had a mild attack of hemiplegia with aphasia, which passed on into dementia.—Dr. ORMEROD spoke of the case of a patient who presented very much the same assemblage of symptoms; after death he had found the same kind of lesion of the cerebral arteries as Dr. Sharkey had described. But there was no clotting in the arteries, and no obvious disease of the cerebral centres.—The PRESIDENT described a case which had recently been under his care; the patient was a footman, aged twenty-two, who contracted syphilis in the spring, and in the autumn was seized with partial hemiplegia, subsequently he suffered from diplopia, and passed into a drowsy state, and finally died comatose. He was, towards the end of his life, under the care of Dr. Cayley, who had stated that there was some arteritis of the cerebral vessels. Here death occurred within seven months of infection.—In reply to a question, Dr. SHARKEY said that the fundus oculi was frequently examined and never presented any evidence of disease.

Syphilitic Inflammation of the Capsule of the Liver.—Dr. SHARKEY read the notes of this case. The patient was a man who was admitted under the late Dr. Murchison in 1876. He was suffering from diarrhœa, and his liver was much enlarged, reaching to the umbilicus, and presenting a large, faintly nodulated mass apparently projecting from the left lobe. In 1878 he was readmitted suffering from hæmatemesis, melæna, dropsy, and slight jaundice. He died a little later. At the *post mortem* examination the liver was found to weigh 6 lbs. 7 ozs., the surface was coarsely nodulated, and the whole contour of the organ was distorted; from the capsule inwards for an inch and a half a growth of hard fibrous material extended; this was due to a fibrocellular new growth springing from the capsule, and extending along the lines of Glissen's capsule; in this growth were imbedded small gummata, the centres of which were caseating. The patient gave a distinct history of alcoholism, but not of syphilis.—Dr. MAHOMED inquired whether there were any other signs of syphilis. The drawing shown by Dr. Sharkey did not seem to exhibit anything that might not be found in alcoholic cirrhosis. He referred to a liver, which he had recently removed from a body, where the right lobe was greatly contracted, while the left was large and cirrhotic: he felt great hesitation in classing such a case as this as syphilitic.—Mr. BUTLIN thought that it was hardly safe to make these small so-called gummata conclusive evidence of syphilis; they might just as probably, from the evidence offered, be attributed to caseation of the products of inflammation.—Dr. T. H. GREEN inquired whether fibroid disease of the liver, extending inwards from the capsule, was ever found in any cases where syphilis was not an element in the causation. He believed that, as a rule, there was not much difficulty in coming to a decided opinion with regard to the nature of gummata.—Dr. NORMAN MOORE thought there were no visceral lesions, other than large gummata, which, by themselves, so distinctly pointed to syphilis, that it was, in every case safe to speak positively. He thought that where a thickening

of the capsule extended into the liver substance, that was good evidence of the existence of syphilis; still, he had recently seen a case which contravened this generally held opinion.—Mr. ROGER WILLIAMS referred to two cases of syphilitic disease of the liver which he had seen.—Dr. SAMUEL WEST believed that cases of chronic fibroid growth, extending from the capsule into the liver, and due to peritonitis, were not uncommon; but that cases of a syphilitic nature had certain well recognised characteristics.—Dr. GOODHART thought that, in the vast majority of cases, it was easy to recognise syphilitic disease of the liver, the changes being so characteristic.—Dr. COUPLAND agreed with Dr. Goodhart. He had seen several cases where the lesion was limited to a capsulitis, quite distinct from ordinary cirrhosis; in such cases, gummata were often not found. He wished to inquire whether the testes had been examined.—Dr. BUZZARD inquired whether the eyes had been examined with the ophthalmoscope.—Mr. THORBURN inquired whether the penis had been searched for traces of old disease.—Dr. SHARKEY said that there were no other evidences of syphilis, beyond those which had been described in the liver. He thought, however, that the small gummata were perfectly characteristic. Neither the penis nor the testes were examined. The changes in the eye were nothing more than small retinal hæmorrhages, and not at all characteristic of syphilis. At the suggestion of the President, the specimen was referred to the Morbid Growths Committee.

Keloid after Scraping for Lupus,—The patient, a boy, was shown by Mr. CLUTTON. He originally presented a patch of lupus in front of the ear; this was scraped in April, and in July it was perfectly healed. Subsequently, an abscess appeared behind the shoulder-joint, which was opened, and a sequestrum removed, leaving a large cavity. This incision healed quickly by first intention. Early in November, the cicatrix on the right cheek had passed into the condition of keloid, and the scar of the incision over the humerus was also enlarged and keloid. This condition had persisted up to the time at which the patient was examined. Another similar incision made over the head of the tibia had not taken on the keloid change, whereas a scar left by the amputation of a phalanx had become thickened, and was apparently about to become keloid.—Mr. LUCAS had seen keloid in several cases after scraping for lupus, and had always found that the condition spontaneously recovered after some time. At the time the keloid developed, in one case he had seen, the patient had rapidly improved in health, and he had attributed the development of the keloid to this.—Mr. BUTLIN pointed out that the patient shown was strumous, and in such patients scars had a tendency to enlarge. He thought that, not improbably, Mr. Lucas would find that, though the keloid growth in his patient occurred when the patient's health was improving, yet, when the health was still further improved, the tendency to overgrowth of the scar-tissue would diminish.—Mr. MORRANT BAKER had recently excised a large patch of lupus, where the wound healed well, but subsequently became keloid; the disease in this case was lupus hypertrophicus, and possibly that might have been the case also in Mr. Clutton's case; if it were eventually found that it was only in the hypertrophic form of lupus that this overgrowth of the scar was likely to occur, that would be an important clinical fact.—Mr. BALMANNO SQUIRE had found keloid a very common sequence of erasion of lupus. The treatment of lupus by linear scarification was never followed by the occurrence of keloid. As a rule, the keloid eventually disappeared, but this was hastened by scarification. Was the patch of lupus in this case primary, or was it secondary to suppurating gland in the neck?—Mr. SUTTON said that the late Mr. Critchett always used to maintain that the history of the scar had never been completely written, founding his remarks on the extreme vascularity of the scar after peritomy in scrofulous subjects.—Mr. CLUTTON, in reply, thought that, though a thick scar was a common result after the healing of a strumous ulcer, yet keloid, such as had, he thought, undoubtedly developed in his case, was rare. The case was not one of lupus hypertrophicus, but of lupus vulgaris, and was, in its origin, in no way connected with any gland or suppurating sinus.

Card Specimen.—Mr. BERRIDGE showed a foreign body—an iron plate with vertical spikes from the sole of a boot—which he had removed from the œsophagus of a child.

THE French official journal publishes a report on oyster culture, which is in favour of the Portuguese oyster. It appears that 100 grammes of the flesh of this mollusc contain about one-tenth gramme of iodine, bromine, and chlorine, just twice as much as the common oyster.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JANUARY 11TH, 1883.

WM. BOWMAN, F.R.S., President, in the Chair.

The Growth of the Crystalline Lens.—At the commencement of a very interesting paper on this subject, Mr. PRIESTLEY SMITH quoted a passage from the chapter by Otto Becker in the *Handbook* of Gräfe and Saemisch, to indicate the present position of knowledge on this subject; and then proceeded to describe an original research carried out during the last two years. He had examined 142 lenses, removed in their capsules, shortly after death, from the eyes of 83 adult subjects. Special precautions were taken to avoid changes from absorption, or evaporation of moisture. Each lens was accurately weighed; and its volume was then very accurately measured by means of a specially devised instrument acting by displacement of fluid along a graduated tube. Finally, it was measured as to its transverse diameter. The author's aim had been to examine at least twenty transparent lenses in each decade of adult life; this had been accomplished up to the age of 70, but between 70 and 90 the numbers were not yet fully made up. Detailed tables were appended to the paper, and the general results were demonstrated to the meeting by charts and diagrams. He had found that the average weight of the lens continually increased, the increase being, roughly speaking, at the rate of 1.5 milligrammes each year; the volume of the lens also continually increased, and in about the same proportion, the increase being at about the rate of 1.5 cubic millimètres each year. By calculation from the weights and volumes, it was found that the specific gravity remained, on the average, about the same throughout life, though there were lenses of low and of high specific gravity in each decade. Reservation, he considered, was necessary, in accepting linear measurements of the lens after its removal from the eye; but, from the data obtained, it was demonstrable mathematically that the enlargement of the lens was not by any means limited to the transverse diameter. The continuous growth of the lens sufficed to explain the acquired hypermetropia of old age without assuming that the lens changed its form; it was also, in the author's opinion, the cause of the shallow anterior chamber of the senile eye, which had hitherto been attributed to an advance of the whole lens, a supposition which could not be reconciled with the acquirement of hypermetropia. The continuous enlargement of the lens, though hitherto unobserved, and though apparently separating this organ from every other in the body, was readily intelligible from a physiological point of view; for the lens was, by development, a cuticular structure, the cells of which, unlike those of the cuticle, multiplied within a closed capsule, and could not be thrown off as they grew old, the older cells being surrounded by the younger. In the tabulated results, the relation of senility to the development of cataract came out clearly. Lenses which showed any opacity were distinguished from the others, and were found, when tabulated, to be, on the average, smaller than transparent lenses of the same age. As this difference was present even when the opacities were very slight, it seemed likely that a period of diminished rate of growth preceded the formation of the opacities of senile cataract. The opacities were in most cases limited to the equatorial zone, where the capsule and cortical layers of the lens were subjected to the traction of the suspensory ligament. This supported the conclusions recently published by Becker, concerning the formation of opacity by separation of the fibre-layers at the equator. The bearing of the continuous enlargement of the lens upon certain other morbid conditions was reserved for future consideration. The instrument used in the investigation was shown to the Society; and the paper was further illustrated by tables and diagrams.—THE PRESIDENT congratulated the Society upon having had the advantage of listening to so admirable a paper, and one that would become a standard work of reference on a number of important pathological and physiological points.—Mr. HIGGENS inquired whether, as a result of his researches, Mr. Priestley Smith was able to explain how it was that very old people sometimes became less presbyopic, and why in some cases of incipient cataract there was myopia. Mr. Priestley Smith seemed to have concluded that an increase in the volume of the lens produced hypermetropia, otherwise Mr. Higgens would have been satisfied to have attributed the myopia to this.—THE PRESIDENT observed that the capsule must be stretched and enlarged as the lens increased in volume. It would be a suitable subject for inquiry, to ascertain whether the capsule was strengthened by layers applied to it from within; further, there might be some alteration in the tension of the capsule as age increased, which might alone modify the form of the lens. He concluded, by again expressing the gratification with which he had listened to this paper, which was a most satis-

factory paper, and highly creditable to the author.—Mr. PRIESTLEY SMITH, in reply, expressed the gratification with which he received the President's compliments on his paper. He was not prepared to answer the question put by Mr. Higgens, and had not desired in this first communication to enter into pathological questions. It was difficult to estimate the effect of the several various and opposing forces: it was necessary to take into account alterations occurring in the lens, alterations in the ciliary muscles, and also changes in the capsule, probably giving rise to increased tension of the lens.

A Case of Paralysis of the Third Nerve, with Cerebral Symptoms.—Dr. DAVID LEES showed a living patient, a girl, aged 6½, who had been brought to the Hospital for Sick Children on November 10th, 1881, on account of a squint of the right eye, and shaking of the left arm and leg. The squint had been noticed by the mother three months earlier, and the shaking began a fortnight after the squint. She had had three fits when a year and a half old, but none since; she had had slight headache over the right eye for the fortnight before she was brought to the hospital. There was complete paralysis of the third cranial nerve on the right side; the pupil was dilated, and did not respond either to light, or in accommodation; the upper lid drooped slightly, but no affection of the fifth or seventh nerves could be discovered; both optic discs were normal. The movements of the left upper limb consisted in slight forward and backward movements of the whole limb in a vertical plane, together with short flexions and extensions of the wrist; they were rhythmical and uniform, and occurred when the limb was not used; and the mother stated that they did not quite cease during sleep, but that they were worse when the child was excited; there was no distinct paralysis of the limb; similar, but less decided movements affected the lower limb. No history of congenital syphilis could be obtained, but an infant brother of the patient was subsequently found to be suffering from snuffles, and to have had some rash on the buttocks. After treatment for twelve months with iodide of potassium, the shaking of the limbs could no longer be detected, and the squint had entirely disappeared, leaving only a little weakness of the internal rectus The right pupil, however, remained dilated and motionless; it measured six millimètres, while the left measured 2.5 millimètres. The power of accommodation was entirely lost in the affected eye. Vision with that eye was very imperfect, but, by using a convex lens of six dioptrics, she could read small type. Her condition remained unaltered up to the time she was shown to the Society. The case, Dr. Lees thought, presented the group of symptoms to which Mr. Hutchinson had given the name of ophthalmoplegia interna, and which he attributed to disease of the lenticular ganglion; but this case seemed to support the theory that the symptoms were due to a cerebral lesion, probably near the nucleus of the third nerve, below the aqueduct of Sylvius.—Dr. HUGHLINGS JACKSON inquired whether there had been any severe headache or optic neuritis. An affection of the third cranial nerve combined with a one-sided disorder on the other side of the body pointed to a lesion involving the crura cerebri; on the other hand, he had never seen a case of rhythmical movements, such as those in this case, due to organic disease. In most cases of rhythmical movements, the patient was either a malingerer or hysterical; evidently, this patient fell into neither of these categories, so that the case was a very unusual one.—Dr. STEPHEN MACKENZIE asked whether the ocular defect and the mobile disturbance were coincident in time; if not, there may have been two lesions.—Mr. JONATHAN HUTCHINSON said, that he would prefer to describe the case simply as one of paralysis of the third nerve, and would not apply the term ophthalmoplegia interna to it; in the cases which he had described under that name, there was no dilatation of the pupil, that is to say, the sphincter and dilator of the pupil were alike paralysed; but in this case, the dilator was at first evidently active, and, indeed, was probably so still. With regard to the question of syphilis, he was decidedly of opinion that the child's physiognomy was strongly suggestive of inherited syphilis.—Dr. BUZZARD observed that, though the motor disturbance was not noticed until a fortnight after the ocular defect was apparent, yet there might have been some loss of power in the affected side at an earlier period, so that the irregular movements might be such as are sometimes seen after hemiplegia. On the other hand, no tendon reflex was obtainable on the left side; whereas, in a case of coarse lesion such as a gumma, an exaggerated reflex would, at so late a stage, probably be present. On the whole, he was inclined to believe that the lesion was one of the nerve rather than of the centre.—Mr. BRUDENELL CARTER thought it probable that the non-recovery of the pupil was due to atrophy of the muscle from which the nerve influence had been for a long time withdrawn; he suggested that, in similar cases eserine might be of use in exercising the pupil and preventing its atrophy.—Dr. LEES, in reply, said that he thought the suggestion as to eserine a valuable one. At no time had there been any optic neuritis, and the headache was slight, temporary, and confined to the right frontal region. Dr. Lees thought that the name ophthalmoplegia interna was fairly applicable to this case, and the important point was that it here obviously depended on some central lesion. The objection to accepting the theory that there had been two lesions, was that they must have been synchronous both as to onset, and recovery. Probably, in this case there was some lesion in or near the nucleus of the third nerve, which by the pressure it set up, produced the tremors in the arm.

A Case of Paralysis of the Sixth Nerve, with Choreiform Movements of the Face.—Dr. LEES also exhibited a boy, aged 11½ years, who had had convergent strabismus, from the age of three years. On examination in December 1882, it was found that the left eye could not be brought to the outer side of the median position; there was no other interference with ocular movements; pupillary reaction and the optic discs were healthy, but each disc presented a crescent. Spasmodic contractions of the facial muscles, chiefly on the right side, occurred at irregular intervals. These choreiform movements, as well as headache, from which he had suffered for some months, were probably due to the hypermetropia and astigmatism with which both eyes were affected. There was no paralysis of the seventh nerve.

Movements of the Eyes provoked by Pressure on a Diseased Ear.—Dr. HUGHLINGS JACKSON read a paper discussing this subject, and relating the details of a case which, he said, resembled one reported by Schwalbach, and was important as giving a demonstration that ear-disease was one cause of, or one factor in producing, vertigo. It was a clinical illustration of one of Cyon's experiments on the semicircular canals of rabbits. The patient was a woman, aged 49, who had suffered from otorrhœa on the right side, from childhood. She had recently become subject to attacks of auditory vertigo, and had a peculiar, unsteady gait, resembling that produced by alcoholic intoxication. Pressure on the tragus of the right ear caused certain definite movements of both eyes; first, the eyes moved slowly to the left; then they moved back again, by jerks, to the right; at the same time she felt giddy, and there was apparent displacement of objects to the left. This displacement was synchronous with the slow movement to the left. The patient was examined by Mr. Laidlaw Purves and by Mr. Couper; and, under treatment by syringing the ear, and the internal administration of quinine, she improved, so that only the very slightest movements of the eyes were producible by the pressure spoken of. Dr. Jackson referred to certain researches by Dr. James, of Boston, U.S.A., which seemed to show that deaf-mutes were not easily made giddy by rotatory movements, and were not at all liable to sea-sickness. In conclusion, he thought that the procedure mentioned in this case might, probably, be helpful in the diagnosis of some difficult cases; and that the different results obtained, at different periods, in such cases, would be some measure of the patient's progress.—In reply to the PRESIDENT, Dr. HUGHLINGS JACKSON said that the slow movement of the eyes was from right to left, and that the apparent movement of objects was towards the same side, and, according to the patient's statement, coincident in time. He referred to a note on this subject, by Professor Donders of Utrecht, which he had communicated to the Society during the last session. An abstract of this note will be found in the report of the meeting of the Society, published in the BRITISH MEDICAL JOURNAL, 1881, vol. ii, p. 667.

A New Method of Determining the Relation between Convergence and Accommodation.—Dr. MADDOX contributed a paper descriptive of a new method of testing the ordinary relation between convergence and accommodation, and exhibited an instrument designed by himself for this purpose.

A Case of a Peculiar Growth developing from a Cilium in the Anterior Chamber.—The account of this case, contributed by Mr. ROCKLIFFE (of Hull), was read by the SECRETARY. The patient was a man aged 23. In August 1881, he received a vertical lacerated wound in the outer third of the cornea, and the lower lid was injured at the same time; six weeks after the accident, an eyelash could be seen in the anterior chamber, reaching from the angle of the chamber to the middle of the pupil; there was a slight pink zone around the cornea, and cataract. An attempt to remove the eyelash at this time failed. In September 1882, the eye became acutely inflamed, and, at the inner end of the cilium, there was a peculiar white woolly growth. This growth rapidly increased, and, on October 18th, 1882, Mr. Rockliffe opened the anterior chamber, when the tumour, with the cilium firmly adherent to it, was carried out with the

gush of aqueous humour. Dr. Brailey examined the mass, and reported that it consisted of flattened epithelium-cells exactly like the more superficial cells of the conjunctiva; it seemed possible that the cells of the root-sheath had proliferated within the anterior chamber.—Mr. HENRY POWER said that he had seen a similar case. The patient was a boy, who accidentally thrust a knife into the eyeball; an eyelash was carried on to the iris, and continued to grow in that situation; it was removed without difficulty.—Mr. COUPER remarked that, in a case under his care, Mr. Nettleship had examined the material that came away with the lash when it was removed, and had found that it consisted of cholesterine, as though some of the sebaceous cells of the sheath of the hair had been carried with it into the anterior chamber and there developed. The hair had become coiled up in the angle of the chamber. The patient did well after the operation for the removal of the mass, and recovered with good vision.

MEDICAL SOCIETY OF LONDON.

JANUARY 15TH, 1883.

FRANCIS MASON, Esq., President, in the Chair.

Case of Intestinal Obstruction from Volvulus of the Ileum treated by Abdominal Section.—DR. J. KINGSTON FOWLER read the notes of this case. The patient, aged 40, was taken into the Middlesex Hospital with a history of acute obstruction of the bowels of four days' duration. Abdominal section was performed by Mr. Hulke, and a volvulus of the ileum found and untwisted. The patient was much relieved by the operation, and the bowels were freely opened three times subsequently. Death took place three days after, from cardiac failure and hypostatic pneumonia. At the *post mortem* examination a portion of the ileum with a long mesentery was found somewhat congested, and the peritoneum generally was normal, and the wound healthy. Dr. Fowler drew attention to the method used of passing the finger deeply down into the pelvis, where a portion of collapsed small intestine was found, which was withdrawn and carefully followed until the obstruction was reached. He considered this an easier proceeding than examining the distended bowel.—The President, Mr. Bryant, Mr. Edmund Owen, Dr. Coupland, Mr. Walsham, and Dr. Green took part in the discussion which ensued. Dr. FOWLER replied.

Abdominal Pulsation.—Dr. WILTSHIRE read a short paper on this condition, which is more common in women towards the change of life and afterwards, may arise from various causes, which might be grouped as follows:—affections of the vascular system, such as cardiac lesions, arterial lesions, blood-changes and extravascular affections, as pulsatile tumours of the liver, spleen, stomach, omentum, mesentery, kidneys, tumours lying near the aorta, as horse-shoe kidney, movable kidneys, the pancreas, purulent collections, hydatids, sarcomata, fæcal collections, mesenteric cysts. The diagnosis depended upon careful physical examination of abdomen, pelvis, and thorax. Inquiry should be made into the general state, especially of the blood.—The President, Dr. Thorowgood, Dr. Green, Dr. Ewart, and Mr. Owen took part in the discussion, and Dr. WILTSHIRE replied. The Society then adjourned.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY,

TUESDAY, 14TH NOVEMBER, 1882.

MCCALL ANDERSON, M.D., President, in the Chair.

Treatment of Pulmonary Consumption.—The PRESIDENT delivered an introductory address on this subject. In introducing his subject he pointed out the great importance of making a correct diagnosis of the various destructive diseases of the lungs, and considered in detail the points of distinction between tubercular phthisis and syphilitic affections of the lung. In the latter there is the history of the contraction of syphilis and the occasional presence of concomitant syphilitic affections. In pulmonary syphilis the disease is usually unattended by fever; the right lung is more frequently involved than the left, and the physical signs instead of making their appearance at the apex, are generally at first limited to the central parts of the lungs, the reason being that the disease consists of hyperplasia of the interalveolar and peribronchial connective tissue, whose starting point is the hilus, whence it spreads outwards, and only secondarily involves the parenchyma of the lungs. Further, there is the character of the sputum, which usually contains little irregularly shaped, greyish-white or brownish, firm but elastic masses, which sink in water, and under the microscope present the characters of syphilitic gummata. In syphilitic disease of the lung, there is the absence of elastic fibres and of the tubercular bacillus; and finally, the effect of antisyphilitic treatment may help greatly to clear up the diagnosis. Dr Anderson then considered the distinguishing features of acute and chronic phthisis, and acute miliary tuberculosis, and acute "pneumonic phthisis," and pointed out the line of treatment to be adopted in acute phthisis, the two principal indications being, 1, to keep up the strength; 2, to bring down the fever. The former should be fulfilled by giving the patient small quantities of food and stimulants, if they be required, at frequent intervals—every hour or half-hour—day and night. The antipyretic remedies recommended by Professor Anderson were Niemeyer's pills, or ten to thirty grains of quinine at the time when the temperature commences to rise, or cold, either in the form of ice cloths, or Leiter's temperature-regulators; and last of all, if these measures fail to reduce the temperature, cold baths. In treating chronic phthisis, the first point to consider is the presence or absence of fever, and the condition of the digestive organs. Where fever is present, it must be met by a similar course of treatment to that adopted in cases of acute phthisis—only that the antipyretic remedies do not require to be pushed with such vigour. The derangements of the digestive organs should be treated by careful regulation of diet; and excellent results are often obtained by the use of teaspoonful doses of Benger's liquor pepticus, or eight to ten minims of dilute hydrochloric acid, in a glass of water, an hour after meals. In cases of uncomplicated phthisis, cod-liver oil is the remedy *par excellence*, but should not be given in larger doses than three ounces per day, with children. Mackenzie's compound cod-liver oil emulsion is often of great use; but, in whatever form it is used, cod-liver oil is much to be preferred to any of its substitutes. Regarding the use of tonics, Dr. Anderson remarked that the preparations of iron are frequently employed; and although of great value in cases of chlorosis, it is of subordinate value in those of anæmia, arsenic being, in his opinion, infinitely preferable to iron in the latter. When night-sweats are present, the patient should be fed by night as well as by day, and should in every case have some stimulant the last thing before falling asleep; he should also use a gauze flannel night-dress. Sponging the body is sometimes useful, particularly when a mixture of equal parts of tincture of belladonna and water, or a drachm of quinine dissolved in a pint of alcohol, is employed. Subcutaneous injection of picrotoxine, five minims of the saturated solution, is also very effectual; but probably the best of all is one-seventieth of a grain of atropia by the mouth, or one hundreth of a grain by subcutaneous injection. The use of cough-mixtures is of subordinate importance, as they are apt to derange the digestion; and, when employed, they should be used with caution but it is otherwise with antiseptic inhalations. They are frequently of the greatest value, and will probably come to be used more intelligently now that a *materies morbi* has been shown by Koch to exist. The only fear now is, that medicated vapours will be used without due attention to the surroundings of each case. Towards the close of his address, the President considered the question of climate; and remarked, that he had seen better results follow from residence in high mountain valleys, and long sea-voyages, than from other health-resorts; and quoted at some length from Dr. Charles Denison's book on *Rocky Mountain Health-Resorts*.

After the address, specimens of bacillus tuberculosis were exhibited by Dr. Coats and Dr. Newman.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

JULIUS DRESCHFELD, M.D., President, in the Chair.

Weigert's Method of Staining Nerve-Tissues.—The PRESIDENT gave a demonstration and description of Weigert's new method of staining nerve tissues.

Cirrhosis of the Liver in a Child aged 3¼ Years.—Dr. H. R. HUTTON showed the liver, together with sections of that organ, from a case of cirrhosis of the liver in a boy aged 3¼ years. The subject of this condition was admitted into the Hospital for Sick Children, at Pendlebury, on August 30th, 1882. Two days before admission, paracentesis abdominis was performed, ascites having been first noticed seven months previously. For some months before this, the child had been in a low state of health, and had suffered from an abscess in the axilla. There were no evidences of congenital syphilis, nor was there any family history of syphilis. The possibility of alcoholism was also negatived. The boy was admitted in an emaciated and exhausted condition. He was slightly jaundiced, and his

ankles and feet were œdematous. The abdomen, which was much distended, contained fluid, and was markedly tympanitic in its upper part. The liver was felt below the costal margin; its border was smooth and hard, but a single small nodule was distinguishable anteriorly; there was no tenderness. The spleen was greatly enlarged, and the blood contained a considerable excess of white corpuscles. The urine was scanty; it was free from albumen, but contained bile, together with much mucus and urates; the stools were natural. The patient's condition became rapidly worse; great dyspnœa manifested itself; and, on September 7th, paracentesis abdominis was again performed, 3 pints 17 oz. of fluid being removed. Peritonitic symptoms, which had supervened, increased in intensity, and the child died three days later. The *post mortem* examination revealed general tuberculosis, cavities in the lungs, chronic pleuritic adhesions, chronic and recent peritonitis, and a typically "hobnailed" liver, the capsule of which was thickened. The liver-substance was light yellow in colour, and of a firm tough consistency; the gall-bladder was distended with bile. Microscopical examination of sections of the liver showed the ordinary appearances of typical multilocular cirrhosis, with great thickening of the capsule and proliferation of bile ducts. Much of the new formed connective tissue was still embryonic, and its arrangement was less zonular than usual; numerous small hæmorrhages were observed.

Papilloma of the Antrum of Highmore.—Mr. A. H. YOUNG showed sections of a papillomatous growth, which occurred as a sequel of chronic inflammatory processes, in the antrum of Highmore.

Sarcoma of the Forearm, etc.—Mr. YOUNG showed sections and preparation of a tumour from the forearm of a woman about thirty-five years old. The growth originated between the superficial and deep muscles of the forearm, but, reaching the surface, had involved the skin, and caused a fungoid projection. Ulceration led to fatal hæmorrhage. Microscopically, the tumour was found to be a sarcoma, of a mixed character, its cells being either spindle-shaped or round.

Mr. YOUNG also exhibited sections of a painful subcutaneous tumour.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

DECEMBER 21ST, 1882.

B. WALKER, M.R.C.S.Eng., President, in the Chair.

Complete Absence of Left Kidney and Suprarenal Capsule: Rudimentary Left Lobe of Liver, etc.—Mr. GUBBIN exhibited the specimens from this case. The patient, a man aged 24, had been under the care of Dr. Branson, in the Sheffield Public Hospital, where, on November 16th, he had been admitted suffering from anæmia, following a severe attack of hæmatemesis; the vomiting of blood recurred several times, and he died at the end of a fortnight. The patient had been in India for two and a half years; he had drunk freely, had had several attacks of ague, and had been discharged from the army for enlarged spleen. At the necropsy, the following condition of parts was found. The liver weighed 2 lbs. 6 oz., and consisted almost entirely of the right lobe; the left lobe being represented by a small appendix, weighing a few drachms. Microscopical examination showed moderately advanced cirrhosis. The spleen weighed 2 lbs. 2 oz., and was tough on section. The right kidney weighed 13 oz., but was otherwise normal in appearance. The left kidney was entirely absent, there was neither suprarenal capsule nor ureter. There were many pints of clear fluid in the peritoneal cavity. The lungs were healthy. The heart weighed 14 oz. There was only one ridge and one opening (right) in the bladder. There was no malformation of any part of the genital organs discovered. Mr. Gubbin remarked on the interest attaching to this case, from the absence of the left kidney and suprarenal capsule, as well as the rudimentary condition of the left lobe of the liver; and said that, in 1838, Dr. Brenner (Virchow's *Archiv*) had collected records of forty-eight cases of congenital absence of one kidney; but in all these cases, except five, one suprarenal capsules were present. Dr. Brenner also stated that, in one-third of his series of cases, there was some malformation, or arrest of development, in one or other of the genital organs.—Dr. BAXTER referred to a case in the *post mortem* room at the Sheffield General Infirmary, a short time ago, where there was an absence of the kidney.

Suppurating Ovarian Cyst.—Dr. DYSON exhibited the morbid specimens from a patient who had suffered from ovarian cystic disease. The woman, aged 35, was delivered of a weakly child twelve weeks before her death. The cyst was simple, unilocular, and filled with pus; it was tapped a fortnight before her death, and seven pints of pus removed; but it had rapidly refilled. The patient had suffered from capillary bronchitis and pneumonia ever since the confinement, and this, together with great exhaustion, had never permitted an opportunity for ovariotomy. Some recent peritonitis was present in various situations, but in each of them at a considerable distance from the trocar wound, which was quite healed. A great point of interest in the case was the condition of the lower lobe of the left lung; this was small, very tough, and fibrous; the bronchial tubes, both small and great, were dilated, and in many instances cretified, feeling like small pieces of slate-pencil when pressed externally. The breath of the patient during life was peculiarly offensive, and probably the condition of part of the lung was the cause.

Puerperal Tetanus.—Dr. KEELING related the particulars of a case, in which this interesting, and somewhat rare, complication occurred. With the exception of some flooding, to which the patient had always been liable in her confinements, parturition in the present instance was normal, and had been followed by a satisfactory recovery up to the tenth day. Symptoms of lock-jaw manifested themselves on the eleventh day after labour, and the malady was soon fully developed. The patient died in a paroxysm of aponea three weeks after her confinement, and on the ninth day after the first appearance of tetanus.

Portion of a Catheter removed from a Male Bladder.—Mr. A. JACKSON exhibited this specimen, removed by him the same day, by the ordinary lithotomy operation. The piece of flexible catheter was thickly coated with phosphates,

Retroversion of the Gravid Uterus.—Mr. E. SKINNER related particulars of this case. The patient, aged 19, was in the third or fourth month of pregnancy, and was, on September 10th last, suddenly seized with abdominal pains and feelings of faintness and sickness. The means, by poultices, etc., adopted by the friends, failed to afford relief; and, later on, a midwife detected a hard swelling at the mouth of the vagina; and on September 15th Mr. Skinner first saw the case. The patient was then suffering great pain; the abdomen was distended, and she was pale and faint. He detected, at the orifice of the vagina, a firm round tumour about the size of an orange, pressing upon the perinæum, and distending the anus. This was the fundus uteri, and the os was situated above the pubes. An attempt to pass a catheter along the disturbed urethra failed, but later in the day was successful. No urine had been passed since the 10th. Attempts at replacing the uterus caused such distress, that they were not persevered with then; but later in the same day, after the bladder had been emptied, with the patient in the knee-elbow position, it replaced itself without difficulty. On the 17th, there was recurrence of the pain and distress, and the uterus was again found to be retroverted. It was again replaced, and a Hodge's pessary introduced to support it. On the 18th, she was delivered of a four months' fœtus, and made a good recovery. Mr. Skinner stated also that, a month later, he found retroflexion, which he replaced, and for which she still wore a pessary.—In the discussion which ensued, Dr. Martin, Dr. Keeling, Mr. Jackson, and Dr. Dyson took part.

NEW YEAR'S FESTIVITIES AT ST. MARY'S HOSPITAL.—We recorded last week some of the efforts which were made to give the patients at this hospital a Christmas which would be memorable to them, and on account of the kind interest in them exhibited by many friends of the hospital. The festivities came to an end on Tuesday, January 7th, when a dramatic and musical entertainment was given in the board-room, which had been fitted up for the occasion; a large number of patients were present, and the room was filled to overflowing. The comedietta, "Dearest Mamma," in which the principal parts were sustained by Messrs. Michelli (secretary) and Hayes, and the Misses Hayes and Ellis, was received with loud applause, and was followed by a series of songs, the vocalists being Mr. Ernest Lane, Dr. Shepherd, who sang "The Lass of Richmond Hill;" Miss Brown, who gave "Robin Adair;" and Mr. Bertram Thornton. The entertainment came to a conclusion with the comic operetta, "Blind Beggars," given with much spirit by Surgeon Aylmer Hayes, A.M.D., assisted by his brother, Mr. Philip Hayes; the representation was received with much delight by the audience, who laughed at all the subterfuges of the two malingerers, and encored all their songs. The entertainment ended soon after 9 P.M., so that while the patients were provided with much cheerful amusement, its good effects were not minimised by prolonging the performance to a late hour, and so curtailing the hours of repose. A word of praise ought to be given to the tasteful printing of the programmes, and cards of invitation; and every credit is due to the secretary, Mr. Michelli, the house-surgeon, Mr. Bertram Thornton, and all others who have organised the successes of the past fortnight.

REVIEWS AND NOTICES.

A DICTIONARY OF MEDICINE. Edited by RICHARD QUAIN, M.D., F.R.S. London: Longmans, Green, and Co. 1882.

FOR long we have heard that Dr. QUAIN'S *Dictionary* was coming, and at last we see it with our eyes; a portly volume it is, in a strikingly unpretentious covering, which, in the harmony of its proportions and lettering, might almost be said, by the leave of the artists, to possess some little artistic merit. But what is in a cover? We might, were it worth while, grow eloquent on this part of the *Dictionary*, for not a few books have no backbone but their cover, and no marrow but some morbid dedication. This book, on the contrary, is all pith. It appears to have been called into being, as is not unfrequently the case in the world of medical book-making, where books of the best sort are concerned, by the suggestive genius of the publishers; and Dr. Quain, assisted by a numerous staff, has endowed it with literary merit. The editor informs us, that it may be regarded, not only as a dictionary, but also as a treatise on systematic medicine, in which the articles on the more important subjects constitute monographs in themselves; the aim of the work being to supply, in a clear, condensed, and readily accessible form, all the information that is at present available for the use of the practitioner of medicine. Naturally, he hopes for a distinguished career for his book; and, without taking, perhaps, quite such an optimistic view of the position it is to occupy, the work, without doubt, gives considerable promise. It has been "roughed up" from material of the purest and most concentrated. No rubbish has been shot here. Colleagues and professional friends have co-operated; and each contributor volunteered or was invited to write upon subjects specially familiar. Thus we have about 160 writers, including many of the leading names in medicine. We subjoin a list of the names of the authors and the subjects on which they have written:

Diseases of the Brain.—Drs. Bastian, Ferrier, Long Fox, Gowers, and Mr. Jonathan Hutchinson. *Diseases of the Spinal Cord.*—Drs. Bastian and Lockhart Clarke. *Other Nervous Diseases.*—Drs. Broadbent, Brown-Séquard, Echeverria, Buzzard, Gowers, Latham, Mackenzie, Poore, Quain, Mr. John Wood, and Mr. Macnamara. *Mental Diseases.*—Drs. Blandford, Chas. Cobbold, Down, Saundby, Sibbald, and Batty-Tuke.

Diseases of the Heart.—Drs. Balfour, Bristowe, Mitchell-Bruce, B. Foster, Hayden, Peacock, Quain, Shapter, and Wardell.—*Diseases of Vessels.*—Drs. Bruce, Hayden, Little, Mr. Cantlie, and Mr. Holmes. *The Pulse.*—Dr. B. Foster.

Diseases of the Lungs.—Dr. Allchin, Sir Risdon Bennett, Drs. Ewart, Green, Douglas Powell, Quain, F. T. Roberts, Symes Thompson, A. T. H. Waters, and C. T. Williams. *Diseases of the Chest-Walls.*—Sir William Jenner and Dr. F. Roberts. *Diseases of the Bronchi.*—Dr. A. T. H. Waters. *Diseases of the Bronchial Glands.*—Dr. Quain. *Diseases of the Larynx, Trachea, etc.*—Mr. P. Thornton and Dr. T. J. Walker. *Diseases of Pharynx, Œsophagus, and Tonsils,* (other than larynx).—Drs. Muirhead and F. T. Roberts. *Diseases of the Pleura.*—Dr. Clifford Allbutt.

Diseases of the Abdomen in General.—Dr. F. T. Roberts. *Diseases of the Spleen.*—Dr. Aitken. *Diseases and Disorders of the Stomach.*—Drs. Allchin and Fenwick. *Diseases of the Intestines.*—Drs. Allchin and Oliver; Mr. Curling and Mr. Durham. *Diseases and Disorders of the Liver.*—Drs. Legg, J. Macpherson, Murchison, F. T. Roberts, and Ward; and Mr. Johnson Smith.

Diseases of the Kidneys.—Dr. Grainger Stewart; Mr. Marcus Beck. *Diseases of the Bladder, Urethra, Prostate, Penis, and Testes*—Messrs. Cadge, Cantlie, Curling, Durham, Godlee, McCarthy, and Sir Henry Thompson. *The Urine.*—Dr. Lauder Brunton and Mr. Cadge.

Diseases of Women.—Drs. Barnes, Duncan, Herman, Madden, Godson, Hicks, Playfair, Simpson, John Williams, Wiltshire, and Mr. Spencer Wells. *Diseases of the Breast.*—Mr. Birkett.

Venereal Diseases.—Messrs. Arthur Cooper, Gascoyne, Berkeley Hill, and Meredith.

Diseases of the Skin.—Drs. Collcott Fox, Tilbury Fox, Liveing, Sangster, Sparks, Thin, and Sir Erasmus Wilson.

Disorders and Diseases of the Eye.—Messrs. Carter, Nettleship, and Streatfeild. *Diseases and Disorders of the Ear.*—Mr. Dalby.

Diseases of Bone.—Sir William Mac Cormac. *Diseases of Skull.*—Mr. Godlee.

Diseases of the Teeth.—Mr. Salter.

Diseases of the Nose.—Mr. Bellamy. *Diseases of the Mouth and Tongue.*—Dr. Fairlie Clarke.

Diseases of the Joints.—Sir William Mac Cormac.

Diseases of the Spine.—Mr. W. Adams.

Acute Specific Fevers.—Drs. Beveridge, Broadbent, Collie, and Grimshaw. *Glanders.*—Messrs. Durham, Peacock, and Squire. *Erysipelas and Post Mortem Wounds.*—Mr. Beck. *Rheumatism, Acute, Chronic, etc.*—Dr. Bruce. *Plague.*—Dr. Netten Radcliffe.

Diseases of Children.—Dr. Eustace Smith.

Gout.—Dr. F. T. Roberts. *Diabetes.*—Dr. Silver. *Lymphatic Diseases.*—Dr. Gowers, Dr. F. T. Roberts. *Morbid Conditions of Blood.*—Dr. Bruce. *Addison's Disease.*—Dr. Silver. *Alcoholism.*—Dr. Curnow. *Cholera.*—Mr. Macnamara. *Dysentery.*—Dr. Joseph Ewart. *Yellow Fever.*—Dr. Jones (New Orleans). *Croup and Diphtheria.*—Sir John Rose Cormack. *Malarial and Tropical Diseases.*—Sir Joseph Fayrer and Dr. Maclean. *Sea-Sickness.*—Dr. De Zouche (New Zealand). *Rabies.*—Mr. Banham. *Venomous Animals.*—Sir Joseph Fayrer.

General Pathology.—Drs. Allchin, Andrew, Bäumler, Beddoe, Bowles, Bruce, Carpenter, Cayley, Curnow, Gee, Green, Irvine, Ord, Payne, Quain, F. T. Roberts; Mr. Butlin, Mr. Callender, Mr. Cantlie, Mr. Haward, Sir William Mac Cormac, Sir James Paget, Mr. Radcliffe. *Tumours.*—Mr. Godlee.

General Therapeutics.—Drs. Binz, Lauder Brunton, Farquharson, Finny, McKendrick, Quain, Thorowgood, and Wiltshire. *Anæsthetics and Resuscitation.*—Mr. Clover. *Vaccination.*—Dr. Collie and Dr. Seaton.

Parasites.—Drs. Bastian, Spencer Cobbold, Cunningham, Lewis, and Manson. *Diseases of Muscles.*—Dr. A. Davidson.

Contagion, Infection, Pathological Organisms, etc.; Antiseptics, Disinfection, etc.—Drs. Bishop, Greenfield, Redwood, and Russell; Mr. Horsley, Mr. Simon.

Surgical Operations in Medical Practice.—Mr. Beck.

Poisons.—Drs. Ferrier and Stephenson.

Medico-Legal Subjects.—Drs. Ferrier, Poore, and Mr. Rose. *Hygiene, Personal and Public.*—Drs. Buchanan, Howard, Pavy, Parkes, Southey, and Myers. *Electricity.*—Dr. Poore. *Climate.*—Drs. Henry Bennet, Sparks, and C. T. Williams. *Baths, Mineral Waters, Sea Voyages, etc.*—Drs. J. Macpherson and Hermann Weber. *Anatomical Subjects.*—Mr. Bellamy; Dr. F. T. Roberts, Dr. Roy. *Hospitals and Nursing.*—Captain Galton, Mr. Holmes, Miss Nightingale. *Instruments used in Diagnosis.*—Drs. Allchin, Godson, Gowers, and Poore.

In turning over the leaves of a work of this kind, one point strikes us, that there is no space for quoting authorities. As medicine grows older, it becomes increasingly the practice to belabour, no matter what subject, be it trivial or important, with the names of authorities, chiefly foreign; charity compels us to suppose for the reader's benefit. On the other hand, it is probably not unproductive of harm that, in the necessary condensation, some questionable things are stated as facts. For instance, to take the first heading, "Diseases of Arteries"; under it we find periarteritis described, after Charcot and Bouchard, as the common cause of cerebral hæmorrhage. But cerebral hæmorrhage is, beyond question, the outcome of chronic renal disease, and that disease is, in great part, the arterio-capillary fibrosis of Gull and Sutton, though described as a distinct change in a later paragraph. Now, what is wanted in such a case, is not the acceptation of statements on any authority, however great, but a careful sifting, with some amalgamation where necessary. In this particular case, we believe we are stating the matter fairly when we say that, to those who are conversant with the subject, it appears that the existence of a special disease, periarteritis, of the cerebral vessels is more than questionable, and that Charcot and Bouchard, in making out a case and a clear one so far as their existence is concerned, for miliary aneurysms, have overdrawn the fact by their conclusions. It is clear beyond all question, that a large number of cases of cerebral hæmorrhage are associated with atheroma of the cerebral vessels, and with Bright's disease; and it is also clear that capillary fibrosis covers the same ground in great part, it may be, more or less, as periarteritis; and there is much cause for thinking that periarteritis, arterio-capillary fibrosis, and atheroma are modified results, perhaps no more than stages, of one process.

Taking another article, that by Dr. Balfour on Pericarditis, we question much the advisability of making such a statement as the Bamberger considers that pericarditis, when associated with acute rhe

matism or any other curable disease, invariably terminates favourably. One is quite at a loss to know what such an opinion can mean. Theoretically it may be true, but it is impossible to dissociate in practice the inflammation which is confined to the serous membrane,—if, indeed, there be such a thing as pure pericarditis, and Sir James Paget's suggestive, and no doubt true, remarks upon the subject of pathology, may well receive consideration before we settle that question—and the myocarditis which accompanies or follows it. In practice, it comes to be the fact that in a certain proportion of cases of rheumatism, probably one in six, as given by Dr. Balfour, may be taken as the average, acute pericarditis supervenes, the heart-muscle swells, the lung undergoes the so-called "splenised" change, and the case terminates fatally. No doubt death is the result of several conditions, but the pericarditis is morally guilty if it do not actually commit the murder. Two other interesting statements may also be noticed in this article. One is that salicylic acid is not contraindicated in pericarditis. Dr. Broadbent, in treating of fever in another part of the volume, asserts, and we believe other physicians have said the same, that, when pericarditis has come on, this drug usually altogether fails to influence the temperature. May it not also be said that, when it fails to influence the temperature, it usually fails to relieve pain, and is therefore useless in such cases? Moreover, it is very generally taught that the salicylates are dangerous when pericarditis is present. The other is the advocacy of chloral, "which is not more useful as a sedative than as an antiphlogistic," and which may very well replace morphia. This statement seems to contain within itself a contradiction: for chloral is a vascular depressant; it weakens the heart's action, and paralyses in diastole; and as such, in theory, is certainly not the drug for the weakened muscle of pericarditis. The antiphlogistic action is probably obtained by this very action, which sounds so dangerous, though increased, no doubt, by some other effect on the terminal arterioles. We are not, bear in mind, criticising the practice—a grain of experience is worth a bushel of theory; we are only concerned to point out, that Dr. Balfour's experience appears to us to traverse the more usual teachings. There are other points in this article, which is a very good one, which we would gladly hold up for imitation; and none more than the most commendable, vigorous, and, in these days, necessary insistance that, in pericarditis, the good of the patient is more promoted by rest, and warmth, and sedatives, than by jeopardising him by dangerous and uncertain remedies.

If we attempt to descend still more into particulars, candour compels us to state that we are at a loss. As a whole, the book does not seem to us to be open to any adverse criticism. Naturally, in a work of its size, individual opinions may differ, and will do so, as to the orthodoxy of the separate contributions; but, as a whole, we believe the general opinion will be, as it is ours, after examining carefully article by article, that it is throughout leavened with trustworthy and sound information. For instance, we light upon Dr. Cayley's article on Embolism, and we find there a thoroughly terse and presentable view of the subject. We may be quite ready to discuss whether Litten has demolished Cohnheim so completely as would be gathered from the summary; but that is not the question. The fundamental points of embolism are stated with most commendable clearness; and, even to those who are familiar with the subject, a sense of knowledge revived brings a sense of information gained. We next take the article on Fever, by Dr. Broadbent—a subject peculiarly prone to assume a gaseous form even in the most able hands; and, again, we think no one can read it carefully through without feeling in this case—not that he knows what fever is—which was not to be expected; but that he has some conception of the intricacies of the subject, of some of the factors which have an important share in the production of fever; that he is more able to give a reason for the faith which is in him. Yet once more: the article on Diseases of the Spinal Cord, by Dr. Charlton Bastian, is all that such a contribution ought to be; it is full of information, given in a perfectly readable and easily intelligible manner. So much cannot often be said where a writer has to treat upon matters at once so complex and abstruse. It may be remarked, in passing, that we are nowhere more in accord with Dr. Bastian than when he animadverts on the assumption that the granular degenerations of the motor cells in the anterior cornua in infantile and adult spinal paralysis are inflammatory in their nature. We quite agree with him that the term cornual myelitis, or, worse, anterior polio-myelitis acuta, are unwarrantable, so far as any evidence of their inflammatory nature can be said to exist. On the contrary, the characteristics of the disease are all against that view; and it can hardly be doubted that we are as yet by no means at the bottom of the nature of these obscure diseases. But where shall we stop? The list of contributors is so representative of all that is best in medicine, that it is impossible to notice in any detail the majority of contributions. It must suffice to say that Hayden writes on Diseases of the Aorta; Holmes on aneurysm; Peacock, Balthazar Foster, Bristowe, and the editor, on Diseases of the Heart; Waters and Douglas Powell, amongst others, treat of Chest-disease; and Deformities of the Chest engage Sir William Jenner. Florence Nightingale takes Nursing, and treats it with that rare combination of delicacy and decision which, so happily blended, unite to make her the foremost nurse the world has known. Eustace Smith, Playfair, Spencer Wells, Murchison, Salter, Hermann Weber, Pavy, and many others, treat of subjects which they have made particularly their own; and even this enumeration does the injustice of omission to the many other excellent contributions of younger men.

But a work of this ambitious scope, should it afford no sufficient ground for criticism, is assuredly altogether beyond the capacity of adequate review. And in short, we shall take leave of it by saying that, as a work, it is well conceived and well executed; that it is a really good epitome within very moderate limits, and that it cannot fail to prove useful to the busy practitioner.

How great the magnitude of the work of supervision must have been, is suggested by the not unfrequent appearance of headings which seem to tell of the omnipresent and occasionally overmastering shade of Johnson not quite obliterated. Such are "erratic (*erro*, I wander)," "general," "humid," "indication," "inspection," "itching," "incoherence," "latent," etc. A number of such as these might very well be taken as understood, and their space occupied by more instructive matter.

Dr. Quain is to be congratulated upon the completion of his labours. He may rest from them in the full assurance that the result will prove a boon to the medical profession. The assistant editors, Dr. F. T. Roberts and Dr. Mitchell Bruce, whose labours have been not less successful than they must have been onerous and protracted, are equally to be congratulated on the sound and good work which they have bestowed on a classical book, with which their names will long be honourably connected.

NOTES ON BOOKS.

Illustrations of Clinical Surgery (J. and A. Churchill.—Mr. JONATHAN HUTCHINSON continues the regular publication of this fine work. The fifteenth fasciculus, plates 55 to 58, contains an admirable series of illustrations of typical and striking cases illustrating morbid conditions of the tongue. Among other morbid conditions shown are a remarkably instructive series illustrating syphilitic glossitis, with hypertrophy; chronic scleroses of the mucous membrane from syphilis and smoking, with very dense leucomata; recent and transitory leucomatous eruption of the tongue; follicular stomatitis in a young child; and thrush in an infant. Another series shows the deviation of the tongue in paralysis of the ninth nerve, chronic psoriasis-eczema of the tongue, white patches on the tongue in connection with lichen-psoriasis. The fifty-seventh plate illustrates syphilitic glossitis, syphilitic warts on the tongue, congenital hypertrophy of tongue, and cancer slowly supervening in a syphilitic tongue. On plate 58, a well-marked specimen of myeloid tumour of the lower end of the femur is shown in an illustration of remarkable beauty. The drawings are by Mr. Burgess, one of the most accomplished artists who has ever in this country given his time and trained skill to the illustration of clinical and pathological specimens. This work is in the highest degree creditable to British surgery; and there are few surgeons, indeed, who have either had the opportunity, or the zeal and liberality, of which a rare combination is necessary, to have collected, in the course of an individual experience, such a magnificent portfolio of illustrations of disease as Mr. Hutchinson is able to draw from, and to arrange and discuss them with so much clinical sagacity, suggestive and original thought, and with so wide a range of pathological research and reading. This book, when completed, will constitute one of the finest classics of British surgery; and, meantime, each part is a valuable possession to the practising surgeon no less than to the scientific pathologist.

SUPERANNUATIONS.—Mr. Timothy Lorkin Walford, late Medical Officer to the Reading Union Workhouse, has obtained a superannuation allowance of £87 *per annum*.—Mr. John Hatton, late Medical Officer for the Coleford District of the Monmouth Union, has obtained a superannuation allowance of £26 *per annum*.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SAFETY HYPODERMIC INJECTOR.

SIR,—Will you kindly allow me to reply to the letter of Dr. Mules, which appeared in your issue of last week, in which he desires to establish a relationship between a curious instrument which he constructed during April 1881, and my "safety hypodermic injector"? Dr. Mules states that the instruments are "almost identical"; but the only point of identity apparent to me is this, that they both belong to the genus syringe, which in its primitive form consisted of a pipe with a bladder tied upon the end, and was thus introduced into practice by the ancient Egyptian professors of the healing art.

The special features of my little invention—belonging, without doubt, to this antique class of surgical instruments—have been described by me in the BRITISH MEDICAL JOURNAL of December 16th, 1882. I only claim for it that it is the simplest hypodermic instrument ever introduced, both in form and in construction. The special quality possessed by each injector is that, with it, only one uniform dose of fluid can be administered, and that this dose is regulated, not "by graduated glass bottles", but simply by selecting an injector of a certain capacity. In a word, the "safety hypodermic injector" is a perfect instrument for a certain dose, and, on its exterior, a number expresses its special capacity in minims; thus, by this simple method, it renders the use of hypodermic remedies absolutely easy and safe, and it becomes a special safeguard against accidental mistakes. Again, I claim for the safety hypodermic injector that it is a special contrivance adapted to promote cleanliness and purity in the application of hypodermic remedies, as a special injector can be used for every remedy. It possesses even another valuable quality—its inexpensiveness—which actually permits the use of a special instrument for every patient; and surely, by this peculiar feature, it becomes remarkably adapted to the practice and the theory of this antiseptic age.

I have never seen or read any notice of Dr. Mules' syringe, but, from his description, it does not appear to me to show any marked advantage over the ordinary hypodermic instrument. At all events, all the special features of the safety hypodermic injector are entirely absent from this costly and elaborate contrivance, which is obviously intended by its construction to administer various remedies and various doses, regulated by a complicated arrangement of "graduated small bottles."

It is, moreover, fitted with a gold needle, which, either for mere convenience, or else for some mysterious, and, probably, ancient prejudice, is kept, when not in use, by "constant immersion in the fluid."

Finally, the whole instrument is compactly preserved in a metal case with a screw top; and so, just like the hypodermic syringe, it is intended for general use on any number of patients. Dr. Mules' syringe is, in my opinion, a pocket instrument of ancient type, and remarkably suitable to family practitioners who still carry a gold-headed walking stick.

In conclusion, the Safety Hypodermic Injector has now been before the profession for many months. It has been exhibited at the annual meeting of the Association, and at many branch meetings in various localities. It has also been submitted to the Army and Navy Medical Departments, both at the Army Medical School, Netley, and Haslar Hospital, and I have received on every side only one opinion as to the novelty and practical utility of my humble invention.—I am, sir, yours faithfully,

J. WARD COUSINS, M.D.Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

Southsea, January 13th, 1883.

LADY-DOCTORS FOR INDIA.—The Queen has expressed her interest in the efforts now being made to provide fully qualified medical women for India. Miss Manning, Honorary Secretary of the National Indian Association, has received a letter from Generat Ponsonby, stating that her Majesty gladly countenances a proposal suggested by Mr. Kelterdge, of Bombay, to raise, with the co-operation of natives of India, a guarantee fund for the benefit of women doctors willing to go out from this country to settle in India.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 20th, 1883.

THE ARTIFICIAL FEEDING OF INFANTS.

THERE ought not to be any difficulty in formulating a series of rules as to the best method of bringing up infants by bottle, considering that we have a vast mass of material at hand for observation and experiments. In fact, experiments are being daily carried on which should afford us ample data on some of the great points about which there can be any difference of opinion.

We are all agreed that the infant thrives best on its mother's milk. From various causes, into which we cannot now enter, mothers are prevented from nursing their children. After the natural method, which is the best?

What kind of milk should be used in place of mother's milk? Should it be diluted, and to what extent? In what proportion should cow's milk be used at one month, two months, six months? How often should food be given to the infant at those respective ages? Should a bottle be used, or a spoon?

It is questions of this kind which have been vexing the minds of the French academicians. Upon these simple elementary questions, there is the widest divergence of opinion both in France and England. Let us take, for instance, the feeding of an infant, from birth to sixty days, without breast-milk, and see what an English authority says about it. There is a small book, distributed by the Ladies' Sanitary Association, entitled, *How to Rear Healthy Children*. At page 9, there are some rules on feeding the baby. Rule 2 reads as follows: "If the mother fail to supply milk, and if there be no wet-nurse, the child should be fed with cow's milk. Equal parts of cow's milk and water is the best mixture, to which a little sugar, one teaspoonful to a quarter of a pint, may be added."

Rule 3 reads: "At two months, the cow's milk may be increased to two-thirds, water one-third."

We have heard grave objections to these rules, from medical men and mothers, who have had a large experience in feeding children by the bottle. They state that, during the first two months, the mixture of equal parts of milk and water is not suitable; it is too strong.

It may not be without profit for us in England to take cognisance of the discussion at the Academy of Medicine—a discussion introduced by the distinguished obstetrician Tarnier, who is in favour of instituting a new series of experiments in order to arrive at the best method of artificial alimentation. For the present we shall leave on one side M. Tarnier's communication, in order to consider the remarks of M. Guéniot, as they appear to us well reasoned and practicable.

M. Guéniot resumed the discussion at the sitting of the Academy October 17th, 1882. Quoting from a report which he presented in 1874 to the Director of Public Assistance, M. Guéniot expressed directed attention to one statement therein, viz.—that to bring infants successfully without breast-milk constituted a true art, for the practice of which true artists were not always to be found. This view he still insisted on. Artificial feeding had the same title to an art of medicine itself; for, as the application of ready-made formulæ

not make a successful practitioner, so the mere mixing of milk and the management of a bottle did not make a nurse; other qualities were required.

In order to clear up the points in dispute, artificial feeding should be defined. Four kinds might be recognised.

1. Primary artificial feeding. Feeding by the bottle alone from first days of infant's life.

2. Secondary artificial feeding. Feeding after infant had reached a certain stage of growth.

3. Primary mixed feeding. Feeding by bottle and breast from first days.

4. Secondary mixed feeding. Feeding by bottle, after breast had been given alone for some time.

These distinctions were essential; for, whilst primary artificial feeding carried off each day numerous victims, secondary artificial feeding was not attended so frequently with such results.

Primary feeding was more difficult, owing to the condition of the newly born infant. All its functions had, as it were, to be put in train, and to acquire a particular rhythm. In this state, badly prepared or improper aliment disturbed the harmony of function, and induced serious complications. When the infant had reached the age of three months, it was easier to obtain success by a mixed method, because a functional impulse had been given, and the organism could oppose some resistance to any injurious agent introduced.

Artificial feeding, carried on from the very first days of life, failed in certain hands, but in the hands of others it was successful. He mentioned a few cases, as that of Madeleine X., upon whose tomb was inscribed words to the effect that, by her intelligence, devotion, and maternal care, she had brought up successfully, by the aid of the bottle, more than sixty infants; that of Dr. Perron, who had brought up his own six children; and of Dame Reding, who had reared eleven by the same means. It might be objected that these were phenomenal cases. It should not be forgotten that these children were reared by the application of known principles; all that was wanted was an extension of these principles.

New experiments were not required; but an inquiry into existing facts was needed, as, for instance, why artificial feeding, from the very first days of life, succeeded in certain hands. M. Guéniot also referred to the results obtained by Dr. Giberton-Dubreine, at Jouy-en-Josas, near Versailles. His *crèche*, in six months, received twenty-four infants, viz., five weaned, six at the breast, five at the breast and using the bottle, eight exclusively fed by the bottle. There had not been a single death in this small colony. A more complete success could not have been obtained than that of rearing eight children by primary artificial feeding. These results were secured, not by the employment of new methods, but by the observance of rules issued by the Academy itself.

Dr. Giberton-Dubreine had given the intelligent and devoted nurses written instructions. The English feeding-bottle was used, which holds about 250 grammes. Cows' milk alone was employed, and water was added which had been previously boiled. The rules were simple. Up to the age of one month, milk was used in the proportion of one-third to two-thirds of water, sweetened with sugar; about a third of a bottle being used every two hours. From one to three months, half milk and water was given; half a bottle every two hours. From three to six months, pure milk was given, every two or three hours, leaving the infant to take what it required.

Since such results were obtained by the application of the rules formulated by the Academy, science was not without definite ideas on artificial alimentation. M. Guéniot was opposed to the view of Tarnier, that all was uncertainty and contradiction. There was no question as to the value of the milk of the ass; but cows' milk, by its abundance and cheapness, its nutritive and digestive qualities, must retain its place as the general food for infants. The milk should be reduced in strength, when it was even more digestible.

This should be especially done during the first days of life. The quantity of sugar used must vary in proportion to the quantity of liquid. M. Guéniot expressed himself in favour of the bottle. M. Tarnier favours the cup or spoon; the bottle he regards as a dangerous engine. M. Guéniot said: "The bottle was good, but it was the hands that prepared or administered the food that were to blame."

There are some special points on which the views of M. Guéniot are particularly important; viz., in reference to the quantity and dilution of milk during the first days of infancy. M. Guéniot thinks that during the first eighteen hours the infant should have nothing but tepid water, slightly sweetened or flavoured with some drops of orange-flower water; and during the six following hours, the same, with one-sixth of milk added, in the proportion of two tablespoonfuls every two or three hours. The second day, it should have four or five tablespoonfuls, every two or three hours, of *eau sucré*, and milk in the proportion of one-fifth. The third day, it should have milk diluted with three times its quantity of *eau sucré*.

During the following days, this proportion should be observed until the infant makes known by its cries, movement of lips, and evacuations, that a more substantial food is necessary. The attentive observation of the infant, and of the character of the functions, must guide the nurse as to the quantity and dilution of the milk necessary. Success could only be achieved by judicious personal direction. He had seen more harm done by too liberal administration of pure milk than by its dilution. He concluded by a repetition of his assertion that the practice of artificial feeding depended on perfectly determinable factors, upon the observance or neglect of which, success or failure depended.

We are inclined to agree with M. Guéniot in his general deductions. New experiments are not required; an authoritative statement, from existing data, is however imperatively demanded.

In England, we have so many institutions where artificial nursing is carried on, as foundling hospitals, workhouses, *crèches*, and private families, that a commission would have little difficulty in collecting particulars on the special methods adopted, and in extracting the true measure of success.

The bottle is almost universally used in England; in bad hands it is a vehicle of danger. The cheap gutta-percha used in bottles is another element of mischief. Considering that in France there is a good feeding bottle called *biberon pompe*, we should feel flattered by the use of the English feeding bottle. The *biberon pompe* has the advantage of a valve, by which suction is rendered easier.

Theoretically, the best form of feeding bottle is the old fashioned boat, to which a natural or vulcanite teat is attached. Its advantages are these. 1, It can be readily cleaned; 2, The teats can be turned inside out and thoroughly washed; 3, The nurse must attend personally to the feeding. The infant cannot be put into a cot with the teat in its mouth, a custom reprehensible in the extreme, and one commonly adopted with the ordinary bottle. The child secures by the boat a fresh supply of milk each time it is fed. An intelligent nurse will only prepare what is required for each meal. The objection to it is, that it is not practicable when there are a number of infants to be fed, as at a *crèche*.

In all rules issued by sanitary associations, due consideration should be made for the actual condition of the various classes of society.

Instructions for mothers and nurses have been published in abundance; unfortunately, some have been written in the study, without acquaintance with the needs of the class for whose good they were intended. When a mother is presented with one of these little handbooks, and on reading it finds recommendations out of her reach, she simply uses it to light her husband's pipe. Henceforth she looks with contempt on literature of this class. Much good has, however, been done by the diffusion of leaflets and popular guides on the rearing and feeding of infants. There is a great awakening to the importance of saving infant life.

Babies have now become an object of interest to the scientific stu-

dent, affording him a field for the observation of the phenomena of sense-development. We have at present a number of psychological fathers, who visit the nursery, and who inspect their offspring with mingled feelings of parental love and scientific zeal. This is a new departure, but it is one in the right direction. The intrusion of man into the nursery may be attended by good. Whilst engaged in the study of psychology, he will be able to notice the infant's physical development. It will be well for him to remember, that there can be no healthy psychical growth without corresponding physical growth. The homunculus is influenced by his environments and his food. Sterne suggested a great physiological truth in the opening chapter of *Tristram Shandy*.

The influences which produce an effect at conception, during uterine life, and after birth, are manifold. Each baby has the potentiality, so far as we know, of becoming a great man or woman, certainly a healthy man or woman. In many cases this potentiality has been strangled by causes simple and preventable. The popular belief that there are "twists" in the mind is not such a wrong one. The brain-convolutions or "twists" are dependent, not only upon the exercise of mind, but upon nutrition.

The athreptic diseases of infants—marasmus, diarrhœa, etc.—are caused by improper food and bad nursing. Weakly infants will, as a rule, become weakly children, and should they survive, weakly men, mentally and physically. The watchful father, by his occasional presence in the nursery, will keep the nurse on the alert; for instance, dirty feeding bottles will not be used, nor will he find the infant with a feeding bottle in its mouth to keep it quiet, if his advent in the nursery may be looked for at uncertain moments.

We think we are justified in looking hopefully to the future protection and preservation of infant life, in view of what is being done at home and abroad. Like Goethe, we welcome and ask for "more light."

THE FINANCIAL CRISIS AT THE LONDON HOSPITALS.

During the last few weeks, some consternation has been caused amongst hospital managers and committees, by the announcement that four general hospitals in London have spent collectively during the year 1882 nearly thirty thousand pounds more than their available income. How many more general and special hospitals are in an equally impecunious state, is not apparent at present. This financial distress has been foretold more than once by experienced authorities, who have in vain advised the hospital committees to arouse themselves, and to take steps to secure the proper financial management of the institutions under their control. At the present time, the committees are for the most part quite content to authorise the insertion of an advertisement in each issue of the *Times*, and to do little else. Their argument seems to be that the hospitals have generally found this *laisser faire* policy sufficient for the needs of the past; and, of course, *experientia docet*. In the good old times, before the era of special hospitals, with their aggressive pushing ways, this was, no doubt, a simple, an easy, and a sufficient policy to secure the necessary funds. During the last few years, however, a great change has been going on; and to-day the philanthropist, instead of sending twenty guineas to the general hospital he most favours, now divides this sum into four, six, or even ten portions, and inscribes his name upon the books of as many different and smaller charities. It happens, therefore, that although the sum of the contributions to the hospitals is greater than it ever was, as the establishment of so many small special hospitals, and the vigorous appeals with which they flood the charitable public, have caused a considerable increase in the area of distribution. As a matter of fact, the special hospitals have drained the general hospitals in the metropolis of funds, in the same way that the cottage hospitals have drained the county hospitals of accident and acute cases.

An examination of the accounts of a few hospitals will prove the truth of the above statements. In 1877, the income of the metropolitan general hospitals amounted to £310,237, and in 1881 it was but £274,159; a decrease of £36,075. On the other hand, the income of seventeen hospitals for women and children, and of twenty-three miscellaneous special hospitals, which amounted to £156,055 in 1877, had increased to £173,746 in 1881, *i.e.*, by the sum of £17,691. If all the special hospitals in London were included in the totals, no doubt the increase in the income of special hospitals would more nearly approach the decrease shown to exist in the case of the general hospitals.

It has been stated that want of enterprise on the part of the managers is the true cause of the falling off in income, and of the consequent financial crisis now existing at the general hospitals. This is shown by an examination of the accounts of these institutions for the years 1872 and 1881 respectively. Thus, four general hospitals received in the year 1881 £11,381 in annual subscriptions, against £13,348 in 1872, or a decrease of £1,967, and £14,355 in donations, against £10,582, or a decrease of £3,773. On the other hand, at six general hospitals, where a more vigorous system of management has been introduced, the income has increased from £12,751 in annual subscriptions, and £17,598 in donations in 1872, to £16,028 and £30,651 respectively, or by no less a sum than £16,330. Nor have the special hospitals been less active, the increase in income in one or two cases being very remarkable. At the Samaritan Hospital for Women in 1872, the annual subscriptions were £812, and the donations £2,103, against £1,309, and £2,364 in 1881; at the East London for Children the increase was from £493 and £2,531 in 1872, to £1,975 and £5,299 in 1881; at the Poplar Hospital for Accidents, the increase was from £463 and £1,482 in 1872, to £946 and £2,20 in 1881; and at the North-Eastern Hospital for Children, the annual subscriptions increased in the ten years from £211 to £1,261, and the donations from £296 to £3,228. These figures speak for themselves and need no comment.

It remains to point a moral and a warning. It is certain that, if the existing state of affairs continue and no improvement take place in the financial management of the general hospitals, nothing but disaster can ensue. More vigorous action on the part of the committees will bring about an improvement, or a change in the responsible officials must be made. We have before questioned the policy of electing half-pay officers to responsible positions in our hospitals, and the figures we have quoted seem to enforce the protest. The committees should tell their secretaries plainly that means are to be had and must be obtained, and unless they be forthcoming new blood and a different system must be introduced. Fortunately the nursing difficulty only seems to have affected King's College Hospital; but the ravages of a wrong system are eloquently testified by the statement that the annual subscriptions have fallen off from £2,001 in 1872 to £1,957 in 1880, and to £1,873 in 1881, and the donations from £4,435 in 1872 to £3,519 in 1881, and by the further statements that the invested funds are almost exhausted, although there is an excess of £9,000 of expenditure over income for the current year. It is time the right and best method of financing large hospitals was seriously considered. In such an inquiry the fact that the pay hospitals, Fitzroy House (Home Hospital Association for paying patients), Bolingbroke House, and St. Thomas's Home are all flourishing, will have to be borne in mind. We are within a measurable distance of a radical reform in the system of managing the finances of our hospitals, and the pay-ward is rapidly forcing its way into public notice as one, and as some allege, as the best, means of meeting a serious and pressing crisis.

ARMY SURGEONS AND THEIR HOSPITAL PRACTICE IN EGYPT.

In the course of the last five or six weeks there have appeared at intervals, in some of the daily journals, remarks calculated to convey an unfavourable idea of the manner in which the military medical officers in Egypt have been discharging their professional duties

They have been accused, with more or less directness, of being the cause of some of the mortality which has occurred among the troops, in consequence of not understanding the nature of the diseases from which the men have been chiefly suffering, and especially from ignorance of suitable methods of treatment. These accusations appear to be chiefly founded on the reports of certain newspaper and other correspondents at Cairo. At the same time as these disparaging observations have appeared regarding the military hospitals and the practice followed in them, very laudatory remarks have been published regarding the hospital at Cairo which is under the management of Lady Strangford, and attention has been directed to the remarkable success of the treatment followed in that establishment. Some of the statements, or rather hints, which have been included in the observations put forth to induce benevolent persons to send contributions for the maintenance of this hospital, ought certainly not to have appeared in print without substantiating evidence, or more complete explanation than is given in the appeals referred to. Thus in a letter addressed to the editor of the *Daily News*, and published in that paper on the 23rd ultimo, with the signature of E. Strangford, and date Cairo, November 26th, an earnest hope was expressed that "all those who have grieved over the loss of life so painfully and mysteriously large in this country among our own men" will contribute funds to provide for the English and the Arabs in the hospital, and to furnish the necessary expenses of the staff. Surely if there have been, or be, any mystery about the deaths which have occurred among the sick of the army in Egypt, it is the duty of the military authorities to investigate and unravel it; and we think, further, that after such an allusion to the mortality among our men having been painfully and mysteriously excessive, if the authorities are satisfied that there has been no mystery in the matter, the groundlessness of the suggestion ought to be made as equally public as the charge implied in the statement. Some course of the kind ought to be followed, not merely for the sake of the professional characters of the medical officers concerned, but also to relieve the distressing thoughts such a statement is calculated to excite in the minds of the relatives and friends of those whose deaths are alluded to. In the printed appeal for subscriptions to Lady Strangford's hospital at Cairo, from which the foregoing quotation was taken, it is also stated that "six small wards have been continuously occupied by English officers, and a few other Englishmen, who preferred a civil hospital to a military one," and that "most of these have been serious cases, but all have done well." We are not informed to what class the few other Englishmen belonged who preferred the civil to a military hospital; but, as none but military persons could exercise a choice as regards the army hospitals, it is to be presumed that all the patients concerned were either officers or men engaged in the military service. Officers and soldiers while on active employment could only make a selection of the kind with the sanction of the commanding officers under whom they might be serving at the time; and, when a sanction of this sort is given to them, it seems only right that the hospital expenses which may be incurred in their treatment should be defrayed by the Government, through the agency of those departments whose function it is to provide the necessary means for the care and treatment of all military officers and men who become sick in the performance of their public duties. The payment of expenses so incurred should certainly not depend on private benevolence.

We make these remarks in no unfriendly spirit toward any who may be concerned in them. It is manifest that, if there have been anything like a mystery about the amount of sickness and mortality which has unhappily visited the troops in Egypt, the subject ought to be thoroughly investigated; and if the problem can be solved, whatever its solution may be, whether want of knowledge on the part of the medical officers or any other deficiency, steps ought to be taken to put an end to it by suitable measures; but if there be no enigma or mystery in the matter, then it is equally manifest that the publication of such a charge, calculated as it is to lower the character and impair the prestige of the Medical Department of the Army, is very objectionable and deserves strong censure. We are under an impression that there is no mystery whatever connected with the subject. Judging from the communications which have reached us on various occasions from Egypt, there seems to be no room for doubting that the severe type of the diseases, particularly of the enteric fever from which the troops have suffered, has been due, on the one hand, to the constitutional condition of the men, exhausted for the most part by the circumstances incidental to a rapid campaign, carried on in Egypt during one of the most trying seasons of the year; and, on the other hand, to the unhealthy and generally foul state of the barracks in which they have since had to be quartered, and of the ground on which they have been encamped; to the bad quality of the water; to the night duties; and to exposure to various other unfavourable conditions incidental to military life.

Not long ago, it was asserted in an article, which appeared in a widely circulated newspaper, that milk was an unsuitable description of food for persons suffering from enteric fever; but that this was the diet generally prescribed by the army medical officers for enteric patients in Egypt. The statement was said to be made on the authority of a leading physician in Cairo. We know, however, that in this country milk forms an important constituent of the food usually prescribed for patients suffering from enteric fever; and we are also aware that, in the Deaconesses' Hospital at Alexandria, where the treatment of enteric fever has been attended with remarkable success, so far from being regarded as injurious in such cases, milk has been the principal ingredient in the diet given to the patients. We are informed that one of the best known members of the staff of this hospital, Dr. Mackie, who has had long experience of the treatment of disease in Egypt, has addressed an official letter to Sir Edward Malet, Her Majesty's Agent and Consul-General in Egypt, on the subject, with a view to demonstrate the injustice of the accusations which have been published against the medical officers on this and other points connected with the treatment of patients in the military hospitals in that country. There is every reason to believe that this communication will have been forwarded in due course by the Consul-General to his official superiors in England. This disinterested and generous line of action, on the part of one of the leading civil practitioners in Egypt, in defence of the professional reputation of his military colleagues, is deserving of the highest commendation; and is likely to exert a very powerful influence in neutralising some of the effects of the charges which have been advanced against them in other quarters.

COLLECTIVE INVESTIGATION.

A MEETING of the profession to promote the objects of medical science, at which Sir William Gull and Sir James Paget delivered addresses, and at which Professor Humphry, Dr. Acland, and Dr. Quain were among the speakers, could not fail to be an important medical event, and one calculated to exercise considerable and valuable interest. The announcement of these addresses collected, as might be anticipated, a large and distinguished gathering of auditors on Wednesday evening, at the meeting of the Metropolitan Counties Branch, held in the Theatre of the School of Mines, under the presidency of Dr. Bridgwater. Among those present were the President of the British Medical Association, the Treasurer, the President-elect, and many members of the Committee of Council, of the Association. Nothing was wanting, therefore, to give official importance to the occasion. Sir William Gull has never, perhaps, appeared to greater advantage than at this meeting. His address, which lasted for an hour, was a masterly production. The theme was a congenial one, and it would hardly have been possible to have selected any subject so well suited to his genius, and in which his varied and long clinical experience, and his original and philosophic

turn of thought could be turned to more solidly useful purpose. Replete with brilliant epigram, novel suggestion, critical sagacity, and wise questioning of accepted dogma and philosophic searchings after the deeper meaning of common things, Sir William Gull's address, which we shall publish in full next week, will we venture to predict, make a deep impression on the minds of the profession, and serve for many years to supply texts for inquiries, and to furnish to clinical physicians hints for new work, and, what is perhaps still more valuable, criteria by which to test the well-worn doctrines which guide daily practice. It is needless to say, too, that the persuasive eloquence and skilful generalisation with which Sir James Paget addressed himself briefly, in following Sir William Gull, to the theme which had been suggested, were well calculated to bring the thoughts of those who were still indifferent to the subject of collective investigation, to a fuller appreciation of the rich mine of work which this organised inquiry promises to open up, and to deepen the interest with which the subject is regarded by those who are already convinced of its importance, and anxious to give their personal help. The earnest pleading of Professor Humphry on this, the latest and most promising child of his intelligent enthusiasm, the frank and outspoken criticism of Dr. Quain, and the academic approval of Professor Acland, gave emphasis and weight to the proceedings of the meeting; and the Metropolitan Counties Branch which, if it has moved slowly in the matter, has at last done its part with effective vigour, may be congratulated on having organised a meeting which gives to the project of collective investigation by the Members of the British Medical Association, an importance and a promise of success which are of the fairest augury, and are likely to influence powerfully the future success of this work. We shall publish next week a full report of the whole proceedings.

On Monday, January 29th, at 3 o'clock in the afternoon, Sir Henry Thompson will lecture in the clinical theatre of University College Hospital, on Exploration of the Bladder in Cases of Obscure Disease, the Removal of Tumours, etc.

Mr. F. J. M. Page, B.Sc., F.C.S., Assistant to the Jodrell Professor of Physiology in University College, London, has been elected Lecturer on Physics at the London Hospital Medical College.

Sir John Forsyth, C.B., K.C.S.I., late Principal Inspector-General Her Majesty's Indian Medical Department (Bengal) and Honorary Physician to the Queen, has lately died, at the advanced age of 84.

Dr. V. Bompiani, of Dicomano, Florence, who last year published an Italian translation of the work *On Regressive Paralysis*, by Dr. W. H. Barlow of Manchester, is at present engaged in translating the same author's monograph *On Pseudohypertrophic Paralysis*.

The subscription for the Darwin Memorial has awakened so much enthusiasm in Sweden, that the local committee there formed has received subscriptions from no fewer than fourteen hundred persons, including "all sorts of people," writes Professor Loven in a letter to the English Committee, "from the bishop to the seamstress,"—the sums varying from five pounds to twopence. The English Committee, which has its head-quarters at the Royal Society, London, has now received (inclusive of subscriptions from abroad) £4,000, but the number of subscribers in the United Kingdom is only about six hundred. From this it would seem, that an interest in science is not nearly so widely spread in Great Britain as it is in the more thinly peopled land of Sweden.

A correspondent at Suez informs us that Colonel Warren is actively following up the murderers of Professor Palmer's party. Sheik Saffied, the murderer of Professor Palmer, has been brought in; £1,000 was found on him; he was trusted in by Palmer, and afterwards informed the Bedouins of the large amount of money carried by the party, filling up his "vial of wrath" by shooting the Professor, and then shoving him over the precipice into the ravine (waddy). This traitor and murderer has escaped justice, having died on the 6th instant, at Suez, from fever. It was thought likely that he might have been put out of the way, lest he might betray the other murderers; but a *post mortem* examination, performed by Surgeon Charles Hamilton, R.N., of H.M.S. *Beacon*, proved death from natural causes. The other murderers are daily expected in; but it is to be regretted that Sheik Saffied died without giving the whole history of this tragic affair, with all the details of which, of course, he was well acquainted. Colonel Warren was at Nake by last accounts.

HER ROYAL HIGHNESS THE DUCHESS OF ALBANY.

Arrangements are being made for an interesting event in the family history of H.R.H. the Duchess of Albany. The services have been retained of Dr. Matthews Duncan, as accoucheur.

THE LEEDS TRAGEDY.

Mr. Noake and Mrs. Hudson, charged on remand at Leeds with the wilful murder of Margaret Scott of Wakefield, have been committed for trial. Mr. Noake is committed on a charge of giving a false certificate as to Scott's death.

THE HUNTERIAN ORATION.

This biennial discourse will be delivered on Wednesday, the 14th proximo, at three o'clock, by the President of the College of Surgeons, Mr. Spencer Wells, in the theatre of that institution. The biennial festival will be given in the library the same evening, to which the president and vice-presidents have, as usual, invited several distinguished visitors.

PORRO'S OPERATION.

Dr. Heywood Smith writes to us—"My case of Porro's operation died on the fourth day. The wound had perfectly healed, there was scarcely any trace of peritonitis, there was no fluid in the peritoneal cavity, and the tongue remained clean and moist to the last. There was, however, some incipient sloughing of the vagina, which I consider due partly to the length of time the patient was allowed to be in labour, and partly to the attempt, though it was not prolonged, at extraction with instruments in a case that was enfeebled by struma."

MR. GLADSTONE.

Mr. Gladstone has gone to Cannes, where he will remain for a fortnight, at the end of which he will return to England. While at Cannes, he will take up his residence at the house of Lord Wolverton who has placed it at the Premier's disposal. The sleeplessness still continues. It might be supposed that Cannes is not the quietest resort for anyone who is suffering from sleeplessness; but it is hoped that the change may prove restorative, and will dissipate the sleeplessness from which the illustrious statesman is now suffering. It is possible that Mr. Gladstone will journey along the Riviera toward Genoa.

DR. WILLIAM GIBBON.

The conduct of the medical officer of the Inman steamer, *City of Brussels*, which was lately sunk in a collision with the *Kirby Hall* the Mersey, has elicited the unqualified admiration of the passenge and crew of that ill-fated vessel. Dr. Gibbon, who was rescued fro the hose-box to which he was found clinging in a half-drowned co

dition, directly he was put on board the *Kirby Hall*, set to work, in his half-dressed and dripping state, to endeavour to restore animation to the bodies of those who unfortunately perished before they could be saved, with the utmost promptitude and skill. Dr. Gibbon was formerly a student at the Manchester School of Medicine, and had been surgeon to the *City of Brussels* during the last two years.

SOCIETY FOR RELIEF OF THE WIDOWS AND ORPHANS OF MEDICAL MEN.

THE usual quarterly Court of Directors was held on Wednesday, January 10th, at 5 P.M.; Dr. Pitman, V.P., in the chair. Grants to the amount of £1,262 were made to sixty widows, five orphans, and three orphans on the Copeland Fund. There were no fresh applications for relief; the death of one widow in receipt of £40 per annum was reported. The expenses of the quarter were £80 10s. The death of four members, and the resignation of two were announced, and one new member was elected. A Christmas present of £320 had been made in December last to the widows and orphans already on the funds of the Society.

NEPHRECTOMY.

MANY of our readers may recall a case shown by Mr. Morrant Baker to the International Medical Congress at its meeting in London in 1881. The patient was a lad, aged sixteen, upon whom Mr. Baker had performed nephrectomy, that is to say, had incised the pelvis of the kidney, through the loin; the operation, which gave exit to about thirty ounces of purulent fluid, was followed by a very great improvement in the patient's condition. This, however, was not maintained, and after some fluctuations in the symptoms, Mr. Morrant Baker found it necessary, on the 28th ultimo, to remove the whole kidney; this it was only possible to do piecemeal. The patient who was in a most anæmic and exhausted condition, rallied from the operation very well, and has since steadily improved; the urine became free from pus immediately after the operation, and the only symptom which at any time gave rise to any anxiety was an irregular pyrexia. On inquiry at the hospital on the 18th instant, three weeks after the operation, we learnt that the patient was then in a most satisfactory state, and that there was an excellent prospect of his eventual complete recovery.

AN ECONOMICALLY MANAGED HOSPITAL.

A STRIKING example of the comparatively small cost at which an infectious hospital may be kept in an efficient condition, is afforded by Mr. Gornall in a recent report on the infectious diseases hospital attached to the borough of Warrington. During 1881 there were 224 patients under treatment, including 6 who were already in the hospital at the close of 1880. Of the 318 admissions during the past year, 302 were suffering from scarlet fever, 9 from enteric fever, 1 from small-pox, and 5 from other diseases. Nineteen deaths were registered in the hospital during the year, 17 being from scarlet fever, and one each from small-pox and enteric fever; 39 patients, all suffering from scarlet fever, remaining in the hospital at the close of 1881. A large amount of disinfection was also carried out during the year, no fewer than 8,013 articles of clothing, etc., having been disinfected. The actual cost of maintenance of each inmate of the hospital, including the matron, nurses, servants and patients, was 15s. 2½d. per week. Food alone averaged 5s. 6¾d. per week, an expenditure which speaks well for the great economy exercised in every department. Mr. Gornall adds that he knows of no other institution where patients are so well or so cheaply fed.

THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

On Saturday last, the President of the Royal College of Surgeons held a reception in its newly decorated and repaired Museum. A large number of Fellows and Members of the College combined in congratulating the President and the Council upon the admirable result of the vast time and trouble devoted by all connected with the Museum to the re-arrangement of its contents in a manner better adapted to display its unrivalled treasures, and to facilitate the work of reference. This re-arrangement is the complement, as it were, of the new edition of the catalogue just published. The credit of the highly successful result now achieved is due to Professor Flower, and his present assistants, Mr. Eve and Dr. Garson, and to the past members of the museum staff, Dr. Goodhart and Mr. Doran. Of Sir James Paget's labours, and of his inspiring influence over the labours of others in this Museum, it is unnecessary to speak; future generations will identify his name with the Museum as a worthy successor of its great founder. The visitors on Saturday were welcomed by the President, Mr. Spencer Wells, and were invited to inspect the Museum in its new dress, and many found, in some one or other of the gentlemen above named, a courteous and enthusiastic guide. In the library, Mr. Chatto, the librarian, had displayed some of the large portfolios of wood-cuts, mezzotints, and steel engravings, of which the College possesses a valuable collection, consisting chiefly of portraits of men at one time celebrated as exponents of the medical and surgical art, and even now remembered in some few instances, after the lapse of a century.

INSANITY AND UTERINE DISEASE.

THE trustees of the State Lunatic Hospital at Harrisburg, Pennsylvania, have adopted the system of appointing a lady-physician to the charge of the female department of the institution, and Dr. Margaret Cleaves, M.D., who has held that charge for two years past, and who is assisted by Dr. Jane R. Garver, has just presented a very satisfactory report on the results of her professional labours. She calls special attention to the frequent association of uterine disease with insanity, and pleads for more careful attention to this subject than has hitherto been bestowed upon it by asylum medical officers. Of eighty-five patients, admitted under her care at Harrisburg in a period of twelve months, twenty-nine suffered from utero-ovarian disease of some kind, and in a large proportion of those who so suffered, improvement in mental health followed rapidly on the treatment of the local disorder. Dr. Cleaves arrives at the following conclusions: That a large proportion of women in lunatic hospitals have some form of uterine or ovarian disease; that many of those under treatment make marked mental and physical improvement coincidently with improvement in the local condition; that in a majority of cases, however, this improvement, owing doubtless, to the long-standing of the combined physical and mental affection, only reaches a certain point, beyond which it seems impossible to make further gain. Dr. Cleaves thinks that the monotony of the lives led by many women, too frequent child-bearing, and unduly protracted lactation, are among the most prolific causes of insanity in females.

COMMENTS ON QUARANTINE.

THE comments of the *Diritto* on quarantine in Egypt, and upon the objections urged by the Chairman of the Peninsular and Oriental Company against its abuse, show how imperfectly the projected changes in the constitution of the International Sanitary Board are as yet understood. Italy, France, Spain and Austria, says the *Diritto*, must protect the International Sanitary Board. The chief need, as our readers are well aware, is to protect it against itself. The narrative recently given by us of the quarantine of the *Hesperia*, exceeding in duration the old "quaranta" of forty days, is a type of the suicidal action of the Board. It allows that the presence of the English in Egypt will insure the enforcement of proper hygienic regulations in the interior, but will not take for granted that the same results would be obtained in the more remote provinces;

without strict supervision, cholera or plague might reach Suez, from Mecca or Jeddah. Certainly it must be admitted that England cannot enforce proper hygienic regulations in remote provinces over which it has no control, but neither can the Sanitary Board. The strict supervision of pilgrim ships has long been recognised as a necessity at our Indian ports, and is not likely to be neglected at Suez. Indeed, it is by this very practice, by immediate disinfection where there is contagious disease on board, and by other appropriate hygienic precautions, that the fitful quarantine regulations of the Board, based as they have been in the past upon stray telegrams and the groundless suspicions of officious zeal, will be replaced. Surely this is an advance in sanitary science. At the recent Geneva Congress, Dr. da Silva Amado of Lisbon showed how useful as regards public health, and how prejudicial to commerce, were the quarantine regulations of that port. But the partial revision of quarantine laws is unsatisfactory, and the whole question ought to be relegated, as we have already urged, to an early Conference of the European nations.

AMATEUR PRESCRIBING.

In addition to the evils of counter-practice by unqualified persons, the public suffer from the risks of amateur prescribing by some individuals who ought to appreciate the dangerous nature of their amusement, especially when their influence with the poor gives a particular responsibility to their actions and a peculiar authority to their dicta. Clergymen, we are never slow to acknowledge, in their dealings with their poorer parishioners, are mostly to be found as the intelligent allies of the medical man; the minister of religion and the minister to the sick each respecting the other's special province, and both cheerfully aiding each other whenever their joint action can benefit the suffering. But we are afraid it is within the experience of our professional brethren that occasionally clergymen are to be met with, especially in some country districts, who plume themselves upon a smattering of medical lore, with whom a little knowledge is verily a dangerous thing, and who, moved probably by good intentions, mixed possibly with a little meddlesome egotism, conceive that they cannot go about doing good without airing their perilous possession, and going about as amateur prescribers. In most cases, these mistaken gentlemen take confidence from the consideration that the remedies they use are simple and harmless; but the disorders they aim at curing are occasionally complex and fatal, and the significant early days of disease, when time is precious, and imperfectly developed lesions are still within skilled control, are frittered away in impotent and mistaken medication. We speak plainly, but with all fairness, respect, and friendliness towards the clerical profession, to which our own body owes much. We desire clearly to point out an evil which, though happily not widespread, is yet in pressing need of distinct recognition and efficient remedy. A recent inquest ought, at least, to awaken those of our clerical brethren who need the warning to the dangers they run in using drugs which they do not understand. We refer to the sad case reported last week of a young woman who unfortunately met her death at the hands of a clergyman from a dose of what the reverend prescriber took to be ordinary oil of sweet almonds, but which proved to be the deadly volatile oil of almonds, a preparation which, as sold in the shops, is intensely poisonous, from the large amount (4 to 8 per cent.) of prussic acid it contains.

THE RISKS OF THE ROAD.

The risks of the road are among the daily perils of practitioners. Crowded traffic and new modes of conveyance have, of late years, brought increased dangers to doctors in driving their daily rounds. This is particularly the case in the suburban roads of those populous districts where tramways are to be found. The old tram-rail, with its broad groove, an inch and a half wide, is especially dangerous, and the danger increases with the depth of the groove. In driving a carriage in a direction parallel with the tramway, the tires of one or more of the carriage-wheels almost inevitably run into the grooves of the tram-rails; and, when the exigences of opposing traffic require an abrupt divergence of the carriage to either side, there comes an awkward wrench, which always gives an unpleasant jolt to the occupants of the vehicle, and which, in many instances within our knowledge, has so damaged the carriage-wheels as to render their further progress immediately impossible. A horse, too, however sure footed, is apt to fall when crossing tram-rails obliquely, being likely to come down on his side, with broken shafts as the smallest consequence, especially when damp weather has rendered the rails unusually slippery. In the most improved and more recently constructed tramways, these dangers to ordinary vehicular traffic have been in great measure removed, by the tram-rails being so laid that their upper surfaces are slightly below the level of the road, but chiefly by the groove being narrowed to a width of three-quarters of an inch, so that the tires of ordinary carriage-wheels cannot run into it. But, with these necessary improvements in roadways, which carry tramways, the evolution of the new traffic has brought fresh dangers to equestrians and travellers in ordinary vehicles, in the substitution of steam for horse-power in tramway traction. The working of steam-tramways, which is as yet only an experiment, is inspected and controlled by a Government official, and the tramway engines are usually declared to be free from smoke and noise in their work; this latter statement, however, is really true only in a qualified and comparative sense. Even when noiseless in their action, the tramway engines we have seen are ugly objects, and they are evidently regarded with terror by spirited and young horses passing near them; we are afraid their use in public roads is not free from danger to those who employ horses to aid their progression.

BRITISH MEDICAL BENEVOLENT FUND.

The annual general meeting of subscribers to the British Medical Benevolent Fund was held on January 11th, at 63, Montagu Square, the house of the Honorary Secretary, Mr. Malcolm Morris; Dr. G. C. Jonson taking the chair, in the unavoidable absence of the President, Sir George Burrows. The financial statement was submitted; and the annual report of the Committee was read by the Treasurer, Dr. Broadbent, from which it appeared that the donations during the year 1882 had amounted to £803, the subscriptions to £1,152, the former being less than in 1881, the latter more than in any previous year. The action of the Metropolitan Counties Branch of the British Medical Association, in permitting contributions to the Fund to be collected at the same time with the subscriptions to the Association, had brought a considerable accession of subscriptions. The disbursements during the year had been, in grants, the unprecedented amount of £2,134; in annuities, £938 10s.; a total of more than £3,000; and the entire expense of collecting and distributing this sum had not amounted to £132, *i.e.*, not 4½ per cent., including the printing and postage of a voluminous report, and the postage and stamps employed in the distribution of over £2,000 by Dr. G. C. Jonson, Chairman of the Committee, in weekly or monthly instalments. The expansion in the operations of the Fund, while full of satisfaction to the Committee, was a source of anxiety, as constant effort was required to obtain the means of meeting the growing demands. During the year, the expenditure had exceeded the income by more than £300. The number of annuitants on the list was now 48, of whom 11 had been elected during the year, one at the age of 93, two aged 84 and 83 respectively, two aged 78; only four were less than 70, and of these one died of joy on hearing of her election, and another only lived a month. Grants were made at the monthly meetings to 170 applicants, all of whom were in distress, some in positive misery. It was pointed out that, while from some towns large sums were sent up by honorary local secretaries, and many suitable cases for relief, from others the Fund received nothing and, for want of local representa-

tion, many poor and suffering members of the profession in those neighbourhoods must be cut off from the benefits of the charity. Dr. Fleetwood Churchill and Mr. Malcolm Morris joined the Committee; and Mr. Ed. East, Clifton Gardens, was appointed Honorary Secretary for cases, in the place of Mr. Malcolm Morris, resigned.

DANGERS OF INFECTIOUS HOSPITALS.

In a letter to a lay contemporary, Dr. J. G. Glover, of Highbury, directs public attention to the "risks of hospitals for infectious cases", arising from visitors to patients in these hospitals; and he narrates the history of what appears to him to be a case in point. Some months ago, Dr. Glover narrates, he was called to see a young woman, whom he found suffering from scarlet fever, and whom he had at once removed to the Fever Hospital, at Liverpool Road. "A short time after the case went in, I inquired of the uncle of the patient if he had heard of his niece. 'Oh, yes,' he said, 'I have seen her. She is doing well.' He then told me that he had been urged to see the patient by the nurse, and been told there was no danger—not the slightest. Another uncle, with a lady, saw the patient, and sat with her a quarter of an hour on a Sunday afternoon; a brother and his wife did likewise. After the uncle and the lady had sat a quarter of an hour in the fever ward on the Sunday they went over to Peckham (no doubt in a public conveyance), and dined with some friends. In the house where they dined, a week after, one of the children fell ill of scarlet fever." There is here a case of *post hoc*, and we are apparently asked to believe that it is also a case of *propter hoc;* but there is, at any rate so far as regards the letter we quote, no evidence to show that the occurrence was other than a mere coincidence. The child may have been exposed to many other sources of infection other than the presumed source, and the unusual length of the supposed incubation period (if we rightly interpret Dr. Glover's somewhat ambiguous English), suggests that the visitors were not, after all, the cause of the attack. There is, however, undoubtedly some risk of visitors to fever hospitals acting as the vehicles of infection, although we are inclined to believe that the risk is comparatively slight. It is important, therefore, since it is impossible, or at any rate impolitic, to prohibit all visiting, that all precautions should be taken to minimise this danger. We are sure that the Committee of the London Fever Hospital will lose no time in removing any defects that may exist in their regulations as to visitors, or any laxity that may have crept into the carrying out of these regulations. It seems to us that Dr. Glover would have been better advised had he communicated his experience to the Committee of the hospital, rather than to a lay paper. Had he adopted that plan, he would equally well have attained the object of diminishing the risks of visiting, if that were possible, while he would have avoided unnecessarily alarming the public, which is always ready to exaggerate any risks of the kind in question.

BAD FOUNDATIONS.

The rarity with which convictions are obtained against metropolitan builders for infringements of the by-laws made by the Metropolitan Board of Works, under the Metropolis Management and Building Acts Amendment, 1878, is so great, that either the builders must have acquired a large amount of virtue since the making of the by-laws, or they are not sufficiently watched. A builder at Hammersmith has lately been summoned for neglecting to put down six inches of concrete on the whole of the site of six houses, which were built upon an old cabbage-garden. The by-laws require that a layer of concrete of this thickness should be used whenever the houses are not built upon virgin soil, gravel, or sand. This, with the provision damp-proof courses, is one of the most useful of the by-laws, as it is necessary to keep out ground-air, or perhaps, sewer-gases. It is too often forgotten that the soil is full of interstices between the stones and particles of gravel, sand, or earth, which are filled with air, making up, sometimes, one-fourth, or even more, of the total bulk of the soil, the average being somewhat less than 10 per cent. The constituents of ground-air varies very much, according to the composition of the soil, which, when it is that of an old cabbage garden, ordinarily contains a considerable proportion of decaying organic matter. Variations in the barometric pressure, rainfall and temperature, alter the level of the ground air, and give it a greater tendency to escape into houses; and this is especially the case as regards the temperature inside houses, which, when high, tends to draw the air into the dwellings, to the injury of the inhabitants. The use of concrete is to prevent this, therefore the by-laws are stringent on this point. But, however great the stringency of the by-laws may be, it is necessary that there should be an equal stringency in enforcing them, otherwise they are of little avail; but we can scarcely say that a penalty of 40s., with 2s. costs, is likely to prevent builders from shirking the by-law, if possible. In this case, one inch in thickness of concrete instead of six was laid down, evidently for a blind; and yet, for attempting this most injurious cheat in six houses, the penalty was comparatively nominal. It may be, that one summons only was taken out instead of six, and that the injurious consequences likely to result from the non-compliance of the by-law were not pointed out. At any rate, it is to be hoped that district surveyors will not be content, as in this instance, to leave the case in the magistrate's hands, as it was wished only to have the law complied with. If the prosecutor had been a medical officer of health, or if the Metropolitan Board of Works had a medical officer to point out the reasons for the by-law, it is most probable that a heavier penalty would have been inflicted.

MEDICAL CORONERS.

We regret to see in the *Somerset and Wilts Journal* of January 13th, a letter signed by four medical practitioners, headed by the publisher "Advertisement", and the insertion of which has evidently been paid for, depreciating the importance of the appointment of medical coroners, and alleging that the opinion in their favour is not by any means endorsed by the profession as a whole. That opinion, however seriously entertained, is, we venture to say, founded on the slightest possible basis; and, from the knowledge which we have of the opinion of the profession on the subject, we should say there are few subjects on which any profession is more unanimous than on this. The medical profession is well aware that the coroner's court is mainly a court of inquiry into the cause of death; that it frequently happens that there is no medical evidence forthcoming before the coroner, or, when such evidence is forthcoming, it is *ex parte*, and is most advantageously considered by a person who has medical knowledge. Moreover, in every case, the coroner has to decide beforehand, from his own knowledge, whether an inquiry is, or is not, necessary. The branches of such inquiries as are held before coroners often lead into medical questions largely affecting the public welfare, on which a medical coroner, far better than anyone else, is able to charge and instruct a jury, and by his observations and comments to inform the public mind. Take, for example, the enormous number of instances of overlying children, of underfeeding children, and of neglecting children, and the great number of cases of sudden death, in which the legal coroner, destitute of information, is only too apt to overlook other doubtful suspicions or important circumstances, and greatly to undervalue the importance of the information obtained by *post mortem* examinations. The coroner's law is the simplest code of law in existence, and all that is really required of a coroner legally, is to possess necessary knowledge of the laws of evidence, which is most rapidly and easily acquired, and to know what not to do, and when not to say too much. It is most certain that, as the law of England at present stands, medical coroners are infinitely more efficient than the legal coroners, and it is of them that the evil-doer and the neglectful are the most afraid. The magistrates' court stands by the side of the coroner's court, and

it is in that court that the question of legal guilt is investigated before any prisoner takes his trial before a judge and jury. As at present constituted, the coroner's inquiry is essentially a preliminary inquiry into the cause of death, and, as such, a medical man is eminently fitted to hold the office. The technical knowledge required is essentially a technical knowledge of a medical kind. It is, indeed, conceivable that, by some not very complicated changes in the arrangement and structure of the coroner's investigation, such as many well instructed persons desire to see made in English law, a legal coroner might be the proper person to be appointed; but, before it can be accepted as an improvement upon the appointment of a medical coroner, it will be necessary to reconstruct the whole system of the coroner's investigations, so that a medical assessor should be appointed in every case, attached to the coroner's court; and that impartial and skilled medical information should be provided as an essential part of the investigation. Until this is done, we are not of opinion, and we may assert with great confidence that the medical profession is not of opinion, as these gentlemen would lead the readers of this country paper to believe, that the coroner's inquiry conducted without medical assistance, or conducted by a legal coroner, is likely, in a great majority of cases, to be nearly as efficient as an inquiry presided over by a medical coroner.

AN EPIDEMIC OF DIPHTHERIA FROM INFECTED MILK.

DR. MORELL MACKENZIE has favoured us with the following note of a severe but limited epidemic of diphtheria now raging at Hendon, which has been traced by himself and Dr. Cameron to the infection of the milk-supply. Although in some previous epidemics a strong suspicion has been entertained that milk was the vehicle of the poison, the inquiries have generally been made so long after the occurrence that it has been difficult to arrive at any certain result. In this instance, however, the facts appear to be conclusive. Fifteen persons were attacked on a single day, the disease in every case being a typical example of what French writers call *diphthérite d'emblée*. All the patients received their milk from the same vendor, and no other case occurred among the comparatively large population supplied by other dairymen. It has been discovered that the purveyor of the tainted milk, washed his cans in water derived from a brook which contains a large amount of sewage-matter. Indeed, up to the present time the whole of the Church End district of Hendon is drained by an open ditch into the Brent, and this ditch passes slightly above and in close proximity to the brook used by the dairyman in question. In the Tenterden Park district, every household made use of the tainted milk except two. One of these families had cows of their own, and the other had thrown away the milk supplied to them the day before the outbreak began, because it was thought "it looked bad". These two were the only houses in the Tenterden Park district which altogether escaped infection.

THE GENERAL MEDICAL COUNCIL.

AT a meeting of the Executive Committee of the General Medical Council, held on Friday, January 12th, official notification was received of the appointment of Dr. Fergus, as crown nominee on the General Council for five years, from November 30th, 1882; and of Dr. Pyle, as representative of the University of Durham for five years from December 12th, 1882. Various names, which had been removed from the Medical Register in conformity with the provisions of section 14 of the Medical Act, were restored, on payment of a prescribed fee of five shillings. A correspondence with the Privy Council on the subject of the proposed scheme for the reorganisation of the faculty of medicine in the University of Malta was read, requesting that steps ought to be taken to procure the recognition of the medical degree of the university as a qualification to practise medicine in other parts of Her Majesty's dominions; upon which a resolution was passed to the effect "that the General Medical Council has not the power, as the law at present stands, to do as requested, or, indeed, to recognise the degrees of any foreign or colonial university, as the qualification for registration in the *General Medical Register* of the United Kingdom, constituted by the Medical Act, 1858; but that possibly the law on this subject may before long be altered, when the claims of the University of Malta will doubtless receive due consideration at the hands of the General Medical Council." A penalty, to the amount of £4 19s. 6d., being a fine inflicted at the suit of the Liverpool Medical Defence Association, on one Lewis George Wynne, an illegal practitioner, was remitted as requested, and handed over to the Liverpool Medical Defence Association. The audited accounts of the receipts and expenditure of the General Council, the Executive and Dental Committees, and the Branch Councils, for the year ending January 1st, 1883, were laid on the table, and other routine business was transacted.

CLINICAL SOCIETY OF LONDON.

THE annual meeting of the Clinical Society was held at the termination of the ordinary meeting of the Society, on Friday the 12th instant. The proceedings seemed to lack that interest which would have been given them by an address from the retiring President—Professor Lister. And, indeed, it would seem that, in not requiring of its outgoing chief officer a yearly address, the Clinical Society fails to obtain from that official all the advantage which it might legitimately expect. A Presidential address from Professor Lister, for instance, whether it had dealt retrospectively with the Society's work of the past year, which has been full of surgical novelties, or had given biographical notices of deceased members, or had enlarged upon some question of surgical interest, could not have failed to elicit from his audience the deepest attention. However, what might have been did not take place; and the audience had to be satisfied with more humble fare. The Council's report was satisfactory; it stated that the society now numbered 264 resident and eighty-one non-resident members. It alluded to the deaths of Sir T. Watson, its first President; of Professor Pirrie, Dr. Peacock, and Mr. Clover; and stated that the capital of the society now invested exceeded £550. It spoke of the diploma of honorary membership, which had been executed during the past year; of the exhibition of specimens by card, which had been established; of the report of the committee appointed to investigate the question of hyperpyrexia in acute rheumatism; and of the recent appointment of a committee to examine and report upon the treatment of spina bifida by iodo-glycerine solution. The income of the Society during the year had been £537, which had exceeded the ordinary expenditure by £160. Dr. Duffin thought the reports of the Council and Treasurer satisfactory, and moved that they be received and adopted. Dr. Meadows seconded this resolution, which was carried. Mr. Gant, in proposing a vote of thanks to Professor Lister, said that his development of the principles of the antiseptic method of treatment was a splendid piece of scientific work, so that Edinburgh, with its great traditions, was yet too small to hold him, and that his work was now known and appreciated throughout the civilised world. Mr. Marsh, in seconding the resolution, said the society was young, and had been fortunate in securing a line of most distinguished men for its presidents not the least of whom was the brilliant surgeon now retiring. Professor Lister, in a few brief words, returned thanks, and remarked upon the satisfaction which the continued growth of the society had given him. This success, he thought, was due to the essential inherent vitality of the society itself, and to the indefatigable industry of its secretaries. Mr. Lucas and Dr. Finlay proposed votes of thanks to the other retiring officers, which Mr. Spencer Watson acknowledged. The following is the list of officers and council of the society proposed for election for the year 188 all of whom, as the result of the ballot, were declared to have been elected. The gentlemen whose names are marked with an asteri

(*) were not on the council, or did not hold the same office during the preceding year. *President*:—*Andrew Clark, M.D. *Vice-Presidents*:—W. H. Broadbent, M.D., F. W. Pavy, M.D., F.R.S., *Reginald Southey, M.D., John Croft, *A. E. Durham, George Lawson. *Treasurer*:—Christopher Heath. *Council*:—John Cavafy, M.D., W. R. Gowers, M.D., *Robert Liveing, M.D., *R. J. Lee, M.D., *F. A. Mahomed, M.D., W. M. Ord, M.D., G. H. Savage, M.D., *T. Gilbart Smith, M.D., Frederick Taylor, M.D., I. Burney Yeo, M.D., *A. E. J. Barker, R. J. Godlee, M.S., H. G. Howse, M.S., *R. C. Lucas, F. Howard Marsh, *J. H. Morgan, H. W. Page, R. W. Parker, W. J. Walsham, E. T. Watkins, M.D. *Honorary Secretaries*:—Sidney Coupland, M.D., J. Warrington Haward.

UNQUALIFIED PRACTITIONERS.

THE proceedings at an inquest held on the body of an infant at Castleford, by Dr. Grabham, coroner, are instructive, and suggest some points of great importance to the medical profession. We are glad to see that the coroner took up a decided line respecting unqualified practitioners. The case which elicited from Dr. Grabham the very strong remarks which are credited to him by the newspapers will, we trust, attract the attention of the General Medical Council. Dr. Kemp, a registered medical man, attended an infant for laryngismus stridulus; but the child becoming worse, it was taken by the parents to a Mr. Jackson, who, though practising, is not a legally qualified medical man, and had not his name on his door; the parents of the child were, nevertheless, under the impression that he was a regular doctor. Jackson treated the child for three weeks till its death, and then certified that the child died of pertussis and convulsions, and signed the death certificate "J. T. Jackson, L.M.D." This certificate was objected to by the registrar, and Dr. Kemp, who had not seen the child for three weeks before its death, properly refused to certify—hence the inquest. According to the report in the *Pontefract Telegraph*, the coroner, at the outset, said that he should call Dr. Kemp, but not Jackson, as a witness, as he could not recognise the latter as a medical practitioner, but, if Jackson thought fit, he might volunteer a statement; nor did the coroner order a *post mortem* examination, as it could, he said, throw no light on the cause of death, for, whether it were child-crowing or whooping-cough, the appearances, if any, might be expected to be almost precisely similar. The registrars were instructed not to refuse the certificates of quacks (the coroner, according to the newspaper reports, called Jackson "charlatan"), except the death was sudden, or was occasioned by violence, or occurred under suspicious circumstances. Dr. Grabham added that, beyond the expression of reprobation or censure, it was not the province of the jury to censure Jackson "for his fraud in pretending to be what he was not." We cannot help admiring the outspoken words of the coroner in this case, although we think that his zeal for his profession somewhat exceeded his prudence. Our remarks have reference to two facts connected with the inquest—the intimation that Jackson was not to be called as a witness, since he could not be recognised as a medical practitioner, and the failure to order a *post mortem* examination. In the absence of the latter, the cause of death was merely conjectural, and the verdict returned, of "death from child-crowing," might be subject to cavil. It is probable, too, that had Jackson himself, or the jury, insisted upon his giving evidence, the coroner would have been bound to receive it as to the circumstances preceding death, though not as to the cause of death. It would have been wiser, we think, to have ordered a *post mortem* examination, and so to have invited Jackson to give evidence, at the same time warning him that he would not be allowed to give an opinion as to the cause of death. We do not think any injustice was done in the case, but it is always best not only to be, but to seem, fair. The jury do not appear to have adopted the coroner's very strong hint as to censure, for we observe that they contented themselves with returning a bare verdict as to the cause of death. It remains to be seen whether any steps will be taken as to the certificate given by Mr. Jackson, "L.M.D."

ELECTRICITY V. HANGINGS.

A CONTEMPORARY, in drawing attention to a proposal of Mr. Lane Fox in a recent issue of the *Zoophilist*, to employ a form of apparatus known to electricians as the micro-farad condenser for the destruction of worn-out horses and domestic animals, takes the opportunity of drawing attention to the barbarities attending the present use of the long drop in judicial executions; and also suggests that "far less contrivance and money than were expended on the Peltzer case would suffice to arrange a murder by electricity, "which would in all respects resemble a death by the visitation of God," by which we presume is meant a death from natural causes. Murder is so much a fine art, or at all events an application of science, in the present day, that this suggestion—perhaps not a novel one—might well have been spared, even in the pages of a medical journal, where it is little likely, we hope, to catch the eyes of would-be murderers. We believe that should murder by electricity ever be practised, the resources of medicine and science will prove equal to the detection of the agent employed. The accidents that may be expected to result from the extension of electric lighting, will doubtless soon afford medical men the opportunities of becoming more familiar with the appearances resulting from death from electricity. Mr. Lane Fox's proposal is a humane one, but we question whether it will meet with serious recognition. It is applicable to horses and pet animals only; and is inapplicable to animals the flesh of which is to be used for food. The plan is too complex, and involves, in killing a horse, the following elaborate preparations:—the fitting of an iron plate into the stable-floor, and the connection of this with the negative pole of a condenser formed of alternate layers of tin-foil and tissue paper soaked in paraffin. The condenser is then to be charged from an ordinary coil to its full capacity, so as to be capable of producing a one-inch spark. The animal to be killed is to have its head, feet, and legs sponged with salt water, and is then to be placed on the iron plate, and touched on the head by a brass knob attached to an insulating handle, and connected with the positive pole of the condenser, when it at once falls dead. Death is asserted to be painless. Probably it is so; but of this we know, and can know, nothing. Our readers will perhaps be of opinion that by this method it would be more troublesome and costly to kill a worn-out cab-horse than to hang a criminal; not to speak of the operation being by no means devoid of danger to the operators. The feasibility and advisability of judicial executions being carried out by means of electricity is one, nevertheless, which is well worthy of consideration; and certainly, now that executions take place in private, and the criminal at the moment when the drop falls becomes immediately removed from the view of all but the executioner, there are additional reasons why the existing mode of carrying out the dread capital sentence of the law in Britain should be revised. Not to go back to earlier atrocities, the scenes at the execution of the man Taylor, at Wandsworth, and of Myles Joyce, at Galway, respectively, are reported to have been of the most revolting description. It would appear that the long drop (the length at present used is stated to be 9 feet) does not bring about instantaneous death; and causes, sometimes, perhaps, prolonged and unnecessary suffering. It is, then, well worth consideration whether the use of electricity, or the simpler mode of strangulation recently proposed by Dr. Hammond, of New York, should not be substituted for the present system. Dr. Hammond's method has the advantage over the electrical, that we have the personal voucher of a man of his high reputation that the sensations of the strangled man, up to the moment when unconsciousness supervenes, are rather pleasurable than painful. So long as execution is required by our law, it behoves the authorities to carry out the sentence in a manner as little revolting, and as painlessly, as is possible.

ON SUNSHINE AND FOG AS AFFECTING VITAL STATISTICS.

THE unusual absence of sunshine during a long portion of the month of December, with considerable alternations of temperature, has been accompanied by very general complaints of neuralgia and rheumatism, as well as of languor and general discomfort. The absence of sunlight during December was very marked. Thus, between November 29th and December 9th, the sun shone on two days only, and for the short period of 4.3 hours; whilst from December 9th to the 18th, it was visible on two days only, and shone for 3.8 hours; making a total of 8.1 hours in twenty days, out of the 156.6 hours in which he was above the horizon. During the four days, December 19th to the 22nd, there was a reasonable amount of sunshine, viz., 10.4 hours out of a possible 30.8 hours. From December 23rd to January 1st, 1883, inclusive, we had only 0.1 hour of sunshine out of a possible 77.8 hours. There were also several unusually cold and foggy days, which were much worse than the merely dull and misty weather. During a considerable portion of this period, the death-rates were unusually low for the time of year, having been 23.0 per 1,000 inhabitants, or below that figure, except during two weeks, when fog prevailed, when it reached 26.8 and 27.1 respectively. In the early part of the year, *i.e.*, during the fortnight ending January 21st, there was an almost similar absence of sunshine, as the sun shone for only 4.8 hours, out of a possible 115.6 hours, when the death-rates were only 23.3 and 22.8 per 1,000, which, especially the latter, was below the average. Again, in August, 1882, the sun was visible for only 123.5 hours, out of a possible 411.4 hours, and the mean mortality was only 1.92 per 1,000, which was about 2.5 per 1,000 below the average for the month. In July, 1881, the sun shone during a fortnight for 124.0 hours, and was attended with a high temperature, when the mean death-rate rose from 24.7 to 26.5 and 27.2 for the two succeeding weeks. They were followed by a decreased death-rate (falling as low as 20.1), when the sun shone for only 117.4 hours during the four weeks ending August 20th. In the latter end of July, and during the whole of August, there was a similar absence of sunshine during three weeks, when the death-rates were below the average; whilst in the other three weeks there was much more sunshine, and consequently higher temperature, when the death-rates rose from 20.5 to 24.9 per 1,000. Examples of excessive sunshine in summer, accompanied or immediately followed by high or greatly increased death-rates, are very numerous. The excess of deaths under these circumstances are, as is well known, chiefly caused by diarrhœa, which always prevails with the high temperature that is coincident with excessive sunshine in July or August. When absence of sun is accompanied, in winter, by an unusually high temperature, in consequence of the cloudy state of the sky and prevalence of warm winds, the death-rates are always low; but when there is a low temperature, with absence of sun, high death-rates prevail. Thus the small amount of sunshine during the first fortnight of December in last year, with an unusually low temperature, was followed by a rise in the death-rate from 22.4, to 26.8 and 27.1 per 1000, owing chiefly to the great number of deaths from acute diseases of the lung, which rose from 350 to 553 in a week. There certainly was some fog during this period, to which some of the increase was due. The effect of fog in producing an excessive mortality, was very marked in the latter part of January and first fortnight in February last year, 1882, when a decrease in the mean temperature from 43.9° Fahr. to 36.2° Fahr., with occasional fogs, was followed by an increase in the death-rate from 22.8 to 26.4 and 27.1. After four consecutive foggy days, with a low mean temperature (about 3.5° below the average), early in February the death-rates rose, for two weeks, to 35.3 and 29.3 per 1000 inhabitants. This mortality was, however, much below that produced by the great fogs of January 1880, when the low weekly mean temperatures of 29.7° and 29.2° prevailed, and the death-rate reached the excessive sum of 48.1 per 1000 for the week ending February 7th, and 35.5 for the week ending February 14th. During this last named week, the mean temperature rose to 38.8° Fahr., and the fogs had disappeared; but their effects continued, although, no doubt, a considerable proportion of the deaths registered during this week had occurred during the preceding week. The deaths from inflammatory diseases of the lungs, rose from 458 in the week ending January 24th to 688, 1,445, and 935 in the three succeeding weeks. These fogs alternated with sunshiny days, as, in spite of the fogs, 46 hours of sunshine were registered in the three weeks ending February 14th. In the months of April, May, and October, there does not seem to be any definite relation between sunshine and death-rates. These comparisons show that, in summer, excess of sunshine is usually accompanied, and speedily followed, by high temperatures and excessive death-rates, whilst diminished sunshine is usually coincident with temperatures below the mean for the time of year, and comparatively low death-rates. The death-rates, however, do not absolutely correspond with the temperature and amount of sunshine, as they appear to be modified by the direction and hygrometrical state of the wind. A comparative absence of sunshine in winter is not always accompanied by low temperatures, and is then usually concurrent with death-rates below the average for the time of year. Slight mists and absence of sunshine, in winter, are usually accompanied by moderate death-rates, as they are usually attendant on winds blowing from a warm quarter, and holding a large quantity of aqueous vapour in suspension, thus preventing excessive radiation from the earth, which is one of the causes of extremely low temperature in this country, and, consequently, of high death-rates. The excessive cold of January 1881, which was almost unique, probably arose from this cause. Bright sunshiny days in winter, in consequence of the comparative absence of cloud, are frequently associated with excessive terrestrial radiation in the night, and are, therefore, followed by unusual cold.

EXTENSIVE DIFFUSION OF SYPHILIS TRACED TO A MIDWIFE.

DURING the past few weeks, Dr. Hime, of Sheffield, has been engaged in the investigation of a most painful, and, fortunately, unparalleled misfortune, so far as this country is concerned. It came to his knowledge early in December that a number of married women, only recently confined, all of whom had been attended by the same midwife, were suffering from a strange eruption, and other symptoms of venereal disease; very similar in all the cases. Dr. Hime at once set to work to investigate the matter; and the result is that, up to the present, the cases of about 30 married women have been thoroughly examined, all of whom have been syphilised. All of these women have been attended by the same midwife within a period of three or four months, and all have had secondary syphilis, in some cases of a very severe type. Nine husbands have been inoculated by their wives, and two infants have suffered. With praiseworthy energy Dr. Hime brought the calamity to the notice of the Health Committee, and, on his advice, the Committee determined to undertake the prosecution of the midwife, on behalf of the sufferers. Three cases were selected on which to prosecute, two being married women and one an infant, suffering from secondary syphilis, the primary sore having been situated at the navel, where it caused extensive and deep ulceration. The case was brought before the stipendiary magistrate at Sheffield, and ended in the defendant's being committed for trial at the assizes at Leeds next month. The charge against her is for "wilfully and maliciously doing grievous bodily harm." The stipendiary, from the beginning of the case, expressed his opinion of the legality of the proceedings, assuring counsel for the prosecution that he need not take trouble to establish precedent for the case, as he felt satisfied that, if a *primâ facie* case were made out, the defendant ought to be sent for trial. The energy with which Dr. Hime has worked up the case is most praiseworthy, the difficulties with which it was surrounded being numerous and complicated. The importance of the case is manifest, and its gravity

equally impressive, considering the interests of the number of sufferers.

THE GOVERNMENT AND THE METROPOLITAN ASYLUMS BOARD.

SOME little time ago, the Metropolitan Asylums Board endeavoured to obtain from the President of the Local Government Board some information respecting the probability of early legislation in accordance with the recommendations of the Royal Commission on Infectious Hospitals. The reply obtained from the then President, Mr. Dodson, was wholly unsatisfactory, and in consequence of this the managers determined to appeal to the Prime Minister himself. At their last meeting, on Saturday, January 6th, the Board had under consideration a report on the steps taken by the General Purposes Committee to interest the Premier in the question. This report was brought up by Sir Edmund H. Currie, who at the same time presented for approval a letter addressed to the Prime Minister by the Chairman of the Committee. The letter requested Mr. Gladstone "to receive a deputation from the General Purposes Committee of the managers, with a view to their explaining the difficulties which prevent the managers from performing the duties imposed upon them by Parliament, or from carrying out the recommendations of the Commissioners." In support of this application it was pointed out that, during the greater part of the existence of the Board, "the managers have been persistently harassed and impeded, and have incurred heavy costs on behalf of the ratepayers in the performance of their duties, by legal proceedings, followed in some instances by injunctions, and by threats of proceedings, whenever and wherever they have endeavoured to carry out the intentions of the Act, by providing hospital accommodation for the sick poor;" that while the Act imposes certain duties on the managers, it does not give them sufficient power and freedom to carry out these duties; and that through the neglect of local boards and vestries, the managers have had thrown upon their hands the task of providing accommodation not only for paupers, but for patients of the non-pauper class, suffering from infectious disorders. The letter further pointed out the importance, and the pressing nature of the question, and the unsatisfactory nature of the replies hitherto received from the Local Government Board. In moving the adoption of the report, Sir Edmund Currie declared that no question could be more worthy the great abilities of the new President of the Local Government Board, and expressed a hope that he would take the matter in hand. After some remarks from the Chairman, who deplored the attitude apparently taken up by Sir Charles Dilke, in one of his recent electoral addresses, that the question should be relegated to the "New Government of London," the letter was unanimously approved. No reply has yet, we believe, been received from Mr. Gladstone, but we trust that, when it is received, it will be found to express more practical sympathy with the managers than has been bestowed on them by the department whose duty it is to advise them. The question is undoubtedly of vast importance to the Metropolis, and all parties, we are sure, will be ready to admit its importance. The present time, moreover, is particularly favourable for a satisfactory solution. The panic which was created by the epidemic of small-pox of two years ago has now subsided, and there is little fear, therefore, that any rash measures will be taken or even suggested. At the same time, the unsatisfactory nature of things in the difficulties and embarrassments of the Asylums Board, and their consequent inability to grapple successfully with the epidemic so clearly demonstrated on that occasion, must be still fresh in men's minds. Moreover, the elaborate report of the Royal Commission, presented to Her Majesty in July of last year, has laid down the lines on which it would be necessary for the Legislature to act. There should not, therefore, be any difficulty in grappling with the question—a question which is, besides, in no sense a party one. Theoretically, perhaps, it may be desirable that the question should be dealt with by the forthcoming Municipal Government of London, by the Bill which is to create that Government. Practically, however, there are urgent reasons why some part of it at least should be taken in hand *at once*. There seems no reason why, leaving the question of its alternate constitution to remain open for the present, the Board as at present constituted should not be extricated from its difficulties, and enabled to perform the work set before it by a short Bill enlarging the scope of its operations, and giving it the necessary additional powers. A short Bill embodying these changes could surely be passed through Parliament with but little opposition, and it would leave unprejudiced the question of the future relation of the Board to the "New Government of London." We trust that something of this kind will be done. We hope, therefore, that the managers, who are keenly alive to the importance of the question, and who are seriously anxious to overtake their duties, will succeed in impressing on the Government the absolute necessity for immediate legislation.

SCOTLAND.

THERE is at present rife at Paisley, amongst horses, a very bad type of influenza, popularly known as "pink eye." The affection renders the animals weak a few hours after they are attacked; and, if they are kept at work while suffering from it, the complaint is frequently fatal. There are indications of the malady spreading to the surrounding country districts, where several farm-horses are already laid up with it.

AT the meeting of the Natural History Society of Glasgow, held on the evening of the 11th inst., Dr. Freeland Fergus exhibited, under the microscope, two slides of the human parasite *trichina spiralis*. These parasites had been found in the muscles of a man who had died in the Royal Infirmary, Glasgow; although, in the present case, the *trichina* was not the cause of death. The specimens were of interest, as it is the first time that this parasite has been found in a human subject in Glasgow.

BEQUEST TO THE EDINBURGH ROYAL INFIRMARY.

MR. THOMAS LAING of Emhouse, West Calder, has left the residue of his estate, which amounts to over £30,000, to the Edinburgh Royal Infirmary.

EDINBURGH HEALTH LECTURES.

THE lecture in connection with the Edinburgh Health Society was delivered last Saturday by Dr. Argyll Robertson, who chose for his subject "The Eye; the Organ of Vision." In the lecture, which was listened to with great interest, Dr. Robertson directed attention to the question of colour blindness, and its distribution between the sexes.

EDINBURGH PUBLIC HEALTH COMMITTEE.

AT a meeting of the Edinburgh Public Health Committee of the Town Council, held on Tuesday, various matters affecting the health and comfort of the citizens were considered, among the principal being the regulations to be adopted for the proper management of public burying grounds. Several nuisances, in the shape of unsanitary houses, were considered, and in one case it was decided reason must be shown by the several proprietors, why the tenement should not be pulled down.

MEMORIAL TO THE LATE DR. FYFE JAMIESON.

THE friends of the late Dr. Fyfe Jamieson, Demonstrator of Anatomy in the University of Aberdeen, have erected a monument over his grave in Old Machar Cathedral, Aberdeen. The memorial was

subscribed for by his pupils, friends, and fellow-students. At the same time, a medal was subscribed for, to be given annually in the class of anatomy, and to bear Dr. Jamieson's name.

SMALL-POX AT NEW CATHCART.

An outbreak of small-pox has just taken place at New Cathcart under peculiar circumstances. A local firm of paper-makers received, in December last, a quantity of rags from Kœnigsberg, *viâ* Leith. The workpeople in their employment have been engaged in cutting them up recently, and, within the last few days, four of them have been seized with small-pox, and some others have sickened with what it is feared will turn out to be the same disease. Remedial measures were at once adopted by the sanitary authorities to check the further spread of the epidemic, and all the patients were sent to the hospital either at Belvidere or Lovan, as the parish has no hospital accommodation.

PRESENTATION TO DR. MANSON OF BANFF.

Dr. A. J. Manson of Banff was entertained, a few days ago, at a public banquet in the council chamber there, and presented with a handsome testimonial in recognition of his long and valuable services to the community as a medical practitioner. The Doctor was presented with a sum of five hundred guineas and a silver tea-tray. The number of subscribers exceeded three hundred. Dr. Manson's name has long been a household word in the north of Scotland, where he has practised for nearly half a century, during which time his uniform kindness, courtesy, and sympathy have endeared him to all classes of the community. In making the presentation, Sheriff Scott-Moncrieff mentioned that Dr. Manson was amongst the first to make use of cod-liver oil.

DUNDEE UNIVERSITY COLLEGE.

We observe that Miss Baxter, and the trustees of the late Dr. Baxter, have each presented £10,000 to the Dundee University College with the view of still further extending its usefulness and increasing its efficiency. It seems probable that Miss Baxter's handsome gift will be expended in providing an extensive and thoroughly equipped laboratory in connection with the College, the want of which has been apparent from the first, and has for some time seriously engaged the attention of the trustees. Dr. Baxter's bequest is very properly to be devoted to the endowment of a law chair to perpetuate his memory. These munificent gifts should materially help to insure the ultimate success of the college in the new career on which it is starting.

GLASGOW MATERNITY HOSPITAL.

The medical report of the Glasgow Maternity Hospital from November 15th, 1881 to November 15th, 1882, shows that, during the year 135 primiparæ and 121 multiparæ, making a total of 256 women, were delivered in the hospital. There were 5 deaths of mothers. There were 15 children still-born. Forceps was used eleven times. Delivery was once effected by craniotomy, and twice by turning There were no deaths in the hospital from septic or epidemic disease. The mothers' deaths were, one from cardiac and kidney disease, one from dropsy, a third suffered from mental shock, chronic ill-health, and desertion, the fourth had an old ovarian abscess which burst during labour and gave rise to fatal peritonitis, and the fifth succumbed to exhaustion after placenta prævia, ten days after delivery. The physicians, Dr. Hugh Miller and Dr. Samuel Sloan, insist upon careful watching of the patients by day and by night, supplying the patients with thoroughly disinfected clothing and linen, removing all soiled clothes at once from the wards, and the prevention of any fermentation in soiled clothes by cleansing them without delay. It may be stated that the hospital is a new structure.

IRELAND.

Dr. William J. Smyly, a graduate in medicine of the University of Dublin, and a Fellow of the Royal College of Surgeons in Ireland, has been appointed Gynæcologist to the City of Dublin Hospital, in the vacancy caused by the resignation of Dr. Macan.

An Amateur Concert on behalf of the funds of the Women and Children's Hospital, Cork, took place last week and was very successful, a considerable sum having been obtained for a very deserving charity.

DUBLIN HOSPITAL SUNDAY FUND.

The returns of the collections held on the 12th of November last for Hospital Sunday have now been published, and we learn that a total was obtained amounting to £4,174 6s. 10d. This sum is an improvement on the returns for 1881 by upwards of one hundred pounds, and will be divided among the sixteen charitable institutions which participate in the Fund. We may add, that the grants are allocated in proportion to the subscriptions received, and the work done by the various hospitals.

ROYAL UNIVERSITY OF IRELAND.

Examinations for the degrees of Doctor in Medicine and Master in Surgery, and for the Diploma in Obstetrics, and also for the Second University Examination in Medicine, will be held next June. The Standing Committee had under consideration, last week, a memorial from the matriculated women students of the university, praying that arrangements may be made to accord them facilities for receiving instruction from the fellows of the university. The memorial has been referred to a special committee for consideration and report.

HEALTH OF CORK.

For the four weeks ending December 30th, the total number of registered deaths amounted to 189 (including 40 deaths in the workhouse, and therefore outside the borough), and 144 births took place. The annual death-rate, per 1000 inhabitants, gives a total ratio of mortality of 31.2; but, deducting those who died in the workhouse, the urban rate will then stand at 24.0; from infectious diseases 0.3; an infant mortality of 1.0; and a birth-rate of 23.0. The urban mortality has been somewhat increased from the previous return, probably due to the inclement weather which prevailed. A marked diminution has, however, taken place in the amount of infectious diseases generally in the city.

COOMBE LYING-IN HOSPITAL, DUBLIN.

The fifty-fourth annual meeting of the friends of this charity was held on last Monday, presided over by the Lord Mayor. During the past year 608 women were treated in the lying-in department, and 131 in the wards for diseases of women, while 2,020 women were attended in their confinements at their own homes. The mortality among the women confined in the institution did not exceed 1.1 per cent.—a low average when it is considered that several of the cases were of a very serious kind. Owing to various causes the account close with a balance against the institution of £1,154. During the year a donation of £1,500 was received from a lady who wished to erect a memorial to her husband, and the board determined to place a tablet in the hospital commemorating the gift, and to name one of the wards the "Robert Tighe Ward." The donation has been permanently invested for the benefit of the charity, and the board appeal for funds to wipe off the debt they have incurred.

SUICIDE BY HYDROCYANIC ACID.

On Monday evening, January 1st, a young lady, aged 23, committed suicide, in Belfast, by taking a quantity of hydrocyanic acid. She was living at lodgings, and another young lady was sitting with her at the time she took the poison. She was noticed to be in a depressed state of mind, and immediately before the act was making inquiries of her friend (a not unusual thing for her to do when in trouble) as to the quantity of several poisons sufficient to cause death. She then took a little bottle out of her pocket, emptied it into a cup of milk and drank it off. Soon after, she became very pale, and fell on the floor. A medical man was in immediate attendance, and gave an emetic of sulphate of zinc, and this not acting, one of mustard; neither had the desired effect. The stomach-pump was then used, and coffee was injected into the stomach, and stimulants into the rectum. Her breathing at first was very much embarrassed, "and she was frothing at the mouth," and her circulation was very weak. She rallied after a time, but again became weak, and died about three and a half hours after taking the poison. The duration of life in this case appears to have been longer than usual in fatal cases of poisoning by prussic acid. Dr. Sidney Ringer says: "If life can be supported for half an hour after a poisonous dose, the patient is generally safe." The exact quantity taken is not known, but half an ounce was purchased by her at the beginning of November for toilet purposes, and whether any of it had been used in the meantime is difficult to say. She was a frequent contributor to the daily papers, and was the author of several novels of considerable merit. The income from this occupation was, however, rather precarious, and it is believed her suicide was due to this cause. The coroner and jury strongly animadverted on the conduct of the druggist who sold her the poison. He was, however, within the Act, as the lady was personally known to him, and he took a note of her name and address, and the purposes for which the poison was bought.

EXTENSION OF THE EXAMINATIONS OF THE COLLEGE OF PHYSICIANS.

We understand that a suggestion is under discussion at the College of Physicians, for instituting special examinations on the subject of State medicine, and granting certificates of proficiency in State medicine to registered practitioners, similar to those at present granted by various Universities and by the Apothecaries' Society of London. A proposal is also under consideration, and will probably be submitted at an early date to the Fellows, for instituting a similar examination and granting certificates for proficiency in psychological medicine.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

Meetings of the Committee of Council will be held on Wednesday, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

The list of acknowledgments of the replies to the inquiry concerning the Communicability of Phthisis has been received. It is unavoidably postponed, owing to want of space in the JOURNAL of this week. Five hundred replies were received up to Tuesday, January 16th. It is hoped that many of those who have not filled up and forwarded their inquiry sheet, will yet do so. The sheet will be found folded in the JOURNAL of January 6th, 1883.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH OF IRELAND BRANCH.—The annual meeting of the Branch will be held in the Royal Cork Institution, on Saturday, the 27th instant, at 4.30 P.M. Members wishing to exhibit pathological specimens, read papers, etc., will intimate their intention to the Honorary Secretary at once. It is hoped that Dr. Mahomed, Honorary Secretary of the Collective Investigation Committee, will attend and give an account of the work of his Committee.—T. GELSTON ATKINS, B.A., M.D., Honorary Secretary, January 8th, 1883.

BATH AND BRISTOL BRANCH.—The third ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, January 24th, at 7.30; J. K. Spender, M.D., President. The following communications are expected. 1. Notes on Cases of Placenta Prævia: A. E. Aust Lawrence, M.D. 2. A Case of Successful Excision of the Shoulder-Joint (the patient will be exhibited): T. Chalmers Norton. 3. A Case of Uterine Fibroid removed by Abdominal Section: F. Parsons. 4. A Case of Removal of Encysted Osteoma of Neck: F. K. Green.—E. MARKHAM SKERRITT, R. J. H. SCOTT, Honorary Secretaries.—Clifton, January 1883.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of the Branch will be held on Friday, January 26th, at 8.30 P.M., at the house of J. Wallis Mason, Esq., 1, Osnaburgh Terrace, Regent's Park. Dr. Felix Semon will give an address on the Diagnostic Importance of Paralyses of the Glottis-Openers.—G. W. POTTER, M.D., Honorary Secretary, 12, Grosvenor Road, N.—January 17th, 1883.

DUBLIN BRANCH.—The sixth annual general meeting of the Dublin Branch will, by the kind permission of the President and Fellows, be held on Thursday, January 25th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The Officers and Council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. Banks, President-elect, will deliver the annual address; and Dr. Mahomed, Assistant-Physician to Guy's Hospital, has kindly consented to attend the meeting, and will explain the objects of the Committee of the Association (of which he is Secretary) for the Collective Investigation of Disease, and the functions of the Local Subcommittee of the Branch recently formed in connection therewith. The annual dinner of the Branch will be in the College Hall, at 7 P.M., on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 23rd instant, 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—GEORGE F. DUFFEY, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin, January 8th, 1883.

SPECIAL CORRESPONDENCE.

ROME.

The Bacillus Malariæ.

No further attempts were made last autumn in the *post mortem* rooms at the Santo Spirito Hospital, or in the Pathological Laboratory, by the present professor of morbid anatomy, Dr. Marchiafava, to settle the still undecided question of the existence of a specific bacillus malariæ. It will be remembered that Professors Tommasi-Crudeli and Klebs made their first researches on the air and soil of notedly malarial localities, exposing the latter to a series of artificial cultivations, in appropriate media in the laboratory, and thus isolating the micro-organism, and which they figured and described as the bacillus malariæ. They then tested their discovery by noting the effects of the injections of liquids thus carefully prepared, and containing the bacilli, into rabbits. A micro-organism, similar in appearance to that to which they gave the name of bacillus malariæ, was soon afterwards found by Marchiafava in the spleen, medullary canals, blood and lymph of patients who had died of "perniciosa" in the Santo Spirito Hospital; but injections of the blood of fever-patients into the trachea and peritoneal cavities of dogs gave only indecisive results. Further, it was shown that the blood of patients

with malarial attacks, contained no bacilli when the fever was at its height, or in the remission stage; although numerous spores were then seen which, when cultivated, developed into rod-like bodies, resembling in all respects the bacillus described by Tommasi-Crudeli and Klebs. On the other hand, when examinations of the blood of such patients were made during the cold stage, true spore-bearing bacilli, were frequently, though not invariably, found. Thus the matter rests at present, obviously still *sub judice*. In the meantime, Professor Tommasi-Crudeli proposes to try the effect of injecting the bacillus cultivation in the same way as formerly, in soil taken from a malarial locality, into rabbits which have been subjected to a prolonged treatment by arsenic, to find out whether the animals thus treated offer any resistance to the action of what he regards as the specific malarial virus. He has often maintained that if arsenic were thus given to those exposed to malarial influences, it would act as an effectual prophylactic; and the subject is one of much importance in reference to the colonisation and cultivation of the Campagna, or other malarial districts. Your readers will be kept informed of the results of these experiments.

CORRESPONDENCE.

FUNGOID POISONING.

SIR,—I must beg for space in your pages for a further discussion on my case of fungoid poisoning, as published in the JOURNAL of November 25th. I require this, in consequence of the remarks of Dr. Thomas Stevenson on it, on p. 1120 of the number for December 2nd. He says: "I add a statement of additional facts, taken from official documents, as a supplement to Mr. Jackson's article." And from these he too plainly draws his inference, that I am wrong in my investigations of the case; that there was no inflammation of the stomach. His own words are: "I may add that the stomach itself, as well as the intestines, not much decomposed, were, to all appearance, perfectly normal, and free from congestion or any inflammatory products." There was no appearance of fungi, and the stomach was perfectly normal. Such are Dr. Stevenson's statements; and I must here express my astonishment at such statements; seeing, as I see, the purple-red blotching of the stomach *in situ*, fearfully visible through its peritoneal covering; and also the purply red blotched condition of the mucous lining of the viscus when opened. I am amazed at the failure of microscopic research to discover some remnant of such a condition. But anon, a sufficient explanation will be shown when we examine Dr. Stevenson's own evidence before the Hull stipendiary magistrate.

Dr. Stevenson states, in examination (copied from the *Eastern Morning News* and contemporary papers): "The first bottle, No. 2, contained a mass of brown stuff, about the size of an unshelled walnut, with innumerable maggots on the whole, forming an unrecognisable mass. On washing it, he found it to be the stomach of a young child. After being washed, it had the appearance of a normal or healthy stomach a little decomposed. The mucous coat was eaten away by maggots." And, from his examination of the above "unrecognisable mass, mucous coat eaten away by maggots", Dr. Stevenson ventures to dispute my relation of facts. On the integrity of the mucous coat rests the whole fabric of the case. Dr. Stevenson evidently never saw this structure; "it was eaten away by maggots".

In my necropsy, I had full opportunity of a fair investigation, and I have but related what I saw. The mucous membrane, as I have said in my paper of November 25th, was easily detached from its other coats; the result of an intense inflammatory action. We may remember that it—the mucous membrane—is the immediate recipient of any substance, poisonous or otherwise, that enters it; that it is the first to show inflammation; and that any serious destruction of its structure causes death; and this result might take place before any serious alteration had occurred in the muscular coat, unless, indeed, in mineral poisoning, which would be more searching.

The peculiarity of the inflammation; the purple red blotched appearance in my case; the dusky red, highly congested, intensely inflamed condition of the case reported in the *Lancet* of June 28th, 1856; the large spots of inflammation and gangrene in the cases related in Hooper, point prominently to the poison causing it; and this poison let us now discuss.

Dr. Stevenson said, in his examination before Mr. Twiss, the Hull stipendiary magistrate:

"There was no portion of fungi. He was confident that, if the child had been poisoned by fungi, he would have found portions of the fungi in the stomach or intestines. He found no portion of fungi whatever."

I must again refer to my paper of November 25th. I say, "On removing the stomach from the body (having ligatured each end), I opened it with scissors through its lesser curvature, and displayed its contents, and which appeared to be nearly half a pint of mushroom, apparently what would result from an old black-gilled mushroom."

Two pieces of the fungus were of the size of a two-shilling piece, and there were betwixt twelve and twenty pieces more of the semi-white skin and flesh of the same intermixed in the dark grumous mass.

I cannot admit a doubt of their character; they required no microscopy. Microscopy is all powerful in assisting the human eye, when the object examined is small and anatomic; but here, in this case, the pieces of fungus were sufficiently large to enable anyone to give them their name. In confirmation of my opinion of their character, I may state that our superintendent of police, his men, and all the coroner's jury, examined the contents, the superintendent having provided two pencil sticks for the purpose; and those who did express an opinion declared them to be mushroom, or very like unto it.

Is it necessary to dilate further on this case of fungoid poisoning, which, I hope I have made clear, is not altogether problematical, notwithstanding microscopic research and hastily expressed opinions, and furthermore the ambiguity thrown over the case by no evidence being forthcoming as to how and where the unfortunate child obtained the fungus?

The testimony of the medical gentlemen, Drs. Thompson and Sherburn, who made the second necropsy, I hold in much respect.

Dr. Stevenson, in reporting their examination, writes: "The lungs were considerably emphysematous." I notice this, as it does not appear in the printed examination of Drs. Thompson and Sherburn, in the *Eastern Morning News* or the *Lincolnshire Times*. They considered that the death of the child might have resulted from obstructed respiration. I can assure them that when I examined the lungs (they looked so healthy that I did not incise them), there was no emphysema.

If I am not trespassing too much on your space, I would say, in relation to the opinion of death by strangulation, that I think it could not be so; the state of the lungs, the face, the eyes, the mouth, all point to the contrary. I would even infer that, if the mark around the neck of the deceased child was made by a cord during life, death did not result from strangulation, but that the child died from acute gastritis—before strangulation was effected.—I am, Sir, yours obediently, T. JACKSON.

Welton, December 4th, 1882.

A NEW MODE OF AFFORDING PERMANENT RELIEF TO INTRACTABLE CHRONIC CYTSTITIS, AND TO CONFIRMED PROSTATIC RETENTION OF URINE.

SIR,—In last Saturday's BRITISH MEDICAL JOURNAL I have read a communication by Sir H. Thompson on "A new mode of affording permanent relief to intractable chronic cystitis and to confirmed prostatic retention of urine." I feel sure that Sir H. Thompson is not aware of the fact that the operation, described by him as a "new mode," has for years been practised, and published by me, for the relief of various forms of chronic cystitis. A long time ago I read a communication before the Clinical Society on this subject, and exhibited the patient whom I had cured by this very operation. My paper will be found in the Society's *Transactions*, and an abstract of it appeared, I believe, in the various journals.

The following extracts from my second Lettsomian Lecture will show the nature of the operation, together with its *raison d'être*, results and indication, practised by me for the relief of inveterate chronic cystitis occurring in men obliged to use a catheter.—"I think that future experience will prove that the incisions of lateral lithotomy are unnecessarily severe for the purpose, which can be equally attained by external urethrotomy, with which operation I have contented myself, and allowed all the urine to run away through a soft tube," . . . . "the object being to treat the bladder as a suppurating sac, and give it physiological rest." . . . . "It is wonderful to see the immediate relief which such an operation affords a patient who has, perhaps, been tormented for years, and has not known a good night's rest, sleeps soundly the night of the operation having lost all his pain." . . . . "I consider that, wherever

auto-catheterism is becoming increasingly difficult and frequent, the time for action has arrived."—*Lancet*, April 17th, 1880, p. 593.—I remain your obedient servant, W. F. TEEVAN, B.A., F.R.C.S.

12, Christchurch Road, Folkestone, December 9th.

THE FEEDING OF INFANTS.

SIR,—I am sorry to see that you give the weight of your editorial approval to condensed milk as a food for infants.

This subject was very fully discussed in the JOURNAL in 1877, and again in 1879, and the consensus of opinion and authority was decidedly against the use of ordinary condensed milk as a substitute for human milk in the feeding of infants, M. Otto Hehner's analysis showed that the condensed milk usually sold is of such a composition that, if diluted so as to bring the other solids into due proportion, it contains far too much sugar to be wholesome food; if, on the other hand, the further diluted, its nutritive value is proportionately diminished. He also showed that, when diluted according to the directions on the labels, its nutritious value was much below that desirable for infants' food.

From my own experience, I can endorse all that was then written against condensed milk. Infants fed on it are starved, and generally suffer from diarrhœa. No doubt, instances may be given of children who have thriven upon it; for, as Professor Jacobi says, there is no food or method of feeding infants, upon which some do not thrive.

I quite agree with you as to the desirability of eliminating most of the infant's foods now in use. The best and most generally useful food, is a mixture of equal parts of cow's milk and barley-water; or where there is constipation, of weak oatmeal-tea. When there is diarrhœa or gastric irritability, the milk should be diluted with lime-water. In the rare cases of inability to digest milk so diluted, it may be diluted with veal-broth, or the latter may be given alone for a time.

ROBERT SAUNDBY, M.D., Edin.

47, New Hall Street, Birmingham, January 15th, 1883.

DR. STEELE'S CASE OF EXTRA-UTERINE OR MURAL PREGNANCY.

SIR,—In your number of November 18th last, you reported a case read by Dr. Steele of Liverpool, which he called "Intra-mural Pregnancy" Mr. Lawson Tait taking it as a case of extra-uterine pregnancy, with comments on it as a "very good instance of the do-nothing policy" as adopted by Dr. Grimsdale and Dr. Steele. Dr. Steele, in his rejoinder of December 9th, says that this policy was not initiated by him, but by Dr. Braxton Hicks and Dr. Moon. This hardly conveys my true position in the case. I was asked to visit the patient in consultation with Dr. F. Moon of Greenwich. I and he both arrived at the conclusion that she had been pregnant, but that then there was nothing in the uterine cavity. I therefore concluded that it was of the nature of an extra-uterine pregnancy, and in this Dr. Moon concurred. As inflammatory attacks had occurred many times, and as much thickening was felt around, no parts of a fœtus could be felt. I was, then, particularly asked to decide whether she could be removed to Liverpool; as she had at once to leave her house, and wished to join her husband in Liverpool. We assented to her removal, if done with due care and pre-arrangement, provided she were furnished with a letter to give her doctor, setting forth our views of the nature of her case to guide him in his future treatment. As there was no time for further treatment, quiet was enjoined, and I may not see her again. I can hardly accept, therefore, the position assigned me as the initiator of the 'do-nothing policy'; particularly as I have always operated on similar cases as often as they presented themselves, and probably as often as any one.

But my experience leads me to the conclusion that the diagnosis and handling of these cases is very different, requiring far more care than that of abscesses in the same positions, and, certainly, else-where.—I am, etc.

J. BRAXTON HICKS.

BRITISH MEDICAL BENEVOLENT FUND.

SIR,—In connection with the annual general meeting of the British Medical Benevolent Fund, will you permit us, through your columns to appeal—

1st, to the honorary local secretaries, through whose exertions a large proportion of the contributions to the fund is collected, and in their lists to the honorary financial secretary, Mr. George Hall, 31, Lower Seymour Street, as soon as possible;

Secondly, to the subscribers generally, that they will transmit, with as little delay as may be, their subscriptions, and especially subscriptions in arrear, to the honorary financial secretary, or myself, or to the local representative of the fund. More than one-fourth of the subscriptions for the last year and for many preceding years remain unpaid, and we are in this predicament; either we must drop the names out of the published list, and so displease many who have no intention of deserting the charity, or we must retain all names in the absence of an intimation that a subscription is withdrawn, and thus issue a list to some extent fictitious. If our receipts corresponded with our subscription list, our expenditure would not have outrun our income by £300 in the past year, as has been the case.

Finally, let me appeal to the profession for increased support. It is a great thing that the Committee of this fund is enabled by the generosity of their brethren to distribute more than £3,000 to distressed members of the profession in the course of a single year; but more is needed. To many the aid given by weekly or monthly instalments, supplementing feeble efforts to earn a living, is the only barrier against real want; in other cases, it enables a struggling medical man or widow to tide over a crisis and prevent ruin; many instances, again, are known in which it has helped to support orphans, who now, mainly through its instrumentality, are doing well for themselves. It is in the cases in which permanent good may be done that most money is required.—I remain, sir, your obedient servant,

W. H. BROADBENT.

Seymour Street, January 15th, 1883.

MILITARY AND NAVAL MEDICAL SERVICES.

THE HERBERT HOSPITAL.

ON Monday last, His Royal Highness the Prince of Wales inspected the Herbert Military Hospital. This hospital, which was erected at the instance of the late Mr. Sidney Herbert when Secretary for War, is built on the pavilion principle, the sick and wounded being carefully classed, and kept in distinct wards. It now contains 257 men, about 120 of whom were in Egypt during the late war. The institution is under the management of Brigade-Surgeon Wiles, Acting-Principal Medical Officer, assisted by Surgeon-Major Harvey, Surgeon-Major Farris, and Surgeons Barrow, Powell, and Alexander. The royal party passed through the different wards, the Prince of Wales making kindly inquiries of the men as to the nature of their wounds and the engagements in which they had received them. His Royal Highness presented the Egyptian medal to 12 men who were lying in the B upper ward. None of these men had been wounded, but they had returned from Egypt invalided. In E upper ward were twelve men who had been severely wounded in the different actions in Egypt, and the Prince appeared to take special interest in their cases. The wards were profusely decorated with flowers, which are cultivated on the premises under the superintendence of Mrs. Wiles, the wife of the senior medical officer. Mrs. Wiles, who is assisted by a number of trained lady nurses, has taken great pains to render the men cheerful, and has taught a number of them to knit and sew and to do other light work, which breaks the monotony of their hospital existence. The nurses are attired in scarlet and white dresses with light gray cloaks, and as they move about the different wards, the brightness of their costumes enlivens the scene.

"THE MILITARY MEDICAL REVIEW."

SIR,—It is impossible to conceive a more practical reproach to the military medical services of Great Britain, than is contained in the words of your correspondent, Señor Don Manuel Sierra: "Such a journal is published in every capital in Europe, and I cannot believe but that a similar one is also published in London."

It would be equally difficult to adduce a more cogent reason for its existence, than that which is editorially offered for its non-appearance, viz., "the very scattered condition of British medical officers all over the globe." If a Collective Investigation Committee be, as it undoubtedly is, a most valuable means of arriving at conclusions on vital questions from evidence gathered from all over England, how much greater must be the value of decisions on matters affecting our soldiers, based on accumulated evidence from "all over the globe."

That the absence of such a publication is due to the "fewness of subscribers," is only assigning a part of the cause. What has long been felt to be the real reason is, that the majority of medical officers are impressed with the idea that, to become contributors, in money or matter, to such a journal, would be to incur the disfavour of the heads of the service; and the cause of such coldness on the part of the heads of the service, is a fear that such a journal would degenerate into the *Medical Grumblers' Gazette*.

If the statement here ventured upon be correct, it is certainly a reproach to the British services—Indian, military, and naval—that such a narrow consideration should crush out a publication which ought to be, of its kind, the most valuable in any capital of Europe; and that, while every other important branch of the various armies can be intrusted with its especial paper, the British medical services must remain unrepresented.

That an *Imperial Medical Review* might, within the present year, be organised and started by the members of the three services is not an extravagant suggestion. To say that it would become degraded into a grievance-monger's periodical, is to assert that medical officers are "mostly fools." A.

THE HEALTH OF THE ARMY IN EGYPT.—The returns of sick for the whole of the forces in Egypt, dated the 12th of January, show that 28 officers out of 382, and 1,675 men out of 12,633, were then in hospital. The average of the cases among the cavalry is nearly 21, and among the artillery nearly 19 per cent. The sick list for the first 15 days of January at Cairo alone shows 518 fresh admissions, and 11 deaths, of which ten were occasioned by enteric fever. Although, therefore, some improvement continues, it is manifest that the state of things is far from satisfactory. Both the nature of the illness and the character of the climate point unmistakably to the fact that the men are suffering from the hardships of the campaign, and that, especially with those who had the most trying work to perform, the only remedy is removal from the influence of a climate which, though generally healthy, is never favourable to rapid and perfect recovery from fever. There is no reason why those regiments which are suffering most should not be at once withdrawn.

SURGEON-GENERAL JOHN GIBBONS, C.B., A.M.D., died on December 6th in Dublin. He served in the Eastern campaign of 1854-55, including the battles of Alma and Inkerman, siege and fall of Sebastopol (wounded on October 20th, 1854, by a shell in the trenches), and attack and occupation of the cemetery on June 18th. He was specially mentioned in Lord Raglan's despatches for his exertions (medal with three clasps, Knight of the Legion of Honour, and Turkish medal). During the Indian campaign of 1857-58 he served in medical charge of the 32nd Light Infantry, and was present at the successful attack on the entrenched position at Dehaygain, capture of the fort of Dühool, action at Doopore, affair at Jugdespore, surrender of the forts of Amethic and Luckerpoore. He also accompanied the column under Colonel Carmichael, which drove Beni Madkoo across the Gazra (medal). He was made a C.B. for his services in the late Afghan war.

DEPUTY SURGEON-GENERAL J. Irvine, A.M.D., who has been appointed to succeed Surgeon-General Sir J. Hanbury, K.C.B., as principal medical officer to the army of occupation in Egypt, is an officer who has seen much service. During the Indian Mutiny he served throughout the operations with Havelock's column, in medical charge of the Royal Artillery, and was commended in despatches for his devotion to the wounded throughout the campaign. He was awarded a medal with two clasps, and granted a year's service from Lucknow. Since December 2, 1876, he has held the appointment of head of the statistical and sanitary branch at the War Office, in which post he will be succeeded by Deputy Surgeon-General J. A. Marston, C.B.

NAVAL MEDICAL SERVICE.—The following appointments have been made:—Staff-Surgeons: Charles G. Wodsworth, to the *Serapis;* Edward E. Mahon, to the *Sapphire.* Surgeons: Samuel Cairns Browne, to the *Cockchafer;* George W. F. Armstrong, to the *Indus;* Joseph Anderson, to the *Stork;* Albert C. Queely, to the *Excellent;* Charles H. Wheeler, to the *Espoir;* Charles E. Geoghegan, to the *Indus,* additional; Anthony Kidd, to the *Terror;* Herbert M. Nash, to the *Dido.*

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

SIR,—In accordance with a resolution passed at the last meeting of the Liverpool Medical Institution, I forward you a copy of some correspondence between Dr. Littlejohn of Edinburgh and Dr. Davidson of Liverpool, relating to the notification of infectious diseases; and beg to request that you will be good enough to accede to the desire expressed by the Society that it should be published in your valuable paper.—I am, sir, yours, etc.,

January 13th, 1883. FRANK T. PAUL, Honorary Secretary.

2, Gambier Terrace, Liverpool, December 29th, 1882.

DEAR SIR,—In the BRITISH MEDICAL JOURNAL of last Saturday (p. 1281) an extract from a letter of yours to the *Glasgow Herald* appears, in which you represent the medical profession of Liverpool as protesting against a loss of fees, were any of their patients, however badly housed, removed to hospital. The protest of the medical profession of Liverpool against the proposed compulsory notification of infectious disease was almost unanimous, and was based on no considerations of pecuniary loss, but on grounds of public policy. The protest emanated from the Medical Society of the town, and was supported, not only by those who were engaged in family practice, but by nearly every hospital physician and surgeon. The representation, therefore, in your letter to the *Glasgow Herald* that the protest was against loss of fees is a most incorrect one, and calculated to mislead the public as to the views of the medical profession of Liverpool, and the grounds of their opposition to compulsory notification. These grounds were made public, and were fully discussed in the Town Council and in the newspapers; but I never heard of any suggestion about loss of fees. I cannot doubt that you will at once withdraw your accusation; and express your regret at having been betrayed into such an unfair representation of the action of your professional brethren in Liverpool.—I am, yours faithfully,

A. DAVIDSON, Honorary Secretary, Lancashire and Cheshire Branch of the British Medical Association.

H. Littlejohn, Esq., M.D.

Public Health Office, Edinburgh, 4th January, 1883.

Dear Sir,—I am in receipt of your letter. As I am not in the habit of seeing the Liverpool newspapers, I was not aware of any formal protest of the medical profession against the notification of infectious diseases, and, therefore, the remarks of mine, to which you draw my attention, could have no reference to such action of the profession in Liverpool. Of this you will be convinced by reading my letter to the *Glasgow Herald*—only mutilated portions of which have been brought under your notice.—Yours truly,

A. Davidson, Esq. H. D. LITTLEJOHN, M.D.

2, Gambier Terrace, Liverpool, January 6th, 1883.

Dear Sir,—I am in receipt of your letter, in which, however, I find, you neither attempt to substantiate your charge against the medical profession of Liverpool, nor do you withdraw it. I have read the whole of your letter to the *Glasgow Herald*, and see nothing in it which in the least alters or modifies the definite character of your statement which I challenged—viz., "to-day we have the medical profession there (in Liverpool) protesting against loss of fees were any of their patients, however badly housed, removed to hospital". I repeat what I stated in my former letter, that the only grounds of protest by the medical profession of Liverpool against compulsory notification were grounds of public policy, and were published both in the Liverpool newspapers and in the medical journals. There never was any protest by the profession, or even by individual members of it, ever heard of here against loss of fees. We in Liverpool are naturally annoyed that such a misrepresentation of our motives and action should be made as is contained in your letter; and especially seeing it is made by one holding the professional and public position which you hold, and which add weight and authority to the statement. The fact, too, that the misstatement was made by one medical man against his professional brethren, in a letter to a public newspaper, which none of us were likely to see, adds to the seriousness of the offence. It was the accident of the paragraph being copied into the BRITISH MEDICAL JOURNAL that made it known to us. I have written to you with the approval of leading members of the profession here; I ask you to withdraw your statement, and to make such apology as I can hardly doubt you must feel is due to your professional brethren here, whom you have misrepresented. I shall be glad to have your answer before next Thursday, when our Medical Society meets.—Yours faithfully,

Dr. Littlejohn. A. DAVIDSON.

Public Health Office, Edinburgh, January 8th, 1883.

Dear Sir,—I have not the honour of your acquaintance, and have no means of knowing, beyond the address on your note-paper, how far you are justified in speaking for the profession in Liverpool, o even for the leading members of it. I certainly expected to have received either a copy of, or a correct reference to, the protest which you inform me was made on the subject of notification of infectiou diseases, as I never saw it. Personally, I have no doubt the large portion of the profession in Liverpool repudiate the motive that th element of fees enters into their opposition to notification, but bot at Worcester and Nottingham gentlemen, who spoke of the professio in Liverpool as if they represented it, used the argument that not fication necessarily implied removal to a hospital; and they aske the question, What is to become of those medical men whose practi

lies among the poorer classes, if their patients are compulsorily removed by sanitary officials? This argument, although very fallacious, I regret to say, had evidently considerable effect. In the abstract, few will acknowledge that the element of fees enters into their opposition scheme; but, given the fallacy to which I have alluded, I cannot see how the conclusion can be avoided that serious injury must result to my poorer professional brethren. I have done my best during the last five years to expose this fallacy, and latterly have adduced an experience in Edinburgh for the last four years in proof of my contention.—I am, faithfully yours,

Dr. Davidson. HENRY D. LITTLEJOHN, M.D.

2, Gambier Terrace, January 11th, 1883.

Sir,—You now make the following assertion (as an excuse for your charge against the medical profession of Liverpool, that they are protesting against the loss of fees); you say that, "both at Worcester and Nottingham, gentlemen, who spoke of the profession of Liverpool as if they represented it, used the argument that notification necessarily implied removal to the hospital; and they asked the question, What is to become of those medical men whose practice lies among the poorer classes, if their patients are compulsorily removed by sanitary officials?" This assertion has no foundation in fact. I was myself present at the Worcester meeting, and I heard no such statement made by any Liverpool medical men. I have asked several who were present at the meeting, and all are positive that nothing of the kind was said. It is an utter misrepresentation. As to Nottingham, the only Liverpool medical man who was present was Dr. Ewing Whittle, and he informs me that neither he nor anyone else from Liverpool made any such statement. When I first wrote to you, I fully expected to receive an immediate and frank withdrawal of this unfounded charge. You have not withdrawn it. Considering the nature of the replies which I have received from you, I do not suppose you are likely to do so, and I shall not trouble you with any further request to that effect.—I am, yours faithfully,

A. DAVIDSON, Honorary Secretary, Lancashire and Cheshire Branch, British Medical Association.

Dr. Littlejohn, Edinburgh.

At the ordinary meeting of the Medical Institution of Liverpool, held January 11th, 1883, Dr. Macfie Campbell, Vice-President, in the chair, the following resolutions were unanimously passed:

"That this meeting condemns in the strongest possible manner the action of Dr. Littlejohn of Edinburgh; in that he, while confessedly ignorant of the grounds of opposition to compulsory notification of infectious diseases by the medical men of Liverpool, should nevertheless publish the following statement, viz., 'that to-day we have the medical profession there protesting against loss of fees were any of their patients, however badly housed, removed to hospital, so as no longer to be a source of danger to the community'; and this meeting declares that such statement is absolutely void of foundation. It further desires to express its surprise and regret that Dr. Littlejohn, when challenged either to justify or withdraw his charge, should be unwilling to withdraw, while unable to justify, it."

CERTIFICATION OF PAUPER LUNATICS.

THE certification and removal of pauper lunatics upon a magistrate's order merely is an unsatisfactory proceeding which has not unfrequently led to difficulty, and sometimes to public scandal. Several unfortunate cases having lately arisen in Birmingham in reference to the removal of insane paupers, the local guardians have determined to appoint a fresh medical officer, whose only and exclusive duty shall be to examine lunatics and give certificates for their removal to the borough asylum. However convenient this new form of official specialism may be in theory, it is likely to be of doubtful advantage in practice; and it is an innovation which is not likely to prove acceptable to parochial medical officers, who will properly object to be superseded in duty and in fees in a relatively easy and remunerative branch of their own proper work. Past irregularities in Birmingham, so far as we can learn, cannot fairly be charged upon the present Poor-law medical officers of the town, and those gentlemen are unanimous in their desire to prevent difficulty in the future, in their willingness to aid the guardians in dealing with their pauper lunatics, and in their protest against the new appointment. The medical officers have addressed the following letter to the borough magistrates.

"Gentlemen,—We, the undersigned, being the medical officers of the parish of Birmingham, respectfully call your attention to a change proposed in the system of certifying lunatics in this parish. During the period of twenty years, these certificates have been issued in an unsatisfactory manner, against which we have, until recently, striven unsuccessfully. Now that they are about to be filled up legally, and at a scale of remuneration commensurate with their responsibility, we learn with regret that it is contemplated to employ medical practitioners other than ourselves. We respectfully solicit you to continue us in the discharge of the duties which we have performed for so many years, as we have acquired an enlarged experience, not only in the diagnosis, but in the treatment of cases of insanity. Several magistrates have been, and we believe still are, members of the Asylum Committee of the Town Council, who can testify as to the appropriateness of cases admitted under our certificates, and of their uniform correctness. We, therefore, hope you will take our position into your favourable consideration, and continue us in the discharge of duties faithfully performed for so long a period.—We have the honour to be, gentlemen, your obedient servants, JOHN DARWEN, CHARLES R. SUFFIELD, H. JONES, J. JACKSON, VINCENT A. JONES."

HOUSE SANITATION.

IN a very interesting lecture, delivered before the Society of Arts on the 17th January, Mr. Burton, the chief inspecting engineer to the London Sanitary Protection Association, gave some account of their work. In the two years during which the association has been in existence, he and his assistants had inspected 523 houses. In twenty-nine of these they had found the drain entirely stopped up, no communication at all with the sewer, and all the foul matter sent down the sinks and soil-pipes being simply deposited under the basement of the house. In 166 houses they found the soil-pipes leaky, allowing sewer gas and, in many cases, liquid sewage to escape into the house. In 194 houses the overflow pipes of the cisterns were led direct into the drains or soil-pipes, thus allowing sewer gas to pass up them and contaminate the water in the cisterns, as well as pass freely into the houses. In 357 houses, or about three-fourths of those examined, the waste-pipes from sinks and baths were found to be connected directly with the drains, allowing the sewer gas to pass up them, instead of being led outside the house, and made to discharge over trapped gullies in the open air, so that nothing could pass up them except air. Mr. Burton then went on to show how the engineers examined houses, explaining the "peppermint test," and the "smoke test," and showing the method of applying each. The lecture was illustrated by a number of diagrams, particularly two very large ones—one showing a house arranged as it should be, and the other, as it should not be, but generally is—and also by a number of specimens, removed from houses, of ventilating pipes choked by birds' nests, D traps, completely filled by foul deposit; waste-pipes in the same condition, etc.

Dr. PARSONS has completed his inquiries at Devonport concerning the recent outbreak of diphtheria, and will shortly make a report to the Local Government Board, in view of which it is unnecessary to give currency to the conflicting statements made as to the extent of the outbreak. In order to satisfy public anxiety, it is hoped that the publication of the report may not be long delayed. It is satisfactory to be assured that there has been no fresh case for the past ten days.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

MILE END OLD TOWN.—Dr. Corner has little of interest to chronicle for the year ended March last. During this period there were 4,141 births and 2,371 deaths registered in the parish, representing rates of 37.64 and 21.55 per 1,000 respectively. Zymotic diseases were fatal to 347 persons, whooping-cough alone accounting for 111 deaths. Referring to the prevalence and fatality of this disease Dr. Corner laments the lack of attention which it receives, not only at the hand of the public but also from health authorities. He observes that were the same mortality to result from any other infectious disease it would create a serious alarm, and would lead to the adoption of most stringent measures. The suppression of whooping-cough appears, he adds, to have been given up, either as a hopeless task, or is looked upon as not sufficiently dignified and important to merit official attention. The disease is not only very fatal, but probably more than any other disease, it is liable, when the patient survives, to leave behind its insidious poisonous effects upon the internal organs, mischief which is frequently fatally developed in after life, causing serious illness and often death, the real origin of which is unsuspected. This complaint is only too common with health officers, and it is one that calls for serious attention from sanitary authorities. Diarrhœa comes next in order

of fatality causing 88 deaths, measles following with 62, scarlet fever with 34, diphtheria and small-pox each being credited with 23, the whole zymotic mortality is represented by a rate of 1.15 per 1,000, against 3.34 for the previous year. Dr. Corner has little to say in regard to the condition of the district, but he gives a summary of his reports to the sanitary committee. A constant water-supply has now been almost completed in the hamlet, and some good results have been obtained by the operation of the Artizans' and Labourers' Dwellings Act. For the purposes of comparison it would be convenient if the health officer's report could be made up to December, instead of as at present to the close of the parochial year in March.

OBITUARY.

FRANCIS KER FOX, M.D., Brislington, Bristol.

WE notice, with much regret, the death, at a full age, of Francis Ker Fox, M.D. Cantab., who has been long known to the profession at large, as the senior proprietor of Brislington House Lunatic Asylum. Though a Cambridge graduate, Dr. Fox derived his medical knowledge from Edinburgh, and various continental universities. From the commencement of his professional life he devoted himself to the subject of mental disease; and though, in his early memories, he could date back to a period before the era of non-restraint, his own kindly instincts, as well as his professional knowledge, led him to adopt the milder system with enthusiasm, and to work heart and soul with the early pioneers of this humane treatment of the insane.

In 1863, he was elected President of the Bath and Bristol Branch of the British Medical Association, of which, we believe, he was an original member; and he delivered a thoughtful and learned presidential address on the subject with which he was most conversant.

A man of high education, of varied knowledge, of wide experience and peculiar amiability, he was largely consulted throughout the West of England, and in Ireland. He did much to promote the interests of the insane, and to raise to the highest standard the duties and the position of the alienist physician.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF LONDON.

EXAMINATION IN DISEASES OF THE EYE AND EAR.—At the last meeting of Convocation, Dr. Storrar presiding, the following resolution was brought before the House, being moved by Dr. J. William Meek, and seconded by Dr. Peter Horrocks: "That, in the opinion of Convocation, it is desirable that a clinical examination in diseases of the eye and ear (to be conducted in each case by special examiners) should be added to the subjects of the M.B. examination." The further discussion was opened by Dr. Hilton Fagge; but, when he sat down, the Chairman observed that there were only twenty-nine members of Convocation present, being one short of the legal quorum, and the discussion was accordingly adjourned.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 10th instant, and when eligible will be admitted to the pass examination.

Messrs. Frank Jeffree, Edward Wood, and E. Brewitt Sugden, students of King's College; Frank Corner and H. Lewis Hughes, of the London Hospital; P. O. Ward Hailey, of Guy's Hospital; F. James Warwick, of the Cambridge School; Umadas Banerji, of the Calcutta School; Claude Conlan, of St. Bartholomew's Hospital; Y. M. Jones Humphreys, of the Liverpool School; C. Perival Ruel, of University College; S. William Bryant, of the Edinburgh School; D. Mackay Ellis, of St. George's Hospital; and G. William FitzHenry, of St. Thomas's Hospital.

Nine candidates were referred for three months, and one for six months.

The following gentlemen passed on the 12th instant.

Messrs. H. Moxey Partridge, G. Frederick Richards, J. R. G. Chick-Lucas, and F. Osborne Smith, of St. Bartholomew's Hospital; J. Milton Cotton, P. John Strathy, and G. Strange Beck, of the Toronto School; J. Augustus Bradbury and T. Henry Benson, of Guy's Hospital; T. William Richardson, and J. George Baggetts, of King's College; E. Fitzgerald Trevor, and J. Prosser Evans, of University College; H. Lawless Cade, and G. William Davis, of St. Thomas's Hospital; Frank Hayden, of the Westminster Hospital; and H. W. Denton Carden, of the London Hospital.

Six candidates were referred for three months, and one for six months.

The following gentlemen passed on the 15th instant.

Messrs. Purnell Purnell, H. Housemayne Du Boulay, F. Evans Cave, and M. George Dundas, of Guy's Hospital; A. Blair Avarne, and J. Andrew Going, of the London Hospital; John McOscar, and Richard Edwards, of the Middlesex Hospital; S. Lloyd Jones and L. Stephenson Luckham, of University College; C. Edward Valpy, and Thomas Iredale, of St. Bartholomew's Hospital; Walter Venis, of King's College; S. Thomas Bewsey, of St. Mary's Hospital; L. de C. Eagles Harston, of St. George's Hospital; and A. R. Steele Anderson, of the Cambridge School.

Seven candidates were referred for three months.

The following gentlemen passed on the 16th instant.

Messrs. Z. Belling Mudge, H. Richard Churcher, C. Copley Hutton, H. Browse Trist, and J. Sadler Curgenven, of St. Bartholomew's Hospital; D. Morgan Evans, Alfred Sutton, F. Charles Butt, and F. Wheldale Foster, of Guy's Hospital; J. Peece W. Freeman, S. Leonard Clift, and Walter Bowden, of University College; G. George Gidley, V. John Rigg, and R. S. Fairbank, of King's College; A. John Hubbard, of St. Thomas's Hospital; C. Michael Cooke, of St. Mary's Hospital; and Charles Dickenson, of St. George's Hospital.

Six candidates were referred for three months.

APOTHECARIES' HALL. — The following gentleman passed the Examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, January 11th, 1883.

Humphreys, Charles Style, 3, Chichester Street, S.W.

At the Preliminary Examination in Arts, held at the Hall of the Society on January 11th, 12th, and 13th, 1883, 110 candidates presented themselves, of whom 73 were rejected, and the following 37 passed, and received certificates of proficiency in general education in the second division; in alphabetical order, viz.:

J. Bamfylde, W. H. Barnby, G. Barton, J. A. Bairstow, F. J. Brown-Wade, S. J. Cole, P. W. Colthurst, W. C. Croxford, A. J. De Butts, A. Delve, T. S. Dennison, S. V. Duncan, W. R. Elphinstone, G. A. Ferraby, F. H. Horner, J. R. F. Hutson, E. E. Kershaw, R. J. Langley, P. S. L. MacDougall, H. E. Mahonie, C. G. A. Le Mesurier, J. D. Moulton, J. E. Moyse, J. Penny, J. D. Price, E. E. Prior, T. O. Raw, Marie Rockstro, A. L. Travers, F. G Vicars, B. Walker, R. F. Walker, A. W. Waller, H. W. Wedgwood, F. C. Wood, J. L. Thomas.

The following candidate passed in Elementary Mechanics alone:

W. D. Gimson.

MEDICAL VACANCIES.

BOND OF BROTHERHOOD SICK BENEFIT SOCIETY.—Surgeon. Applications to Mr. T. P. Gallop, Secretary, Street, Somerset.

BROMYARD UNION.—Workhouse Medical Officer. Applications by January 22nd.

BROMYARD UNION.—District Medical Officer and Public Vaccinator. Salary £105 per annum. Applications by January 22nd.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Resident Surgeon. Salary, £180 per annum. Applications by February 1st.

CHILDREN'S HOSPITAL, Birmingham.—Resident Assistant Medical Officer. Salary, £40 per annum. Applications by February 1st.

CHORLTON UNION.—Assistant Resident Medical Officer. Salary, £120 per annum. Applications by January 24th.

COUNTY LUNATIC ASYLUM, Lancaster.—Assistant Medical Officer. Salary, £100 per annum. Applications by January 31st.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by February 12th.

HACKNEY UNION.—Medical Officer. Salary, £80 per annum. Applications by January 23rd.

LIVERPOOL DISPENSARIES.—Assistant House-Surgeon. Salary, £108 per annum. Applications by January 22nd.

LONDON LOCK HOSPITAL, Male Hospital and Out-patient Department, 91, Dean Street, Soho, W.—House-Surgeon. Salary, £50 per annum. Applications by January 23rd.

LONDON TEMPERANCE HOSPITAL.—House-Surgeon and Registrar. Salary, £52 10s. per annum. Applications to F. Wright, at the Hospital, Hampstead Road.

MIDDLESEX HOSPITAL.—Medical Registrar. Applications by February 2nd.

PAROCHIAL BOARD OF AUCHTERGAVEN.—Medical Officer, Officer of Health, and Vaccinator for the Western District of the Parish. Salary, £40 per annum. Applications to Mr. Donald Cumming, Inspector of Poor, Auchtergaven, Bankfoot, Perth, by January 30th.

PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £40 per annum. Applications to Captain Stewart, Shambellie, New Abbey, Dumfries.

RANGOON MUNICIPALITY.—Health-Officer. Salary, 600 rupees per month. Applications to the President by January 31st.

ROYAL EDINBURGH ASYLUM.—Junior Assistant-Physician. Applications to Dr. Clouston.

SPIKE ISLAND CONVICT PRISON.—Apothecary. Salary, £118 per annum. Applications to the Chairman, General Prisons Board, by January 20th.

STRANORLAR UNION, Killygordon Dispensary.—Medical Officer. Salary, £120 per annum, with fees. Election on February 2nd.

UNIVERSITY COLLEGE, London.—Jodrell Professor of Physiology. Salary, £264 per annum. Applications by January 24th.

WARNEFORD HOSPITAL, Leamington.—Dispenser. Salary, £40 per annum. Applications by January 23rd.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Pathologist and Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Herbert Major, the Medical Superintendent.

MEDICAL APPOINTMENTS.

KEMPE, A., M.R.C.P., appointed Medical Officer of Health for Budleigh Salterton.

LANE, J. O., M.B., appointed House-Surgeon to the General Infirmary, Northampton.

MITCHELL, T. H., appointed Assistant Medical Superintendent to the Ayrshire District Asylum.

REES, Robert, M.B., C.M., appointed Public Vaccinator for West Bromwich North-East District, *vice* Alfred Paget Evans, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

CULLINGWORTH.—On the 10th inst., at 260, Oxford Road, Manchester, the wife of Charles James Cullingworth, M.D., M.R.C.P., of a daughter.

HOWSE.—On January 12th, at 10, St. Thomas's Street, Southwark, the wife of H. G. Howse, M.S., of a daughter.

DEATHS.

BIRT.—On the 4th inst., at Grove House, Leamington, Thomas Birt, M.D., in his 70th year.

HEANE.—On December 25th, at the Lawn, Cinderford, William Heane, F.R.C.S.Eng., aged 72 years.

MURPHY.—On the 29th ult., at Holly House, Sunderland, Adelaide Harriett Lucretia, the wife of James Murphy, M.D., aged 27.

THOMAS.—On the 16th instant, at Cliff Goodwick, Fishguard, John Richard Thomas, Staff-Surgeon, aged 50.

HEALTH OF FOREIGN CITIES.—It appears from statistics, published in the Registrar-General's last weekly return, that the death-rate recently averaged 32.2 per 1000 in the three principal Indian cities; it was 26.3 in Bombay, 34.2 in Madras, and 40.7 in Calcutta. Cholera caused 74 deaths in Calcutta, and small-pox 12 in Bombay and 3 in Madras; the fatality of cholera in Calcutta is still increasing, and "fever" fatality showed the largest excess in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-two of the largest European cities, was 27.2, and was 4.8 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 39.5, and showed a considerable increase upon the rates in recent weeks. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 31.1, and ranged from 27.7 in Christiania to 32.1 in Stockholm; scarlet fever caused 5 deaths in Stockholm, and whooping-cough 4 in Copenhagen. In Paris, the death-rate was equal to 26.0; 69 deaths resulted from typhoid fever, 42 from diphtheria and croup, and 28 from measles. The 175 deaths in Brussels (including 2 fatal cases of small-pox) were equal to a rate of 22.6; the rate in Geneva did not exceed 16.4. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.2, the highest rate being 26.7 in the Hague; diphtheria caused 4 deaths in Amsterdam, and small-pox 2 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.0, and ranged from 21.9 in Berlin, to 29.5 in Trieste and 30.3 in Buda-Pesth. Small-pox caused 4 deaths in Vienna, and typhoid fever 7 in Prague; diphtheria showed fatal prevalence in most of these German cities, and caused 10 of the 1000 deaths in Dresden. The death-rate averaged 29.1 in three of the principal Italian cities; 7 deaths were referred to "fever" in Rome, 5 to scarlet fever in Turin, and no fewer than 22 to measles in Venice. In four great American cities, the mean death-rate was 25.1; the rate ranged from 21.6 in Brooklyn, to 26.1 in New York and 28.9 in Baltimore. Small-pox caused 57 deaths in Baltimore, showing a considerable increase upon previous weekly numbers; 20 deaths were referred to typhoid fever in Philadelphia, and diphtheria showed more or less fatal prevalence in each of these American cities.

MANSION HOUSE.—The Lady Mayoress (Mrs. Knight) has sent a handsome present of toys and New Year's gifts—about 1,000 different articles in all—to the following institutions, viz., the Hospital for Sick Children, Ormond-street; the Commercial Travellers' Schools, the Warehousemen and Clerk's School, and the Royal Normal College for the Blind, Norwood.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. A. Ernest Sansom will deliver his second Lettsomian Lecture on the Treatment of some Forms of Valvular Diseases of the Heart—Mitral Regurgitation.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Sir Henry Thompson: 1. On Three Cases of Polypoid Tumour of the Bladder removed by Operation; 2. On an Operation for Exploring the Bladder by Perineal Section of the Urethra, and for Removing Vesical Tumour, Impacted Calculus, etc.; with Cases.

WEDNESDAY.—Hunterian Society, 7.30 P.M., Special Council Meeting. 8 P.M., Mr. G. J. B. Stevens: A Case of Bullet Wound of Skull. Dr. Woakes: On Vertigo and the Group of Symptoms sometimes called Menière's Disease.

FRIDAY.—Clinical Society of London, 8.30 P.M. Opening Address by the President. Dr. Longhurst: On the Activity of the Infective Power of the Poison of Scarlet Fever during the Pre-eruptive Stage of the Disease. Mr. Shuter: On Subperiosteal Amputation at the Hip-Joint (patient to be shown). Dr. Broadbent: On a Case of Supposed Hydrophobia treated by Chloral, with Recovery. Dr. S. West will show a Case of Diffuse Scleroderma. Dr. Lediard (Carlisle) will show a Case of Osteitis Deformans.—Quekett Microscopical Club, 8 P.M. Mr. J. G. Waller: On an undescribed Sponge of the Genus Hymeraptria.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

AN advertisement of a book was accepted at the office of the JOURNAL last week, under the impression that its author was a registered practitioner in regular practice. An acknowledgment is due to the correspondents who have called attention to the fact that this is not the case. The advertisement will not be repeated.

STONE TESTIMONIAL FUND.

IT has been thought desirable by the Executive Committee to close the list of subscriptions to the Stone Testimonial Fund on January 31st. Any gentleman desirous of adding his name to the list is requested to send his subscription, as early as convenient, to James Shuter, Esq., F.R.C.S., 58, New Broad Street, E.C.

LUTHER HOLDEN, Honorary Secretary.

SAD CASE OF A SURGEON'S WIDOW.

SIR,—Will you allow me, through the medium of your valuable JOURNAL, to solicit the pecuniary help of your readers, on behalf of Mrs. Stephens, aged 64, the widow of a Mr. G. Stephens, surgeon, who died in Australia in 1847, since when Mrs. Stephens has supported herself by nursing in India, China, and Japan? Losing all her effects by fire, and having to come to England through illness—from which she has never sufficiently recovered to be able to earn her living—Mrs. Stephens has, for the last two years, supported herself by the pledging of her clothes, etc. She came under my notice in applying for relief from this charity, for which, however, she was not eligible.

I brought her case under the notice of the committee of the British Medical Benevolent Fund, who, I am glad to say, have promised to pay her passage to the Cape of Good Hope, where she has a son, and whither Messrs. Donald Currie and Co. have undertaken to convey her for £10 instead of £15. I am trying to raise about £25 more to redeem her clothes and buy a few necessaries for the voyage.

Being accustomed to make searching inquiries into such cases, I can vouch for the genuineness of Mrs. Stephens's, and will gladly acknowledge any sum sent to me, and will see the same applied for the purpose given.—I am, sir, your obedient servant,

R. G. SALMOND, Secretary.

British Home for Incurables: Offices, 73, Cheapside, E.C.,
January 15th, 1883.

Sums received or promised.

	£	s.	d.		£	s.	d.
The British Medical Benevolent Fund (for passage) ...	10	0	0	J. Borrodaile, Esq.		10	0
Stephen Wright, Esq. ...	1	0	0	— Borrodaile, Esq.		10	0
Colonel Bates	1	0	0	Messrs. Copestake, Moore, and Co, ...	10	6	
F. A. Bevan, Esq.	1	0	0	Colonel Gascoigne	10	0	
Mrs. J. E. Adams	1	0	0	Major Dundas	10	0	
Mrs. Coulson	1	0	0	J. H. Hale, Esq.	10	0	
Dr. B. Fenwick		10	0	J. Young, Esq.	10	0	
J. Wotherspoon, Esq. ...		10	0				

NEW TREATMENT FOR PARAPHIMOSIS.

SIR,—Under "Surgical Memoranda" in the BRITISH MEDICAL JOURNAL of January 6th, 1883, headed "New Treatment for Paraphimosis", Dr. O'Connor describes an easy method of treating it. I can fully confirm all Dr. O'Connor says in its favour. I first adopted this method in 1861, and have used it in every case since that time in which there was any difficulty in reduction by the ordinary method, in adults as well as children, with this difference, that in addition to twine I sometimes use narrow tape or a strip from a bandage. The material used should be slowly applied, unwound rapidly, and quickly followed by an attempt at reduction by the ordinary method. The idea of adopting this plan was suggested to my mind by seeing the ease with which a finger can be relieved of a tight ring. Following out the same line of thought, on March 25th, 1864, I applied this method to control the circulation in a limb when amputating for a mill-accident, thus anticipating Professor Esmarch by about thirteen years.—I am, sir, yours faithfully,

C. YOUNG, M.D.

Yarm, January 10th, 1883.

UNQUALIFIED ASSISTANTS.

SIR,—I noticed in a recent number of the JOURNAL a letter by "M.B.M.A.", in which he depreciates the unqualified assistant. As a matter of curiosity, it would be interesting to know if "M.B.M.A." was qualified when, as he says, he took charge of a practice five days in each week whilst attending the hospital? I think it extremely unfair that one who has obtained a diploma should try to bar to others the way by which he himself obtained it. Having at times prior to my obtaining a diploma acted as an assistant, I have sympathy with those who probably could never obtain that end without the help afforded them by assisting a medical man.—I remain, sir, yours truly,

L.R.C.P.

APPEAL FOR THE ORPHAN CHILDREN OF THE LATE DR. GRIFFITHS.

SIR,—Since my appeal for the orphan children of the late Dr. Handsel Griffiths, I have much pleasure in acknowledging, through the medium of your columns, the receipt of the following additional sums: from W. Morrant Baker, Esq., F.R.C.S. (London), and A. D. (England), each £2 2s.; from Francis Vacher, Esq. (Birkenhead), H. R. Hayes, Esq., F. De Havilland Hall, M.D. (London), and J. Bothwell, Esq., each £1 1s.; from Revd. F. R. Wynne (Dublin), W. B. Brabazon, Esq. (Lynn), M.D., R.N., Wm. Whitaker, Esq. (Bantry), Herbert H. Lawton, M.D. (Poole), James McCleery, Esq. (Belfast), and W. A. Bell, Esq. (Red Hill), each £1; from Wm. Easby, M.D. (March), James Martin, Esq. (Portlow), Wm. Thomson, Esq., F.R.C.S. (Dublin), P. N. (Bristol), R. Young, Esq., Anonymous (Guildford), each 10s.; from "A Country Doctor", and John Holden, Esq., each 5s.; from Miss Purcell (Dublin), amount of her collection in small sums, 11s. 6d.

Anything further sent to me for the above object will be thankfully received and acknowledged.—I am, sir, yours,

LAMBERT H. ORMSBY, M.D., F.R.C.S.

4, Merrion Square West, Dublin, January 16th, 1883.

CERTIFICATES OF DEATH.

SIR,—I desire to know, in your next issue, whether it is absolutely necessary to fill in all particulars in the printed form of death-certificate for the Registrar-General by duly qualified medical men, when local registrars accept death-certificates on plain sheets of paper from unqualified men and quacks; making a rule compulsory on professional men, which is quite optional with the other class. Surely it is high time for councils of associations and societies to come forward and protect the lawful interests of individual members.—I remain, sir, yours faithfully,

J. FITZGERALD, Surgeon-Major.

Gilsland, Cumberland, January 13th, 1883.

*** The Births and Deaths Registration Act, 1874, which made it compulsory upon registered medical practitioners to give a certificate of the cause of death of a patient who has been attended during his last illness, does not make it obligatory on medical practitioners to use the forms supplied by the Registrar-General for that purpose. A medical certificate may be written on a plain sheet of paper; but in order to comply with the requirements of the Act, recent attendance must be certified, as well as the cause of death. The other particulars are only added in the official form in order to secure the necessary identification of the certificate with the death to be registered. Written statements of unqualified practitioners and quacks are not accepted as legal certificates by registrars; but as the law ordains that all deaths should be registered, the cause of death in all cases in which no registered practitioner has been in attendance, or in which no inquest is held, is entered in the Death Register as "uncertified".

TROUSSEAU'S PLUG FOR SPERMATORRHŒA.

SIR,—Would any of your readers who have used Trousseau's anal plug in the treatment of spermatorrhœa be kind enough to give me the result of their experience through your columns? I have a patient who has suffered from spermatorrhœa for years, and he has requested me to get him the plug; and before doing so, I want to ascertain whether he can use it without danger, and also if it is likely to be of any benefit to him.—Yours faithfully,

A MEMBER.

A PERSONAL QUERY.

SIR,—An expression of opinion on the following case by any member having experience will greatly oblige me, as I feel some anxiety regarding the state of my heart. Early in 1881, though feeling in good general health, I began to suffer from intermission of the heart. I was serving in India, and for some months previously had worked pretty hard; and had some anxiety, being the only medical man in charge of a considerable number of troops and departments. The intermissions were irregular, sometimes one at a time, at others several together; sometimes the heart seemed to flutter. I was comparatively free from the symptoms at night, but sometimes felt a sensation of constriction or oppression about the heart, which was very unpleasant. After several months, it came to my turn to return to England, and I arrived home in May 1881. The symptoms continued all the voyage; but after a few months' residence in England disappeared, and I felt in good health. I returned to India at the end of March 1882; but though I have since been in an excellent climate for India, the symptoms returned three months after my arrival, and continue very troublesome at times. No day ever passes without my feeling it. What I should be glad to know is, Are the symptoms likely to be from any form of degeneration? Are the strong pulsations following intermission likely to cause dilation? Is residence in India likely to keep it up? And what treatment would be likely to benefit me?

I should mention that several medical officers have examined me, and think the heart and valves sound; but one said the first sound seemed very accentuated. I have nearly seventeen years' service, out of which I have passed nearly twelve in the tropics, nearly nine of these in India. I have always been most temperate and regular in my habits, and can bear a good deal of fatigue; though, on ascending a hill, slight uneasiness, not amounting to pain about the heart is felt. I do not smoke, and am of nervous temperament. I have never had acute rheumatism, nor any other constitutional disease. I suffered from malarial fever in 1879 and 1880.—Yours truly,

A. M. D.

TREATMENT OF MENIÈRE'S DISEASE.

SIR,—In reference to your correspondent's letter which appears in your issue of January 13th, I may say that for the last six months I have had under my care, in conjunction with Dr. Russell Reynolds, a case of Menière's disease which has improved greatly under treatment. The drugs prescribed have been the ammoniated citrate of iron, and the bromide and carbonate of ammonia. A liberal diet has been enjoined, severe brain-work interdicted, and the patient has been living at Westgate. From the steady improvement made up to the present, I am hoping that something approaching a curative result may be attained. Of course, watchfulness is necessary during the exhibition of the bromide, and when anæsthesia of the fauces and soft palate supervene I knock it out for a short time.

It may not be uninteresting to mention here that a small bromide pimple appeared (amongst others) over the tubercle of the tibia about a fortnight ago. By repeated picking and other irritation, this pimple grew into a carbuncle and a large slough has been discharged during the last few days.—Your obedient servant,

ARTHUR FLINT L.R.C.P.Lond.

Westgate Lodge, Westgate-on-Sea, January 15th, 1883.

Medical Sick Benefit Association.

SIR,—I wish most emphatically to endorse the remarks of Mr. Bain Sincock of Bridgewater, in the JOURNAL of January 6th, in reference to a medical sick and benefit society. I am sure the subject is one, the importance of which can hardly be exaggerated, and which deserves the earnest attention of the profession. There is not one of us who may not at any moment be temporarily or permanently incapacitated for work by disease; there is not one of us who is not advancing towards old age, a time when work is perhaps no longer possible. What proportion of us, in either case, would be able, after the first few months of enforced idleness, to support ourselves? The medical benevolent societies could tell; and a sorrowful tale they would unfold. Finally, there is not one of us, however prosperous he may be now, who would not feel all the happier if he could say with confidence, "Come what will, I can always depend, if I am unable from disease or old age to work any longer, on having a small sum every week, which will eke out my savings if I have been able to save; and which, if I have saved nothing, will in any case, and at the very worst, prevent the necessity of choosing between charity and the parish for my support."

Such a society should, I think, be formed on the model of the best friendly societies, with such modifications as might be considered advisable; and it must, of course, be constructed on purely business principles, only those in good health at the time, and under a certain age, being eligible for admission; there should be several classes, a person assuring in Class A getting, say, £6 a week in sickness, and, say, £4 in the event of his becoming permanently incapacitated for work; one in Class B getting, say, £5; and £3 and so on. Conducted on these principles, the payments need not, I am sure, be large; for the reasons mentioned by Mr. Sincock, and for others which I need not name, they would, I believe, be much smaller in proportion than those of the ordinary friendly societies. The only thing needed is to give it a start; once set going, it would, I feel sure, be largely supported by the profession, and would prove an inestimable boon to many.

It seems to me that, for the purpose of setting it going, the organisation of the British Medical Association might legitimately be used, the subject being broached at one of the Branch meetings, talked over, referred to the other Branches to consider and report upon, and so a committee formed, and something definite decided on. I hope to see the subject discussed by abler pens than mine, and that it will shortly get out of the region of talk into that of practice; so that we may, as a body, be credited with at least as much providence as the working classes, whose improvidence we are so fond of deploring.—Faithfully yours,

T. H. RAVENHILL.

Bordesley, Birmingham, January 10th, 1883.

Homes for Imbeciles.

SIR,—Will any member kindly inform me of an institution or home where one can place a little boy of deficient intellect? He is about ten years of age, harmless; and though unable to articulate properly, has a fair amount of intelligence. The parents are tradespeople, and are only able to afford a moderate sum annually.—I am, yours faithfully,

T. CASSAN.

Gainsboro', January 9th, 1883.

Pruritus after Herpes Zoster.

SIR,—I am interested to know if any of your readers have met with an example of the above exceedingly obstinate complaint. My patient, a gentleman sixty-five years old, had, two years ago, a violent cold in the chest, with cough and difficulty of breathing. He was kept in bed for one day, and his chest poulticed, and then the cold left him; but immediately afterwards he was attacked with a violent pain in the head. This lasted night and day for two or three days, being especially severe in the occiput. At this time, and for a fortnight before, he complained of his right eye, which was a little bloodshot, with very marked photophobia. Two small vesicles next appeared at the outer extremity of the eyebrow; and, on the following day, an herpetic eruption covered the whole upper eyelid (right), and ascended up over the right temple, affecting the anterior third of the right half of the scalp, not crossing to the left side nor descending below the level of the eye in the region of the zygomatic arch. The swelling was so great as to close the eye entirely, and did not disappear entirely for three weeks. Within a fortnight, the vesicles dried up, scaled off, and disappeared, leaving the skin to all appearance healthy. The swelling injection of the conjunctiva, and the photophobia lasted for a considerable time longer. The "itching" first showed itself on the healing of the eruption, extending exactly over the same area as the eruption. At this time patient was very feeble, getting upstairs with difficulty, dragging his legs, and sometimes staggering like a drunken man. His temper, always quiet, became more so, and he acquired a dislike to exertion, which was not part of his previous character. I may add that, with the exception of habitual constipation, he has had no illness, his organs are sound, and he is healthy-looking, and inclined to be stout.

About two months ago, I saw him for the first time, and found him in the state described as regards the "itching." He is well in every other respect, if we except a slight tendency to dyspepsia, or, at any rate, "want of appetite." Outwardly I have applied aconitia, morphia, conia, carbolic acid, carbolate of soda, hydrocyanic acid, cyanide of potassium; and inwardly iodide of potassium, arsenic, strychnia, iron, with only slight and temporary benefit. He has also consulted many physicians of eminence, with no benefit.

Can any of your readers suggest anything likely to be useful in this very obstinate case? Neuralgia after herpes zoster I have seen frequently, but never pruritus I should feel very obliged if you give space to this letter, that my unfortunate patient may have the benefit of the experience of the profession.—I am, yours truly,

INQUIRENS.

Counter-Prescribing.

SIR,—The following case illustrates the degree to which counter-prescribing may be carried on, and indicates a new source of danger in that practice. A little girl, with severe and well marked scarlet fever, was brought to my out-patient department on a Tuesday. The mother informed me that the child had been taken ill on the preceding Thursday; that she had gone (without the child) to a druggist, and asked for some medicine for her, stating that she had a cold. The druggist supplied the medicine, and advised her not to bring the child out. On the following Monday, the mother applied for more medicine, and said the child was worse. The druggist was then self-sacrificing enough to recommend her to get a medical man. In consequence of the above proceeding, a case of severe scarlet fever remained for four or five days undiagnosed. This needs no comment.—I am, etc.,

HENRY MALET, M.D.,

Physician to Out-Patients, General Hospital, Wolverhampton.

54, Darlington Street, Wolverhampton, January 15th, 1883.

Non-Intoxicating Liquors.

SIR,—In your valuable and interesting article on non-intoxicating liquors (BRITISH MEDICAL JOURNAL, December 2nd, 1882), amidst many very important suggestions, there is one point left unnoticed—a point to which I am anxious to call attention. The writer recommends that non-intoxicating drinks should be excisable if containing more than 2 per cent. of alcohol. But there follows no note of warning, such as would come with more force from the medical profession than from anywhere else, that drinks containing this 1 or 2 per cent. of alcohol are not safe for the reclaimed drunkard, and ought not, therefore, to be sold as temperance beverages. I am aware that there is a widely spread belief among clergymen and others, that very weak wines and ales cannot provoke the drunkard's appetite; and very sad results have followed from this mistaken opinion—results of misery, sin, and death. But it is a fact of which medical men cannot be ignorant, now that this powerful drug alcohol has been brought into such prominent notice, and its nature and properties carefully studied by those to whom we intrust so implicitly the care of our health; and it is to them we must look to guard from relapse our former victims of drink, by their authoritative teaching on the subject.

May I suggest that, instead of recommending the Excise to place a limit at 2 per cent. of alcohol, it should be advised to tax every drink in which an appreciable quantity of spirit can be found.

Trusting you will be able to find room for this in your valuable JOURNAL, believe me, truly yours,

HELLENA RICHARDSON.

Belle Vue, Westbury-on-Severn, Bristol.

*** The writer of the above letter does not appear to be aware of the fact that the flavours and essences by means of which these "temperance" beverages are rendered palatable, if not attractive to the taste, are in most cases necessarily alcoholic. The fact that water alone will not extract the delicate bouquet of the plants used, is so well known that we did not think it necessary to mention it. In this way, ¼ to ½ per cent. of alcohol is introduced into several, if not most, of the really good temperance drinks; and were this mode of flavouring given up, it would be impossible to make the "tasty" beverages on which the advocates of total abstinence rely. It only remains to deprecate the addition of any alcohol whatever for preservative purposes. With extreme care in preparation and suitable arrangements for rapid use, any such addition should be unnecessary.

The Laryngoscopic Mirror in the Examination of the Eye and Uterus.

SIR,—Having read an account of examining the external ear by the aid of light reflected by a laryngoscopic mirror, and found it much superior to direct light, the idea occurred to me that it might be very advantageously used in examining the os uteri, and more especially if a black vulcanite speculum were used; and, upon trying it, I found it equally practicable, and the result as satisfactory as when applied to the ear.—I am, sir, faithfully yours,

J. F. HOWARD.

Sandycroft, Shaw, November 24th, 1882.

A Question of Diagnosis and Treatment.

SIR,—In answer to "A Physician" in the JOURNAL of January 6th, I wish to say that I have had somewhat similar cases under my care which have benefited more or less by the treatment described below. As nothing is said about the condition of the sphincters, I take it that the patient has control over the bladder and rectum.

The chief object of the treatment is to re-establish the connection between the patient's will and the voluntary muscles of the limbs. The limbs must be thoroughly rubbed (massage) by a strong woman, properly instructed by the medical man, for an hour or two daily. In addition, if the circulation is defective, which is probably the case, the limbs must be kept warm by extra coverings, as fur-lined gaiters, hot water bottles, etc. A daily warm bath for the whole body, followed by rapid cold sponging and thorough drying with friction, is also very useful. Lastly, and most important, is the methodical exercise of all the joints of the affected limbs. Each joint is to be taken in succession, and, where the patient cannot do the movement, the surgeon or the thoroughly instructed nurse is to move the joint while the patient is being urged to try and help at the same time. At first, the patient will find it an effort even to try "to will;" but, by perseverance, this improves, and the voluntary power of motion so increased, that a previously passive movement becomes a more and more active one; till, finally, the movement can be executed voluntarily by the patient without any help at all, or even if some resistance is offered, by the surgeon or the nurse. (For further details of the "medical gymastics" thus indicated, see my articles, "The Treatment of Lateral Curvature of the Spine", in the JOURNAL of May 13th; and "Early Treatment of Flat-foot", in the JOURNAL of November 18th of last year.

"A Physician" will very readily devise the exercises of each joint, viz., the flexions, extensions, circumductions, etc. By persevering thoroughly with this treatment, a decided improvement should be obtained at the end of a month.—I am, etc.,

BERNARD ROTH, F.R.C.S. (Exam.)

48, Wimpole Street, London, W., January 7th, 1883.

W. S. P.—The suggestion shall be carefully considered.

An Obscure Disease.

SIR,—Two gentlemen have been good enough to reply to my letter of December 2nd, headed as above, for which I beg to thank them. Since reading your correspondents' letters, I have more fully examined my patient, and he states that, at the commencement of the disease, he had noticed, but only for a few days, some frothy mucous discharge from the urethra. There was, however, no pain in either urinating or defæcating, no pain in the perinæum; and it was only the dribbling of urine after adjusting his dress, on making exertion, that gave him annoyance. He noticed also that, immediately after micturition, the penis would shrivel up and appear much smaller; and there was also some wasting of the parts, with frequent sweating. He consulted, after some months, a surgeon, who passed No. 8 or 10 gum elastic bougies about twice a week, and the instrument was pretty firmly grasped at the membranous part of the urethra, and its passage there gave him a good deal of pain. Is it possible that pressure on the nerves of the part, from violent straining at stool, with hardened fæces, could have produced more or less paralysis or weakening of Wilson's and Guthrie's muscles (whose function it is chiefly to expel the last drops of urine), and so caused the complaint? And might not loss of power or tone of these muscles have caused the difficulty in passing instruments and the simulation of stricture? I think I have read something to this effect somewhere.—Yours, etc.,

STUDENS.

Dr. A. H. Jacob and the Irish Poor-law Medical Officers.

Sir,—For many years past, I have been observing the never-ending zeal and unflagging attention bestowed by Dr. A. H. Jacob of Dublin, in endeavouring to redress the grievances of the Poor-law medical officers of Ireland. If Dr. Jacob or any member of his family held any position in the Poor-law Medical Service, it might be urged by those who would decline to give anyone credit for purely unselfish and disinterested acts, that Dr. Jacob's energies on behalf of the Irish Poor-law doctors were more or less influenced by personal considerations; but such, sir, is not the fact; neither Dr. Jacob nor any member of his family holds nor ever held office under the Poor-law. His presence at every meeting of council and committee of council of the Irish Medical Association, when conferring on steps to be taken to promote our interests, has been always looked on as the helm by which to steer the actions of his *confrères* to the haven of good result.

When deputations waited on the representatives of the Government in this country, and when they went to London to press measures on our behalf through the House of Commons, Dr. Jacob was found in the foremost ranks, thereby necessarily absenting himself from his professional duties at home, which to him, as one of the leading oculists in Ireland, must be no small pecuniary sacrifice. If the outcome of the Royal Commission on the Poor-law Superannuation Bill be to give to the Poor-law medical men of Ireland satisfactory retiring allowances, they may thank Dr. Jacob.

I will not say another word of Dr. Jacob, beyond assuring you most truthfully and sincerely that he has no idea whatsoever of my addressing you on this subject. I am sure if he did he would feel quite displeased; but, as I know that in my cranium the bump of gratitude is highly developed, I cannot help suggesting, through your columns, the desirability of the Poor-law medical officers of dispensaries and workhouses in Ireland gladly uniting in giving practical proof of their thanks to Dr. Jacob for his purely unselfish and disinterested zeal in their behalf. If all give one pound each, it will simply show that the Irish dispensary doctor knows how to be grateful. Every one of them will say: "Yes, Dr. Jacob is, and has been, our tried and trusted friend; he deserves our thanks; we could not have had a more gifted man to press our cause." I like something more than words; and accordingly I hope to see proper steps taken to carry out my suggestion—one pound from each doctor of a dispensary or workhouse. Hoping you will give this a place in your next issue, I am, yours truly,

Medicus in Rure.

Lead-Contaminated Water.

Sir,—Seeing the note of Mr. C. J. B. Johnson, of Kirby Overblow, on lead contaminated water, I should like to inform him, and other members, that I have very often examined lead-contaminated water, both before and after it has been filtered, and I have always found that filtering removed all the lead. More than this, after the water had passed through a charcoal filter, I have added lead-scrapings to it, and then it would not dissolve lead. I believe the only safe filters are those which have a good bed made of animal charcoal. —I am, your obedient servant,

Arthur Roberts, Medical Officer of Health.

Keighley, January 13th, 1883.

Palmar Psoriasis.

Sir,—A patient of mine has suffered from an attack of the above for seven years, and during that time he has constantly been under treatment. The disease, as far as I can make out, is not syphilitic. I have put him under the influence of arsenic several times, and used locally carbolic acid, liquor carbonis detergens, oil of cade, tar and creasote ointment, acid nitrate of mercury, and various kinds of soap, without avail. Gutta percha gloves seemed to give him slight benefit. Perhaps some member would give me advice on the above.—I am, etc.,

A Member.

A Question of Treatment.

Sir,—I should be much obliged if some of my medical brethren would help me by their advice in the treatment of the following case. Mrs. F., aged about 40, the mother of several children, has suffered for the past six months from severe pain in the left foot, supposed to have been brought on by weeding in the garden on a damp day. The pain is more or less constant, deep-seated, sometimes darting, yet not always in the same spot. It is sometimes in the metatarso-phalangeal joint of the great toe, sometimes in that of the little toe; at other times, it is in the scaphoid, in the cuboid bone, in the sole of the foot, or in the heel. It is accompanied by a certain amount of swelling of the foot, and there is always considerable tenderness on pressure, so that the patient cannot bear to put it to the ground. The pain is worse at night, and is then so severe as to prevent sleep. The patient is otherwise in fair health, but for phthisis pulmonalis, which, however, is at present quiescent. I have tried various liniments, containing opium, aconite, belladonna, chloroform, camphor and chloral, salicylate of soda; also the subcutaneous injection of morphia, blistering, the use of Martin's bandage accompanied by elevation of the limb and absolute rest; but with only temporary relief. I have also given the following drugs inwardly, viz., salicin, salicylate of soda, iodide of potassium, and colchicum wine, but with no good effect. As the continued loss of sleep was weakening my patient considerably, I had recently a consultation with an eminent physician; but nothing that we could think of has had any curative effect. If we could be sure of the pathology of the case, we might discover something which would. There is no evidence of periostitis, or of locomotor ataxy. She has never had rheumatism or syphilis, and there is scarcely a possibility of gout. I think I may certainly exclude hysteria also. I may add that her general health has been attended to by the administration of iron, quinine, and strychnine, and of a liberal supply of nourishment.—I am, sir, yours faithfully,

Dum spiro, spero.

Salivary Calculus.

Sir,—In your issue of January 13th, Dr. King narrates a case of salivary calculus, occurring in his practice, spontaneously evacuated, which he regards as of rare occurrence. I may, therefore, mention that I had a similar case a few years since. A gentleman brought one to me, which he stated had just passed into his mouth. It was of an almond shape, nodulated, and over one inch in length; its exact weight I do not remember. The patient stated he had suffered little inconvenience, and was unconscious of its presence until it suddenly burst into his mouth.—I am, sir, yours faithfully,

Langport, Somerset, January 13th, 1883. J. Prankerd, F.R.C.S.Eng.

The Treatment of Partial Trichiasis.

Sir,—If Mr. Benson will refer to Agnew's *Surgery*, vol. ii, page 691, under the article "Hair", he will find the following: "The radical removal of the hair is most satisfactorily accomplished by introducing a very fine platinum needle into the follicle, and connecting it with the poles of an electro-galvanic battery. A few can in this way be destroyed at each sitting; and though the process is slow, it has the advantage of being sure." Mr. Benson, when speaking of the decomposing of the tissue of the hair-follicle, says: "and as this method has not, as far as I am aware, been tried before by others, I had no rules to guide me." (*See* British Medical Journal, December 16th, 1882.)—I am, etc.,

Robert Rentoul.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, etc., RECEIVED.

The Causation of Sleep. By James Cappie, M.D. Second Edition, rewritten. Edinburgh: James Thin, 54 and 55, South Bridge. 1882.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. With an Introduction on General Anatomy and Development. By T. Holmes, M.A.Cantab.; the Drawings by H. V. Carter, M.D., with additional drawings in later editions. Tenth Edition. Edited by T. Pickering Pick. London: Longmans, Green, and Co. 1883.

The Retrospect of Medicine. Edited by W. Braithwaite, M.D., and James Braithwaite, M.D.Lond. Vol. 86, July-December 1882. London: Simpkin, Marshall, and Co.; Edinburgh: Oliver and Boyd; Dublin: Hodges, Foster, and Co., and Fannin and Co.

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AN ADDRESS

ON THE

COLLECTIVE INVESTIGATION OF DISEASE.*

By SIR WILLIAM W. GULL, Bart., M.D., F.R.C.P., F.R.S.,
Physician-Extraordinary to Her Majesty the Queen, etc.

Mr. President and Gentlemen,—When invited by you and the Council of the Metropolitan Branch of the British Medical Association, to address this meeting on the Collective Investigation of Disease, I gladly accepted the honour, since the whole sympathies of my life are in the direction of this movement.

After the admirable addresses made in different parts of the country on this subject, first at Chester by the late Dr. Hughes Bennett, Dr. Waters, and Dr. Ransome, then at Cambridge by Professor Humphry and Dr. Mahomed, and lately at Birmingham by Dr. Foster, Mr. Macnamara, Professor Haycraft, and others; though I cannot hope to present this matter in any new aspect, or to add anything to the arguments in favour of it, still I am glad of an opportunity, in conjunction with Sir James Paget and others on this occasion, to take part in promoting what promises to be of so much advantage both to the public and the profession.

This meeting may be considered as a supplement, though it is but accidentally so, to the Bradshawe Lecture, given a month ago at the Royal College of Surgeons by Sir James Paget, in which he endeavoured to draw the mind of the profession into new lines of pathological inquiry, and to consolidate the results by the formation and extension of museums of morbid anatomy.

Now, although morbid anatomy is at an immeasurable distance from a great part of medical pathology, as physiology is a distinct science from anatomy, still both are built on anatomy. Without morbid anatomy our work would be foundationless and in the air. Nevertheless, my object to-night is to direct your attention to, and to enlist your services in, the investigation of a region of facts, which in large part, at least, lies at a far distance from the gross mechanical terminations of disease as they come before us in the *post mortem* room. And although the hoped-for gains of this collective investigation movement may not be such as to admit of being labelled and placed on the shelves of a museum, they will serve to throw a new light on what is already placed there, and will at least help us to a better knowledge and practice of our profession.

You will admit that a migraine headache, an attack of asthma from the smell or sight of some particular object, the troubles of digestion from mental work and anxiety, the special liabilities to disease of certain families, and the cloud of small ailments which often make life intolerable, though having no morbid anatomy, deserve a more exact study than they have yet obtained, whether for the satisfaction of the intellect, or for the latent pathological meaning they may convey to us; and especially, further, that when we have learned to question Nature, we find she has much more to tell us, even on trifles, than we had expected.

The idea of a collective investigation of diseases, in which every member of the medical body shall have his effective part, though obviously not to be realised at once—not, indeed, until the sun of science, which is the true Apollo of Medicine, has risen far higher in our sky than now—is yet one that at once challenges our ready and best efforts for its realisation.

Whilst the morbid anatomist is engaged in our hospitals and medical schools in demonstrating the effects of disease on the several organs and tissues of the body, we desire that all the practising members of the profession over the country, in the colonies, and in other parts of the world, should assist in the inquiry as to the origin of diseases—their early symptoms; their mode of spreading in families; their combinations; the causes of their intensity; their modifications in individuals; in families; their occurrence according to time of year; locality; sanitary conditions; occupations; and many other circumstances, some as yet but dimly discerned, and others not yet suspected. The value of this movement will, I believe, be obvious to all after but little consideration, for it will be admitted that had we leisure, proper means at our disposal, and from previous training a fitness for exact observation, we should find in general practice one of the most valuable fields of pathology, as here and here only we have before us the earliest signs of departure from health, and the only opportunities for tracing the course of a disease from its beginning to its end. Having passed many years in hospital and private practice, I have come to see that experience gained in the latter is necessary for the correction of that acquired in the former, especially as helping towards a truer pathology.

In hospitals we have more largely to do with organic lesions and with isolated cases of acute inflammations or developed fevers, and in all with an incomplete personal history and without any family record. We cannot thus learn with any exactness either the beginnings or endings of disease. Patients come under observation with their maladies far advanced, and they often pass from observation but imperfectly cured, thus leaving fallacious histories, both in pathology and therapeutics; and if they die, morbid anatomy can often give but a confused and inextricable mass of facts, which it may be difficult or impossible to put into their true relations. One might as well hope to determine the physical geography of a country, by measuring and analysing the contents of its rivers as they fall into the sea, as to hope to reach a true pathology from studying alone the results of disease on the *post mortem* table. Let it, however, be remembered, that we still insist upon the fundamental necessity of morbid anatomy as the only basis of true advancement. I am glad, therefore, to be informed by Dr. Mahomed that it is in contemplation to associate paid pathological experts and morbid anatomists with this movement. By such means alone can we make our results permanent stepping-stones for those who follow us.

As a passing illustration of what is here insisted upon respecting the relation of pathology to morbid anatomy, and as indicating what we may expect from wider research, pardon me if for a moment I refer to renal diseases. One of our recent and best writers on the subject concludes by expressing his conviction that "there is but one Bright's disease";—this honoured name of Bright defining a state found after death, and fixed upon as the battle-ground of renal pathology—and I see that the latest statement of to-day, drawn from experiments on animals, is to the effect that destructive changes in the kidneys have but one form and lead to but one result in the tissues of these organs.

I appeal, however, with some confidence to our present limited experience in general practice, and with more to that wider experience which will be gained by Collective Investigation, whether there are not to be found quite different beginnings, quite different courses, and conditions requiring quite different therapeutics, for that which in the *post mortem* room is regarded but as one pathological state.

In disease, one stream of morbid action naturally falls into another; and, whilst morbid anatomy gives us the final synthesis of results, there is but one possible means of analysis, and that through noting beginnings, order, and progress. Diseases are apt to so far assimilate as to become much alike towards death; but our work lies in a far other direction.

Believing, as I do, that more than we dare now expect will grow out of Collective Investigation, we must not be over sanguine as to its immediate fruits. The essentials for success are not only the *numbers* but the *intellectual organisation* of the movement. If we aspire to have the arms of Briareus, we shall need the eyes of Argus; for Nature is very much a Sphinx, and will answer no question put to her if it be open to evasion. Yet in truth it is not so; for truth lies on the surface, if we had minds trained, and free from prejudice, to see it.

The plan of this movement at present is to draw up memoranda on the several subjects for inquiry, and to issue with these cards of questions to be answered. Already such important memoranda have been issued on Acute Rheumatism by Drs. Goodhart and Barlow; on Acute Pneumonia by Drs. Sturges and Coupland; on Inherited and Acquired Syphilis by Mr. Macnamara and Dr. Barlow; on Diphtheria by Mr. Shirley Murphy; and questions on the evidence of the Contagion of Phthisis by Dr. Burney Yeo. This plan leaves nothing to be desired.

Nothing can be more useful and instructive than such memoranda. When extended over the whole range of medicine, they will place before the practising members of the profession in every locality, more or less succinctly, the state of our knowledge on the different subjects proposed for inquiry; and they will, whilst they indicate what we want to know, inform us of our ignorance on the various subjects.

The main difficulty lies in properly formulating the questions to accompany the memoranda. They must of necessity be so simple, pointed, and incisive, as to admit of no vague answers. This, with-

* Read before the Metropolitan Counties Branch of the British Medical Association.

out saying it, calls for a great amount of knowledge and intellectual combination, and no slight mental perception; for rightly to ask questions of Nature is the highest science of the intellect.

This is, indeed, the vital centre of the whole movement. If the Committees issue for any inquiry a definite question, and, that being settled, follow it up by another, and so on in series, Nature must at last be driven into a corner, and be obliged to say "Yes" or "No."

If it be that truth is hidden in Nature as a stimulus to the intellect in the general pursuit of knowledge, to us this obscurity of things has a double meaning where duty and interest come in to urge forward the pursuit.

And here we ought to remind ourselves that, if there is an experience which teaches, there is a much larger experience which is fallacious. Hippocrates rightly begins his aphorisms with this reminder.

Numbers, without perfect organisation, can effect but little or nothing. We require not only the fulcra of ascertained facts upon which to base our movement, but such intellectual combinations and direction of effort as is in a manner required in mechanics. If, says Bacon, men had attempted mechanical labours with their hands alone, and without the power and aid of instruments, as they have not hesitated to carry on the labours of their understanding with the unaided efforts of their mind, they would have been able to move and overcome but little, though they had exerted their utmost and united powers. Yet men, he adds, are hurried on by senseless energy and useless combinations in intellectual matters, as long as they expect great results either from the number and agreement, or the excellence and acuteness of their wits.

And we may add, that as great mechanical results cannot be obtained without engines framed by the wit and hands of many men, neither can a knowledge of such facts as we have to deal with be attained without an exact *mental* and *numerical* combination of the members of our profession.

It will perhaps, and naturally, be objected that it is almost impossible to organise for any useful purpose the labours of men already overburdened by the cares and fatigue of practice, and that there is neither time nor fitness for delicate inquiries on their part. Admitting that this objection is valid, it may be urged in reply that it need not be insuperable; that if this movement makes some demand upon the busy practitioner, he will (as remarked by Mr. Macnamara in his speech on this subject at Birmingham), in proportion to the help he affords in carrying on this work successfully, receive back quite as much as he gives. That, further, it cannot be denied that when we see the meaning of the apparent trifles which in practice would otherwise oppress and worry us, our burden is thereby much lightened, and that nothing could encourage us more than to feel that even one daily observation recorded was adding to our general store of knowledge, and making the path of practice more easy. There is no tonic to the mind greater than the sense of work done; and our journey is likely to be made shorter, as it certainly will be easier, if the way is illuminated.

We, indeed, owe it to those members of our profession, who are admittedly overwhelmed by the apparently senseless details of their work, to promote a movement like this, the object of which is to bring order into their chaos, and to help them to stamp a scientific value upon facts hitherto only burdensome. If we compare the unflagging interest of any pursuit where the aim is high and clear with the tediousness and wearisomeness felt when working in the dark, we shall readily admit that we are actually lightening the burdens of practice by thus adding to them, and by giving some portion of them a sense and meaning.

It is the spirit of a man which enables him to do his work lightly and cheerfully, and he will certainly be helped in this by a combination with fellow-workers on the same subject.

There is, however, a further consideration which should weigh with the practising members of our profession. This combination for the purpose of extending medical knowledge is an important duty in itself to all concerned, for however slowly, and at first imperfectly, such a combination may operate, the smallest progress is a great gain to society and to our profession, and if favoured as it plainly claims to be by all the members of it, and helped by the efforts of our best minds, cannot, but, in the course of time, lead on from what is now but dawn to daylight.

As to the objection on the score of fitness, if this were urged as an argument against this movement, it would stand self-condemned on every ground; for if the members of our profession are unfit to observe, they are largely unfit to practise.

Probably not so much as this is meant, when it is said that the working members of the profession cannot help us much, but rather that until the special workers in the sciences of physiology and pathology have made more advance, it would be useless for untrained practitioners to attempt anything novel.

But we believe this to be one of the fallacies of the day, and one of the causes which retard the progress of practical medicine.

Without in any degree depreciating the more recondite study of physiology and pathology, whilst indeed hailing with thankfulness the light such studies give us, and honouring those who in that behalf work for us, we may fairly maintain that we have been too indifferent to the value of the facts which lie nearest to us in our daily work. The feeling that only experts in science can do anything, and that we must wait until they, from their centre, move us, or we shall not move successfully, is only partially true.

To say that this Association is beginning at the wrong end, is to misapprehend how knowledge is gained. The history of medicine is in our favour. We do not wait to discuss the nature of sensation; or how it is that the peritoneum is painful in inflammation, before we give opium for its relief. Currie proved the use of cold effusion in fever more than half a century before physiologists began to suspect that there was a nerve-centre in the cord for controlling animal heat; and as yet they have not taught us specially how to utilise their discovery. We have long known the curative effects of quinine in ague, though physiologists have not yet determined the operation of the *miasm-organisms* which are present, and which may give rise to this disease. Laënnec developed his method of physical examination of the chest on the commonest and nearest principles.

All practice obviously lies in a knowledge of proximate facts, and it is equally obvious that that practice will be most guarded and exact which is guided by a knowledge of all the facts, both near and remote; still we are not to esteem lightly that which is near, because we are ignorant of that which is remote. It is good knowledge to have learned that fire burns and water wets; though obviously it is much better knowledge to know all the facts of combustion and wetting; the combinations, the oxidations, the adhesions, the capillary attractions, the amalgamations, the endosmoses, the exosmoses, and the many other molecular changes which attend these processes.

It would appear to be one of the faults of the medical education of to-day, which this movement may in some degree correct, to lay undue weight upon ultimate facts, whilst we neglect those which are near; to indoctrinate the student with the belief, for instance, that if he can run off upon his fingers the supposed ultimate constitution of the gastric juice (about which we are still very ignorant), that he has learned something respecting the digestive process; or that, by reciting the atomic composition of an organic substance, a muscle, he has learned something about it, though, in fact, nothing but what appertains equally to mere dead substance.

It will not be the least valuable result of this movement, if it correct our prejudices in these matters; and hence it has already been well observed that one of its effects will be educational on the whole profession, from the youngest student to the oldest practitioner. It will quicken and keep alive a sense of docility, the want of which is the cause of that confirmed prejudice which we often call experience, and which blocks the way of progress.

If the eye sees no more than it brings with it the power to see, then any objection against fitness must be met by the several Committees of the Association, when they issue their questions, by accompanying them with such memoranda as instruct the working members in the way of observation in any particular direction.

We, of all men, ought to be the last to be discouraged by the small promise of beginnings. Had we been present at the dawn of organic life, we should hardly have predicted its wonderful result as seen in past and present times. This collective investigation has been started on the principle of giving significance to what has hitherto been neglected; it would therefore be directly contrary to the *animus* of the movement if we underrated the power and probable success of efforts which may at first produce but little fruit.

The first intention of the Association respecting this movement was to obtain a better notification and more complete statistics of disease; and this was carried out to some extent by Dr. Ransome in Lancashire and Cheshire, but apparently not much came of it. The present form of the movement is chiefly due to Dr. Mahomed and the advocacy of Professor Humphry at Cambridge in 1880, and subsequently to the meeting lately held at Birmingham.

Fifty-four Committees have been already organised, one of the Branches having six Committees, and another four. These Committees include from eight hundred to one thousand of the chief practitioners in England, Scotland, and Ireland, already pledged to the work

Dr. Mahomed acting as honorary secretary to the whole, and who may be called its moving spirit.

It is not my province on this occasion to indicate specially what should be the subjects for inquiry, or to discuss the memoranda which should be issued upon them, but I may, perhaps, be permitted to refer to the subject generally. For instance, on the contagiousness of phthisis a preliminary difficulty occurs as to what is meant by phthisis.

Does the term include all the cases of destructive pneumonic changes, beginning from the apex, or only those of a distinctly tubercular type? Cases beginning acutely with fever and hæmoptysis, and ending fatally in a few weeks, and others with pleurisy or bronchitis, and lasting perhaps twenty years, or only those springing up without much observation until the infiltration of the lung is far advanced? To properly distinguish the cases will be an affair of much difficulty, since they approach from various points and intermingle inextricably. If the evidence of the communicability of phthisis should appear to gain force by extended inquiry, it will then obviously be necessary to determine with more than common accuracy in which form of phthisis this communicability occurs. If only in the more chronic forms, then whether the phthisis of old age is to be classified in this respect with the phthisis of the young.

It is plain that if in this movement of collective research we see a land of promise before us, we must at the same time recognise that the way to it is by a narrow and dangerous path. For whilst truth must be accepted when it is proved to be such, nothing will be more pernicious than false conclusions and partial truth sanctioned by so large a body as this. The opinions of a single individual would have less weight, and would take longer to permeate a profession, than conclusions having the colour of authority, and where the error would be perpetuated by numbers interested in the fallacy.

Assuming, again, respecting this question of the communicability of phthisis, that the presence of bacteria in the expectoration is characteristic of the disease at a given stage, we should then have to determine whether they were present at all stages; and whether the phthisis bacterium received its specific form from the exudation in which it was found, or whether its presence determined the specific form of the exudation. The fallacy of putting effect for cause is here imminent; and families might be broken up and society much alarmed by conclusions having but little foundation.

As genealogical trees, showing the rise and extension of families, with their many collateral branches and intermarriages, are found in great houses, and are regarded with pride and veneration, so we could wish that, in a like manner, *life-histories* were found in every family, showing the health and diseases of its different members. We might thus in time come to find evidence of pathological connections and morbid liabilities not now suspected; and we might discover means of prevention by a better knowledge of the origin and extension of maladies through blood-relation. The proposal of constructing such family life-histories is an important part of this scheme of Collective Research; and more would certainly be gained especially by the genealogies of health and disease, their connections and causes, and by tracing the strength of the strong as well as the laments of the weak in a family, than from such barren histories as have referred to, which tell only of inherited fame, but do not indicate the way to perpetuate and augment the inheritance. Unfortunately, there is a feeling of safety in ignorance; and there prevails in us a sort of blind superstition, a survival of the darkest ages of man, which makes us think that there is a kind of religious trust in not seeking too minutely into the ways of life; as if the intellect of man were the servant of impiety rather than as it is—the handmaid of all that is good to us. Again, there is another hindrance to our obtaining all we want in this matter of family history: "all men think all men mortal but themselves," and there is a half-conscious sense of shame in admitting any liability to human frailties. This makes it a great difficulty to obtain the truth we want, though we may well excuse it, and believe it to be an instinctive tribute to the righteousness of Nature's laws; and an unconfessed confession, that many of our diseases and weaknesses are due to our own fault, and ought to have been prevented, as, we trust, they will be through this movement in the course of time.

This matter of life-histories is no new subject, though it is one which this Association especially wishes to give a new impetus. Practitioners of large experience would be able to tell us something concerning the associated occurrence of diseases in families, which are not generally supposed to have any connection between them.

Dr. Cheyne, in his article on epilepsy, in the *Cyclopædia of Practical Medicine*, says we conceive that epilepsy is as certain a manifestation of the strumous diathesis, as tubercular consumption, psoas abscess, etc. Now it is, of course, not to be maintained that tubercular disease and epilepsy are one state; but it does not seem improbable that diseases from hereditary defects of organisation may evince themselves in most different ways, and that there may be a common underlying bond of pathology between them. No advance of our knowledge on these and many similar points can be made through morbid anatomy. It is only through family life-histories that the subject can be studied. Such histories, incomplete as they now are, are often of great use in practice. Take, for instance, the anæmia and langour so much complained of in the girls of a family. Though, of course, such ailments are often due to the want of physical and intellectual training, they are by no means altogether so; and certainly the most difficult and intractable of them are not to be so explained.

We must, in many instances, have the life-histories of the parents or more remote ancestors, before we can fully unravel the causes of irregular menstruation, hysteria, anorexia, uterine flexions, and the like. And the same line of inquiry applies to the headache, pallor, dyspepsia, and seminal hypochondriasis of the males of such families. Further, take another example in acute rheumatism, upon which already a memorandum and questions are before the Association. The hereditary transmission of the rheumatic diathesis, its occurrence in intrauterine life (as appears to be shown by some of the congenital cardiac malformations), and its association with other diseases prevailing in the same family, throw a light on its pathology not to be gained at the bedside, or in the *post mortem* room.

Life-histories, as Sir James Paget pointed out in his Bradshawe Lecture, would give us the genesis of new and rare forms of lesion, and I hope I may add they would also show how the organic laws, favoured through generations, prevail over and wear out disease from the stock.

Again, if I may be allowed to refer once more to the still vexed question of the pathology of the contracted kidney and its relation to cardio-vascular changes, my friend Dr. Sutton and myself believe that it is only by a careful record of the life-histories of such cases that the matter can be settled. We believe it will then appear that the same pathological tendency in the arterioles may give rise to lesions in various parts, and not in the kidneys only; to a retinal apoplexy in one, a cerebral apoplexy in another, to chronic changes in the cord or brain and cord in a third, to contraction of the kidneys in a fourth, and in all to muscular changes in the heart.

Family life-histories would show whether it be true or not that the ailments of childhood and age—eczema, bronchitis, diarrhœa, etc.—have a parallelism in their pathology. Certain it is, they have much in common as to their occurrence. In old age, these ailments are called gouty, and in infancy and childhood catarrhal. It would be a point gained, if it were cleared up; whether, in fact, childhood is as gouty as age; or whether the word gouty, as applied to the diseases of the latter period, has any actual pathological value. If an old man's urine deposits largely crystals of uric acid, whether he be distinctly gouty or not, we refer it to that state; though such deposits are as frequent in infancy and childhood; and uric acid is the chief component in the urine of many creatures lower than man. Varied and numerous family life-histories might place on a surer basis our knowledge in this and a thousand matters.

Take the inquiries of to-day respecting infectious diseases, and the increasing evidence that such states are due to agents which we may hope to fix and analyse. These, if ever completed, will still leave untouched a vital question in the solution of which this collective research will have to take an important if not an isolated part;—I mean how it is, that the same poison acts with such varying intensity in different families; in some, the organism breaking down at almost the first touching of a poison; others suffering but little, and others having almost or altogether immunity.

Does this depend upon certain family peculiarities, and if so, what? Does the immunity come from ancestors having passed through the ordeal, as occurs to the individual in vaccination and syphilisation? Family histories will show us how far these immunities and susceptibilities extend; and with what peculiarities of the nervous system they are associated, and how acquired. Allied to this inquiry, is also that of the action of endemic poisons upon the new-comers into a district; at which I can only glance.

In the early part of this address I asserted, that collective research would give a new colour and meaning to many ailments, and show their relations to later organic changes; and I will conclude what I have to say, by referring to a set of ailments which very largely claims the attention of the practitioner, and a fuller investi-

gation;—I mean a set of cases whose life is nothing but ailment. Their physiology, if I may so express it, is a state of pathology. Their nervous systems are so sensitive, and their digestions so feeble, that they know nothing of that satisfactory resistance to disturbing causes from without, which we call health; and who often suffer as much from futile attempts to cure them, as from their congenital defects.

These cases supply a constant *clientèle*, and I can hardly say how much we should add to the happiness of mankind by a better understanding of them. Of course, I exclude those dilettanti *malades imaginaires* who may be said to enjoy bad health; whilst the class of cases to which I refer of right claim our greatest sympathy.

But I feel that I must not longer tax your patience. From the nature of the case, it would be impossible to indicate, even in a cursory way, the many bearings which this collective research may take. One thing is certain: every question settled will but open another, and give renewed encouragement for fresh exertions. In all its aspects, this project, set on foot by the British Medical Association, cannot but advance the highest interests of our profession, and the more surely, in proportion as it extends our knowledge of the prevention and cure of disease.

This is the age of combinations; but I know of none which has a purer object than this: for what can surpass that whose purpose is the investigation of truth for the good of man?

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COLLECTIVE INVESTIGATION OF DISEASE.*

By SIR JAMES PAGET, Bart., D.C.L., F.R.S.

Mr. President and Gentlemen,—When it was proposed to myself, as well as to Sir William Gull, that we should give addresses here on the subject of collective research, it seemed to me scarcely possible that two addresses on the same subject could be given on the same night; and when Sir William Gull was good enough to promise that he would speak first, I felt nearly certain that he would leave me nothing that could be said, except after the manner of useless repetition. I shall, therefore, speak very briefly; and I will add emphasis in proportion to the shortness of my speech, by admitting that I entirely agree with everything that Sir William Gull has said. I will ask you to allow me to flatter myself so far as to say that, if I had spoken first, I should have said the very same things. If I may condense what Sir William Gull has said at full length, it seems to me he has shown perfectly how this design of the British Medical Association may fulfil the two great purposes which we should have constantly in mind in our profession—the increase of knowledge and the improvement of the mind of the observer; for these things can rarely go apart.

I cannot but admire how well a large assembly such as this, representing, as it does, a yet larger Association, has declared itself to be in the state of mind most favourable to the acquirement of knowledge—the state of partial ignorance. The list of questions which is published upon each of the papers sent out by the Committee indicates that we are not ashamed to confess our doubts on some of the most important things that come before us; that we are prepared to start confessedly ignorant on many points upon which we are supposed to have complete and final knowledge. I think that, in common with most scientific men, we may boast that this is rather rare; that there are large groups of men, and those much esteemed, who rarely express doubt on anything, and thereby command the assent of those who listen to them. Without expressing the smallest preference for one side more than the other, I would say that this is best to be found amongst politicians, in whose speeches we almost entirely miss the words which are most familiar to ourselves—"perhaps", "possibly", "I rather think", "I would venture to suggest." I have looked with much curiosity, not for the sake of acquiring political knowledge, but for the sake of comparing the political and the scientific mind, to see if in some of the best and most renowned speeches I could find one expression of the kind. Not one is there. We must therefore be content to put up with what may be regarded as a sort of unpopularity if we confess ourselves to beginning with doubts, in order that we may be more sure in proceeding towards knowledge; for there is no state of ignorance so hopeless, so profound, as that which cannot even doubt.

The questions also show well how very large the inquiry is, and how various the objects that must be had in view in every research that we undertake. Sir William Gull has rightly said that I had in view in the Bradshawe lecture the promotion of museums of morbid anatomy, and I am quite conscious that, whenever one undertakes to promote one thing, it is very difficult to avoid an appearance of depreciating others. I put, as it were in parenthesis into the lecture, some words which probably attracted no attention, and might have been omitted, implying that I should be the last to hold that any one method of inquiry on any scientific subject can be sufficient; and I said, what I venture to repeat, that the pathologist who thinks lightly of observation in practice, and the practitioner who thinks lightly of observation in pathology, will neither of them attain to more than that partial view of truth which is nearly as bad as error. And so I think, although still very highly estimating pathology, as illustrated by morbid anatomy, one may nevertheless speak with an unbounded desire for the success of an inquiry such as this, in which morbid anatomy may be almost wholly left out of sight. It is impossible to reckon what shall be ultimately the relative degrees of importance of the several methods of inquiry. I would rather hold that it is altogether childish to endeavour to say which method is best. One rule may be held for all; that is for each man best which he can do best, whether by force of circumstances, or by his own natural ability. And as one cannot but observe that the chief design of this collective inquiry is to bring into the fields of knowledge all that may be gathered in general practice by family and general practitioners, so I would not hesitate to name the knowledge which may be so gained as probably likely to lead to the very highest knowledge, and even the solution, of the most difficult problems in pathology that can be set before us. I would have dilated on this subject, but that Sir William Gull has treated it so fully in regard to the attainment of family histories. There is certainly no other means so good as that which may be possessed by those who have known families for generations, and who can, of their own knowledge, and not on the fallacious and often very false reports of relatives and friends, declare what has been prevalent in this and that household. And yet, if one should set before one's self the gravest and most important problem in all pathology, it would be that which concerns the inheritance of disease; and as Sir William Gull has rightly stated, the inheritance, not of disease alone, but of that which from generation to generation shall obliterate the disease which one ancestor may have acquired. Let me observe that this is a kind of knowledge which can be gathered in the most ordinary pursuits of life; it needs no minute inquiry. The mere recollection of the daily life that has been spent in this or that small village, among the two or three generations in one family, may recall it at once, and this is what we most thoroughly need, this personal and exact knowledge. And when I speak of knowledge that may be gained in the study of common things, there always comes to my mind the great example of Darwin, whose renown will last as long for the manner in which he pursued his knowledge, as even for the grand knowledge which he acquired. I have often felt in Darwin's greatest inquiries, and I would cite, as the chief among the kind his last work on the influence of worms, that there are very few facts which might not have been observed by the common daily labourer in the field. He had the rare power of taking the common things that other men waste, and out of them making the grandest material of scientific work. So that it is vain to say that in any branch of practice, "I have no opportunity for scientific inquiry; I cannot investigate this; I can contribute nothing to that which I see the scientific members of the profession are doing." It requires merely the opportunity of a practice in the country and the mind and resolution of Darwin, to bring great pathological conclusions out of the most ordinary facts of daily life in general practice. And if one wanted another motive for this, it would be the improvement of the observer's mind, and the charm which, as Sir William Gull has well said, he would find in the promotion of his own work, and in the mere pleasure of observing and finding his conclusions.

We are all very apt to think that, as we grow older, we acquire experience and grow wiser. I have lived long enough to feel and discern the exceeding fallacy of that as a general rule; and yet I venture to say that the starting with a distinctly observing and scientific mind is of the first importance in our lives; for the whole career of a man's life, his whole real success in practice—or, to speak more to the subject of the evening, the whole value of what he may contribute to knowledge may de-

* Delivered before the Metropolitan Counties Branch of the British Medical Association.

pend upon whether he begins with a mind for scientific inquiry. I am quite ready to believe, or rather I would say, I am quite willing to hope that the young men who now enter upon life, and are called qualified practitioners, are really, in the broadest and largest sense, qualified, as well as in the legal one. Legally they all are, but some are certainly not qualified to make full use of the knowledge which they may meet with in their career and practice. A very wise old man said that, it would be well if the youngest amongst us would remember that he is not infallible. It is a fault which is apt to prevail, to think that at the conclusion of study and with the right to practice, there is full power to do all that is required. There is not. Dr. Billings said cleverly the other day that he wished, after thirty years of practice, he really knew half as much as he was convinced he knew when he first obtained his diploma. And I recollect Sir Benjamin Brodie telling me that, when he looked back over forty years of practice, he was astonished, chiefly at the ignorance with which he began; and I think to most of us who have that long career, the same reflection may often happen. Now both of those would have said that the knowledge which they really acquired late in life was due, not to the mere fact of seeing cases nor to having lived long to see them, but to the care, the prudence, the discretion, with which they observed, and remembered, or recorded what they saw.

And if I may impute a fault to those who are admirable in all the ordinary work of their life, I would suggest how large a quantity of knowledge lies scattered and lost to the scientific world in the charge of those who are in large practice, and who record nothing. It will be indeed an admirable result, and I think it will be the result, of this system of collective research, if this fault is mended, if every one can be induced to record his answers to the several questions that will be asked, and in the recording will get the habit of recording for himself many things that are not asked; for I am quite sure that there is no one who will undertake this but will find in the task an amount of refreshment, and of pleasure in his practice, equal to that which may be had in any kind of speculative pursuit, in any kind of sport, in any kind of game. For amongst all these things—in sports, and games, and speculations, and the rest—there lies underneath one thing—the desire we all have to unveil mysteries. Even the boy who tosses a halfpenny to see which way it falls may illustrate a part of the scientific mind: at every toss he invents a mystery; at every fall he solves a mystery. So, on a larger and grander scale, in every investigation that we enter upon, we set before ourselves a mystery—a mystery that may be as interesting as that of a romance, of a drama, of a great tale told in the history of past times. The mystery is before us; the power of solving it may be in our minds; and I venture to promise to all who will begin with this collective inquiry, and then proceed from it to personal inquiry, a pleasure of this kind as great as can be had in any of the pleasures of life.

LONGEVITY OF MEDICAL MEN.—A daily paper notes that the following eminent physicians and surgeons have died during the year just closed, at ages varying from 78 to 96, namely:—John Flint South, F.R.C.S., late President of the Royal College of Surgeons of England, and Surgeon to St. Thomas's Hospital, 85; George Samuel Jenks, M.D.Edinburgh, F.R.C.P. London, 93—he served in the Peninsula from 1812 to the end of the war in 1814, and at Waterloo; Price Blackwood Hallowes, F.R.C.S. England, 81; Sir Robert Christison, Bart., M.D., D.C.L., LL.D., one of Her Majesty's Physicians in Ordinary, Scotland, 85; John Francis De Grave, M.R.C.P., late Master of the Society of Apothecaries, 92; John Lonsdale Minshull, F.R.C.S. England, 81; George Macilwaine, F.R.C.S. England, 86; Sir James Alderson, M.D. Oxon, D.C.L., F.R.S., Physician Extraordinary to the Queen, and late President of the Royal College of Physicians, London, 87; Henry John Gore, F.R.C.S. England, 85; Staff Surgeon William St. George Davies, R.N., 96—he served as Acting Surgeon in the *Norge* at the Bombardment of Copenhagen under Admiral Gambier and Lord Cathcart in 1807, and was in all probability the very last survivor of that engagement; Henry Bell, M.D., 85; George Gulliver; F.R.S., F.R.C.S., late Surgeon, Royal Horse Guards, 79; A. E. Blest, M.D. Edinburgh, Indian Army, 85; Staff Surgeon Cotton, 87; Edward Greatrex, F.R.C.S., late Surgeon, Coldstream Guards, 83; Edward Doubleday, F.R.C.S., 84; John Haxworth, 86; Sir Thomas Watson, Bart., M.D., D.C.L., F.R.S., Physician in Ordinary to the Queen, and a former President of the Royal College of Physicians, London, 90; Inspector-General Cross, R.N., 78; James Arthur Wilson, M.D., F.R.S., Senior Fellow of the Royal College of Physicians, 88.

REMARKS
ON THE
COLLECTIVE INVESTIGATION OF DISEASE.*

BY G. M. HUMPHRY, M.D., F.R.S.,
Professor of Anatomy in the University of Cambridge, Surgeon to Addenbrooke's Hospital, etc.

MY duty, gentlemen, is a very easy one, and that is to ask of you to give your thanks for the two addresses which have just been delivered. In the first place, for the noble address which has laid before us the real work we have to do, the work of seeking out and developing the pathology of the living; and which has also laid before us the many difficulties and dangers which surround us in the work: an address by one whose remarkable ability, singular good sense, and genius for work and for inspiring work in others, have been to-night so well exhibited. As for the other address, from one the charm of whose oratory, in conformity with the charm of his character, wins for him that universal love which is felt by everyone of us towards him, it has already received the expression of your thanks. It is not only this meeting, but the British Medical Association, the whole medical profession, the whole community, which is indebted to these two men, the foremost men of our profession, who have given their time and thought to come before us on this occasion, and who thereby show so deep an interest in this matter as a great professional investigation.

I confess that, in my knowledge of the whole history of the British Medical Association—and that knowledge is nearly coeval with that history—nothing has given me so much hope for the Association, and for its permanent beneficial influence upon the profession and upon the world at large, as the manner in which it has taken up this subject of collective investigation—the manner in which it has been taken up by the leading members of the Association, who have given it all the aid they could, and who have not been sparing of the funds of the Association. The last thing which was said to me by one of the greatest, the most earnest and most efficient promoters of the British Medical Association—the man to whom the Association is, perhaps, more indebted than to any other man living—was this: "Your work will make considerable demands upon the funds of the Association; but you must not be cramped for want of funds. It is a great work, and deserves all the assistance the Association can give it." The manner, also, in which the work has been taken up by many members of the Association has been most satisfactory. The manner in which they have combined to form committees and to carry out the work has shown that they have a real sterling interest in it, and that they desire that the British Medical Association should connect itself actively with the promotion of the science and the practice of medicine. I have always felt that there could be no task which the Association could undertake so appropriately as the great duty of collecting the scattered fragments of knowledge which are daily and hourly running to waste; and surely there is no other profession, no other class of men, in whose case there is so large a number of facts and observations continually running to waste as in the medical profession. To gather together these scattered fragments, to condense, to analyse, to make them the basis of the furtherance of the science and practice of medicine, must be one of the greatest and highest works which the Association can undertake. We boast of our numerical power, of our ten thousand members, but let us remember that power means responsibility—that the only right ground for the continuance of power is the good use of it. The only assurance of the stability of power is well doing; the only assurance of the stability and persistence of our Association is, that it should use its power in right directions; that it should satisfy the yearnings of medical men for its work in scientific medicine. And not only will this undertaking have the advantage, as I trust it will, of bringing large accumulations of knowledge to bear, but there is also that which has been alluded to, both by Sir William Gull and Sir James Paget, namely, the advantage that must accrue to the members of the profession who take part in the work. No one can read those admirable cards

* Made at a Meeting of the Metropolitan Counties Branch, January 17th, 1883.

and the memoranda that have been sent out with them, framed with so great care by the gentlemen who have given their time and trouble to the subject, without being greatly instructed by them. They constitute, and, if they are continued in the same way, they promise to constitute, some of the best literature of the profession.

I would commend them most earnestly, if only to the reading of all the members present; and when I speak of the members present, I am sure I may say that nothing could be more gratifying than this meeting. I believe it to be the grandest meeting of the British Medical Association that has ever been assembled. This meeting represents the most distinguished members in the metropolis and in the provinces more thoroughly and fully than any meeting ever has done. And bear in mind, that we are met together for one simple purpose, that of promoting medical science and medical practice; we have no other motive than that. I will not say that we have not been attracted, to a certain extent, by the expected eloquence of the addresses; but, nevertheless, the one object of this meeting is the simple one of promoting the welfare of our profession in a scientific point of view. I am not at all blind to the fact that the difficulties are enormous. The difficulties of carrying on a work of investigation of this kind are indeed very great, but we do not forget also that difficulty is the real stimulus to exertion. Without difficulty, what would life be? And certainly in this work there is difficulty enough to stimulate exertion and to promote enterprise and interest. The difficulties are partly those which Sir William Gull has mentioned, the difficulties of proposing the questions aright, and of selecting the right subjects. But there is another difficulty to which he has not adverted, and which is a great and a serious one, that we have to contend with a force which is the most resisting of all forces, the force of inertia, the unwillingness of a large number of men to enter upon a work of this kind.

It is said, "We are too busy we cannot attend to that." I would answer that the real expectations are from the busy men. It is the men who are busy, if I mistake not, who will send us in the answers, because they are the men of energy, of ability, of anxiety for the welfare and the profession, and it is that ability and that energy which have raised them to their high positions in the profession and made them men of business. It is to busy men, therefore, that we look with hope. One of the real and great inducements to this work is that it is a work to be carried on, not so much for the benefit of the individuals taking part in it, though that will be no small result, as for the benefit of the profession and the public at large. It is on that ground that we demand your interest and ask your help. It is, as I have said, difficulty which inspires interest and which brings spirit, and assuredly we have in this instance one spirit which I think will surmount the difficulty if ever the difficulty is to be surmounted. We have one person at least, engaged in this work who is actuated by the most earnest, the purest desire to make it a success. I mean our secretary, Dr. Mahomed. We are also deeply indebted to the members of the various committees who have given us their time in drawing up these admirable memoranda. We start with good auspices; but I trust that the members will bear in mind that after all it is upon their own individual exertions that success most depend. It is not alone by great meetings like this, encouraging as they may be; it is not by coming here and listening to eloquent addresses, soul-stirring even as those we heard have been, so much as by the persistent continuance of every-day work that success is to be attained in the difficult undertaking upon which we have entered.

THE COST OF AN EPIDEMIC.—It is announced that the Bangor Local Board of Health have issued a summary of the expenditure incurred in stamping out the epidemic of typhoid fever which rendered their district so notorious last summer. The total expenditure for the half-year is put down at £4,000, £1,600 of which was covered by a public subscription initiated by the Bishop of the diocese, who allowed tent hospitals to be erected in his private grounds and in other ways co-operated most earnestly with the local authorities. To meet the deficiency, the local board have found it necessary to make a rate of 3s. in the pound for the current half-year, or fully quadruple the usual amount. To this must be added the cost of what is far more difficult to estimate, and which must amount to a far larger sum than here set down—the life, health, and wage earning power on the part of the numerous victims to the epidemic. It would be interesting if the medical officer could make an estimate on this subject. We may add, that if he can furnish us with the figures we will endeavour to have a calculation made out, on the basis of such data as exist, of the loss which may be calculated under these heads

ABSTRACT OF LETTSOMIAN LECTURES
ON
THE TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

Delivered before the Medical Society of London.

BY ARTHUR ERNEST SANSOM, M.D.Lond., F.R.C.P.,
Physician to the London Hospital, Senior Physician to the North-Eastern Hospital for Children.

LECTURE II.—MITRAL REGURGITATION.

Morbid Anatomy—Clinical Study—Regurgitation in Adynamia, in Acute Fevers, in Rheumatism and in Degeneration—Treatment General and Special—Action of Digitalis, Belladonna, Caffeine, Convallaria majalis, etc.

I HAVE to ask your attention this evening to the subject of the treatment of various conditions of disease associated with a certain imperfection in the mechanism of the heart—an imperfection of closure of the left auriculo-ventricular orifice at the time of systole, occasioning the reflux of a portion of the contents of the left ventricle into the left auricle, the mitral valve being inadequate to close the orifice. Pathological anatomy teaches that such result may be brought about by several varieties of morbid change:

1. By dilatation of the left ventricle without structural disease of the valve; so the free borders of the curtains are drawn upon by their circumferential attachments, and prevented from a perfect apposition in systole.

2. By diseased conditions of the valve-curtains, the tendinous cords and fleshy columns, induced by endocarditis, and the changes consecutive thereto.

3. By rupture of the valve-curtains, cords, or columns, and their consequent incompetence. It has been supposed that rupture may occur from sudden strain in a healthy heart, but Drs. Wilks and Moxon have given strong reasons for the conclusion that there must have been some dilatation, at least, of the left ventricle previously. They consider that this accident is not of infrequent occurrence.

4. By atheromatous disease, patches of which may be observed upon the valve with consecutive degenerative change, rendering it inadequate.

5. By ulceration of portions of the valve and the surrounding structures.

Mitral regurgitation is not, however, wholly to be interpreted by pathological anatomy; it is to clinical investigation that we must chiefly look for guidance. Of this condition, a murmur at the left apex of the heart with the systole is the sign almost, though not quite, pathognomonic. The only condition with which it is likely to be confounded is, in my opinion, pericardial roughening at or about the apex. I have never known a difficulty about the differential diagnosis in the case of adults, but I have observed such difficulty several times in children. In cases of children I have repeatedly said that the quality, character, and situation of a systolic apical murmur will not declare with precision whether there be exocardial or endocardial disease. Combined clinical and necroscopic observation soon convinces us that, in certain cases, wherein we have determined from such physical sign that mitral regurgitation existed during life, no lesion indicating inadequacy of the mitral valve to close its orifice has been discovered after death. Moreover, in some cases, where we have not only observed the sign mentioned, but where the whole category of signs, symptoms, and consecutive changes which experience has taught us to associate with mitral inadequacy has been present, the necropsy has demonstrated no determinate lesion at the orifice.

It will best serve a practical purpose, I think, if we divide the cases in which the signs indicating mitral regurgitation are evident into clinical groups, discussing the bearing of the collateral phenomena upon treatment in each group. We shall thus consider the cases just as we meet with them in practice.

1. A case presents itself, manifesting signs indicating mitral regurgitation in the subject of *marked anæmia*. We have to inquire whether or no there has been antecedent disease, leading up to organic change at the mitral orifice. Supposing such signs are not in evidence, have we a right to assume that actual mitral regurgita-

tion can be induced by the condition of anæmia without concurring causes? The answer is, in my opinion, undoubtedly in the affirmative. In cases of anæmia and chlorosis, a murmur is sometimes heard exactly in the site of that indicating mitral regurgitation. Assuming that, in these cases, there is a veritable regurgitation, how is such brought about? The explanation is, I think, given by the careful experiments conducted by Ludwig and Hesse at Leipzig, which have been admirably summarised by Dr. Donald Macalister (*Remarks on the Form and Mechanism of the Heart*). The mechanism for the closure of the left auriculo-ventricular orifice does not reside in the valve-curtains alone; the surrounding muscles of the ventricle have an active share, not merely in floating up the valve-curtains, but in reducing the size of the aperture which these valve-curtains have to close. It is not that the orifice is dilated, but that it is insufficiently contracted, the aid of the muscles of the wall of the ventricle which normally produce such contraction being lost.

It is important, in regard to treatment, to differentiate mitral regurgitation due to disease of the valves, from that due to adynamia of ventricle, supposing a systolic-apical movement to be manifest in a markedly anæmic subject. The two signs I would most rely on as pointing to an anæmic causation of the murmur are (1) an absence of notable cardiac dilatation; (2) a heightened tension in the systemic arteries. I have never known in these cases any marked improvement follow the administration of the usual cardiac tonics, such as digitalis and iron. In the cases attended with hæmorrhage, it is, of course, of the first importance to arrest this at its source. Rest, and the administration of assimilable food, are no less important indications. In this connection, I may call attention to the great value I have observed to attach to supplementary alimentation by the rectum in such cases. I have long tried the plan of using defibrinated ox-blood for a nutrient enema, as advocated by my friend Dr. A. H. Smith, of New York. In comparing results, however, with those in which artificially digested food has been employed, I felt that the balance of evidence is in favour of the latter plan. I have had prepared mixed peptone enemata—beef, milk, and farinaceous food—which have been proved to preserve a perfectly good condition for long periods. These have the advantage of being available at a moment's notice, it being only needful to render them diffluent with warm water. From two to four ounces are injected slowly into the rectum, and repeated every three or four hours. In many cases, I have caused to be added the dry ox-blood (sanguis bovinus exsiccatus), in the proportion of a drachm to the ounce. I have lately, however, adopted a simpler plan with good results; using, instead of peptoned food, equal parts of warm milk and cod-liver oil, as a nutritive enema. In the treatment of cases of idiopathic anæmia, I have found no drug-treatment so efficient as the administration of arsenic (Fowler's solution in small doses gradually increased). I have observed, as has been recorded by others, complete recovery, with the disappearance of the cardiac murmur, under such treatment, combined with rest and careful nutrition.

II. We will now assume that a systolic apex-murmur is present in a patient showing signs of *a neurosis of the cervical sympathetic*. It has been frequently noted that a murmur at the apex has existed in the subjects of exophthalmic goitre (Graves's or Basedow's disease); and, on *post mortem* examination, no disease at the mitral orifice has been discovered. In these cases, anæmia may be present, but not of necessity. It is not causally related with the phenomena. Organic heart-disease may coexist, but such coincidence is rare. It is important to recognise, especially with regard to treatment, that, in the subjects of Graves's disease, mitral regurgitation occurs without valvular lesion. The record of fatal cases in which disease of the cervical sympathetic ganglia has been actually demonstrated in Graves's disease, is now tolerably extensive. Trousseau, Cruise, and O'Donnell, Reith, and Shingleton Smith, have recorded cases in which some of the ganglia (usually the inferior cervical) have been enlarged, atrophied, or degenerated.

As regards the cases which I have seen, ordinary tonics and digitalis have been of very little benefit; but great improvement has followed galvanisation of the cervical sympathetic. I have employed the continuous current, from twenty to forty elements (Leclanché). One pole may be placed behind the lower jaw in front of the sterno-mastoid, and the other either at a corresponding point of the opposite side or at the nape of the neck, right or left of the vertebra prominens, or above the sternum at the inner edge of the insertion of the sterno-mastoid.

III. I now turn to a third group of cases, and assume that the indications of mitral regurgitation are manifest during the *evolution of certain fevers*. In the course of typhoid fever, for example a systolic murmur may be discovered at the apex. There is no history of its existence before the attack, but it has arisen during the course of the disease. The murmur is an evanescent one. To what is it due? The changes are, according to M. Hayem's observations, not in the endocardium nor pericardium, but in the muscle of the heart. In fatal cases, the muscular fibres present a granular and fatty degeneration, or a special form of vitreous degeneration; the areas of morbid change are disseminated in an irregular manner here and there throughout the cardiac muscle. There are, besides, a multiplication of the muscular nuclei and aggregation of cellular elements; in fact the disease is a form of myocarditis. It is, I think sufficiently proven, that the murmur occasionally heard at the apex in cases of typhoid is due to regurgitation, on account of imperfect apposition of the valves of left or right sides from enfeeblement, by disease, of the muscular fibres in certain areas of the heart wall. It does not appear that the occurrence of such murmur renders the prognosis more grave, but sudden death from myocarditis in all probability may occur in typhoid, without any special evidence of direct cardiac impairment previously. Its occurrence, however, should make us watchful, and cases presenting any of the phenomena indicating myocarditis in typhoid should be observed and treated with a view of preventing subsequent dilatation. Analogous myocarditis has been described in variola (by MM. Desnos and Huchard), and in severe forms of intermittent fever as observed in Africa (by M. Vallin).

It is obvious that a recognition of the nature of the alteration which produces a mitral regurgitant murmur in these cases must have an important bearing on treatment. We need not fear that endocarditis has arisen as a complication, nor have we to debate as to an antirheumatic plan of treatment. The indication is to keep the disturbed muscle of the heart as tranquil as possible, and, of course, to promote as good a nutrition as the circumstances will permit.

IV. I now come to the fourth group, and assume that a murmur indicating mitral regurgitation is observed in the subjects of *acute or subacute rheumatism*. Attention has been frequently drawn to the fact that murmurs may arise in the course of evolution of the disease, and yet disappear, and patients may be supposed to be free from cardiac complication. I have, in my former lecture, deprecated this as a too hasty conclusion. It may be well to inquire, in the first place, what is the probable nature of these transitory or evanescent murmurs, which are by no means uncommon, for they occur, as the statistics of the London Hospital for 1880 and 1881 show, in about 10 per cent. of the cases. Rheumatism is a disease notably attended with anæmia. Is it probable that these *bruits* are of the nature of those which we have considered to be causally related with anæmia? The evidence collated for me by Dr. Gabbett as to the site of such transient murmurs is, I think, against this view. It is well known that the murmurs heard in connection with anæmia, though sometimes heard at the apex, and indicating mitral regurgitation, are far more frequently audible at the base over the site of the pulmonary artery or aorta; even when heard at the apex, they are usually accompanied by other murmurs at the base. In rheumatism, however, the usual site of the evanescent murmur is the apex. The totals for 1881 show as follow: Transient murmurs in mitral area, 15; at base and apex, 7; in aortic area, 5; in pulmonic area, 3.

It would appear that a murmur which might suggest an anæmic causation is almost confined to a first attack of rheumatism. After two or more attacks, no basic transitory murmurs are recorded. Then, as regards the transient systolic murmur in the mitral area, we may ask whether it may be due to myocarditis. If so, it does not resemble in associated phenomena the murmur observed in typhoid, etc. The peculiar perturbations of rhythm are not recorded, and it would appear probable that, if there be myocarditis, it does not occur in disseminated areas as in typhoid. May it not be that the temporary regurgitation is due to a localised myocarditis developed in the neighbourhood of a swollen valve or inflamed endocardium? Thus, though the swollen valve might not be in itself incompetent, a temporary incompetence would be produced by the impairment of the force of the muscle. As the myocarditis subsided, the valve would again become competent, but probably, in many instances, to present a renewed imperfection when the swelling, in the course of time, has given rise to fibrous change and consequent shrinking. I draw attention to this as a caution as to the expression of any opinion that a valve is sound after a murmur developed during the early stages, and disappearing during the later period of rheumatic fever.

Supposing that mitral regurgitation is left after rheumatic endocarditis, it is well known that compensation may be effected, and the

health of the patient be preserved for very long periods with no subjective symptom of cardiac unsoundness. The chief factor in inducing such compensation is a (conservative) hypertrophy of the right ventricle, and the sign of such compensation (supposing the amount of blood regurgitating to be not very small) is an accentuated second sound over the pulmonary semilunar valves. If we are satisfied that there be due compensation, medicinal treatment may be entirely unnecessary. I have no doubt that a vast amount of injury has been done to patients by a shaking of the head of the auscultator over the subject of a mitral murmur, who perhaps was no worse at the time of examination than he was ten, twenty, or thirty years before, and who might continue uninfluenced for harm by his cardiac complication all his days. He should be cautioned against strain, exposure, irregularities of diet, etc.; he may be better occasionally for treatment by iron tonics, cod-liver oil, or strychnine, but any special cardiac treatment is out of place.

Not so, however, if there be evidence that compensation is beginning to fail. I will pass in brief review the chief agents which are of service in such case.

I. Digitalis is *facile princeps* of drugs in the treatment of imperfect compensation. A little over a suitable dose, however, may induce nausea, vomiting, anuria, irregularity of pulse, and, instead of slowing, an enhanced rapidity of heart-action. Whilst a dose which produces favourable result is constant and discoverable, in regard to a large majority of patients, in a minority, such dose is inconstant and even unattainable.

As regards the preparation used, we may have differences of result, and we know that, as in the case of so many vegetable products, the energy of different samples may vary. Practically, I consider the tincture most reliable, and that usually in small doses, five minims to ten minims, increased only in exceptional cases, and then occasionally reduced; next in value I consider the powdered leaves (half a grain to two grains) the combination of which with alkalies I shall hereafter consider.

In some cases, even by increasing the dose, no apparent influence appears to be exerted by the drug; then digitaline, especially when hypodermically injected, I have observed to give, in many cases, good results. The digitaline hitherto prepared has probably scarcely ever been the pure alkaloid. The usual dose for hypodermic administration is one-fiftieth of a grain.

When the right ventricle has dilated so far that there is marked tricuspid regurgitation, the beneficial action of digitalis is by no means so decided. Nevertheless (especially when purgatives are also administered), the signs of tricuspid regurgitation may pass away. In other cases, no such favourable result attends. In fact, as *à priori* considerations might suggest, any increased force of systole which the digitalis may bring about serves the more to urge back the blood through the imperfect tricuspid orifice into the venous channels. But yet I have seen good results when the administration of digitalis has been combined with abstraction of blood by leeches or cupping to relieve venous engorgement.

II. Belladonna is, I think, only useful in the treatment of failure of compensation in cases of mitral regurgitation, when combined with, or occasionally substituted for, digitalis. Belladonna, like digitalis, increases the power of systole and raises the arterial tension. As Dr. Lauder Brunton has shown, it paralyses the cardiac terminals of the vagus, and reduces irritability by an anæsthetic effect on the sensory nerves of the heart. Very useful occasionally, it by no means compares with digitalis for prolonged employment. The hypodermic injection of one-fiftieth of a grain of digitaline with one-eightieth of a grain of atropine I have found very satisfactory.

III. Casca.—A tincture made from the bark of the ordeal bark of West Africa, has been employed as a substitute for digitalis. Dr. Lauder Brunton, in his Gulstonian Lectures for 1877, published the results of elaborate experiments as to its physiological action. In kind, this action appears much to resemble that of digitalis. Dr. Brunton has said: "Digitalis has hitherto been our great resort in mitral disease, but I think it probable that in casca we possess a drug more powerful still; at least, its effect upon the arterioles appears to be greater than that of digitalis, and it is quite possible that it may succeed in those cases of advanced mitral disease where digitalis fails." I have myself employed the tincture of casca, substitutively for digitalis, in a considerable number of cases, but I have never yet been able to convince myself that it has any more beneficial action in mitral disease.

IV. Caffeine.—Gubler, Shapter, Leech, Milliken, Brakenridge, Huchard, and others have recorded observations showing the action of caffeine (or its citrate) in cases of cardiac disease, especially where dropsy is a marked symptom. Some of the cases show very forcibly that a beneficial influence has been exerted by the drug. There are many apparently contradictory data as to the physiological action, but the cardinal points are, that it at first quickens but soon after slows the heart's action, that it increases the general arterial tension, and acts in a very pronounced manner as a diuretic in cardiac dropsy. Dr. Brakenridge advises that digitalis be administered previously to, or in conjunction with, the citrate of caffeine, and that small doses (three grains) should be employed. M. Huchard, however, recommends that caffeine and not its citrate should be used, and that in larger doses (four to six grains). It produces diuresis more rapidly than digitalis, and has none of its nauseating effects. I have employed citrate of caffeine in substitution for digitalis without any marked benefit being manifest; indeed I have found that in some cases it has induced insomnia. Nevertheless, I consider that the evidence is such that I should certainly employ it in many cases where, in cardiac dropsy, a rapid diuretic effect is desirable.

V. Convallaria majalis.—This is the well-known lily-of-the-valley, long employed by the Russian peasantry as a remedy for dropsy. Professor Sée has shown that it has an action much resembling that of digitalis. An extract of the whole plant is employed in doses of from five to eight grains, three times a day. In cases of mitral regurgitation with severe symptoms, it entirely relieved the cardiac distress, and manifesting a decided diuretic action, removed the dropsy. Professor Sée considers that it may be used in all forms of heart failure, for it has none of the nauseating effects of digitalis, nor does it exhaust the contractility of the heart and arteries. I have employed it as a substitute for digitalis, and am convinced of its action in promoting a stronger ventricular contraction; but I am not yet convinced of its superiority to digitalis.

VI. Morphia.—The hypodermic injection of morphia, as advocated by Dr. Clifford Allbutt, is a most valuable adjunct to the treatment of failure of compensation in cases of mitral regurgitation. I have found preparations of opium by the mouth generally disagree, but not so when the alkaloid is hypodermically injected. It is often very advantageous to combine the morphia with atropia or digitaline.

V. By no means all the cases which come before us showing mitral regurgitation are to be explained by the modes of causation we have hitherto discussed. In a considerable minority, such regurgitation is secondary to combined high tension in the aorta and arteries. It is important for prognosis and treatment to discriminate the cases of *mitral regurgitation due to heightened arterial tension*. In such, the apical murmur is usually post-systolic, the signs of hypertrophy preponderate, the patient is usually, though not always, of middle or advanced age, the advent of signs has been gradual; often the arteries may be observed to be tortuous and hard. The most important signs, however, are the discovery either of aortic disease, or of accentuation of the aortic second sound, with pulse of high tension. Chronic renal disease may be also manifested. When not so complicated, great improvement often follows a prolonged treatment by alkalies with iodide of potassium. A carefully regulated diet is most important, and those cases do best, I am convinced, who entirely abstain from alcohol. It is by no means infrequent to find a murmur of regurgitation brought about by such causes wholly disappear. Their epiphenomena are often to be successfully treated by the administration of nitroglycerine, or the inhalation of nitrite of amyl.

XANTHIC OXIDE CALCULUS.—At the December meeting of the College of Physicians, Philadelphia, Dr. W. W. Keen exhibited, for Dr. George T. Porter, of Bridgeport, Conn., a specimen of vesical calculus of the xanthic oxide variety, the first of the kind reported in America, and it is believed, only the eighth on record. The stone was cut in half; one half was deposited in the Mütter Museum, the other was to be presented to the Jefferson Medical College. A full description and a representation of the same, it was said, had been published in the *New England Medical Monthly* for May, 1882. In the discussion which took place, it was stated that Dr. Levis had removed a similar stone in 1876, from a patient at the Pennsylvania Hospital, the chemical character of which had been recognised, but it had not been reported; it will probably be presented at the next meeting of the College. Dr. James Tyson reported a case of cystine calculus.

CITY COMPANIES.—The following grants have recently been made to the North-West London Hospital, Kentish Town Road:—The Skinners' Company, £10 10s.; the Vintners' Company, £10 10s. the Haberdashers' Company, £10 10s.; the Mercers' Company £26 5s

A NOTE UPON THE USE OF THE MULLEIN PLANT IN THE TREATMENT OF PULMONARY CONSUMPTION.

By F. J. B. QUINLAN, M.D., M.R.I.A., F.K.Q.C.P.,
Physician to St. Vincent's Hospital, Dublin.

From time immemorial, the Verbascum thapsus, or great Mullein, has been a trusted popular remedy, in Ireland, for the treatment of the above formidable malady. It is a wild plant—most persons would call it a weed—found in many parts of the United Kingdom; and, according to Sowerby's *British Botany*, vol. vi, page 110, is "rather sparingly distributed over England and the south of Scotland." In most parts of Ireland, however, in addition to growing wild, it is carefully cultivated in gardens, and occasionally on a rather extensive scale; and this is done wholly and solely in obedience to a steady popular call for the herb by phthisical sufferers. Constantly, in Irish newspapers, there are advertisements offering it for sale; and there are, in this city, pharmaceutical establishments of the first rank in which it can be bought. Still, it does not appear in the *Pharmacopœia;* nor, as far as I know, has its use received the official sanction of the medical profession. Some friends with whom I talked over the matter at the Pharmaceutical Conference at Southampton last August, suggested that it would be desirable to make a therapeutical research into the alleged powers of this drug, and ascertain by actual experiment its efficacy or otherwise. Having partially accomplished this, I am anxious to very briefly set forth what has been done, in order that others may be induced to co-operate in the work.

There are five mulleins, all belonging to the parent order of the Scrophulariaceæ; but the old Irish remedy is the great mullein or Verbascum thapsus, a faithful delineation of which will be found in Plate 1437, vol. vi, of Sowerby. It is a hardy biennial, with a thick stalk, from eighteen inches to four feet high, and with very peculiar large woolly and mucilaginous leaves, and a long flower spike with ugly yellow and nearly sessile flowers. The leaves are best gathered in late summer or autumn, shortly before the plant flowers. In former times, it appears to have been rather highly thought of, particularly as a remedy for diarrhœa; and Dioscorides, Culpepper, and Gerarde favourably allude to it.

Having been furnished with a good supply of fresh mullein from a garden near this city, where it is extensively grown, I commenced operations. As it proved useful, subsequent supplies were procured from our drug-contractor.

The old Irish method of administering the mullein is to place an ounce of the dried leaves, or a corresponding quantity of the fresh ones, in a pint of milk; to boil for ten minutes, and then to strain. This strained fluid is given warm to the patient, with or without a little sugar. It is administered twice a day; and the taste of the mixture is bland, mucilaginous, comforting to the præcordia, and not disagreeable. I resolved to try this method, and also the watery infusion; and, moreover, the natural expressed juice fortified with glycerine. This latter preparation was carefully made for me, from fresh mullein leaves, by Dr. John Evans, chemist to the Queen and the Prince of Wales.

Some phthisical sufferers, of whom there are here, alas! too many, were now admitted from time to time into St. Vincent's Hospital. They were admitted in all stages, from an early one to the most advanced. On each admission, the case was carefully examined; the history, symptoms, and physical signs were exactly noted; and the patient was weighed on a stage balance of great accuracy. The patient was put as much as possible on the mullein treatment only. For obvious reasons, no cod-liver oil, koumiss, or other weight-producer was given; the patients got the diet suitable to such sufferers; and, if the special symptoms became troublesome, received appropriate treatment. As much as possible, however, they were left to the mullein—a proceeding which was entirely satisfactory to themselves. In addition to the admission-weighing, they were carefully weighed every week, and care was taken that this should be done as nearly as possible on the same day and hour, with the same clothes, and, in fact, as much as could be under the same conditions. In securing this, the patients anxiously co-operated; and it was frequently amusing, but sometimes painful, to watch the satisfaction or chagrin with which the weekly result was received. I must here tender my acknowledgments to our zealous, attentive, and accurate house-surgeon, Mr. Denis P. Kenna, by whom this important, but tedious, duty was discharged.

I annex a brief statement of patients so treated, with particulars of their cases and the results obtained.

Case I.—Elizabeth S., aged 22, single, resident governess at Kildare, was admitted November 8th, 1882. She had been ill for six months, with severe cough and profuse night sweats. The catamenia had ceased from the outset of the illness. There was a cavity with tubular breathing, and moist crepitus under the left clavicle. Tubercular bacilli were found in her sputum. She was put on mullein twice a day. On November 16th the cough was much relieved, and the dyspnœa diminished. The perspirations were unchecked. They were stopped by the hypodermic use of atropia sulphate. On December 4th, cough and breathing were much relieved. As death was evidently approaching, the weighings were discontinued. On January 8th, 1883, she died very peacefully of pure exhaustion, and without any dyspnœa or pain. The weighings were, on November 9th, 1882, 93 lbs. 8 ozs. On November 14th, 1882, her hair was cut short, reducing her weight 5 ozs. On November 16th her weight was 90 lbs. 8 ozs.; on the 24th, 90 lbs. 8 ozs.

Remarks.—From the beginning this case was hopeless, and an early termination evident. To those familiar with such cases the relief to the cough and dyspnœa was clear and distinct. The diminution of the distress to be expected at the closing scene was evident.

Case II.—Richard C., aged 45, married, a farmer, of Meath, was admitted November 8th, 1882. He had been phthisical for two years, during which time he had suffered from cough, with occasional attacks of hæmoptysis and of night sweats. The apex of the left lung was dull, with tubular breathing and moist crepitus. There was no dyspnœa. Mullein was given twice daily. On November 18th his cough was much easier; he felt much improved. On November 24th an improvement continued. On December 1st he left the hospital, saying that he would continue the treatment at home. I was unable to ascertain whether bacilli were present, as my dyes did not arrive till after his departure. The results of weighing were, November 9th, 146 lbs. 4 ozs.; November 17th, 143 lbs.; November 24th, 144 lbs.; December 1st, 144 lbs.

Remarks.—This patient's case was unfavourable. He was not troubled with the hæmoptysis or night sweats while with us. He left with a much better opinion of his future than we had. The relief to his cough was very evident.

Case III.—Sarah O. F., aged 29, married, no family, a dressmaker in Dublin, was admitted November 9th, 1882. She had been phthisical for the last five years, and had chronic cough and occasional hæmoptysis; the catamenia were irregular and scanty; there was dulness under the right clavicle, with diminished respiratory murmur. Mullein was given twice daily. On November 17th she left the hospital at her own request. The cough was much improved. Her weight had increased from 102 lbs. 8 ozs., on the 10th, to 105 lbs. on the 17th.

Remarks.—This was an average case of chronic phthisis, and the relief obtained was considerable.

Case IV.—Margaret R., aged 26, single, a servant at Dublin, was admitted November 14th, 1882. She had been phthisical for three months, with cough and emaciation. The catamenia had ceased. There was dulness under the left clavicle, with moist crepitus. Mullein was given twice daily. On November 28th she left at her own request. The cough was much improved, and her weight increased. The results of weighing were, November 15th, 98 lbs.; November 22nd, 101 lbs.; November 29th, 102 lbs. 4 ozs. and December 6th, 105 lbs. 12 ozs.

Remarks.—This was a rather acute case, but was taken in time. The relief and improvement were evident.

Case V.—Martin G., aged 24, single, a draper's assistant in Dublin, was admitted November 13th. He suffered two years ago from severe hæmoptysis; since when he had been ailing. It returned on November 12th, and it was for this he was admitted. When it was checked, we discovered dulness under the left clavicle, with moist crepitus. Mullein was given twice daily. His weight on November 20th was 114 lbs. 2 ozs; on November 28th, 114 lbs. 8 ozs.; December 4th, 116 lbs. 4 ozs; December 7th, 117 lbs. 8 ozs.

Remarks.—This patient had a very great tendency to diarrhœa, which the mullein checked most effectually. His cough was also benefited.

Case VI.—Patrick N., aged 28, single, a labourer, residing in Dublin, was admitted December 18th. He had been phthisical for two years, having occasional hæmoptysis and profuse night sweats, which latter were at once checked by atropia. There was dulness under the left clavicle over a large area, with cavernous breathing

and a cracked-pot sound. Phthisical bacilli were present in the sputum. He also suffered from anal fistula. His weight, on December 19th, 122 lbs. 4 ozs.; on the 30th, 124 lbs. 8 ozs.

REMARKS.—In this case the cough was much benefited.

CASE VII.—Julia N., aged 23, single, of no occupation, was admitted December 24th. She had been phthisical for three years, and had severe cough and occasional hæmoptysis. The catamenia had stopped for six months. There was dulness under the left clavicle, with moist crepitus. Mullein was given twice daily. The records of her weight are, December 26th, 84 lbs. 8 ozs.; January 2nd, 1883, 85 lbs.; January 9th, 83 lbs.

REMARKS.—This patient is still under the mullein treatment. The relief of the cough is very great.

I have set down the above cases simply in the order in which they occurred, and with no view of supporting any preconceived idea. These cases, although too few to justify any general conclusion, appear to establish some useful facts. The mullein plant boiled in milk is liked by the patients; in watery infusion it is disagreeable, and the succus is still more so. The hot milk decoction causes a comfortable (what our Gallic neighbours call *pectorale*) sensation, and when once patients take it, they experience a physiological want, and when the supply was once or twice interrupted, complained much in consequence. That it eases phthisical cough there can be no doubt; in fact, some of the patients scarcely took their cough mixtures at all—an unmixed boon to phthisical sufferers with delicate stomachs. Its power of checking phthisical looseness of the bowels was very marked, and experiment proved that this was not merely due to the well known astringent properties of boiled milk. It also gave great relief to the dyspnœa. For phthisical night-sweats it is utterly useless; but these can be completely checked by the hypodermic use of from the one-eightieth to one-fiftieth of a grain of the atropia sulphate; the smaller dose, if it will answer, being preferable, as the larger causes dryness of the pharynx, and interferes with ocular accommodation. In advanced cases, it does not prevent loss of weight, nor am I aware of anything that will, except koumiss. Dr. Carrick, in his interesting work on the koumiss treatment of Southern Russia (page 213) says: "I have seen a consumptive invalid gain largely in weight, while the disease was making rapid progress in her lungs, and the evening temperature rarely fell below 101° Fahr. Until then I considered that an increase of weight in phthisis pulmonalis was a proof of the arrest of the malady." If koumiss possesses this power, mullein clearly does not; but unfortunately, as real koumiss can be made from the milk of the mare only, and as it does not bear travelling, the consumptive invalid must go at least to Samara or Southern Russia. In pretubercular and early cases of pulmonary consumption, mullein appears to have a distinct weight-increasing power; and I have observed this in several private cases also. Having no weighings of these latter, however, makes this statement merely an expression of opinion. In early cases, the mullein milk appears to act very much in the same manner as cod-liver oil; and when we consider that it is at once cheap and palatable, it is certainly worth a trial. I will continue the research by careful weighings of early cases; and will further endeavour to ascertain whether the addition of mullein to the cultivating solution prevents the propagation of the phthisical bacillus.

THE INCUBATION OF SCARLET FEVER.

BY W. TONGE SMITH, M.D.,
Late Resident Medical Officer to the London Fever Hospital.

MR. SWEETING, in spite of the very obvious criticisms which have been showered upon his interesting cases, has inspired me with the boldness of adding my mite to the discussion on the "Incubation of Scarlatina".

Of course, mere exposure to infection does not necessarily mean infection of the person so exposed, any more than that a chemist need be poisoned because he is in constant contact with poisons. In the one case, as in the other, the poison must somehow or other get into the body first, and in a sufficiently large dose, and it must find that body unprotected.

To fix the incubation period of any of the acute specific diseases, it is essential to have a known definite exposure to infection, of short duration, followed by isolation up to the time of the development of the disease; and this is precisely that which it is most difficult to obtain. But though most cases, like Mr. Sweeting's, fall short of this standard, I venture to think that they are not without interest. Unfortunately, I cannot now lay my hands upon all my cases, but the following series is fairly representative. Some, it will be seen, come up to the above standard, and will, I think, satisfy even Dr. Cullingworth, unless he should ask me to show that these patients had never been exposed to infection in the whole previous course of their lives. The only possible reply that I could give to such an inquiry would be, that neither the patients nor their friends could throw any further light on the subject, although they were questioned closely and set a-thinking. The cases are, therefore, offered for what they are worth.

CASE I.—S. B., certified as scarlatina, was brought to hospital in a scarlet fever ambulance on the evening of May 30th, 1879. He was found to have morbilli, and was isolated. May 31st. The rash of morbilli had almost disappeared. June 1st. Temperature 99°; he felt quite well. June 2nd, 8 A.M. Temperature 103.2°; headache and sore-throat. 11 A.M. Scarlet rash, etc. Incubation, about sixty hours.

CASE II.—H. H., on the morning of October 30th, 1879, met friends at Regent Circus, and rode with them in an omnibus to the Marble Arch. There he left them, and had no further communication with them. He had not had anything to do with them for some weeks previously, as some members of the family were ill with scarlatina. Two of those whom he met had themselves been taken ill with scarlatina about three weeks before. The boy continued well till November 2nd, 1879, when, in the morning, he had sore-throat, followed by rash, etc. Incubation, about seventy-two hours.

CASE III.—J. O'B., certified as having scarlatina, was brought from an important hospital and medical school, and was said to have been isolated some days. He reached the London Fever Hospital at 11 A.M. on November 4th, 1879. There was no sign of scarlatina or other acute specific disease. On faith in the authority (I very soon got over faith in the authority), I myself put the patient in the scarlet fever ward. No symptom of anything wrong appeared until November 7th, when, at 9 A.M., he had sore-throat, and his temperature was rising. At 1 P.M., he had scarlatinal rash, etc. On the 10th, desquamation was beginning. Incubation, seventy hours, not more.

CASE IV.—G. H. was sent in with Case III, at the same time, from the same place, under the same conditions, and by the same authority. There was no sign of illness. In a credulous mood, I myself put the patient in the scarlet fever ward. There was no sign of scarlatina whatever till November 17th, 1879, in the afternoon, when he had sudden vomiting, sore-throat, etc., followed by scarlet rash; temperature 103.4°. He desquamated subsequently. Incubation, thirteen or fourteen days (?) not more, certainly. These were the only two cases sent in; both recovered perfectly.

CASE V.—A. R., certified as having scarlet fever, was placed in the scarlet fever ward on the afternoon of December 24th, 1879. On December 26th, he was feverish at night. Temperature normal. On December 27th, during morning, the temperature was 101°; in the afternoon, he had sore-throat, rash, etc. Incubation, about sixty-four hours, not more.

CASE VI.—J. R., certified as having scarlet fever, had an hour's drive in a scarlet fever ambulance between 5 and 6 P.M. on December 27th, 1879. On arrival at the London Fever Hospital, he was found not to have scarlatina, and was isolated. At 7 P.M. on December 30th, the temperature was 99.8°, followed by sore-throat, vomiting, scarlet rash, etc. Incubation, about seventy-two hours.

CASE VII.—A young lady visited a dressmaker on February 11th, 1880. She saw there a sick child (the mother said it had sore-throat). She went again on February 12th to have her clothes fitted, and again saw the child. On February 15th, she was attacked with scarlatina. Incubation, about seventy-two to ninety-six hours.

CASE VIII.—A sister of the above left home before her sister was attacked, and in consequence stayed with a friend. She visited the same dressmaker on March 10th, 1880, at 5 P.M. On March 12th she went again to be fitted. On the 15th, she had sore-throat, etc., followed by scarlatinal rash. Incubation, about seventy-two to one hundred and twenty hours.

Since getting the above facts of these two cases, I have been told that possibly there may have been another source of infection common to both sisters—that of a young lady who had an illness which her friends thought might have been scarlatina, but which the medical attendant said positively was not.

CASE IX.—M. P., nurse at the London Fever Hospital, arrived on April 1st, 1880, at night. On April 2nd, at 7 A.M., she for the first time entered the scarlet fever wards, and remained on duty in these wards until April 5th, when, shortly after 7 A.M., she suddenly had sore-throat, etc., followed by rash. Temperature 103°. Incubation about seventy-two hours, not more.

CASE X.—E. R., certified as having scarlet fever, was brought in a scarlet fever ambulance on April 8th, 1880, at 3 P.M. He was found to have rubeola, and was isolated. On April 10th, towards night, he had slight sore-throat; temperature normal. On the 11th, in the morning, his condition was the same. Towards evening, his temperature was 99°; throat much worse, followed by sickness, rash, etc. Incubation, about seventy-two hours.

CASE XI.—M. F. C., ward-servant, began work on entering hospital at 9 A.M. March 28th, 1881, and remained well till 3 P.M. on April 1st, when she had sudden sore-throat; temperature 103.6°, followed by rash, etc. Incubation, one hundred and two hours, not more.

CASE XII.—S. G., certified as having scarlet fever, was brought in the scarlet fever ambulance on March 29th, 1881, at 3 P.M., and was found to have rubeola, and was isolated. No symptoms of scarlatina appeared till April 1st, at 7 A.M., when the patient had headache, sore-throat, fever, and then rash, etc. Incubation, sixty-four hours.

REMARKS.—Cases I, VI, X, and XII are all of known, definite, and short exposure to infection, followed by isolation. They show a variation in the incubation period within the limits of sixty and seventy-two hours; that is to say, that towards the end of the third day (the third period of twenty-four hours' length each) after exposure, the onset of the disease took place. I know of no case of the kind which exceeds three days—seventy-two hours. Case II I think as good as any of the above, and in it also the end of the third day is marked out. III, V, and IX show an incubation not exceeding three days.

In Case VII, four days, or ninety.six hours, were not exceeded.

In VIII and XI, five days was the maximum.

In VII and VIII, if the disease were contracted from the child, though they differ in their maximum limit, they strangely agree in their minimum—seventy-two hours; and this, moreover, dates in each case from the most important point in the history—that is, the trying on of the clothes, which had lain for twenty-four to forty-hours in the supposed infected house.

Case IV shows nothing more than it is possible to live in the midst of the infection of scarlatina for a fortnight without showing signs of the disease. Amongst nurses and servants I have known of several such cases, which have little practical importance. In this connection I may remark that I have known some cases lie in bed in a well ventilated scarlatina ward for two or three weeks and not develop the disease, but to do so towards the end of the third day after getting up and coming to closer quarters with the other patients.

Lastly, in ten out of these dozen cases the important points in exposure preceded the onset by sixty to seventy-two hours.

The shortest periods of incubation that I know of were in cases of surgical scarlatina and its fellow *post partum* scarlatina, in which twenty-four hours was the time.

My belief certainly is that in scarlatina the incubation does not exceed three days, and upon this I have founded the practical rule of quarantine for rather more than seventy-two hours in the case of a person exposed to infection, and I have not yet known the practice to fail. Obviously, beliefs are not arguments, but one cannot help getting impressions, after having in three-and-a-half years observed over two thousand cases of a disease. I have been frequently struck, in reading reports of cases with the names, in which this period of seventy-two hours crops up even when these are quoted to show a longer period of incubation. The use of Dr. Neale's *Digest* would probably unearth a good many such instances. Not to go further back than the period of the 2nd December, I would point out that this period was the case with Mr. Jamieson, and also with the baby reported by Mr. Hamilton. Is it unlikely that such diseases as variola, scarlatina, typhus, morbilli, and rubeola (which are generally definite in their onset, and, when not modified, punctual in their stages,) exhibit a like definiteness and punctuality in their incubation period? And would it be too much a stretch of the imagination to look to our (as a rule) insidious, indefinite, and unpunctual friends, diphtheria and enteric fever, to show the greatest variations in the length of their incubation.

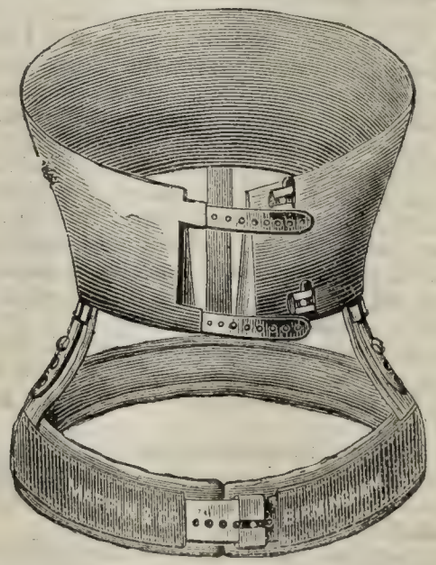
AN inquest has been held on Mr. Charles Richard Johnstone, resident surgeon at the Cheltenham dispensary, who, suffering from pains in the head, had been in the habit of taking chloral for relief, occasionally as much as ninety grains. One night he took two doses, and his wife afterwards discovered him taking something else, which he said was ether. Afterwards, deceased asked her to pray for him, and he died in a few minutes. Medical testimony showed that deceased had taken prussic acid. A verdict of suicide while in an unsound state of mind was returned.

THE TREATMENT OF SPINAL CURVATURE BY EXTENSION AND ARTICULAR MOTION.

BY EDWARD L. FREER, M.R.C.S.Eng.,
Honorary Assistant-Surgeon, Birmingham Orthopædic and Spinal Hospital.

Dr. M. J. ROBERTS of New York has contributed an article to the October number of the *New York Medical Journal* on the treatment of spondylitis by "elastic tension and articular motion," which is of great interest to all surgeons engaged in orthopædic practice, inasmuch as a large proportion of their patients are the subjects of Pott's disease. He speaks of the non-uniformity in the principles of treatment as taught by Professor Lewis A. Sayre, who, as is well known, claims for the plaster-jacket that "it affords the means by which absolute rest is secured, motion of the parts diseased not being permitted to the slightest degree, so long as the apparatus is properly adjusted;" but, at the same time, advocates, in cases of cervical or upper dorsal curvature, the addition of the jury-mast, which cannot, by any possibility, afford this absolute rest. Dr. Roberts gives his experience of patients with cervical spondylitis, treated by him, first of all, with the ordinary jury-mast, and more recently, with modifications of it, with elastic webbing, instead of the leather straps for the head-sling, on the principle laid down by him of elastic tension and articular motion, and which treatment, he alleges, is followed by far better results than that of Dr. Sayre. He also describes an instrument by which, in cervical cases, the extension is carried out by a support from below, the occiput resting upon a sheet of iron shaped to the part and padded, the extension being made by a spiral spring and elastic bands on either side underneath, which are attached below to a fork-shaped bar of steel passing on either side of the neck, and fixed to a cuirass in a somewhat different way to Sayre's jury-mast. It allows of extension and free mobility, the support, however, being from below, instead of from above, as in Dr. Sayre's method.

This instrument must commend itself to surgeons for many reasons, not the least being that it renders the patient less an object of curiosity and ridicule. He concludes by saying that, "if speedy recovery without deformity and without ankylosis is a possible, nay, a probable result, of the early treatment of cervical spondylitis by elastic tension and articular motion, are not similar results to be obtained in all other parts of the spinal column by the application of the same mechanical principles?" During the last six years I have applied about 600 plaster-jackets, and my experience leads me to fully endorse Dr. Roberts's views. I would ask—Do we ever obtain that "perfect immobility," on which Dr. Sayre lays such stress? No surgeon can have failed to notice the ample space that is left between the cuirass and the body after the plaster has thoroughly dried, allowing free rotary movement. From this, I consider that the



only real advantage derivable from the plaster-jacket, is the fact that it supports the cone of the thorax, and having been applied during extension, separates the diseased surfaces, so allowing nature to pursue her curative efforts, the sources of irritation having been removed. With this idea in view, and having had many complaints, especially from private patients, of the irksomeness of the plaster-jacket, principally on the ground of cleanliness, I have devised the subjoined instrument, which consists of a pelvic band, similar to that of the

ordinary spinal instruments, with two lateral, and (in cases of Pott's disease) two posterior upright bars of steel, to allow space between them for the spinous processes, and jointed for extension; to these are rivetted above two thin pieces of truss-spring about three inches apart, encircling the body, hinged anteriorly six inches from the centre, and fastening in front with a small spring button at intervals of a quarter of an inch. To these lateral hoops is attached, by rivets, a band of India-rubber, graduating from half a line in thickness above to three-quarters of an inch below, as seen in the engraving, the whole being padded with washleather or other soft material, and perforated for lightness (in upper dorsal disease, a large perforation can be made corresponding to the prominent vertebra). This instrument has been made, under my direction, by Messrs. Mappin and Co., of New Street, Birmingham: and in the one case for which I have applied it I have been perfectly satisfied with the result obtained. It allows fairly free movement of the body below the point at which it grasps the thorax, and in no way interferes with the respiration. I may add that, since reading Dr. Roberts's paper, I have directed Messrs. Mappin to make a similar instrument, with a spiral spring placed in a socket in each of the uprights for the reception of the upper part of the instrument in lieu of the screw-joints, and which I have reason to hope will still further carry out the principle of "elastic tension and articular motion." The instrument engraved will be seen to have only one posterior upright, having been just completed for a case of lateral curvature (for which the principle is equally applicable); and, as it is for an adult, I considered, on account of its larger size, it would better explain the principles of mechanism; with this exception, it is the same as the one used for angular curvature.

ON TWO CASES OF SEVERE INJURY TO THE EYE.*

By W. J. CANT, L.R.C.P., M.R.C.S.

THE first case is where a man, sixteen years ago, when chipping brass, felt a piece strike his right eye. One of the fellow workmen examined it and thought he could see the piece deeply situated, but would not attempt its removal; he went home and applied cold water; his mother advising him to have nothing done to it, as if he did he would be sure to lose the other. He says the eye became intensely painful, followed by redness and swelling. He remained at home for about a month, at the end of which the pain and redness had diminished, but never completely left it; if he took the slightest cold all the old symptoms returned, and with each attack the sight became more impaired, and at last it became quite blind. On one occasion the left eye also became affected, but recovered. About a month ago I saw him for the first time, suffering, as he said, from one of his old attacks of inflammation of the eye; on examination, there were marked ciliary congestion, commencing iritis, cataract and great tenderness on the slightest touch. By focal illumination I imagined I could see a minute foreign body entangled in the iris at the upper part, and a slight scar just above the centre of the corneas tended to make it more probable. After keeping him in a dark room for four days, and the application of leeches and cold lotion, it was thought safe to attempt the removal of the foreign body. I made an iridectomy in the upper segment and put in the forceps to remove the piece of brass, but found it impossible to do so, without force. Having taken hold of it crossways, then removing the forceps and applying them in a different direction, a large piece of brass three-sixteenths of an inch long was drawn out; the lens and its capsule were then extracted, when the anterior chamber became filled with floating glistening particles of cholesterin. Slight iritis followed, but gradually all inflammatory symptoms cleared up, and he is now with the injured eye able to see his way about easily. There is no pain on touching the eye at any part.

The points of interest in the case are:—

1. The length of time a large piece of irritating substance like brass can remain in the lens and iris without destroying the eye or producing sympathetic ophthalmia:

2. The fair amount of vision that is maintained, although the eye was more or less inflamed for over sixteen years.

The second case was where a man, between sixteen and seventeen months ago, received a splash of molten metal in his eye, passing principally under the upper lid, and causing severe damage to the cornea and conjunctiva. When first seen, it was a question whether the eye could be saved; however, under prolonged antiphlogistic treatment, the inflammation subsided, leaving nearly the whole cornea covered with a dense leucoma, and the upper lid, for about the middle third, closely united to the eyeball.

The eye in that condition being useless, it became necessary to do something to relieve the symblepharon. Some months after the injury, all irritation having subsided, the eyelid was freely separated from the eyeball, and the conjunctiva dissected up for some distance on either side, and brought together by means of fine black silk sutures, as high under the lid as possible. A cold-water pad was applied for three days, when the conjunctiva was found to have united, and the stitches were removed.

A small piece of skin was taken from the upper lid to counteract the drooping that had been caused by the constant dragging. Afterwards, an iridectomy was performed downwards and inwards, so as to utilise the small amount of transparent cornea that remained. The patient has now perfectly free movement of the upper lid, and can see to read with the injured eye.

* Read before the Midland Branch.

ILLUMINATION OF INTERNAL CAVITIES BY MEANS OF THE ELECTRIC LIGHT.

By THOMAS OLIVER, M.D., M.R.C.P.,
Physician to the Infirmary, Newcastle-upon-Tyne, and
J. B. PAYNE, F.R.M.S.,
Newcastle-upon-Tyne.

AT the last meeting of the Northumberland and Durham Medical Society I exhibited Mr. Payne's improved electric light appliances, and showed how some of them might be utilised for microscopical and clinical purposes. For the past few months I have been engaged with Mr. Payne in suggesting adaptations of these instruments to the purposes just alluded to. Remembering that Sir Henry Thompson, more than a year ago, explored the bladder by means of the electric light, and that Leitz, of Vienna, is devising instruments for illuminating the throat, posterior nares, bladder, uterus, etc., Mr. Payne made an instrument by means of which the throat could be examined. Having at the present time a patient in the infirmary who is suffering from hydatid disease of the liver—on whom the operation of abdominal section with incision of the liver had been performed—giving exit to about seven pints and a half of pus, I took advantage of the opportunity, and succeeded in lighting up the interior of the cyst by means of the electric light. For this purpose Mr. Payne devised and constructed a brass tube, electro-plated, nine and a half inches in length, and eleven-sixteenths of an inch in diameter externally. One end of this tube was funnel-shaped, and the other was closed by a piece of glass; down this tube was inserted a narrow cylinder, which carried a Swan's lamp and the electric wires. This tube, with its glazed extremity, was smeared with carbolised-oil, although, in future, I shall use carbolised glycerine for the window of the tube, and, with gentle pressure, I succeeded in passing it through the abdominal incision into the interior of the liver. The lamp was at once lit, and I had the pleasure of observing a greyish red condition of the wall of the cyst, studded across which were numerous yellow-white spots, evidently pus; a slight oozing, or sweating, was also noticed on the wall of the cavity. The illumination of the interior of the liver by means of the electric light was in every way satisfactory and successful; and, although it is of little aid in the treatment of the case in question, it has shown us that the lighting up of internal cavities is not only a possibility, but a matter of comparative ease. With the extremely small size of the Swan's lamp required (it is not much larger than an ordinary bean), and which gives a light equivalent to that from three candles, and with the improved instruments which Mr. Payne is devising, I see how the electric light might become useful in operations for vesico-vaginal, or recto-vaginal, fistula, and in certain diseases of the bladder. Before making use of this illuminating endoscope on the human subject, I tried its effects in a dark chamber; I read, with ease, a piece of print placed therein.

Mr. PAYNE'S REPORT.—Leiter's arrangement contains an electric lamp in which platinum wire is heated by means of battery power, and rendered incandescent. The arrangement I made is of much simpler construction, gives a perfectly pure light, and develops less heat. It consists of an electro-plated outer tube nine inches and a half long, by eleven-sixteenths inch external diameter; glazed at one end with a stout piece of plate glass made perfectly secure and tight.

A Swan's electric lamp is used—the filament of which is carbon, and rendered incandescent by means of battery power. It is hermetically sealed in a glass shade; and water, conveyed to and fro through very small brass tubes, is made to circulate round the lamp. The light from this lamp is perfectly pure, and exhibits the conditions of things in their true and natural colour. For prolonged

observation I should prefer to use either a Grove's or Bunsen's battery, but in the demonstration just referred to, four cells of a modified Léclanche battery were employed and answered admirably. It is advisable to have as great a pressure as possible for the water supply, so as to ensure perfect circulation, and for this I suspended from a hook fixed near the ceiling of the room a tin can containing water, connecting it with the brasss tubes by means of lengths of India-rubber tubing.

A CASE OF EFFUSION INTO THE SEROUS CAVITIES.

By A. R. BARNES, M.B.Ed.

The following is an interesting, and, as far as my experience goes, an unique case. Mrs. L., aged 30, a delicate looking woman, married, with two children, consulted me on the 8th July last. She complained of abdominal enlargement, which she had noticed for some weeks past, and which she stated had sometimes disappeared, and then returned. This enlargement proved to be a considerable effusion into the peritoneal sac. There was at this time, too, a slight cough and expectoration; a not very strong family history of consumption; and a personal history of an effusion into the right pleura two years previously, which had been aspirated by her then medical attendant, and two and a half pints of fluid withdrawn. About the end of July, I became aware that the left pleural cavity was gradually filling, the abdominal effusion having, as well, increased in quantity.

On August 11th, the condition having become very grave, with urgent dyspnœa, constant sickness, and great emaciation and weakness, I determined to aspirate the pleural cavity. This I did with a Dieulafoy's aspirator, drawing off five pints of serous fluid. At this point I had to desist, owing to the fainting condition of the patient. The operation was followed by a distressing attack of dyspnœa, which was very alarming. On the following morning, however, all the symptoms were considerably relieved; and on measuring the girth of the abdomen, to my surprise and pleasure there was a decrease of three inches on the measurement previous to the aspiration of the pleura.

On August 18th, as physical signs still demonstrated the presence of fluid, both in the peritoneal and pleural sacs, I again aspirated the pleural cavity; but after drawing off just a pint, the aspirator broke down, and I had again to desist. The drawing off of this second quantity was again followed by a diminution in the girth of the abdomen.

On August 28th, I aspirated for the third and last time, taking away rather more than three pints, making, in all, a total of rather more than nine pints, and a total diminution in the girth of the abdomen of seven inches and a half. After this last aspirating, physical signs gave no indication of fluid in either peritoneal or pleural sacs; and convalescence proceeded slowly until October 28th, when I paid my last visit; the patient by that time having gained considerable flesh, and sufficient strength to get about again.

There are many points of interest in this case. I will enumerate them briefly.

1. The fact of effusion into the three large serous cavities in one individual is, I should say, decidedly uncommon.

2. The presence of so considerable a quantity of fluid in the peritoneal sac, and subsequently in the left pleural, without any very assignable cause.

3. The rapid lowering of the quantity of fluid in the peritoneal sac after the aspirations of the pleural sac; in a few hours, possibly sooner. I regret I did not measure the abdomen directly after operation. This rapid alteration can only be accounted for by the fact of some direct means of communication between the two cavities, such as is mentioned under the head of Pleurisy in Quain's *Dictionary of Medicine*. "The origin of the pleurisy which may accompany puerperal and other diffuse peritonitis is explained by von Recklinghausen's demonstration of lymph-canals between the diaphragm and pleura; and its supervention in cases of abscess of the liver may receive a like explanation. Reversely, septic pleurisies spread themselves sometimes from the pleural to the peritoneal cavity."

4. Aspirating the chest is not always a successful operation. I have assisted in three cases prior to this one; two, both middle-aged women, died soon after the operation. The other, a young man, recovered after two aspiratings. In neither of these three cases was the fluid in nearly so considerable a quantity as in the present instance.

5. In the second and third aspiratings of this case, I adopted the recumbent position for the patient, she lying on the side where the fluid was. Previously, I had practised, and seen practised, the sitting posture for the patient. The former I consider more convenient for both operator and patient, and safer for the latter.

6. I have always found Dieulafoy's aspirator very wearisome to work, when the quantity of fluid to be removed was considerable, and very liable to be broken. The third time of aspirating this patient, I used an aspirator of Maw's, which fits any receiving bottle, costs less than half the price of the other, is very much less labour to the operator, and obviates considerably any movement to the needle while the operation is going on, a movement which causes considerable pain to the sufferer.

THERAPEUTIC MEMORANDA.

TREATMENT OF DYSENTERY.

At the present time, when dysentery is very prevalent, especially amongst those who have returned from the Egyptian war, any suggestion that may mitigate the suffering of so fatal a malady will be hailed with gratitude. The plan I have used with most success is the following. First, having placed the patient between warm blankets, I proceed to inject a pint and a half of warm water, at a temperature of 90° Fahr. This is seldom retained longer than a few minutes, but is pronounced very grateful to the patient. When the water has soothed the mucous membrane of the colon and rectum, and brought away any *effete* matter, I then proceed to administer a small injection of two ounces, by measure, with a gum-elastic bottle. The form I administer is the following: ℞ Quinine disulphate ten grains; compound tincture of camphor four drachms; decoctum amyli to two ounces. Mix, and when about milk-warm, inject. It is generally retained; but, if ejected, it may be repeated after an hour or two. This I have found of great service, and very grateful to the patient. I do not stop to inquire how it acts, but the effect is like magic. If griping pains be felt over the region of the epigastrium, I administer half-drachm doses of chlorodyne, in some aromatic water, mint, carraway, or aniseed. The diet, of course, should be of the most soothing kind: jellies, isinglass, linseed, toast and barley water, *ad libitum*. Ipecacuanha I have found of little service, and have discarded it from my treatment. If any of my medical brethren will try these measures, he will not often be disappointed. I have used with advantage warm turpentine stupes on warm flannels, over the hypogastrium.

F. Rawle, M.R.C.S., etc.

OBSTETRIC MEMORANDA.

HYDATIDIFORM DISEASE OF THE CHORION.

On September 7th, I was sent for by the midwife to attend Mrs. C., who was flooding. On my arrival, the hæmorrhage had stopped. On making an examination, the uterine sheath was not sufficiently dilated to be able to ascertain its contents. On passing my hand over the abdomen, I remarked to the midwife, how unusually circular it was. On the following afternoon, I was again hastily summoned, and found the woman had lost much blood. On making an examination, I found, by a little manœuvring, that I could insert my hand into the uterus; and I vividly remember how astonished the midwife and Mrs. C. looked, when I informed them that it contained no child. In fact, Mrs. C. stoutly declared she had felt the child many times; and said that, being the mother of thirteen children, all living, she ought not to have been mistaken. After administering a full dose of ergot, some sharp uterine pains followed—soon expelling a mass, which, when collected, filled three ordinary-sized chamber-utensils. After this jelly-like mass had been expelled, she rapidly recovered, and made an uninterrupted recovery.

Edward Stephens, L.R.C.P., M.R.C.S., etc.,
Ilminster, Somerset.

The Vaccination Acts.—The Leicester Guardians have adopted a resolution which will go far to exclude Leicester from the operation of the Compulsory Vaccination Acts. Hitherto distress has been levied upon those neglecting to comply with the Acts; but in consequence of the disturbances attending these proceedings, the magistrates threw the onus of applying for distress upon the Guardians. The latter have now declined to do so, instructing their officer in future not to apply for distress warrants for unpaid fines.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

CASE OF LYMPHADENOMA OR HODGKIN'S DISEASE.

(Under the care of Dr. BRADBURY.)

[NOTES of this case were taken by Dr. J. K. FOWLER, at the time House-Physician.]

Elijah T., aged 55, a shoemaker, living at Great Shelford, was admitted on July 5th, 1879. Five years before this date, when out walking in the morning, he noticed that he was suffering from left facial paralysis. There was no hemiplegia, and no loss of consciousness, but he could not make himself understood. His speech returned in three hours, but partial paralysis remained for three years. There was, on admission, slight twitching on the left side, and some loss of power. He had always had good general health up to Christmas 1878, when he began to suffer from pains (worse during the day) in both calves. The pain afterwards occurred in both ankles. Two months before admission, he experienced pain and swelling in both hands, but especially in the left. Five weeks before, he had had a stiff neck and sore-throat, and some swelling on the left side of the neck. A month before, he had had a sore mouth, and the lips swelled. For the last twenty years, he had had a lump on the back of his neck. This had increased, more especially during the last three or four years; but he had not noticed any other swellings on his body. He has not suffered from sweating or itching, but had suffered from cramps in his legs off and on for a month.

State on Admission.—The lips, nose, cheeks, backs of both hands and both legs were slightly œdematous. The lymphatic glands were enlarged in the following places: in both supraclavicular fossæ, especially the left; beneath the occiput; along the sterno-mastoids; in both axillæ; in the epitrochlear spaces; in both inguinal and femoral regions: at the angle of the jaw on both sides. The left side was more affected than the right. The chest-wall was emaciated; the chest-sounds and the cardiac dulness were normal, but the first sound was prolonged; the liver-dulness was increased; the spleen could be felt below the edge of the ribs; the urine was acid, and contained no albumen; the bowels were regular. He was ordered a milk and beef-tea diet, with eight ounces of bread.

July 5th. The temperature was 100° Fahr., and the following mixture was ordered to be taken three times a day—Liq. potassæ ♏xxx; infusi gent. co. ℥j.

July 8th. An ulcer was seen on the uvula.

July 10th. Both tonsils were enlarged. He was ordered five grains of iodide of potassium infusion, with an ounce of compound of gentian, three times a day. The bowels were acting twice a day. The temperature from this time to July 22nd ranged from 99° Fahr. to 98.6° Fahr. On that day, it was found that the glands at the angle of the left side of the lower jaw had increased slightly. The circumference two inches below the symphysis was 16½ in.; the temperature varied between 99° and 99.4° Fahr. There was an excess of white blood-corpuscles. He was ordered to take the following three times a day: ℞ Liquoris hydrarg. perchlor. ℥iss, tincturæ aurantii ℥j, syr. zingiberis ℥ss, aq. ad ℥j.

July 27th. The circumference of the neck at the same situation was 17⅜ inches.

July 29th. The temperature rose from 98.6° in the morning, to 100° in the evening. On August 1st the circumference of the neck was 18½ in.; on August 4th it was 18in., and on August 5th it was barely 18 in. The mixture was omitted on this day.

August 11th. He was ordered the following mixture three times a day—℞ Potassii iodidi gr. x, inf. gent. co. ℥j; and, on August 14th, brandy ℥ij in twenty-four hours.

August 17th. The following mixture was ordered to be taken three times daily: ℞ Tinct. ferri perchlor. ♏ x, potassæ chlorat. gr. x, glycerini ℥ss, aq. ad ℥j. On August 19th, the perchloride of iron and glycerine were omitted; and on August 25th a drachm of tincture of cinchona was added to each dose of the mixture. On August 23rd, an increase of the splenic dulness was noticed. On August 26th, about 3 A.M., and again on the morning of the succeeding day, he had a rigor. On August 25th, about 8 A.M., the circumference of the neck was 19¾ in. The mixture was omitted. On August 29th, he had diarrhœa, and on the following day another rigor. The glands in the axilla were becoming larger. On August 31st, he was ordered an acid mixture, containing three grains of quinine in each dose, to be taken three times a day.

September 1st. He had a rigor at 8.20 A.M., and another at 9.30 A.M. The temperature during the rigor was 102.4° Fahr. On the following day the quinine was given at 7.45 A.M., and no rigor followed. On September 3rd the ulcer on the uvula was enlarging, and on September 4th a gargle of chlorate of potash was ordered. The circumference of the neck was 20 in.

September 12th. The uvula was more ulcerated. The following local application was ordered to be used twice a day: ℞ Argenti nitrat. gr. xv; aq. ad ℥jss; and on September 15th, the uvula looked healthier. The temperature was 101° Fahr. in the evening, and 98.4° Fahr. in the morning. On September 18th, a rigor, the first recorded since September 1st, occurred at 9 A.M., shortly after he had taken the medicine; the temperature was 98.6° in the morning, and 101° in the evening. On the following day, a rigor recurred at the same hour; the morning temperature was 101°; the evening, 98.4°. The fauces were much injected; the uvula was still ulcerated, but looked healthier. On the following day, he took the medicine at 8 A.M., and a rigor occurred at 10.45 A.M. The temperature after the rigor was 104.4°. The dose of quinine was increased to five grains.

September 21st. Some blood was seen in his motions. The temperature was 101.2° in the morning; after feeling cold all night, a rigor commenced at 9 A.M. on the following day, and lasted until 10.45. The temperature was 98.6°, and the pulse 108. The dose of quinine was raised to eight grains.

September 27th. No rigor had occurred since September 22nd. The circumference of the neck was 18¾ in.

The temperature from September 29th to October 3rd varied between 98.4° and 99.4° Fahr.

October 3rd. He had a rigor lasting an hour and a half. The temperature at its conclusion was 104.2° Fahr. Neither in this nor any other rigor was there perspiration. The circumference of the neck was 18¼ inches.

October 12th. The temperature varied between 95° Fahr. and 100° Fahr. The glands in the axillæ and inguinal regions were much smaller.

On October 17th, both feet and ankles were œdematous; and, on October 19th, blood was seen in the motions; he had no hæmorrhoids, but had a good deal of pain before passing the blood. The circumference of the neck was 17 inches.

October 22nd. The ulceration in the uvula had nearly caused its removal, leaving but a very small stump. Both tonsils were also ulcerated.

October 30th. The temperature had varied between 98.4° and 100° Fahr. He thought he had caught cold, as he did not feel so well, and his head felt thick. The temperature rose to 101° Fahr. in the evening.

On November 1st, he had a rigor, which commenced at 8.45 A.M., and lasted till 9.30; the temperature being at the beginning 100.4°, and at the end 102.8°; and, on the following day, another rigor, which lasted from 9 A.M. till 11 A.M., the temperature rising from 99° to 103.2°. Some dry eczema was noticed on his upper lip and chin; and, on November 3rd, the submaxillary glands on the left side were swollen; they felt hot, but there was no tenderness on pressure. The circumference of the neck was 18¾ inches. The twitching of the left side of the mouth was very marked. The dose of quinine was increased to ten grains.

On November 4th, he had a rigor lasting from 10 to 10.30 A.M., the temperature rising from 99.2° to 103.4°. There was no perspiration. On the following morning, at 8 A.M., he had twenty grains of quinine, but a rigor began at 8.45 A.M., and lasted till 11 A.M.; and a second, lasting ten minutes, occurred at 12.30. The temperature rose from 99.2° to 102.8° Fahr.

On November 6th, the quinine was repeated at 7.30 A.M., but the rigor commenced at 9.15 A.M., and lasted half an hour, the temperature rising from 98.4° to 98.6° Fahr.

November 7th. He had a fit of excitement about 5 A.M., in which he threw himself about the bed, his eyes rolled, and he was unconscious. Twitching of the left side of the mouth and of the right eyelid was very marked. At 7.30 A.M., he was given the dose of quinine He complained of intense headache, was sick after lunch, and wandered in the afternoon. Pulse 88.

November 8th. He had two fits, of the same character as before in the early morning. He was quiet, and slept afterwards. The circumference of the neck was 18½ inches. A third fit came on at 5 P.M. He threw his arms about, and occasionally there were attacks of opisthotonos. The pupils were dilated. He was conscious a

intervals during the fit, and then relapsed again. The fit lasted one hour and twenty minutes. He said he remembered it coming on and going off. He complained of a noise in his head like that of a "threshing machine"; and his head was dizzy. The pulse was 80.

November 9th. He had an attack lasting two hours and twenty minutes, but did not remember anything of it. His conjunctivæ were injected, and his face twitched very much. His throat felt a little sore, but there was no change in its appearance.

November 10th. He had four attacks during the night; a rigor at 8.40 A.M., lasting half an hour; and was hardly conscious in the morning. The twitching of the face and right hand were very marked. He continued in this state all day. The temperature at 5 P.M. was 98.2° Fahr.; at 7.30 P.M., the temperature was 105.8°; the pulse was imperceptible; the respirations 48 per minute, and shallow; he lay in a semicomatose state, but could be roused, and looked blue. There were no twitchings. At 11 P.M., the temperature was 105.6°.

He died at 4.30 A.M. on November 11th.

Post Mortem Examination.—The brain was healthy, There was slight hyperæmia in the region of the medulla. In the spinal cord no morbid appearances were found. There was a quantity of blood, which had probably gravitated, in the lower dorsal and lumbar regions. The heart weighed 12 oz.; it was flabby and pale; the left side was empty. The lungs were both healthy. The glands at their roots were enlarged and black. The liver weighed 75½ oz.; it was much enlarged and fatty. The spleen weighed 26½ oz.; it was enlarged. The Malpighian bodies were very prominent. The kidneys were healthy, and weighed 4½ oz. each. In the intestines, Peyer's patches and solitary glands were enlarged. The suprarenal capsules were rather darker than normal. In the lymphatic system, the glands in both groins, the axillæ, the epitrochlear spaces, and the submaxillary and sublingual regions, were enlarged and indurated. On section, they were white, with an appearance like that of cold boiled bacon. The carotid sheath, at the level of the fifth cervical vertebra on the left side, was found quite inclosed by enlarged glands; and there was a very large one lying on the longus colli muscle, behind the carotid. These glands spread downwards in a chain into the supraclavicular fossa and under the clavicle. The descendens noni nerve passed between two of the glands, situate at the level of the fifth cervical vertebræ. There was a group of enlarged glands lying on the aorta, at the level of the semilunar ganglion, into which the large splanchnic nerve was seen to disappear. These glands were more indurated than any of the others. The mesenteric glands were only slightly larger than normal.

POPLAR AND STEPNEY SICK ASYLUM.

CASE OF ANKYLOSIS OF HIP-JOINT IN BAD POSITION, TREATED BY SECTION OF FEMUR.

(By R. W. GOLDIE, Medical Superintendent.)

WHEN the boy, who is the subject of this report, was admitted on May 17th 1878, his state was as little promising as could well be conceived. He presented all the evidences of struma in addition to numerous discharging sinuses in the region of, and leading to the right hip-joint. The limb was firmly fixed in the position shown in the woodcut.

He was thin, and had a pale complexion; the belly was tumid; the urine contained albumen; the liver-dulness was increased. As he was in this condition, and with a history of having been recently an inmate of a hospital under treatment for hip-disease, the improvement of his general health was aimed at. Warmth, cleanliness, good food, rest in bed, and syrup of iodide of iron, with occasionally cod-liver oil, all contributed to the desired end, and in summer he was wheeled into the grounds daily. Under this treatment, continued for nearly four years, that is, up to the date of the operation, February 15th, 1882, he made the most marked improvement. He grew fatter, his abdomen became not only relatively but absolutely less, and the albumen in his urine decreased. He ate well, and slept well, and, as far as his distorted leg and crutches would permit him, played well. His condition at this period is well shown in the accompanying engraving (Fig. 1).

After consultation with Mr. Rivington, it was determined to perform osteotomy. My colleague, Dr. Thornton, having administered chloroform, I cut down on the femur beneath the trochanter major in a line almost level with the trochanter minor, and inserted my finger until it came into contact with the bare bone. A chisel was introduced, and a few taps given with the mallet, and the femur was gently broken at the point of section; the leg was then easily straightened. A band of fascia lata attached near the origin of the adductor longus was previously divided subcutaneously. There was next to no bleeding, and the operation was over in a surprisingly short space of time. No antiseptic precautions were adopted, but notwithstanding this, and the fact that the operation clearly left him in the position of one with a compound fracture of the femur, his temperature did not at any



Fig. 1.

subsequent period rise above normal. The treatment after operation was simple, and the patient's progress extremely satisfactory. The wound scabbed over and did not discharge. Three days after the operation, the limb was placed in a box-splint and a weight attached to the foot. Fourteen days later, the leg and pelvis were encased in a plaster-of-Paris bandage.

He was kept in bed seven weeks, when it was deemed safe to allow him to move about with crutches. Confinement in bed had



Fig. 2.

made him thinner; the engraving (Fig. 2) of his condition after operation, otherwise excellent, does not show this so well as the photograph from which it was taken. He was discharged October 10th, 1882.

REMARKS.—It will be perceived that it took four years to get this patient into a condition favourable for surgical interference. A better

illustration could not well be adduced of the advantage it is to a patient to enter a Poor-law infirmary, instead of making a tour of the general hospitals. When discharged, his legs were of equal length, he could walk fairly well unassisted by crutches, and remarkably well with the aid of one. He experienced the greatest relief in consequence of the altered position of his limb enabling him to sit comfortably at meals with his leg bent naturally, and to pass through doors without causing himself pain by knocking his misplaced foot.

In conclusion, instead of being, as on admission, a bedridden invalid and distorted cripple, he left the Asylum fat, and feeling well, having a straight limb, from which he suffered little or no inconvenience, and thoroughly able to take part in the sports of his playmates.

CUMBERLAND INFIRMARY, CARLISLE.

CASE OF NECROSIS OF FEMUR: AMPUTATION AT THE HIP-JOINT: RECOVERY.

(Under the care of DR. MACLAREN.)

[Reported by JAMES L. WATERS, M.B., House Surgeon.]

T. B., aged 6 years and 8 months, was admitted on June 21st, 1882. The thigh was abducted, and in the position produced by dislocation of the head of the femur into the obturator foramen. A sinew existed on the inner aspect of the thigh, about three inches below the perinæum, and the entire limb was œdematous. The femur, on examination by the finger, passed into the sinus, was found to be necrosed in almost its whole extent, and the lower epiphysis being the only portion which remained healthy. The child himself was exceedingly emaciated.

The following history was attached to the case by Dr. Bain of Glenridding, who first saw the patient in March, 1882. He had at that time pain and swelling, accompanied by slight redness along the course of the saphena vein, and there was considerable constitutional disturbance. A swelling formed on the outside of the thigh and another on the elbow. An abscess formed and burst, leaving the above mentioned sinus. Subsequently to this, the boy's health improved, but the condition of the leg became worse, and the thickening of the femur extended to nearly its whole length. There was no history of injury or exposure to cold and wet, but the family history was very bad.

June 26th. Dr. Maclaren performed amputation at the hip-joint, by making a circular incision at the upper third, and a vertical one along the outer aspect of the thigh (Mr. Furneaux Jordan's method). Some of the periosteum of the upper part of the femur was left. A "Davy's lever" was used to compress the right common iliac artery from the rectum. This answered admirably, hardly any blood being lost during the performance of the operation. The femoral artery was ligatured, and a sponge inserted to act as compress. The sponge and the sutures of the vertical incisiory were removed next day, and the wound was dressed as an open sore. The progress of the patient was excellent, and on August 11th he tried his crutches, the stump having been, for some time previously to this, entirely whole. In his general condition he had immensely improved, being scarcely recognisable as the same pale-faced boy on whom amputation had been performed. Some bone had evidently reformed from the periosteum which was left at the operation. A hard mass could be felt in the substance of the stump, which he moved with some degree of power, flexing and extending, abducting and adducting it. This is Dr. Maclaren's fourth case in the Cumberland Infirmary with one death. The details of the three former cases are published in the *Edinburgh Medical Journal*, December, 1881.

AN AID IN PERCUSSION.—The *Chicago Medical Journal and Examiner* publishes the following expedient, suggested by Dr. E. C. Huse. If a couple of feet of small rubber tubing be attached to an ordinary "finger stall," such as to be found in most druggists' shops, and its top, sewed to an elastic band, be pushed into the ear, the stalled finger will convey sounds in percussion, where nicety is requisite, far better than in the ordinary way. It is, he suggests, to percussion what the stethoscope is to auscultation. An apparatus which he devised cost about a shilling, and worked well.

IN reference to the recent fire at Hampton Court Palace, Mr. A. B. Mitford, Secretary to the Board of Works, has called attention to the danger arising from mineral oils used for the purposes of lighting and heating. He suggests that every landing of every house in which such oils are used should be furnished with a scuttle or bucket of sand, as sand, if thrown upon burning oil, disintegrates it and puts out the flames, whilst water, used in small quantities, tends only to spread them.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 23RD, 1883.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Four Cases of Polypoid Tumour of the Bladder removed by Operation. By Sir HENRY THOMPSON.—Sir Henry Thompson, who read his own paper, gave a short account of four cases in which he had removed polypoid tumours of the bladder, through the perinæum; an operation of which there have been few examples, and which was worth consideration, as an attempt to deal with growths which, when unremoved, had always proved fatal. The first case was that of a lady, aged 31, who had been brought under his notice by Dr. Philson, of Cheltenham. The first symptoms of vesical disease were noticed in 1876, when there was frequent and very painful micturition; and subsequently, there was much hæmaturia, and several attacks of acute cystitis. An examination with the sound showed no calculus or definite tumour, but the walls of the bladder were felt to be soft and flabby. The urethra was dilated, and a sessile growth, scarcely pedunculated, was removed from the base of the bladder. There was a good deal of bleeding at the time, but, after a week, micturition ceased to be painful; in three weeks, she had control over her urine for four hours at a time. She rapidly regained good health, and there had been no return of the symptoms. An examination of the growth by Mr. Stanley Boyd showed a vascular tumour, with several short pedicles, and a velvety covering of club-shaped processes, about one-sixteenth of an inch long. The second case was of a man, aged 41, whose symptoms dated from 1861. There was great irritability of the bladder, and much painful hæmaturia, which had not been materially relieved by styptics. A suspicion of vesical tumour was confirmed by examination with the finger, and a large mass removed by a central incision through the perinæum. The case, however, was seen in too late a stage to avert a fatal issue. No necropsy was obtainable. The third case was that of a medical man, examined by the sound in connection with Dr. George Johnson and Dr. Chapman, in December 1880. A note was made at the time, that the walls of the bladder "felt soft," an expression which Sir Henry Thompson was in the habit of using to describe an abnormal condition, in which the signs of tumours were not definite. Styptics gave temporary relief, but after about six months the symptoms became acute, and recourse was had to digital examination. Polypoid growths were felt and removed by lateral forceps, from the side of the bladder. The recovery was uninterrupted and rapid. The fourth case was of a man, aged 67, short, stout, and heavily built. He had had occasional hæmaturia since 1876, with occasional passage of uric acid calculi. On May 26th, 1882, lithotrity was performed at one sitting, and two hundred grains of uric acid were removed. During the summer and autumn, there was much pain and loss of blood, and on January 27th 1883, a digital exploration was made. The perinæum was deep, and the operation presented some difficulties, but a tumour was successfully removed from the base of the bladder. The progress had been favourable on the whole, but some gouty symptoms had developed on January 22nd. Microscopical specimens of the tumours were placed on the table. They were all fibromata.

On an Operation for Exploring the Bladder by Perineal Section of the Urethra, and for removing Vesical Tumour, Impacted Calculus, etc.; with Cases. By SIR HENRY THOMPSON.—The author asked attention to a new method of investigating obscure diseases of the bladder, which promised to be valuable in certain conditions occasionally met with. Every one sometimes met with a case in which the symptoms of vesical disease were severe and obstinate; and, although very careful examination had been made, he was unable to arrive at a rational diagnosis. The occurrence was, doubtless, not a common one; in the great majority of cases, carefully made observations demonstrated the nature and seat of the disease. But for the exceptional cases, always important—cases generally marked by frequent or persisting hæmaturia of some standing, manifestly not renal, and without local sign of cancerous tumour—he proposed to take decided action, and to submit, further, that such action should not be unduly postponed. The essential step in the method proposed was to examine the entire internal surface of the bladder with the finger, by which means we can recognise the presence of any tumour, large or small, the existence of encysted calculus, etc.

The method of doing this he illustrated, and showed it to be a proceeding simple and easy of performance, and at the same time one which involved little, if any, danger to life. It consisted in making a small opening from the raphé of the perinæum to the membranous urethra, which was opened on a grooved staff, just enough to admit the left index finger to enter the canal and to be pushed on to the neck of the bladder. Provided the anæsthesia of the patient was so complete that the abdominal muscles were perfectly relaxed, every portion of the internal surface of the bladder might be brought consecutively by suprapubic pressure into close contact with the tip of the finger, and any deviation from the natural condition, however slight, might be noted. The operation was an external urethrotomy only, and involved neither the prostate nor the bladder. The application of the proceeding, not only to diagnosis, but subsequently to treatment, was then discussed. It was shown to offer facility for the removal of tumour, impacted calculus, etc. Seven or eight cases in which the operation had been performed were cited, and several examples of tumour were exhibited which had been removed by the author. These latter were examples of a disease which was inevitably fatal unless removed by operation. The signs and symptoms of their presence were discussed; great care was necessary in examining the state of the patients before having recourse to operation. The two conditions, the absence of which it was important to be assured of before interfering, were renal disease and cancer. Hæmaturia from either of these sources of course absolutely contraindicated an operation.

The PRESIDENT thanked the author for his papers in very warm terms, and pointed out the many lines of discussion, both as to diagnosis and treatment, which they opened up. He called attention to various specimens of tumours of the bladder, which were on the table, from the Museum of the Royal College of Surgeons, St. George's and University College Hospital, and from Sir Henry Thompson's private collection.—Mr. LUND (Manchester) expressed his sense of the great practical value of the communications, and his hope that they would lead to earlier decision on the line of treatment to be adopted. The exploration of the male bladder had been shewn by Sir Henry Thompson to stand on essentially the same footing as that of the female; in this respect, the sexes might be considered more equal than heretofore. The suprapubic manipulation necessary to enable the finger which was in the urethra to explore the whole of the bladder required considerable skill, and he was inclined to doubt if it would be found possible in cases of stout patients. He had had three cases in which an operation essentially similar to that described had been performed; two were fatal; in the third, a villous tumour had been successfully removed. Mr. Walter Whitehead had made digital exploration of the bladder through the urethra several times during the last seven years, and in four cases had found a tumour. In one case, when a sessile growth had been scraped away with Volkmann's spoon, there had been profuse hæmorrhage, which was controlled by a free use of perchloride of iron; and he ventured to suggest to Sir Henry Thompson an even more liberal use of styptics than seemed to be his practice. He had known a complete coat of the female bladder thrown off after the use of nitrate of silver, with an ultimately favourable result.—Mr. REGINALD HARRISON gave an account of a case in which he had removed a scirrhous tumour from the neck of a man's bladder in Liverpool last summer. There was obstruction in the prostatic portion of the urethra, and profuse hæmorrhage from it. After a median incision in the perinæum, he passed his finger into the prostatic portion of the urethra, and felt there a fungating mass, with hard base. With some difficulty, he succeeded in enucleating a tumour about the size of a walnut, which was proved to be atic tissue infiltrated with carcinoma, after the type of scirrhous tumours of the breast. The relief was very great; there was no further hæmaturia, but slight incontinence of urine, which he had succeeded in controlling by a vesical truss, by means of which pressure was applied over the upper part of the urethra.—Mr. ARTHUR DURHAM remarked that the operation of opening the membranous urethra by median incision for exploration of the bladder could hardly be called novel, for he imagined he must have performed it more than a hundred times, and it was one which, under the title of "Cock's operation," was very familiar in the practice at Guy's Hospital. Circumstances sometimes arose in which it was necessary to perform it without the guidance of a staff; and he narrated an instance of such a case, in which, after incision of the membranous portion of the urethra, he was able to extract a long stone, which had adapted itself to the shape of the prostatic portion, and given rise to very severe distress. He could not agree with Sir Henry Thompson, that the operation was to be avoided in all cases of cancer, or even of renal disease, for the drainage and irrigation obtainable by it gave sometimes much relief.—Dr. WOTTON referred, in a few words, to a case of calculus impacted in the prostatic portion of the urethra, in which the distress was much mitigated when the feet of the patient were raised above his head; and expressed his belief that irritation about the neck of the bladder was often thus quieted.—Mr. HENRY MORRIS pointed out that the cases in which "Cock's operation" was generally performed, were as a rule different from those described by Sir Henry Thompson, inasmuch as, in the former the membranous portion of the urethra was dilated. He had during the last two years performed the operation five times for the sake of exploration. In the first case, a calculus was found encysted in the prostate, was removed, and the recovery was satisfactory. In the second and third there were obscure symptoms of cystitis, and death finally took place from secondary renal disease. The fourth case was of a stout old man with incontinence of urine, who was suffering great pain. After digital examination, a sloughing portion of the coat of the bladder was removed, and some comfort during the last two days of his life was secured. The *post mortem* examination showed central sloughing of the bladder due to contact with the catheters, which would have led to extravasation into the peritoneum but for intestinal adhesions. The last case was one still under treatment. He had stricture and many false passages, and the introduction of a catheter needed constant highly skilled attention. Nearly pure blood was drawn off, and it was judged probable that this came from an intensely congested prostate. Urethrotomy was performed, but it was found impossible to reach the bladder, owing to the large size of the prostate, although the patient was thin and had not a deep perinæum. The bleeding, however, ceased, showing its origin from the prostate.—Mr. T. VINCENT JACKSON (Wolverhampton), ventured to think that some of the preceding speakers had somewhat misinterpreted the papers. The novelty was not in the operation, but in its application to a new set of cases; for he contended that the cases which had been described by Sir Henry Thompson had essentially new features in them, and that no one had shown with equal cogency the practicability and importance of complete digital examination of the bladder by the urethra.—Mr. T. SMITH said he was certainly surprised that Sir Henry Thompson should speak of this operation as the "new one." It had been used when he was a boy; he had done it himself; and he believed it was in very general use. And a passing warning from Sir Henry Thompson to examine the bladder *after* any operation for removing stone, he thought, was needless; it was habitually done, and he should naturally insist on it in any operation at which he was present.—Mr. SPENCER WELLS mentioned three cases in which, after dilatation of the female urethra, he had successfully removed small polypoid growths; and added, that he thought that when there was persistent hæmorrhage from such growths, the cases were sometimes mistaken for cancer.—Mr. BERKELEY HILL said it was remarkable that all Sir Henry Thompson's tumours were fibromata, for those used to be considered some of the rarest of vesical tumours. He should himself prefer the *écraseur* to the forceps in the removal of these tumours, for he thought its management possible, whereas the tissues grasped by the forceps were very difficult to determine. If the tumours were very large, recourse might be had to the compound method of Billroth, who operated both from above and below. —Dr. AVELING had found, as the result of his experience, that in women it was better to remove any vesical tumour which was larger than a walnut through the vesico-vaginal septum.—Mr. SHATTOCK showed an instrument shaped like a sound, whose lip separated into two blades, between which a tumour of the bladder might be caught. He further suggested that, in the case of tumours, excisions of portions of the bladder might be possible, after the manner of excisions of the pylorus at present practised. The frequency of papillomata about the trigone of the bladder he attributed to the three orifices in the neighbourhood, for warty growths always showed a preference for growth near orifices. —Sir HENRY THOMPSON, in reply to the comments on his papers, thanked his critics for much information, but protested that they had quite misunderstood him if they thought he claimed any originality for the method he had described for opening the urethra. That was an operation, dating not from Cock's time, but from two hundred years ago—a mere French *boutonnière*. But the "new method" he had brought before them, was the application of this urethrotomy to a new class of cases, which had hitherto often been judged to have no organic disease, and which had, some of them, been treated in the physicians' wards. There were specimens of tumours of the bladder doubtless, but they were specimens from the *post mortem* room

not from living and healthy patients. As to Mr. Smith's protest, that the bladder was always examined after an operation for the removal of stone, he pointed out that that was generally by the finger, and could hardly be avoided, seeing that the finger was generally the last thing in the wound; but what he had meant was an examination by the sound after the finger had been withdrawn, made to ascertain the presence or absence of a second stone. Mr. Harrison's case, he ventured to think, from the clinical account, was more likely to turn out the common fibrous tumour of the prostate than the rare scirrhus.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 10TH, 1883.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

Sacral Teratoma.—Dr. HEYWOOD SMITH exhibited a fœtus of about five months intra-uterine age, having an outgrowth from the end of the coccyx, about three and a-half inches lung, and seven inches in circumference. This consisted mainly of embryonic tissue, small round cells, with a faint fibrillar arrangement. From the coccyx were traceable four vertebræ, consisting each of a cartilaginous body, with spinous processes.

Porro's Operation.—Dr. HEYWOOD SMITH exhibited an uterus, removed by Porro's operation. The patient was a primipara, aged 20, the conjugate diameter of whose pelvis was one inch and three-quarters or less. She had been in labour two days, and attempts at delivery by craniotomy and cephalotripsy had been made without success. The performance of Porro's operation occupied nearly an hour. The specimen showed clearly the rugæ on its peritoneal surface.—Dr. FANCOURT BARNES said that Müller's modification of Porro's operation was a bad one, requiring a larger incision, and making the application of the ligature more difficult. Porro's original plan was better.

Superfœtation?—Dr. OUTHWAITE exhibited a body looking like an ovum, of about a month's intra-uterine age, which had been passed within thirty-six hours after the birth of a full-time child. The specimen was referred to a committee for examination and report.

Notes of a Specimen of Anteflexion of the Uterus.—A paper by Mr. W. S. A. GRIFFITH, on the above subject, was read. The specimen was one in the museum of the Sussex County Hospital, at Brighton. The uterus was sharply anteflexed, and was fixed, and the adjacent parts agglutinated into one mass, by firm old adhesions. The uterine cavity was dilated into a sac of the size of an almond, and contained the remains of a clot. The patient had died from peritonitis, while menstruating. Except for a previous attack of peritonitis, she had had remarkably good health. She was unmarried, and had never complained of painful menstruation, until asked during her fatal illness, when she said she had pains towards the end of the periods. The bend was at the junction of the body and cervix. The cervical canal was not contracted, but rather larger than usual. There was no atrophy of the uterine wall. The author rejected obstruction as a cause of the dilatation, which he thought due to chronic congestion. He thought the specimen interesting, as showing that acute flexion of the uterus might exist without interfering with the nutrition of the uterus, or with the general health.—Dr. ROUTH thought this specimen did not prove that the canal of a flexed uterus was not constricted; for the patient was menstruating, and the canal became dilated during menstruation; further, the uterine cavity was here ulcerated, and this might have enlarged the canal.—Dr. GRAILY HEWITT said that without contraction of the canal, there might be virtual obstruction from the co-aptation of its opposite walls, and from the swollen congested condition of the uterine tissues resulting from the flexion. This was proved by clinical facts.—Dr. HERMAN agreed with Mr. Griffiths that this case showed no evidence that the dilatation was due to obstruction. There was no angulation, nor narrowing of the canal, which was bent in a curve. The uterus was fixed; and if it were admitted that here the dilatation was due to obstruction from flexion, it did not follow that the same effect would be produced in an uterus which was free to move.—Mr. GRIFFITH said that microscopic examination showed that apparent ulceration was due to the patient having just ceased menstruating.

Case of Extirpation of the Uterus and Appendages for Epithelioma of the Cavity.—This paper, by Mr. KNOWSLEY THORNTON, was then read. The author thought that, these operations being still on their trial, it was a duty to fully report every case. This duty was not enough recognised. Many cases had been reported at the time of operation, but not further. One case had been publicly referred to as successful without correction by the operator, although the patient died within a day or two of operation. Others had been reported when immediately successful, but died within a few months from recurrence, without public record of the fact. This reticence indicated that they were rarely immediately successful, and when they were, gave but a short interval without recurrence. He argued that speedy recurrence was to be expected, He had refused to operate in many cases, and thought that the only justifiable ones were those in which the disease was confined to the cavity or body of the uterus. He then gave at length the history of such a case, with details of the operation, and after-progress, to death on the fifth day. He referred to the statistics of the operation by the abdominal and vaginal methods. In any future case he would choose the vaginal method, and would avoid the use of ligatures altogether, leaving pressure forceps on for the first few days. These would serve as drains, and at the same time by their weight tend to draw together the wounded surfaces.—Dr. EDIS suggested, that in the abdominal operation, septic infection might be avoided by removing the uterus through the vagina.—Dr. AVELING said that drainage was, he believed, first advised by Purmann, in 1706, and in England by Johnson, in 1769.—The PRESIDENT had taken part in three of these operations, all of which proved fatal. He was struck with the greater facility of the vaginal operation.—Mr. THORNTON replied.

Transfusion.—A paper on this subject by Mr. C. E. JENNINGS was read. The author remarked on the danger and difficulty of transfusion, which he thought too grave to be undertaken by a practitioner alone, at a moment's notice. Defibrination of the blood rendered its nutritive value very small. But the value of transfusion depended primarily, not on its nutritive, but on its dynamic effect. This latter could be procured with greater certainty by the intravenous injection of a large quantity of saline fluid. He had invented, and elsewhere described, a siphon for such injections. This instrument he had now modified, so that blood-transfusion might be combined with the saline injection. The flow of saline fluid into the recipient's vein having been established with the siphon, the blood-donor's vein was opened with a trocar and cannula specially devised for the purpose, and the blood, by a tube, was conducted into one limb of a Y-shaped glass-tube, through the other limb of which the saline solution flowed, and by this was carried on into the recipient's vein. Coagulation was prevented by the addition of a few drops of liquor ammoniæ to the saline solution. Should the blood-donor become faint, by turning a stopcock the current could be reversed, and the saline solution made to flow into the donor's vein.—Dr. AVELING thought the interest of the paper was in the proposal to substitute saline fluid for blood. He thought the apparatus a bad one; there was no certainty that blood would flow through it, no way of telling whether it was flowing, or of measuring its quantity. The reversal of the current he thought dangerous, tending to carry clots into the donor's circulation. Life might sometimes be saved by antitransfusion, raising the patient's feet high above her head.—Dr. ROUTH said that Mr. Jennings's solution contained potash salts. It had been found by experiment that the injection of potash-salts was poisonous. The valves in the donor's veins would prevent the proposed reversal of the current.—Dr. GRAILY HEWITT thought the chief point in the paper was the attention directed to the dynamic effect of transfusion. This, he thought, was probably very important. There was great difficulty in deciding when the operation was necessary. Patients after *post partum* hæmorrhage might rally, and yet perish some hours later without further loss of blood.—Mr. FENTON-JONES thought Mr. Jennings's siphon an admirable instrument. The solution had been used with success, and, therefore, was not poisonous. He thought the current of saline fluid would act as a *vis a fronte*, and carry on the blood.—Dr. FANCOURT BARNES said that he had found it difficult to get the blood to flow from the donor's arm, even with Roussel's instrument.—The PRESIDENT regarded transfusion as little more than a hopeful proceeding, demanding encouragement and study. Patients who survived it were often spoken of as having been saved by it—a manifest mistake. In many cases, it had caused death. Sets of cases of transfusion, occurring in single practices, within a limited time, were often published; he could not admit that extreme danger occurred so often. Injections of plain water had been used in cholera with splendid but temporary benefit: he would like to see it have a fair trial in cases of hæmorrhage. The attempt to use blood introduced most of the difficulties and dangers of the operation, and these were increased by complicated apparatus. He would use any good clean syringe, preferably a glass one. —Mr. JENNINGS only advocated blood-transfusion for the minority; he thought it dangerous. He had found by experiment that a few drops of liquor ammoniæ would prevent coagulation. He thought that the collateral circulation through venous anastomoses would

allow the saline fluid, when the current was reversed, to enter the donor's vascular system. The amount of blood taken should depend upon the effect of its loss on the giver, not on measurement by ounces.—Dr. HERMAN said that, at the London Hospital, saline intravenous injection had been used in four cases of puerperal hæmorrhage, of which two recovered, and two died; water once, and the patient recovered.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, JANUARY 3RD, 1883.

GEORGE BUCHANAN, M.D., F.R.S., President, in the Chair.

The Planning and Construction of Hospitals for Infectious Diseases.—Mr. P. GORDON SMITH read a paper on this subject. Hospitals, he asserted, form an important feature in the "defences" of a district against invasion of infectious diseases, and ample powers have been given by the legislature to make the requisite provision in anticipation for repelling this invasion, and for the treatment of patients needing proper isolation. Having regard to the serious pecuniary loss, no less than to the vast amount of individual anxiety and misery, caused by outbreaks of epidemic disease in any district, it is surprising that the degree to which it is possible to prevent the ravages of such outbreaks is at present so imperfectly appreciated by the public. Hospitals for infectious diseases must provide for the admission and treatment of at least two kinds of infection, the arrangements being such as to allow of this being done with reasonable security, so that a patient admitted for one disease shall not contract another disease consequent on his stay in the hospital. For small-pox the accommodation ought to be as completely separate from that for other infectious diseases as possible. Indeed, where practicable it would be well to have an entirely separate hospital for that disease. In any case, however, the site for a hospital must be of such extent as to allow the several buildings to be at an ample distance from the boundaries and well separated from each other, so as not only to permit free circulation of air and access of sunlight about them, but that the arrangement of them will prevent as far as possible intercommunication among the patients and nurses occupying the several ward-blocks. For aiding the free circulation of air, it is useful to raise the building on arches about four or five feet above the ground, so that the confined angles formed by the vertical sides of the building and the ground are obviated. The area of site for a hospital should be ample, not only for the buildings themselves but for any future extensions, temporary or otherwise that may be needed, as the difficulty and cost of obtaining additional land is often considerable. Spare land is most useful, too, for the convalescent patients. The extent of site should be such as to allow not more than about twenty patients to the acre—and it is useful to aim at securing one acre of land for even the smallest hospital. The site must be effectually inclosed with a solid fence, not less than six feet high. The hospital buildings may be divided into three classes. 1. The administrative and management; 2, the patients' department; and 3, the various out offices. The administrative department must be easily accessible from the patients' buildings, and conveniently near to the general entrance to the premises. The patients must be wholly excluded from this building, and its position must be such that persons (tradesmen and others) approaching it from the outside may not come in contact with the patients or the nurses and ward-servants. Hence it should stand in advance of the ward-blocks, and be moderately near the entrance-gates. It should also have an obvious front entrance, which should be wholly distinct from the means of access from it to the patients' blocks; and its external appearance should be cheerful and pleasing. The administrative block should contain the general kitchen and other usual domestic offices, also the apartments of the caretaker, a small room for the medical officer, and the necessary store-rooms. In an upper storey should be provided the bedrooms for the nurses, who should sleep here in preference to in the patients' blocks. A bath-room is a useful adjunct to this building. The patients' blocks must be arranged so as to afford separate and distinct accommodation for the patients suffering from each different disease; and this must further be subdivided for the due separation of the sexes. Hence at least two distinct pairs of wards are requisite. These must be so disposed on the site as not to necessitate the traversing of one ward-block to gain access to another; but each ward-block should be so arranged as to be wholly independent, and to have entirely open-air communication with the administrative block. Between the two wards in each ward-block, it is convenient to place the nurses' rooms, also the bathing accommodation. Likewise a small, cool and well ventilated pantry, where the supply of milk, beef-tea, etc., for the day or night's use may be kept. Where this is not provided, inconvenience is often experienced in hot weather from the spoiling of food. The wards themselves, in order that each bed may have the requisite amount of space, are usually made twenty-four feet wide and fourteen feet high, each bed having twelve feet of wall space. Advantage, however, may result from modifying these dimensions by making the ward twenty-six feet wide and thirteen feet high. The beds, while having slightly increased floor-space, may then be placed a foot or so away from the wall, thereby facilitating the free circulation of air about the head of the bed; and in hospitals for infectious fevers, it would seem unadvisable to exceed twenty beds in any single ward-block, while it would probably be better to restrict the number to a maximum of twelve or sixteen patients. Wards of two or more storeys in height are objectionable, as increasing the difficulty of supervision and administration, while on sanitary grounds they are open to the objection that the vitiated and infected air of the lower wards will be likely to find its way into the upper wards; and, accordingly, wards only one storey high are to be preferred. A few small wards for one or two patients each are always useful in an infectious hospital. Plans prepared by Mr. Keith D. Young, architect, were exhibited, showing an arrangement of private rooms at a hospital for infectious diseases, which Dr. Charles West hopes to get built at Nice. Referring to certain details of wards, windows with double-hung sashes are ordinarily to be preferred; and flooring of oak or red deal, the boards being in narrow widths, and grooved and tongued, is recommended, the surface being polished with bees' wax and turpentine. The walls internally may be finished in polished parian cement, or be faced with glazed bricks set with fine joints in white-lead. No cornices, mouldings, or other projecting enrichments on which dust could lodge are permissible, and it is recommended that all internal angles should be rounded. For the further avoidance of the accumulation of ward-dust, an open roof with exposed timbers is less preferable in a ward than a flat ceiling. Water or earth closets and slop sinks should be placed in a projection from the end of each ward, and be separated from the ward by a cross-ventilated lobby, the two closets themselves also having means of cross-ventilation, independently of the lobby. The ventilation and warming of the wards must be considered together. To secure that effectual ventilation which is indispensable in the successful treatment of all sickness, and especially of infectious disease, it is necessary to provide, without possibility of failure, for the constant and uninterrupted renewal of ward air from the exterior. For small hospitals, powerful stoves or grates in the wards are recommended, and these may be supplemented, where desired, by hot water pipes passing round the wards, but above the floor and away from the walls, so as to allow the space around them to be easily cleaned. For the admission of fresh air, openings having an area of about one hundred square inches are recommended in the opposite external walls at the floor level, one behind each bed. Other openings may be formed near the ceiling, and roof ventilators where there is an open roof. In connection with the ventilation of the wards, it is advocated that they should be kept well above the ground, and large arched openings provided in the side walls, so as to allow a free current of air to pass beneath the wards, thereby effectually preventing stagnation of air beneath and around them. The ground beneath and for a short distance on either side should be covered with a layer of good concrete. By these means, the ground-air would be excluded from the building and the air-inlets to the wards would derive their supply of fresh air at a higher level and of altogether a purer kind than is usually the case in wards built close to the ground level. The outbuildings of an infectious diseases hospital usually comprise a washhouse, a disinfecting house, an ambulance house, a deadhouse, and a *post mortem* room, together with the necessary sheds for fuel, etc. The washhouse and laundry should be of ample size, the latter being large enough to hold a mangle, and between it is convenient to provide a drying closet. The disinfecting chamber should be near the laundry building, and should have a thoroughly efficient apparatus capable of dealing with mattrasses, bedding, etc., as well as ordinary clothing, carpets, etc. With regard to the drainage of a hospital for infectious diseases, it differs in no essential points from that of any other building. Drains, to be permanently efficient and satisfactory, require the most careful consideration in every particular, and on completion should be tested in lengths by plugging the lower end of each length and then filling the length with water. If the drain then failed to hold the water for a specified time, it would be evident that means of leakage existed for which the contractor would be held responsible. The drains should be laid in direct lines with uniform

gradients between the points where a change of direction or gradient occurs; and at each of these points means of access to the drain should be provided either by a lamp-hole or a man-hole, so that the entire system of drains could be inspected with ease at any moment. —The paper was followed by an account of the use of tents for the treatment of small-pox, by Mr. G. W. COLLINS, of which the following is an abstract. Mr. Collins, who had had experience of the treatment of small-pox under canvas, during the summer of 1881, at Finchley and at Wednesbury, Staffordshire, during the recent epidemic in that district, gave his views of the relative merits and demerits of the hospital marquee and the "Radcliffe" tent, and temporary wooden buildings for the accommodation of these cases. He claimed the superiority of the hospital marquee over the "Radcliffe" tent and wooden buildings, on the following grounds. The marquee contains double the amount of cubic space. The ventilation can be regulated at will. A more even temperature can be maintained with less trouble. It is less affected by wind, rain, snow, and external temperature. It has greater facility for attendance and supervision, and is more suitable for confluent cases. The invariable preference was shown for the marquee by the patients. He found that with due attention to the hot-water apparatus and the ventilation, the temperature of these tents could with ease be kept between 60° and 65°, even when the external temperature was as low as 18°; and, in order to show that tent-hospitals can be conducted equally well in summer and winter, he quotes the following statistics obtained through the Meteorological Society during his stay at Wednesbury:—Highest temperature recorded, 66.8°; lowest, 17.4°; highest mean, 46°; lowest, 33°. On fourteen days, the temperature was above 60°; on twenty-three days, it was below 32°. There were recorded nine days of snow, sixteen of fog and rain, forty-two of rain alone, and twenty-three of frost. During the summer of 1881, when in charge of the small-pox hospital at Finchley, he found that, with a temperature of about 104° in the sun, the tents could be kept perfectly sweet by looping up the sides and opening both ends; and in neither epidemic did the tent life give rise to any pulmonary complications. An abstract of the cases treated in the hospital at Wednesbury gives the following result. Of the 118 patients treated in the tents, 24 were unvaccinated, and amongst these the mortality was 21 per cent.; the mortality of the vaccinated patients being 7½ per cent. Thirty-two per cent. were confluent cases, and in 11 cases the rash aborted either in part or entirely.—In the discussion which followed the reading of the two papers, Dr. Thorne Thorne, Surgeon-General Gordon, Dr. C. E. Saunders, Dr. Collie, and Messrs. Saxon Snell and Robins took part.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

DECEMBER 15TH, 1882.

J. W. TRIPE, M.D., President, in the Chair.

A REPORT from the Council was received, recommending that the Home Secretary be requested to receive a deputation from the Society concerning the unsatisfactory position of legislation with regard to bakehouses, the Society being of opinion that these places should be registered and controlled under regulation by the local sanitary authorities. On the motion of Drs. Bate and Thursfield, the report was adopted.

Illegal Occupation of Cellar-dwellings.—Mr. S. R. LOVETT read a short paper on this subject. A woman, who was nearly dead from cold and hunger, had been discovered in a cellar in Dudley Street; the cellar was a small rubbish-hole, measuring thirteen feet by nine. The woman had no right to be there; she did not lodge in the house, but was a tramp and a trespasser. A similar case had occurred two years before, when a woman was found dead in a cellar. Such cases occurred through the front doors of tenemented houses being left open, day and night. People walked in uninvited, slept in the cellars and on the stairs, used the closets, and even asked for soap and water in the morning. They did not take possession of their sleeping places until night; and, as the legislature has fixed the hours of inspection of dwelling-houses between nine in the morning and six at night, the sanitary inspectors were powerless to deal with them. Mr. Lovett, in conclusion, asked what remedy could be found to prevent such illegal occupations.—In the discussion which followed, in which the President, Drs. Bristowe and Bate took part, the opinion was generally expressed that the Medical Officer of Health could take no action.—On the motion of Mr. SHIRLEY MURPHY, it was decided to address a letter to the President of the Local Government Board, praying that the death-registers in workhouses and Poor-law infirmaries might in future show the localities from which those who died in these institutions were removed.

Tubercle-Bacillus.—Dr. G. A. HERON read a paper on this subject. Last June the author began to give attention to the clinical aspect of Roch's discovery of the bacillus of tubercle; sixty-two patients had come under his observation, in whose sputa he had detected the bacillus. They were of both sexes, from ten to sixty-five years of age, of various occupations, and all unmistakably suffering from phthisis. In three of these patients he had at first searched the sputa for the bacillus unsuccessfully, but found it in two cases in the third week, and in the other in the seventh week. His experience of the sixty-two cases inclined him to the belief that the presence of these organisms in the sputum would sufficiently indicate the prognosis. Given a persistence for some weeks of fewness of the bacilli of tubercle in the sputum, that case would probably run a long course; on the other hand, given the persistence of a large number of bacilli early in the history of a case, that case would run a short course and end in death. In the cases most rapidly fatal, the bacilli were grouped in numerous masses. Grouping might occur when the bacilli were few as well as when they were numerous, but the feature alluded to was that, where the masses of bacilli were so numerous as to give a characteristic appearance in almost every microscope field. Three or four bacilli in a field indicated the presence of few of these organisms, thirty or more in a field must be regarded as numerous. Koch's work was undertaken in the interest of the public health. He found the sputum when dried, as it might sometimes be seen drying upon a hospital floor, to be as surely fatal in its results when inoculated, as when he inoculated with the bacillus obtained by the cultivation of the organism from tuberculous tissue. Taking his views as true, it must be admitted that the expectoration of a consumptive person probably always contained a poison of the most virulent kind. After referring to the deposit of tuberculous sputum upon handkerchiefs and other linen, the author suggested that this might be a possible if unfrequent source of infection; but Koch had indicated other possible sources of infection, for he had demonstrated the presence of tubercle in animals with which man comes into frequent contact. The question, how phthisis spread among mankind, was one of the most difficult to answer, but the explanation must be sought for in the light which Koch had shed upon it by his discovery. —In the discussion which followed, the President, Dr. Bristowe, Dr. Corfield, and Dr. Samuel West, took part. A number of specimens of tubercle-bacilli were exhibited by Drs. Heron and West.

REVIEWS AND NOTICES.

INJURIES OF THE SPINE AND SPINAL CORD, WITHOUT APPARENT MECHANICAL LESION, AND NERVOUS SHOCK, IN THEIR SURGICAL AND MEDICO-LEGAL ASPECTS. By HERBERT W. PAGE, M.A., M.C., Surgeon to St. Mary's Hospital. Pp. 374. London: Churchill. 1883.

WE cannot speak very highly of this book as a literary production. The arrangement of the subject matter is somewhat arbitrary, the style diffuse, the sentences are too long and involved, and repetitions occur frequently. Long quotations, from old and new authors, abound on almost every page; and even the lamentable story of the Count de Lordat is here repeated at such length, as to make us fear that the dust of that unhappy nobleman will not rest in peace for years to come. In spite of all these blemishes, however, the work is a very important one.

Mr. PAGE has had peculiarly abundant opportunities of observing and studying cases of this kind, throughout their course, in his capacity of Surgeon to the London and North-Western Railway Company, and has made excellent use of his opportunities. The most important portion of his work, we take to be the appendix of cases (pp. 270-353), in which he has tabulated the principal features of a series of two hundred and thirty-four consecutive cases of injury from railway collisions, showing the sex and age of the patient, the nature of the accident, the general outline of the case, the date of settlement of claim, and the condition of the patient when last heard of. Much praise is due to the trouble taken by the author to ascertain the after-history of these patients, extending, in some cases, to more than eight years after the accident. These reports have, in the vast majority of cases, been obtained from medical practitioners in different parts of the country, who were well acquainted with the habits and modes of life of the patients; and they must, in the nature of things, throw considerable light on the exact kind of nervous de-

rangement originally caused by the injury. They are evidently genuine, and tell a strange tale. The upshot is that, with very few exceptions indeed, patients, however ill they might have been after the collision and previously to the settlement of their claims, recovered sooner or later—some with indecent haste—after the compensation money had been paid. In hardly any of these cases—with the exception of perhaps two or three—was there any evidence of actual injury to the spinal cord or its membranes; and in a few, where the eventual result was unfavourable, this could be traced to heart-disease, phthisis, alcoholism, and other accidental conditions. These facts show more clearly and convincingly, than any mere argument on the part of the author could have done, that railway collisions, as a general rule, cause only temporary and functional disturbance of the nervous system; and that the prognosis, as far as eventual recovery is concerned, is exceedingly favourable in such cases.

Mr. Page seeks to show that there is no proof of the liability of the spinal cord to suffer from concussion in the absence of simultaneous injury to the vertebral column, the cord being the most securely protected of all organs of the body; that the symptoms commonly observed after collisions are not dependent upon chronic spinal meningitis or myelitis; that the absence of *post-mortem* examinations of such cases shows them to be generally functional, and not organic in kind; and that the spinal cord is indeed, as a general rule, absolutely uninjured in cases of railway collision.

What, then, are the common effects of such accidents on railway passengers? In many persons a sprain of the muscles and ligaments about the lumbo-sacral region is caused, a kind of traumatic lumbago; and such a sprain may affect the whole of the spinal muscles and ligaments, and then give rise to great tenderness, pain, and inability to move, yet without acceleration of pulse, elevation of temperature, pain and numbness in the limbs, and other signs of real concussion of the cord. Such cases, if the patients are genuine, yield generally in a short time to rest and simple treatment. Frequently, however, nervous shock, or symptoms of general nervous prostration, are superadded, and the combination of these with pain in the back has probably laid the foundation of the views hitherto entertained of the nature of these common injuries received in railway accidents. According to Mr. Page, the occurrence of tenderness on pressure over one of the spinous or transverse processes, does not indicate any graver injury, as it is also met with in cases of simple sprain of the back from lifting heavy weights, etc. He very properly draws attention to the fact that such tenderness is almost invariably absent in real severe disease of the cord, as seen in hospitals. It should therefore be looked upon as a symptom which is rather reassuring than otherwise, as pointing to the superficial kind of injury which has been received.

In the next chapter the author discusses the nature of the nervous shock which is produced by railway collisions. He attributes much of it to the element of fear and alarm, produced by all the attendant circumstances of the accident, such as the noise, the confusion, the vastness of the destructive forces engaged, the helplessness of the travellers, the imminent danger to the lives of numbers of persons, etc., such incidents being quite sufficient to produce shock, or even death, irrespectively of the extent or importance of any bodily injury which may have been received. Pain and other abnormal sensations, arising from the sprain of the spinal ligaments and muscles, are thus rendered more intense by the prolonged and expectant attention which the patient gives to them; and the exaggerated estimate which he forms of the symptoms and their significance, leads to a belief in the impossibility of eventual recovery and usefulness. Then litigation steps in, and keeps the sufferer in an atmosphere of suspense and uncertainty, and he determines not to return to work as long as the question of compensation remains unsettled. To this are added the pernicious influences of want of occupation, and frequently of fresh air and exercise. It often happens, therefore, that a patient who has received a similar kind of injury in some other way, and has, therefore, no compensation to look forward to, recovers more quickly, and returns to his work much sooner than the railway patient. Lastly, bromide of potassium, which is indiscriminately prescribed in these cases, has, by its depressant action on the nervous system, no doubt, some effect in the protraction of all the symptoms. It is generally discontinued immediately after the cheque has been paid, to the evident benefit of the sufferer.

The author next refers to a less numerous, but nevertheless important class of cases in which the symptoms closely simulate those of real disease dependent on organic lesions, viz.: those to which Sir James Paget has applied the term of neuromimesis, being dependent upon a peculiar idiosyncrasy of the nervous system, which may be acquired or inherited. Several cases of functional paraplegia, hysterical attacks, hypnotic catalepsy, etc., are recorded, which although to all appearance most serious, got completely well after a settlement.

The last chapter, on malingering, is less complete than we should have wished to see it, and might with advantage be considerably extended in a subsequent edition. There are, no doubt, many persons who endeavour to gain large compensation for trivial or imaginary injuries, but it will often require considerable tact to distinguish cases of wilful deception from others of functional, hysterical, and neuromimetic disorders in which the patients deceive themselves more than others.

In conclusion, we must congratulate the author on having produced a work which, although not free from blemishes, yet is sure to impress a new direction to current thoughts on railway injuries.

ANNOTATED MODEL BY-LAWS OF THE LOCAL GOVERNMENT BOARD, WITH DIAGRAMS AND APPROVED ADDITIONAL CLAUSES. London: Knight and Co., 90, Fleet Street, E.C. 1883.

SINCE the issue of the model by-laws by the Local Government Board in 1877, a large number of sanitary authorities have adopted a new code of by-laws based upon the model ones, either in substitution of clauses which were imperfect, or for districts where hitherto no by-laws had been in operation; and judging from the testimony of medical officers of health, architects, and others, the resulting advantages have been considerable.

But a by-no-means insignificant proportion of authorities who have had the model clauses under consideration, have failed either to adopt them or to prepare others embodying the same principles, and this because it has been found difficult, in consequence of the technical and legal phraseology necessary to secure the results arrived at by many of the clauses, fully to understand their precise scope and intention. Others, again, have not seen the necessity for inserting clauses which at first sight seemed needlessly severe, if not indeed altogether inapplicable to the districts concerned. Under these circumstances, some work explaining the object and intention of the several clauses, and showing how they may be added to or modified without infringement either of the law or of the principles of health on which they are based, has long been needed, and we have no hesitation in saying that the want is now met in a way that leaves but little, if anything, to be desired.

The work in question relates to the three series of by-laws which are most in demand, namely, those as to the cleansing of footways, privies, etc.; those having reference to the prevention of nuisances and the keeping of animals; and the lengthy series controlling the construction of new buildings. The meaning and object of each by-law is explained; reference is given to legal decisions affecting their operation and validity, and a series of about sixty illustrations are inserted where it has been found desirable to explain certain points of construction in detail. Amongst these illustrations, we specially note a most useful series of lithographs drawn for the work by Mr. Rogers Field, C.E., and which show in detail how the by-laws regulating the construction, disconnection, and thorough ventilation of house drains can be best carried out under the varying circumstances of the site and position of houses which are detached, semi-detached, or in continuous rows, and either at a distance from, or adjoining the public footway. The annotations are, however, by no means limited to points of construction. The by-laws dealing solely with questions affecting the healthiness of houses and their surroundings are equally dealt with, and the desirability of adopting the principles they embody is enforced by the recorded experience of other districts, and by reference to the work and opinions of such authorities as the late Dr. Parkes, Mr. Simon, and Dr. Burdon Sanderson. Care has also been taken to explain the legal bearing of clauses as to which some doubts have arisen, and the legal objection to certain additions and modifications which are at times proposed. All additional by-laws which have received the approval of the Local Government Board since 1877, and which do not form part of the model series, are also included. Indeed, evident care has throughout been taken to make known the views of the several departments of the central authority having concern with by-laws, and in view of the success attained in this respect, it is, to say the least, significant that the volume appears anonymously.

The work supplies a recognised want; it will be most helpful to sanitary authorities both in compiling new by-laws and in interpreting existing ones; it will supply medical officers of health and surveyors with an easy means of indicating how far and in what way sanitary and other wants may be met by by-laws; and even the non-technica

reader can learn from the diagrams not only how house-drainage should properly be carried out, but how far his own house complies with the requirements of health in this and other respects.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

URETHRAL SYRINGE.

MR. BALMANNO SQUIRE has forwarded us specimens of a very convenient and portable urethral syringe. The body of the syringe is a small flattened india-rubber sack with flat sides, connected with a glass nozzle, provided with an india-rubber cap. This syringe is very convenient, portable, and clean, and is, we judge, likely to answer its purpose efficiently. It has the advantage of being cheap. The makers are Messrs. J. C. Ingram and Co.

MITCHELL AND MUIL'S CHARCOAL BISCUITS.

THESE biscuits, made by Messrs. Mitchell and Muil, of Aberdeen, will be found useful in flatulence, pyrosis, and other forms of dyspepsia. They are palatable, and free from grittiness. They may be eaten either alone or with butter.

COLOURLESS ANTISEPTIC OINTMENT.

MESSRS. SQUIRE of Oxford Street have forwarded to us specimens of a colourless antiseptic ointment, put up in collapsible tubes, on the suggestion of Dr. Godson. The ointment is prepared with Barff's boroglyceride. These tubes can be carried in the waistcoat-pocket, and are likely to be very useful to accoucheurs, and to surgeons and others who have to make examinations. This ointment, it is stated, does not become rancid by keeping. An ointment of this kind is very useful in *post mortem* rooms.

THE PURE CONDENSED ALPINE MILK (EDELWEISS BRAND).

WE have received from the Swiss Milk Company (Gossau, Switzerland) specimens of the Edelweiss brand of pure unsweetened condensed milk. The first point deserving of attention is, that the new preparation is sent out in clear glass bottles, fitted with air-tight porcelain stoppers—an obvious improvement on the use of tins. The milk itself is palatable, and is free from that unpleasant sweetness observed in many specimens. It is prepared, we are told, by a new process, so as to render the addition of any antiseptic agent unnecessary. It contains no added sugar, or other substance foreign to milk proper. When one part of condensed milk is mixed with two of hot water, it forms an admirable substitute for fresh cow's milk, and is taken even by young children without difficulty. It is undoubtedly a valuable therapeutic agent. Another point deserving of mention is, that it keeps well. We have had specimens by us for over three months, and they are still quite fresh.

SAFETY HYPODERMIC INJECTOR.

SIR,—I have neither the time nor the inclination for recriminatory correspondence; therefore, I should not notice Dr. Ward Cousins's communication in the JOURNAL of to-day, except to deprecate the tone of his letter, for which nothing that has emanated from me gives him the slightest warrant.—I am, sir, obediently yours,

P. H. MULES.

20, St. John's Street, Manchester, January 20th, 1883.

AT a meeting of the Senators of the University of Aberdeen, held on Saturday last, it was announced that the Mather and Liddell medical bursaries had been gained by Mr. John D. Thomson, M.A., and Mr. J. C. G. Duffus. At the same meeting, the Senators approved of the report on the George Thompson medical bursaries, and it is hoped that these bursaries will be competed for at the beginning of next winter session.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 27th, 1883.

THE INFLUENCE OF ALCOHOL ON MORTALITY.

WE published last week a paper on this subject, full of importance and interest. As the title stated, it was the report of a Committee of the Harveian Society, appointed by the Council in pursuance of a resolution of the Society, for the purpose of inquiring into the mortality referable to alcohol. The points to which it was found desirable to confine the attention of the committee were: (1) the extent of the mortality referable to alcohol, and its proportion to the mortality from all causes; (2) the proportion in which it is distributed between the two sexes; (3) the ages at which, and (4) the occupations in which, it chiefly occurs; and (5) the modes of death. For reasons connected with the convenience of collecting their returns, the committee thought it well to confine their inquiry to London; and on addressing themselves to medical practitioners in the metropolis, to various medical officers and registrars, and the late Dr. Hardwicke, coroner for West Middlesex, they obtained returns of 10,000 cases of death from all causes. Care was taken, in the first instance, that these cases should be of a representative character, since it is obvious that, unless this had been so, any conclusions drawn from them would have been untrustworthy. As the committee say, the London mortality is peculiar in this respect, that a large proportion of the deaths take place in public institutions, and that a large proportion, being cases on which inquests are held, are not certified at all. Out of 10,000 deaths in London, about 7,505 will, on the average, be certified by private practitioners, 1,183 will occur in workhouse hospitals and lunatic asylums, about 646 in hospitals, and inquests will be held in about 666 cases. The 10,000 cases, of which returns were sent to the committee, embraced 7,505 cases certified by private medical practitioners, 1,172 were workhouse infirmary and asylum cases, 646 were hospital cases, and 677 were cases of inquests; and on these data the committee think that they may be considered fairly average cases, and that any conclusions to be drawn from them will be equally applicable to the adult mortality of the whole metropolis. As to whether this is the case or not, everything will depend on how the cases have been selected. If they were taken as they came, without selection, this character would cause them to approximate in nature and significance to the cases in the Registrar-General's report, better than if they had been selected. To be comparable, in short, they should be representative cases. Even then, however, too much importance must not be attached to small figures. In the report of the Registrar-General for 1878, for example, on which the committee found their conclusions, twenty-one deaths were reported in London as having occurred from synovitis, and sixteen from ischuria. It is obvious that it would be most risky to draw inferences as to the influence of alcohol in causing the incidence of such diseases as these, or of others that might be named, from finding, in the 10,000 cases examined, either more or fewer instances of death from them than was to be expected. The committee are evidently alive to this, however, since we find them saying that too

much importance must not be attached to the deaths attributed in their returns to erysipelas and diabetes, although in both cases the mortality was higher than the average mortality of the metropolis from these causes.

The committee thought it best to divide their 10,000 cases into three groups, the first consisting of 8,598 cases with the causation of which alcohol did not enter, the second of 1,005 cases into the causation of which alcohol entered as an accelerating cause, and the third of 397 cases which were wholly due to alcohol. Supposing these proportions to hold good in the metropolis generally, there would be about 14 per cent. of all deaths due either partially or wholly to alcohol; and, at this rate, we should be justified in assuming that 5,870 deaths occur annually in London from alcohol in whole or part, and 38,971 in England and Wales. This estimate may seem small to those who place side by side with it other estimates, which range from 60,000 to 120,000 deaths in the United Kingdom from alcohol annually. We believe, however, that the estimate of the committee, if more moderate, is also more likely to be true, than the others, because, for the first time, we believe, the committee have separated the adult from the total mortality in attempting to reach their result. It has been stated that about 12,500 deaths occur annually from intemperance in London alone. This is, however, incredible, in view of the fact that the total adult mortality in the metropolis (over twenty years of age) was only 41,929 in 1878. If it were true, the proportion of deaths from alcohol to the total mortality would be nearly as one to three, for the influence of alcohol in causing infant mortality directly must be comparatively slight. The indirect influences may, of course, be considerable—those which lead drunken parents to neglect their offspring—but they are not at present in question, and it is scarcely possible to believe that such a proportion of the deaths can be caused by alcohol, wholly or partially. In any case, the returns of the committee do not touch the question of mortality under twenty years of age, and we believe they have acted wisely in excluding the juvenile and infant death-rate. The committee further show that, when the evidence is of the solid kind that depends on *post mortem* examinations, and when professional opinion and estimate are more or less excluded, the percentage of mortality due directly and wholly to alcohol, sinks to about 1½ per cent. of the whole adult mortality. In the main, however, the committee see no reason to doubt that about 14 per cent. of the total adult mortality is due to alcohol in whole or part.

Some interesting special points emerge from the inquiry. Thus it seems that of the deaths due partially to alcohol, about twice as many occur in proportion among men as among women. In those wholly due to alcohol the preponderance of male to female deaths, while still large, is not so large as in the former class. These figures may show, as the committee appear to think, "that while disease from alcoholic excess prevails much more among men than among women, its more aggravated forms are relatively more common among women." On the other hand, they may be interpreted to mean that as the men get killed off early in larger proportion than women, there are not so many men left to maintain the proportion as there are of women, and therefore the ratio falls. Another point brought out by the figures is, as might have been anticipated, this: deaths, in the causation of which alcohol is concerned, occur at a relatively earlier age than deaths from all causes. In the partial alcoholic deaths, two-thirds of the whole occurred between the ages of 30 and 60; and in those wholly due to alcohol no less than three-fourths occurred at those ages; whereas, in the adult population of the metropolis generally, little more than half occur between 35 and 65. As to occupation, it appears that out of 224 persons dependent for their living on various trades, no less than 104 were publicans, hotel-keepers, wine merchants, their wives, and persons in their employ. Again, as to age, no less than 86 persons out of 1,402 who died wholly or partly from the effects of alcohol reached the age of seventy years or over. One widow, aged 82, constantly drunk for years, died finally of congestion of the lungs. How much longer she might have lived had she been sober is of course an insoluble question.

As to the modes of death, the committee have a good deal to say. Fifty-nine of the cases died of various causes, in which no disease of any particular organ figured largely; but of 338 other cases in which a classification could be made as to the organ specially affected, 116 are referred to diseases of the liver, 11 more to diseases of the stomach and liver, 8 to diseases of the stomach and hæmatemesis, 9 to disease of liver and kidneys, 2 to disease of heart and liver, 3 to diarrhœa, and 3 to peritonitis, so that it appears that 150 deaths, or three-eighths of the whole class, occurred from disease of the abdominal viscera. Deaths from pneumonia and pleurisy, into the causation of which alcohol entered, occurred in the proportion of seven per cent. of the whole, as compared with three-eighths of the general mortality from these causes. On the other hand, only ten per cent. of the alcohol-caused deaths were due to bronchitis, asthma, emphysema, and congestion of the lungs, while over fifteen per cent. of the total mortality is due to these causes. It may, however, be pointed out, in reference to this classification, that the separation between deaths from "pneumonia" and those due to "congestion of lungs," is evidently somewhat loose, and therefore somewhat vitiates the results. No doubt the committee returned the deaths as they were sent in to them, and such uncertainties are inseparable from returns made by a large number of hands; but, in weighing the evidence, such figures must be kept in mind. Strange to say, phthisis is a less frequent cause of death among free users of alcohol than among the general population, only sixteen per cent. of deaths being due to this cause among the former class, while twenty per cent. is the proportion in the latter. Still more curiously, when phthisis is a cause of death, it appears to be at a later age among drunkards than among the general population. Three men seem to die of phthisis to one woman among the intemperate; whereas the proportion among the general population is four men to three women. The committee have no explanation to offer—at least, they do not offer any—of these curious facts.

A point which has struck us much in the returns is the almost entire absence of reference to the zymotic diseases. The only instance in which any of them is mentioned is when, among the deaths partially due to alcohol, thirteen cases of typhoid fever are inserted. Since about 3,000 deaths occur from zymotic disease, out of a total adult mortality of about 42,000 in London, this is evidently a very much smaller proportion than we might have anticipated. The committee have, however, no remarks to offer us on this head. They sum up the results of much labour in the following terms: "We find, therefore, upon the whole, reason to think that, in the metropolis, the mortality among any considerable group of intemperate persons will differ from that generally prevailing among adults in the following important particulars, viz., a fourfold increase in the deaths from diseases of the liver and the chylopoietic viscera; a twofold increase in the deaths from disease of the kidney; a decrease of half as much again in those from heart-disease; a marked increase in those from pneumonia and pleurisy; a considerable increase and an earlier occurrence of those from disease of the central nervous system; a marked decrease in those from bronchitis, asthma, emphysema, and congestion of the lungs; a decrease nearly as great in those from phthisis; and a later occurrence, or at least termination, of the disease; a very large decrease in those from old age, with an increase in those referred to atrophy, debility, etc.; and the addition of a considerable group referred in general terms to alcoholism, or chronic alcoholism, or resulting from accidents."

VACCINATION.—Mr. W. H. Hatfield, of Hambledon, Hants, has received for the second time a grant of £7 16s. for efficient vaccination in his district.

COLLECTIVE INVESTIGATION.

In the speeches delivered at the last meeting of the Metropolitan Counties Branch, the uniform expression of approval of the great principle of Collective Investigation, on the part of the distinguished speakers themselves, cannot fail to give universal satisfaction. These eminent members of the medical profession assure us that the whole sympathies of their lives are in the direction of this movement; indeed, such were Sir William Gull's very words. The cynical critic might remind us that successful and leading men have, on the whole, the reputation of approving of the majority of established undertakings in which they are invited to take part; but this chiefly applies to circumstances under which their names are merely required as signs of patronage. In the present instance it is leadership and practical encouragement that is needed, the speeches show that the distinguished speakers prefer to direct and to encourage, rather than to bestow compliments on, those who are undertaking the labours of collective investigation. Sir William Gull turns attention to certain relations between clinical work and pathology, not by any means well recognised even at the present time. Not many years ago a foreign physician, during his daily rounds in the wards of a great hospital, was observed by his pupils to lay greatest stress on questions which, he admitted, would be settled by *post mortem* examination. Since that date, clinical pathology has advanced a stage, and the scientific physician, at a patient's bedside, dwells upon pathological evidence often obtained during the lifetime of others who have recovered from diseases which were noted by experts during their course. Such cases are mostly instances of more or less severe and definite lesions of large organs, or of a fluid like the blood, which can be examined closely during the patient's life-time; in this category we must turn to surgery, and remember how, in exploratory operations, the morbid anatomy of some diseases becomes an objective symptom, and the possibility or improbability of cure seen at a glance. Collective investigation will advance the cause of practical pathology and clinical work yet one step further.

Hitherto we have studied "definite lesions", and the two above described methods of clinical work require hospital appliances; in fact, they could not be carried on outside the walls of institutions where a considerable number of sick are constantly assembled, and where the medical staff are specially suited for the kind of work which can be pursued in sick-wards and *post mortem* rooms. The human species is, however, affected with innumerable diseases which do not involve "definite lesions;" that is to say, no definite lesions have as yet been detected, owing to imperfect study. Moreover, the discharged hospital patient may suffer for years from mere results of his former malady, too trifling to force him to apply for renewed hospital relief, yet still very troublesome. The branch of the medical profession, who are most experienced in the management of such diseases, are not on the staff of large hospitals and infirmaries. Sir William Gull most pertinently observed, that with proper means at our disposal, and a fitness for exact observation, through previous training, one of the most valuable fields of pathology would be found in general practice. To this were added the significant words: "Having passed many years in hospital and private practice, I have come to see that experience gained in the latter is necessary for that acquired in the former, especially as helping towards a truer pathology." Sir James Paget, in discussing the scope afforded to general practitioners for scientific observation, regrets that so large a mass of knowledge lies, as yet, scattered and lost to the scientific world, in the charge of those who are in large practice and who record nothing.

Little can be done without method and organisation; and the advances in medical knowledge, now projected, are no exception to the rule. The special requirement is met, in every way, by the new principle of collective investigation of disease, if carried out in the system already in working order, thanks to the energy of the special committee appointed for the purpose. In the first place, the fundamental necessity of morbid anatomy as the only basis of true advancement can never be set aside. Hence, pathological experts and morbid anatomists must be associated with the work of collective investigation. Just as the general practitioner possesses certain clinical experience that the pure pathologist cannot share, so the latter can afford evidence that the former is incapacitated from bringing forward. In fact, both must work together. How the pathologist works, we all know. He has his societies, his *post mortem* room, and the ward-books of his hospital. Through the knowledge gleaned from these sources, his services are required in collective investigation.

The mention of the word "ward-book" reminds us of the great advantage of the hospital worker, and of the great want in private practice—namely, adequate registration—not mere private notes in the doctor's pocket-book, but systematic records of the course of the disease, accessible to others. It is just this want that is, to some extent and in certain directions, supplied by the new system. Ready-made questions are forwarded to general practitioners, and the answers are returned to the committee. The main difficulty, Sir William Gull observes, lies in properly formulating the questions. The solution of this difficulty, however, comes under the same head as the question of employing experts in hospital work; and if such authorities put all the main questions that they consider necessary for solution with regard to any disease, there is nothing to prevent the practitioner from suggesting the necessity, which he alone can recognise, of advancing for reply other queries which have been overlooked. Thus, questions set by those who are competent to ask, are already being sent to those who are competent to reply.

The last question, and one of the most important is: shall we get such replies? This is partly settled already, for replies to at least one set of questions have been obtained in abundance, and by force of habit and imitation there is every reason to expect in the future still more satisfactory results in this direction. The general practitioner is proverbially overworked, yet experience already shows that he can find time to register his cases. All the speakers at the recent Branch meeting were confident in the public spirit of the family doctor. Professor Humphry believes that in all probability it is just the very busiest men that will send the best answers, because they have, for the most part, become successful and therefore busy, through energy and anxiety for the welfare of their patients and of the profession, and will be delighted to aid in a kind of work entirely to their taste. Sir James Paget showed how many hard-worked men feel actually relieved and almost diverted by labour of this kind, after heavy practical duties. Lastly, Sir William Gull demonstrated how truly collective work was advantageous and agreeable to the practitioner, since it helped him to stamp a scientific value on facts hitherto only burdensome. When the aim of a heavy pursuit is rendered high and clear, it becomes no longer tedious and distasteful, but, on the contrary, proves to be of unflagging interest.

In conclusion, the last meeting of the Metropolitan Counties Branch of the British Medical Association showed how entirely our highest metropolitan authorities were in favour of a movement which is already shown to be, by its practical working during the past few months, full of hopeful promise. The presence of so great a gathering of leading hospital and family practitioners, both from the provinces and the metropolis, added to the importance and the good augury of the meeting.

The Municipal Council of Paris, in consideration of M. Alfonso, temporary house-surgeon of the Trousseau Hospital in Paris, having died on October 15th last, in consequence of a typhoid fever contracted in the performance of his duties, has just voted, in favour of his daughter Estelle Alfonso, a marriage dowry, together with a *trousseau*, to be charged on the Pupils' Endowment Fund of the city of Paris.

MEDICAL CERTIFICATES, CORONERS, AND DEATH-REGISTRATION.

THE present relations between medical practitioners and coroners, and their respective responsibilities with reference to the civil registrations of deaths, are far from satisfactory, and are apparently the subject of considerable apprehension. A correspondent has called our attention to the case of a sudden death which recently occurred in Battersea, and has asked one or two questions in connection with the legal aspect of the case, whch affords us the opportunity once more to point out the state of the law as regards medical and coroner's certificates, and the registration of causes of death. It appears that, on the 24th ultimo, a boy, aged 11 years, retired to bed in apparently good health, but was within an hour or two afterwards found dead in bed, "his head being between his legs"; he had evidently died in the act of vomiting. A neighbouring practitioner appears to have been at once called in, and found that the child had been dead more than an hour. Subsequently, another practitioner, who did not see the body of the child until sixteen hours after death, and who had not seen the deceased for more than two months previously to his death, certified that the death was due to heart-disease, from which the child was said to have suffered from infancy. So far as may be judged from our correspondent's letter, the case was properly referred to the coroner, who, in the exercise of his discretion, seems to have pronounced an inquest unnecessary.

It is not stated whether the certificate attributing the death to heart-disease was produced to the coroner; and it is impossible to say, supposing this to have been the case, how far the certificate may have influenced his decision that an inquest was unnecessary. Our correspondent asks:—"Was it legal for a medical practitioner, who had not seen the deceased for over two months, to grant, or a coroner to accept, a certificate of death under those circumstances?" Now, it is quite clear that, in this case, no medical practitioner was in attendance upon the deceased during his last illness, and that, therefore, no one was qualified, under the provisions of Section 20 of the Births and Deaths Registration Act, 1874, to give a legal medical certificate. The case having been referred to the coroner, and he having declined to hold an inquest, the cause of the death of this child could not be legally certified by anyone; and as the Registration Act declares that all deaths must be registered, the registrar, supposing that he strictly carried out his official instructions, would enter the cause of death (which was legally uncertified) according to the last information he could obtain. It is incorrect to state that the coroner, in any sense, "accepted" the so-called certificate, though it may have been produced to him as part of the evidence to enable him to decide upon the desirability of holding an inquest. This certificate probably found its way back to the registrar, who, in accordance with his instructions, would accept its contents on the best available information as to the cause of death. Indeed, it is possible that in the certificate in question, the certifying practitioner stated he had attended the deceased, and misstated the date of his last attendance, in which case the certificate would be accepted as legal. There can be no question that directly the coroner decided against holding an inquest it became desirable to obtain for statistical purposes in the Death Register the best available information as to the cause of death; and no useful purpose would have been served if the medical practitioner who had known the child had refused to state what he believed to be the cause of death, whether in the form of a legal certificate or merely of a written statement for the guidance of the registrar. From the statement of the facts before us, it would appear desirable that an inquest should have been held, but it cannot be too clearly understood that the mere refusal of a medical practitioner to give a certificate, however such refusal may be justified, does not necessarily force a coroner to hold an inquest. Further, though the State calls upon medical practitioners to give certificates in all cases where they have attended deceased persons in their last illness, it neglects to provide any means for affording satisfactory evidence of the cause of death in other cases, unless an inquest be held. Lastly, it must be remembered, that the decision as to the necessity for holding an inquest rests solely with the coroner, whose discretion is almost irresponsible.

TREATMENT OF COUGH AND EXPECTORATION.

NOTWITHSTANDING that the above symptoms occur with almost monotonous frequency among our patients, the treatment of the conditions producing them is still in a most unsatisfactory state. Most of the remedies used are of a purely empirical character, which, from our ignorance of the *rationale* of their action, must be employed in a more or less haphazard fashion. Even those remedies of whose chemical action we know something, are simply supposed, on extremely imperfect grounds, to have certain analogous physiological actions. We are, therefore, glad to welcome the results of certain careful observations aud experiments by the accomplished Professor of Materia Medica and Pharmacology at the University of Würzburg.

Before entering on these, Dr. Rossbach discusses shortly the commonly recognised expectorants (*Berlin. Klin. Wochenschr.*, 1882, Nos. 19, 20), such as warm decoctions, alkalies, emetics, balsamic, aromatic, and astringent drugs, narcotics, and substances of a sharp irritating character, like vinegar, or of an indifferent character, like steam. Of the directly observed effect of these remedies on the mucous membrane, there is no record, Dr. Rossbach says, in German literature; and we do not remember having seen any in English literature. Through a wide opening in the trachea, Dr. Rossbach observes directly the effect of medicines either taken internally or applied locally, while at the same time he has beside him an undrugged animal for the purpose of comparison; this last being, we should say, a most important point, as even simple tracheotomy may cause considerable changes in the mucous membrane of the trachea.

Dr. Rossbach first directed his attention to the effect of alkalies on the mucous secretion; the preparations used being, internally, sodic carbonate and ammonic chloride; locally, solution of sodic carbonate and liquor ammoniæ. A dose of thirty grains of sodic carbonate, or fifteen grains of ammonic chloride, injected directly into a cat's femoral vein, produced substantially the same effects, and these effects were somewhat unexpected. The usual theory of the effect of alkalies is, that they render the mucus more soluble, and hence more easily expectorated. The changes observed by Dr. Rossbach were a gradually increasing pallor and greyish white appearance of the mucous membrane, and, ultimately, a complete cessation of the mucous secretion. While the mucous membrane of the normal animal, after being dried with blotting-paper, became moist again in two minutes, that of the drugged animal showed no trace of mucus till ten minutes; and, if this small quantity were dried off, no more appeared. What the cause of this cessation is, Dr. Rossbach does not say, but it cannot be the anæmia, as the secretion continues unaltered in much higher grades of anæmia from nerve-stimulation. The diminution of the blood-supply and mucous secretion of the bronchial membrane, evidently tend towards an actual cure of the pathological conditions usually involved. Solutions of one to two per cent. of sodic carbonate applied locally seemed to produce no effect; but even very weak dilutions of liquor ammoniæ caused a marked injection of the mucous membrane, with distinctly increased secretion. The local application of a weak solution of acetic acid produced the same effect as liquor ammoniæ; and Dr. Rossbach, both from his experiments and observations, is strongly opposed to the use of this drug in throat-affections.

The astringent remedies observed were tannin, alum, and nitrate of silver. Local application of the former two caused the surface to

become pale, the opaque epithelium, however, preventing the condition of the blood-vessels from being observed. The secretion was completely abolished, the surface being dry and shining. These facts were still more markedly true of solution of nitrate of silver, which produced a sharply limited patch of chalky white colour, over which the mucous secretion was entirely absent. Dr. Rossbach is inclined to believe that the vessels are really contracted, and from a long experience he strongly recommends the local application of solution of nitrate of silver in all cases of inflammation of the mucous membrane, more especially when accompained with pain, feeling of dryness, etc.

The local effect of oil of turpentine on the mucous membrane was somewhat perplexing, as, when sprayed directly on a spot, it caused dryness of the mucous membrane, while a 2 per cent. solution dropped on a spot caused an increased mucous secretion, notwithstanding that there was a diminution of vascularity. Dr. Rossbach strongly recommends oil of turpentine, both internally and locally, in cases of chronic bronchial catarrh, more especially with putrid expectoration. He believes that it has not only an antiseptic, but also a refrigerant and narcotic effect.

The action of apomorphia, emetine, and pilocarpine was observed both in large and in small doses. With all three, but more especially with the last, there was a very great increase of the mucous secretion in the larynx, trachea, and bronchi, the mucous glands becoming so large as to cause projections on the surface. This effect Dr. Rossbach proves to result from a direct action of the drug on the gland itself, the circulation of the blood being quite unaffected. The subsidiary effects of pilocarpine render it unsuitable as a practical expectorant; but apomorphia Dr. Rossbach considers to be the prototype of all expectorants, giving in his hands most excellent results. He administers it as hydrochlorate of apomorphia in doses of one-fifteenth to one-seventh of a grain thrice daily, with a little dilute hydrochloric acid, the mixture being kept in a dark bottle and containing no sugar.

Lastly, Dr. Rossbach gives the results of his experiments with atropia and morphia. Atropia produces extreme dryness of the tracheal mucous membrane, accompanied by a gradually increasing hyperæmia. Its effect in deadening the irritability of the membrane is, he finds, very uncertain; while, on the other hand, the effect of morphia, both in diminishing the secretion and lessening irritability, is constant. Another advantage possessed by morphia is that the diminution of the secretion is never so great as to be followed by inflammation, which, he asserts, is frequently the case with atropia. A combination of morphia and apomorphia he has found extremely useful in cases of difficult expectoration, while a combination of morphia and atropia has given excellent results in cases of chronic catarrh, emphysema, and phthisis. Electrical stimulation of the superior laryngeal nerve causes distinct contraction of the blood-vessels, justifying, therefore, Ziemssen's recommendation of percutaneous electrisation of the larynx in cases of obstinate chronic inflammation.

NAVAL AND ARMY MEDICAL SERVICES.

A FEW weeks since it was a pleasure to us to allude to the very satisfactory manner in which the medical affairs of the Navy had been conducted, and more immediately so in the recent expedition to Egypt, under the very able supervision of its Director-General, whose services we are now glad to find have been rewarded with the decoration of K.C.B. We trust that this recognition may be followed speedily by that, in the same kind, of the corresponding official of the Army Medical Staff at Whitehall, to whom, as we believe, no blame can be imputed for any shortcomings that may appear to the eyes of the committee now investigating the errors committed by officials not under his control, in the stowage of medical stores in the transports, and of those who, at the seat of war, are answerable for the delay in transmission with the divisions sent to the front, with whom medical representations would seem to have been unduly of but little avail. We hear much praise of the readiness with which the Admiralty have acted, and, on the other hand, much chagrin expressed by army medical officers at no similar step having been made by the Horse-Guards, which is unusual. The banquet lately given by the medical profession at large to the medical officers who have returned from Egypt, is a convincing proof of estimation of the faithful and honorable manner in which they did their duty, under difficulties not raised by themselves; and we fear that dissatisfaction may again raise its head, with injurious results to the tone of the department, if adequate decorations be not awarded, in a willing spirit, to its responsible officers.

IN Wisconsin, any druggist, apothecary, or vendor of medicine is liable to a fine of ten dollars and costs for every time he is convicted of refilling a prescription marked "No Duplicate."

WE are requested by Dr. Morell Mackenzie to state that the successful tracing to its origin of the diphtheria epidemic at Hendon is entirely due to Dr. Cameron, the district medical officer of health.

THE Municipal Council of Paris has voted the sum of £120,000, two-thirds of which are to be expended in the improvement of existing hospitals, and the remaining one-third to be expended in the erection of new establishments for the relief of the sick and wounded poor of that city.

THE small-pox epidemic seems to be making headway in the Wolverhampton district. Within a few days, three cases have appeared in Wolverhampton; and at Heath Town, an outlying part of the borough, there have been another two cases reported, one of which has ended fatally. There are now eight patients in the hospital.

MR. GEORGE COURTAULD, M.P., has offered to erect a cottage hospital at Halstead, at a cost of nearly £1,500. The offer has been made in memorium of the late Mrs. Courtauld, and from a desire of the hon. member to do something to benefit a town connected for some years with the firm of which he is the head. After erection, the hospital is to be supported by the town, and conducted upon unsectarian principles. A public meeting will shortly be held, when the generous offer will undoubtedly be accepted.

THE MEDICAL SOCIETY OF LONDON.

ON Monday evening next, Dr. Whipham, Physician to St. George's Hospital, will open a discussion on the important question of the association existing between bacilli and tuberculosis. It is expected that many practitioners, other than those who are Fellows of the Society, will enter into the debate.

GENERAL GARIBALDI.

AN agitation has been set on foot, headed by the Senator, Professor G. Cantoni, for demanding from the Government, and the family of General Garibaldi, the accomplishment of his will, signified by testamentary declaration, that his remains should be incinerated at Caprera. It is the object of this movement to obtain such cremation on the occasion of the first anniversary of the death of the Great Captain.

DEATH OF DR. JOHN FORSYTH MEIGS.

THE *Philadelphia Medical Times* reports that, on December 16th, J. Forsyth Meigs died of pneumonia, at his residence in Philadelphia at the age of sixty-four years. Dr. Meigs was widely known in the country as joint author with Dr. Pepper of one of the best and m

pular text-books on children's diseases ever published in the glish language. Dr. Meigs was born in Philadelphia in October 18, and was the son of Professor C. D. Meigs. He was graduated m the medical department of the University of Pennsylvania in 38, and has always practised in Philadelphia, where he occupied ny prominent positions.

THE ROYAL HUMANE SOCIETY AND DR. SILVESTER.

E Fothergill Gold Medallion, of the value of fifty guineas, has n presented by the Royal Humane Society to Henry Robert ester, M.D., B.A.Lond., for his valuable researches and discoveries the method of inducing respiration in cases of apparent death n drowning and other causes, and which method has been suc- fully adopted by the Society for many years past.

GERMAN HOSPITAL, DALSTON.

committee at the last annual general court of governors having ived authority to open a convalescent home in the immediate nity of the hospital, have secured the lease of suitable premises alston Lane, opposite the hospital gates, known as Graham House, h they opened last Monday for that purpose. The home has mmodation for sixteen patients (ten for the present will, however, be admitted), and will thus considerably relieve the main build- and enable the committee to greatly extend the usefulness of harity.

SIGNS OF PREGNANCY.

EPAUL, in presenting recently, to the Academy of Medicine, a r by Dr. Jorisen of Liège, laid stress upon a new sign of preg- y, presenting the following characteristics. M. Jorisen calls tion to the statement of Graves, that the frequency of the circu- n remains invariably the same in all positions, when there is rtrophy of the heart. Following out this suggestion, he has observations with the object of ascertaining whether the hy- phy of the heart, which occurs during pregnancy, would give me result, and he has ascertained that in the first weeks it is A woman who is pregnant has the same number of pulsations, ner she be seated, lying down, or erect.

SMALL-POX AT NOTTINGHAM.

IOUS outbreak of variola has occurred in the Notts County ic Asylum at Sneinton, a densely populated district on the east f the borough of Nottingham. For the past twelvemonths the e has been epidemic in the town in spite of the vigorous pro- gs of the local sanitary authorities. About a fortnight ago, pox appeared in the imbecile ward of the asylum, where a female patient was attacked; she was at once isolated, but sease has continued to spread, and it has been found necessary ove at least seven cases to the garden hospital, where the pox patients from the town have hitherto been received.

THE ELECTRIC LIGHT IN SURGERY.

derstand that the incandescent electric light has been lately d by a few surgeons for operations about the mouth, and that ts are likely to find it exceedingly useful. The globe con- g the incandescent material is inclosed in another globe, and ed on a handle of suitable form; after its introduction into uth, the circuit can be closed, and the light immediately ob- The light is extremely pure and clear, and all shadows are own, and away from the operator. It is calculated to be ingly useful for operations for cleft palate. The amount of ity required to be stored is not great, as the light is only ined for the time that the operator actually requires; and accumulators, which are already a commercial product, are apted for the purpose.

THE BACILLUS OF MEASLES.

ACCORDING to M. Le Bel, (Académie des Sciences), the bacillus is found in the urine in the early stages, and disappears with the fever; is a slightly curved, highly refractive rod, moving very slowly; it contains oval spores at one-third of its length, in a bag of dead protoplasm, which gradually disappears, the spore showing then a zone of mucilage around it. Another occurrence of spores on the thirty-fifth day was observed in an adult. The bacillus also may be got from the skin at the later stages. M. Le Bel cultivated it, and injected it into a guinea-pig; which, on the tenth day, showed small bacilli in its urine, but did not seem incommoded. The urine in scarlatina and in diphtheria shows a microbacterium and a micro-coccus, respectively both quite different from the "bacillus of measles."

THE HOSPITALS OF NEW YORK.

JUST now, the finance of New York hospitals is, for purposes of comparison, of some metropolitan interest. The Hospital Saturday and Sunday Association of New York has compiled a statement of the work and resources of the hospitals connected with the Association for the year ending September 30th, 1882, from which the following statistics are taken.—The total expenses of the hospitals were 442,760.68 dols.; current expenses for the care of patients, 409,590.26 dols.; total income from invested funds, 106,449.81 dols.; amount received from paying patients, 79,072.71; amount received from city, county, or State appropriations, 58,156.38 dols.; amount received from collections in 1881, 33,815.44 dols.; amount received from subscriptions other than bequests and gifts to the permanent fund, 152,066.07 dols.; receipts applicable to current expenses, 409,084.35 dols.; total number of patients treated in hospital, 9,165, of whom 6,945 were free patients; total number of days of hospital care, 368,374, of which 261,705 were free.

A MAN AND HIS BODY.

THE recent New York legislation gives a man very complete far-reaching and apparently retrospective rights to possess himself in pieces as well as in peace, and under the most adverse circumstances. "A person," says section 305, "has the right to direct the manner in which his body shall be disposed of after his death, and to direct the manner in which any part of his body which becomes separated therefrom during his life-time shall be disposed of." Such claims might, it is thought in America, seriously affect the pathological museums of the hospitals, for which dissevered and morsels of humanity have hitherto been appropriated without legal leave asked or permission granted. It is feared that some fortunate possessors of rare pathological growths may set an unreasonably high value on their morbid peculiarities, when once they discover that they are their legal property and have a marketable value. A man's bones may become of more worth than himself, and his little finger of more value than all the rest of his body.

BRANDY.

THE report of the American Consul at Rochelle, which has been published, as to the falsification of brandy, is so serious that it cannot be passed over without notice. Reading between the lines of this report, it appears that it is hardly possible for private consumers, at the present time, to obtain genuine brandy. The details given by the American Consul, which, so far as it is possible for us to verify them, appear to be fairly corroborated by the analyses of various samples made here, seem to show that there are very few cases in which a genuine sample of pure Cognac brandy is actually sent over for consumption in this country. In most cases, the spirits sent to England for consumption, appear to consist of beet or potato spirit, diluted to the proper strength, and flavoured with

genuine Cognac, and probably, not unfrequently, with the addition of other flavouring materials, so as to produce such a bouquet as would pass for ordinary taste, and then bottled and labelled so as to sell at prices which really belong to those of genuine brands, instead of the made-up compounds which are substituted for them. It is this falsification of spirits which is doing the greater part of the harm in connection with the consumption of spirits in this country. It is almost impossible now to obtain spirits which have been already aged by keeping, so as to ensure their freedom from those products which form during the first distillation, and are of an injurious character; and this dilution and adulteration is going far to render it impossible altogether in the future to obtain pure spirits.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

THE following members are recommended by the present Council, as officers and councillors for the year 1883:—*President:* *Dr. Joseph Walker. *Vice-Presidents* (resident): Charles S. Tomes, Esq.; Henry Moon, Esq.; *T. Chartres White, Esq. (non-resident); Walter Campbell, Esq. (Dundee): William Doherty, Esq. (Dublin); *J. T. Browne-Mason, Esq. (Exeter). *Treasurer:* James Parkinson, Esq.; *Librarian:* Felix Weiss, Esq. *Curator:* S. J. Hutchinson, Esq. *Honorary Secretaries:* T. F. Ken Underwood, Esq. (Council); J. H. Mummery, Esq. (Society); *Claude Rogers, Esq. (for foreign correspondence). *Councillors* (resident): Alfred Coleman, Esq.; J. Stocken, Esq.; Isidor Lyons, Esq.; George A. Ibbetson, Esq.; Ashley Gibbings, Esq.; *Thomas A. Rogers, Esq.; *J. Smith Turner, Esq.; *F. Canton, Esq.; *Alexander Cartwright, Esq. (non-resident); William Fothergill, (Darlington); Martin Magors, Esq. (Penzance); *R. Rogers, Esq. (Cheltenham); *W. Hele, Esq. (Carlisle); *A. Wilson, Esq. (Edinburgh); *A. White, Esq. (Norwich). The asterisks denote that those gentlemen are the new officers and councillors recommended for election.

ACCIDENTAL POISONING BY CARBOLIC ACID.

THE crop of fatal accidental poisonings by carbolic acid is still plentiful. There ought surely to be some methods of treating carbolic acid, either by colouring the fluid strongly, or by the use of strongly smelling powders in lieu of liquid, which should put an end to such frequent disasters. Sir John Humphreys held an inquest this week at Poplar, on the body of James Shepherd, aged 82, a labourer, who died from the effects of poison. Sarah Ann Lawson stated that the deceased was her father, and lived with her. For some time past the deceased had been ailing, and a short time ago she sent for some medicine for him, which was of a whitish colour. Witness placed it on the shelf amongst some other bottles, one of which contained carbolic acid, that was used for disinfecting purposes. On Wednesday night, witness sat up with the deceased, and during that time gave him, as she thought, some medicine out of a bottle, which he swallowed. Finding that he was afterwards in dreadful pain, she looked, and found that she had given him a dose of carbolic acid in mistake. She gave deceased about a table-spoonful of the acid in an egg-cup. What she did was purely by misadventure. The deceased died early the following morning. The jury returned a verdict of death from misadventure.

MANCHESTER MEDICAL SOCIETY.

AT the Annual Meeting of the Manchester Medical Society held at Owen's College on the 10th instant, the following were elected office-bearers for the ensuing year:—*President.*—Daniel John Leech, M.D. *Vice-Presidents.*—Julius Dreschfeld, M.D., Arthur Gamgee, M.D., Thomas Jones, M.B., and James Ross, M.D. *Treasurer.*—D. Little, M.D. *Secretary.*—Charles J. Cullingworth, M.D. *Other Members of Committee.*—J. A. Ball, M.B., (Stockport), James Duncan, M.B., (Ashton), John Earle, C. E. Glascott, M.D., James Hardie, M.D., John D. Mann, M.D., Siegmund Moritz M.D., Herbert S. Renshaw, M.D., (Sale), James Stephens, Walter Whitehead, William Yeats, M.D. The above, with the past presidents of the Society and two representatives of the council of the Owens College, form the committee. *Library Committee.*—Judson S. Bury, M.D., Abraham Emrys-Jones, M.D., Siegmund Moritz, M.D., Thomas Windsor, and William Yeats, M.D. *Auditors.*—Alfred Godson, M.B. and Frederic A. Southam, M.B. The report showed that there are 218 members on the roll, the same as last year. The library now contains 27,29 volumes, of which 1,054 have been added during the past year.

INJURY OF THE JEJUNUM.

DR. BOGMOLOFF of Krasnoie-Selo has recently communicated to the Russian Medical Society of St. Petersburg the case of a child, aged 11, who received a lacerated wound of the abdomen through a fall from a scaffold. The mother of the girl had noticed a loop of intestine protruding from the wound, and had reduced it; at the same time, she fancied she saw some fæcal matter oozing from the prolapsed gut. Dr. Bogmoloff did not consider it advisable to draw the intestine once more out of the wound, which he closed by means of three silken ligatures, and covered the abdomen with carbolised gauze. The wound began at once to discharge freely, and particles of food, brown fluid full of biliary acids, and a lumbricus were found in the dressings; but the discharge never emitted a fæcal odour. On the fourteenth day after the injury, the patient passed her first stool *per anum;* the discharge ceased on the thirty-ninth; recovery was complete. Relying on the nature of the discharge, Dr. Bogmoloff diagnosed laceration of the upper part of the small intestine.

HARVEY AND THE CIRCULATION OF THE BLOOD.

PROFESSOR FILIPPI of Florence, writing in the journal he edits *Lo Sperimentale*, has some hard words for Harvey. Dr. George Johnson has charged the Italians with systematic attempts to snatch from Harvey the honour of the discovery and of the demonstration of the general circulation of the blood. But, says Professor Filippi, it is not the history of Italian science that is stained; in other pages and in a foreign tongue is that crime to be found. Not all the water that bathes the shores of England would suffice to cleanse Harvey of the sin of ingratitude towards Cesalpini, in that he does not name him even once in his *Exercitatio de Motu Cordis et Sanguinis*, published in 1628; but on the contrary, with veiled allusions and with a show of magnanimity, he slights him and criticises or depreciates and forgets. The professor, indeed, accords to Harvey the credit of being the first to demonstrate the circulation and to show the exact manner in which it was performed, but he claims for Cesalpini the recognition not merely of the circulation through the lungs, but throughout the whole body.

THE BACILLUS OF WHOOPING-COUGH.

DR. C. BURGER of Bonn, in the first number of the *Berliner Klinische Wochenschrift* for this year, describes at length the special micro-organisms of pertussis, which he states can be found in any specimen of whooping-cough sputum. They appear, under an immersion lens VII, ocular 0 of Seibert-Krafft, as small elongated elliptical bodies of unequal length, the smallest being double as long as broad. Under a very strong power, transverse subdivision can be detected in the longest specimens. They may form chains or groups, but are generally isolated and scattered singly all over the field. They bear a certain resemblance to *Leptothrix buccalis*, the spores of which are often found in whooping-cough sputum; but the latter are longer and stouter, and near them the filiform mature leptothrix is always present. Occasionally, some of the specific bacilli are found lying inside the mucus-cells in the sputum. The bacillus is easily prepared; they can be readily recognised if coloured in the usual way by watery solutions of aniline. Fuschin and methyl-violet are employed by Dr. Burger. As in the case of *Bacillus tubercu*

s micro-organism is best studied when mounted in the dry way. . Burger concludes that this bacillus is the actual producer of tussis, because it is not found in any other kind of sputum, ause it is so abundantly produced in whooping-cough that its uence cannot be doubted, because its abundance increases in ect proportion with the severity of the disease, and "because the rse and symptoms of the whole disease are best explained by the elopment of this fungus."

QUEEN'S COLLEGE, BIRMINGHAM.

E authorities of Queen's College, encouraged by the good entries ecent years, and especially by the large influx of fresh students October, are taking pains to continue the development of their hing arrangements. A second medical tutorship has just been blished, and Mr. W. F. Haslam, F.R.C.S., lately Demonstrator of tomy at St. Thomas's Hospital, and now one of the assistant-eons to the General Hospital, has been elected to the new office. council of the college are about to make some more new appoint-ts; two demonstratorships of operative surgery are announced, iat a systematic course of surgical operations upon the dead may be given regularly in the summer session. The amalgama-with Mason's College, which came into force last year, and h transferred the chairs of chemistry, botany, and physiology, to iew institution, has been found to work well, to be popular with students, and to have resulted in a distinct improvement in the ce teaching of the school. The old buildings of Queen's Col-contain ample accommodation for about forty resident students, with noble dining hall and handsome chapel, present the com-equipment of a college arranged upon the plan of those of the universities. For some years past, the resident department has een used. The popular and revered warden has now engaged side permanently in the college, and it is hoped that some medi-udents will be attracted into residence under his guidance, and themselves of the advantages of a complete residential col-e curriculum. The present prosperous and promising condition e Birmingham medical school is due in no small measure to its ed executive, and it is the legitimate outcome of an intelligent opment of the practical, demonstrative, and tutorial aspects of ssional teaching, and of the wise and liberal policy, steadily ed for many years, of gathering together all suitable local nts in the maintenance of a single strong school.

THE RELATIONS BETWEEN MEDICINE AND PHARMACY.

CENT correspondent, signing himself "A Non-Trader," writes JOURNAL, of January 6th, p. 38, sketching some clauses ting the relations between medicine and pharmacy which, he its, should be inserted in the proposed new Medical Bill. The lause suggested would be a restriction upon medical practi-s, prohibiting them from supplying or dispensing medicines en 8 a.m. and 9 p.m., except in cases of emergency, if a phar-tical chemist were resident within half a mile or a mile. The l would most affect prescribers and patients, since it would e that a prescription should not be dispensed more than once, ordered to the contrary, until it had been redated and ed by a medical practitioner. The next would be restrictive druggists and proprietors of patent medicines, for it would impose nt regulations to prevent counter-prescribing, prohibit the nendation of proprietary preparations and patent medicines, ovide that the only statements on the wrappers and labels of medicines should be as to the ingredients and proportions of they are composed, without any reference to their medical effects. The *Pharmaceutical Journal*, in commenting upon ter, considers that "although in the presence of actual facts uggestions as a whole must certainly be looked upon as im-able and chimerical, there is running through them a healthy recognition of the necessity for a more distinct separation of medicine and pharmacy, which is welcome. The writer also goes on to say that in consideration of the increased business which non-dispensing by medical men would give, to pharmacists they would probably be induced to charge less for dispensing prescriptions, and be satisfied with 25 to 50 per cent. profit on the retail price of the drugs used. Although the charges for medicines are not likely ever to be regulated in this crude fashion, we think this question may be left to right itself, for pharmacy is not yet such a close preserve as to be free from the competition which, in all other businesses, influences so largely the rates of charge."

LORD WOLSELEY ON THE ISSUE OF SPIRIT-RATIONS TO THE TROOPS IN EGYPT.

SIR JAMES HANBURY, late Principal Medical Officer of the Army under Lord Wolseley in Egypt, was under examination before Lord Morley's Committee on Friday, the 19th instant, and again in the course of the present week. Several matters will probably be cleared up when the evidence given by this medical officer, who, of course, holding the high position which he did, was Lord Wolseley's chief medical adviser in sanitary matters, is published. Among other points, we may hope to get an explanation regarding the issue of spirit-rations to the troops in Egypt. The distribution of spirits to the troops was quite contrary to the views of the commander-in-chief, if we may take as accurate the report of Lord Wolseley's recent speech to the temperance societies at Blackburn, which appeared in the *Times* of the 19th instant. According to the report referred to, Lord Wolseley told the deputations that he himself firmly believed that, if we could only have an army which not only wore Her Majesty's colours, but also the blue ribbon, it would be the finest army ever sent into the field to represent this country; yet, during the recent campaign in Egypt, "the doctors told him it was very necessary that the men should have grog; and he was obliged, owing to great pressure put upon him, to allow it occasionally." The recorded experience of some of the ablest medical officers has shown that alcoholic drinks neither give help as regards bodily exertion, nor protect the constitution against the invasion of disease, and, with respect to hot climates, that they aggravate rather than lessen the effects of heat; moreover, Lord Wolseley was able to quote, with regard to Egypt itself, that, during Sir Ralph Abercrombie's expedition to that country in the year 1800, the good conduct and health of the troops landed were attributed to the fact that no liquor was issued to them—testimony which was confirmed by Sir James McGrigor in his *Medical Sketches of the Expedition to Egypt*. Under all these circumstances, it seems strange that the issue of grog to the men should have been pressed upon the commander-in-chief of the army recently engaged in active operations in Egypt by the medical officers. As, however, the particular conditions under which the advice was given have not as yet been published, it seems only right to abstain for the present from comments on the observations made by Lord Wolseley on the subject to the deputations from the Blackburn temperance societies. It is greatly to be hoped that the opportunity of forming an impartial judgment on the subject will be afforded when the report of Lord Morley's Committee, and the evidence on which the report will be based, have been presented to Parliament. The matter is one of more than passing interest.

REMOVAL OF THE UTERINE APPENDAGES.

AT a meeting of the New York Academy of Medicine, in December, Dr. T. Gaillard Thomas read a paper, entitled "A Contribution to the subject of Removal of the Uterine Appendages (Tait's Operation), for Recurrent Pelvic Inflammations." He commenced by alluding to the remarkable essay of Mr. Lawson Tait, of Birmingham,

published in the BRITISH MEDICAL JOURNAL of July 29th, 1882, entitled: "Remarks on the Diagnosis and Treatment of Chronic Inflammation of the Ovary," and said that it was in accordance with the principles there enunciated that he had undertaken to operate in the four cases narrated in the present paper. Dr. Thomas had performed Tait's operation in four cases, as yet too recent to show permanent results. The first patient was a negress, 30 years of age, who for a considerable time had had recurrent attacks of pelvic cellulitis. During the past eighteen months she had suffered the most intense pain over both ovaries, and for six months had had profuse menorrhagia. The uterus was found to be large and anteverted. Under the supposition that the endometrium was probably covered with a growth of fungoid excrescences which gave rise to the menorrhagia, he carefully scraped the uterine cavity; but, scarcely any of these fungous growths were present. He then introduced an anteversion pessary, but this only resulted in positive harm. A more careful physical examination now led Dr. Thomas to the conclusion that there was chronic inflammation of the ovaries and Fallopian tubes. He made an abdominal incision in the median line and performed Tait's operation, the strictest antiseptic measures being adopted, with the exception of the spray. The ovaries were found to be covered with small cysts, while the tubes were enormously distended with fluid, giving them the appearance of sausages, and pouring forth a purulent discharge from their lining membrane. The operation was not followed by the slightest unfavourable symptoms, and on the thirteenth day the patient sat up. Since then there had been no return whatever of the menstrual flow, and the woman seemed quite well. The second patient was a married lady twenty-five years of age, who had borne one child eighteen months before. Nine months after her confinement she had had an attack of pelvic inflammation, and had never been well since. She suffered mainly from intense pelvic pain and irregular and profuse menstruation. The left ovary was found to be as large as a hen's egg, and exquisitely sensitive to the touch. An exploratory abdominal incision was made, and both ovaries and both Fallopian tubes being found to be diseased were removed. The operation was a difficult one on account of the adhesions that were present. The patient made a good recovery, and had not menstruated since the operation. The third case was that of an unmarried lady of twenty-two. From the age of fourteen she had suffered from the most extreme dysmenorrhœa. For the past year the pain had been almost constant, although not so severe as at the time of her periods, when it was necessary to seminarcotise her in order to give her any ease at all. Sometimes, for hours during her periods, the pulse was wholly, or almost, imperceptible at the wrist. Dr. Thomas removed both ovaries, which were cystic, and both tubes, which were greatly enlarged, and the lining membrane of which was filled with pus; though there was not as much dropsy as in the other two cases. Since the operation the patient had passed one menstrual period, and there had been no discharge. The fourth operation was followed by a fatal result; but the patient, who was unmarried and twenty-seven years of age, was in a state of extreme exhaustion at the time. From the age of fourteen she had suffered from severe dysmenorrhœa, but during the last two years she had had, in addition, repeated attacks of pelvic inflammation, which caused her the most intense suffering. When operated upon she looked precisely like a patient in the third stage of pulmonary phthisis, so great was her pallor and emaciation. Her temperature was 100°, her pulse 150, and she was harassed by never-ending pelvic pain. The operation was very tedious and difficult, as the ovaries, which were covered with small cysts, and the tubes, which were dropsical, were firmly bound down by false membranes. Within twenty-four hours after the operation, an insidious attack of peritonitis, with low temperature and accompanied by little pain, set in, and the patient died on the sixth day. This, Dr. Thomas said, was all his experience, and he could not but regret that the remote results of his cases were not yet attainable. All that he had done was simply an attempt to uphold the hands of a bold and original investigator. The results of Tait's operations were exceedingly gratifying. In his seventy-five cases there had been six deaths. In the cases of chronic ovaritis he had lost only one case out of thirty-five. Battey had lost three out of fifteen cases, while he himself had lost four out of twenty-one. The fact was undoubted that laparotomy was more successfully performed in Europe than in America, where the operation originated. This was a reproach to American surgeons, and the discrepancy in favour of the European operators was one which could not be met with arguments, and was only to be abolished by results.

COMPULSORY VACCINATION IN SWITZERLAND.

MR. WILLIAM TEBB writes to the *Times* to announce with evident satisfaction that the agitation against compulsory vaccination is going on vigorously throughout the Swiss Confederation. The agitation has he thinks been stimulated by "the numerous, serious and fatal vaccine disasters at home and abroad"; and it is, therefore just as reasonable as an agitation against the use of milk would be founded on the numerous serious and fatal lacteal disasters at home and abroad, in which the milk can has been proved to have been the vehicle of distribution of diphtheria and typhoid fever. On December 17th we are informed the citizens of Basle suppressed compulsory vaccination by a majority of 3,539, against 716 votes, while, on the 26th ultimo, compulsory vaccination and revaccination were abolished by the Federal Council throughout the Federal Army. The cantons of Aargau, St. Gall, Lucerne, Berne, and Zurich, are, it is alleged, about to follow the example of Basle. These facts need occasion no surprise if viewed in connection with the evidence recently brought to light as to the appalling prevalence of intemperance in Switzerland, and the demoralising effects on the peasantry of their drinking habits, to which they are so generally abandoned. Crowds of sotted mountaineers can scarcely be regarded as competent judges on complicated scientific and social questions. The Canton of Switzerland some time ago abolished compulsory mortification, the death-penalty may perhaps be called; but several of them, having found that they were engaged in a costly and dangerous experiment, have gone back to the old preventative measure and re-introduced capital punishment. Perhaps their action with regard to compulsory vaccination may be somewhat similar. They may abolish it for a season; but the logic of events will in time convince them of their error, and force them back into reasonable courses. Meanwhile it is difficult to regard with patience foolish and ignorant experiments involving a large sacrifice of human life, and much disablement, disfigurement, and misery. The enemies of Switzerland will scarcely rejoice to hear that her army is to be left an easy prey to the pestilence that walketh in darkness, which is a far more powerful logical argument than the bullet that killeth at midday. Mr. Tebb has a Napoleonic attachment to the *plébiscite;* and perhaps he is right in supposing that, by a sudden appeal to the English people after diligent agitation and misrepresentation, that old tyrant and scourge of the human race, small-pox, might for a time be re-established on the throne from which medical science has put him down; but compulsory education is influencing the masses, and protecting them against zymotic ideas, which are scarcely less injurious than zymotic diseases. Is it not, however, an abuse of language, to speak of the decision at Basle as having been arrived at by *plébiscite?* The canton and town of Basle contain upwards of 100,000 inhabitants, and yet the vaccination question seems to have been decided by 4,255 votes.

HARVEIAN SOCIETY OF LONDON.

ON Thursday, the 18th instant, the annual meeting and conversazione of the Harveian Society took place in the Stafford Rooms, Tichborne Street. The report of the Council showed that

Society was in a most flourishing state, and that much useful work had been accomplished in the past year, perhaps the most important being the completion of the work of the Alcohol Committee, whose report appeared in our last issue. Many valuable papers have also been promised for the remainder of the present session. A vote of thanks to the Council was proposed by Dr. Eâis, seconded by Mr. W. T. Drew, and carried unanimously. Votes of thanks were also given to the retiring treasurer, Dr. Pollock, and to the secretaries, especially to Mr. Malcolm Morris, who is retiring. The President, Dr. William Hickman, delivered his address, in which he very fully considered medical education, and pointed out various ways in which it might be improved. He also drew attention to the great abuse of hospitals and dispensaries, and other places where medical advice was given gratuitously, and said the fault lay with the profession. The early founders of hospitals remunerated medical men for their services, and did not expect them to give it gratuitously. On the conclusion of the address, a hearty vote of thanks was given to the President, this being proposed by Mr. Gant and Dr. Eveking. The President having received the report from the scrutineers appointed, declared that the officers for the coming year proposed by the Council had all been duly elected. The list was published in the British Medical Journal for January 13th. Upon this, the newly elected President, Dr. Symes Thompson, took the chair, and declared the conversazione open. The rooms were very tastefully decorated by Messrs. Morris and Co., of Oxford Street. Pictures, works of art, and objects of interest, were lent by Dr. Cleveland, Mr. Danford Thomas, Mr. Field, Mr. Henry Power, Mr. Malcolm Morris, Mr. Vincent, Mr. Rischgity; also by the Japanese Fine Art Association, Grafton Street; Messrs. Dowdeswell and Dowdeswell, of Bond Street; Mr. H. Samuel, of Oxford Street, who supplied a number of beautiful pictures by Bartolozzi, also objects from the Hamilton sale; Messrs. London and Ryder exhibited a case of valuable jewels; Mr. Pillischer supplied microscopes; Drs. Heron and Silcock exhibited some fine microscopical specimens. A band played at intervals during the evening, which was much enjoyed by the members of the Society and the many visitors who were present. The public which the honorary secretaries, Mr. Malcolm Morris and Mr. H. H. Lamb, and the committee, had taken to organise the conversazione was highly appreciated.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

The annual courses of lectures at the College of Surgeons begin on Monday, February 2nd, at four o'clock. Professor Parker, F.R.S., Hunterian Professor of Comparative Anatomy, will, as in former years, deliver the first course of nine lectures, to be followed by Professor Flower, F.R.S., Hunterian Professor of Comparative Anatomy, who also gives a course of nine lectures. Abstract reports of these courses we hope to be able to publish in due course. The subject of Professor Parker's lectures is "The Metamorphosis of Suctorial Fishes and Batrachia," which will be discussed in the following manner: Lecture I—Introductory.—On low types of animals approximating to the vertebrata, and on the embryology of those types, and of the vertebrata proper. II.—On the structure of the myxinoid fishes (Myxine and Bdellostoma). III.—On the early development of the lamprey. IV.—On the metamorphosis of the lamprey. V.—A comparison of the lamprey with the myxinoids. VI.—On the embryology of the Batrachia. VII.—On the metamorphosis of the tadpole into the permanent form. VIII.—The three types—Myxinoids, Petromyzoids, and Batrachia—compared together. IX.—The light shed by these low types upon the highest, the Mammalia. Concluding remarks. A knowledge of those lower forms of animal life, which Professor Parker is about to treat of, is absolutely essential to the thorough understanding of the higher forms, with which we have more especially to deal; and the phenomena appearing in the latter are readily explained, when the more general conditions to be found in the former are known. The Suctorial fishes include the most generalised type of fish, in which, for the first time, we have a true skull and brain developed, but neither limbs nor their arches have been attained; the heart also is of a very simple character. The Batrachians are probably better known to most people, comprising animals of the proteus, menopoma, salamander, and frog class, and are perhaps some of the most interesting orders of the vertebrata. It is very satisfactory that the College of Surgeons, by having established and maintained such lectures, takes a lead in the diffusion of general as well as of more strictly professional scientific knowledge for the advantage of its Fellows and Members, and the general body of the educated public; these, we trust, will, in return, widely avail themselves of the advantages thus offered to them. The number of courses of such lectures given in this country is very small in comparison to what the public of Paris have open to them in the Jardin des Plantes, Anthropological Institute, and other places, and of which they freely avail themselves. The lectures at the College of Surgeons are given on Monday, Wednesday, and Friday at four o'clock, except on Wednesday, February 14th, on which day, the anniversary of the birthday of John Hunter, the Hunterian Oration will be delivered by Mr. Spencer Wells.

RELIEF AND CHARITY.

A MEDICAL contemporary has recently started the question of "out-door relief" in a very trenchant style, and one which is likely to provoke some controversy. The "workhouse test" is described as a device by which the country is being dragged down "to the depths of social confusion and consequent obscurity;" as an "offence against humanity;" and as "a hideous folly, unworthy of men with brains, to say nothing of hearts." Whilst we cannot follow our contemporary in its indignant protest against a policy which is gradually extending throughout the country, we are not wanting in respect for the humane feelings which have prompted the condemnatory article. But the whole position seems to us to be based upon an erroneous assumption; namely, that "charity" and "Poor-law relief" are synonymous and interchangeable terms, and that it is the duty of guardians to relieve indigence in any and every form. Now, it seems to us to be beyond question, that it is neither to the interest of the poor nor of society that the care of the poor should be relegated to the Poor-law, and that guardians should be constituted public almoners of private charity. Those who are most conversant with the practical working of the Poor-law tell us that, until very recently, the lax administration of legal relief was rapidly bringing the country into a condition akin to that which existed at the time of the passing of the Poor-law Act of 1834; that pauperism, with its helplessness and hopelessness, was not only extending, but that, with such extension, the real poor—the self-respecting poor—who, by a fiction, were supposed to be cared for by the Poor-law, were hiding their poverty, and suffering under hardships and privations. Thus, whilst the Poor-law was perfunctorily carrying out its work of vicarious almsgiving, the conscience of charity was being silenced by the payment of a compulsory poor-rate. Thoughtful, and truly benevolent men tell us, moreover, that out-door relief is never adequate, although too frequently sufficient to sap courageous effort, to destroy natural affection and provident habit, whilst those who work among the poor most, and know them best, are almost unanimously on the side of the abolition of this form of relief. Surely if this be so, it must be conceded that the abolitionists are not, after all, so brutal as to some they seem. But, adverting for the moment to the case which forms the basis of comment, we must energetically protest against the policy of giving "poor married folk" two or three shillings a week to keep them from starvation. Out-door relief is, too frequently, neither more nor less than starvation; and where they are "honest and true-hearted," and "self-respecting," it is little less than "brutal" to relegate them to such a Poor-law pittance, and so withdraw them from the sym-

pathy and real helpfulness of Christian charity. But our main object here is to suggest that the subject is a many-sided and difficult one, and deserves more thought than it has yet received.

HELVELLA ESCULENTA.

THE botanist who is ready to partake of a dish containing any kind of fungus besides the common mushroom *Agaricus campestris*, the truffle *Tuber cinereum* so dear to epicures, or the now less esteemed morel, *Morella esculenta*, possesses an unusual amount of self-confidence; and the empirical rules by which countrymen profess to be able to distinguish mushrooms from toadstools, are about as reliable as a Midland-county weather-rhyme applied as a forecast in the Scottish Highlands. Just as, with regard to the latter district, it is safest for the traveller to consider that any meteorological sign means rain, or may mean rain, so it is far safer for the epicure to believe that any fungus that is neither a mushroom, a truffle, or a morel is poisonous, or may be poisonous. Professor Balfour's saying, "It is not easy to distinguish between edible and poisonous fungi" should be taught to all, juvenile or adult, amateur or professional botanists. Dr. Bostroem of Freiburg has recently contributed to medical literature a valuable work *On Poisoning by Helvella Esculenta*, published by Hirschfeld of Leipzig. He finds that the fresh helvella contains, under all conditions, a very active poison. This fungus must be at once struck out of the list of edible mushrooms, in which it ought never to have been included, for its poisonous principle cannot be eliminated either by boiling, with rejection of the water in which it has been boiled, and prolonged washing before it is eaten, nor by addition of salt, nor by any process of pickling. It is true that helvella, when completely dried, loses its deadly properties, together with its flavour. Hence, those who choose to taste this mushroom, do so at the least risk when some specimens have been half dried; but the fresh gathered helvella must never be cooked and eaten. Dr. Bostroem denies that there is a typical helvella esculenta, always harmless, and a second species, helvella suspecta, that is sometimes poisonous. There is but one species, and that is always dangerous when fresh and still possessing any taste. The active principle is very soluble in hot water, only scantily taken up by tepid water after prolonged maceration, and hardly soluble at all in cold water. It is very unstable; indeed, it appears to be self-decomposing. It acts powerfully on the blood, separating hæmoglobin from the red corpuscles, so as to diminish their power of carrying oxygen. Hence, in cases of poisoning by helvella, actually described, hæmoglobinuria and "icterus of an extremely hæmatogenous type" are essential symptoms. From a practical point of view, no sensible person is ever likely to gather helvella, deliberately recognising it as such, and not confounding it with agaricus, for the purpose of food, whilst ignorant and careless country children will not be influenced by Dr. Bostroem's work; but he has, at least, made a useful addition to toxicological literature. M. Dupetit, as the *Times* has recently informed us, has discovered an active poison—of the character of a soluble ferment and not an alkaloid—in the fresh juice of Boletus edulis, Agaricus campestris, and three species of Amanita. It is significant, as supporting Dr. Bostroem's theory of the effects of fungus-poison being chiefly marked in the blood, that the juices proved very deadly when injected under the skin of rabbits, rats, or guinea-pigs, whilst these animals can swallow the juices, as a rule, with impunity. The juices become innocuous when they have once been boiled.

PREVENTION OF SMOKE.

THE following comment on a correspondence initiated by Sir John Hawkshaw, on the use of smokeless (semi-anthracite or steam) coal as a fuel in ordinary house-grates, is published in the *Times* this week. We reproduce it here, as it affords partial answer to a number of queries which reach us from time to time, as to the part which each individual householder can take or can be advised to take in bringing about this great national sanitary reform, in the present stage of the movement. It can be hardly questioned that no solution of the problem can be at all efficient which does not contemplate the abolition of coal-smoke issuing from household chimneys. Towards this solution legislation may presently afford some help, but meantime, what is essentially needed is the intelligent and voluntary co-operation of householders. From none may more public spirited assistance in this direction be anticipated, than from members of the medical profession, who have in this matter not only the civil interest of every patriotic citizen, but also that enlightened appreciation of sanitary interests and scientific authority which fits them to be pioneers in such a movement.

"To the Editor of the *Times*,—Sir,—The useful and instructive correspondence opened by Mr. Hawkshaw in *The Times* on the use smokeless anthracite coal as a means of diminishing London smoke will unquestionably lead to excellent results if it induce only a small proportion of householders carefully to test the use of this excellent fuel, but much disappointment will follow unless those who make the attempt do so with an intelligent understanding of the conditions under which alone anthracite coal can be burned in open grates, with such results as ordinary householders accustomed to soft coal fires will be likely to tolerate.

"Briefly, the conditions of burning smokeless coal satisfactorily, according to metropolitan habits, are as follows.

"1. A good draught is required in the chimney; where the draught is deficient, or, when the fire requires stimulating, a 'blower' should be used.

"2. The smokeless coal should be put on the fire lightly, in pieces about egg-size. Fires should be replenished with moderate quantities and before they get too low.

"3. The coal should never be stirred with the poker. The ashes from the bottom of the fire should be gently raked out; the smokeless coal requires as much air as possible.

"4. For kitchen use, no saucepan or kettle should be put to rest on the fire; they should be rested just above the fire, as the smokeless coals will not bear weight.

"5. Grates or stoves with fire-clay sides and back are best adapted for burning smokeless coals, but they will burn in ordinary iron grates with attention to the above rules.

"6. The cinders of the smokeless coal can be used, and make a bright fire if they be sifted quite free from ash. The cinders are particularly useful in lighting fires.

"7. To light a fire readily with the smokeless coal alone, a good quantity of wood is required; a little of the ordinary description of coal to start the fire is useful. A red hot iron or 'salamander' taken from one fire and inserted under the wood of another kindles it very readily, a strong heat being required to light smokeless coals.

"8. The above directions apply to burning the smokeless coals in closed stoves as well as in open grates.

"I may say, as a matter of personal experience, that under these conditions it is quite easy to burn a semi-anthracite or the steam coal of the Welsh collieries in the majority of our ordinary open grates. Those grates, however, are best fitted for the purpose which have vertical iron bars, and in which the access of air from below is free and ample. In that class of kitcheners—a numerous one—in which a bright flame lapping over the ovens or boiler is necessary for baking and supplying boiling water, anthracite coal as a rule does not, for obvious reasons, answer. Once more, however, it would be useful if you will allow me to remind those householders who are willing to interest themselves practically in this question, that the use of semi-anthracite and steam-coal is only one of the many expedients by which ths existing waste of coal and excessive production of smoke may be abolished. It is necessary to approach the question with some pliability of mind, and to use the various resources at hand according to the particular objects desired, and the facilities at hand for fulfilling the requirements. To take again a domestic example. I have, in my house, a kitchen-range on the old well-known principle of construction, which requires soft coal with abundant flame in order to heat the ovens. To have replaced it by one of the smokeless kitcheners, of which those of Brown and Green, Constantine, the Falkirk, and the Radiator, are typical examples, would have involved a considerable expense. I have, however, had it altered, at a very moderate cost, on the underfeeding Luton principle; and for many months

kitchen-chimney has given forth no smoke, neither have the flues needed sweeping. In the drawing rooms, where I have open dog-grates, I have applied Siemens' principle; and these also burn smokelessly with coke fires, at not more than half the expense of the coal fire which I had been accustomed to employ. In one study, I have introduced the ordinary open Welsh grate for burning anthracite, which costs, I think, about 16s., and this also is perfectly successful; and in the butler's room I have one of Crane's open grates, in which either anthracite or ordinary soft coal can be burned without difficulty. All these may possibly only be expedients leading up to the grate of the future, of which Dr. Siemens has indicated the correct principles. Meantime, I may say, from my own practical experience, that no householder need be guilty of poisoning the London atmosphere with smoke from his chimneys, unless he elect to do so; and that, at a moderate cost, and with ordinary intelligence and goodwill, every one may fulfil his part in lessening the pall of smoke and of unconsumed carbon which now daily overhangs London, obscuring the sunlight, poisoning the air, and adding intensity to the fatal influences on life, health, and cleanliness, of London fogs. May I add that the report of the jurors, with the tabulated results of upwards of one thousand tests carried on in the testing-houses at the South Kensington Exhibition by our Smoke Abatement Institution, is now in the press, and will very shortly be issued? Its issue has been somewhat delayed by the elaborate character of the annexed documents, and by the necessity which the committee and the experts, who have so kindly and generously given their assistance, have felt of making these tests and tabulations accurate to the utmost extent of their power.—I am, yours truly,

"ERNEST HART, Chairman of the Committee of Council of the Smoke Abatement Institute.

"44, Berners Street, W."

SCOTLAND.

THE Thompson lectures on Natural Science in the Free Church College, Aberdeen, are being delivered this year by Professor Young, of Glasgow University. The subject of the lectures is Geology.

FIFE AND KINROSS LUNATIC ASYLUM.

A MEETING of the Fife and Kinross Lunacy Board was held at Cupar last week. The report stated that the number of patients in the asylum was 325; comprising 157 females, and 168 males. The financial report was considered very satisfactory. Admiral Maitland moved that the salary of Dr. Turnbull, medical superintendent, be increased from £350 to £400. The motion was unanimously agreed to, and a high compliment paid to Dr. Turnbull for his efficient management.

FATAL CASE OF ALCOHOLIC POISONING.

A DEATH has just taken place in the Royal Infirmary, Glasgow, from the effects of an excessive amount of alcohol. The patient, a young man, aged 24, was admitted on the 18th inst., in a state of unconsciousness, and he remained in that condition until his death, the following day. It is uncertain how much alcohol had been taken, but he is known to have drunk about twenty-four ounces of whisky on the day previous to his admission to the infirmary in a space of four hours.

THE LENZIE CONVALESCENT HOME.

SINCE its establishment, nearly twelve years ago, this home has been steadily increasing in usefulness; and, last year, no less than 1,453 patients were admitted into it, being 72 in excess of the previous year. Their average stay in the home was eighteen days. Dr. Whitelaw's medical report gives interesting details as to the cases treated during the past year, and it shows how ably the institution is fulfilling the purposes for which it was established. The total expenditure for the year was £2,085, and the revenue £2,000, showing a deficit, which is to be regretted; for, as long as the balance is on the wrong side, it prevents the directors proceeding with that extension of the Home which the many demands upon it necessitate.

THE GLASGOW LOCK HOSPITAL.

WE observe, from the annual report of this hospital, that, during the past year, 352 patients have been successfully treated, with an average residence in the wards of thirty-one days. Of these patients, no less than 251 were under treatment for the first time, and they were almost entirely young persons. Financially, the institution is not in a very flourishing condition, but this is partly to be accounted for by the prejudice which is somewhat unjustly shown by the public towards hospitals of this nature, and from want of knowledge of the real benefits they confer on the community at large.

AN OUTBREAK OF SCARLET FEVER IN A TRAINING-SHIP.

AN unexpected outbreak of scarlet fever has occurred on the *Mars* training-ship in the Tay. The directors of the Dundee Royal Infirmary being unable to receive the patients, a temporary hospital has been provided for them in a building on the Fife shore, opposite the mooring place of the *Mars*. In all, about a dozen cases have occurred, six of which are convalescent, and care has been taken to isolate them and their attendants. It is supposed the outbreak has occurred through boys carrying the contagion on board, after visiting friends on shore. An outbreak of measles has again occurred in the northern islands, this time in the island of South Ronaldshay, Orkney. The disease has made rapid progress, but the cases reported are said to be of a mild type.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending January 13th, show that the death-rate in the eight principal towns during the week was 26.8 per 1,000 of estimated population. This rate is 3.4 above that of the corresponding week of last year, but 2.3 below that of the previous week of the present year. The lowest mortality was recorded in Leith—viz., 17.6 per 1,000; and the highest in Greenock—viz., 34.2 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.3 per 1,000, or 1.0 below the rate for the previous week. This rate was exceeded in Glasgow, where whooping-cough and measles were the most fatal miasmatic diseases, and in Dundee, where whooping-cough was still prevalent. From acute diseases of the chest, 188 deaths were registered, or 25 more than in the previous week. The mean temperature was 40.9, being 1.0 below that of the week immediately preceding, and 1.8 below that of the corresponding week of last year.

GLASGOW PHILOSOPHICAL SOCIETY.

AT the meeting of this society, held on the 17th inst., an interesting paper was read by Mr. Coleman, F.C.S., on the preservation of food by cold; and afterwards Dr. McKendrick read a "Note on a Simple Form of Lipmann's Capillary Electrometer." This instrument consists of a fine capillary tube containing mercury, and dilute sulphuric acid so placed under a microscope as to show a junction of the metal with the acid. A fine platinum wire dips into mercury at each end of the tube, and so extremely sensitive is it that feeble currents obtained from muscle and other sources at once cause a movement of the mercurial column. Specimens of the instrument were shown, and the oscillations of the mercury, magnified by a quarter of an inch objective, were projected on the screen by the lime light, so as to be visible to all present. Dr. McKendrick illustrated the sensitiveness of the instrument by various experiments.

THE GLASGOW SANITARY PROTECTION ASSOCIATION.

THE necessity for improved house sanitation, even among the better class houses of our large towns, is brought out very strikingly by the facts elicited during the operations of the above association, which has been engaged for about six months in the practical work of examining and reporting on the houses of its members. During this period the sanitary condition of sixty-four houses has been

looked into, and in most of them there were defects discovered. These last were of various kinds, but the effect of them was to permit the entrance of foul air from the drains into the house. The results arrived at were obtained by the systematic use of the "smoke test" (originally, we believe, first suggested by Prof. James Thomson, of Glasgow University), and every year shows its value. Such work as this association is doing must eventually tell favourably on the public health, but its value would be very much increased if observations were made as to the presence or absence of sickness in houses where there was defective drainage.

THE HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending January 6th, shows that there were 631 deaths registered, representing a death-rate of 32 per 1,000 living. The mortality for the year 1882 was 25 per 1,000; while, in the five years 1871-75 it was 30, and in the five years 1876-80 it was 26. Intimately bound up with the mortality statistics is the question of population. So far, the Registrar-General's estimate has been followed in compiling the mortality tables, but as far back as June there was reason for thinking that this estimate was at least 15,000 too low, and since then the increase has been going on. A communication has been received by the municipal authorities from the Home Office in reference to the sewage question in Glasgow, suggesting further investigation into the matter, and it seems likely this course will be followed.

THE GLASGOW ASYLUM FOR THE BLIND.

AT the annual meeting of the contributors to the funds of the Glasgow Asylum for the blind, held on the 15th instant, the fifty-sixth annual report was presented and adopted. The report shows that 163 persons received the benefit of the institution during the year, and the amount earned in the manufacturing department was £2,230 in wages. There is still a considerable loss on the articles manufactured, but it is much less than in previous years, which is encouraging. The new buildings that were recently opened have been completely finished and have been occupied for some time. They have been found in every way commodious and suitable for the requirements of the inmates. Funds are still urgently needed for the erection of new workshops, and we hope that they may soon be forthcoming, for the Asylum is the only institution in Glasgow or the West of Scotland where a blind person can learn to do something for his or her support, so as to be in an independent position and become a more or less useful member of society. From the recent report of the Government inspector of schools it is evident that a very thorough education is given to the blind pupils, and those who were present at the opening of the new asylum buildings had opportunities of judging of their general attainments in various branches, more particularly in mental arithmetic and music. It is a matter of regret that, financially, the institution is not in a more satisfactory condition, for the place offers not only a home to the blind, but a school of instruction and an important centre of industry for a class of persons suffering from one of the heaviest of all afflictions. We hope that there will be a generous and ready response on the part of the public to the director's appeal for further funds.

THE SCOTTISH ANTIVIVISECTION SOCIETY.

THIS Society, which is for the total suppression of vivisection, "as being not only scientifically unnecessary, but opposed to the laws of God, and the higher interests of humanity", has just held its annual meeting, and made public its report. If the principles of the Society are not making progress, it cannot be from want of energy or zeal on the part of its members and officials, for we learn from the report that no fewer than twenty thousand pamphlets condemnatory of vivisection had been distributed, and petitions against the practice had been sent up to Parliament, with an aggregate of thirty thousand signatures. At the same time, we observe that, as the result of this strenuous effort to spread its principles, the income of the Society has only amounted to £173, being considerably short of its expenditure. The truth is, that the general public are gradually coming to recognise the unreasonableness and the hollowness of the statements put forth by the supporters of the antivivisection crusade, and to see that the verdict of the whole scientific world is in favour of vivisection, under proper safeguards and regulations, on the ground that it is essential to the progress of those discoveries which tend to mitigate or prevent human suffering. The sooner the supporters of the Scottish Antivivisection Society recognise the truth of this fact, the better; and they might with advantage transfer their energies and their funds to one of those excellent societies which very properly exist in almost every town for the prevention of cruelty to animals. In this sphere, they may attain the object which apparently they have deeply at heart, namely, to do something to check any tendency towards a wanton infliction of pain on animals. At present, they are striving to do this in a direction where there is no need for their sympathies, as it has, over and over again, been shown that no cruelties are perpetrated in any of our schools of medicine and research.

HEALTH OF PROVINCIAL TOWNS IN SCOTLAND.

THE introduction of a proper water-supply into the district of Newton Dalkeith, has resulted in a marked diminution of death-rate of the parish. The total number of deaths for the past year was 15; for 1881 it was 31; for 1880, 23; 1879, 27; and 1878, 39. Since the commencement of the Registration Act, the average death-rate has been 25. The Registrar's returns for the year 1882 in Helensburgh shows that there were 158 deaths during the year, or 15.6 per 1,000 of the population. Sixty of the deaths were of people over 60 years of age, 28 being between 70 and 80 years, and two between 90 and 100 years. Compared with 1881, there was a decrease of six in deaths. Last month's temperature in Helensburgh compares favourably with Glasgow; in the latter place the thermometer fell below freezing point on twenty-two days, in the former place only on sixteen days. In Montrose, the number of deaths during the year was 311. In Thurso, the number of death recorded during the year 1882 was 143, or 23 per 1,000. Except in 1875, when there was an epidemic of scarlet fever, and the deaths were then 154, the mortality of the past year was greatly in excess of former years. The mortality was chiefly confined to infants and aged people; more than a third of the number were children under five of age years, while 3 were of persons over 70 years and upwards, the average age of the latter being 80. In Leith, the returns of the sanitary inspector are fairly satisfactory. The satistics show that there were 1,213 cases of zymotic diseases reported to the Public Health Department, but the class of disease was not unusually fatal; typhus fever, scarlatina and measles, were higher in proportion than in former years, but the death-rate was much below the average. In 1881, the deaths numbered 1,282, and in 1882 only 1,177, giving an annual mortality of 2 per 1,000 in the former year, and 19 per 1,000 in the latter. The infant mortality was 42 per cent. of the entire deaths, about the same as last year. In Musselburgh, during December, only nine deaths occurred, equivalent to an annual mortality of 14.4 per 1,00 as compared with 21 deaths, or 33.6 per 1,000. Dr. Sanderson, the medical officer of health, thought that the remarkable difference was due to the beneficial effect of the introduction of good water and drainage into the burgh.

EDINBURGH ROYAL INFIRMARY.

THE meetings of the court of contributors to the Royal Infirmary, Edinburgh, were held recently. At the first meeting, the six managers for the year were elected by the contributors, the names being Messrs. John Baxter, Edmund Baxter, James Haldane, James T., Dr. Haldane, and Lord Shand. At the latter meeting, the report of the managers from October 1881, to October 1882, was submitted

to the Court of Contributors, and considered satisfactory. The report stated that the members availing themselves of the benefits of the institution continue to increase. The daily average of patients was 537, against 520 in the previous year; the total number treated being 6,443, against 5,746. The increase has arisen chiefly in patients from the country, which show an increase of about 500, and those from Leith 200. The number of out-door patients is stated as over 18,000, against 15,000 in the preceding year. The extraordinary income arising from legacies of over £100 has largely increased, and has enabled the managers to meet the deficiences of two years, and to add upwards of £7,000 to the stock of the infirmary. The expenditure for 1882 was £500 less than for the preceding, although the number of patients was increased by 697; this again being balanced by a reduction in the time during which patients remained under treatment. The committee consider this satisfactory, and they are satified that the managers are using every endeavour to keep down the expenses, consistent with the maintenance of the efficiency of the institution. The charge for stimulants per bed was in 1882 reduced, being 13s. 10d. against 15s. 5½d. last year. During the year, £15,000 was expended in the building account. The managers, at the request of the committee, now state that they calculate on a further sum of £7,500 being sufficient to complete the whole building. This includes the very expensive alterations in the engineering department, but not the expense rendered necessary by defective ventilation. They are glad to be assured that this defect has now been cured, at the expense of £1,000. The new fever-house—part of the old infirmary retained—is now completed at the cost of about £2,500. Negotiations are at present in dependence with the Town Council as to the future arrangements for fever patients, and the propriety of charging the expense upon the rates under the provisions of the Public Health Acts.

IRELAND.

DR. CLEARY was, on last Monday, elected coroner for the county Limerick. He was unopposed.

THE annual meeting of the Belfast Hospital for Sick Children will be held on the 26th inst. in the Clarence Hall, when the chair will be occupied by the Hon. R. T. O'Neill.

AN election took place last week for a medical officer to Dromore Dispensary. There were two candidates—Dr. O'Reilly of Lismore, and Dr. Donnellan of Castlerea; but, as both received an equal number of votes, a fresh election must take place.

BELFAST HOSPITAL SUNDAY FUND.

THE returns of the collections recently held for this fund show that, up to the present, a sum of £364 has been sent in, as against upwards of £500 obtained last year. Some of the churches have not yet forwarded their collections, but it is surmised that the total receipts will be below those of previous years.

THE LATE DR. TANNER OF CORK.

AT a late meeting of the Cork Medical and Surgical Society, the following resolution was unanimously adopted: "That this, the first meeting of the Society since the death of Dr. Tanner, be adjourned, as a tribute of respect to his memory; and that the Society desires to place on record the great esteem entertained not only by the members individually, but also by the profession at large, for his great personal worth, high professional attainments, and universal kindness. And that we request our Secretary to convey to Mrs. Tanner our deep sympathy with her in her great bereavement."

STIMULANTS IN THE BELFAST WORKHOUSE.

A DISCUSSION recently took place, at a meeting of the guardians, in reference to the large amount of whiskey consumed by the inmates. It was stated that the cost to the union alone of whiskey was over £900 a year; and ultimately a resolution was adopted, that the attention of the medical officers should be directed to the amount consumed in the workhouse, with a view to its reduction.

DR. THOMAS CROFTS SHINKWIN, OF CORK.

WITH considerable regret we notice the death of Dr. Shinkwin, a gentleman highly respected and esteemed, which sad event took place at his residence in Cork after only two hours' illness. Deceased graduated in 1850, and was shortly afterwards appointed resident medical officer of the Cork Fever Hospital. He next was elected house-surgeon to the North Infirmary, and, ultimately, visiting-surgeon, a position he held until his death. For a time he performed the duties of demonstrator of anatomy in the Queen's College, and for one session he delivered the lectures on surgery in the same institution. Dr. Shinkwin was one of the leading physicians in Cork, and his loss is deeply regretted by all classes of the community.

BELFAST ROYAL HOSPITAL.

A MEETING of the Governors and Committee of Management was held last week, to consider a plan by which a simultaneous effort could be made to enlist the co-operation of the working classes in support of the hospital. Two months since, an alteration took place in the method of collecting subscriptions, and a very large increase has already been received. As regards obtaining subscriptions from the working classes, the principal firms in Belfast have promised their support; and the Board of Management have arranged that any worker in any shop who contributes a regular sum of even a penny a week towards the funds of the hospital, shall be entitled, in case of accident or illness of any kind, to enter the hospital at once without charge. In a large number of instances, this arrangement has been carried out, and already about £200 has been obtained in this way. The meeting was finally divided into small committees, and to each were assigned half a dozen places of employment, so that they might be visited and reported upon.

UNFOUNDED CHARGE AGAINST A MEDICAL MAN.

AT Kells, the magistrates have been lately engaged in hearing a charge of assault brought against Dr. Sparrow, medical officer of Kells, by a dispensary patient named Kate Murphy. After the girl had been examined at considerable length, the magistrates unanimously dismissed the case, and held Dr. Sparrow free from any imputation. The defendant's counsel said that, had the case proceeded, Dr. Sparrow had in court many witnesses, medical and others, who could have established beyond a doubt that he had simply done his plain duty as a medical man. It was, the counsel added, comforting to Dr. Sparrow, when such an unfortunate charge was made against him, to find himself surrounded and supported by his honourable colleagues as he was that day. One of the risks of the noble profession of medicine was, to have false charges made against physicians by hysterical and designing female patients.

THE POTATO FAMINE IN IRELAND.

THE Irish people are now face to face with a potato famine, likely to be more severe than any they have experienced since 1846. Dr. Lyons, M.P. for Dublin city, has brought forward the latest specific for the distress of his countrymen; he advises that the Irish should forthwith change their diet, and, as an Irishman and a physician, he is entitled to speak with some authority on the subject. He urges that a serious and energetic effort should be promptly made, to induce the great mass of his poorer compatriots to give up their

allegiance to the national potato, and substitute for the treacherous tuber the hardy and wholesome oats of the Scotch. In consequence of the wetness of the past season, the Irish potato crop, nearly everywhere the chief dependence and "staff of life" of the smaller farmers and cottagers of the sister island, is again a lamentable failure. In view of this national disaster, Dr. Lyons pertinently asks, if the already depressed population of his country shall be left again to follow an ignorant routine, and plant once more a tuber which has so often fatally failed them, and which has now left them in such sore plight. He suggests that an organised national effort should be made, between the present time and St. Patrick's Day, which falls on the 17th of March, and is the time-honoured date for sowing potatoes in Ireland, to prevent the people from relying upon the doubtful and diseased seed now in their hands, and to prepare for the general substitution of some other crop for the uncertain potato. He recommends oats as such a substitute. The Irish are already familiar with oats as an occasional crop, but they have never used that grain as a staple article of diet, as the poorer Scotch do. Although the time appears opportune for the change Dr. Lyons proposes and supports with his powerful influence, and there is a growing and general feeling of distrust in the potato in Ireland, we are afraid it will not be found possible suddenly to alter deep-rooted, old established, and popular national domestic habits. But Dr. Lyons would not trust to oats altogether or exclusively; he would supplement such food by an ample supply of the cheaper kinds of fish, "with which the Irish seas literally superabound," and which furnish, close at home, an economical and nutritious diet for the people, which the judicious development of fisheries might cultivate, and which increased facilities of transport might diffuse throughout the country. The nutritive value of oats is well known. Dr. Parkes taught that that grain is more nutritious than wheat or barley, that it can be eaten for long periods with relish, and that it can be easily and long kept without change.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT the comitia meeting, January 25th, the following report was submitted to the Fellows.

The Council having considered the report of the committee appointed by the College to take into consideration the report of the visitors from the General Medical Council, with a view to ascertain if any change is required in the examinations conducted by the College for its licence, does not think it necessary or desirable that any alteration should be made at present in the examinations for the licence of the College. The committee, however, in its report, has referred to some remarks made by the visitors on the subjects of hygiene and psychological medicine, directing attention to the want of some adequate provision for insuring from medical practitioners who enter on these departments of practice the possession of a sufficient knowledge of these important subjects; and the committee has suggested whether the College might not, with advantage to the public, institute separate and voluntary examinations on those subjects, to be followed by a special certificate or diploma. To this suggestion of the committee the Council has given the most careful consideration, and, believing that a scheme for conducting such examinations would confer a great benefit on the public, and supply a much needed want in the profession, the council recommends the College:—

1. To institute a special examination on the subject of hygiene or State medicine; 2. To institute a special examination on the subject of psychological medicine; 3. That such examinations be conducted by special examiners appointed by the College; 4. That all registered practitioners be admissible, under conditions, to either of these examinations, in order to qualify for a distinct diploma or certificate of proficiency on these subjects. (Signed) WILLIAM JENNER.

Dr. R. Quain, Sir H. Cooper, Dr. T. G. Balfour, and Dr. W. Ogle, were elected councillors.

The annual report of the examiners, and the reports of the Sanitary and Finance Committees, were read, as well as the report from the treasurer.

COLLECTIVE INVESTIGATION OF DISEASE.

A MEETING of the Metropolitan Counties Branch of the British Medical Association was held on Wednesday, January 17th, at the School of Mines, Jermyn Street, for the purpose of hearing addresses by Sir William Gull and Sir James Paget, on the subject of the Collective Investigation of Disease. Dr. BRIDGWATER, president of the Branch, occupied the chair. There was a very large attendance of members and visitors, including the President and Treasurer of the Association, and several members of the Committee of Council, which had held its meeting on the same day.

The CHAIRMAN said: I am glad to welcome you here in such goodly numbers this evening; and I think you will all agree with me, that I am justified in saying that the occasion on which we meet is no ordinary one. For, in the first place, I see around me not only members of our Branch, but several of the most representative members of our profession, not only of this metropolis, but of very many provincial towns in the United Kingdom. Again, our subject is one which, in its development, may tend more than any other to revolutionise some of our accepted notions on pathology; and, by an improved induction, tend to raise medicine on a par with the exact sciences. And I think, gentlemen, that a special halo, if I may venture to say so, hangs over this evening in the fact that we are to be addressed by two of the most distinguished men in the medical body. [*Cheers.*] Collective investigation, as we interpret it, is no new theory; it is an idea that has flitted transitorily through the minds of many medical men. Some, more earnest, have endeavoured to carry out the principle in their own practice, but sooner or later all their energy has been crushed out by the vast expanse of the field to be travelled over, and by the paucity of results that have generally come from so limited a sphere of observation. Our own Association, too, in days gone by, endeavoured to give stability and impetus to a more general movement, but it failed for want of pecuniary means; for we know that in science, as in every other pursuit, a great deal depends upon finance. Happily, now our funds are in a more favourable condition, and this difficulty no longer exists. For the present movement, we are indebted to Professor Humphry of Cambridge. [*Cheers.*] All honour be to him! And I trust the satisfaction which he must feel at being present at this large assembly this evening is but a fair test of that greater satisfaction which he must experience if this system becomes an established one. Professor Humphry, in his address before the Association at Cambridge in 1880, so forcibly, so vividly, so earnestly, and, I might almost add, so irresistibly, advocated this scheme, that the Association in special assembly passed a resolution referring it to the Committee of Council for their consideration, in order to take action upon it. That Committee of Council, at their first meeting, appointed a Subcommittee, a very powerful and a very important one; but of the doings of that Committee, and the labour it has gone through, I have no doubt you will hear more fully during the evening. I would only add, that those of you who have read the BRITISH MEDICAL JOURNAL for the last week will have observed in the long list of returns from the honorary secretaries of the Collective Investigation Committees over the country, that the Metropolitan Counties Branch was conspicuous by its absence. We had not this matter brought officially before us until our annual meeting in July last, when it was referred to our Council. The Council met in October, and Dr Mahomed, who is a member of the Council, and who also is the earnest, energetic, and active secretary of the Collective Investigation Committee, told us what had been done hitherto, and what the condition of matters was; that almost every branch throughout the country had appointed committees and secretaries; yet he could not but feel that there was wanting earnest effort in the work, and that he was constantly met by the question, "What is the Metropolitan Counties Branch doing?" It was then thought that, before we took any further action, if we could get two men, whose presence, whose words, and whose position would carry weight, to address a public meeting, it would not only give a great impetus to the metropolitan movement, but also reflect an impetus on the movement throughout the whole country. A subcommittee was elected, and that subcommittee called upon two gentlemen; and they were delighted to find that those gentlemen were not only keenly alive to all the merits and advantages that such a scheme presented, but, what was more to our purpose, they were both ready and willing to come whenever we asked them, to say what they could to advance the movement. This night was fixed for the general meeting, and to fulfil their promise, and in furtherance of the wishes of that subcommittee, I

James Paget and Sir William Gull are here. [*Cheers.*] I believe that nothing further remains for me to say, but to call upon those gentlemen to address you; and, inasmuch as medicine is perhaps more deeply interested at present in the question, I will first of all call upon Sir William Gull.

Sir WILLIAM GULL delivered an address, which is published at page 141.

Sir JAMES PAGET then addressed the meeting. His remarks are given at page 144.

Professor HUMPHRY (Cambridge) in moving a vote of thanks to Sir William Gull and Sir James Paget, made some remarks which are published at page 145.

Dr. QUAIN, in seconding the motion, said it was only by accuracy of observation that the proposed collective research could be of any value. But what answer could be given to such a vague question as, "What experience have you had as to the communicability of phthisis?" He should like to see the Association directing its attention, as was originally intended, to such questions as the influence of localities, of geological conditions, and of occupations, upon disease. Anything more vague and absurd than some of the questions that had been asked, he had never heard. Sir William Gull had said that there was great difficulty in asking the questions, but the difficulty of answering them was ten thousand times greater.

Dr. STRANGE (President of the British Medical Association), in supporting the motion, said he did not rise to tender his own individual thanks to Sir William Gull and Sir James Paget, but, from the position which he held, the thanks of the British Medical Association, for the pains those gentlemen had taken to enlighten the members on the subject under consideration by their discourses. He only wished that every member could have been present to listen to their admirable discourses, which would, no doubt, sink deeply into the hearts of all those who had heard them. He could not but admire the wonderful analytical power displayed in the address of Sir William Gull, and the broad synthesis in that of Sir James Paget —two powers that constituted the great elements of all inductive reasoning. The thanks of the members were also due to Professor Humphry, who was the prime mover in the matter; and to Dr. Mahomed, for his extraordinary devotion to the work. No pecuniary remuneration could compensate him for his labours; but he would be compensated by the satisfaction he would feel that so vast a fund of knowledge had been accumulated, and he had really been so a great extent educating his medical brethren. The work might be at first crude and imperfect, and the answers received unsatisfactory; but the cards could be sent out again and again until more minute and exact information was obtained.

The motion was unanimously adopted,

Dr. HARE (President-elect of the Metropolitan Counties Branch), said that the addresses of Sir William Gull and Sir James Paget had been delivered with a definite practical object, and he had been requested to propose the appointment of a Committee in order to carry out the purposes that had been so clearly laid before the meeting, viz.:—C. A. Aikin, Esq.; W. H. Allchin, M.B.; J. Althaus, M.D.; G. W. Armstrong, Esq., (Greenwich); J. Baber, M.D.; G. H. Bailey, Esq.; E. Ballard, M.D.; J. Wickham Barnes, Esq.; J. G. Barratt, M.D.; Fletcher Beach, M.B., (Darenth); A. Hughes Bennett, M.D.; G. H. Bishop, Esq.; C. Y. Biss, M.B.; Percy Boulton, M.D.; John M. Bright, M.D., (Forest Hill); George D. Brown, Esq., (Ealing); G. H. Cable, Esq., (Greenwich); W. Watson Cheyne, Esq.; T. Fairlie Clarke, M.D., (Southborough, Tunbridge Wells); W. F. Cleveland, M.D.; J. B. Curgenven, Esq.; W. H. Day, M.D.; Walter Dickson, M.D.; Maurice Davis, M.D.; George Eastes, Esq.; Stamford Felce, Esq.; A. Forsyth, M.D., (Greenwich); F. J. Gant, Esq.; J. Gawith, Esq.; J. Goodchild, Esq., (Ealing); A. Grant, M.D.; Hastings, M.D.; W. B. Hemming, Esq.; Charles H. Hill, M.D.; J. T. Hulke, Esq.; F. W. Humphreys, Esq.; W. B. Johnston, M.D.; Norman Kerr, M.D.; J. C. Langmore, M.B.; H. Cripps Lawrence, Esq.; J. T. N. Lipscomb, M.D., (St. Albans); Robert H. Lloyd, M.D.; T. J. Maclagan, M.D.; H. M. Madge, M.D.; H. C. Martin, M.D.; J. J. Merriman, Esq.; W. J. Mickle, M.D., (Bow); G. Mickley, M.B.; A. B. R. Myers, Esq.; Robert J. W. Oswald, Esq.; A. Perigal, M.D., (New Barnet); R. H. Prior, M.D., (St. Albans); Walter Rigden, Esq.; G. H. Savage, M.D.; S. W. Sibley, Esq.; W. Squire, M.D.; J. Tapson, Esq.; C. Meymott Tidy, M.B.; Godwin W. Timms, M.D.; Harris Tonge, M.D., (Harrow); T. S. Townsend, Esq.; Edgcombe Manning, Esq.; W. Verdon, Esq.; F. Warner, M.D; John Way, M.D.; Wotton, M.D.; F. J. Wright, M.D. The object of the Committee would be to participate in the inquiry being made, by recording cases on the cards issued, and also inducing others to assist in the same way by filling up cards whenever opportunity arose. The questions already issued on the cards were, on the whole, admirable; they might not, perhaps, be everything that could be desired, but they were only tentative. The memoranda accompanying them were excellent models, and would be of great value in guiding the members in giving their answers. They were written with great clearness and definiteness, and would make observers of many who had not been accustomed to observe, and enable those who had been observers to observe with greater accuracy and skill, so that they would themselves be gainers, and would be prevented from rushing into what was a great fault in the profession, too hasty generalisation.

Mr. JONATHAN HUTCHINSON seconded the motion, which was unanimously adopted.

Dr. WADE (Treasurer of the British Medical Association), in proposing a vote of thanks to the chairman, said that the meeting was one of the most important gatherings of the Metropolitan Counties Branch of the Association, and that no one could have presided over it with greater judgment and discretion than Dr. Bridgwater.

Dr. ACLAND (Regius Professor of Medicine at Oxford), in seconding the motion, said that every member of the profession must have been struck with the wisdom and the importance of everything that had been said on that occasion by Sir William Gull, Sir James Paget, and Dr. Humphry; and no one could doubt that they had now arrived at one of the most important landing places, as Coleridge would say, in the history of medicine. He had recently been reading the admirable address delivered by Sir Charles Hastings at the foundation of the Association; and there was only one point on which he could take exception to it—the distinction which he seemed to think necessary to preserve between those who studied and worked in the provinces, and those who studied and worked in the metropolis. By taking the chair, and summoning to his assistance their esteemed friends and teachers, Sir William Gull and Sir James Paget, Dr. Bridgwater had broken down the line of demarcation in research which had been in many respects the bane of medicine from the time of Hippocrates to the present day. It had been clearly shown that they had all different work to do, on which they brought to bear different opportunities and different qualities of mind; but there was one quality which they had in common, that of love to their fellow-creatures to whose help they were bound to minister. They were also bound in a still higher sense to maintain the integrity of the country by preserving and strengthening its national health. It was impossible to listen to the Bradshawe Lecture recently delivered, without feeling that they were truly entering upon a new epoch in the history of scientific knowledge, and were in fair way of analysing all the circumstances that tended to make a strong nation, physically, morally, socially, and intellectually. That was the object they all had in view, and he was quite sure that they would all return with their hearts strengthened for that common work, and with a feeling of gratitude to those who had brought the subject before them.

The motion was unanimously adopted; and the PRESIDENT having briefly acknowledged the vote of thanks, the proceedings terminated.

THE SUPERINTENDENCE OF THE METROPOLITAN FEVER AND SMALL-POX HOSPITALS.

AT the meeting of the Metropolitan Asylums Board on Saturday, Mr. E. Golsworthy presiding, an important discussion was brought on relative to the superintendence of the fever and small-pox asylums in the metropolis. This subject has reference to the action taken by the Board in the last epidemic of small-pox, and in the present epidemic of fever, in employing resident medical officers to attend to the extra asylums, as in the case of the small-pox camp at Darenth, and, at present, in the case of the Hampstead Hospital (now to be known as the North-West Hospital); and calling upon the present medical superintendents to act as visiting physicians. Dr. Collie, under the resolution of the Board, and with the consent of the Local Government Board, acts as visiting physician to the North-West Hospital, now open for fever-patients.

Colonel HAYGARTH, who had opposed this action, moved the following resolution, directed against the mode thus adopted in the extra hospitals: "That, in the opinion of this Board, it is not desirable that the medical superintendent of any hospital under the control of the managers, should have the supervision of any other hospital than that to which he was originally appointed as resident medical officer, and that any previous resolution of the Board to the

contrary be rescinded or varied accordingly." He urged that the asylums under the medical superintendents needed the whole care of those gentlemen, who should not be allowed to take any extra charge, while there were plenty of medical men who could be engaged, and who could be held responsible for the whole charge of the asylums. He was opposed to the system, which seemed to have been commenced by the appointment of Dr. Collie as superintendent at Hampstead.

A MEMBER seconded the motion.

Sir EDMUND HAY CURRIE, in the course of an energetic speech against the motion, said: I think it may be as well, in the first place, to define the actual position of Dr. Collie in reference to the Hampstead Hospital, now the North-West Hospital. Some gentlemen might be inclined to think that Hampstead or Homerton was, in some way, being neglected by the present arrangement. This would be a complete misconception, and I can declare that no one can charge the management with the slightest failure of attention. I need not say more to show that it is so, than that the Hampstead and Homerton committees are entirely satisfied with the way in which the work at both hospitals is being done; and the Hampstead Committee, I may here add, have given an immense deal of time and attention to the work of preparing the hospital. That the arrangements are satisfactory, will be patent to the managers when I explain to them how the medical work is done. There is, in the North-West Hospital, a resident medical officer, who attends to the daily routine; whilst Dr. Collie visits the hospital daily, sees the bad cases, discharges patients, and advises the resident medical officer and the steward on questions of general administration; and it is most important for us to have Dr. Collie's experience at this juncture on these points at Hampstead. [*Hear, hear.*] I think hardly anyone will say that Dr. Collie cannot do these things without neglecting Homerton. [*Hear, hear.*] Indeed, I am satisfied that Dr. Collie would not undertake the work unless he could do it. Of the value of his advice and help to a young officer commencing his career, there can be little doubt; and of the value of these services to us in administering the hospital with due regard to the public health, I think there can be none. These services, moreover, are of special importance in reference to the Hampstead Hospital, about which there has been so much and such costly litigation and agitation. Dr. Collie knows all this; no one, possibly, so well. He gave evidence on this question before the Select Committee of the House of Commons, as well as before the Royal Commission, and in other ways he has advised the Board and their solicitors on various questions which have hindered the work of the Board. He understands the whole question of the Hampstead Hospital, knows all the difficulties associated with it, and appreciates, as probably no new man could, the importance of administering the hospital in relation to the public so that it may be without reproach. [*Hear, hear.*] Bearing these facts in mind, it will readily be seen that it is of the utmost importance to us to have a man like Dr. Collie there, who thoroughly understands our past and present difficulties. From this point of view, it is worthy of note that, since Dr. Collie has undertaken the management, we have heard nothing of the former difficulties; and although there is a constant watch set by the vestry and others, and Dr. Gwynn, the medical officer of health, has visited the hospital from time to time, not a single fault has been discovered and not a complaint made. [*Hear, hear.*] I doubt if we should have been able to say this, but for the precise regulations which Dr. Collie's knowledge enabled him to draw up and carry out: regulations so precise and so complete that to a less experienced man they would have seemed unnecessarily stringent. So much for that part of the administration which relates to the public. There is another equally important. I mean the actual medical care of patients. I confess I do not think that the cases which come into our fever hospitals, consisting of the most serious and most fatal of all medical cases, should be left entirely to the care of a young man almost fresh from college. Grave questions of treatment arise—questions of surgical intervention—which only a long experience can enable one to determine satisfactorily. I hardly think anyone of us would like to have the operation of tracheotomy, for instance, performed upon us or one of our children upon the advice of a comparatively young man; nor do I think that the treatment of large numbers of our population suffering from these grave diseases should be left in the care of medical officers who can have but little experience in the treatment of those diseases. [*Hear, hear.*] When these asylums were opened, the managers were exceptionally fortunate in obtaining the services of one or two exceptionally well qualified men of wide and rare experience, but we cannot expect to do this always. Having, then, regard to this; to the urgent nature of the cases sent to our fever hospitals; to the growing importance and publicity of the Board; and to the fact that the patients whom we treat will gradually and will probably soon, entirely, lose the pauper character, I am of opinion that our new hospitals should be, when practicable, and as far as practicable, supervised by our older and more experienced officers; in other words—that the great experience which our officers may have gained by many years of service, may be utilised by the Board for the more efficient management of the hospitals. I confess that this appears to me to be a wiser course, as well as more economical, than the system of appointing a medical superintendent every time you have the presence of an epidemic, and have to open, perhaps temporarily, a new hospital. It is to be remembered that the fever work of the managers is of a very variable and uncertain kind. At one time there is a good deal to do; while at another time there is very little to do. Our medical arrangements should therefore be of such a kind as to permit of ready expansion, without loss of efficiency, to meet an increasing epidemic; and of ready diminution when the epidemic is over. Unless this be done, the managers run the risk of being burdened with idle officers, or the patients the risk of being treated by officers temporarily appointed, without experience, without supervision, and, with the natural consequence of being treated badly. It is in the history of the Board, as a result of the rupture Colonel Haygarth would revive, that one officer of this Board did nothing, absolutely nothing, for about three years out of six, for which three years' idleness he was paid £1,400. It would have been far better, I think, if economy had been attained in that case by having an assistant medical officer, and efficiency maintained by letting him have the keep of an officer who had many years' experience of the nature of the work to be done. How well this work was done at Darenth and in the ship *Atlas*, I can myself vouch. We had patients carried through the streets of London, and through miles of the country, and we were thus enabled to cope with the terrible disease, under experienced officers, and why? Because, instead of having a medical superintendent at the ship, and one at Darenth, thus creating two new officers, we utilised the services of Dr. Gayton and Dr. Collie, and at the close of the epidemic relegated them, with a small and well earned gratuity, to their respective hospitals. The superiority of this plan over that of making a new appointment when each new hospital is opened, seems to me to be self-evident. The valuable experience of our older officers is gained, to the advantage of efficient administration and of careful medical treatment; and the ratepayers are saved an expenditure of money for which no adequate return is given. Do you say, "Very well; we shall have experienced men?" Very good. But the reply to that is, that experienced men in fever and small-pox cases cannot be had outside our own officers. The hospitals of the managers have almost monopolised the fever work of London; so that, with one or two exceptions, the experience of fever—I mean, of course, a wide experience—is confined to our own officers; so that, if we tried to get such officers for each new hospital, we should not be able to find them. This is my view of what our position should be generally; but, as regards the present condition of fever-prevalence in London, and particularly in the district allocated to Hampstead, it would, in my opinion, be foolish to make any change from the system now adopted. Fever is going down everywhere; in the district of the Hampstead Hospital, there is almost none; only comparatively few cases were admitted during the last few months. The question, then, which you have to consider, in reference to Hampstead, is whether you are to continue the present management or to appoint a medical superintendent, to be followed, in due course, by an assistant medical officer—because the hospital cannot be left without a medical officer—when there are about fifteen to twenty patients mostly convalescent, with the probability that in a few weeks there will be none at all until the next epidemic. If we had appointed a medical superintendent when the hospital was full, that would have been an intelligible proceeding; but to saddle the ratepayers with £5[illegible] a year when the hospital is nearly empty, would be ridiculous. People would say "These managers thought that when the Hampstead Hospital was full of patients it might do without a medical superintendent, but when it was empty they thought it could not." I cannot imagine that the managers will stultify themselves in this way. The time may come when it might be a very proper thing to appoint a medical superintendent. I am not saying that there is nothing to be said for the motion; on the contrary, should the epidemic break out afresh; should there be a large increase of cases at Homerton and Hampstead; should it turn out that the hospital in any way suffered, then the question might arise of appointing a medical superintendent. But to appoint a medical sup

intendent when the epidemic is at an end, and the numbers of the patients at vanishing point, and that without any reason at all, and in the teeth of the recommendation of both of the committees that the present arrangement was satisfactory, will be a most unwise step backwards. [*Hear, hear.*]

Dr. GRIFFITHS thought, with the last speaker, that the Board would not be able to obtain the services at once of experienced men for each of the hospitals, and he objected to the action of the Board being fettered by the passing of this proposal.

Mr. WENTZELL pointed out that the carrying of the resolution would shut out the Board from using the services of their medical officers on any emergency.

Mr. T. HODGES said, that the Board would be placed in a position of great difficulty if the motion were adopted, for the managers would have their hands tied from making the best arrangements for the superintendence of the asylums.

The motion was then put, and only six members voted for it. It was consequently lost.

COLLECTIVE INVESTIGATION COMMITTEE.

AT a general meeting of this committee, held at the offices of the Association, 161A, Strand, on Wednesday, January 17th, 1883, at 4 P.M., there were present—Professor HUMPHRY, F.R.S. (in the chair), Dr. Atkinston (Kingston-on-Thames), Dr. Bowles (Folkestone), Dr. Lauder Brunton, F.R.S., Dr. W. E. Buck (Leicester), Mr. S. H. Burton (Norwich), Dr. A. Carpenter (Croydon), Mr. N. Davies-Colley, Dr. D. Drummond (Newcastle-on-Tyne), Dr. Dyce Duckworth, Dr. George F. Duffey (Dublin), Dr. R. Foster (Birmingham), Dr. Grigg, Dr. Stephen Mackenzie, Dr. Withers Moore (Brighton), Dr. Jones-Morris (Portmadoc), Mr. Shirley Murphy, Mr. A. A. Napper (Cranleigh), Mr. Herbert Page, Dr. Rees Philipps (Exeter), Dr. Arthur Ransome (Manchester), Dr. E. S. Scott (Shrewsbury), Mr. Richard J. H. Scott (Bath), Dr. A. Sheen (Cardiff), Dr. E. H. Sieveking, Dr. J. Stowers, Dr. Octavius Sturges, Dr. Joseph Tyson (Folkestone), Dr. J. Uhthoff (Brighton).

Letters of apology for non-attendance were received from Dr. Bury (Manchester), Dr. A. Davies (Swansea), Dr. C. Harrison (Lincoln), Mr. de Vere Hunt (Bolton), Dr Manning (Salisbury), Mr. Frank Paul (Liverpool).

The Secretary reported that 382 cards had been received, and acknowledged in the JOURNAL of January 13th. These consisted of 145 cases of acute pneumonia; 82 of chorea; 132 of acute rheumatism; 16 of diphtheria; together with 7 sanitary cards. Since then, others had been received, bringing the total up to about 400. Up to the time of meeting, 501 replies to the inquiries concerning phthisis had been received, out of which 144 stated that they had seen cases, and over 175 cases were recorded with details. He believed that these returns would prove to be of very great value.

It was proposed by Dr. RANSOME, seconded by Dr. STEPHEN MACKENZIE, and carried unanimously:

"That the subcommittee appointed to draw up the inquiry concerning the communicability of phthisis, consisting of Dr. Dyce Duckworth, Dr. F. Taylor, Dr. Tyson, and Dr. Burney Yeo, be reappointed to analyse and report upon the returns received in answer to the inquiry."

It was proposed by Dr. B. FOSTER, seconded by Mr. H. PAGE, and carried unanimously:

"That the cards received on acute pneumonia, chorea, and acute rheumatism, be referred to the several subcommittees who prepared them, for tabulation and further consideration."

The consideration of the inquiry on paroxysmal hæmoglobinuria was adjourned to another meeting.

A discussion of much interest took place on the general working of the local committees in the Branches, and it was agreed that for the present their efforts should be concentrated on obtaining a larger number of returns to the inquiries concerning pneumonia, chorea, and rheumatism.

COLLECTIVE INVESTIGATION OF DISEASE.

THE COMMUNICABILITY OF PHTHISIS.

REPLIES to this inquiry have been received, up to January 23rd, from the following:

George Abbott, Esq., Tunbridge Wells; Boughton Addy, M.D., Pendleton; H. Alderson, M.D., Hammersmith; F. J. Allan, M.B., Kennington; J. Anderson, M.D., Bryanston Street; J. Anderson, M.B., Preston; R. J. Anderson, M.D., Belfast; H. R. Archer, M.D., Royston; W. Armistead, M.B., Cambridge; George Armstrong, Esq., Greenwich; James Arthur, Esq., Henley-in-Arden; H. G. Armstrong, Esq., Reading; F. P. Atkinson, M.D., Kingston-on-Thames; W. H. Axford, M.B., Southsea.

G. M. Bacon, M.D., Fulbourn; S. Bagley, Esq., Stockport; A. Baird, M.D., Perth; T. Baker, Esq., Fulham Road; D. B. Balding, Esq., Royston; M. Balding, M.D., Royston; J. Barker, Esq., Coleshill; Thomas Barlow, M.D., Russell Square; H. Barnes, M.D., Carlisle; N. W. Barrington, M.D., Bexley Heath; A. Barron, M.B., Liverpool; H. J. W. Barlow, Surgeon A.M.D.; R. W. Barrow, Esq., Liverpool; G. H. Batherbury, M.D., Wimborne; R. Batho, M.D., Burnley; W. M. Beaumont, Esq., Oxford; — Le Bec, M.D., Paris; M. R. J. Behrendt, Esq., Doncaster; A. H. Bennett, M.D., Old Cavendish Street; W. Berry, Esq., Wigan; M. G. Biggs, Esq., Wandsworth Common; P. Bindley, M.B., Bournemouth; G. Black, M.B., Keswick; W. T. Black, Esq., Edinburgh; J. F. Blake, Esq., Princes Street; G. F. Blake, Esq., Birmingham; B. Blower, Esq., Liverpool; D. Blyth, M.B., Balfron, N.B.; J. P. H. Boileau, M.D., Netley; F. T. Bond, M.D., Gloucester; W. A. Bonney, M.D., Beaufort Street; J. M. Booth, M.B., Aberdeen; L. Booth, M.D., Durham; A. Boswell, M.B., Ashbourne; T. S. Bourne, Esq., Kenilworth; R. Bowen, F.R.C.S., Rudgeway; O. Bowen, Esq., Liverpool; T. E. Bowkett, Esq., East India Road; D. Bradley, Esq., Dudley; J. M. Bramwell, M.B., Goole; G. H. Brandt, M.D., Oporto; J. Britton, M.D., Strabane; T. Britton, M.D., Halifax; J. Broadbent, Esq., Manchester; C. Broomhead, M.D., Oldham; J. Brown, Esq., Bacup; B. Browning, M.D., Rotherhithe; W. E. Buck, M.D., Leicester; T. J. Buckell, M.B., Islington; W. H. E. Burke, Esq., Barnsley; T. Burnie, Esq., Nottingham; J. S. Bury, M.D., Pendleton; J. Bisshopp, Esq., Tunbridge Wells; W. O. Barry, M.D., Bury St. Edmund's; Chas. Boyce, M.B., Maidstone; Alf. E. Barrett, Esq., Ladbroke Grove; W. M. Price Biden, Esq., Hyères; Byrom Bramwell, M.D., Edinburgh; Alf. Brett, M.D., Watford; H. J. Brown, Esq., Worcester; G. H. Burford, M.B., Burton-on-Trent; W. E. P. Burnett, Esq., Manchester; Hugh Brosnan, M.D., Forranfore, Co. Kerry.

T. C. Cade, Esq., Derby; D. J. Calman, M.D., Glencoe; J. S. Cameron, M.D., Huddersfield; W. J. Cant, Esq., Lincoln; D. B. Carter, Esq., Wakefield; J. Carter, Esq., Cambridge; E. Casey, M.D., Windsor; E. J. Chance, Esq., Lambeth; G. Chapman, Esq., Brierley Hill; G. Chater, Esq., Tenby; A. Chaloner, Esq., Chesterfield; W. R. Cheadle, M.D., Hyde Park Place; W. S. Church, M.D., Harley Street; T. Churton, M.D., Leeds; C. C. Claremont, M.B., Southsea; J. C. Clarke, M.B., Bolton; R. H. Clay, M.D., Plymouth; J. G. Clendinnen, Esq., Coseley; W. F. Cleveland, M.D., Maida Vale; M. Coates, Esq., Southsea; A. Cohen, M.D., Highbury New Park; B. Collenette, M.D., Guernsey; G. B. Collett, Esq., Worthing; T. A. Colt, Esq., Portsea; G. H. Cook, Esq., Northwich; T. W. Cooper, Esq., Leytonstone; J. Cooper, M.B., Wolverhampton; A. Cordes, M.D., Geneva; J. Cornbill, Esq., Ilfracombe; J. Cornwall, Esq., Fairford; J. H. Coveney, Esq., Manchester; J. W. Craig, M.D., Bingley; R. Craig, M.B., Inverness; G. Cran, M.D., Aberdeen; G. Crawford, M.D., Port Glasgow; W. G. Creswell, Esq., Saltley; E. Crickmay, Esq., Laxfield; R. W. Crighton, M.D., Tavistock; T. W. Crosse, Esq., Norwich; R. Crossitt, Esq., Cookstown; G. W. Crowe, M.D., Worcester; — D. Cronin, M.D., Kensington; C. J. Cullingworth, M.D., Manchester; J. Cunningham, M.B., Campbeltown; Leonard Cane, M.B., Peterborough; J. Court, Esq., Chesterfield; F. W. J. Culhane, M.B., Byfield.

G. Dale, M.B., Pontrilas; G. C. Dale, M.D., Upper Tooting; R. Dale, Esq., Sunderland; F. H. Daly, M.D., Hackney Downs; G. H. Daly, M.D., Chippenham; C. G. Dalton, Esq., Lincoln; J. Daniel, Esq., Cheadle; F. J. Davys, Esq., Dublin; G. H. Darwin, M.D., Didsbury; A. Davidson, M.D., Liverpool; F. W. Davis, Esq., Gosport; D. A. Davies, M.B., Swansea; E. T. Davies, M.B., Liverpool; H. L. Davies, M.B., Holywell; M. Davis, M.D., Brunswick Square; J. Davison, Esq., Ballinakill; W. H. Dawson, Esq., Great Malvern; H. Davy, M.D., Exeter; J. Dewar, M.D., Arbroath; J. Drew, M.D., Stirling; E. Drummond, M.D., Newcastle-on-Tyne; W. Donovan, Esq., Leicester; W. R. Duguid, M.D., Buckie; G. F. Duffey, M.D., Dublin; C. Duke, M.D., Rugby; D. Duckworth, M.D., Grafton Street; J. J. K. Duncanson, M.D., Edinburgh; E. H. Dickinson, M.D., Liverpool; Henry Denne, M.D., Birmingham.

J. Easton, M.D., Norfolk Crescent; C. Eddowes, Esq., Devizes; R. W. Egan, Esq., Dublin; G. F. Elliott, M.D., Hull; C. Elliott, M.D., Bristol; T. Elliott, M.D., Tunbridge Wells; J. Ellison, M.D., Windsor; W. L. Emmerson, Esq., Melton Mowbray; T. Evans, M.D., Cardiganshire; T. M. Evans, Esq., Hull; Ernest Elliot, M.D., Cosham.

J. Farquhar, M.D., Harrogate; J. Farrar, Esq., Morecambe; H. Fearnside, M.B., Rome; W. Few, Esq., Huntingdon; A. P. Fiddian, M.B., Cardiff; T. Fielding, M.D., Blandford; E. Field, M.D., Bath; J. B. Fisher, M.B., Whitehaven; B. Fletcher, M.D., Leamington; F. J. Flower, Esq., Warminster; C. Forsythe, M.D., Coleraine; M. Foulds, Esq., Mauchline; J. K. Fowler, M.D., Clarges Street; R. Fowler, M.D., Old Burlington Street; R. W. Forsayeth, Surgeon-Major, Shoeburyness; G. B. Fraser, Esq., Weston-super-Mare; G. Ross Fraser, Esq., Warto-on-Tyne; R. F. Fraser, Esq., Lavender Hill; W. E. Fulford, Esq., Wadebridge; W. Fuller, Esq., Piccadilly; William Frew, M.B., Galston; Charles Firth, M.D., Gravesend.

J. Gabb, Esq., Bewdley; P. Gabb, M.B., Welbeck Street; P. H. Gardner, Esq., Bath; W. C. Garman, Esq., Wednesbury; T. W. H. Garstang, Esq., Dobcross; E. Garraway, Esq., Faversham; G. Gaskoin, Esq., Westbourne Park; J. Gason, Esq. Rome; H. George, Esq., North Thoresby; W. Gillespie, Esq., Methun; T. C. Gilmore, M.D., Londonderry; J. F. Goodhart, M.D., Weymouth Street; J. H. Gordon, M.D., Salisbury; J. B. Grewcock, Esq., Pershore; B. Gowing, Esq., Salisbury; F. D. Grayson, Esq., Rayleigh; A. R. Graham, M.B., Weybridge; J. L. Green, Esq., Salisbury; T. H. Green, M.D., Wimpole Street; W. E. Green, Esq., Sandown; W. R. Grove, M.D., St. Ives; J. S. Grubb, Esq., Waterbeach; E. Gumpert, M.D., Manchester; A. D. Gupper, Esq., Skipton; J. R. Gibbes, Esq., Anerley; J. A. Goodchild, Esq., Bordighera; Samuel Gosling, Esq., Biddulph; David Goyder, M.D., Bradford; Samuel Griffith, M.D., Portmadoc.

H. Habgood, M.D., Eastbourne; W. Hall, Esq., Lancaster; W. Hammond, Esq., Nuneaton; T. A. E. Harnardo, Esq., Southport; G. Harday, Esq., Rugby; H. N. Hardy, Esq., Dulwich; J. D. Harris, Esq., Exeter; W. Hart, Esq., Chelmsford; C. Harrison, M.D., Lincoln; J. Harper, Esq., Barnstaple; W. F. Haslam, F.R.C.S., Birmingham; E. Haughton, M.D., Upper Norwood; J. Haworth, Esq., Filey; G. P. Hay, M.D., Forres; H. R. Hayes, Esq., Basingstoke; W. L. Heath, M.B., South Kensington; J. H. Hemming, Esq., Kimbolton; A. Henderson, Esq., Cranfield; G. H. Higgens, Esq., Leeds; T. Hickes, Esq., Cheddar; C. H. Hill, M.D., Islington; J. Hinton, Esq., Warminster; J. Hitchman, M.D., Fairford; H. N. Holberton, Esq., Hampton; C. Holman, M.D., Reigate; E. Hollis, M.D., Woodbridge; W. A. Hollis, M.D., Brighton; W. Holman, Esq., Clapham Road; S. W. Hope, Esq., Coltishall; D. Arthur Hughes, Esq., Llanfairfechan; R. S. Hudson, M.D., Redruth; G. M. Humphry,

M.D., F.R.S., Cambridge; J. Humphry, Esq., Aylesbury; L. Humphry, M.B., Cambridge; J. H. Hunt, Esq., Ockbrook; G. Hunter, M.D., Linlithgow; F. W. Humphreys, Esq., West Kensington Park; Junius Hardwicke, M. D., Rotherham; Stanley Haynes, M.D., Malvern; John Harrison, Esq., Dublin; W. R. Hemming, Esq., Notting Hill Terrace; Alf. Hollis, M.D., Freshwater, I. of W.; Alex. Hodgkinson, M.R.C.P., Manchester; H. Hope, Esq., Southampton; De Vere Hunt, Esq., Bolton; T. H. Hutchinson, Esq., Sittingbourne; J. Hill, Esq., Portsmouth.

R. W. Isbell, Esq., Hereford; E. Jackson, Esq., Manchester; V. Jackson, Esq., Wolverhampton; J. B. James, Esq., Jamaica Road; Z. Johnson, Esq., Kilkenny; G. W. Johnstone, Esq., Wigan; J. J. Johnston, M.D., Bolton; J. J. Johnstone, M.B., Colmonell; A. H. Jones, M.B., Northampton; E. Jones, Esq., Kingsland Road; R. O. Jones, Esq., Bala; W. F. Jones, Esq., Bala; F. J. Joynes, Esq., Darsley; B. Jumeaux, Esq., Dorset; E. S. Jackson, M.B., Carnforth; C. E. James, M.B., Kilkenny; J. Brindley James, Esq., Jamaica Road; A. Lloyd Jones, Esq., New Cross Road.

W. Kelly, M.D., Taunton; R. V. Kelly, Esq., Birmingham; G. Kelman, Esq., Haddington; H. R. Ker, Esq., Birmingham; E. W. Kerr, M.B., Kinlough; W. Kidd, M.D., Blackheath; R. Kirk, M.D., Partick, Glasgow; R. Kirkland, M.B., Cheltenham; S. Knaggs, Esq., Huddersfield; A. A. H. Knight, M.D., Keswick; J. T. Knight, Esq., Carlton; Bedford Kerswill, Esq., St. Germains.

T. Langston, Esq., Westminster; W. Lockhart, Esq., Blackheath; W. Latharn, Esq., Ashton-in-Makerfield; W. Lattey, M.D., Southam; J. Lattey, Esq., Kensington; A. Leachman, M.D., Petersfield; A. D. H. Leadman, Esq., Boroughbridge; T. C. Leah, Esq., Hyde; R. W. Leftwich, M.D., London; T. Ligertwood, M.D., Chelsea; B. Lindsay, M.B., Salisbury; J. T. N. Lipscomb, M.D., St. Alban's; M. Lloyd, Esq., Carmarthen; R. R. Lloyd, Esq., St. Alban's; J. P. Lockwood, Esq., Faringdon; T. W. Locke, Esq., Redcar; D. G. Lowe, M.D., Burton-on-Trent; T. M. Lownds, M.D., Egham Hall; R. Lowther, M.D., Grange-over-Sands; W. E. Luscombe, Esq., Newark; T. B. Luscombe, Esq., Teddington; F. Fawson Lee, M.B., Salisbury; Thos. Lettis, Esq., Yarmouth; H. S. Leverton. Esq., Truro; Chas. Lovegrove, Esq., Llanfyllin.

Donald McAlister, M.B., Cambridge; T. Lamont Macartney, Esq., Worthen; Alexander J. Macarthur, M.B., Anstruther; T. A. C. Macarthur, Esq., Southwold; D. A. MacCarthy, M.D., Eastbourne; J. M. McCarthy, Esq., Wellington, Salop; Keith M. MacDonald, M.D., Cupar; P. William Macdonald, M.B., Birstall; R. F. Mackenzie, M.D., Redcar; W. J. Mackie, Esq., Turvey; S. F. McLachlan, M.B., Longtown; Duncan Mackay, M.D., Inverness; Stephen Mackenzie, M.D., Finsbury Square; L. A. M'Lachlan, M.D., Dumbarton; A. MacLean, Esq., Leatherhead; A. Macmillan, M.D., Hull; Donald Macphail, M.D., Whiffiet, N.B.; D. U. MacLennan, M.B., Widnes; J. F. McVeagh, M.D., Dublin; S. Macfie, M.B., Chirnside, N.B.; F. A. Mahomed, M.D., St. Thomas's Street; T. S. Maguire, Esq., Stony Stratford; W. Maine, Esq., Clacton-on-Sea; A. C. Malley, M.B., Munslow; H. Mallins, M.B., Watton; B. H. Manby, M.D., Canonbury; H. J. Manning, Esq., Salisbury; John Marchbank, M.B., Leadhills; Henry F. Marley, Esq., Padstow; Charles George Marshall, Esq., Woodbridge; A. Martin, M.D., Helmsdale; John Martin, Esq., Alcester; John Martin, Esq., Barracks, Cork; J. M. H. Martin, M.D., Blackburn; J. W. Martin, M.D., Sheffield; T. M. Martin, Esq., Piltown; W. Y. Martin, Esq., Bolton; F. Mason, Esq., Bath; J. Matthews, Esq., Liverpool; G. May, Esq.; Reading; G. May, jun., M.B., Reading; G. Parker May, M.D., Maldon; H. Maturin, Esq., Winchfield; C. Mures, Esq., Sandown; C. W. M. Medlicott, M.D., Holles Street, J. W. S. Meiklejohn, M.D., Deptford; J. S. Mein, M.D., Manchester; J. Meredith; M.D., Wellington; J. D. Miller, M.B., Notting Hill; J. W. Miller, M.D., Dundee; Dugald Mitchell, M.B., Renton, N.B.; J. J. W. Miles, Esq., Dingle, Ireland; H. C. Moore, Esq., Hereford; H. G. Moore, M.D., Ipswich; W. Withers Moore, M.D., Brighton; T. H. Moorhead, M.D., Cootehill, Ireland; John Morgan, Esq., Langport; James Morris, M.D., Hyde Park; W. W. Morris, M.B., Nottingham; A. Mullan, M.D., Ballymena; G. Mowat, Esq., St. Alban's; J. Murphy, M.D., Sunderland; S. F. Murphy, Esq., Camden Road; J. Carrick Murray, M.D., Newcastle-on-Tyne; W. Murrell, M.D., Portland Place; A. R. B. Myers, Esq., Caterham Barracks; Chas. MacDowell, M.D., Carlow; R. B. M'Clelland, Esq., Banbridge, Co. Down; Adam A. C. Matthews, M.D., Coleraine; Alf. Mantle, M.D., Durham; John Moorhead, M.D., Weymouth; W. Jones-Morris, Esq., Portmadoc; Siegmund Moritz, M.D., Manchester.

A. A. Napper, Esq., Cranleigh; William Newman, M.D., Stamford; C. F. Newcombe, Esq., East Twickenham; A. H. Newth, M.D., Hayward's Heath; E. J. Nix, M.D., Great Portland Street; Henry Vevers, Esq., J. Birkbeck Nevins, Esq., Liverpool.

J. Harrison Oates, Esq., Dewsbury; Martin O'Connor, Esq., Chatteris; H. P. Olivey, Esq., Taunton; F. W. O'Connor, Esq., Limerick; J. Oliver, M.D., Putney.

W. H. Parsey, M.D., Hatton, Warwick; C. Palmer, Esq., Great Yarmouth; J. Parette, Esq., Bristol; C. H. W. Parkinson, Esq., Wimborne; Ed. Parker, Esq., Liverpool; F. Parsons, Esq., Frome; T. Patterson, M.D., Oldham; F. Panton, M.B., Chichester; H. Payne, Esq., Sheffield; T. Frederick Pearse, M.D., Liphook; R. Perry, M.D., Glasgow; C. Parsons, M.D., Dover; S. Rees Philipps, M.D., Exeter; W. J. Pilcher, Esq., Boston; C. H. Pinck, M.B., Nelson; E. G. Pitt, M.D., St. George's, East; W. H. Plaister, Esq., Tottenham; H. A. Powell, Esq., Beckenham; Scudamore Powell, M.D., Peterchurch; R. E. Power, Esq, Portsea; J. Pratt, Esq., Markethill, Ireland; E. Price, Esq., Tipton; W. Prowse, Esq., Cambridge; J. Procter, M.B., Tunstall; John Prytherch, M.D., Liverpool; H. G. Purdon, M.D., Belfast; A. Purkiss, M.D., Kew Bridge Road; R. Featherstone Phipps, Esq., Sutherland Gardens; Douglas Powell, M.D., Wimpole Street; George W. Potter, M.D., Grosvenor Road.

T. J. Quicke, M.B., Hull; F. J. B. Quinlan, M.D., Dublin; R. S. Quinton, M.D., Manchester.

G. Rae, Esq., New Pitsligo, N.B.; H. Rainbird, Esq., Saxelby; A. C. Rayner, M.D., Preston; J. A. Ramsay, Esq., Cambridge; A. Ransome, M.D., Manchester; T. F. Raven, Esq., Broadstairs; T. Hall Redwood, M.D., Rhymney; A. Creswell Rich, M.B., Liverpool; F. Robinson, M.D., Eastbourne; A. W. Mayo Robson, Esq., Leeds; J. Morley Rooke, M.D., Cheltenham; Amand Routh, M.D., Upper Montague Street; F. Everard Row, Esq., Devonport; G. Herbert Rowe, Esq., Leeds; Wm. Palmer Rowe, Esq., Liverpool; Charles Royston, M.D., Westbourne Park; H. Boyle Runnalls, Esq., Saltash; M. W. H. Russell, Esq., Bath; W. Russell, M.B., Carlisle; William A. Ross, Esq., Alderney.

George St. George, Esq., Lisburn, Ireland; W. Samuel, Esq., Swansea; J. Sarjant, Esq., Worcester; W. Wingate Saul, M.D., Lancaster; Edwin Dawes Saunders, Esq., Tenterden; Ed. Fowler Scougall, M.B., Newmill, near Huddersfield; W. Scott, M.D., Dublin; E. S. Scott, M.B., Shrewsbury; W. Sellers, Jun., M.D., Radcliffe, near Manchester; John Service, M.D., Tharsis, Spain; Seymour J. Sharkey, M.D., Lambeth Palace Road; Spencer Sharman, M.D., Torquay; Jno. A. Sharp, Esq., Derby; A. Sheen, M.D., Cardiff; Patmore Sheehy, Esq., Claremont Square; John Wilton Sheridan, Esq., Stowmarket; George Shaw, Esq., Enfield Highway; M. Shurlock, Esq., Chertsey; G. Slade-King, M.D., Ilfracombe; F. Small, Esq., Boston; E. Markham Skerritt, M.D., Clifton; Alder Smith, M.D., Christ's Hospital; F. Smith, Esq., Plumstead; G. Munro Smith, Esq., Clifton; P. Caldwell Smith, M.B., Motherwell, N.B.; R. Shingleton Smith, M.D., Clifton; S. W. Smith, M.D., Pershore; Thos. Smith M.D., Torquay; Walter G. Smith, M.D., Dublin; G. J. Malcolm Smith, M.B., Hurstpierpoint; Spencer T. Smyth, M.D., Honor Oak; Jas. Vose Solomon, Esq., Birmingham; R. Somerville, M.D., Galashiels; W. J. Van Someren, M.D., Redhill; C. R. Straton, Esq., Wilton; Henry Stear, Esq., Saffron Walden; W. J. Spence, Esq., Bradford; W. Goldie Stevens, Esq., Renfrew, N.B.; Charles Sprigge, M.D., Great Barford; W. Stevenson, Esq., Crieff, N.B.; J. R. Stocker, M.B., Queenstown, Ireland; Fredk. Stockwell, M.D., Bruton Somerset; A. Sutherland, M.B., Invergordon, N.B.; Chas. H. Swayne, Esq., Newry; A. M. Sculthorpe, Esq., Tamworth; William Shaw, M.D., Maidstone; Samuel Smith, Esq., Lowestoft; John Sutcliffe, Esq., Staleybridge.

William G. Tacey, Esq., Bradford; J. Tatham, M.D., George Street; Fredk. Taylor, M.D., 11, St. Thomas's Street; Alex. Thom, Esq., Crieff; J. Howell Thomas, Esq., Wellingborough; J. Raglan Thomas, Esq., Llanelly; Harry G. Thompson, M.B., Brampton; J. Roberts Thomson, M.D., Bournemouth; J. O. Thorowgood, M.D., Welbeck Street; Charles W. Thorp, Esq., Todmorden; Robert Thorburn, M.D., Lidburgh; Godwin W. Timms, M.D., Wimpole Street; Thos. Sutton Townsend, Esq., Queen's Gate; Theophilus W. Trend, M.D., Southampton.

John C. Uhthoff, M.D., Brighton; F. W. Underhill, Esq., Birmingham; Chas. Unuerhill, M.B., Edinburgh.

W. E. W. Vaughan, Esq., Crewe; T. A. Vesey, M.B., Knapton, Ireland; H. J. K. Viner, Esq., Littlehampton.

Frank Wacher, Esq., Canterbury; W. F. Wade, M.D., Birmingham; John Waggett, M.D., Lincoln's Inn; Charles D. Waite, M.B., Old Burlington Street; A. W. Wallace, M.D., Parsonstown, Ireland; V. Wearne, Surgeon-Major, Parkhurst; E. Allan Waterworth, M.D., Newport; J. Watts, Esq., Chatham; R. W. Watkins, Esq., Towcester; Vere George Webb, Esq., Coleshill; F. R. Webster, Esq., St. Alban's; H. W. Webster, M.D., Fulham Road; Thomas J. Webster, Esq., Merthyr Tydvil; C. H. Weld, Esq., Hawkhurst; J. J. Welply, M.D., Bandon; J. W. Wemyss, M.D., Broughty Ferry; W. Westcott, M.B., Camden Road; C. G. Wheelhouse, Esq., Leeds; E. A. Whiteley, Esq., Duffield; G. Whittle, M.D., Liverpool; J. Whiteley, Esq., Wakefield; J. Wigmore, M.D., Bath; George Wilks, M.B., Ashford; Edw. Williams, M.D., Wrexham; D. M. Williams, Esq., Liverpool; James Williams, Esq., Brecon; John Williams, M.D., Pontypool; J. Llewelyn Williams, M.B., Wrexham; R. W. Williams, Esq., Stoke; J. Willis, Esq., Maida Vale; J. P. Wills, M.B., Bexhill; E. T. Wilson, M.D., Cheltenham; J. O. Wilson, M.D., Huntly, N.B.; S. Woodman, Esq., Ramsgate; J. W. Workman, Esq., Reading; J. Worthington, Louth, Lowestoft; J. L. W. Walsh, Esq., Worcester; Fred. E. Webb, Esq., Maida Vale; Robert M. Wilson, M.D., Mintlaw, N.B.; William White, M.D., Manchester; William R. White, M.D., Wadhurst; C. Wood, Esq., Dover.

Two inquiry sheets have been returned filled up, but without the names or addresses of the senders. Total number of replies received up to Tuesday, January 23rd, 571. It is hoped that many of those who have not filled up and forwarded their inquiry sheet, will yet do so. The sheet will be found folded in the JOURNAL of January 6th, 1883.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to ser

as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH OF IRELAND BRANCH.—The annual meeting of the Branch will be held in the Royal Cork Institution, on Saturday, the 27th instant, at 4.30 P.M. Members wishing to exhibit pathological specimens, read papers, etc., will intimate their intention to the Honorary Secretary at once. It is hoped that Dr. Mahomed, Honorary Secretary of the Collective Investigation Committee, will attend and give an account of the work of his Committee.—T. GELSTON ATKINS, B.A., M.D., Honorary Secretary, January 8th, 1883.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE fourth ordinary meeting of the session was held in the Medical Institute, Edmund Street, Birmingham, on Thursday, January 11th. The chair was taken by the President, Dr. Dewes, at 3 P.M.

New Members.—Mr. A. S. Bridges, Gerrard Street, Lozells, Mr. A. Orton, Solihull, Mr. C. Vokes, Brearley Street, Dr. B. C. A. Windle, the General Hospital, were elected members.

Representation of Branches on the Committee of Council.—The circular and questions from the Committee of Council were considered.

Mr. HUGH KER moved, and Dr. FOWLER BODINGTON seconded, the following resolution, which was carried:

"That, in the opinion of this Branch, no change in the laws which regulate the election of members of the Council will be satisfactory, which does not provide for the election, by the Branches, of one or more representatives from each Branch, in proportion to the numbers of its members."

Mr. GAMGEE moved, and Dr. SAWYER seconded, the following resolution, which was carried:

"That this Branch is of opinion that the principle of direct representation, which the British Medical Association insists upon in the institution of the General Medical Council under a reformed Medical Act, should be applied to the government of the British Medical Association."

METROPOLITAN COUNTIES BRANCH: SPECIAL MEETING.

A SPECIAL general meeting of this Branch was held at the house of the Medical Society of London, 11, Chandos Street, on Wednesday, December 20th, at 8 P.M; THOMAS BRIDGWATER, M.B., President, in the chair.

Representation of Branches in the Committee of Council.—The questions submitted to the Branch by the President of Council (in JOURNAL, December 2nd, page 1111) were considered.

The answers to questions 1 and 5 were deferred until question 7 was answered. To question 2, it was replied that no special appointment had been made, other than one of the secretaries. In answer to question 3, it was stated that the total number of members of the Branch was 906, and its income about £113. To question 4, it was replied that the expenses of the secretary were not paid by the Branch; but that, when the Committee of Council met in Birmingham, the Branch had paid the travelling expenses of the Secretary from the funds when it had sufficient funds to do so. Question 6 was answered in the negative. Question 7 (including also 1 and 5) was answered by a series of recommendations which had been agreed to by the Branch, and were now submitted to the meeting.

Regarding representatives in the General Council of the Association, the following recommendations were unanimously adopted:

1. That every Branch President for the time being be, *ex officio*, one of the representative Members of the Council. 2. That not less than fourteen days prior to the date of nomination of the members of the Council of the Association, the honorary secretary shall write to each proposed representative of the Branch on the Council, inquiring whether he will be able to attend the forthcoming Annual Meeting or not.

Regarding the Committee of Council, the following recommendations were discussed:

Proposed by Mr. SAUNDERS, and seconded by Dr. HARE:

"That the present system of placing past Presidents and Treasurers of the Association, and Presidents of Council, on the Committee of Council as *ex officio* Members, remain unaltered."

To this an amendment was proposed by Mr. NELSON HARDY, and seconded by Dr. JAMES THOMPSON:

"That not more than six Vice-Presidents be *ex officio* on the Committee of Council."

The amendment was negatived, and the original motion was carried by a large majority.

2. Proposed by Mr. SIBLEY, seconded by Dr. GRIGG, and carried *nem. con.*:

"That Branches with not more than two hundred members be represented, as at present, in the Committee of Council by their honorary secretary, or such other person as they may specially appoint to represent them, who should be designated the '*ex-officio* representative.'"

3. Proposed by Mr. MACNAMARA, seconded by Dr. STEPHEN MACKENZIE, and resolved:

"That, in addition to this, power should be given to every Branch with over two hundred members to nominate to the General Council a second representative, over four hundred a third, over six hundred a fourth, and so on in proportion; and that such nomination take the place of the present nomination of twenty members by the Committee of Council."

4. Proposed by Mr. G. EASTES, seconded by Dr. JOSEPH ROGERS, and resolved:

"That these representatives should not be obliged to retire until they have completed their second year of office."

5. Proposed by Dr. GRIGG:

"That the travelling expenses of the representatives to all the meetings of the Committee of Council be paid by the Association."

Mr. ERNEST HART proposed as an amendment, and Dr. A. P. STEWART seconded:

"That, in cases where the payment of honorary secretaries is desirable, each Branch should as far as possible defray the travelling expenses of its representative; but that in any particular case in which a Branch desires to pay the expenses of its representative, but does not possess the adequate resources, the Committee of Council should have power to grant a subsidy towards the payment of such expenses."

The amendment was carried; and, having been put to the vote as a substantive motion, was adopted.

The Journal and Finance Committee.—It was agreed that the Committee of Council should be informed that it was the opinion of the Branch, "that not more than three members of a Branch should be, at any one period, members of the JOURNAL and Finance Committee."

SOUTH-WESTERN BRANCH: QUARTERLY MEETING.

THE quarterly meeting was held on January 10th, at the Devon and Exeter Hospital, Exeter; Mr. A. J. CUMMING, Vice-President, in the chair. Sixteen members and a visitor were present.

New Members.—Two gentlemen were elected.

Communications.—The following communications were made:—

1. Mr. W. E. C. Nourse: A Case of Calculus in the Nostrils.
2. Mr. L. H. Tosswill: On Enucleations of the Eyeball.
3. Dr. J. Thompson: Case of Idiopathic Tetanus.
4. Dr. J. Adams: Case of Plastic Operation.
5. Dr. H. Davy read a paper on Acute Rheumatism, with special reference to the Collective Investigation cards issued to members; which was followed by an interesting discussion.
6. Dr. A. Blomfield showed microscopic specimens of Bacillus Tuberculosis, mounted by Dr. Heneage Gibbes.
7. Dr. R. Hudson showed microscopic specimens of Bacillus Tuberculosis.

Homœopathy.—It was resolved:—

"That the Committee of Council be requested to take steps to carry out their own proposal, made in their report to the general meeting at Worcester, to obtain a full expression of opinion on the part of the whole Association, as to whether it will tolerate homœopathy in its ranks, or not."

Representation of the Profession on the General Medical Council—It was resolved:—

"That this meeting is of opinion that the Medical Council cannot be, in any sense, satisfactory to medical men, unless proper provision is made for the direct and adequate representation of the whole profession."

Representation of the Branches on the Committee of Council.—It was resolved that the following recommendations be made:—

"1. That, every Branch President, for the time being, be *ex officio* one of the representative members on the general Council. 2. That, the twenty representatives on the Committee of Council be elected by the Branches. 3. That these representatives be elected for two years, and be not eligible for re-election for one year. 4. That, the Committee of Council elect not more than two members from one Branch on its Journal and Finance Sub-Committee."

WEST SOMERSET BRANCH: SPECIAL MEETING.

A MEETING of this Branch was held at the Castle Hotel, Taunton, on December 14th, specially convened to take into consideration a letter from Mr. Wheelhouse, President of the Committee of Council, issued (under circumstances which were fully stated in the JOURNAL of Dec. 2nd, at page 1111) with a view to elicit the opinion of each Branch of the Association as to whether or not its members considered they were properly and adequately represented on the Committee of Council. There were present H. P. OLIVEY, Esq., President, in the chair, and five other members.

Answers from Absent Members.—The HONORARY SECRETARY stated that he had sent out, with the notice of the meeting, a copy of the three principal questions to which Mr. Wheelhouse desired to receive answers from members, and had requested that gentlemen unable to attend would return these questions answered. The questions submitted were as follows.

1. Are you satisfied with the present method of representation of this Branch in the Committee of Council of the Association by the honorary secretary, *ex-officio*?

2. Are you aware if any feeling exists in the Branch of inadequate representation?

3. Have you any suggestion to offer on the subject?

Twenty-five members returned the questions answered, almost uniformly as follows:—To question 1, Yes; to questions 2 and 3, No.

The answers were laid before the meeting, and all which contained remarks or comments were read.

Discussion.—Mr. Wheelhouse's letter and the questions appended to it were read and discussed.

Announcement from the Honorary Secretary.—Dr. Kelly announced to the meeting that the state of his health prevented him from undertaking the necessary journeys to attend meetings of the Committee of Council, and that he should be glad to be relieved from his office of representative.

Resolutions.—The following resolutions were passed.

1. That, in the opinion of this meeting, the existing By-law of the Association, No. 25, and the resolution passed by the Committee of Council on October 15th, 1879, defining the powers given by that By-law to Branches for appointing an *ex officio* representative, are sufficient, and that no alteration in the By-laws of the Association on this subject is required.

2. That, under the circumstances of Dr. Kelly having intimated to this meeting that he is unable, from the state of his health, to attend the meetings of the Committee of Council, and that he should be glad to be relieved of his office of representative, in the opinion of this meeting, the power to elect a special Honorary Secretary to represent this Branch in the Committee of Council should be considered, and, if thought proper, be acted upon by the next general meeting of the Branch.

General Practitioners not sufficiently represented.—Three of the gentlemen at the meeting wished their opinions to be recorded to the effect: That the general practitioner is practically not sufficiently represented on the Committee of Council.

NORTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held in the Belfast Royal Hospital on Thursday, December 7th, at twelve o'clock. The President, Dr. JOHN MOORE, Belfast, occupied the chair, and there was a large number of members present.

New Members.—Sixteen new members were elected.

Collective Investigation.—A small subcommittee, consisting of the President, Dr. Whitla, Dr. Byers, and the Honorary Secretary, were appointed to manage the work of collective investigation.

Changes in the Laws.—In pursuance of notice given at the last general meeting of the Branch, Dr. M'Keown proposed certain resolutions amending the by-laws of the Branch, which were seconded by Dr. Maconchy (Downpatrick), and adopted.

Representation of the Branches in the Committee of Council.—The circular letter from the President of the Council in reference to the representation of the Branches in the Committee of Council was read to the meeting, and it was resolved:

"That the Honorary Secretary answer the queries appended to the circular from the President of Council so far as the facts warrant, and that the whole of the questions involved be referred to the Council for consideration and report at the next meeting of the Branch."

Communications.—The following communications were read.

1. Dr. M'Connell showed a patient with an Artificial Anus at the Umbilicus, the result of the sloughing of a large umbilical hernia.

2. Dr. Byers showed an interesting case of Sporadic Cretinism.

3. The President read the notes of a case of Cancer of the Fundus and Body of the Uterus.

CORRESPONDENCE.

A NEW MODE OF AFFORDING PERMANENT RELIEF TO INTRACTABLE CHRONIC CYSTITIS, AND TO CONFIRMED PROSTATIC RETENTION OF URINE.

SIR,—I am fully acquainted with the case reported by Mr. Teevan, in the *Transactions of the Clinical Society* (Vol. xii. "A Case of Cystotomy," by W. F. Teevan, page 148, March 28th 1879), to which he calls my attention, and on which he rests his claim to have performed "the very operation," which I have recently termed "a new mode." And let me first say that, had I, when publishing my own plan, referred to his proposal, I could not have avoided the ungracious task of pointing out its serious defect; a necessity, however, which is now imposed upon me. My reply is simple and distinct. So far is my procedure from being identical with Mr. Teevan's, it is, on the contrary, opposed to it in the most essential particular.

The paper to which he refers me describes the only case of the kind, so far as I can ascertain, that he has ever published, and is entitled, "A Case of Cystotomy"; in which, to use the author's words, he not merely "opened the membranous urethra" (which is all I do), but "*incised the prostate and neck of the bladder vertically downwards*" as well. Hence, the term "cystotomy," rightly chosen to designate the proceeding, and not "external urethrotomy" (which, in his second Lettsomian lecture, is applied to it); because, while the first incision might certainly be so described, a second and deep incision followed the first. To this lecture Mr. Teevan also refers me, to illustrate the "*raison d'être*, results, and indication," of the same operation, relative to which I have no controversy with him, since I agree with him that "the incisions of lateral lithotomy are unnecessarily severe"—far too severe—for the purpose.

But it is the incision of the neck of the bladder which he adopted in his case, that I regard as unnecessary and dangerous; and I have emphatically pointed out in a paper at the Royal Medical and Chirurgical Society and elsewhere, that my proceeding is not cystotomy, but an incision from the perinæum to the membranous urethra only; an incision sufficing merely to admit the index finger, and therefore almost absolutely devoid of risk. The primary object I had in performing it, was to make "digital exploration" of the bladder, for the diagnosis of obscure diseases (*vide Lancet*, May 6th, 1882*), a method of prosecuting such inquiry not before adopted. It was in connection with several cases of this slight exploratory incision† that I found it amply sufficient to afford rest and drainage to the bladder for the prostatic cases in question; and I desired to substitute it for the "lithotomy" and "cystotomy" which have been long ago employed for that purpose both here and elsewhere although on rare occasions.—I am, Sir, yours obediently,

HENRY THOMPSON.

Wimpole Street, January 22nd, 1883.

MOVABLE KIDNEY.

SIR,—Will you allow me a word on this subject, to say I have been a good deal misunderstood about it? I did not say that I had never seen a kidney that was movable. Nearly all enlarged kidneys are more or less movable; some of them, like Dr. Baines's case, very movable indeed. But confining the term "movable kidney" to the state in which the kidney moves by reason of the existence of a mesonephron, I have never seen, nor is there recorded, so far as I can

*"On Digital Exploration of the Bladder through Incision of the Urethra from the Perinæum."—*Lancet*, May 6th, 1882, pp. 724–5.

† I have done this now in fourteen cases of obscure vesical disease, finding and removing tumour in no less than five of them.

liscover, any instance where by reason of this kind of mobility, a 'movable kidney" has been an incident of any pathological importance.—I am, your obedient servant, LAWSON TAIT.

A PRESCRIPTION FOR ACUTE GOUT.

SIR,—Will you allow me to ask practitioners who happen to have 'acute gout" under treatment, to test the value of the combination f familiar drugs set forth in the following prescription? With the xception of the glycerine, which I have recently added, it is a ormula which I constructed on the basis of very striking results btained shortly after the trial made of hydrochlorate of ammonia or the relief of "neuralgic" and arthritic—which is also neuralgic -pain, about twenty years ago.

At the date mentioned, it was permissible to suppose that the hlorate of potass in every mixture parted with some of its 39 per ent. of oxygen during its passage through the blood, and contriuted to the cure by oxidising the uric acid, and thus promoting its limination as urea. Subsequent experiment has demonstrated that, nder the ordinary conditions of its administration, chlorate of potass is not decomposed in the organism, but passes through unaltered, istead of appearing in excretions, as chloride of potassium. I venure to submit that it is not by any means certain that chlorate of otass undergoes no change when administered in the combination ven below.

However this may be, unless I am greatly deceived, the chemical sults of employing the formula in acute gout—the more sthenic ie better—will prove extremely satisfactory. There are, of course, veral obvious ways of explaining the effect produced. I will not w trouble you with my own hypothesis, but simply ask the prossion to give the prescription a trial, carefully noticing the results tained as regards (1) the relief of the pain; (2) the reduction of mperature, general and local, *i.e.* in the inflamed joint or joints;) the rapidity of the subsidence of the attack; and (4) the cometeness and brevity of the convalescence.

I will give the prescription simply as I write it:—

Ammonii chloridi ℥ij; potassæ chloratis ℥iss; tincturæ iodi ; glycerini ℥vj; aquam destillatam ad ℥vj; misce fiat mistura, cujus mantur cochlearia duo magna,, quartâ (vel tertiâ) quâque hora.

If there be much thirst, it is well to give the dose of this mixture ther diluted with water. In the intervals of successive attacks of ut, while the *malaise* lasts, great benefit is often derived from the e of a single dose, freely diluted, every morning before breakfast.

Your obedient servant, J. MORTIMER GRANVILLE.

16, Welbeck Street, W., Jan. 22nd 1883.

P.S.—I hope those who make a trial of this combination will ort results, as many interesting questions are involved.

THE HOUNSLOW TRAGEDY.

IR,—The jury empanelled to inquire how, and by what means, William Whitfield Edwardes, late of Bath Road, Hounslow, ie by his death, having returned a verdict which, as I have read evidence, meets the just requirements of the case, I write to exss the hope that the members of the Association generally will ress their opinion on this sad story.

f this view meet with approval, the most practical and benel way in which the Association can mark its sense of the moral obation under which the two principal actors lie, is to raise a l for the benefit of the widow and children who have been so lly despoiled and sadly wronged. I therefore, through your mns, ask the aid of the Association for this object.—I am, sir, s obediently, JOSEPH ROGERS.

, Soho Square, January 20th, 1883.

THE CONVICT PRISON SERVICE.

R,—I must congratulate you on the article headed "Association ng Prison Medical Officers" which appeared in the last issue of paper.

at it is time for the prison doctors to combine for the purpose irecting the Home Secretary's attention to their claims and ances, no one can doubt; and I am certain that anyone who s the prison service, will agree with me when I state that, of all superior prison officers, the medical man has the most nsible, arduous, and painful duties to perform. Prisoners are nually attempting to escape labour on the plea of sickness; e great care is necessary lest cases of real illness be overlooked. again, upon the medical man rests the responsibility of seeing the punishment to which prisoners are subjected does not produce an injurious effect. In fact, I do not think I shall be exaggerating the subject when I say that the whole working of the prison depends on the medical man, as no prisoner can undergo any form of punishment, be received into the prison, or be placed at any labour without the doctor's instructions. Now what salary does the prison surgeon receive for these responsible and disagreeable duties.

I will answer my question by quoting from a previous number of this paper which stated, "that the pay of an assistant-surgeon is £210 a year, which, in some instances, is less than that of the clerk of the works and the chief warder; and it is only a little more than half that of a deputy governor, whose duties are purely mechanical, and who has plenty of spare time at his disposal; whereas an assistant-surgeon must be always at hand in case of any emergency; for if he were absent at such a time, he would probably have the facility of encountering a coroner's jury, ready to catch at any excuse to censure him."

In conclusion, I may ask, why is the prison surgeon treated thus? Does he perform his difficult work less faithfully than the other superior officers?—I enclose my card, and am

Your obedient servant,

FAIR PLAY.

SUNSHINE IN THE ISLE OF WIGHT.

SIR,—I enclose you a record of bright sunshine at St. Lawrence, Undercliff, Isle of Wight, as compared with that given in the *Times*, observed at Kew. You were kind enough to publish a similar table last year, and I should feel obliged by your doing the same this year.—Believe me, truly yours, J. B. MARTIN.

Belgrave House, Ventnor, I.W., January 9th, 1883.

1882.—*Summary of Bright Sunshine, as recorded by W. E. Kilburn, Esq., St. Lawrence, I.W., compared with that at Kew derived from the "Times".*

SUMMARY OF MONTHS.

St. Lawrence.	Hrs.	Mins.	Kew.	Hrs.	Mins.
January	33	21	January	33	—
February	70	42	February	40	—
March	165	44	March	142	—
April	196	47	April	157	30
May	274	28	May	283	—
June	159	12	June	140	—
July	141	8	July	170	30
August	252	29	August	177	—
September	165	33	September	115	—
October	102	49	October	73	37
November	99	6	November	86	—
December	47	59	December	27	—
	1709	18		1444	37

Note.—It is necessary to bear in mind that the foregoing tables contain the record only of bright sunshine, and do not include days which might otherwise come under the category of bright and sunny days; haze and mist, or the passing of a light cloud, arresting the power of the recording instrument.

With regard to St. Lawrence, some allowance should also be made, in consequence of the Undercliff falling into shade between 6 and 7 in the evening during the summer months. As an example, in the week ending March 22nd, the total "possible quantity of sunshine at Kew was 84 hours, and at St. Lawrence 80—30"; and in the week ending May 17th, "possible quantity at Kew 108, St. Lawrence 93—40."

It will be perceived that the months given are not regular calendar months, the record of one month running occasionally into that of another, which arises from the desire to make them correspond with the record published in the *Times* each Thursday. It is perhaps worthy of note that the excess of sun occurs during the months when it is most valuable to the invalid.

THE CONTAGIOUSNESS OF PULMONARY PHTHISIS.

SIR,—Though a member of the British Medical Association, and a "constant reader" of the BRITISH MEDICAL JOURNAL, I have not made medicine my profession. I earn my bread as a minister of the Scotch Kirk. But I am deeply interested in the inquiry as to the contagiousness of pulmonary phthisis, and, with your leave, would like to offer three suggestions in furtherance of that inquiry.

1. Among the Highlanders of Scotland, consumption has long been regarded as contagious. When a boy, about forty years ago, I remember being warned by an old Highland lady against sleeping with a youth of my own age who was supposed to be consumptive. Her words were remarkable, for there were no lady doctors in her day: "His breath will give you *white lights*;" that is, white lungs. The old lady's words have often come back to me as characteristic of not a few tubercular lungs which since then I have seen cut up for pathological demonstration.

2. Might not the Collective Investigation Committee inquire with

advantage into the effects on a healthy wife of a phthisical taint acquired, through the fœtal circulation, from her tubercular husband? Is that effect direct and immediate, as in the case of a syphilitic taint similarly acquired? or is the effect only such as to engender a constitutional predisposition to the more palpable contagion from the breath of her phthisical husband?

3. Might not some valuable results follow an inquiry into the history of phthisis in regions of the world and among races of men till lately supposed to enjoy a happy immunity from that fell disease?

It is not many years since the late Sir Robert Christison wrote a paper to explain the immunity from phthisis of our Western Isles. These once happy isles are now notorious for the large number of their phthisical and scrofulous sufferers.

The late Professor Bennett of this city used to recommend Canada as a hopeful sanatorium for consumptives. Consumption may now be called the peculiar scourge of the Dominion—at least, of its older provinces.

It is still a common thing to send consumptives to Australia; and it cannot be denied that some of them come back to us with every appearance of having derived benefit from the change. I shall not here inquire how much of this apparent benefit is due to the change and rest of the long sea-voyage; but there can be no doubt that our Australian colonies have now their own full share of native pulmonary phthisis.—I am, sir, your obedient servant,

DONALD T. MASSON, M.A., M.D.

Edinburgh, January 9th, 1883.

SYMMETRICAL GANGRENE.

SIR,—In the *Provincial Medical and Surgical Journal* for July 1846, I published a case of symmetrical gangrene, which had occurred in the practice of Mr. Nott of Bere Regis, Dorset, with a portrait of the patient taken and engraved by myself on the glyphographic method. Mr. Nott called his case "spontaneous dry gangrene," and Dr. Henry of Philadelphia, to whom you refer in your notice of Dr. Southey's case in last week's JOURNAL, gives the name of "idiopathic gangrene," to the case he had met with. Mr. Camps of Fenny Stratford published, as an "original communication," in the *British and Foreign Medical-Chirurgical Review*, July, 1855, a "Supposed Case of Ergotism." All these appear, from their history, to have been cases of "Symmetrical Gangrene." I now refer particularly to the one narrated by myself, because the symmetrical condition is clearly shown in the portrait. The gangrene in each hand, in each cheek, in each ala of the nose is distinct. I may mention that I believe the glyphographic block to be still in my possession, if, at any time, it were thought advisable to reproduce the portrait.—I am, etc.,

HENRY DAYMAN, F.R.C.S.

Millbrook, Southampton.

THE PREVALENCE OF SYPHILIS.

SIR,—It would be interesting to know, just now, whether syphilis is on the increase, at a standstill, or declining in towns unprotected by the Contagious Diseases Acts. A comparison of 725 consecutive cases of venereal disease, seen at the Liverpool Seamen's Dispensary by my colleague, Mr. F. W. Lowndes, and myself, during the years 1878, 1879, 1880, 1881 and 1882, shows the percentage of syphilis and the proportion of its stages to be as stated in the following table:

Year.	Venereal Disease.	Primary.	Secondary.	Tertiary.	Percentage.
1878	725	79	74	3	21½
1879	725	79	71	6	21½
1880	725	78	58	4	19⅓
1881	725	95	86	8	26
1882	725	94	72	5	23½

Perhaps some of your readers, who take an interest in the subject, will contribute their experiences.—I am, sir, yours obediently,

A. BERNARD, M.B., Surgeon to the Liverpool Lock Hospital.

Liverpool.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW ROYAL ASYLUM.

AT the annual general meeting of the supporters of this institution, held on the 11th inst., the report, which was read and adopted, showed that during the past year there had been 152 admissions, 111 discharges (of which 58 were recoveries), and 38 deaths, the total number of inmates at the end of the year being 486, as compared with 483 at the beginning of the year. Of this total, 271 are private patients, and 215 are chargeable to parishes. The Commissioners in Lunacy have twice visited the Asylum during the year, and their official reports have been in all respects most satisfactory. The noticeable feature in the report is that there has been in the year just passed a decided increase in the number of private patients as compared with parish ones, showing that in receiving this class of cases the institution is meeting a great public want. The financial statement submitted to the meeting was very satisfactory, as it showed that, after meeting all the liabilities of the institution, there was on hand the sum of £11,935.

CORK WORKHOUSE.

DR. BRODIE, Local Government Board Inspector, in his half-yearly report, states that the workhouse is adequate to the wants of the Union, and there is no overcrowding except in the female lunatic ward. No effectual steps have, as yet, been taken by the Guardians to relieve the pressure of accommodation in this department additional space being very much required, as the sleeping rooms are much overcrowded. A committee of the Guardians was appointed subsequently to the visit, in July last, of Dr. Nugent, Inspector of Asylums, to try to obtain some suitable building for the accommodation of the class in question; but they did not succeed, and Dr. Brodie is of opinion that a new building will have to be erected. As regards the arrangements for medical attendance and nursing in the sick wards, they are stated to be sufficient; the attendance, however, of the gentleman who acts as apothecary and resident medical officer not being at all satisfactory. The recent inquiries at the workhouse, and the frequent absences of Dr. Magner, have revealed a state of laxity in the discipline of the workhouse which reflects on the master's system of management; and the ease with which visitors to officers obtain permission to remain in the workhouse to late hours, and frequently overnight, for lengthened periods, in the fever hospital, shows that the superior officers have fallen into a state of great indifference to the enforcement of that strict discipline necessary to the proper conduct of the establishment.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL ORGANISATION: A WARNING AND A SUGGESTION.

SIR,—The outcome of the present Committee on Army Medical Organisation awaited with the keenest interest, not unmixed with anxiety, by the medical officers. It is certain that, whether for good or ill, it will mark a most important turning-point in the history of the Army Medical Department. as in your recent editorial comments you remark, it be "an open secret" that the military members of the Committee are strongly predisposed to supersede the present disciplinary powers of medical officers by a system of combatant control over military hospitals, the predisposition must be regarded as extremely unfortunate; for any scheme of reorganisation that may accrue from it is, without a doubt, doomed to failure, and moreover, cannot fail to be attended with the most mischievous results to the department which it is sought to improve. You judge rightly in supposing that a system equivalent to the *intendance* which for years proved the bane of the French medical service, culminating in such glaring scandals and inefficiency as ultimately to lead to its abolition, cannot, and will not, be tolerated by British medical officers. It may be introduced with all the flourish and authority of a Royal Warrant, but it is as certain as anything that can be predicated of the future that it will speedily share the fate of the brilliant inspiration of the wise who, not long ago, suggested the "ten years' system". Its promulgation may retard and postpone the fulfilment of the aspirations of the more zealous and energetic members of the department, but it will never do away with them. The objections to such a system are so numerous, and to anyone who will give a moment's unbiassed thought to the subject so extremely obvious, that I hardly think it necessary to refer to them. If the members of the Committee hesitate to allow any weight to theoretical objections, let them, at least, give heed to the teaching of experience, which shows that the system has always signally failed wherever it has been tried. To anyone with the welfare of the department and the honour of the medical profession at heart, it is positively painful to contemplate the ill effects on the members of the department which would be likely to arise from such a system. It would be destructive of self-respect and the sense of responsibility. In the energetic, it would provoke resistance and obstructiveness; in the careless, apathy. To a large number of the senior officers its enforcement would be the signal for retirement from the service which no longer possessed any attractions for them: while for the juniors, it would point to a cheerless and uninteresting future, and remove all incentive to hard work and the attainment of excellence as army surgeons

And I have no hesitation in asserting, also, that, even should it not prove absolutely deterrent to would-be candidates for the department, it would be the means of introducing a class of men socially and professionally inferior to those at present obtained. With all due respect for the opinions of some of the profession in civil life, and even of some well meaning members of the department, it is the merest folly to suppose that the functions of an army surgeon can ever be purely professional.

How anyone conversant with the requirements of our daily life in peace or war can hold such a view, it is difficult to imagine. The sphere of professional work in the service is necessarily so limited and circumscribed, that it hardly affords a fair field for a man of the most ordinary ability and energy. I do not hesitate to say that the humblest village practitioner, in the superior facility which he enjoys of pursuing his cases to their termination, is more favourably placed than any of us for the attainment of professional excellence. Our *raison d' être* as army surgeons is, that we may contribute to efficiency; and the qualities which among us are recognised and rewarded are certainly not those which would be regarded as purely professional. The man who seeks professional eminence and its attendant rewards had better seek it anywhere rather than in the Army Medical Service. This may appear a startling statement; but it is true. Does it follow, then, that the army offers an unworthy career to a medical man? By no means. Exercised as it ought to be, the function of an army surgeon is as high and as noble a one as any to which a man can devote himself. In the combination of competent professional skill with coolness, courage, and devotion under the most trying circumstances, a capacity to organise and deal with men, and moral courage of a very high order, which should characterise the true army surgeon, we have an assemblage of qualities which few careers in life tend more frequently to elicit. But it is just because we aim at a high ideal, and would try in every way to increase our usefulness, that we have been accused so frequently of late of "aping the combatant." Would it surprise those who make the accusation, and find food for ridicule in what they no doubt consider our eccentricity, to be assured that, notwithstanding the flattery implied by partial imitation, there are no army surgeons of the right sort (and certainly not those who have most incurred the displeasure of a puissant military contemporary), who would dream of abandoning their own calling for all the honour and prestige which a so-called combatant position could bestow? Let them, however, rest perfectly satisfied that such is the fact. The general sentiment of the department is undoubtedly one of professional pride; and it is precisely because its members are animated by such pride that they are endeavouring to secure for the profession in the service a position in which its mobility and usefulness may be more manifest. They desire to import into it no larger amount of "combatant" duty than may be found absolutely necessary for cohesion and efficiency.

The proposal, which is also said to be under consideration, of attaching a surgeon, for a limited period, to each corps, is one which, it is earnestly to be hoped, will not be carried into effect. It would certainly weaken, and injuriously affect, the working of the department; and the necessity for such a step at the present day is, I maintain, purely imaginary. The want which it is chiefly intended to supply may, as has been pointed out elsewhere, be fully met by appointing to each considerable garrison, for a certain number of years, a staff-surgeon of skill and experience, to whom all officers and their families could appeal with confidence for professional advice. Such a position would be sought after by many officers of sound professional attainments, and would be infinitely preferable to the rather anomalous standing which temporary attachment to a regiment would give them.

Let us, then, sincerely hope that the members of the committee will hesitate to suggest "reforms" of a kind which will inevitably retard the attainment of the object which they are supposed to have in view, viz., the efficiency of the medical service, and may possibly be productive of untold misery to the men who fight our battles. If, on the other hand, setting aside sentimental or prejudiced views, they will only shape their recommendations in accordance with the general opinion of the profession, in and out of the service, they will have conferred a benefit on the army and on the department, which will be speedily recognised. The true reforms urgently called for in the Army Medical Service may be very briefly stated.

1. Amalgamation of the Army Medical Department with the Army Hospital Corps under a suitable title, which will obtain for it recognition as one of the scientific corps of the army.

2. Full and complete disciplinary power, such as that accorded to the officers of any other corps in the service, to the medical officers over their own men.

3. A system of corps and hospital organisation, approaching more, in point of autonomy and mobility, to that of the fighting units of the army than at present obtains.

4. Adequate increase in the *personnel* of hospitals and bearer companies.

Should these reforms be accomplished, we have no fear for the result. They would entail far less expense than would be incurred by return to a modified regimental system, or the employment of military commandants of hospitals, and would, in the opinion of those best qualified to judge, be a final settlement of the long vexed question of army Medical organisation. VATES, A.M.D.

January 21st.

THE late Deputy Surgeon-General James E. Dickinson, whose death announced, will be remembered by most officers who have served British Burmah as the Civil Surgeon at Rangoon for a number of ars. He entered the Madras Army in September, 1851, and served the following year in the Burmese campaign, being in medical arge of Martaban during its blockade by the enemy (medal with sp). He became surgeon-major in 1871, and was afterwards ncipal of the Medical College of Madras.

N accordance with the provisions of Her Majesty's Order in Coun- of April 1st, 1881, Inspector-General of Hospitals and Fleets, ouel Sloane Dalzell Wells has been placed on the retired list of rank from the 16th instant.

AVAL APPOINTMENTS.—Horatio R. Sparrow, surgeon, additional he *Nelson;* William G. O. Smith, surgeon, to the *Cleopatra*, vice nell; Edmund D. Maddick, surgeon, additional, to the *Pembroke;* n S. Logan, M.D., surgeon, additional, to the *Duncan;* Thomas Nunan, M.D., surgeon, additional, to the *Cambridge;* William H. Norman, surgeon, additional, to the *Vernon;* Robert J. Lawson, M.B., John Cushin, Francis Woore, and John M. Phillips, to the Plymouth Hospital.

BRIGADE-SURGEON Henry Richard Lobb Veale, M.D., has been granted retired pay, with the honorary rank of Deputy Surgeon-General. Brigade-Surgeon John Sarsfield Comyn, M.B., has been granted retired pay, with the honorary rank of Deputy Surgeon-General. Surgeon-Major Henry Carden Herbert, M.D., to be Brigade-Surgeon, *vice* J. H. Beath, M.D., C.B., granted retired pay. Surgeon-Major Robert Owen Hayden to be Brigade-Surgeon, *vice* F. M. Skues, granted retired pay. Surgeon-Major David Arno Smet Thorburn, M.D., retires from the service, receiving a gratuity.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE SANITARY INSPECTION OF HOUSES

AT the meeting of the Society of Arts, on Tuesday night last, under the presidency of Captain GALTON, a paper was read by Mr. W. K. BURTON, on the subject of "The Necessity of the Sanitary Inspection of Houses." It was illustrated by some diagrams of the defective style of drainage most usually in vogue, even in the best sort of London houses, contrasted with what modern sanitary science requires, and some specimens of defective apparatus taken from buildings that have undergone examination, in which they were acting as most efficient means of introducing sewer gas and typhoid fever into premises they were designed to protect. Having insisted on the importance of skilled inspection, to be sure that the system of house drainage is doing its work efficiently, Mr. Burton explained that such efficiency was only attained, first, when all matter placed in any of the sanitary appliances of a house was carried with the greatest possible expedition clear of the premises, leaving behind it as little deposit as possible; secondly, when all sewer air was prevented from entering the house by the channels which serve to carry away the sewage; thirdly, when all air, even from sink, bath, and other waste pipes, was kept out of the dwelling rooms; and finally, when a constant current of fresh air was established along every pipe in which it was possible that decomposing matter might exist, so that it might be rapidly oxidised, and rendered innocuous. Some interesting statistics were given of the defects discovered in 523 houses which have undergone sanitary inspection during the past two years, in which it was found that no less than 68 per cent. had appliances of some sort intended to exclude sewer gas, but which, on account of objectionable arrangement or faulty principle, were found to be only very imperfectly fulfilling their object. In 37 per cent. of the houses, direct communication had been found between the drain or soil pipes and the drinking water cisterns; and in many more, though the communication was less direct, it still existed to an extent to make the advent of typhoid germs the most probable thing in the world. Mr. Burton described the means by which the modern sanitary engineer tests "solutions of continuity" in the recondite underground drainage system of a house to be examined, the first of which is to introduce a little oil of peppermint dissolved in boiling water into the pipe from the outside of the building. The pungent penetrating odour speedily permeates the whole circulating system of the establishment, and, if there exist the slightest break, makes itself known to the olfactory nerves of those who are legitimately poking their noses into the most probable holes and corners for its detection. A better plan still is the injection of smoke from a centrifugal pump, by which the pipes may be so charged that the smoke escapes from every break, and these are immediately localised by being seen. A perfectly drained house should have small drain pipes perfectly jointed with a sharp fall along their entire length, and should be disconnected from the sewer by a trap, no appliance being allowed to discharge into the sewer directly, while it should be accessible for inspection throughout simply by lifting certain iron covers.—In the discussion which followed, Mr. R. RAWLINSON, C.B., said that he agreed with the lecturer that every house required careful sanitary examination; and he would add that if a house had not been inspected by a competent person there were very long odds in favour of its being in a defective condition. He could speak on that point from experience, ranging from the humblest cottages to the most magnificent palaces, for it had fallen to his lot to examine houses of every class, from Windsor Castle down to a beggar's common lodg-

ing-house, and he could testify to the great necessity that existed for the lessons they had just heard being repeated incessantly. It was a most unsatisfactory feature in regard to house sanitation that in many cases persons who complained of their houses, and who went the length of skilled examination to find out the defects, shrank then from the cost of making them fit to live in. Nothing, in his opinion, could be more foolish, for healthy human life was the first essential of all enjoyment of existence, and such an expenditure ought to be incurred at any shift. He was sorry to say that in many cases it was an expensive process, but that would in time be obviated by the adoption of better principles of construction, when the needful sanitary appliances would be comparatively cheap. The very first principle of such construction should be, that no drain should pass under any portion of a building. In London, where houses were built in streets, it was impossible to avoid that faulty construction, and the remedy was to make the necessary drains of cast-iron pipes, soldered as for gas and water, and to ventilate them at the back and front of the house, and so to insure that there shall be no escape of sewage or sewage-gas in the basement. From our defective municipal system in London a heavy duty was inflicted on builders who connected houses with the public sewers, and this led in many cases to no junction being made in the case of new houses between the drains and the sewers, with unsanitary consequences that needed no comment.—Sundry other experts bore testimony to the very unsatisfactory condition of things as at present existing in the metropolis, and it was mentioned that in New York recent sanitary requirements obliged every person building a new house to employ the jointed and ventilated iron pipes on which Mr. Rawlinson had insisted.

CERTIFICATION OF PAUPER LUNATICS.

SIR,—I was glad to see your article in last week's JOURNAL, in reference to the certification of pauper lunatics in Birmingham. The medical staff of the parish totally deny any irregularities on their part, but for many years past have objected to certify, not only to paupers, but more so to patients far above that grade, for the paltry remuneration of £5 per year, directly contravening the Law of Lunacy, by which two medical certificates are necessary in cases not paupers.

Having, after many years' agitation to put the matter in its legal form, at last induced the authorities to see it in its legal light, the whole protective spirit of the Lunacy Law is done away with by appointing one self-interested person to certify for all and every so-called pauper lunatic in the parish of Birmingham. The law expressly states that a magistrate, upon information from a proper authority, "shall call to his assistance a qualified practitioner", and expressly stating that he has done so in his certificate. Now, it so happens that, in our united long experience, we have never been called upon to see a case in conjunction with a magistrate—a strong instance of the illegality of the whole practice for a considerable time past.

The medical staff do not object to lose so onerous, difficult, and unremunerative an appointment as it now is; but as the result of their exertions to have the law properly and fairly carried out, they do feel that they should be placed at least in the same position as the whole of the Poor-law medical officers of the kingdom.—I am, sir, yours faithfully,

JABEZ JACKSON,
One of the District Medical Officers for the past seventeen years.

Birmingham, January 23rd, 1883.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 23rd instant.

Messrs. A. Arthur Ward, Walpole Street, S.W.; G. Sleaman Arthy, Manchester; J. Aspinall Marsden, Camberwell; St. J. Outlaw Rands, Northampton; Alexander Wilson, Manchester; J. Archer Buck, Newmans Row, W.C.; Albert Gresswell, Louth; H. Holdrich Williamson, Mildmay Park; S. Thomas Salter, B.A.Cantab., Woburn Place; Benjamin H. Lane, L.R.C.P.Edin., Victoria Street, S.W.; H. Lyttleton Holt, L.R.C.P.Edin., Devonshire Terrace, W.; J. Arthur Unitt, L.R.C.P.Edin., Walsall; and Richard Holton, L.S.A., Lincoln.

Two gentlemen passed in Surgery, and when qualified in Medicine will be admitted Members of the College; and six candidates were referred to their studies for three months, and nine for six months.

The following gentlemen passed on the 24th instant.

Messrs. T. George Davy, B.A.Oxon., Exeter; E. Wilkinson Roughton, Brook Green; A. John Williams, Charterhouse Square; Walter Dowson, Upper Chadwell Street; J. Henry Targett, Idmistone; M. Alexander Muirhead, Jamaica; H. Pottinger Keatinge, Trinity Square, S.E.; Yasuzumi Saneyoshi, Tokio; C. John Power, B.A.Cantab., L.R.C.P.L., Torquay; F. Edward Pearse, Frome; E. Waldemar Von Tunzelmann, Wimbledon; Herbert Owen, Coventry; H. Louis Albert, Sloane Street; and C. Gordon Brodie, Isle of Wight.

The following seven candidates, who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members of the College.

Messrs. John Orford, L.R.C.P.L., Ipswich; Adolphus V. Bernays, M.B.Edin., Birmingham; J. Rowland Payne, L.R.C.P.Edin., Coleford; Charles Harrison, L.S.A., Braintree; C. Stephen Sparkes, L.S.A., Guildford; H. Morgan Davidson, L.R.C.P.Edin., Aldebrugh; and F. Thomas Frampton, L.R.C.P.Edin., Gloucester Terrace, W.

The following candidate, who had previously qualified in Surgery and Medicine, having passed in Midwifery, was also admitted a Member.

S. Reginald Dyer, Harlesden, N.W.

Four candidates passed in Surgery, and when qualified in Medicine and Midwifery will be admitted Members of the College. Four candidates, having failed to acquit themselves to the satisfaction of the Court, were referred for three months, three candidates for six months, and one for nine months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 18th, 1883.

Butler, Francis Henry, 25, Paddington Green, W.
Verity, Herbert William Steele, Cheltenham.

The following gentlemen also on the same day passed their Primary Professional Examination.

Bird, Henry, University College.
Newey, William Edward, Middlesex Hospital.

UNIVERSITY OF CAMBRIDGE.—The following lists of candidates examined and approved have recently been issued.

First Examination for Degree of M.B. Class 1.—Fuller, St. John's; Kimmins, Downing; Sprague, St. John's. Class 2.—Andrews, St. John's; Arkle, Gonville and Caius; Carter, Pembroke; De Jersey, Pembroke; Dickinson, Gonville and Caius; Dickinson, Downing; Dickson, Jesus; Douty, King's; Emerson, Clare; Ferguson, Gonville and Caius; Gervis, Trinity; Graves, Gonville and Caius; Hiley, Pembroke; Jaques, B.A., St. John's; Kerr, St. John's; Luard, St. Catherine's; Manners, B.A., Pembroke; May, Trinity; Mitchell, Gonville and Caius; Olive, St. John's; Parker, Cavendish; Ronald, Trinity; Shaw, Gonville and Caius; Smyth, B.A., King's; Trott, Gonville and Caius; Tuppen, Gonville and Caius; Turner, non-collegiate; Van, Cavendish; White, Clare; Wickham, Gonville and Caius; Wilkinson, St. John's; Williams, St. John's; Wynne, St. Catharine's.

Second Examination for Degree of M.B. Class 1.—Evans, Clare. Class 2.—Castle, B.A., Pembroke; Clapp, Gonville and Caius; Clark, B.A., Gonville and Caius; Dickinson, B.A., St. Peter's; W. P. Graham, Gonville and Caius; Hillier, B.A., Gonville and Caius; Maudslay, Christ's; Piggott, B.A., Emmanuel; Priestley, B.A., Trinity; Ritchie, Trinity; Rutherfoord, B.A., Gonville and Caius; Stericker, Clare; Whishaw, Cavendish; White-Cooper, B.A., Trinity.

Third Examination for Degree of M.B.: Part II. Class 1.—Brinton, B.A., Downing; Fuller, B.A., Gonville and Caius; Harrison, M.A., Clare; Richardson, M.A., King's; Shield, Downing. Class 2.—F. J. Allen, B.A., St. John's; Bullar, B.A., Trinity; Buller, M.A., Trinity; Driver, M.A., Christ's; Hewitt, B.A., Christ's; Holthouse, M.A., Trinity; Newnham, M.A., Gonville and Caius; F. F. Schacht, Trinity; Swift, B.A., Gonville and Caius; Vos, B.A., Christ's.

M.D.—The degree of Doctor of Medicine has been conferred upon William Collingridge, M.A., M.B., S.Sc.Cert. Camb. (Christ's College), Medical Officer of Health of the Port of London. The subject chosen by Dr. Collingridge for Thesis was, "Scurvy; its Causes and Prevention."

UNIVERSITY OF DURHAM.—At the recent final examinations for the degree in Medicine and Surgery, the following candidates satisfied the examiners.

Degree of Doctor in Medicine for Practitioners of Fifteen Years' Standing.—Ptolemy S. H. Colmer, L.R.C.P.Edin.; Philip Cowen, M.R.C.S.Eng.; Eugene Goddard, L.R.C.P.Lond., M.R.C.S.Eng.; Alex. Clement Rayne, M.R.C.S.Eng., L.S.A.; George Thompson, L.R.C.P.Lond., M.R.C.S.Eng.

Degree of Doctor in Medicine.—Alex. Wm. W. Dowding, M.B.; Thomas Dutton, M.B., L.R.C.S.Edin., M.R.C.P.Edin.; Alfred Mantle, M.B., M.R.C.S.Eng.; George Lucas Pardington, M.B., M.R.C.S.Eng.

Degree of Master in Surgery.—Charles H. Melburn, M.B.; William J. Sheppard, M.R.C.S.Eng.

Degree of Bachelor in Medicine.—David Henry Barley; F. W. Giles, M.R.C.; Percy Brown, M.R.C.S.Eng.; Isaac Hartley; William J. Sheppard, M.R.C.S.

A gold medal for the best thesis for the degree of Doctor in Medicine was awarded to W. S. Porter, M.B.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the quarterly examination for the Certificate in Sanitary Science, held on Thursday and Friday, January 11th and 12th, the following candidates were successful.

George Purcell Atkins, L.K.Q.C.P., 1882, Dublin; John Byrne Power, L.K.Q.C.P., 1871, Kingstown.

At the First Professional Examination, held on Monday and Tuesday, January 9th and 10th, the following candidate passed.

Augusta Stolte, London.

At the usual monthly examinations for the Licences of the College, held on Monday, January 9th, and the three following days, the following were successful.

For the Licences to practise Medicine and Midwifery.—William Thomas Cuthbert, Dundrum, Co. Tipperary; Percy Herbert Delamere, Rathmines, Dublin; Johnson Gore Hunt, Kilmacthomas, Co. Waterford; Percy Newell, Dublin.

For the Licence to practise Medicine only.—Alan Montgomery Irwin, Donadea Rectory, Co. Kildare; Francis Saunderson Morrison, Warrenpoint, Co. Down.

For the Licence to practise Midwifery only.—Edward Francis Pigot, M.B., B.Ch.Dubl., Dublin; Samuel Stronge, M.D., M.Ch. Royal Univ. Irel., Belfast; West Wheldale Wilson, M.B., B.Ch.Dubl., Fahan, Co. Derry.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of 1878, have been duly enrolled Members of the College.

Philip Crampton Smyly, 1860, Dublin; William Edward Robson, 1869, Dundalk; John Weddick, 1874, Dublin; Montagu W. C. Perceval, 1877, Greenwich; George Stoker, 1878 London.

MEDICAL VACANCIES.

ENTRAL LONDON SICK ASYLUM.—District Assistant Medical Officer and Dispenser. Salary, £100 per annum. Applications by January 27th.

HELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Resident Surgeon. Salary, £180 per annum. Applications by February 1st.

HILDREN'S HOSPITAL, Birmingham.—Resident Assistant Medical Officer. Salary, £40 per annum. Applications by February 1st.

ORLTON-UPON-MEDLOCK DISPENSARY, Manchester. Honorary Surgeon. Applications to the Honorary Secretary, A. Fox, Esq., 53, Princes Street, Manchester.

LINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Manchester.—Honorary Surgeon. Applications by February 6th.

LINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Manchester.—Honorary Assistant Medical Officer. Applications by February 6th.

OUNTY LUNATIC ASYLUM, Lancaster.—Assistant Medical Officer. Salary, £100 per annum. Applications by January 31st.

ENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by February 12th.

ORE UNION, Hereford.—Medical Officer. Salary, £70 per annum. Applications by February 6th.

LASGOW MATERNITY HOSPITAL.—Out-door Accoucheur. Applications to the Secretary by February 3rd.

ENAMADDY UNION, Dummore Dispensary.—Medical Officer. Salary, £65 per annum, with fees. Election on January 27th.

OSPITAL FOR WOMEN AND CHILDREN, 3 and 4, Vincent Square, S.W.—Honorary Physician and Honorary Surgeon. Applications to the Honorary Secretary by February 3rd.

NSINGTON DISPENSARY.—Resident Medical Officer. Salary, £125 per annum. Applications by February 10th.

NASKEA UNION, Maguiresbridge Dispensary.—Medical Officer. Salary, £95 per annum, with fees. Election on February 1st.

IDDLESEX HOSPITAL.—Dental Surgeon. Applications by February 2nd.

IDDLESEX HOSPITAL.—Medical Registrar. Applications by February 2nd.

WCASTLE-ON-TYNE DISPENSARY.—Resident Medical Officer. Salary, £250 per annum. Applications to J. Logan, jun., Honorary Secretary, Nelson Street, Newcastle-on-Tyne, by January 30th.

ROCHIAL BOARD OF AUCHTERGAVEN.—Medical Officer, Officer of Health, and Vaccinator for the Western District of the Parish. Salary, £40 per annum. Applications to Mr. Donald Cumming, Inspector of Poor, Auchtergaven, Bankfoot, Perth, by January 30th.

OCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £40 per annum. Applications to Captain Stewart, Shambellie, New Abbey, Dumfries.

GOON MUNICIPALITY.—Health-Officer. Salary, 600 rupees per month. Applications to the President by January 31st.

AL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by February 8th.

AL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary, £75 per annum. Applications by February 6th.

FORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—Honorary Surgeon. Applications to the Secretary by February 6th.

NORLAR UNION, Killygordon Dispensary.—Medical Officer. Salary, £100 per annum, and £20 as Medical Officer of Health. Election on February 2nd.

ST. LONDON HOSPITAL, Hammersmith.—Assistant Dispenser. Salary, £70 per annum. Applications by January 29th.

STMINSTER HOSPITAL, Broad Sanctuary, S.W.—Second Dental Surgeon. Applications by February 6th.

MEDICAL APPOINTMENTS.

LE, W. H., F.R.C.S., reappointed Surgical Registrar to St. Thomas's Hospital.

N, W., L.R.C.P., appointed Medical Officer to the Northmavine and Delling ishes, Shetland, *vice* J. Mitchell, M.D., resigned.

ON, Francis Carteret, M.B. & C.M., Aberdeen, M.R.C.S.Eng., Assistant ical Officer, County Asylum, Bodmin, Cornwall, appointed Senior Assistant-sician to the Surrey County Asylum, Brookwood.

, R. Clement, B.S., F.R.C.S., appointed Honorary Consulting Surgeon to Princess Louise Home.

NS, G. H., F.R.C.S., appointed Resident Assistant Surgeon to St. Thomas's pital, *vice* B. Pitts, F.R.C.S., resigned.

PITTS, Bernard, M.A., M.C., F.R.C.S., appointed Assistant-Surgeon to St. Thomas's Hospital.

SMITH, R. P., M.D., appointed Resident Assistant-Physician to St. Thomas's Hospital, *vice* C. E. Sheppard, M.D., resigned.

SMITH, T. F. Hugh, F.R.C.S., L.S.A., appointed Medical and Surgical Registrar to the Victoria Hospital for Sick Children, Chelsea.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

GREATHEAD.—On 19th December, 1882, at Grahamstown, South Africa, the wife of J. B. Greathead, M.B., C.M.Edin., M.R.C.S.Eng., of a daughter.

MARRIAGES.

HOYLE—SHARP.—On the 19th instant, at Union Chapel, Oxford Road, Manchester, by the Rev. Alex. McLaren, D.D., William Evans Hoyle, M.A., M.R.C.S., of Edinburgh, to Edith Isabel, eldest daughter of E. Hamilton Sharp, Esq., of Manchester.

TUKE—WYLDE.—On the 12th December, at St. John's Church, Grove Park, Chiswick, by the Rev. Lawford Dale, M.A., vicar of Chiswick, assisted by the Rev. Thornhill Webber, M.A., vicar of St. John the Evangelist, Holborn, Charles Molesworth Tuke, M.R.C.S., third son of Dr. Tuke, of the Manor House, Chiswick, and Albemarle Street, London, to Mary Ella, second daughter of William H. Wylde, Esq., C.M.G., of Westfield, Putney, Lieutenant-Colonel 2nd South Middlesex Volunteers.

DEATHS.

MIDDLETON.—At 17, Straiton Place, Portobello, N.B., on the 16th instant, John Middleton, M.D., L.R.C.S. Friends will please accept this the only intimation.

WILDING.—On the 17th instant, at Church Stretton, Shropshire, Richard Wilding, M.R.C.S., L.S.A., aged 65.

HEALTH OF FOREIGN CITIES.—It appears from statistics, published in the Registrar-General's last weekly return, that the death-rate recently averaged 33.4 per 1000 in the three principal Indian cities; it was 25.0 in Bombay, 40.8 in Madras, and 41.4 in Calcutta, Cholera caused 89 deaths in Calcutta, showing further increase upon previous weekly numbers, and small-pox 13 in Bombay; fever fatality showed the largest excess in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-two of the largest European cities, was 28.4, and was no less than 5.0 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 39.0, and showed a slight decline from higher rates in previous weeks; the 694 deaths included 26 fatal cases of scarlet fever, and 25 of small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 22.0; 5 fatal cases of measles occurred in Stockholm, and 2 of diphtheria in Copenhagen. In Paris, the death-rate was equal to 26.3; the deaths included 68 of typhoid fever, and 15 of small-pox. The 204 deaths in Brussels were equal to a rate of 26.5; and includng 4 fatal cases of small-pox, and 4 of fever. The rate in Geneva did not exceed 19.4. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.7, the highest rate being 30.7 in Rotterdam; diphtheria caused 6 deaths in Amsterdam, and small-pox 2 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.5, and ranged from 23.8 in Berlin, to 32.6 in Prague and 36.8 in Breslau. Small-pox caused 5 deaths in Buda-Pesth, and 3 in Vienna; diphtheria continues to show fatal prevalence in most of these German cities, especially in Berlin and Dresden. The death-rate averaged 28.6 in three of the principal Italian cities, and was equal to 34.7 in Venice, where 17 of the 90 deaths resulted from measles; typhoid fever caused 8 deaths in Turin, and 3 in Rome. In four great American cities, the mean death-rate was 24.5; the rate ranging from 23.0 in Brooklyn, to 30.5 in Baltimore. Small-pox caused 71 deaths in Baltimore, showing a further considerable increase upon recent weekly numbers. The deaths in Philadelphia included 12 from typhoid fever and 10 from small-pox. Diphtheria fatality was excessive in each of these American cities.

IT appears in the *Times* summary of the meteorological conditions of the last month, that under the influence of the long-continued fogs diseases of the organs of respiration increased rapidly, so that in London the number of deaths from these complaints rose from 424 in the week ending on December 2nd to 447 in the following week, and to between 630 and 640 in each of the two following weeks in the month. Bronchitis, was, of course, the most active of these diseases, and the sufferers, as usual, were mainly young children and elderly people.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Whipham; A Case of Acute Pulmonary Tuberculosis (to open a discussion on the Association of Tuberculosis and Bacilli).

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. W. H. Lamb: A Case of Pleuropneumonia. Mr. H. C. Stewart: On Fevers and Exanthems treated by Antiseptics.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE BRITISH MEDICAL BENEVOLENT FUND.

SIR,—Though not, strictly speaking, within the objects of the JOURNAL, may I, for the sake of the interests involved, beg place for the following letter, written to a hitherto guinea subscriber to the British Medical Benevolent Fund, who is withdrawing that subscription in favour of the smaller sum of five shillings, to be paid through the secretary of the Yorkshire Branch. If the guinea subscribers in other Branches are adopting a similar method, the movement of the South Wales Branch will be disastrous, and not beneficial to the funds of this urgently necessary and most admirable charity.—I am, yours obliged, DAVID GOYDER, Honorary Local Secretary (Bradford),

British Medical Benevolent Fund.

"Dear Dr. ——, I did receive your guinea, but I regret to find you are about to discontinue it, and give only the five shillings being raised through the Yorkshire Branch of the Association; that was intended to supplement the work of the honorary local secretaries, not to supplant it. The Fund would be in poor case if all the annual subscribers of a guinea were to withdraw their subscriptions, and give only five shillings instead; for example: I raise, by guinea and half-guinea subscribers, £25 yearly, which is equal to the sum furnished by 100 contributors at five shillings each. Now I understand that, out of the 280 members of the Yorkshire Branch, only about seventy are subscribing the five shillings, which is to be gathered by Mr. Arthur Jackson, and transmitted to London as a Branch contribution, that is to say, a total sum of £17 10s., or only three-fourths of what I have hitherto been able to forward without the Branch's assistance. It was never contemplated nor suspected that the Branch effort would damage the previous guinea subscriptions to the Fund, or possibly the promoters of the effort (of whom I was one) would have stayed their hands before issuing the appeal to the members of the Branch. The object was purely to induce members of the Association who had not hitherto subscribed to the Fund to assist it by a small contribution, leaving the guinea and half-guinea subscribers to continue their yearly assistance intact as before. I therefore earnestly beg that you will reconsider your decision, and continue your guinea subscription at least until the whole 280 members of the Branch become five-shilling subscribers, when, indeed, we might send the Fund a handsome contribution.—I am, dear sir, yours, etc.,

D. GOYDER."

BENTLEY TESTIMONIAL FUND.

THE retirement of Professor Bentley from the office of Dean of the Medical Faculty of King's College, London, a position which he has filled with so much ability, energy, and courtesy during a period of twenty years, has induced a number of his old pupils and colleagues to take the opportunity of presenting him with some memorial of their affectionate regard and esteem. A large and influential committee has been formed. Contributions to the Fund should be forwarded to the treasurer, Mr. John Wood, F.R.S., at 61, Wimpole Street, London, W., before the end of March 1883.

ERRATA.—In the JOURNAL for December 16th, p. 1237, in the second letter headed "An Obscure Disease," the signature should be "Herbert Collier M.D.,"; and "fistula," in the first line of the last paragraph of the same letter, should be "prostate."

W. G. (Richmond).—We see no reason to ascribe our correspondent's nervousness to the cause alleged. We recommend him to consult a respectable medical man on the subject.

"PREVENTIVE FAMILY PRACTICE."

SIR,—With reference to the paragraph, a "Preventive Family Practice," in your issue of the 13th instant, may I be permitted, in common fairness to myself, to ask the author thereof to quote any portion of my recent paper in the *Practitioner* (to which he refers) which will justify his statement that, "without absolutely stating that it should, I, at any rate, lean to the opinion", that "unasked" for advice should be given to our clients in delicate family matters having reference to the prevention of the spread (in the only radical manner of the propagation (at compound interest, so to speak) of certain very hereditary and fatal diseases, which contribute to our preventable mortality to such an alarming extent.

In any case, I respectfully beg you to allow me to state that, whilst humbly advocating an endeavour to get our clients to previously consult us, and take our advice in such important matters, I decidedly discountenance "unasked for advice under such circumstances; considering, as I do, that such a course of unsought-for meddling in private and personal matters would only tend to frustrate, instead of to promote, the object I had in view in writing the paper, viz., that we should, in the future, seek to prevent (or have means of preventing) disease, as far as possible; and, in doing so, to endeavour to educate our clients into considering that such preventive advice is really more valuable and worthy of compensation, than advice and treatment after the damage effected. I claim simply to have tried to give effect, as best I could, to the old adage, that "prevention is better than cure," which nobody can deny, however much we may differ as to the particular methods of promoting such a scheme—I am, sir, your obedient servant,

J. WILKIE BURMAN, M.D.

Ramsbury, Hungerford, Berks, January 17th, 1883.

*** As any medical practitioner would give the advice respecting marriage if asked for it, there would be nothing new or worthy of mention by the author of the paper if he did not, as a part of "preventive family practice" advise that it should be offered when unasked; of course, always supposing that both parties were known to the medical attendant. The letter, however, states that we have made a mistake, and we are left, therefore, to suppose that nothing more is advised than all medical men do at present, viz., give opinion when asked for it.

THERE are now about 2,400 diseases, and every year the strain on a single patent medicine becomes harder and harder; yet the medicine stands up manfully and promises to cure them all.—*Druggist* (Chicago).

Medical Reform.

Sir,—I shall feel obliged for your opinion of the following facts. An unqualified man is practising in a neighbouring village, and one of his bills was handed to me yesterday, on which was printed his name, and 'surgeon', etc. Just before Christmas, I was called to see a patient he had been treating for typhoid fever, as the husband informed me, and, on my arrival, I found her dying from peritonitis following parturition. She had never had a fomentation or anything in the nature of a counter-irritant applied to her; indeed, a neighbour informed me "that the doctor had never examined her belly." The following morning, the husband applied to me for a certificate, which, after some hesitation, I gave; but I added to the certificate "that I considered she should have had the benefit of skilled medical assistance at an earlier date. The registrar forwarded this to the coroner, who decided to hold an inquest, the result of which was that a verdict was given to the effect "that the deceased died from natural causes, brought on by her own imprudence in getting up too soon after her confinement."

Now, sir, I hold that the question was, whether this poor woman was properly treated, and whether she had not been imposed upon by this individual styling himself a surgeon, when he has no moral or legal right to do so. I was not summoned to attend the inquest, which at the time rather surprised me; but I believe the coroner represented this view to the jury, but they studiously avoided making any comments adverse to this man's reputation. I have since been told they were chiefly composed of his companions, and they believed I had caused this inquiry to be held simply with the intention of injuring him.

I quite expected my action would be assigned to personal motives, but I feel convinced it was perfectly justifiable under the circumstances. If it be advisable for me to take any further steps in the matter, I shall be glad if you will mention what will be the best course to adopt.—Yours, etc.,

M.R.C.S.

P.S.—Will the new Medical Act prevent these unqualified men from practising? if so, perhaps it may be advisable to wait till it becomes law.

*** We consider that our correspondent was fully justified in the course he took, and that he might even have refused to give a certificate of death in this case, there being quite sufficient "reasonable excuse" for withholding it in the facts narrated above. There is no accounting for the verdicts which coroners' juries sometimes return, and medical men must not be deterred from doing their duty to society at large by the apparent failure of their efforts to convince the public of the dangerous results of unqualified practice. The assumption of the title of surgeon by an unqualified person is clearly illegal, and our correspondent, if he desired to follow the matter up, should instruct a solicitor to take steps for the recovery of the penalty imposed by Clause xl of 21 and 22 Vict., cap. xc, on any person guilty of the offence. The expenses attendant on such proceedings would, however, come out of our correspondent's pocket, while the penalty which might be recovered is directed, by a subsequent clause of the Act, to be paid over to the treasurer of the Medical Council. In the report of the Royal Commission, it is recommended that, under an amended Medical Act, these prosecutions should be undertaken by the Public Prosecutor, or by anyone else with the consent of the Attorney-General. This would be a decided improvement on the present arrangement. When the proposed Medical Bill is drafted, it will be the duty of the Medical Reform Committee of our Association to consider how far it is in accordance with the wishes of the profession on this subject of illegal practice.

J. M.—Rebuke would be hardly accepted by a gentleman who avows his intention to cut the "captive cord" which prevents professional men from issuing advertising circulars, and who, announcing himself to the inhabitants of Torquay with: "Here I am," and declares his intention of abolishing the use of "morphia, chloral hydrate, strychnine, atropine," and other deadly drugs; professing equally "intimate acquaintance" with allopathy, hydropathy, and homœopathy.

Menière's Disease.

Sir,—In your number of January 13th, a correspondent desires to know the best means of treating Menière's disease. If, by this term, he refers to the class of cases described by Menière, in which the labyrinth is the seat of organic change, I fear that little benefit will be derived from treatment of any kind, except in a few of those cases which owe their origin to syphilis. If, on the other hand, your correspondent alludes to auditory vertigo, he must first in each case arrive at a diagnosis of the pathological condition which gives rise to the symptom. The latter may be due to any one of the following conditions.

1. A foreign body presses upon the drum membrane. The malleus is thus forced inwards, causing, through the incus, movement of the stapes. The latter is pressed into the vestibule, and causes compression of the intralabyrinthine fluids, including the endo- and peri-lymph of the semicircular canals.

2. Disease of the middle ear may influence the canals in various ways. Owing to obstruction of the Eustachian tubes, the membrana tympani may be driven inwards, indirectly causing a similar movement of the stapes. Again, the latter may be pressed upon by exudation in the tympanum. Sometimes, hyperæmia of the middle ear produces a similar condition of the labyrinth.

3. Organic mischief in the latter may result from long-standing disease of the middle ear.

Primary and sudden disease of the labyrinth may be caused by hæmorrhage, sudden serous exudation, or syphilis. As to the treatment of auditory vertigo, it must depend upon the nature of the lesion which produces it. As a palliative, quinine has been recommended. Bromide of potassium I have, in some cases, found to give immediate relief. Both for this reason and on theoretical grounds (into the nature of which I cannot here enter), I consider it as a most valuable adjunct to suitable local treatment.—I am, etc.,

Edinburgh, January 15th, 1883. P. McBride, M.D.

We is thanked for his letter. His criticisms on the position held by the medical officers of friendly societies' medical associations are no doubt perfectly just, and we are disposed, whenever a case in point arises, to enforce the line of argument.

Queries and Answers.

Sir,—Many medical questions are asked as to treatment of particular and troublesome cases. The answers generally come from what might be termed small fry of the profession. Would it be too much to ask some of our leading medical men to help us general practitioners with advice? I find them willing enough to give assistance to patients, even gratuitously, but very chary in advising and assisting their professional brethren. It often happens we have patients who can neither afford the fee nor the journey to London. It would be a great boon if we had the opportunity of putting difficult questions through the Journal, and receiving a reply in the same way from some leading man.

Again, I feel that consulting physicians ought to decline to see patients without a communication from and to the medical practitioners in attendance. It is, to say the least, unpleasant for a patient to go unexpectedly and unknown to us to a consulting physician, and get his advice, which may seem to contradict ours, and do us much harm. I think they should act as counsel do; no counsel would communicate with a client directly, he must have a solicitor. You will perhaps understand me.—Believe me, yours truly,

January 6th, 1883. N. H. A.

School-Board Certificates.

A district medical officer recently put the question in our columns as to the legal liability of the School Board to pay the cost of medical certificates demanded by the School Board officer. In a case which recently came before the Southwark magistrate, Mr. Bridge, after considerable argument, decided that, where the certificates were demanded by the School Board officer, after the doctors had stated that a child was unable to attend school, the School Board were bound to pay for the medical certificates. He, therefore, made an order for the School board to pay £1 5s. costs, and dismissed the case against the father.

Steam Draft Kettle.

Sir,—On the outside sheet of this week's number of the Journal, there is an advertisement of T. Allen and Son's ventilating croup, or steam draft kettle, with which is associated a notice from the British Medical Journal. Allow me to inform you that, on the occasion when Mr. Parker exhibited his apparatus to the Royal Medical and Chirurgical Society, the late Mr. W. D. Napier was present, and stated that it was simply an imitation of the machine in use at the Hospital for Sick Children, Great Ormond Street, which had been made under my directions. The day following, Mr. Napier addressed a letter to the editor of the *Medical Times and Gazette*, of which I enclose a copy, and which was written in consequence of what had happened at the Royal Medical and Chirurgical Society.

It is right that I should inform you that Mr. Parker had been house-surgeon at the Children's Hospital, and was in this way acquainted with the details of my invention. In justice to myself, I must beg you to correct the impression which the advertisement might give, that the apparatus of Mr. Parker is either original or ingenious.

I have drawn the attention of the Royal Medical and Chirurgical Society to the advertisement, as the use that is made of its name, under the circumstances above stated, is highly improper.—I am, etc.,

6, Savile Row, W., January 19th, 1883. Robert J. Lee.

F. R.—We have no information on the subject.

Intoxicants in Workhouse and Asylum Dietaries.

Sir,—The writer of the letter signed "Kaliston Udor", in your issue of January 6th, can only be either an advocate of teetotalism, blinded by his zeal, or a person but very superficially acquainted with the internal economy of workhouses and asylums. No one else would think of describing the small beer served out in such establishments as an "intoxicant" and "strong drink", and still less as "provocative of disorder". It is in effect, though usually a sufficiently honest liquor, never anything more than the very weakest of small ales; and in the quantities in which it is served out (half a pint, as a rule), it could not possibly have any effect upon the well-seasoned heads of those that drink it. I say "well-seasoned", because I take it that no one who had not previously been accustomed to drinking beer with his meals would be tempted to adopt the practice in an asylum or workhouse. Such as it is, nevertheless, it is valued by its drinkers, and gives a relish to their not too savoury meals, which would be greatly missed, and for which a glass of cold water would be but a poor substitute. It is a luxury, it is true, but it is one which costs little to the State, and of which it seems a pity to deprive those who, whether they have been brought there by their own past errors or by misfortune, are compelled to remain where they are, and content themselves with whatever is given them.

The strictly medical aspect of the question, however, is of course that of the effect of the beverage upon the mental and physical condition of those that drink it; with regard to which I doubt if the opinions of many medical men will be found to be in accordance with the "accumulated experience" to which "Kaliston Udor" vaguely refers. One argument in favour of its abolition from the legal dietary does exist, and that is, that its addition to the pauper's meal being then dependent upon the will of the medical man, he would be able to use it as an aid to the preservation of discipline, and as a small reward, in the same way, in fact, as tobacco is already used in many establishments.—Yours, etc., Guy N. Stephen, M.R.C.S.Eng., Officier de Santé, France.

Marseilles, January 9th, 1883.

W. L. (Derby).—We find, in the newspaper cuttings which our correspondent sends us, a statement that the inspector, in the first instance, put himself in communication with the public vaccinator. How are we to reconcile this with the statement that the Local Government Board had not afforded any opportunity for reply or explanation? The report contains the decision after investigation, and any explanation of the circumstances must necessarily be given before the decision, rather than after it.

Stoves.

Sir,—As the question of stoves has recently been discussed in your columns, I strongly recommend the use of Smith and Wellstood's, of Ludgate Circus, American stoves, for rapidity of heating when suddenly required, and their ready conversion into slow combustion ones when the room is sufficiently warmed. If a little attention be paid to regulating the draught, positive economy of fuel will be ensured. In my bedroom, I use one called the Sylph, having convenient openings for the use of a small kettle, etc. For the study, I prefer the Excelsior.—I am, yours truly, F. H. Vertue.

Red House, Southwold.

Deaths from Chloroform.

Sir,—I have delayed replying to the letter of Dr. Whelan (British Medical Journal, December 23rd), in order to see whether anyone else would save me the trouble; but, as no communication has since appeared upon the subject, I should like to say that, although I have never given atropia by subcutaneous injection for the purpose of preventing death from chloroform, I have, on two occasions (the first time in 1881), administered a dose of belladonna about half an hour before beginning to give the chloroform. Both patients were well advanced in years, one about seventy, and the other about eighty, and in both cases the operation was the same—excision of epithelioma of the lip. In both cases, too, the position adopted for convenience in such an operation increased the risk—the patients were seated in a high-backed easy chair. Anæsthesia was complete in both cases, and the administration of the chloroform was not attended by any unusual phenomena. Both patients passed through the ordeal in safety. Whether I am indebted to Mr. Schäfer for the idea of using belladonna for this purpose, I am now unable to say. I have no objection to give him the benefit of the doubt.

As regards the theory, I do not think it likely that the "intellectual centres have much to do with the fatal issue in chloroform administration. Be that as it may, however, the good effects of belladonna in poisoning by chloroform are most likely due, not only to a faradising action on the cardio-inhibitory fibres, but also, as Dr. Harley has pointed out, to a stimulant action on the sympathetic. On this latter hypothesis, I have frequently employed the drug in a variety of cases, and it has generally answered my expectations. As it has thus been found useful in stimulating to contraction dilated arteries and arterioles, it is only natural to expect that it will stimulate the heart when such stimulation is required. This, I think, may suffice for theory till we know more of the intra-cardiac ganglia, and the ways in which they influence the action of the heart. For practical purposes, however, it will be enough for most practitioners to know that, while chloroform weakens the action of the heart, atropia undoubtedly strengthens it; and its use is, therefore, rationally indicated as a means of fortifying that organ against the evil effects of chloroform.

The dose is obviously a matter of some importance. I believe that an ordinary or a full medicinal use will be found sufficient. In one case, I gave twelve minims of the tincture, and in the other, five minims of the succus. Single doses of these quantities are quite sufficient to produce in most people the slighter physiological effects of the drug, and in some, very marked effects indeed. By giving too large a dose, there may be a risk of producing reaction, and so defeating our object. This is a point, however, which only accumulated experience can decide. I trust that that experience will soon be acquired, and published in the pages of the Journal.—I am, etc.,

St. Mary Bourne, Andover, January 22nd, 1883. W. F. Phillips.

C. C. B.—The address of the National Health Society is 44, Berners Street, W.

Medical Advertisements and Unqualified Practice.

Sir,—It is extraordinary how the poor and industrial classes of the people at the East End of London are led by advertisements by druggists and chemists who carry on the trade of unqualified medical practice; the consequences of such an imposition must seriously tell on the health and mortality of the population. Nor is it unusual to find some medical men to lend their names to get unqualified practitioners out of legal difficulties. I inclose two specimens of advertisements with which one is inundated at the East End of London: one from a Fellow of the Faculty of Physicians and Surgeons of Glasgow and M.R.C.S.

"Pamphlet Gratis and Post Free. Antiseptic Treatment; its great efficacy in all Diseases of Women, without interference, cutting, or caustics. Consultations daily, or by letter, by Dr. Washington Evans, 41, Cambridge Street, Hyde Park Square, London. Just published, post free and gratis of author."

"Debilities and Derangements of the Generative and Nervous System: their Nature and Cure by the Antiseptic Treatment. By Dr. Washington Evans, 41, Cambridge Street, Hyde Park Square, London. Consultations daily, eleven till seven, or by letter."

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A Member B. M. Assoc.

London, E., January 1st, 1883.

L.R.C.P.Lond.—Dr. F. E. Pocock, 20, Goulbourne Road, Upper Westbourne Park, is willing to give information respecting the Brussels degree.

"The Factory Acts.

"To the Editor of the *Printer's Register*.

"Sir,—In a paragraph in the *Printer's Register* for November, it is stated that boys under sixteen years of age are not allowed to work in factories after 8 P.M. if they start at 8 A.M., and that they must have at least eight holidays in the year. Now if this is necessary for the welfare of boys under sixteen, I would like the factory inspector to explain how it is that a factory surgeon, receiving fees under the Factory Act, can keep message-boys at work from twelve to fourteen hours a day for seven days a week, and without a single holiday the whole year through. This I know to be done in London, and with boys under fourteen years of age.—Your obedient servant, Dispenser.

"[There is an anomaly certainly, and many a poor little doctor's boy would be thankful if the Act applied to him as well as to his brethren in printing offices. It does not, however.—Ed. *P. R.*]"—*From Printer's Register of December 6th.*

The Nutrient Treatment of Insanity.

"The greater my experience becomes", writes Dr. Clouston in the *Practitioner*, "the more I tend to substitute milk for stimulants. I do not undervalue the latter in suitable cases; but in the very acute cases, both of depression and maniacal exaltation, where the disordered working of the brain tends rapidly to exhaust the strength, I rely more and more on milk and eggs made into liquid custards. One such case this year got eight pints of milk and sixteen eggs every day for three months, and under this treatment recovered. I question whether he would have done so under any other. He was almost dead on admission, acutely delirious, absolutely sleepless, and very nearly pulseless. It was a hand-to-hand fight between the acute disease in his brain and his general vitality. If his stomach could not have digested and his body assimilated enough suitable nourishment, or if he could not have been taken out freely into the open air, he must have died. But to-day he is fulfilling the duties of his position as well as he ever did in his life. All acute mental diseases, like most nervous diseases, tend to thinness of body, and therefore all foods, and all medicines, and all treatments that fatten, are good. To my assistants, and nurses, and patients, I preach the gospel of fatness as the great antidote to the exhausting tendencies of the disease we have to treat, and it would be well if all people of nervous constitution would obey this gospel."

Dr. Neale's Chemical Lung.

Sir,—Permit me to correct an error in Dr. Neale's description of his chemical lung, published in the Journal for December 9th, 1882. A "chemical lung" was sent to the Civil Hospital for experiment. The ulcer ward is a large and thoroughly well ventilated room, in which the foulest ulcers are scarcely perceptible. As it was useless to try any experiments there, a patient suffering from a gangrenous ulcer was removed to a private room, and the punkah was put up there. It worked very satisfactorily as far as keeping the room sweet, but broke down after a few days, owing to the stitches connecting it with the framework giving way.—I am, your obedient servant,

E. Colson, Surgeon-Major, Civil Surgeon, Aden.

Aden, December 31st, 1882.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Sutherland, London; Dr. Sinclair Coghill, Ventnor; Dr. C. Grabham, Pontefract; Dr. Rees Philipps, Exeter; Dr. Robert Lee, London; Dr. Rabagliati, Bradford; Mr. Lawson Tait, Birmingham; Dr. Collie, London; Mr. Manby, East Rudham; Mr. Anderson, Cramlington; Dr. A. R. Barnes, Hastings; Mr. H. Sutcliffe, West Bromwich; Mr. Crookshank, Bridport; Mr. Denison, London; Dr. Semmola, Naples; Dr. Holland, Newcastle-on-Tyne; Mr. Nelson Hardy, London; Mr. G. W. Wigner, London; Dr. Althaus, London; Mr. R. B. Sellers, Rochdale; Our Glasgow Correspondent; Mr. J. Vesey Fitzgerald, London; Dr. Murrell, London; Mr. George Collyns, Moreton Hampstead; Dr. E. F. Scougal, New Mill, near Huddersfield; Dr. Duffey, Dublin; Mr. Berridge, Redhill; Mr. Jackson, Birmingham; Dr. Strange, Worcester; Mr. A. C. Bridges, Birmingham; Dr. Bouchard, Algiers; Mr. J. J. Byrne, Preston; Mr. C. C. Burman, Belford; Dr. Herbert Collier, Gorleston; Mr. J. Whitehouse, Sunderland; Dr. J. D. Macdonald, Haputolis, Colombo; Dr. Dujardin-Beaumetz, Paris; Mr. P. H. Mules, Manchester; Dr. Baccelli, Rome; Mr. Edward Stephens, Ilminster; Mr. W. Roger Williams, London; Mr. R. H. Fox, London; Mr. Simeon Snell, Sheffield; Dr. J. Rogers, London; Mr. E. M. Grace, Thornbury; Dr. J. Crichton Browne, London; Dr. C. S. W. Cobbold, Earlswood; Dr. Thorne Thorne, London; Esperanza; Dr. Sawyer, Birmingham; Sir William Mac Cormac, London; T. F. H. S.; Mr. F. Treves, London; H. M. M.; Dr. Norman Kerr, London; Dr. Goyder, Bradford; Mr. C. P. Hooker, Coltishall; Mr. W. Grove, Richmond; Dr. A. Paterson, Bridge-of-Allan; Dr. Adams, London; J. D. P.; Dr. Eustace Firth, Norwich; Dr. T. W. Hime, Sheffield; Dr. Willoughby, London; Mr. Timothy Holmes, London; Dr. Brailey, London; Mr. Joseph Stephens, Brighton; Mr. William Young, London; Mr. Shirley F. Murphy, London; Dr. Fairlie Clarke, Southborough; Dr. Shettle, Reading; Dr. Pantalcond, Rome; Dr. C. B. Williams, Ashby-de-la-Zouch; Mr. Alfred P. Watkins, Worcester; Mr. J. A. Byerley, Portsea; Dr. Gairdner, Glasgow; Dr. Styrap, Shrewsbury; Sir Henry Thompson, London; Dr. Huggard, London; Mr. George H. Smith, Southsea; Mr. H. W. Gosse, Midsomer Norton; Dr. Kraus, Vienna; Dr. Tom Robinson, London; Dr. Herman, London; Mr. O. Lowsley, Reading; Dr. T. T. Bos, Amsterdam; Mr. Thomas Jones, Manchester; Vates A.M.D.; Dr. Barnardo, London; Verbum Sap.; Mr. W. F. Phillips, Andover; Dr. Saundby, Birmingham; Dr. Mahomed, London; Our Aberdeen Correspondent; Mr. W. H. Wilding, Church Stretton; Dr. C. Binz, Bonn; E. H. R.; M. N. Gille, Brussels; Dr. Fernie, Barnstaple; Mr. Edward Matthew, Redditch; Dr. Allen Charles, Cookstown; Dr. Neale, London; J. M.; Mr. R. Sherlock, London; Dr. James Donnet, Dover; Dr. Hebra, Vienna; Mr. A. Bernard, Liverpool; Dr. J. Wilkie Burman, Ramsbury, Hungerford; Dr. Biddle, Kingston; Mr. Charles Steele, Bristol; M.R.C.S.; Dr. John S. Muir, Selkirk; Dr. J. Ashburton Thompson, London; Mr. Frederic Rene, Manchester; Mr. B. J. Newmarch, Clermont, near Lockhampton, Queensland; Dr. Dieulafoy, Paris; The Secretary of the Cambridge Medical Society; Mr. Brindley James, London; Mr. Dr. Smythe, co. Down; Earl of Bandon; etc.

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ABSTRACT OF AN ADDRESS ON CLINICAL INVESTIGATION.

Delivered before the Clinical Society of London,

By ANDREW CLARK, M.D., LL.D.,

Physician and Lecturer on Clinical Medicine, London Hospital; President of the Society.

GENTLEMEN,—Another epoch in the history of the Clinical Society has come to an end, and a new epoch begins to-night, with us. Standing thus between the past and the future, between the work which has been done and the work which lies before us to do, the opportunity naturally offers, and we may profitably avail ourselves of it, to inquire somewhat concerning both. On former occasions of this kind you have been treated to dissertations on subjects occupying at the time the attention of the profession, to discourses on what may be called the "philosophy of clinical medicine," to delineations of the sorts of knowledge necessary to continued advancement in our art; and to eloquent exhortations to active, purposive, honest clinical work. To-night, for the short time that I shall presume to stand between you and the business which we are assembled to consider, I shall take humbler ground, and, contenting myself with a short survey of the complete labours of the Society, I shall endeavour to elicit therefrom fresh helps for future guidance.

It seems to me, after a careful examination of the contributions made to the *Transactions* of the Society during the reign of my illustrious predecessor, that both in matter and in manner, in abiding interest and in clinical importance, in fertility of practical suggestions, and in successful boldness of the operative procedures recorded therein, the volumes embodying those contributions will bear favourable comparison with any like number of volumes which have been issued before them. I discover in this latter work no decay of earnestness or of strength; none of faith or of knowledge; none of foresight or of judgment; and in some ways, as in the recognition of clinical affections unconnected with sensible anatomical changes, it is taken, as I at least am convinced, higher and truer ground.

Examining the whole series of our *Transactions*, and calling to mind the character of the discussions elicited by many of the papers, one cannot fail to become impressed with a vivid sense of the great and growing importance of the work which the Society is silently but surely doing. The general good results of the Society's work are now so obvious, and have been so often mentioned, that they need, for remembrance, only the barest notice. We see how, through diversity of inquiry, community of work, unity of purpose, and severity of procedure, we have improved our methods, added to our knowledge, established new connections, multiplied our resources, settled a surgical revolution, and widened, deepened, and in some quarters transformed, our views. All this is plain, and the statement of it may be open to the accusation of commonplace. But what is not so plain, but what is not commonplace, is the influence which the Society has exerted, and is exerting, upon the scientific character of individual workers; and thus, although less obvious, is not less important. The Society has improved the scientific character of good workers; and has framed, for the guidance of all alike, a standard of work which insibly elevating the profession and benefiting our art. In the work of the younger members of our profession I see, or at least I think I see, greater care, patience, and accuracy in observation, a more rigorous fidelity in the record of therapeutical experiments, wiser caution in speculation, graver deliberation in judgment, a growing meekness in the confessions of oversights and errors, increasing alacrity in the siftings and testing of their own conclusions, a nobler effacement of personality in the work, less unseemly eagerness for mere priority of publication, a deepened sense of the responsibilities of premature speech and writings, a rapidly abating keenness in the conflicts of opposing views, a more robust and manlier spirit of scientific life, and less reluctance in making admissions that there is no unconditional truth in the results of our inquiries—no finality in our finished work—no creed in medicine.

But the Society has done more than train good workers: it has discussed the bad. For one competent and conscientious worker there are ten incompetent and unconscientious, and who in divers ways hinder our progress and spoil our present possessions. Impatient of the patient and painful toil of the true worker, acute in spite of superficial observation, gifted with a certain showy versatility, quick at catching hold of new ideas, ingenious in guessing, crude in experiments, loose in therapeutic trials, hasty in speculation, strong in dogmatic assertions, accomplished in the transfiguration and use of other men's work, finding what they want wherever they seek, unhindered by difficulties, facile in speech, ready in writing, thirsting for notice, such men, now, alas! not uncommon in medicine, beget papers so quickly that they can have no necessary relation to time, observation, or thought, and flood our literature with their unworthy if not unveracious lucubrations.

The favourite hunting ground of such men is therapeutics, and their favourite sport is the catching of new remedies, the putting of them to new uses, and the setting forth of their successful results. These men discern no difficulties and have few failures: they can illustrate their successes by scores of cases, and explain them by the most ingenious theories. There is scarcely any limit to the extent or the variety of their achievments; and as they flaunt along in the fulness of self-satisfaction, they look down with pitying condescension upon those in the straight and narrow way, who conscientiously toil with small success in seeking after truth, but who nevertheless, missing the praise of men, find strength and solace in the sacred search.

Another great work of our Society has been, and continues to be, the gradual unfolding of the exact relations which morbid anatomy and incidentally experimental pathology should hold to clinical medicine. These two chief servants of our art, excited and carried away by their marvellous successes, and assuming a joint sovereignty over our art, look down with condescending superiority upon clinical medicine, ridicule her claims to supremacy, scoff at her empirical distinction, reproach her with being unscientific, and strive to torture her into a slavish subjection to their theories. But the true relation is not this: it is indeed the converse of it. For the structural change is not disease, it is not even co-extensive with disease; and even in those cases where the alliance appears the closest, the statical or anatomical alteration is but of one of other effects of physiological forces which, acting under unphysiological conditions, constitue by this new departure the essential and true disease. For disease in its primary condition and intimate nature is, in strict language, dynamic; it precedes, underlies, evolves, determines, embraces, transcends, and rules the anatomical state. It may consist of mere changes in the relation of parts; of rearrangements of atomic groupings; of recurring cycles of vicious chemical substitutions and exchanges; of new conditions in the evolution and distribution of nerve-force; and any or all of them may be invisible to the eye, inseparable from life, and undiscernable in death. Undoubtedly, the appearance of a structural alteration in the course of disease introduces a new order of events, sets in action new combinations of forces, and creates disturbances which must be reckoned with even as mechanical accidents of the pathological process.

But always behind the statical lies the dynamic condition: underneath the structural forms are the active changes which give them birth: and stretching far beyond the limits of pathological anatomy and pervaded by the actions and interactions of multitudinous forces, there is a region teeming with manifold forms of disease unconnected with structural change, and demanding the investigation which it would abundantly reward. It is this mysterious and fertile region of dynamic pathogenesis that we come face to face with the primitive manifestations of disease, and learn how much knowledge from various sources is needed to understand it aright; it is here that we see how without help from physics, chemistry, and biology, collecting, converging, and meeting in a common light, no single problem in disease can be completely solved: it is here that we are made to comprehend how the nature of a pathological product cannot be determined by its structural characters, but by the life history of the processes of which it is only a partial expression: it is here that we observe how, in therapeutic experiments, the laws of the race are conditional, and even traversed by the law of the individual: and it is here that we discover how clinical medicine is to become a science, and how she is already, beyond question, at once the mother and the mistress of all the medical arts.

And here, in this relationship of processes to products, although only incidentally and inferentially touched by them, I must advert for a moment to the results of pathological experiments. As to their necessity and value in the progress of medicine, there cannot be any justifiable doubt. But for whatever purpose they may be employed; however carefully they may be designed and executed; however successful may be the precaution taken to exclude error, experiments have their subtle difficulties and dangers, which are perilous to truth and cannot be wholly averted. By the prestige of precision, which often undeservedly they possess, undue weight is attached to their results; and by the assumption that in like con-

ditions the results would be the same in man as in the lower dnimals, flagrant errors are committed, and currency is given to false or inadequate generalisations. The experimenter interprets the results of his experiments by the light of their structural results; he forgets, or he ignores, the life-history of the processes by which they have been evolved, and he takes no account of the fact, beyond controversy, that different clinical states find occasionally the same structural expression. In such circumstances, doubt is inevitable, and it is only to clinical medicine that any just appeal for its solution can be made. To her, at last, all such experiments must be brought for trial; she must be their examiner, critic, interpreter, user, and judge. And no results of experiments can be made of any avail to medicine or be used with safety in her service until they have been filtered through the checks and counter checks of clinical experience, and have responded to the tests and counter-tests of clinical trial.

Had these principles exerted their just influence in the recent debates concerning questions of this kind, we should not have had a seton in the neck of a man taken as the parallel of a seton in the neck of a guinea-pig; we should not have had the artificial tuberculosis of the rodent pronounced to be identical with the natural tuberculosis of the child; we should not have had grey tubercles and caseous pneumonias pronounced, on the grounds of mere likeness of structure, to be of one and the same nature; and we should have been spared the sight of science, drunken with success and drivelling with prophecies, soliciting the public on the common highway.

Of such examples of good work done by the Society there are many more that I could give if time permitted, and doubtless there are many more known to others that I could not give, because they have escaped my notice. But I have given enough to justify, and even to require, a little reckoning of our shortcomings.

One of the defects which I notice in the *Transactions* of the Society is an incompleteness outside the immediate objects of interest in the history of many of the cases recorded therein. If we are to make real use of a case, and if the case is to help us with other cases to make great and true advancement in our art, it must be given to us as a complete whole. We must have, not only the family and personal history, but we must have also the nature, assemblage, and progression of symptoms elucidated by all the assistance that can be had from physics and chemistry, from the spectroscope and microscope, from physiology and experiments. I do not presume to say that incomplete cases are either valueless or unwelcome, for, doubtless, they have often an interest and value peculiarly their own; but I do say that, for all the higher and truer objects of medicine, our earnest and unfailing endeavour should be to make every case as complete as the collateral knowledge of the time will enable us to make it. Hence the necessity and value of purposive, concurrent, and co-operative work. Hence arose the great medical *renaissance* of Germany, when Virchow and Brücke, Ludwig and Traube, Meyer and Lieberkühn, and Helmholtz, bringing together the results of their critical and experimental studies in various departments of knowledge, resolved, as if by magic, some of the observed problems in physiology and medicine.

But of all the defects in the work of the Society, the one which I consider to be at once the most important and the most inexplicable is the seemingly studied disregard, in the treatment of a patient's malady, of those minute conditions of his daily life, which practically make and unmake health; so that, special management being almost nothing, and special medication almost everything, it would seem as if physiological principles were of no account in therapeutics. But a more critical study of disease will soon convince us that this inference is unsound and its application incorrect. Putting aside, for the moment, inherited affections and parasitic maladies of whatsoever sort, I shall assume that chronic disease, a state of parts and not a thing interposed between them, is the eventual outcome of continued violation, conscious or unconscious of physiological laws as they exist for the race or as they are conditioned by the peculiarities of the individual organism. I shall further assume that those violations are not exceptional and gross, but daily and minute, and that their effects, infinitesimal from day to day, become visible only after longer periods of time, and so escape recognition except by those who are trained to discern the causal connections of subtle things. And I shall furthermore assume that the organism in virtue of the inherent forces maintaining its solidarity tends to repair existing and to repulse threatened disorders, and that, when placed in favourable, and liberated from unfavourable physiological conditions, this tendency issues and ends in successful action.

And now let us take for illustration a case of primitive uncomplicated gastric catarrh. Assuredly it does not come without a cause, and it is not introduced from without, but begotten within. It is, in fact, engendered out of a more or less prolonged and petty violation of the laws of stomach digestion, and it is maintained by conditions which, although apparently too trivial to be worthy of notice, are yet sufficient to hinder the formation of healthy peptones, and to traverse the reparative powers of the organism. What is ordinarily done in such a case? The patient is told in a vague sort of way to have a light and nourishing diet, to take daily exercise, to avoid anxiety and overwork, and to try bismuth and alkalies, with an occasional alterative aperient.

Now speaking, if I may be permitted to do so, from my own experience, it is certain that, in such a case, management is of more moment than medicine; and that, without a rigid and even minute obedience to the physiological conditions of healthy digestion, the chances are small of a speedy and permanent recovery from the gastric catarrh.

But the instruction of "a light and nourishing diet" admits of the widest diversity of interpretation; and with the most loyal desire for literal obedience, the patient, according to his age, habits, and status in life, may be unwittingly guilty of doings the most conflicting and injurious. He may eat too often or too seldom; his food may be fresh or preserved, too highly seasoned or too insipid, too concentrated or too bulky. He may take too much liquid or too little, too often or too seldom, too hot or too cold, effervescent or still. And without a conscious, but yet real and great departure from the intention of his instructors, he may frequently refresh himself with cups of tea and coffee, and make glad his heart by incidental glasses of wine or of beer.

Now, there are a right way and a wrong way in the management of every such case; and, although they lie so near each other, and are so much alike, that the distinction between them is not easy of discernment, it is necessary that the distinction shall be made. For it is upon a correct giving, or not giving, minute attention to the physiological conditions affecting the quantity, quality, and character of the solid and liquid food, the times and circumstances of eating and drinking, the amount of exercise, work, and sleep, and the adequate discharges of the excrementitious functions, that our work will succeed or fail, that our case will turn for evil or for good, and that the patient will either recover his health, or drift into permanent valetudinarianism.

If time permitted, and the occasion would justify it, I could easily produce, from the records of our common experience in every department of medicine, illustrations, the most various and conclusive, of the peril of neglecting, and the profit of following, minute physiological considerations in the treatment of disease. On this occasion, I shall content myself with one.

About eight years ago I was summoned to a consultation in South Kensington, where, in presence of the patient and his family I met Dr. Andrew Stephen and Dr. Taylor. It appeared that the subject of our consultation, having been ill for many weeks and growing rapidly worse, had been brought from Wales to London for further advice, and that the advice given was opposed to the feelings and convictions of the patient and his friends. The family, therefore, refused without the help of another opinion to carry out the proposed treatment, and, accordingly, with the acquiescence of the doctor, I was summoned to examine the patient and to state my views, without previous consultation with my colleagues, but in their presence.

The patient, a tall stout man of about sixty, with flushed face, suffused eyes, anxious countenance, and swollen legs, sat, leaning forward, in an armchair, partially undressed, breathing laboriously, and apparently in much distress. He complained of shortness of breath and palpitation, of confused sensations in his head and occasional dizziness; of general weakness and of indescribable depression.

The patient had a loaded tongue with fœtid breath, and although troubled with nausea was able to take freely of food and drink. The abdomen was distended and the liver distinctly enlarged. There were frequent discharges of fœtid gases from the bowels. The fæces, discharged twice or thrice daily, were dark, offensive, and unformed. The urine was scanty, pale, faintly acid, of density 1010, and slightly albuminous. The heart was large, flabby, murmurish, frequent, quick and irregular in time and force. The pulse was small, thready, irregular, and beating over a hundred times in a minute. The legs were œdematous, bluish, red and cold. The cervical veins remained continuously distended. Both lungs were congested at their bases, and there was frequent cough with frothy and sometimes sanguinolent expectoration. Nothing worthy of note was discovered in the nervous system.

Inquiring now as to the treatment which was being pursued, I was told that, in the opinion of all who knew him and of all the

doctors, except the last who had been consulted about him, that the patient was a man of naturally delicate constitution, that he needed constant keeping up, and that his chances of life were in direct proportion to the amount of support that he could take. Accordingly, he was taking food and wine every second hour, had iron, quinine and strychnia three times daily, and, being increasingly thirsty, he drank milk and soda-water without much regard to frequency and amount. Questioned as to my opinion of the patient's malady, and urged by my colleagues to say exactly what I thought, I replied that he was a man with deteriorated, but not seriously diseased tissues and organs, and that he was in peril of death, not so much from his malady, as from the means used for its cure; that he was being poisoned by food and wine, that he was in the condition of a fire having more coals put upon it than it could burn, and that his chimneys being choked, he was in near danger of being suffocated with his own smoke.

My colleagues agreeing with this view of the case, and the patient, after much discussion and explanation, assenting, he was placed upon a precise and severe regimen. He was ordered to have four simple nursery sort of meals in the course of the day; to have an ounce of brandy, diluted with eight parts of water, at dinner and supper; to be restricted to two pints of liquid in the course of the twenty-four hours; to take nothing of any sort between meals; and, as soon as he was able, to move about the rooms in which he dwelt. In the way of drugs, he was directed to take, for a week or longer, a grain of calomel at night, followed by a saline aperient on waking in the morning; and to have, twice or thrice daily, two hours after food, infusion of gentian with bicarbonate of potash, iodide of potassium, tincture of digitalis, and aromatic spirits of ammonia.

For the first three days, he was no better for this treatment. It tried him severely through the restriction of his liquids, and, declaring himself worse for it, he threatened to discontinue it, and to return to his former ways; but, on the fifth day, he began to improve, and then, his confidence being gained, there was no further difficulty in continuing the treatment, which, when digestion improved, was added to by the administration of reduced iron with meals. At the end of three months, the patient declared that he was well, and all that could be said against him was that he had a weakish heart, that he was breathless upon exertion, that he had rather inadequate kidneys, and that, to maintain his sense of wellbeing, he was compelled to live by rule. This rule was, a midday dinner, with an ounce of brandy in half a pint of water; a moderate breakfast and tea, with eggs, or poultry, or fish; extreme moderation in the use of fluids; tepid sponging, warm clothing, gentle exercise, and early hours. Within a year, I heard of the patient being in fair health, and managing his iron works in Wales. What I have since heard of him, from time to time, is instructive. Occasionally losing his faith, or lacking strength to follow his rules, he returns to the freedom for which he longs, frequents society, dines late, rejoices again in his life, and has all his heart's desire. For a time all goes merrily and well, and he breaks sarcastic jokes over the heads of physicians. But, sooner or later, the urine diminishes in density, and becomes albuminous; the heart loses its strength and regularity; the breathing is oppressed; the nights are sleepless; till at last, after much suffering, his obstinacy is conquered; and, reconvinced, and humbled and penitent, he returns to his obedience, and again recovers his health. Such cases are common enough; and my experience forbids me to doubt that, in fevers and inflammations, in hæmorrhages and acute diseases of every sort, the issue of particular cases turns oftener than we are, perhaps, ready to admit, upon an adequate understanding of the physiological principles applicable to the removal of the conditions imperilling life, and upon the resolution and patience, the completeness and fidelity, with which they are enforced.

And such considerations are true and important, not only in diseases jeopardising life, but also in common disorders which, though devoid of serious peril, invade our comfort, hinder our work, and dull our joys in life. I do not forget that, through hereditary influences, and unsuitable, but inevitable, environments, many persons are doomed to be constantly ailing, without being ever quite ill; that their normal state is one of suffering; that no physiological readjustments, and no specific medication, can give to them the pleasant sense of health; and that attempts to effect what is possible, issue only in greater sufferings, or in disaster; but, making full allowance for such cases, there remain countless numbers who are willing and eager to make any and every sacrifice necessary to recovery, and who are left to continue in suffering, because the physiological principles and compensations applicable to their relief are derided, disregarded, or denied.

[*To be continued.*]

A LECTURE
ON THE
TUBERCLE-BACILLUS AND PHTHISIS.

Delivered at Charing Cross Hospital.

By T. HENRY GREEN, M.D., F.R.C.P.,
Physician to the Hospital, and Senior Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

GENTLEMEN,—The discovery by Dr. Koch of the organism concerned in the production of tuberculous diseases, seems destined to exercise a more important influence upon practical medicine than has any previous outcome of pathological research. This influence is already marked, and although the discovery is but a few months old, both the profession and the public are recognising its importance, and are actively engaged, by means of respirators and other weapons, in combating the bacillus to which Koch has introduced us. Now, gentlemen, the announcement of any new and great discovery in medical science is apt to unduly divert us from those which have preceded it; and we are, perhaps, rather liable to allow our opinions to be influenced by the new, to the exclusion of the old. This danger I cannot help thinking we are beginning to incur in connection with the tubercle-bacillus. It is not my purpose now to describe to you Koch's all important investigations, neither to venture to criticise the inferences which have been drawn from them. In dealing with such complex pathological problems, investigations require to be repeated before the results obtained from them can receive unconditional acceptance. I shall, however, to-day, assume the truth of the proposition that tuberculous processes are infective in their nature, and are due to the presence of a specific organism—the bacillus of Koch; and from this standpoint I wish to consider the subject more especially as it concerns pulmonary phthisis; and I shall endeavour to place before you, as briefly as I can, a few considerations which appear to me to be of some practical importance in this connection.

In the first place, then, let me ask you to bear in mind what has been the tendency of pathological teaching respecting phthisis, during the past few years. This is, I think, fairly represented in some propositions which I submitted to you when speaking upon this subject more than a year ago. Amongst these you will find the following. 1. The morbid processes which lead to phthisical consolidation of the lung are inflammatory in their nature; by which it is simply meant to imply that they owe their origin to some kind of injury of the pulmonary tissues. 2. The injury of the lungs which leads to phthisis, is mainly inflicted through the medium of the bronchi, and consists in some condition of the respired air. 3. It becomes *increasingly probable* that this injurious influence of the respired air is due to the presence in it of *minute organisms*; although whether these organisms are specific, and whether they are themselves the causes of the phthisical process, is at present quite uncertain. 4. In most cases phthisical consolidation of the lung differs from other forms of pneumonic consolidation, inasmuch as it exercises an injurious influence upon the adjacent and distant pulmonary tissues, and thus tends to spread. To this *infective* property, which varies in degree very considerably in different cases, and under different circumstances, the progressive character of phthisical consolidation is largely due.

You see, therefore, that our previous notions of phthisis have, so to speak, prepared us for the discovery of Koch. The tubercle-bacillus is the element that was wanting to establish the truth of our pathology as far as it had gone. But Koch's investigations do much more than this; not only do they show that the infective nature of tuberculous processes is due to organisms, but they appear to prove that these organisms are specific—that tuberculosis is produced by Koch's bacillus, and originates in no other way. This is, undoubtedly, by far the most important advance that has yet been made in the pathology of these diseases. But even now our knowledge is quite incomplete. We have yet to learn what conditions are necessary in order that the bacillus may exercise its injurious influence; for it must, I think, be admitted that something more is required than the mere presence of the organisms.

The mode by which the bacillus obtains an entrance to the lungs is undoubtedly, in all but quite exceptional cases, by means of the respired air. The sputum of phthisical patients abounds in the organisms which, as Koch has shown, retain their vitality after the

sputum has dried up, and thus become capable of dissemination as dust in the atmosphere; they are, perhaps, also contained in the breath. The source of infection must thus be very generally present. In some situations, as in institutions set apart for the treatment of consumptives, the atmosphere must probably be impregnated with the contagium, and yet how exceedingly rare are instances in which it can be shown that the disease has been communicated. Although isolated cases of probable infection have been met with by Dr. Hermann Weber and others, the evidence of clinical experience is altogether against the contagious nature of phthisis. Notwithstanding, Koch's investigations appear to prove that it is a truly contagious, *i.e.*, communicable disease. It is, however, certainly communicable only under conditions which comparatively rarely obtain. A knowledge of the conditions which are necessary in order that the tubercle-bacillus may produce tuberculosis, is therefore what is now to be desired. We want to know the life history of the contagium. This knowledge must undoubtedly await further experimental research; but in endeavouring to obtain it, I believe we shall again do well to consider some of our old-fashioned notions of pulmonary pathology.

In considering what conditions are necessary in order that the respired bacillus may produce phthisis, I would say, in the first place, that it is probable that this result is in no way influenced by the possibility, or otherwise, of the organisms obtaining a free access to the pulmonary tissues. The bacilli are so minute, that they must readily enter the alveoli, and probably also, like the particles of inhaled carbon which give rise to the normal pigmentation of the lungs, be able to penetrate the pseudo-stomata of Klein, and thus get into the lymph-channels. We must look, therefore, to the pulmonary tissues with which the organisms come into contact. Some abnormal condition of the lung would appear to be a necessary factor in the process. Here there are, I think, two well known elements in the pathology of phthisis, a consideration of which will help us in our inquiry—I mean the apical distribution of the pulmonary lesion, and the influence of inherited predisposition.

The apical distribution of the pulmonary lesion would appear alone to be sufficient to show that something more is necessary than the mere presence of the organisms. The causes of this distribution are, as you are aware, to be sought for in the diminished range of respiratory movement which obtains in the highest portions of the lungs. As the result of this diminished movement there is, in certain conditions of health, a tendency to stagnation of the blood-stream in the pulmonary capillaries. The stagnation of the circulation leads to more or less injury of the walls of the pulmonary vessels; the injured vessels are no longer capable of completely retaining the elements of the blood; and the slight leakage thus induced, favours active changes in the alveolar epithelium. We have, therefore, in certain individuals, and under certain circumstances, this tendency to slight congestion and inflammation in the highest portions of the lungs; and this tendency appears not only to determine the apical distribution of the pulmonary consolidation, but its outcome—the presence of inflammatory products, however small in amount, *probably* furnishes one of the conditions necessary in order that the bacilli may cause phthisical disease.

The influence of inherited predisposition is so marked, that its consideration must necessarily occupy a prominent place in any study of the pathology of phthisis. As to the nature of what is transmitted—although, accepting Koch's conclusions, this may be in quite exceptional cases a specific organism or virus, as in the case of syphilis—speaking generally, it is in all probability simply a tendency to disease. Without discussing this subject it may, I believe, be said that the tendency consists in some feebleness of the constitution in general, and often of the lungs and other organs in particular. As a result of this feebleness there is usually a want of constitutional vigour, the power of resisting injurious influences is diminished, and the lungs, and often other organs and tissues, which are especially weak, are, as a consequence, abnormally liable to become inflamed. Further—this inherited weakness not only renders certain organs abnormally liable to inflammation, but also abnormally incapable of recovering from the effects of the inflammatory process; and thus there is more or less tendency to a retention and accumulation of the inflammatory products in the affected area. This tendency to accumulation and infiltration is, as you know, the most important histological characteristic of scrofulous inflammations.

You see, therefore, that the result of any inherited tendency to phthisis must necessarily be to favour the occurrence of those congestive and inflammatory conditions in the apices of the lungs, the existence of which, as we have said, probably constitutes an important factor in the pathological history of the bacillus. General feebleness and want of vigour lead to loss of muscular strength and weakness of the heart, and thus tend to prevent the full expansion of the chest, to cause a stooping posture of the body, and to impair the force of the circulation—all conditions favouring blood-stagnation in the highest portions of the lungs. Further, the toneless condition of the blood-vessels and the poverty of the blood with which the constitutional feebleness is so often associated, furnish the conditions which are the most favourable to transudation.

Lastly, in connection with this part of our subject I must ask you to bear in mind that all important factor in the pathology of phthisis—the state of the general health. Quite apart from any inherited constitutional feebleness there can be no doubt that an impaired state of health very greatly favours the development of the disease. This fact gives additional support to the view we have been taking, inasmuch as any acquired weakness must necessarily play the same *rôle* in the causation of apical stagnation and exudation as the inherited feebleness to which we have alluded. It is when the two are associated, as they so frequently are, that we have the conditions most favourable to the development of the disease.

We are now in a position to return to our original question—what conditions are necessary in order that the respired bacillus may produce phthisis? It seems *probable*, I think, from this brief survey of our old pathology that one of these conditions, at all events, is the presence of some inflammatory products within the pulmonary alveoli. Whether such products favour the growth of the organisms, or whether the presence of the organisms leads to the development of some infective substance in the products, I shall not attempt to discuss. The answer to such and many other questions must, as I have stated, await further investigation. I would, however, here remark on the fact that it is alveolar and not bronchial inflammation which especially favours the development of phthisis; and it is interesting to note in this connection that Koch's investigations show the necessity of *prolonged* contact of the bacilli in order to produce tuberculosis. Such prolonged contact is obviously much more likely to occur in the air-vesicles than in the bronchial tubes.

It appears, therefore, from the present position of our knowledge respecting the pathology of phthisis—accepting the truth of Koch's investigations—that two conditions, at all events, are necessary in order to produce the disease: the presence of the tubercle bacillus and some abnormal state of the pulmonary tissue with which it comes into contact—an abnormal state obtaining in the very great majority of cases in the highest portions of the lungs, and probably depending, for the most part, upon inherited or acquired constitutional feebleness. Such being the case, we have now to consider how far this teaching ought to influence us in our practice. To what extent is Koch's discovery likely to aid us in the diagnosis and prognosis of the disease? and, above all, what indications does it afford with reference to its treatment? The answer to such questions must necessarily await prolonged and careful clinical study. At present, it is impossible to do much more than make suggestions on these heads.

Diagnosis.—The tubercle-bacillus is to be found in phthisical sputum. An examination of the sputum may consequently prove a valuable aid to diagnosis. Thus far, the investigations of various observers appear to show that the organisms exist in all cases of this disease. This is important, as it tends to support the view which we have always taught here—that there are no distinct pathological varieties of phthisis; that the attempts so often made to subdivide the disease have no pathological basis. When it can be shown that the bacillus is present in certain cases of phthisis which it is absent in others, we shall be prepared to admit the existence of more than one form of the disease.

If some abnormal condition of the pulmonary apex necessarily precede any injurious influence of the bacillus, it becomes an interesting question as to how far such a condition can clinically be recognised. Although I cannot now support my belief by any carefully recorded facts, my impression is that cases are occasionally met with in which what is probably this pretubercular stage exists. In weakly individuals, in whom there are no marked lung-symptoms, and in whom an examination of the chest is made, perhaps on account of cough which is really of gastric or pharyngeal origin, a few obscure, scattered crepitant *râles*, without any signs of consolidation, are sometimes discovered at one or both apices. In the course of a few days, after tonic treatment, these signs disappear, and there is no subsequent evidence of phthisical disease. In such cases, is not the condition of the pulmonary apices closely allied

that so common in the most dependent portions of the lungs of weakly subjects confined to bed, which gives rise to that transitory crepitation heard with the first few deep inspirations?

Prognosis.—It appears that there is a definite relation between the number of bacilli and the intensity of the phthisical process, so that the examination of the sputum may afford information of much prognostic value.

Treatment.—We now come to the most important part of our subject—that of treatment. What is the practical teaching of Koch's discovery with reference to the prevention and cure of phthisis? If our pathological conclusions be even only partially true, they clearly indicate, I think, the necessity of carefully distinguishing between the bacillus and the conditions which favour its influence, and of directing our treatment to both. We must endeavour to prevent the access of the organism, and, if possible, to destroy it after it has effected an entrance; and we must also strive to maintain a healthy condition of the pulmonary tissues, and thus prevent the occurrence of that tendency to apical stagnation which appears to be such an important, if not essential, factor in the disease. The latter of these indications is, I believe, as important as the former; and it is, perhaps, rather in danger of being lost sight of in the very natural eagerness with which attention is now being directed towards the bacillus.

Firstly, then, with regard to the condition of the lung which favours the influence of the bacillus. Here it is only necessary to remark that, whatever promotes a vigorous state of health will, by improving the condition of the blood, the nutrition of the vessels, the activity of the circulation, and the exercise of the respiratory function, tend to prevent that stagnation and transudation in the highest portions of the lungs, the etiological importance of which we have so especially insisted upon. The value of treatment which has for its object the fulfilment of these indications in the prevention of phthisis it is, I believe, difficult to over-estimate; and its usefulness is almost equally valuable when the disease is established. I cannot but think that, in the meantime, such treatment promises better results than any attempts to attack the specific organisms.

Secondly, the tubercle-bacillus. The consideration of this naturally divides itself under two heads: (*a*) the prevention of its access, and (*b*) attempts to destroy it when the disease is developed.

(*a*) The prevention of the access of the bacillus. The present position of our knowledge appears to point to the desirability of adopting measures for the disinfection and destruction of the sputa of patients suffering from phthisis; and perhaps, also, of the alvine secretions, when there is any evidence of tuberculous disease of the bowel. It also raises the question as to how far it is desirable to allow individuals who are not consumptive, but who inherit a phthisical tendency, and especially when such individuals are out of health, to *intimately* associate with those who are suffering from the disease. If our pathology continues to move on the same lines, this object may become one requiring the consideration of those who manage our hospitals.

(*b*) The destruction of the bacillus after the disease is established. Attempts to do this are made principally by means of antiseptic inhalations. This is the fashionable, though perhaps somewhat misdirected, therapeutics of the day. A respirator charged with some antiseptic, such as creasote or carbolic acid, is now being largely used in the treatment of phthisis. Although I should be very sorry to unfairly criticise such treatment, I cannot but think that the evidence that its usefulness is in any way dependent upon destruction of the bacilli, or of any infective substance which may originate, is wanting. It seems to me much more probable that such inhalations, when beneficial, are so mainly through the favourable influence which they exercise upon the mucous membrane and secretion; and when, as is so often the case, they are combined with chloroform, they will also act as direct sedatives. What we want are cases of early and progressive phthisis in which antiseptic treatment alone, without adjuncts, is followed by marked improvement. When it can be shown, *e.g.*, that the pyrexia of early phthisis is reduced by such treatment, we shall have evidence pointing to the influence of the germicides upon the bacillus of considerable value. We are now making some observations in this direction, but at present, with negative results. Whilst, therefore, I do not wish to be understood to discourage the treatment of phthisis by antiseptic inhalations, I think we must be careful as to the interpretation we put on our results. The treatment of phthisis and of other pulmonary diseases by means of a medicated atmosphere has been greatly stimulated by Koch's discovery. Such treatment has undoubtedly been too much neglected in the past, and its prosecution promises the best results. But, in the meantime, I think we have no evidence that we are able by such means to influence the tubercle bacillus; although, if Koch's investigations be true, the discovery of some agent which, by destroying it, will arrest its injurious influence, is obviously the greatest desideratum.

REMARKS ON CHRONIC OVARITIS.*

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THE disease I have selected for consideration in the short paper I have the honour to read this evening is not only one of the most tedious and intractable of all the ailments we meet with in connection with the uterine system, but, putting aside those which are more directly dangerous to life, there is none which more unfits a woman for her social duties, or more affects her general well-being, than chronic ovaritis in its severer forms. To all of us, whether engaged in general or special practice, it must have been a matter of common observation how frequently one or other of the ovaries, or both, are sympathetically affected in connection with almost any form of uterine disease. The majority of women suffering from endometritis, from flexions, from subinvolution, or any other of the commoner varieties of uterine malady, begin sooner or later to complain of pain in one or other ovarian region, referred sometimes to the neighbourhood of the groin, sometimes to the hip, sometimes to the upper part of the thigh. It is also a matter of common observation, that of the two ovaries it is more frequently the left which first, at all events, becomes the seat of congestion and pain. That this is so, is believed to be due partly to the fact of the left ovarian vein opening into the renal instead of into the vena cava, as on the right side, and so more readily lending itself to obstruction; and partly to the adjacency of the frequently distended sigmoid flexure and rectum, promoting by their pressure, when distended, the same result. And this occasional and sympathetic congestion, periodically heightened by the process of ovulation, it is, which, after a while, tends to pass more definitely into subacute or chronic ovaritis. Acute ovaritis (which we are not now discussing), I may remark in passing, is comparatively rare, and, when met with, is generally in connection with the puerperal condition, either childbirth or miscarriage, and then associated with other pelvic inflammations, and often septic in character. Very occasionally, also, it arises from cold, from a first sexual intercourse, especially if this occurs at the menstrual period, in connection with the exanthemata, or as a result of gonorrhœa. Chronic ovaritis, on the other hand, which is our present subject, I look upon as in the large majority of cases secondary to pre-existing uterine disease. But not always. Quite recently, for example, the following case was under my care at St. Thomas's. A young woman was sent to us whose history was briefly this. She was thirty-six years of age, and her menstruation had been normal up to Christmas last. At that time her general health was less well than usual, and she was exposed in her situation, as nursery governess, to a good deal of extra fatigue in connection with illness in the family. Shortly afterwards, she began to suffer pain before and during her period, and much debility afterwards, and these symptoms had gradually increased up to the date of her admission. Walking had become painful, and ultimately she was only comfortable when resting. In this state she sought medical advice, and the case was diagnosed as retroflexion of the uterus, and a Hodge's pessary introduced. I may note, in passing, that this error is not an uncommon one. I have known several instances in which the enlarged ovary prolapsed, and close to the side of or behind the uterus, in Douglas's pouch, has been mistaken for the fundus of the retroflexed uterus. The pessary, in the case I am referring to, although the diagnosis was erroneous, gave some relief; at least it helped her to get about, and so she was glad of its aid, but otherwise the pain was scarcely mitigated. Under these circumstances, she came to the hospital. Careful examination could detect nothing wrong with the uterus, and indeed this might have been *à priori* expected, from her history of previous painless menstruation. But on the left side, low down in Douglas's Pouch, and pretty close to the uterus, was a rounded tender body, extremely sensitive, and not moving with the uterus, which was at once recognised as a congested and prolapsed ovary, and

* Read before the East Surrey District of the South-Eastern Branch.

the cause of her sufferings. In addition to the cases of uncomplicated subacute ovaritis, of which this is a type, there are the cases of acute ovaritis, with or without coincident uterine disease, to which we have alluded, which drift on into a subacute or chronic form. But both these classes of cases are the exception. When this patient, *e.g.*, was in the ward, a few weeks ago, there were seven other cases of chronic ovaritis under treatment at the same time: three of these were associated with flexions, two with endometritis, and two with parametritis, in one of which the uterus was retroflexed; and in the other, from the amount of exudation present, it was difficult to speak certainly of the antecedent condition of the uterus. But, in all these, the uterine malady, definitely, and by longer or shorter intervals, preceded the ovarian disturbance. Such, at least, is my view of the usual etiology of chronic ovaritis. The symptoms are fairly distinct. The principal one is pain in, and radiating from, one or other ovarian region; more or less severe; sometimes dull; sometimes acute; sometimes very acute. At first, this pain is occasional only, but apt to be pretty regularly provoked by the recurrence of ovulation, getting worse before the catamenia, and lessening afterwards. After a while it becomes continuous, but increased by standing or walking; especially is this the case if the ovary be prolapsed and congested; and, if it be the left ovary which is affected, it is apt to be aggravated before and during the action of the bowels. I have known, indeed, the pain which accompanies the action of the bowels so dreaded, that patients have avoided an action for two or three weeks together to escape the suffering it entailed. In the early stages of ovaritis, there is generally a tendency to menorrhagia; as the case advances, and as tissue changes take place in the ovary, the tendency often, but not always, is to the flow becoming scanty. But this, as well as the amount and character of the dysmenorrhœa, is much influenced by the nature of the associated uterine disease. Among the general symptoms always noticed with the progress of the case, are various neurotic disturbances and nervous irritability, the result of nerve exhaustion. The physical diagnosis is based on the fact, that the swollen and tender ovary may be detected by vaginal, rectal, or bimanual examination; and that its shape and peculiar tenderness are both characteristic. Its shape is that of an oval body, in fact of the ovary itself, increased in all its dimensions to twice or four times its ordinary bulk; and the sickening pain, produced by pressure, resembles the similar pain which may occur in connection with its analogue in the male, orchitis. Should the ovary be prolapsed, and when increased in weight it is very apt to become so, its detection is still more easy. I may add that, not only is the left ovary more liable, as we have seen, to ovaritis than the right, but, when prolapsed, it is generally the lower and more readily detected; and that because Douglas's pouch dips down somewhat lower on the left side than it does on the right.

I incidentally alluded to the importance of distinguishing the fundus of the retroflexed uterus from the ovary; but the careful use of the sound will generally prevent, or rectify, the mistake, by establishing the fact that the uterine axis is normal in direction, and that the uterus may be moved without moving the body behind. Occasionally, however, both uterus and ovary are involved together in perimetric, or parametric exudation, and the difficulty of then making out the ovary is much enhanced. But, even here, the character of the pain, and the peculiar sensitiveness, on examination, at one spot corresponding to the ovary, and the additional swelling and pain which occur at that spot during ovulation, are fairly characteristic points. Among other symptoms which help the diagnosis, are a not infrequent diffused fulness in the iliac region corresponding to the affected ovary, a fulness often spoken of by the patient and her friends as a "tumour," and also some rigidity of the abdominal muscles in the same neighbourhood; mammary and inframammary pain on the affected side are also common. One other remark I would make before passing to the consideration of the pathology and treatment of this disease, is the marked tendency there is in these cases to attacks of pelvic peritonitis; the constantly hyperæmic ovaries, inducing an associated peritoneal hyperæmia, which comparatively slight accidents, such as cold, or sexual imprudence, or over exertion, may aggravate into distinct peritonitis, more or less extensive, sometimes limited to the pelvis, and, at others, spreading to the abdominal peritoneum. As regards the pathology, two forms of ovaritis are recognised; but I must add that, clinically, the distinction cannot be made out. These forms are based upon the ovarian tissue affected, and are seen best in patients dying from septicæmia, with acute ovaritis. They are called respectively the follicular and the interstitial. In the follicular form, the follicles are increased in size, and their contents may be cloudy, flocculent, or puriform. In the interstitial form, the connective tissue is much proliferated, and diffuse suppuration or abscess may occur. Both varieties may coexist. In chronic ovaritis, the ovaries may either become cystic as a chronic development of the follicular variety, or cirrhotic by inflammatory condensation of the connective tissue, constituting a sclerosis of the stroma, as a result of the interstitial variety. The cystic is the more common; the sclerotic more frequent in association with repeated attacks of periovaritis.

Lastly, as regards the treatment. The first proposition I would venture upon is that, as in the majority of instances, the uterine disease precedes the ovarian, and is to it pretty much in the relation of cause and effect; it is essential to rectify the uterine malady before amelioration of the ovarian symptoms can be expected, or, at all events, to ensure that the two shall proceed together. While a patient, *e.g.*, has endometritis, and consequent congestive dysmenorrhœa, or cervical obstruction, either actual as from stenosis, or virtual as from flexion, and so obstructive dysmenorrhœa, it is hopeless to expect, by any treatment, improvement in the condition of the ovaries. Indeed, in numerous cases which I have seen, the restoration of the uterus to a healthy condition has been followed by a speedy mitigation of the ovarian symptoms, and that without any special treatment of the ovaries at all. But in others, of course, both the uterine trouble and the ovarian hyperæmia and irritation have been so chronic, and such tissue changes have taken place in the ovaries, whether follicular or parenchymatous, that even when the uterus is cured, the ovaries remain the seat and source of a constant suffering. And then, too, there is the smaller class of cases in which there has been no antecedent uterine disease, as in the case some particulars of which I have narrated, and those, also, in which subacute and chronic ovaritis has followed some direct acute attack. Taking these last, as being the most hopeful, first, supposing that there is either no uterine complication, or that any such has been rectified, the measures that in this stage, which may be spoken of as the subacute, will prove most useful, include rest, more or less complete according to the severity of the case, and with the lower part of the body somewhat raised, either by a pillow under the hips, or by having the foot of the bed elevated; the application of small blisters to the inguinal region, either allowed to heal or kept open for two or three days at a time by poulticing. The application of one or two leeches either to the cervix or to the perinæum on the side of the affected ovary. The injection of hot water twice daily into the vagina, at a moderately high temperature, say 100°-110°, the introduction into the vagina high up of pledgets of cotton wool soaked in glycerine, by which a considerable watery drain of the uterus is effected and congestion much relieved; the maintenance of the bowels in a somewhat relaxed condition, to avert all pressure on the ovaries from their distension, as well as to deplete the portal venous system; the administration of the iodide and bromide of potassium or ammonium, with quinine and salicine, or the use of sedatives according to circumstances. The recently acute and subacute cases will often yield to treatment of this character, the treatment in fact of ordinary subacute glandular inflammation, varied of course, according to the incidents of the case, any special symptoms being specially dealt with.

In cases of the next class, those in which the antecedent uterine disease has been of longer duration, and in which some amount of tissue change in the ovary itself has possibly occurred, and in which even when the uterus has been put into a healthy condition, the tenderness and ovarialgia remain, remedies are unfortunately less reliable. There is in these cases nearly always pain, generally less after the night's rest than when the day has advanced; sometimes a dull aching pain, sometimes a sharp stabbing pain, sometimes spoken of as like a perpetual toothache in the side; whatever the character, it is increased by standing or exertion; and if the ovary be prolapsed as well as inflamed, increased greatly by the action of the bowels, and by marital relations. In these, the difficulty of cure is much greater. They often persist for years, and too frequently drift into the third or practically hopeless class. The patient's general health is sometimes pretty good, but her capacity for family and social duties and her ability to get about become less and less. Sometimes, on the other hand, various hystero-neuroses develop, and much general impairment of health results. Still, a sufficient number of cures occur even in this class to encourage perseverance in the treatment; tissue-changes may not have taken place, and there is always the hope that if the worst symptoms can be relieved, at the menopause, a very distinct improvement may take place. The remedying of any concomitant uterine disorder still holds the first place. Rest, as in the subacute form, is of the highest consequence; but perhaps not entire rest, and that for two reasons: the first, that complete rest indoors affects detrimentally the general health; and secon

that change of scene is useful in preventing the patient's thoughts from dwelling too exclusively on her pains. Still, stairs, standing, lifting, and long walks must be avoided. The improvement, indeed, of the general health is of particular importance, by attention to general regimen and suitable tonics. Under the former head I would mention the avoidance of any but the lighter stimulants. I am satisfied that, in these cases, the stronger stimulants, except occasionally, are prejudicial. And then, too, unfortunately the relief to pain obtained by the use of brandy and the stronger stimulants, tends to beget a liking which grows and reacts prejudicially upon the whole system. But although but little stimulant is desirable, for both these reasons, the direct and the indirect, plenty of light and easily digestible food is of great consequence. There is often but a poor appetite and impaired digestion in these cases; and, if these can be remedied, a distinct improvement in the ovaritis follows. Indeed, I believe it helps even mechanically to mend matters, and that the ovaries are less liable to prolapse in a pelvis fairly padded, than in one from which all adipose tissue has disappeared. The avoidance of cold, as well as fatigue, is an important point in the treatment. In addition to warm clothing and the avoidance of casual low temperatures, I have often seen much benefit accrue from wintering in one or other of our more sheltered winter-resorts, or, where circumstances permitted, even in Egypt or Madeira. The tonic from which most benefit is generally derived is zinc valerianate with quinine, and this may be combined in a pill with belladonna, morphia, or Indian hemp, as desired. Suppositories of morphia, or of atropia, are also valuable means of relieving pain.

The local treatment includes the use of iodine or small blisters to the inguinal region, or sedative liniments, such as the liniments of aconite, belladonna, or chloroform. Hot sitz baths, douches, 105°-110°; mercurial vaginal suppositories where it appears possible to promote absorption of exudations, or lessen ovarian congestion; and when the ovary is prolapsed, the introduction of an elastic ring necessary, which supports at once both uterus and ovary, often so warding off the dragging and bearing down sensations of which the patient complains, and markedly relieving the dyspareunia so frequently present. A device that I have made use of sometimes, and with benefit, has been what has been called the postural method of treatment. By getting the patient to kneel for definite periods of fifteen to thirty minutes, two or three times a day, in the genu-pectoral position, the ovaries, unless fixed, will gravitate out of the pelvis, and so lose some of their congestion. And these approaches to a healthy condition repeated frequently lead, it is believed, to the tendency towards health becoming permanent. At all events this position very frequently has the effect of distinctly relieveing pain. One other point worthy of attention is the question of utero-gestation; and the cognate one of the permissibility of conjugal relations when married. Briefly, sexual excitement being obviously undesirable, intercourse must be within the most restrained limits, when in circumstances, complete abstinence is unattainable. In some cases of ovaritis, while ovulation proceeds, conception is of course possible; and there is also no doubt that gestation has, in many cases been distinctly beneficial to cases of chronic ovaritis, indeed, in some cases, I have known a complete and permanent cure result. The explanation being that during gestation the ovaries are having complete physiological rest; and also that being lifted out of the pelvis by the uterus, as it rises in the abdomen, they are removed from much of the pressure and weight to which, while in the pelvis, they are subjected. But in spite of all such precautions and treatment, a certain number of these cases drift into the third class, the cases in which no remedy short of a nearly persistent narcotism appears to give any relief. The patient is always in pain; pain often of by some as a burning, scorching pain; by others as a searing unendurable pain; by others as "torture;" a pain from which nothing but the stronger sedatives, or hypodermic injections of morphia, or large doses of brandy, give any freedom. For the relief of this class I am afraid little but surgical treatment remains, apart from the perpetual administration of sedatives.

Of the few words I have to say on Battey's operation I wish to speak in the most guarded manner possible. It is still an operation *sub judice*. It is an operation which before the recent great advance made in the safety of abdominal surgery, by the use of antiseptic methods, must have been scarcely justifiable; for though these extreme cases of ovaritis we are now considering are sources of the utmost misery and suffering, they are compatible with a considerable proportion of life. It is an operation of which the full particulars should always be put before the patient and her friends, so that she may select between the risk of the operation and, indeed, its possible chances of success, even if she recovers, and continuing to bear her pains with such mitigation as medicine can give. The objection raised by some to it, that it unsexes a woman, appears to me groundless; it renders her of course incapable of further child-bearing; but though she can be no longer a mother, she can and does continue to be a wife, and with the feelings of a wife unchanged. Much of the objection that has been felt to it has arisen I think from one of the names proposed for it, "normal ovariotomy," as if it were the removal of healthy ovaries. In the connection in which we are now discussing the operation, this term is wholly inappropriate, it is performed solely for the removal of diseased and worse than useless appendages. The chief drawback to it, besides the risk of an occasional unfortunate result, as in all operations, is, I think, the fact, that in some cases even the removal of the ovaries has failed to cure; and that pain continues afterwards. The probability is in these that some central spinal lesion has occurred as a result of the long-continued nerve-irritation, and that the cause of failure in the operation arises from its being too long delayed. But I have known cases in which the cure, though not immediate, has eventually, after six to twelve months, occurred. In most, however, that I have seen, in my own practice and that of others, the relief has been as immediate as it is marked. Into the details of the operation I do not propose to enter; it is essentially an ovariotomy on a small scale, and not the easier for the less magnitude. Indeed, the bringing up of the ovaries to the abdominal wound through an incision in an often rigid abdominal wall is frequently a matter of much difficulty. Strict antisepticism is, of course, observed; and the preparation and subsequent treatment resemble those which are the rule in ovariotomy. I have myself been concerned in four cases. The first was a lady aged 28, who had puerperal ovaritis six years before I first saw her. The acute had passed into the chronic form, and the pain was constant. During these six years she had had the best London advice. For two years after I began to attend her she was practically bedridden; and only when under the influence of chloral, the only sedative which agreed with her, did she experience any relief. After much thought, the operation was decided upon, and performed in July 1881. The relief in this case was not immediate; but within six months of the operation she was satisfactorily well. The second was a lady aged 36, who had been the subject of ovaritis for nine years, also dating from a confinement. She frequently had had, during these years, attacks of localised peritonitis, more or less severe. She, too, at last became bedridden; and, among other symptoms, I may mention that so distressing was the pain induced by the action of the bowels, that her screams could be heard in adjacent houses. Her mind, too, began to be affected, and her emaciation was extreme. Here, the operation, which I did in October 1881, was immediately successful, and she has continued since in perfect health. The third case was that of a single girl, who had suffered from congenital retroflexion and obstructive dysmenorrhœa since the establishment of menstruation; and, though still young, 27, she had, since the occurrence of ovaritis about five years previously, become helplessly weak, emaciated, and haggard. On the principle already adverted to, of rectifying any uterine malady first, I suggested to her medical attendant the desirability of performing the Sims operation for the retroflexion, it being incurable otherwise. This I did, with some relief to the dysmenorrhœa; but the ovarian pain was unabated. After a further interval, and no improvement being obtained, at her earnest entreaty, and with the entire sanction of her parents, I removed the ovaries, and the result has been, as in the former cases, quite satisfactory. In each of these cases, the ovaries were the seat of more or less cystic degeneration, satisfactorily evidencing the need of the operation and the futility of merely medical treatment. In the second, there were some adhesions on the left side, due to peritonitis; but they were not of a serious nature, and in each the recovery after the operation was without incident. My fourth and last case I operated upon in May 1882. She was a married lady, aged 34. Her ovaritis followed a retroflexion which occurred after her last confinement but one, about five years previously. Before I saw her, about two years ago, she had been under the care of the most eminent London obstetricians, but without benefit. When I first attended her, and for the most part afterwards, she was always lying on her face, sitting or the dorsal position being always painful, the left ovary being low down in Douglas's pouch, and pressed upon by the fundus of the retroflexed uterus. In spite of every care, she had recurrent attacks of pelvic inflammation, each followed by an increase of the local symptoms. Her health gradually deteriorated, appetite and digestion failed, and she became practically worn out with constant suffering. Treatment of all kinds was unavailingly tried. Finally, the operation was decided

upon. Unfortunately, it proved one of those cases in which the adhesions were very extensive, and the operation was long and tedious. Still it was satisfactorily accomplished; but she sank from a slight attack of peritonitis on the fourth day. This adverse condition of the pelvic contents could not be ascertained prior to the operation. It was not as if there were masses of inflammatory exudation which could be felt; nothing wrong but the dislocated ovary and retroflexed uterus could be made out, and only exploration of the pelvis at the operation could show how fixed in its faulty position the ovary was.

I must not, Mr. Chairman, enter more largely into the tempting subject of oöphorectomy. The object, indeed, of this unpretending paper will be fulfilled, if it elicit, as I doubt not it will, from gentlemen present, any suggestions as to the better management of cases of chronic ovaritis of either the first, the second, or the hopeless class.

THE TREATMENT OF INCREASED ARTERIAL TENSION.*

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From the earliest times physicians have watched the pulse, and have used it as a means of estimating the nature and progress of disease; the ancients, no doubt, merely from empirical reasons, but the moderns, not simply because experience has connected certain states of pulse with certain conditions of body, but because physiology having shown that the arteries form the main highway from the heart which propels, to the tissues which use the blood, we endeavour, by watching their condition and their varying relation to the blood stream, to gain some knowledge as to the state of affairs at each extremity of the circulation, to estimate by what force the heart is promoting the circuit of the blood at one end, and by what resistance the tissues are hindering it at the other. The pulse is the expression of a somewhat complex series of factors, the principal of which are heart force, peripheral resistance, arterial elasticity, and quantity of circulating fluid; and it is the varying relation between these different elements that produces the various forms of pulse.

The use of the sphygmograph has led to the identification of the "hard," "persistent," "incompressible," "wiry" pulse, and its description as that of increased arterial tension. This particular form of pulse is of great interest from its frequent association with serious diseases. It is so often found in relation with Bright's disease, gout, angina pectoris, hypertrophy of the heart, apoplexy, and various forms of paralysis, that it has come to be considered a symptom of ill omen; and thus, by a mental process, which does not always lead to safe conclusions, has come to be looked upon as a condition which it is desirable to remove; and as modern medicine provides means by which this can, to a certain extent, be done, it is a matter of the greatest interest to inquire in what cases increased arterial tension is an evil to be got rid of, and in what it may be considered a purely conservative effort which should be aided and encouraged. In all the operations of organic life we find such a constant harmonious relation between cause and effect, between force and work, that we cannot conceive of the existence of such an unbalanced, over effort at the heart end of the circulation as permanently to maintain an increased pressure within the arteries, and, in fact, whenever the pressure, under which the circulation is carried on, the so-called arterial tension, is raised, the cause is to be found at the other end of the stream, and arises from obstructed outflow through the arteries and capillaries. But while obstruction to the exit of blood from the arteries is an essential factor in the production of high tension, it is not in itself enough; it can, by preventing the emptying of the vessels, keep up the pressure within them throughout the diastolic portion of the heart cycle; but the tension is not raised unless the heart has power to push the blood more forcibly into these full arteries; and thus, nipping the stream between the peripheral resistance and its own propulsive force, raise the arterial tension and increase the pressure of the blood against the walls of the vessels.

A broad distinction has to be drawn between mere fulness and increased tension. Obstruction only produces fulness, hinders the normal outflow into the capillaries, and leads to a condition in which the balance between force and work must be re-adjusted either by a slowing of the blood-flow, or a quickening of the heart-force.

*Read before the Leeds and West Riding Medico-Chirurgical Society.

Adjustment may take place in either of these ways; sometimes with lowered circulation, and enfeebled tissue-life the patient leads a slow, lethargic, burdensome existence; sometimes the recuperative power, the formative energy of the system is such that the heart hypertrophies in response to the increased work thrown upon it, forces the blood more powerfully into the arteries, keeps them in a state of high tension, and by means of this extra pressure drives the nutrient fluid into the resistent tissues, and thus keeping up an almost normal interchange between cell and pabulum produces a condition of apparent health; the arteries may burst, or the heart may fail, but in the meantime the tension is kept up, and by means of that tension the tissues are fed. If, then, we can remove the blood impurities which produce the obstruction, we relieve the tension in the best possible way; but if this blood state be due to a cause which cannot be altered, such as imperfect elimination in consequence of organic kidney disease, or if there be obstruction in the vessels themselves in consequence of thickening or rigidity, we must at all hazards keep up such a blood-pressure as is necessary to overcome the resistance, keep up that arterial tension the maintenance of which is necessary for the maintenance of at any rate active life.

To prevent confusion we must here for a moment consider the physical signs of this condition: if the pulse be hard, prolonged, and not easily compressed; if at each beat it raise the fingers applied to it even when greater pressure is used than generally suffices to stop all pulsation; if the relation of the heart-sounds over the aortic valves be disturbed, the second becoming loud, and the first being almost abolished; if the heart's apex beat lower down and further out than it should do, and gives a diffused heaving impulse, we are justified in saying that the arterial tension is increased—that with some peripheral obstruction to the circulation there is hypertrophy of the heart, and that the arteries between the two are distended by a higher pressure than the normal. Now in these cases it is common to find a particular alteration in the form of the pulse trace, so common that this particular outline has been spoken of as the trace of high tension. The peculiarities of a high tension trace are that the tidal wave is well marked and high, often level with the percussion stroke; that the aortic notch is high up in the trace; and that the dicrotic wave is small, not rising much above the bottom of the aorta notch. Now, according to my view this form of pulse is merely an indication of obstruction to the outflow of blood from the arteries, but is no sure sign of increase of tension; and as a matter of fact it is often found in association with a pulse which can be stopped by even less than the average weight.

The sphygmograph shows fairly accurately the range of variation of blood-pressure during the different portions of the heart-beat, but it shows only the variation not the actual pressure. The tracing is a record of the manner and rate at which the tension is raised to the maximum by the cardial systole and falls to the minimum at the end of the diastole, but it tells nothing as to whether this oscillation is at the top of a high pressure or a low one. We know, by the trace taken during an intermission, that even the base line represents a considerable tension, but what that tension is, the sphymograph is unable to say.

It is no doubt a fact, that the so-called trace of high tension is generally found in connection with tense, hard arteries: but as we know that the existence of this arterial tension pre-supposes the presence of peripheral obstruction, the pulse curve found in association with it may as logically be taken to indicate the one condition as the other, and if in even one single case we find this form of sphygmogram produced by a soft and easily compressed pulse, we may be sure that, as it cannot then indicate tension, it probably even when occurring with a hard pulse, shows the associated peripheral obstruction, rather than the increased arterial tension. I have taken some pains to measure carefully, in ounces, the pressure required to stop the pulse in a considerable number of cases, and have found (rather to my surprise at first) that there is no sort of relation between the weight so required in each case, and the nature of the sphygmographic curve.

As it was certain that the harder the pulse, *i.e.*, the greater the pressure within the artery, the greater would be the force required to stop the pulse by pressing on the artery outside, I naturally supposed that the greater the weight I found was required to stop the pulse, the nearer the trace would correspond to that associated with high tension; but nothing of the sort happened, and I have pretty well satisfied myself that the form of trace which has been so long accepted as indicative of high tension, *i.e.*, one with a large tidal wave, an ill-developed dicrotism, and an aortic notch situated high up near the summit of the curve, is really a sign only of peripheral resistance, and consequent slow emptying of arteries; and that the

most feasible way of estimating arterial tension is by observing the amount of pressure required to stop the arterial pulsation, which may be done either by an instrument contrived for the purpose, or by the application of two or three carefully educated fingers.

It is most desirable to be able to distinguish between these two conditions of retained fulness and increased tension, because, although they are so frequently associated clinically, the one process is deleterious, and the other in a way salutary; and whereas, in therapeutics we have constantly to aim at diminishing the peripheral resistance, and thus the retained fulness, we have, on the other hand, rather to encourage the propulsive power of the heart, by which the increased tension is produced, and it is only very occasionally that we have specially to treat the high blood pressure itself, and then rather to ward off accidents to the heart or the vessels, than to cure or palliate the disease itself.

As the peripheral resistance is, in the first instance, often the result of blood-impurity, and as that is the outcome of some deficient or abnormal performance of those functions by which nutriment is absorbed, heat and force are produced, and effete material is eliminated, it is obvious that the range of remedial measures to which one can have recourse, in the treatment of increased arterial tension, is exceedingly wide, and, in fact, embraces everything by which we can restore that equilibrium of physiological processes which we call health; thus exercise, fresh air, sunlight, substitution of intellectual play for mental work, worry, and care, a simple diet proportionate to the work done, baths and frictions to the skin, are all of service in their proper place; but of medicine, actual bottles of physic, those on which we have to place most reliance, are alteratives, liver stimulants, and saline and magnesian purgatives, medicines which alter or stimulate the functions of those large glands and mucous tracts whose abnormal action is often at the root of the evil. A mercurial followed by a saline is the time-honoured way of dealing with temporary attacks of blood impurity, and a very effectual method it is: a calomel pill followed by a black draught often producing as great a change in a man's pulse as it does improvement in his temper; but it is a medication which does not bear frequent repetition; and in its place, of late years, the use of saline mineral water has become very popular.

Now, there is no doubt that Hunyadi water, Friedrichshall, Ofna, and a host of other waters, are exceedingly useful, and, when properly administered, are capable of removing some of the commonest causes of obstructed circulation; but their use is so easy, and their effect is often so immediate, that people are apt to look on them merely as a ready means of correcting the evil effects of their wrong doings; and thus, instead of carefully taking a course in such a manner as to restore health, many people habitually keep a bottle at hand, and take a few doses whenever, as the result of overeating, or over-worry, or deficient exercise, they begin to feel that they are not, as they say, quite up to the mark.

In this way, instead of aiming at a cure, they merely try to enable themselves to do again the very thing they ought not to have done at first. The evil of the great consumption of saline aperients is that they themselves do so much harm, but that they enable people to persist in a mode of life which they would soon give up if the natural pain and penalties ensued after each indiscretion. It is like the mediæval sale of plenary indulgences, which led to endless wickedness, which would never have occurred if each sin had been followed by its own appropriate penance.

The proper and efficient use of saline aperients involves the application of a principle, for which the public cares little. The public wants immediate relief, the doctor wants to cure the patient. If what I have said about the relation between capillary obstruction and arterial tension be true, it is necessary not merely to purge the patient, but, while eliminating effete material on the one hand, to strengthen the heart and increase its propulsive power on the other. This is true, not only of the milder degrees of temporary obstruction, but especially of those more serious cases where, with permanent kidney-disease, and lessened power of elimination, with a general fibrosis of the vessels, and a condition of blood-impurities which we cannot hope entirely to remove, our only hopeful treatment is by lowering the work of the body, and so lessening the amount of effete material to be removed, in stimulating to the utmost all other excretory organs, and in so supporting the energy of the heart that it may be able to overcome the obstruction, even although in doing it may increase the arterial tension. In this way iron is of instant service, and digitalis is often of extreme value.

Some it has seemed illogical to give digitalis in chronic Bright's disease, a disease which is proverbially attended with hard tense pulse. It has seemed the reverse of common sense to urge the heart to drive the blood with still greater force into vessels already overfull; but if we look upon the arterial tension as the measure of the success of the heart in its efforts to overcome a resistance which we cannot materially reduce; and if we recognise that the failure of the heart to maintain this effort would lead to the failure of the patient, we can see the way in which such drugs as iron and digitalis may be of service in maintaining the propulsive power of the heart at the one end of the arteries, even while we are endeavouring, by salines and elaterium, to lower the resistance at the other.

Although, however, we must generally look kindly upon raised arterial tension, there are two conditions to which it may give rise, two accidents we may call them, which make it necessary at all hazards to reduce the vascular pressure. Under the constant strain, the cerebral vessels may give way, producing apoplexy or paralysis, or the heart may become so overtaxed, that angina pectoris, or even sudden death, may take place, from its inability to cope with the high pressure in the aorta. Under each of these circumstances, we have rather to put on one side the future progress of the case, and, even at some sacrifice of the patient's reserve strength, to save him from immediate peril by lowering the arterial tension.

When apoplexy threatens, when, with a tense pulse and hypertrophied heart, there are attacks of loss of memory, giddiness, or unconsciousness, with numbness in the limbs, the best treatment, if there be time for it, is free purging with calomel and colocynth, followed by salines; but, in some cases, the danger is too imminent; one feels that every hour is of importance, and then bleeding is the great resource, either by leeches or by cupping, or by actual venesection. If the danger be real, the loss of half a pint of blood is nothing to the risk of apoplexy or hemiplegia. There may be a doubt as to the benefit of bleeding after a hæmorrhage has taken place, but there can hardly be a question as to its propriety if our diagnosis be correct, that a vessel is on the point of bursting, from the great blood-pressure within it.

The treatment of angina pectoris has to be carried out on rather different lines, although in it also it is urgently necessary to lower the vascular pressure.

It has been shown that in some, and probably in many cases, of angina, there is a condition of increased arterial tension, and that, when this is removed, the pain passes away; it is, however, tolerably certain that this raised vascular tension is not in these cases a persistent condition, but is one which comes on somewhat rapidly, and, if the patient lives through this, the attack gradually passes away, only to return again, when the same causes are repeated; hence, in the treatment of such an evanescent condition, a remedy is required which will act exceedingly quickly, and will not entail any permanent loss upon the patient, but will pass rapidly out of the system, leaving it again *in statu quo*. This we have in nitrite of amyl, and in a somewhat different degree in nitro-glycerine, the effect of both of which drugs is most striking, and has now been attested by a large number of observers.

But in my view of the case it is as great a mistake to sum up the whole treatment of angina in the administration of amyl, as it is to look upon it as wholly due to arteriole spasm. If one were able to watch and analyse the pathological processes involved in the production of disease, we should probably find that, in all cases of angina, there is primarily weakness of the muscle of the heart; and that in many there is also peripheral obstruction, due in some to present blood-impurity, and in others to a condition of vascular rigidity, due to a blood-state which may have long since passed away; but that the actual attacks are due to a sudden increase of the strain upon the already fully burdened heart, resulting either from some over-exertion, or from arteriole spasm; and that the comparative importance of these varied elements in the production of the totality called angina pectoris varies in every individual; the disease sometimes principally arising, as in gouty cases, from blood-impurity, at others chiefly from vascular rigidity, or it may be almost entirely from cardiac weakness; in some being brought on by a chill, or by indigestion, or by over-effort; in others being due to a simple spasm of the arterioles, a kind of epilepsy of the vessels. While, then, we are always right in giving vaso-dilators, and, by enlarging the area of the arterial system, lowering the tension in front of the heart, the treatment ought not to end there, but should include a careful effort to correct every error which is concerned, even remotely, in the production of the disease.

I do not, however, wish to appear to make light of amyl and nitro-glycerine; the benefit gained by their use is not limited merely to the advantages of escaping from the pain in a shorter time; it is a great thing even for the future, as regards the heart, to shorten the present attack. We have many of us, I have no doubt, seen cases of

dilatation of the heart which were going on very well, till some foolish effort, perhaps a run of not more than twenty yards, produced a strain of the cardiac muscle which has not been recovered from for weeks, even if the heart has ever reverted quite to its former state; if, then, angina is due to over-strain of the heart, may not its attacks also each produce a lasting mischief?

To sum up, then, I would say that the presence of increased arterial tension or blood-pressure involves the existence of obstruction at one end, and increased heart-force at the other; that it is important to distinguish between these two conditions; that the form of trace usually considered indicative of high tension really only shows obstruction, which, while necessarily occurring with it, may also occur by itself; that the measure of the tension is the pressure required to stop pulsation in the artery or the circulation in the limb; and that while we should always try to reduce abnormal obstruction, we should but seldom interfere with the tension as such, unless it threaten danger to the heart or vessels.

ON A CASE OF PSEUDO-HYPERTROPHIC PARALYSIS.

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My thanks are due to my friend, Dr. Brown of Burnley, for the notes of the following case of pseudo-hypertrophic paralysis.

W. T., aged 10, came under Dr. Brown's care in November 1879. The patient, during infancy, was, according to the statement of his parents, fat and plump, and did not suffer unduly from dentition, or from any of the usual infantile complaints. At twelve months of age he had an attack of inflammation of the lungs, from which he made a good recovery. He began to walk at sixteen months of age, but it was observed that his gait was awkward, and that he was more liable to fall than other children. At five years of age, the parents observed that the boy's arms were somewhat wasted, and, soon afterwards, the flabbiness of his thighs attracted attention; but the calves of his legs were supposed to be particularly well developed and strong. The awkwardness observed in the gait of the boy at an earlier period now became more marked, and the difficulty he experienced in getting up after a fall attracted special attention; but even at this time he could walk three miles into the country, and his condition had not yet caused serious uneasiness to his parents. At six years of age, however, the wasting of his arms and thighs, and the difficulty of walking, had become so apparent, that several medical men were consulted, and the general treatment recommended consisted of cold-water sponging with subsequent strong rubbing with a dry towel, cod-liver oil, and milk and lime-water. But this treatment did not appear to retard the progress of the disease; the wasting of the upper extremities, body and thighs, became more and more manifest, the prominence of the calves became more pronounced, and walking became progressively more difficult. The patient's father and mother were both healthy, and no special proclivity to any nervous disorder could be discovered on either side. This boy was the third child of his parents. One brother died at fourteen months of age from inflammation of the lungs; another brother and three sisters are living, and all are strong and healthy. The father of the patient was a clerk in a manufactory; he was in comparatively easy circumstances, and the boy had been well-fed and clothed, and had never been exposed to cold or damp, or to any particular hardship. The patient was of moderate intellectual capacity; but, although he could read and write a little, his education was neglected for the last three years.

When first seen by Dr. Brown, the patient was an intelligent-looking boy, with cheerful expression of face and fair complexion. His face was round and plump, but there did not appear to be an unusual prominence of any of the facial or masticatory muscles. The muscles of the neck, the scapular muscles, and the serratus magnus on both sides were developed in proportion to the rest of the body, but the latissimus dorsi and the pectoral muscles, especially the sternal portions of the latter, were much wasted. The deltoids on both sides appeared prominent, probably less from an absolute increase in their size, than from the great wasting which all the muscles of the arms had undergone. The muscles of the forearms and hands were not specially affected. The erectores spinæ muscles were of fair volume, but the gluteal muscles were prominent, and felt doughy to touch. The thighs were comparatively slender, but the calves were prominent, and the muscles felt inelastic and indurated, and became specially dense and hard when contracted. Each arm measured 6¼ inches, the forearm 6 inches, thigh 10½ inches, and the calf 10 inches. The feet were maintained in the position of talipes equinovarus; the toes were inverted and overextended with the metatarsophalangeal and flexed at the phalangeal articulations.

The patient was unable to rise from the ground without assistance. When unaided, he could only get on his hands and knees, and even when he could place both hands on a chair he could only raise his body into a semi-erect attitude, and so far as to enable him to plant one foot upon the ground. When assisted to the erect posture, he could stand and walk without extraneous support. On standing, the shoulders were thrown well back, so that a plumb-line let fall from the most prominent vertebræ cleared the sacrum; the abdomen was protuberant, and the vertebral column was arched, so that a deep concavity was presented by it in the lumbar and lower dorsal regions; his feet were kept widely apart, and the heels could not be brought to the ground so that the patient had to balance himself on his toes, which were well turned inwards. On walking, the body was alternately balanced on either leg, so that the gait was waddling. The patellar tendon-were absent, but the cutaneous reflexes were normal. All the muscles reacted to the faradic current; there were no sensory disorders. The general health was good, and the other organs of the body did not present any feature worthy of being recorded.

In the autumn of 1880 I had an opportunity of seeing the patient along with Dr. Brown. He was sitting on a bench, his body being propped up between the wall and a table, on the latter of which he leaned heavily, supporting himself with his elbows. The vertebral column was now arched forwards, the convexity being directed backwards. He was quite unable to stand; and, on an attempt being made to place him in the erect posture, his legs doubled up under him in a perfectly helpless manner. When he was laid on his back on a sofa, with his legs extended, he was unable to raise either heel; but when placed on either side, he could abduct the uppermost thigh, and the gluteus medius could be felt to contract during this action by the hand placed above the trochanter.

The boy was subsequently admitted to the Manchester Royal Infirmary, under the care of Dr. Leech, and was kept for some time under observation, but during this period no symptom appeared requiring special description. During his residence at the Cheadle Convalescent Hospital, whither he was sent from the infirmary, both his father and mother died after a short illness, and the patient was subsequently transferred to the care of a sister, living at Burnley. The patient gradually became more and more helpless, but was able, almost to the last, to sit in a chair, his body being propped up between the back of the chair and a table. His face became plumper, the temporal and masticatory muscles being manifestly hypertrophied. On April 6th, 1882, he was seized with a severe attack of diarrhœa and vomiting, accompanied by great prostration, and he died from exhaustion early on the morning of April 9th.

Post mortem Examination.—The *post mortem* examination was conducted by Drs. Brown and Mackenzie, and myself, thirty-two hours after death. The body was placed with the face downwards soon after death, and *post mortem* lividity was well marked on the anterior surface of the body. *Post mortem* rigidity was well pronounced, and even the wasted muscles of the upper extremities presented some degree of rigidity. The most prominent part of the calves of the legs measured, each, 9¼ inches; the middle of the thighs, each, 10¼ inches; the middle of the upper arms, each, 5¾ inches, and the thickest part of the fore-arms, each, 5¾ inches. The subcutaneous fat was ½ inch thick over the calves of the legs, and ¾ inch over the gluteal region, while there was very little subcutaneous fat in the lumbar and dorsal regions, but it was more abundant in the back of the neck. The gluteal muscles were of a pale yellow hue, with the slightest perceptible pink tinge. The conversion of these muscles into fat was so complete, that almost every appearance of muscular structure was lost. The gastrocnemii had more of the pink tinge than the gluteal muscles, and also presented more of the appearance of muscular structure. The erectores spinæ muscles were much wasted, and of a pale colour, but they were by no means so much changed in appearance from healthy muscles as either the gluteal muscles or the gastrocnemii. The scapular muscles were considerably altered, the supraspinati being nearly as much changed as the gluteal muscles. The muscles of the back of the neck were wasted, but presented almost the normal colour and texture of muscle. The latissimi dorsi muscles were thin and pale, and more like fibrous membranes than true muscles. The brain and spinal cord did not present any abnormal appearances to the naked eye. The spinal cord was placed in a 2 per cent

solution of ammonium bichromate, and reserved for microscopical examination. Portions of the diseased muscles, and of the sciatic nerve, and the first cord of the brachial plexus, were also reserved for microscopical examination. The lungs were healthy. The heart was soft and flabby, and its cavities were somewhat dilated. The right side of the heart was full of blood, and the left side empty. The walls of the left ventricle were one half inch in thickness; they were of a pale yellow colour, friable, and easily torn. The walls of the auricles were thin, and their external surfaces were covered with a layer of fat. The large intestines, and the lower half of the small intestines, were distended with hard fæcal matter. A small quantity of a purulent fluid was found in the pelvis of the right kidney, but the kidneys were in other respects normal. The liver presented a normal appearance.

A microscopical examination showed that every muscle of the body, even those which appeared almost normal to the naked eye, had undergone extensive changes. In the muscles which were most changed, like the gluteal muscles, scarcely anything but fat-cells and bundles of a wavy fibrous tissue could be discovered with the microscope. But in those muscles which were least altered to the naked eye, as the erectores spinæ, the fat-cells were much less abundant, but the muscular fibres were separated from one another by an interstitial connective tissue, consisting of parallel fibres, in the midst of which numerous elongated nuclei and cells were embedded. The muscular fibres themselves were greatly altered; they were, as a rule, atrophied, some of them being greatly reduced in size. The nuclei of the sarcolemma were much increased in number, but the transverse striation remained well marked, even in fibres otherwise much altered. The fibres themselves did not appear to have undergone fatty degeneration. A large number of the fibres of the cardiac muscles were atrophied, and were in many places widely separated by interstitial connective tissue.

Numerous sections from different elevations of the spinal cord were made by Mr. A. H. Young, Pathological Registrar to the Infirmary, but no evidence of disease could be detected in them. Special attention was directed to the examination of sections from the lumbar enlargement, the dorsal region, and the cervical enlargement at a level with the fifth and sixth cervical nerves. No changes could be detected in either the sciatic nerve or the first cord of the brachial plexus.

Remarks.—It is not yet determined whether the disease of the muscles in pseudo-hypertrophic paralysis is to be regarded as primary, or as secondary to a lesion of their spinal trophic centres. In deciding this question all cases in which a careful microscopical examination of the tissues failed to be made, and all cases, like that of Barth, which were not undoubted examples of this affection, are of little account. A patient of Duchenne's,* who died in 1871, from an intercurrent affection while the subject of advanced pseudo-hypertrophic paralysis, is the first case in which the tissues were subjected to a thorough microscopical examination. Portions of the spinal cord were forwarded to Charcot, Vulpian, and Lockhart Clarke, but the competent observers failed to discover any morbid changes. *Post mortem* examinations have also been made by Kesteven,† Berger,‡ Bay,§ and Schultze,‖ and, although slight changes have been described as having been fonnd in the spinal cord in some of the cases, yet the ganglion cells of the anterior were reported healthy in all of them.

In 1874, a case of the disease was reported by Drs. Lockhart Clarke and Gowers,¶ in which "varied and extensive" lesions were found scattered throughout the entire length of the cord, "the most extensive lesion being found in the lowest part of the dorsal region, where in each lateral grey substance was an area of disintegration, amounting to an actual cavity outside each anterior vesicular column."**

A case of this disease, in a boy aged 14 years at the time of death, has recently been recorded by Dr. David Drummond, in which marked changes were met with in the spinal cord. The principal changes are briefly described as "disintegration in the lateral grey network of fibres, least marked on the left side, and in the lumbar enlargement, where there was an accumulation of serum, causing the cord to bulge out laterally."* These changes are on the whole, as the author remarks, more or less similar to those observed by Drs. Lockhart Clarke and Gowers. With reference to Dr. Drummond's case, however, it must be remarked that extensive changes were only found in one lateral half of the cord, but, inasmuch as the muscular disease was equally pronounced on both sides of the body the essential lesion, if there be such, must be sought in the minor alterations of the right, and not in the major alterations of the left half of the cord. Dr. Drummond states that, "throughout the entire cord the anterior cornual cells appeared to be numerous and normal," and as these cells are supposed to be the trophic centres of the muscles, this case can hardly be quoted in favour of the theory of the nervous origin of the disease. It is only right to add that Dr. Drummond himself is very guarded in his inferences from the appearances described by him. "I do not mean to assert confidently," he says: "that this lateral disintegration or tearing was of pathological significance; it may have been due to the manipulation, but I am inclined to think otherwise."

In 1880, Dr. Milner Moore, of Coventry, described three cases of pseudo-hypertrophic paralysis as occurring in a family of seven children. The eldest of those affected, a boy aged 15 years, died recently and the spinal cord was sent to Dr. Byrom Bramwell for examination. Dr. Bramwell discovered "a curious alteration in the shape of the right lateral half of the cord, and in the arrangement of its grey matter, which reached its highest development in the middle of the cervical enlargement."† This deformity, however, was unilateral; it was evidently congenital and cannot be regarded as an essential part of the morbid anatomy of pseudo-hypertrophic paralysis. The other changes described are "collections of leucocytes and patches of inflammatory softening around the blood vessels," chiefly distributed throughout the grey matter in the cervical region. But if these collections of leucocytes are to be regarded as evidence of any disease they must be looked upon as indicating a more or less acute process, and cannot certainly be regarded as evidence of a chronic and progressive disease extending, as in this case, over a period of at least eight years. In the case of a boy, under the care of Dr. Leech, the subject of pseudo-hypertrophic paralysis from early infancy, who died at 10 years of age, I had, through Dr. Leech's kindness, an opportunity of examining the spinal cord. I found changes in the cord‡ more or less similar to those described by Drs. Lockhart Clarke and Gowers; and a case has recently been described by Pekelharing, in which kindred alterations were observed.§ In Dr. Leech's case, the patient died during hot weather, and the *post mortem* examination was not made until thirty-six hours after death, and the hardening of the cord for microscopical purposes was not satisfactory. But, in the case of W. T., the spinal cord was in a good state of preservation at the necropsy, and the subsequent preparation of it by ammonium bichromate has turned out everything that could be desired. I cannot, therefore, doubt for a moment in my own mind, that much greater importance is to be attached to the negative results obtained in the latter case than to the somewhat dubious changes observed in the former, which might be the results of *post mortem* changes and imperfect preservation. And, contrary to all my prepossessions, I am constrained to decide in favour of the theory which regards pseudo-hypertrophic paralysis as a primary muscular disease.‖

It is also worthy of notice that, the sciatic nerve, which supplies muscles in the lower extremity, that were deeply involved in the disease, and the first cord of the brachial plexus, supplying the deltoid, biceps, brachialis anticus and supinator longus, some of which were greatly atrophied, presented a perfectly normal appearance, not a single diseased nerve-fibre being discovered after the most careful search. It would appear, therefore, that the disease in the muscles did not in this case give rise to a secondary ascending neuritis, as Friedreich assumes to occur in progressive muscular atrophy in order to account for the changes which have been observed in the spinal cord in that disease. That the ganglion cells of the anterior grey horns of the spinal cord have been found extensively diseased in cases of progressive muscular atrophy is beyond question, but when a competent observer, like Lichtheim,¶ declares that he has found the anterior grey horns quite normal in a case of this disease, such a statement ought not to be passed over too lightly. It is not

* Charcot. "Note sur l'état anatomique des muscles et de la moelle dans un cas de paralysie pseudo-hypertrophique."—Archives de Physiologie, Mars, 1872, p. 228.
† Kesteven. *Journal of Mental Science*, vol. xvi, 1871, pp. 42 and 563.
‡ Berger. *Deutsches Arch. für Klin. Med.*, Band xxii, 1878, p. 200.
§ Bay. *Hospitals-Tidende*, 1877; Abstr. in Canstatt's *Jahresb.*
‖ Schultze. Virchow's *Archiv*, Band lxxv, 1879, p. 482.
¶ Clarke and Gowers. "On a case of Pseudo-Hypertrophic Muscular Paralysis." *Medico-Chirurgical Transactions*, vol. xlvii, 1874.
** Gowers W. R. *Pseudo-Hypertrophic Muscular Paralysis*, 1881, p. 42.

* The *Lancet*, vol. ii., October 15th, 1881, p. 661.
† Bramwell, *Diseases of the Spinal Cord*. 1882.
‡ Ross, *Diseases of the Nervous System*, 1881, vol. ii, p. 206.
§ Pekelharing, Ein Fall von Rückenmarkserkrankung bei Pseudomuskelatrophie, Virchow's *Archiv*, Band lxxxix, p. 228.
‖ Schultze. Bemerkungen über die Pseudohypertrophie der Muskeln. (Virchow's *Archiv*, Band xc, p. 208.
¶ Lichtheim, *Deutsches Archiv für Klin. Med.*, Band viii, He

unlikely, to my mind, that two distinct diseases are at present grouped under the name of progressive muscular atrophy, the disease of the muscles being in the one primary, and in the other secondary an affection of the trophic centres in the spinal cord.

With reference to the morbid changes in the muscles in the case of W. T., little need be said, inasmuch as they conform accurately to the descriptions of other observers. The annexed wood-cut, from a drawing by Mr. A. H. Young, of altered muscular fibres in Dr. Leech's case will illustrate the changes usually met with. In the least altered muscular fibres the transverse striation is often indistinct, and a considerable increase of the muscle corpuscles is observed (*a*). In the vicinity of these fibres others may be observed which have undergone every degree of atrophy, while numerous nuclei are always to be seen in their substance (*b* and *c*). In some of the fibres which are greatly atrophied, the transverse striation may even be more distinct than in health (*d*), and then their edges



Muscular fibres in various stages of degeneration, from a case of pseudo-hypertrophic paralysis.—*a*, Muscular fibres only slightly changed, showing increase of the muscle corpuscles and indistinctness of the transverse striation in certain parts of its length; *b*, the same as *a*, but more atrophied; *c*, muscular fibre greatly atrophied, and presenting nuclei at intervals; *d*, atrophied muscular fibre with its transverse striation unusually distinct; *e*, atrophied fibre surrounded by a fibrillated connective tissue rich in nuclei; *f* and *g*, muscular fibres which have undergone a hyaline change, tapering to a point at one end, and sometimes at both ends. Their transverse striation is still faintly visible.

appear serrated. The fibres are often surrounded by a mass of a fine fibrillated connective tissue in which numerous elongated nuclei are embedded (*e*). The fibres are still further separated from one another by accumulations of fat-cells, and in muscles like the gluteal muscles in which the disease is very advanced, the muscular fibres and the even newly-formed fibroid tissue have almost completely disappeared, and the structure presents the usual characteristics of an ordinary lipoma. In Dr. Leech's case, I have met in the muscles which were least changed large fibres which had undergone a hyaline change, and which tapered to a point at one, and sometimes at both ends (*f*, *g*), but I have not observed similar fibres in the present case. No fatty or granular changes were observed in the muscular fibres themselves; and it would seem as if the alterations in them were secondary to morbid changes in the interstitial connective tissue.

A CASE OF DOUBLE HARE-LIP IN A MAN AGED 32.

By WILLIAM ROSE, B.S., F.R.C.S.,

Assistant-Surgeon to King's College Hospital, Surgeon to the Royal Free Hospital.

LEONARD S., aged 32, living at Wadhurst, Sussex, was admitted into the Royal Free Hospital in June 1881, with double harelip, and complete cleft of hard and soft palate.

The patient's appearance was repulsive in the extreme, and, in the neighbourhood where he lived, he was shunned by most people especially by pregnant women, who feared to look at him, lest their offspring should be similarly affected. He was principally employed in carrying coals; hence his blackened face, coupled with his hideous deformity, gained for him the unpleasant reputation of being an emissary from the infernal regions. The reason for his remaining without operative interference for thirty-two years is partly explained by his devotion to his widowed mother, whom he refused to leave to go to a hospital, and it was only after her death that he consented to have anything done.

The wood-cut A, which is copied from a photograph, is a fair representation of the full face, but it does not show the extent of the deformity caused by the projection of the intermaxillary bone,



Fig. A



Fig. B.

containing one central incisor and the stump of another surmounted by the central portion of the upper lip and columna nasi, like a proboscis.

The patient also had a very marked stare, or what I should call a hunted look in his eyes, due, I believe, to the knowledge of his unfortunate appearance, and to the effect he knew it would produce upon those seeing him.

The lower lip was large and fleshy, and hung down, with everted mucous membrane, over which saliva constantly dribbled. The palate was widely cleft, but the edges of the soft parts were thick. Articulation was most imperfect, and it was almost impossible to understand what he said.

Operation.—The patient was chloroformed, and the first steps of the operation were directed to bringing the projecting intermaxillary bone back into position between the maxillæ. To effect this, the mucous membrane was pared off each side of the intermaxillary bone and the edges of the maxillæ. Next, the intermaxillary bone, after the incisor stump had been extracted, was partly cut through, at its junction with the vomer, with bone pliers, applied from behind forwards; by this means it could be pushed back into position, and the above-mentioned raw surfaces brought into contact. A strong silver wire suture was passed through each maxilla across the front of the intermaxillary bone to keep it from slipping out of place.

The lips were then dealt with in the ordinary way, care being taken, in the first place, to dissect each side freely up from the bone, to prevent undue strain when bringing the raw edges together. The central portion of the upper lip continuous with the columna was slightly loosened by dissecting it up from below, its edges pared so as to fit in accurately, like a wedge, with the base upwards, between those of the lateral flaps. Three hare-lip pins were inserted, the two upper transfixing in their passage the central portion, and the parts came easily into position after the twisted figure of eight silk suture had been carefully applied. There was smart bleeding at the time of the operation, but it soon ceased of itself. The pins were removed on the fifth day, and four days afterwards profuse hæmorrhage occurred from both nostrils, and the union threatened to break down. The bleeding was with difficulty checked by position, pressure and application of ice. The remaining central incisor which seemed to be exercising injurious pressure, was extracted, and strapping applied to diminish the tension. But on the following day, as no improvement had taken place, and the tendency to occasional hæmorrhage was still present, I reinserted two hare-lip pins, and applied the twisted suture as before. After this, everything went well, and I withdrew the pins on the fourth day, the lip having firmly united. The intermaxillary suture was taken out on the fourteenth day from the

operation. The patient's appearance was greatly improved, but the lower lip was very unsightly and drooped more than ever and he could not close his lips together. I therefore removed a V-shaped portion from the middle of the lower lip, taking care to remove more mucous membrane than skin. The result of this was very satisfactory, the scar being almost invisible, the lips coming well together, and articulation being quite intelligible. I would here mention that this method of shortening the pouting lower lip was first suggested fifteen years ago by Mr. Oakley Coles, in his *Deformities of the Mouth*, but I am not aware of any published case where it has been carried out. The patient left the hospital shortly after the second photograph was taken, of which wood-cut B is a copy, and has not up to the present time fulfilled his promise of returning to have his palate operated on. I have ventured to record the case, as one of such severe character is seldom met with at the age of 32 in these advanced days of surgical science and civilization. Doubtless, it would have been better and easier to have closed the palate-cleft before operating on the lip, but the patient came up with the specific object of having his appearance improved, and I feared that if I operated first upon his palate and even completely succeeded, he would not have been sufficiently convinced of the benefits derived, to be induced to return for a subsequent operation on the lip; and lastly, I do not consider that, at his age, the closure of the palate was of such importance as the removal of such an unfortunate deformity,

REPORT OF THE MILITARY LYING-IN HOSPITAL OF COLCHESTER FOR 1881 AND 1882.

By FORBES DICK, M.D., L.R.C.P.E., L.R.C.S.E.,
Surgeon-Major, A.M.D., in Medical Charge.

'HIS hospital is simply a double wooden hut, joined at an angle, and s situated in the camp, which is surrounded by a high wall. It is ivided into a confinement room of 1,386 cubic feet, and a lying-in ard of 2,520 cubic feet, and four small rooms which act as kitchen, ffice, storeroom, and matron's room. The lying-in ward has four pposite windows, and is warmed by a central stove; the confine- ient room has a fireplace. These rooms communicate by opposite oors, which admit of the easy passage of a wheeled *lit de misère*. ther cases of illness are also occasionally admitted for treatment.

In 1881 there were 55 deliveries. Of the mothers, 21 were primi- ræ, and 34 multiparæ; of the children, 32 were males, and 23 males. One female child was stillborn, and one male child died of efective development from prematurity in four hours, and another om cyanosis in twenty-four hours. All were head presentations, id the forceps were twice employed in primiparæ. There was no ath of a mother.

In 1882 there were 51 deliveries. Of the mothers, 21 were primi- ræ, and 30 multiparæ; of the children, 34 were males, and 18 males. A very large male child of a primipara was stillborn; and so a female twin. A breech-born female child of a primipara was covered. There was one twin case, one breech case, one forceps se, one case of puerperal fever, and one of puerperal mania. There as no death of a mother nor of a live-born child.

The percentages, for the two years, of primiparæ was 39.38, and of ultiparæ 60.45; of male children, 62.12; and of female, 37.88; of ll-births, 1.89; and of deaths of children from defective develop- nt, 1.89; of mothers, none; 106 mothers received 1,386 diets in spital, or remained in it on an average 13.07 days, and went home th 102 children.

The temperature of the last hundred of these cases has been re- ded. The charts show that in 37 a temperature of 100° was eeded; that 15 excesses of temperature occurred during the first nty-four hours, 12 of these being in primiparæ; 9 during the ond, third, and fourth twenty-four hours, 7 being primiparæ; and during the fourth, fifth, sixth, and seventh twenty-four hours, 11 ng primiparæ. Supranormal temperatures during these periods ng considered to approximately represent the respective trau- tic, milk and constitutional or septic morbilities, it would appear t the tendency to febrile disturbance during the traumatic and milk- ming periods is five times greater in primiparæ than multiparæ; i, when both septic and constitutional (or blood deterioration by gnancy) causes are included, there would appear to be an almost ilar morbility; but, in consideration of the fact that in these 11 niparæ, five had perineal laceration, and that it would be reason- e to suppose that the secondary fever in these cases was a septic , it would appear that the tendency to constitutional fever in the primiparæ is considerably less than in the multiparæ. The majority of those who suffered from high secondary fever were soldiers' wives off the strength. This appears at first sight strange, but is accounted for by their greater poverty and consequent insufficient nourishment during pregnancy, and goes to urge that, probably, pregnancy or blood deterioration rather than parturient or septic causes are to be found the most constant factors in the production of the secondary fever of the lying-in woman.

Both personal and general disinfection are carried out in the hospital. On admission, each woman has a foot-bath and her knees are well washed. This is useful as much in a disciplinary as in a sanitary point of view. A 1 in 60 solution of carbolic acid containing a minute quantity of cassia oil, which makes the smell agreeable, is used for syringing each case once, and some cases three times daily, and for frequently sponging the genitals. The same solution is evaporated on the central stove, which is very convenient for this purpose, and diapers are washed in chloride of limewater; and chloralum wool as a disinfectant absorbent has been lately placed under them. Chloralum wool soaked with lochia has remained six months in a stoppered bottle without tainted odour. It is believed to be a good aid to personal disinfection, and that it would well fulfil this purpose if more absorbent, by being better carded. For the hands, the carbolic solution, carbolic oil and the nail-brush are in constant use.

Six soldiers' wives were trained as midwives and nurses in 1881, and six in 1882. The majority have left this station. Two are at present nursing in officers' families.

ON DISCHARGES OF PUS FROM THE MALE URETHRA WHICH ARE NOT GONORRHŒAL.

By TOM ROBINSON, M.D.

THE practitioner of medicine must frequently meet with cases where there is a copious muco-purulent discharge from the male urethra, which, accepting the patient's statement, is not due to indiscretion or the rupture of the marriage vow; and it is with a view to investigate this state that I write this paper. We accept, as a matter of indisputable medical knowledge, that the female vagina and urethra may pour out a purulent discharge, which discharge is, without any doubt, accepted as due to a pathological state of the feminine mucous membrane, and in no wise reflecting a stain on the fidelity of the sufferer. But, if a male consults us with an oozing from the urethra, we are often apt to disbelieve his protestations, and stigmatise him as an unfaithful husband, if he be married, and an untruthful patient, if he be single. We speak daily of discharges from the mucous membrane of the nose, throat, and elsewhere, as being catarrhal; but the male urethra, what can it suffer from but gonorrhœa? The first instance which led me to investigate this subject, came under my notice in the following manner. A gentleman of the legal profession consulted me with what, to all external appearance, was gonorrhœa. He was forty years of age, fair complexioned, and married. He told me that during the pregnancies of his wife he always had a similar condition. This statement I should have accepted with great caution, had it always occurred about the parturient period; but coming on at the early months of pregnancy, and on several occasions, compelled me to attach importance to the statement, and I may say, I have seen this gentleman twice since with the same condition, always taking place during his wife's pregnancy. The following notes from my case book will afford another example of a discharge, which came from an internal cause.

J. B. H., aged forty-two, a man with gouty history, but without ever having true manifestations, was quite grey, had worn down teeth, and tophi. I had attended him on several occasions for gastric catarrh, and eczema of the infra-orbital regions. He was in the navy, and had been at sea for some time. On coming ashore, he had lived freely, and drank rich wines. At the end of a week, he consulted me for a very profuse discharge from his urethra. The discharge was probably more albuminous than is seen at this stage of true gonorrhœa, and although there was considerable smarting on passing urine, it was not the urgent scalding which goes with the early stage of gonorrhœa. His urine was loaded with lithic acid, and he denied having had sexual intercourse. Four days on barley-water, milk, soda water, and broths, with cooked vegetables, and frequently repeated doses (half a drachm every four hours) of acetate of potash, and a goblet of Pullna water every morning, relieved him completely of his trouble.

Men with enlarged prostate frequently suffer from muco-purulent

discharges from the urethra. Organic stricture is also accompanied by profuse oozing. The cases which we call gleet, go on for many years, are most difficult to cure, and are sometimes incurable. The discharge in these instances, especially after much physical exertion, unusual sexual indulgence, or alcoholic excesses, becomes distinctly purulent, even years after the original infection. There are some men who, after any sexual intercourse, have discharge from the urethra, which passes away in a few days without any treatment.

It would appear to us that these facts indicate there are some mucous membranes which become so congested when stimulated, that they produce a muco-purulent discharge, under sources of irritation which are not gonorrhœal in character, and this is what we find with other mucous surfaces. The conjunctiva in some instances becomes congested, and pours out a copious secretion in a few hours, after being irritated by an external agent. The same rule applies to the nose, the pharynx, and the bronchial tubes. If we apply the same line of thought to the skin, we shall find some cuticles so susceptible to external influences, that the east wind, the sun, soap, and, in one instance I have met with, even daylight, produce an acute eczematous condition. Shall we doubt, then, that muco-purulent discharges, not distinguishable from gonorrhœa, do occur in instances where the irritation is not set up by specific pus-cells? It has often occurred to my mind, that the many remedies advocated for curing clap, have had their reputation based upon the treatment of cases which have been non-specific discharges; discharges which would recover under any line of therapeutics.

CASE OF FOREIGN BODY IN THE EAR NEARLY TWENTY YEARS.

By LUCIUS HOLLAND, B.M., M.D.,

Physician to the Newcastle-on-Tyne Dispensary, Nelson Street; to the Department for Diseases of the Ear, and Lecturer upon Diseases of the Ear and Aural Surgery.

E. H., aged 27, came to the dispensary complaining of frequent headache and giddiness. According to my custom in these cases, the ears were examined, and, a black mass of cerumen being visible in the right ear, she was referred to my clinic for diseases of that organ. Some difficulty being experienced in clearing the canal, a probe was employed, which at once came into contact with a hard body; and its impaction required the further use of forceps for removal. This body, upon examination, was found to be metallic, in shape like a grape-stone with very sharp apex, and weighed twelve grains. It was kindly tested for me by Mr. Leopold Dean, analytical chemist at Sir William Armstrong and Co.'s, and proved to be a globule of iron.

The patient had lived in the neighbourhood of ironworks from the age of three until ten years, and as a child played and rolled in the sand. During the latter part of this time she suffered from pain in the right ear, for which the workmen puffed in tobacco smoke. At the age of ten years she was removed from the locality, and since then has resided in such places where no opportunity has afforded for the introduction of such a body, besides having no recollection of anything of the kind happening during the seventeen years. The globule of iron must, therefore, have been in the ear nearly twenty years. It was imbedded in dense cerumen, occupying the deep part of the canal, the circumference of which I observed to be irritated, the membrana tympani was somewhat depressed and thickened, with alteration of the "cone of light." Hearing has not diminished, and since the removal of the foreign body the giddiness and headache have ceased. After the age of ten years the earache subsided as the calibre of the canal increased. This case may be regarded as a most remarkable instance of a dangerous foreign body remaining for years in the ear without serious and alarming consequences.

SURGICAL MEMORANDA.

EXCISION OF CLAVICLE FOR NECROSIS.

P. C., aged 14, a doffer, living in a cellar, was seen for the first time on October 22nd, 1882. Some three weeks before this, whilst engaged in carrying a basketful of umbrellas on his head, the basket slipped and fell on his shoulder. He felt something give way at the shoulder, and afterwards experienced pain there. He continued at his work for four days, when the increased pain compelled him to desist. Subsequently the arm was maintained at rest, and poultices were applied. On October 22nd the lad was greatly emaciated, and the right shoulder was excessively tender. Over the outer half of the right clavicle, by candle-light, was seen a red and swollen fluctuating abscess, evidently on the point of bursting, which, on the following day, was opened at a point two and a half inches external to and on a level with the sterno-clavicular articulation. A large quantity of yellow pus (not fœtid) flowed out, and the abscess cavity admitted a probe for a couple of inches in all directions, but no bare bone was felt. The cavity was stuffed with lint, and the limb put up as for fracture, the lad thereafter expressing a sense of comfort and gratitude.

November 2nd. Bare bone was felt on probing.

November 5th. It was decided to excise the clavicle.

November 6th. Chloroform was administered at 3.35 P.M., and an examination made. There were two openings; one, the incision made into the abscess, and the other an inch nearer the sternal articulation, where the skin had given way since the abscess was opened. Pus flowed very freely through both these openings on pressure, and a director, pushed in for about two inches, came against bare bone. On the director being pushed through the artificial opening, an incision was made upwards to the clavicle. From the end of this incision, the knife was carried outwards to the acromial end of the bone, and, with some difficulty, the ligaments attaching the clavicle to the scapula were divided. The acromial end was then raised, the horizontal incision continued inwards to the sterno-clavicular joint, some callus, which had formed round the inner half of the bone, cut through, and the bone easily removed, there being no muscular attachments. No ligatures or sutures were used, but a general oozing was stopped by stuffing the wound with dry lint, over which a pad was placed, the whole being kept in position by strips of plaster and a bandage. The temperature, after the operation, did not exceed 102°. For the first two or three days, during which much pus oozed from the wounds and sinuses round the shoulder-joint and in front of the chest, the wound was washed with carbolic lotion. Afterwards, up to December 18th, it was dressed with zinc lotion, then with dry lint till January 2nd, when the wound was quite healed. The bone came away without the interarticular fibro-cartilage, and was denuded of periosteum, except where the claviculo-scapular ligaments were attached, and a portion of the inner half of the shaft, where the bone was almost surrounded by callus. There was no evidence of fracture.

Rochdale. HENRY BLAND.

SILVER v. ELASTIC CATHETER IN HYPERTROPHY OF THE PROSTATE.

In this age so ripe with new inventions in which both large and small things bear a part, one is repeatedly reminded in the daily routine of work how advisable it is not to place too much reliance on this or that form of instrument, or on any particular drug, but strictly to take each case on its own merits. In reporting to the JOURNAL, we cannot be accused of egotism, but rather in its weekly perusal gladly accept hints of any successful treatment, therein described by our colleagues, occurring in private or hospital practice. I was sent for to meet in consultation a medical man in charge of a case which comes under the above heading. W. J., aged about eighty, comfortably off, strong and active for his years, who was suddenly taken with retention of urine. His usual medical attendant and his assistant had been with their patient all night; but, as no relief could be obtained even by the aid of various sizes of the silver catheter, I was called in. I found the exciting cause of retention probably due to over physical exertion, culminating in spasmodic stricture combined with enlargement of the prostate; and as the bladder was very distended, it required speedy emptying. The medical man again used a silver catheter without any result, then handed the case to me. As it was decidedly urgent, I immediately well oiled a medium-sized gum-elastic catheter, and with firm pressure and a turn of the wrist in about two minutes easily passed the instrument into the bladder. If this had not occurred, for the sake of life we must have forced a silver catheter through the prostatic urethra, or else punctured the bladder by the rectum or above the pubes. The instant and happy relief procured in this case shows that it is not the surgeon's hand *per se*, but the means used, that accomplishes the end.

Bromley. T. WELLS HUBBARD, M.R.C.S.Eng., L.M., L.S.A.

A METHOD OF TREATMENT FOR VARICOCELE.

In the British Medical Journal of January 13th, 1883, Mr. W. D. Spanton mentions the process, and gives an illustration of his mode of treatment for varicocele.

Whether Mr. Spanton considers his method a new one or not, I cannot say, but I know that so long ago as the winter session of 1874-75, I saw exactly the same operation performed by Dr. Ogilvie Will, in the Aberdeen Royal Infirmary, with a most successful result. I have, since then, performed the operation myself twice, in a similar manner, and I consider it the best and most speedy method yet devised. W. S. Robertson, M.B., C.M., Port Said, Egypt.

CLINICAL MEMORANDA.

IDIOPATHIC ERYSIPELAS.

On December 22nd, 1882, I was called to see a male child aged eight weeks. He had been brought up on cow's milk, as the mother had only slowly recovered from her confinement, and had no milk. I found him lying with the head thrown backwards, the thumbs turned in towards the palms, but no retraction of the abdomen, nor strabismus. The pupils were equal, and acting to light; the pulse was rapid; temperature over 103°. I was informed that the child frequently screamed out during sleep. There was slight œdema of the scalp over the occipital bone, but no redness anywhere. On the following day, slight redness appeared over the œdematous part of the scalp. On the 24th, the child was seen, in consultation with Dr. Andrew. The brain-symptoms were much less marked; the redness over the scalp more distinct, and spreading on to the forehead and down the back of the neck. It was decided to give the child asses' milk, and, as a medicine, carbonate of ammonia in half-grain doses every four hours. From this date, the erysipelas gradually spread over the face, arms, and trunk. A vesicle (of the size of a filbert) formed over the left elbow, filled with clear serum; and another, later, on the thigh. As the disease advanced, the abdomen became distended and tympanitic, the breathing oppressed; but nothing wrong was discovered in the chest, and the child sank, and died on January 1st, 1883. No local application was used. The rash faded in the parts first attacked. The child had been a fairly healthy infant; but the dejecta had, for ten days or so before the erysipelas appeared, been very pale, pasty-looking, and firm. The child had never been out of sight of his mother and father, and, I am certain, had sustained no injury or bruising. There is nothing wrong in the sanitary condition of the house, so far as I can discover. Erysipelas in so young a child, not of traumatic origin, is, I believe, a rare occurrence. F. W. Strugnell.

DURATION OF INFECTIVE PERIOD OF SCARLET FEVER.

The following case shows for how long a time a scarlet fever patient may convey infection. A boy attending boarding-school had a rather sharp attack of scarlet fever; he was taken to the fever hospital, where the disease ran its usual course; he was kept in hospital eight weeks, when he was thought by the medical man attending to be free from infection and sent home. About a week after returning home he was supposed to have got cold, and had a very sore throat. I saw him a day or two afterwards. His throat and fauces were deeply injected, and there was considerable fever. His throat had all the appearance of scarlatina; there was ulceration going on in the nose. On the third day after seeing the first patient, I was asked to see his brother, who had developed a mild attack; two days afterwards his sister developed an attack of a more severe type; and ten days after seeing the first case, a little boy of four developed a mild attack of scarlatina (the second had had scarlel fever before). All the clothes of the boy were disinfected before he left the hospital, all desquamation was over, but the ulceration in the nose had been going on all the time, from the attack to coming home; and after so long a time, and the clothes having been thoroughly disinfected, I believe infection must have been conveyed to the other children from the ulceration in the nose. Scarlet fever was not prevalent at the time. If scarlet fever can be conveyed in this way, and after so long a time, it shows how very careful we should be to see that not only is the throat clear of desquamation, but we should also carefully examine the nostril, before we let a scarlet fever convalescent mix with the family.

Whitby. T. Tinley, M.R.C.P.E.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. THOMAS'S HOSPITAL.

TWO CASES OF SPONGE-GRAFTING.

(By Theodore D. Acland, M.B.)

In the British Medical Journal of January 6th, 1883, page 7, Professor Hamilton gave some interesting notes on the practical application of sponge-grafting, and in the following number of the Journal, page 51, six cases are recorded by Dr. Case. Through the kindness of Sir W. MacCormac I was enabled to make some observations on the utility of sponge-grafting in two cases of severe burns which were under his care in St. Thomas's Hospital in the early part of 1882.

The results obtained from these two cases present some points of difference from those which have as yet been recorded. I may, therefore, possibly elicit some further observations from Professor Hamilton on one or two details which require especial attention. The sponges were prepared by macerating in hydrochloric and nitric acids, soaking in strong carbolic acid, and, finally, rinsing with water; and care was taken to have the surfaces to which they were applied as clean and sweet as possible.

The cases were as follows.

Case I.—W. R., aged 9, was admitted into Leopold Ward, on October 10th, 1881, suffering from an extensive burn of the second degree, involving the back, and buttocks, with left hand, and axilla. By November 14th, five weeks after the accident, sloughs had separated from nearly the whole injured surface, leaving painful and exuberant granulations. The treatment up to this period had been the application of starch, terebine oil, carbolic oil, and, lastly, sulphate of zinc lotion, which was applied to the granulating surface. All the wounds healed well except that on the back, over which the granulations were pale and exuberant, the ulcer showing little or no tendency to heal. In consequence, towards the end of December, four pieces of sponge about two inches and a half in diameter, and between one-eighth and a quarter inch in thickness, were applied to the upper part of the wound. They were placed well away from the layer of young epidermis at the edge of the wound, and were retained in their places by covering them with gutta-percha tissue and fixing this by two or three turns of bandage very lightly applied. Sufficient room was left above and below to allow of the escape of all discharges, aud to permit of irrigation. The dressings were not disturbed for two days, in order that the sponges might get well fixed; but all offensive matter was washed away by irrigation with carbolic acid lotion (1 in 60). At the end of forty-eight hours the sponges were uncovered and granulations were found to be springing up freely into their interstices. After this there was no difficulty in retaining them in their places. The granulations continued to grow, at first rapidly, afterwards much more slowly, and they looked so healthy that, a week after the commencement of the treatment, five more grafts were applied. Soon after this, however, the discharges became so offensive as to be a source of considerable danger to the patient, and of much annoyance to his neighbours, although the sponges were irrigated twice a day; carbolic acid, thymol, eucalyptol and chlorinated soda were tried in succession, but with no good result, and the experiment would have been abandoned, but that the wound became comparatively sweet under the use of an ointment composed of iodoform and eucalyptol in vaseline.

At the end of three weeks the wound was considerably diminished in size, the sponges were approximated to one another by the contraction of the healing surface, and the healing edge of the ulcer was in contact with the margin of some of the sponges. Hitherto the sponges had taken no part in promoting the healing of the raw surface, except in so far as they had acted as a mechanical stimulus to the wound, since as soon as the healing edge actually came in contact with a sponge, the latter seemed rather a hindrance than a help to the further progress of the case, for it was gradually undermined and displaced, while the granulations in its interstices seemed to take no part in the process of cicatrisation. This process of displacement of the sponges by the healing edge of the wound was observed wherever the two came into contact. In no case was the pellicle of new epidermis carried through or over the sponge, but always under it; consequently the granulations in the sponge did

not help to form the new cicatricial tissue. The further progress of the case was unsatisfactory. The new cicatricial tissue constantly broke down, almost as soon as it was formed, and after two months' treatment, the boy was discharged with some portions of sponge still adhering to his back. His subsequent history could not be traced.

CASE II.—C. P. was admitted into Elizabeth ward, suffering from a deep ulcer (measuring in its widest part 11½ inches by 7 inches), resulting from a severe burn, received twenty-seven months previously. The surface of the ulcer was covered with pale unhealthy granulations, and, as many methods of treatment had been tried, it was determined to resort to sponge-grafting. After the experience of the previous case, the sponges used were much thinner, and they were cut, at the suggestion of Mr. Miller, into thin slices with a microtome, in the way subsequently described by Professor Hamilton. The very thin layers of sponge soon became filled with granulations, and disappeared; but there is no evidence to show what became of them. Two months later, five more sections of sponge were applied, also without appreciable result. The wound remained very stationary, and little better than when the patient was admitted; for, although the cavity of the ulcer was filled with the granulations which had grown up in the sponges, no cicatrisation had taken place six months later.

In the first of these cases, the sponges filled with granulations were above the level of the surrounding epidermis, and they were raised up and displaced as the wound contracted; while the granulations in the sponges seemed to have little share in promoting the healing of the ulcer; for, although the wound began to heal after the application of the grafts, yet the sponges were separated before any cicatrix formed over the place to which they had been applied. In the second case, although the cavity of the ulcer filled with granulations which had risen up through the interstices of the sponges, yet no subsequent cicatrisation took place.

In both cases, the smell of the discharges was most offensive; and the irrigation, which was performed twice a day, gave much distress to the patients. It may be that the cases selected were both hopeless from the first; but a wound with a healthy granulating surface, such as Dr. Case suggests, is necessary for successful sponge-grafting, is not always obtainable; neither does it follow that the healing of such a wound would be accelerated by the treatment. In neither case was any pressure used. The sponges adhered very readily, and, after the first forty-eight hours, could be dressed without fear of disturbing the granulations, but not without pain, as the granulations were very sensitive.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS. January 18th, 1883.

Epithelioma of Cheek: Excision: Long Interval before Recurrence.—Mr. WILLETT sought the opinion of his colleagues as to the expediency of operating for the removal of a large growth in the left cheek. The patient was a man, who gave his age as 42, but looked much older. About five years ago, he received a blow on the left cheek; and about a year later he noticed an ulcer on the inner surface of the cheek. This ulcer increased, and became hard to the touch and painful, and an operation was performed, in Chicago, U.S.A., about three years ago. The result was excellent, and the patient was entirely free from any recurrence of the disease until about two months before he applied at St. Bartholomew's; he then, he stated, lacerated the inside of the cheek with a crust of bread, and the growth had since rapidly advanced, and had become very painful. The mass was very vascular, about the size of a florin, and caused a projection, visible externally, underlying the scar of the old operation. Mr. Willett said that he thought there could be no hesitation in pronouncing the tumour malignant, from its rapid growth and its hardness. There were several points of interest about the case to which he would draw attention. In the first place, the history bore out the now commonly adopted theory, that an injury was often the determining cause of malignant disease in the part injured; in the second place, the long interval, three years, between the removal of the primary growth and recurrence, and the rapid growth since, were points of great clinical importance. Finally, there was the question whether it could be completely removed; if so, there would probably be no great difficulty, by dividing the mucous membrane above and below, in bringing together the two sides of the gap left by free removal of the growth. Unfortunately, however, there was an enlarged gland to be felt at the angle of the jaw.—Mr. SAVORY considered that there was no doubt that the growth was an epithelioma, and advised removal, though the operation would leave a great deal of disfigurement.—Mr. MARSH and Mr. CRIPPS concurred in the remarks that had been made; and Mr. WILLETT said that, before operating, he would submit a scraping from the growth to microscopical examination.

Epithelial Disease of an Unusual Kind.—A man, rather beyond middle age, was shown by Mr. WILLETT, because the case, though not of great moment, presented certain peculiarities. Four years ago, a growth was removed from the left side of the lower lip; about two years ago, another similar growth appeared on the opposite side of the lip, and slowly increased. It had only attained the size of a fourpenny-piece (about three-eighths of an inch), and there was little thickening of the tissues; the epithelial structures were indurated, slightly raised, and covered on the surface by a thin scale, from which a watery fluid exuded. It was interesting to note that the disease had first occurred on the left side, but had recurred on the right, though the patient continued to carry his pipe on the left side. He proposed to remove the growth.—Mr. SAVORY was suspicious that the growth was epitheliomatous, and advised removal.—Messrs. MARSH, WALSHAM, and SHUTER concurred in this view.—Mr. CRIPPS did not think that the case was malignant; he considered it an instance of epithelial disease kept up by the irritation of smoking.

Tumour of Breast.—Mr. WILLETT also showed a woman, aged 55, who presented a tumour of the breast, which led to some difference of opinion. The tumour occupied the right breast; it felt very hard, dense, and firm, and had only caused any trouble or pain for a period of six months; the skin over it was supple and not at all changed in character, and the tumour was freely movable on the subjacent parts; the axillary glands were not enlarged; it had not grown very rapidly. The patient had had seven children; thirty years ago, after the birth of her first child, she had an abscess in this breast.—Mr. SAVORY pointed out that there was some fluctuation at the most prominent part of the tumour, and concurred with Mr. Willett that the tumour was probably cystic, though whether a fibro-cystic growth or an abscess, it was very difficult to say.—Mr. WALSHAM inclined to the opinion that the tumour was an abscess, surrounded by much indurated tissue.—In fulfilment of an intention expressed in the first instance, Mr. Willett subsequently made an exploratory puncture, which gave exit to a clear greenish-coloured fluid. The patient was advised to submit to amputation of the diseased breast.

JANUARY 25TH, 1883.

Sarcoma.—Mr. MORRANT BAKER consulted his colleagues on the case of a young man, a policeman, who had come up from the country to seek advice as to any possible treatment for a rapidly growing tumour in the region of the scapula. About four or five years ago, while in the execution of his duty, the patient received a severe bruising about the right scapula; no ill effects, however, were subsequently noticed until a few months ago; the patient then first noticed a small lump, of the size of a pea, near the shoulder-blade. This lump grew very rapidly; and, on October 21st, 1882, having then attained the size of a hen's egg, it was removed; the scar of this operation was immediately affected by a recurrence of the disease. A second operation, performed on November 9th, 1882, was followed by a second rapid recurrence. At the time of the consultation, the growth had attained a large size; the scar of the previous operation could be traced, reaching from the outer and lower part of the scapula, across the posterior boundary of the axilla. The tissues about the scar were infiltrated and thickened; the skin was red, and purple in places; and at three or four points, masses, each of the size of a hen's egg, projected from the tumour. Mr. Baker said that the growth was evidently a rapidly growing cancer or sarcoma; any operation for its removal must involve the excision of a large extent of skin, leaving an enormous wound. He feared that little benefit could be hoped for from any operation.—Mr. SAVORY thought that the growth was a rapidly growing sarcoma, and could not advise operation. Though all the visible disease should be removed, the growth would certainly soon recur, probably even before the wound was healed.—Mr. Willett and Mr. Langton concurred in this view.

BRITISH LYING-IN HOSPITAL.

OCCIPITO-POSTERIOR PRESENTATION.

(Under the care of Dr. FANCOURT BARNES.)

(Reported by Dr. JOHN PHILLIPS.)

M. A., aged 19, a primipara, was admitted on December 9th, 188
At 7 P.M. on the same day, she was taken in labour. She ha
strong pains throughout the whole of the first stage, which term
nated at 10.30 P.M. with the rupture of the amniotic sac. The pain

during the second stage increased in intensity, and recurred with regularity until 2 A.M., at which time the head had progressed, as near as could be judged by vaginal examination, one-third of the distance through the pelvis. As it had remained in this position three hours, and was making no progress, in spite of powerful uterine contractions, the matron sent for Dr. Barnes.

On examination, Dr. Barnes found an occipito-posterior presentation in the conjugate diameter, with a fully formed caput succedaneum. The patient was becoming feverish. Her temperature was 101.4° Fahr., the pulse 148, the face cyanotic, the eyeballs bloodshot, and the tongue dry. As the os uteri was fully dilated, Tarnier's forceps was applied, and the head delivered; more traction-power being called forth than is usually the case in a mid-pelvic application of the forceps. The child was a live male, weighing 8½ lbs. The perinæum was uninjured. The placenta was delivered by expression ten minutes afterwards. The whole delivery was effected, as is usual in this hospital, under the carbolic spray. The patient recovered without any complication, and left the hospital on the twelfth day after delivery. Six hours after delivery, the temperature fell to normal, where it remained throughout her lying-in.

REMARKS BY DR. FANCOURT BARNES.—Although the position of the head was diagnosed before the application of the forceps, this would have been made clear by the behaviour of the indicating needles during extraction. In occipito-anterior presentations, the indicating needles of Tarnier's forceps always rise in a marked manner as the head approaches the pelvic floor. In the case just related, the indicating needles failed, in an unusual manner, to make any upward movement. The head being delivered with the occiput posterior, rotation round the pubes was, of course, impeded. The absence of rotation was shown in the clearest manner by the non-ascent of the indicating needles. Had the head been delivered by the ordinary long forceps, this circumstance could not have been observed. The case affords an interesting clinical example of the mathematical accuracy of the traction-forceps in displaying to the operator the exact movements of flexion, extension, and rotation, which are being described by the head during its passage through the pelvis. In this way, it is interesting to note that an occipito-anterior position may be distinguished from an occipito-posterior position by the behaviour of the indicating needles. This is a valuable clinical aid in the management of the delivery, and gives the operator due warning for increased care in guiding the head over the perinæum.

SHEFFIELD GENERAL INFIRMARY.

DISLOCATION OF THE HUMERUS (SUBCORACOID): ATTEMPTED REDUCTION AFTER EIGHT WEEKS' DURATION: RUPTURE OF AXILLARY ARTERY; LIGATURE OF ARTERY AT SEAT OF INJURY: DEATH.

Under the care of Mr. ARTHUR JACKSON.

MR. JACKSON saw A. B. on December 17th, in consultation with friend. He had fallen with a ladder six weeks before, and had unmistakable dislocation under the coracoid process. He was sixty-two years of age, and had atheromatous deposit in the aortic and mitral valves. He was admitted into the infirmary December 21st, and on the 28th, after gentle movement, to loosen adhesions, he was put under chloroform with a view to reduction. The radial on each side could be distinctly felt. After slight attempts at reduction, with the heel in the axilla, a tumour was seen under the pectoral muscle in the axilla, and no pulse was felt at the wrist. He was sent back to bed. On December 29th, a consultation of the staff was held. It was unanimously agreed, that the axillary artery had been ruptured the previous day, and that an endeavour must be made to ligature the torn ends. This was done at once. The artery was distinctly diseased (atheromatous); both ends were found with difficulty, and ligatured; but all endeavours to place the head of the bone in its natural position failed. The man never rallied from the operation, and died on December 31st, at 11 A.M. No *post mortem* examination could be performed.

REMARKS BY MR. JACKSON.—One cannot but regret not having left the bone in its abnormal position; but one was tempted to attempt its reduction, owing to the comparatively recent occurrence of the dislocation, and because the patient was unable to follow his usual occupation as a gardener. We carefully considered the chances of rupturing the artery; as the atheromatous condition of the arteries was more than probable. One thing was noticeable, on pressing into the axilla, the extreme tension caused by the pressure of the head of the humerus on the vessels and nerves, when the arm was raised above the shoulder. It gave the impression that reduction by this method would be very dangerous.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 26TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

President's Address.—The PRESIDENT, upon taking the chair for the first time, delivered an address to the members of the Society, which will be found at page 191 of this week's BRITISH MEDICAL JOURNAL.

On the Activity of the Infective Power of the Poison of Scarlet Fever during the Pre-eruptive Stage of the Disease.—Dr. LONGHURST read a paper on this subject. He said that in a short paper on the infection of scarlet fever, in the *Lancet* of July 1877, he expressed a belief that the period of greatest activity of the fever-poison was in the early stage of the disease. Extended observation had strengthened such belief, and it was borne out in the cases reported, which seemed to encourage a line of investigation in connection with the study of acute specific diseases advocated by the late Dr. Murchison in a paper on the period of incubation of scarlet fever, and the probability that they might be transmitted even during the stage of incubation. Case I supported such view, and forcibly demonstrated that the fever-poison was not absorbed by, nor developed in, all persons with the same rapidity and activity, and that possibly, even during the stage of incubation, the poison might be passed on from one member of a family to another, the latest case having little, if any, direct relation to the first, but being due to the further development of the poison through fresh systems. Cases II, III, and IV, all pointed to the activity of the fever-poison in the very earliest stage; whilst case IV was especially interesting, as proving that the long isolation and confinement still enforced by some were not always necessary. It was, he thought, most important that a belief in the activity of the infective power of the fever-poison during the very earliest stage, possibly, also, during that of incubation, should be generally accepted; for then, instead of risking the spread of the disease by scattering at once the members of a family, thus forming new and fresh centres of infection, one should be content with isolating the sufferer in his own home, or by removal to hospital, according to circumstances, and by rigidly adopting all sanitary precautions. If, also, one admitted the activity of the fever-poison to be in the earliest stage rather than during the stage of desquamation, as still held by some, then one could feel that the long period of isolation and confinement of two or three months, still in the opinion of many deemed necessary, might be safely shortened to the very great relief of both the sufferer and his family.—Dr. BROADBENT thought that, before evidence of the kind brought forward by Dr. Longhurst could be accepted, one must have evidence that the first child alone was touched by the original source of the illness. Then, again, what was that original source in the cases quoted? When several children in a family had the disease, it was to be inferred that they all caught it from the same source. He had known numbers of cases of children having scarlatina, and sleeping with others at the early stage of the disease, before the rash appeared, when they were at once separated, in which these others did not contract it, though they at once caught it when subsequently exposed to another source of infection. With measles and mumps, the case was quite the reverse; they were both infectious at an early stage, as was evidenced by an instructive case which Dr. Broadbent mentioned. He should deprecate the sending away of a family of which one member was ill with scarlet fever at an early stage of the disease; the experience of the scarlet fever hospital was that, after baths had been daily given and all other precautions taken, children who had been six or eight weeks ill did yet occasionally convey the disease to others.—Dr. B. O'CONNOR said that, if the author of the paper could have traced his cases to the milk-supply or other known sources of infection, it would have been much more satisfactory. In a case quoted by himself, several children caught scarlatina from the taking of milk at the same time, at an evening party, but the diseased commenced at very different times in the different patients.—Dr. GILBART SMITH said that an important part of the question was as to the length of incubation of the disease; and cited an instance of a child who went to an orphanage in the country, and there gave the disease to others, with some of whom the period of incubation did not exceed twenty-four hours. If the disease had not appeared within three days after exposure to infection, it probably would not appear at all. He had recently seen a patient who developed scarlatina during his honeymoon, and yet the wife, who had not previously had it, did not catch it, which

she almost certainly would have done if it were infectious during its pre-eruptive stage, as she had remained with her husband until the rash came out, when he was sent to hospital.—Dr. GLOVER said that if, when the rash appeared, the patient were at once isolated, generally no other cases occurred in the house, produced from that first case. He thought the views of the author that cases might be sent away at the end of sixteen or twenty days were very dangerous.—Mr. S. JESSETT thought the infective stage was that of peeling. He cited the case of a child in the country who died from scarlatina, and whose clothes were put away for two years, when another child which had grown to their size was dressed in them, and sent to the parish schools, with the result that a very severe epidemic of the disease was thereby started.—Mr. EASTES said that he had had a very mild attack of scarlet fever some years ago, and returned thoroughly disinfected, as he considered, to London, on the twenty-fifth day of his illness, when his brother came unexpectedly to see him from Epsom College, and remained two hours in his presence. Forty-eight hours subsequently, in the evening, that brother was seized with rigors and vomiting, and went to bed in the dormitory, where he remained for thirty-six hours, before removal to the infirmary. Fourteen other boys slept two nights in that same dormitory during the time his brother was lying there, but not one of them at that time contracted the disease. In another case last December, a little girl, after being thoroughly disinfected, was at the end of the eighth week from the beginning of her illness sent to her home in the country, with the result that two or three of her brothers and sisters had scarlatina within three or four days of her arrival, and then it was found that her feet were peeling a second time. Thus his experience was quite contrary to that of Dr. Longhurst; he did not think the disease was infectious at first, but later on, during desquamation it was most infectious.—Mr. BLACK cited a case to show that measles was extremely infectious at its earliest stage.—Dr. DUCKWORTH thought the rule as to the removal of scarlet fever patients should be that they should be kept under the blankets for three weeks, and then not removed, at the earliest, for ten days or a fortnight more. He considered this a good dogmatic rule, by which he guided his own practice.—The PRESIDENT thought the author had not proved his point. He should have proved that all the children did not contract the disease from the same source. He thought the period of isolation should be at least six weeks. A few years ago, having scarlet fever in his own house, though not himself ill with it, he declined to go to a friend's house in Scotland for his autumn holiday, but being pressed, went at the end of six weeks from the beginning of the attack, with the unfortunate result that he imported it into his friend's house.—Dr. LONGHURST, in reply, still believed that the period of safety came sooner than most of the speakers considered. He thought much more risk was run from the clothes and other surroundings of the patient, than from the patient himself. He thought the concentration of cases of infectious diseases in hospitals was extremely prejudicial.

MEDICAL SOCIETY OF LONDON.

JANUARY 29TH, 1883.

FRANCIS MASON, F.R.C.S., President, in the Chair.

Acute Tuberculosis Complicated by Albuminuria.—Dr. WHIPHAM read the history of the case of a man, aged 19, who died in St. George's Hospital, under his care, on November 14th, 1882. The case was one of acute tuberculosis, complicated by albuminuria, with an unusually low temperature, an absence of marked physical signs of consolidation of the lung, and the presence of bacilli in the sputa. At the time of the patient's admission, his father was already in the hospital with symptoms of phthisis. He was suffering from dropsy; he had cough, but it was not troublesome. The lung-sounds were normal. The urine contained a very large amount of albumen, and was, on one or two occasions, nearly solid on the application of heat. Diarrhœa was profuse. On November 9th a portion of the expectoration was prepared and stained by the Heneage Gibbes method, and the bacilli of tubercle were demonstrated in considerable numbers. The temperature chart, extending over thirty-two days, showed that on nineteen days the temperature was subnormal, on fourteen days only was it above 98.4° Fahr., that on six days only did it exceed 99° Fahr., and that on one evening only did it reach 100° Fahr. The patient died November 14th, 1882, and at the *post mortem* examination the lungs were extensively occupied by miliary tubercle in various stages. Tubercular ulcers were found throughout the intestines. The liver, spleen, and kidneys were lardaceous. Dr. Whipham remarked on the absence of physical signs in the chest, the low temperature, and the presence of bacilli.—THE PRESIDENT thanked Dr. Whipham for his paper.—Dr. SEYMOUR TAYLOR said acute tuberculosis frequently existed without physical signs.—Dr. GREEN dwelt on the necessity for many further observations.—Dr. BURNEY YEO concurred with Dr. Whipham, and agreed with Dr. Green as to the unity of phthisis.—Dr. SAMUEL WEST thought Koch had left little to be found out.—Dr. RICHARDSON, in an experience of over 3,000 cases of phthisis, had endeavoured to form ideas of the mode of origin. He had never known a case which seemed to him to support the theory of contagiousness of phthisis. He strongly held to the views of heredity.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

JANUARY 13TH, 1883.

T. PRIDGIN TEALE, F.R.C.S., in the Chair.

Autolaryngoscope.—Dr. HELLIER showed an autolaryngoscope, designed by Dr. Foulis, and demonstrated its use.

An Electric Throat Lamp.—Mr. MARGETSON (Dewsbury) showed an incandescent electric lamp, designed by himself, and used by him since October last, in examining the mouth and throat. The globe was about the size of half a walnut. It could be held in the mouth for two minutes, without discomfort from heat.

Hydatids of the Liver treated by Incision.—Mr. TEALE exhibited a boy, aged 14, whom he had treated for suppurating hydatid of the liver by direct incision and drainage. The tumour had been aspirated before he came under Mr. Teale's care, upon the following dates: July 25th 1882, six ounces of opalescent fluid; September 5th, pus, not fœtid, hooklets found in the pus; September 11th, two ounces of fœtid pus withdrawn—the patient had some pain and sickness; September 20th, same quantity of fœtid pus. On October 11th, an incision, an inch and a-half in length, was made over the tumour (which was situated below the margin of the ribs on the right side). After division of the structures down to the tumour, a wire was passed through its capsule in order to fix it. There were, however, a few adhesions. The tumour was then incised, and the contents evacuated. A piece of omentum protruding from the upper part of the wound was firmly stitched to the walls of the cavity, and to the abdomen, and the projecting part was removed. The wall of the lower part of the cavity was stitched to the wall of the abdomen. A drainage-tube was inserted. The incision in the skin was then stitched up, and antiseptic dressings were applied. The boy recovered perfectly, and was discharged on December 1st. Mr. Teale also related the case of a woman, aged 26, whom he had attended, in consultation with Mr. Whiteley, of Wakefield. In operating upon this patient, Mr. Teale cut through half an inch of the thickness of the liver before reaching the cyst (which, in this case, was not suppurating). After extracting this from its cavity, he stitched the wall of the cavity, formed of liver-tissue, to the wall of the abdomen. Next day, the temperature was 102.5°, but on the following day 99°. For the next fortnight, much bile escaped from the wound. Perfect recovery ensued.

Removal of Numerous Pedicled Growths from Knee-joint.—Mr. F. ATKINSON read notes of this case. A lady, aged 27, had had synovitis in the left knee-joint at times during four years. Mr. Atkinson, when consulted, found a movable body at the edge of the outer condyle, another on the inner side of the joint, and a third above the patella. He operated, using full antiseptic precautions. Having made two incisions, one on each side of the joint, each incision an inch and a half in length (giving exit, in so doing, to fluid containing flocculi of lymph), he passed a finger into each wound, and found a double fringe of pedicled growths attached to the fold of synovial membrane, which stretched across in front of the condyles. These were cut away by probe-pointed scissors, to the number of twelve. Some were of a pinkish hue, and seemed to contain vessels; others were white. There was very little bleeding. A drainage-tube was passed through the joint; a splint was applied; antiseptic dressings were used. For two days the highest temperature was 100.2°. After the first dressing it came to 99.3°; and in two days more was normal. Two short drainage-tubes were used at the third dressing. After a fortnight, these were discontinued. In a month the back splint was exchanged for a lighter support; the patient was removed to a couch. A fortnight later, passive motion was employed, under ether. In the twelfth week the patient, wearing merely an elastic knee-cap, walked two miles.

Abscess of Brain in relation to Disease of the Ear.—Dr. JACOB read a paper in which, after describing two cases which had recently come

under his care, in which disease of the middle ear of some standing was followed by acute symptoms and death, he reviewed the literature of abscess of the brain, with a view to showing that, in by far the greater number of cases which die with cerebral disease, after suppuration in the ear, there was an abscess in the temporo-sphenoidal lobe of the brain, the patient dying from increase of intracranial pressure depending on this, and not on meningitis or the ear disease *per se*, though in a small proportion of cases the abscess was in the cerebellum. He urged that greater boldness should be shown in dealing with these cases when there was reason to believe that an abscess existed, and suggested that an exploratory puncture should be made with an aspirating needle, after an opening had been made with a small trephine or a dentist's mechanical drill. He quoted from ancient works on surgery, showing the freedom and apparent safety with which the trephine was used a century ago, while the experiments of modern physiologists in investigating the functions of the brain showed that, in the case of the lower animals, the cranium might be perforated with complete safety under antiseptic precautions. If, on an exploratory puncture, pus were found, a larger opening might be made and the abscess treated on ordinary surgical principles.—Mr. PRIDGIN TEALE spoke of the frequent use of the dental engine by American surgeons, and strongly approved of its use in such cases. The specimens of brain were exhibited at the meeting.

ACADEMY OF MEDICINE IN IRELAND: OBSTETRICAL SECTION.

FRIDAY, DECEMBER 22ND, 1882,

JOHN DENHAM, M.D., President, in the Chair.

Opening Address.—Dr. DENHAM, after some preliminary observations, took for the subject of his inaugural address "The Progress made in Obstetric Medicine during the last fifty years;" selecting, as the basis of his remarks, a comparison of the Rotunda Hospital Reports of Drs. Collins and Shekleton with those recently published by Dr. George Johnston. Dr. Collins, during his seven years' Mastership, had 16,414 deliveries, in which the crotchet was used 118 times, and the forceps or vectis 27 times. The number of deaths amounted to 164. Dr. Shekleton reported 13,748 deliveries, with the use of the perforator in 130 cases, and of the forceps in 200 cases, and the loss of 163 patients. Dr. Johnston reported 8,908 deliveries; 28 craniotomy, 90 version, and 750 forceps cases. He lost, altogether, 169 patients. Commenting on these figures, Dr. Denham observed that it was patent that, by the more frequent use of the forceps in modern obstetrics, much had been done for relief, without adding to the dangers of labour; and that great numbers of children were now delivered alive, who, under the old practice, would have had to be destroyed. The beneficial results of the introduction of chloroform, the greater use of sea-tangle tents, the operation of ovariotomy, followed as it has been by many new operative procedures, were briefly alluded to as having done much to bring gynæcologists into the front ranks of bold and successful operators, and to break down the barrier which at one time existed between this and other branches of the profession.

Specimens.—Mr. ARTHUR BENSON exhibited a patient showing a well-marked example of recent Spontaneous Detachment with Rent in the Substance of the Retina.

Dr. G. F. DUFFEY showed the heart and pericardium of a male patient aged 50, exhibiting the recent pathological effects of an acute Pericarditis which had lasted only for about eighteen hours. It had followed on an attack of Acute Articular Rheumatism.

Frozen Sections through a Full-time Still-born Fœtus.—Dr. ROE exhibited a series of frozen sections which he had lately made: 1, through the medial horizontal plane of the fœtal head; 2, through the shoulder-joint and upper part of the chest; 3, through the level of the third costal cartilage.

Double Ovarian Dermoid Cysts.—Dr. POOLE showed, for Dr. Kidd, two dermoid ovarian cysts removed from an unmarried patient aged 30. The growth of the tumour had been noticed for three years. The larger tumour involved the left ovary, and weighed, on removal, about six pounds. It was composed of numerous loculi of various sizes, some containing glairy mucoid fluid, and others masses of caseous matter mixed with hairs. Hard centres of ossification were felt in a portion of the cyst-walls. One of the larger cysts contained a matted mass of long dark hairs, on removing which a mass of bone was found jutting sharply into the cavity, and bearing on its apex two closely united teeth. The smaller tumour belonged to the left ovary, and was seen to consist of two cavities, one containing caseous matter with a few hairs, and in one part of its walls a mass of bone; the other containing a quantity of light-coloured hair and several teeth irregularly set in a bony wall.—Mr. P. S. ABRAHAM showed, under the microscope, preparations from the cysts, illustrating their contents and different portions of their walls.

Fœtal Deformities.—Dr. NEVILLE exhibited a specimen of fœto-amniotic adhesions, associated with numerous deformities of a full-time fœtus, including complete ectopia of the abdominal viscera; and with it a four months' fœtus, around whose right forearm the funis had become looped and adherent, associated with deformities of both hands, etc.

Cicatricial Occlusion of the Vagina.—Dr. MORE MADDEN read the notes of a case which recently came under his care in the gynæcological ward of the Mater Misericordiæ Hospital. The patient, aged 38, had been years married, and had given birth to four children. She never had any difficulty in parturition, and her recoveries were always rapid. Six months before admission, she had a miscarriage in the fourth month. This was caused by over-exertion, and presented nothing peculiar. Up to this time, her general and uterine health had been excellent. Two months after miscarrying, she began to complain of obscure pelvic pain, with sense of local fulness and bearing down. Her menses did not return, and, as she had previously been very regular in this respect, she naturally supposed herself to be again pregnant. The pelvic pain increasing, however, and being now attended with dysuria, troublesome tenesmus, and obvious impairment of her general health, she sought medical advice. When admitted into hospital, her general symptoms and history suggested retroversion of the gravid uterus. On examination, this was found not to be the case. The pelvic cavity was filled by a large globular tumour, which extended backwards so as to flatten the rectum against the sacrum, and upwards and forwards so as to displace the bladder. The entrance to the vagina was thus obstructed, so that the finger could only be passed in for an inch and a quarter. On bimanual recto-abdominal exploration, the uterus was found enlarged to the size of the fourth month, but in its normal position. The patient was then placed in the lithotomy position, the parts widely separated by retractors, and the seat of the obstruction, which was seen to consist of a tense convex fibrous-looking septum, was thus fully exposed to view. This diaphragmatic-looking cicatricial structure was then punctured with a fine trocar, and a small quantity of retained menstrual fluid drawn off by the aspirator. As the fluid was too viscid to pass freely through the cannula, the aperture was enlarged so as to admit the point of the finger, with which it was torn through so as to allow the gradual escape of about eighteen ounces of thick treacle-like catamenial matter. For two days afterwards this continued to drain away, and probably as much more escaped in this way. The membranous partition described formed the floor of a large hour-glass shaped cavity, the lower part of which was bounded by the distended vaginal walls, communicating through the open os and expanded cervical canal with the dilated uterine cavity, which formed its upper and smaller portion. The result was complete cure.—Dr. KIDD narrated the history of a case, recorded by the late Dr. Sawyer, in which a cicatricial occlusion of the vagina was found as an impediment to labour, at the end of the second and third pregnancies; the occlusion having, on each occasion, to be opened up by crucial incisions. He insisted on the impossibility of negativing the coexistence of pregnancy with almost any amount of occlusion, illustrating this point by the details of many cases which had fallen under his own observation. It was often very difficult to say whether the occlusion had taken place before or after conception. Dr. M'Clintock had described a form of annular contraction, due to atrophy of the vaginal walls in aged women. He (Dr. Kidd) had seen cases of a like kind in much younger women. Possibly, in Dr. Madden's case, an annular contraction of such a kind had formed, proceeding to such an extent as to form an "impermeable stricture," thus giving rise to the occlusion.—Drs. ATTHILL and BYRNE, and the PRESIDENT, also took part in the discussion, and Dr. MORE MADDEN briefly replied.

Breaking Strain or Tensile Strength of the Umbilical Cord.—Dr. NEVILLE read a paper on this subject, founded on 125 experiments made by him on the fresh cords of full-time children. Having explained the method of making these experiments, in which only the 12 or 14 inches of the cord nearest to the placenta were tested, he stated his conclusions as follows. In 100 cords, from which the blood had been allowed in great part to escape, before subjecting them to strain, the average tensile strength amounted to 12.5 lbs.; one cord bore a strain of 27 lbs.; nine cords, a strain varying from 20 to 25 lbs.; eighteen, of from 15 to 20 lbs.; forty-eight, of from 10 to 15 lbs.; twenty-three, of from 5 to 10 lbs.; and one of less than 5 lbs.

In the case of 25 cords tested, without allowing any escape of the blood contained in them, the average breaking strain was found to be very little above 11 lbs., or nearly one and a half pounds less than in the other case. The cords belonging to male were found to have an average strength of 1.5 lbs. more than those of female children; multiparity made no appreciable difference in strength. The strain was always gradually increased until the cord broke; and rupture was most commonly found to be first marked on the outer aspect of the cord, where an umbilical vein projected in a varicose manner. Thin, straight, and wiry cords, possessing a comparatively small amount of Whartonian jelly, and whose surfaces were least marked by varicose projections, habitually bore the greatest strains. The rather scanty literature on the subject was summarised; especially a paper by Pfannkuch (*Archiv für Gynækologie*, Band vii, Heft 1), who studied the effects of a sudden strain caused by the falling of the child's body, if delivered when the woman was in the upright position. Dr. Neville considered the question of a gradual drag as affecting inversion of the uterus. Assuming, as conditions, a strong funis abutting at or near the centre of the fundus on a firmly adherent placenta, and a flaccid pliable uterus wanting in contraction and retraction, he thought improper traction on the cord very likely to terminate in inversion. Inversion was a rare accident, because these conditions were rarely met with in combination, and because real fundal attachment of the placenta was particularly uncommon, notwithstanding text-book statements to the contrary.—Dr. ATTHILL compared inversion as an accident of delivery, with that which resulted from an intra-uterine tumour. In the one case, he believed that, as a matter of personal observation, the tumour, and in the other case the placenta, would always be found attached to the fundus. The fundus was the part of the uterus most susceptible of irritation. Irritation would set up contractions, and these would expel either the tumour or placenta, and, along with either, might invert the uterus. Pulling on the cord might facilitate the inversion, but could not act as a sole cause of this accident.—Dr. MACAN and Dr. FITZPATRICK also spoke.

Mummification of one Fœtus in a Twin Pregnancy: Labour at Term.—Dr. J. R. KIRKPATRICK exhibited a specimen of a mummified fœtus, with the placenta and membranes belonging to both children of a pregnancy which had gone to full time. There was a single placenta, and double membranous sac; that portion of the placenta which belonged to the mummified fœtus being shrunken and degenerated. The fœtus appeared to have died about the sixth month, and to have been since retained without occasioning any pathological symptoms. It was first born; after which the other child, presenting by the shoulder, was turned, and born alive and healthy. The living child, a female, weighed 8 lbs. The placenta was quickly afterwards naturally expelled. The mother was a healthy multipara, aged thirty-three; her six previous labours had terminated normally.

AN enthusiastic temperance meeting, attended by over 1,300 persons, was held lately, in the Lambeth Baths, New Cut, under the presidency of the Rev. G. M. Murphy, who observed that during the week before Christmas, Christmas week, and last week there were 63 deaths through drink—40 males and 23 females; murders, suicides, manslaughters, and deaths by violence numbered 27; 18 deaths were due to drunken accidents, 6 to exposure and neglect through drink; and there were 12 cases of deaths hastened by drink, and deaths when drunk. These figures he had extracted from the newspapers. A paragraph such as this may perhaps reconcile desponding financiers to the decrease in the revenue from the Excise, and there is reason to hope that it will lead to a still further decrease. This loss, we believe, will be more than counterbalanced by the saving of life and the maintenance of the health and vigour of many breadwinners.

SOCIETY OF PUBLIC ANALYSTS.—The annual meeting of this Society was held at Burlington House on January 17th, when the election of officers and members of Council took place. Mr. G. W. Wigner, who has occupied the position of one of the Honorary Secretaries since the formation of the Society, more than eight years ago, was elected President, and Mr. C. Heisch, Dr. C. A. Cameron, and Dr. Alfred Hill, Vice-Presidents. The new Honorary Secretaries elected are Mr. Bernard Dyer and Mr. Otto Hehner. Other new members of Council are Mr. A. Ashby, Mr. C. T. Kingzett, and Dr. P. Vieth. Mr. Hehner read a paper "On the Analysis of Yellow Wax," which will appear in the February number of the *Analyst*. The annual dinner was afterwards held at the Criterion.

BEQUESTS—The late Mr. John Whitelaw has bequeathed to each of the infirmaries of Glasgow the sum of £1,000.

REVIEWS AND NOTICES.

CENSUS OF IRELAND, 1881; Part II. General Report, with Illustrative maps and Diagrams, Tables, and Appendix. Dublin Alex. Thom and Co. 1882.

A BRIEF reference has already been made in the JOURNAL (December 16th, 1882, p. 1235) to this important blue book, remarkable alike for the completeness of the varied statistical and social information it affords, and for the unprecedently early date in the annals of census inquiries at which it has been published; as the commissioners state, the value of statistics in a large measure depends upon their early appearance. But some idea of the magnitude and variety of the work of this census may be formed, when we state that statistics are given in it, for over 70,000 separate places or areas, exclusive of small islands. Its volumes comprise over 4,600 pages of tables and letterpress, giving tables treating of area, houses (and out-offices), population, valuation, conjugal condition, ages, occupation, social condition, birthplaces, foreigners, religious profession, education, schools, agricultural statistics, agricultural holdings, in relation to population, etc.; emigration; the blind, the deaf and dumb, the lunatic and idiotic; the sick and infirm; the Irish-speaking population, etc.

Several of these subjects are not included in the scope of the census in the other portions of the United Kingdom. While their tabulation in Ireland has materially contributed to the value of the inquiry, it has largely increased and complicated the labours of the department, the amount of which cannot be adequately measured by the relative population with which it had to deal. Compared with that of 1871, this census report includes not only the statistics of the sick and infirm, formerly published under the title of "Status of Disease," but the result of special inquiries into the population, houses, etc., on agricultural holdings, and tables showing the occupations and social condition of the inhabitants of Dublin metropolis, the suburbs of Dublin, and the Dublin registration district.

To the Registrar-General for Ireland, Dr. Grimshaw—with whom, as Chief-Commissioner, were associated Mr. G. W. Abraham, LL.D., and Mr. R. E. Matheson—belongs the chief credit of bringing this great work to so meritorious an accomplishment within a period of such unexampled brevity. Dr. Grimshaw selected the superintendents of the different sections from the trained staff of his own department; and by his timely preliminary arrangements, commencing so far back as October 1879, the members of his well-instructed and completely organised staff were in a position to commence their respective duties at an early date, and were enabled to execute them in a rapid and satisfactory manner.

There are several inherent difficulties in the compilation of Irish statistics. One is the multiplicity of large and small townlands into which the unit of the numerous territorial areas the country is divided, which necessitates an excessive proportion of statistical tables, as compared with its size. Another is owing to the circumstance that neither the county boundaries, nor those of the Poor-law union, nor those of the dispensaries and registration districts, are in harmony Forty-eight Poor-law unions are situated in two counties, while twelve extend into three. It is most desirable that this state of affairs should be altered.

The reduction of the population in Ireland, which was very marked in 1851, 1861, and 1871, is still shown to be in progress, though the percentage of decrease has been less in each succeeding decade that for 1851 being 19.85; for 1861, 11.50; for 1871, 6.67; and for 1881, 4.39.

At the taking of the census of 1881 there were in Ireland 5,174,836 persons, and 914,108 inhabited houses, with an area of 20,194,602 statute acres, exclusive of water, but inclusive of 4,923,800 acres under plantation, roads, fences, towns, bogs, barren mountain, waste, etc. There is, however, a very substantial increase in the number of better class house-accommodation in both civic and rural districts in the recent decade. In 1861 there were 89,37 mud cabins, inhabited by 93,978 families, while in 1881 there were 41,025 families inhabiting 40,665 houses of this class, or a reduction in the latter year of 48,709 in the number of houses of the lowest class, and 52,953 in the number of families inhabiting same.

One of the new features in this census is a remarkable and unique series of tables as to agricultural holdings in Ireland, which will doubtless afford useful data to those who may desire to carry out social reforms in that country in future. We need not here refer further to this portion of the report, beyond indorsing the observation that it is clear that a vast number of these holdings—there are

16,879 not exceeding one acre—are incapable of affording a means of subsistence to their occupiers.

In every census, difficulties arise in classifying occupations, and the indefinite or non-productive class is perhaps the most defective and unsatisfactory one—peers and vagrants, children under fifteen years of age, and married women not having specified occupations, entering into its composition. In contrast with such a classification, a very important and novel series of tables is given for the Dublin Registration District, showing the special occupation and the social position of its inhabitants. These statistics were ordered to be furnished by the Irish Government at the request of the Dublin Sanitary Association, and deal with 346,693 persons constituting the population of the Dublin Registration District, and they vary in their structure from the occupation tables published in the County Abstracts, where the figures opposite each trade represent all persons belonging to it, whether masters, apprentices, workpeople, or clerks. The tables distinguish between employers and employed. The workhouse inmates are also shown separately. Persons who returned themselves as having no occupation, and, who, judging as in the case of employer and *employé*, were evidently in a humble position, are assigned to the line "unspecified." Those, likewise, who were considered to be in a superior position are assigned to the line "gentleman, gentlewoman." With regard to students, in the county tables, all persons over fifteen years of age returned as "student" or "scholar" were tabulated as "student." In the tables now under consideration, a different plan has been adopted. In boarding-school returns, the pupils of all ages up to twenty years are assigned to the column for children, opposite the line "gentleman, gentlewoman," when the circumstances seemed to warrant it; otherwise, they are tabulated as children of persons represented by the word "unspecified." A student or scholar living at home (under twenty years of age), and returned as "scholar" or "student," is placed opposite the parent's occupation; but where there was no clue to social position, he or she is registered as "student." On the left-hand side of the tables are placed the bread-winners, and on the right, on the same line, are placed their dependents having no occupations. When the wife is earning, she is entered on the left hand. The term, "gentleman, gentlewoman," comprises persons of rank, property, or respectable position, as well as retired officers of the army, navy, and civil service. Their sons and daughters following no occupation are, when over twenty years of age, also included.

There are thirty tables in the report, giving details regarding the sick in Ireland on the night of the census. Some of the chief figures from these tables have already appeared in the JOURNAL (*loc. cit.*), and they show a considerable improvement in the general sanitary condition of the Irish people in 1881, as compared with what it was in 1871. The amount of accommodation for the sick in the county infirmaries, general, fever, and in special hospitals, has also been increased during the decade.

As one of the objects of fever hospitals is to prevent the spread of infective disease, it is interesting to note that, of 2,274 persons returned as suffering from infective fevers (small-pox, measles, scarlatina, diphtheria, whooping-cough, and fever), 383 were in hospital, and 775 in workhouse hospitals, the remainder being sick at their own homes, in many instances spreading disease amongst their families and neighbours.

The "infirm wards" and hospitals of the workhouses in Ireland must be considered as the principal public accommodation for the sick poor. Thus, while there were 4,170 in the institutions commonly regarded as hospitals, there were 18,115 sick poor persons accommodated in the buildings connected with the 163 Poor-law unions of Ireland. Thus, about four-fifths of the sick in public institutions were provided for by the Poor-law authorities. A large proportion of the 18,115 "Sick in Workhouses" should not be classed as "sick paupers," the fact being that, in country districts and small towns where no public "medical charities" exist, the sick among the artisan and labouring class make use of the Union hospitals in the same manner as similar classes, in the great towns, use the hospitals supported by voluntary contributions and charitable endowments. In estimating the accommodation for the sick poor in Ireland, these great Union hospitals are too often overlooked by those who take an interest in this important branch of charity.

Allowing for the decrease of population during the decade, the returns show that the proportion of blind to the population of Ireland is slightly greater than in 1871—namely, 1 in 847 in 1881, against 1 in 852 in 1871. A large number of cases of blindness have been attributed to small-pox in the returns for each successive census period. In 1871 the number so stated was less by 199 than in 1861. Now, again, a further diminution is announced, the number returned in 1881 being 359, against 526 in 1871, showing a decrease of 167. The diminution of destructive eye-affections in small-pox is to be attributed to two causes. In the first place, the modifying influence of vaccination has diminished not only the frequency of small-pox, but also the virulence of the disease; and, other things being equal, loss of sight from small-pox should be less frequent than formerly. The other important element, however, is the fact that ophthalmia has also diminished. It is a peculiarity of the small-pox eruption to attack most severely the more vascular parts; hence, an eye influenced by ophthalmia is much more liable to the attack of the small-pox eruption than a healthy eye. The returns state that 98 cases of blindness were caused by fever; in 1871 the number returned was 99. Although continued fevers, are, unfortunately, still common in Ireland, yet, as ophthalmic complication in this class of affections is certainly rare, it cannot be a plentiful source of blindness. The registrar-general, who had, when physician to Cork Street Fever Hospital, a large experience in the treatment of fever, states that he has never, in his own practice, met with a case of blindness as a sequela of any form of continued fever.

The information that has been collected with regard to the deaf and dumb, is, like that in former Irish censuses, unique in its comprehensiveness and minuteness of detail. A registry of the facts concerning each case has now been kept continuously for over thirty years, and special steps taken for the identification and tracing of each individual. The total deaf and dumb from all causes has decreased from 4,747 in 1851 to 4,930 in 1861, and 4,467 in 1871 to 3,993 in 1881, equal to a ratio of 1 in every 1,602 of the population. The number of lunatics enumerated on census night in Ireland was 9,774 (4,857 males and 4,917 females)—943 were at large, 7,547 in asylums, and 1,284 in workhouses; and the number of idiots 8,639 (4,674 males and 3,965 females), of whom 4,548 were at large, 1,896 in asylums, and 2,195 in workhouses. The statistics of the last four matters to which we have referred are graphically shown in one of the several coloured diagrams which accompany the report. This diagram shows, by means of different colours, the proportion per 10,000 of the population of lunatics and idiots, the sick at their own homes, the totally blind, and the deaf and dumb. It is an addition to the diagrams which were appended to the last census return, and which are altogether inferior to those dealing with the same subjects in the present report.

In the foregoing summary, we have given a summary of some of the general features of the report, in its medical bearings especially. Brief and imperfect as this has necessarily been, it may nevertheless serve to indicate the character, extent, and comprehensiveness, of a work which is in everyway creditable to all who took part in its execution.

NOTES ON BOOKS.

Diet-Charts drawn up by SAMUEL BENTON, L.R.C.P., M.R.C.S., L.M. For Daily Use in General Practice, and in the Wards of Hospitals. (Wodderspoon and Co., Serle Street, W.C.) These charts are intended as a means whereby a nurse who is watching a case may be able to show the medical attendant what nourishment his patient has taken since his last visit. In fact they register diet, as similar charts, already much in use, register temperature, pulse, and respiration. The twenty-four hours are indicated, in succession down the first column, and separate columns are headed "milk (oz.)," "B. tea," "broth," "brandy," "extras," "sleep, *(hrs. min.)*," and "remarks." There is a "total" at the bottom of the columns so that the number of ounces of milk etc. consumed during each day can be seen at once. The author has already acquired some considerable experience in nursing, and his handbook on the subject has proved very useful to nurses and physicians. These *Diet-Charts* deserve to be equally successful.

SUICIDES IN NEW YORK.—The *New York Tribune* has published some statistics about suicides in that city during the last twelve years. In that time 1,687 persons took their own lives; 1,326 were men and 361 were women. Poison was the mode of death chosen by 540 persons, while 272 preferred hanging. The number of Germans who destroyed themselves was 701, and of Irishmen only 241.

PRESENTATION.—AN illuminated address has been presented to Dr. Vans Christian Clarke, R.N., by the prison officials, on his transfer from Millbank Prison to Her Majesty's Female Convict Establishment at Woking, Surrey.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 3rd, 1883.

THE MEDICAL OFFICERS OF ATLANTIC STEAMERS AS GOVERNMENT OFFICIALS.

THE evidence before us as to the present working of the medical and sanitary departments on large passenger ships, leads unmistakably to the conclusion that there is an urgent need of reform, and that any scheme to this end must signally fail which does not recognise as a first principle—a *sine quâ non*—the necessity of the medical officers being Government officials, appointed by Government, and responsible to Government alone for the efficient fulfilment of their duties. That "no man can serve two masters" is undeniable when those masters pull in distinctly opposite directions, as not unfrequently do the health interests of passengers and the money interests of the shipowner. It has been abundantly proven that the qualities of the surgeon, both as a practitioner and as a sanitarian, are of the first importance to passengers. That they are of less consequence to the owners, is evinced by the fact that they commonly make little effort, either to secure or to retain the services of the best men, and that they are apt to prefer—indeed, will often only tolerate—those who abstain from finding fault, or interfering, in any way, with existing arrangements. It may be said, as in 1849, that, "The shippers are no doubt honourable men, chargable with no conscious designs against the lives of the human beings committed to their care." It is to-day at least as true as then, that "their thoughts are directed by their interests exclusively to profits." Free competition—which, in matters more tangible, has exercised a naturally salutary influence—inducing the shipowners, in some respects, to voluntarily exceed the requirements of the law, has effected retrogressively, if at all, the medical and sanitary departments, which, not being understood or appreciated by the general public, are not advertised beyond the stereotyped notice, "Each ship carries an experienced surgeon and stewardess."

A regularly constituted mercantile marine medical service is from all points of view eminently desirable; it would give the position a certain status and respectability which could not fail to attract a better and more experienced class of surgeons, thereby affording the travelling public a more certainly efficient medical attendance; it would guard the surgeons against indignities from unworthy captains or "parvenus in shipping", and the ship-owners from inconvenience through nonfulfilment of contract by unworthy surgeons; it would invest the medical officer with such independent authority in sanitary matters as is absolutely essential for the safety of passengers, and guarantee to the public that legal requirements with reference to such matters should be faithfully carried out, not only at the beginning and the end, but throughout the voyage; it would relieve the captain of hygienic responsibilities, for which he has seldom either leisure, inclination, or the requisite training; it would protect the shipowner against complaints, sometimes, no doubt, unfounded, of bad food, bad cooking, want of cleanliness, or misconduct on the part of *employés*, which so frequently appear in the newspapers—especially in those of New York and Philadelphia; and, lastly, it would lead to an organised and co-operative study of naval hygiene, and possibly to a more rational and successful treatment of sea-sickness.

Against this scheme, we fail to discover a single valid reason. If shipowners resent interference in what they are pleased to term private enterprise, and claim the right of "managing their own affairs" as seems most expedient to themselves, we reply that we raise no new issue; the right of Government interference is already asserted in the Government inspection of passenger-ships and all that pertains to them, both before sailing and after arrival. As expressed by Dr. Irwin: "The one 'missing link' in the chain of Government supervision is during the most important time of all—while the emigrants are crowded together during the voyage." It might also be said of such an objection that it savours strongly of a consciousness that the law is at present evaded.

Again, it may be urged that, to place the surgeon in a position of independence towards the captain—or in any position other than that he now occupies as "a seaman on the articles"—would be subversive of discipline, and probably productive of ill feeling between him and other officials. Not only is the reverse already proved by the experience of Colonial Governments who have found it necessary to adopt this system, but to us it seems self evident that in dealing with men of character and intelligence, a clear and unmistakable definition of the duties and responsibilities of each is the best safeguard against misunderstanding or ill-will. The Queensland Government instructs the medical officers of passenger ships bound for that colony: "You are invested by the Queensland Government with supreme authority on board, in everything not connected with the sailing of the ship. You are not to allow any interference on the part of the master or officers in the discharge of your duties. You are to see that no oppression or unkindness is practiced towards the persons under your charge. You are responsible alone to the Queensland Government. The sole medical care of so many persons is of itself a responsible charge, but this responsibility is greatly increased from your having the governance and care of the whole of the passengers intrusted to you, and it is to the medical officer that they will have to look as their guide, protector, and adviser throughout the voyage." Then follows this wholesome caution: "It will be evident to you that your own comfort, and the comfort and well-being of all on board, must greatly depend upon the maintenance of good feeling and unity of purpose between yourself and the captain and the officers. In common with them you have one object to serve—the maintenance of morality, health, good order, and good feeling in the ship." We have inquired of persons experienced in the Queensland Emigration Department and also from those connected with the ownership of the vessels employed, and we are assured on both sides that the system works smoothly and to the satisfaction of all concerned: that both the captains and surgeons are men of tried character and experience each understands his duties, values his position, and finds no difficulty in co-operating with the other for the common good.

It seems possible that measures less complete might meet the necessities of the Atlantic Emigrant trade, it is, however, certain that the existing Passenger Acts—framed by those who never contemplated the possibility of such floating villages as now cross the ocean—are entirely unequal to the requirements of the time.

In pressing upon Government the necessity of additional legislation, we are encouraged by this enlightened statement of the President of the Board of Trade, which we find as a prefatory minute to the Blue Book (c. 2,995), recently so severely criticised by Dr. Irwin. Mr. Chamberlain observes that, if such evils in the state of emigrant ships could be demonstrated as called for exceptional remedies, "the Board would not be deterred from proposing them, either by the fear of imposing expense on the shipowners,"

by the apprehension that the business would be driven to foreign ports and to a foreign flag. For they believe that whatever tends to the health, comfort, morality, satisfaction and general well-being of the passengers, will in the end be to the advantage of the trade." We trust that Mr. Chamberlain may now see sufficient reason to justify prompt and effective action in this matter; and with reference to foreign competition we may venture to express an opinion that, when the Government of the United States—which is most interested in the welfare of these emigrants, and has already, upon that ground, practically assumed the command of the trade—is satisfied with the propriety of a change, it will not hesitate to enforce upon our competitors a system at least as stringent as our own. We hope, therefore, that by promptly taking the matter in hand the Government will spare our national pride the humiliation of more direct American interference in so important a branch of our national trade.

VASO-DILATOR FUNCTION OF THE SYMPATHETIC.

In the prosecution of their experiments on vaso-motor nerves, MM. Dastre and Morat have been led to test for vaso-dilators in the cervical sympathetic (*Arch. de Physiol.*, 1882, Nos. 2 and 3). It is surprising to hear, and still more surprising to see, that the obvious and salient effect of stimulation of the sympathetic of the dog is not vaso-constriction, but vaso-dilatation. The experiment is none other than that which constitutes the basis of vaso-motor physiology—the now classical experiment independently performed in 1852-3 by Claude Bernard, by Brown-Séquard, and by Augustus Waller. This same experiment, which, when performed on the rabbit, affords the typical demonstration of the vaso-constrictor function of the sympathetic, gives when performed on the dog an equally typical demonstration of vaso-dilatation. We shall not follow MM. Dastre and Morat in their critical and historical account of the subject, nor shall we reproduce all the experimental steps by which as in science bound, the authors defined their results, and determined the source and course of the vaso-dilator fibres. The facts presented in strong relief; and the conclusions curtly stated, without comment, will best convey to our readers a clear notion of the bearing of these researches upon vaso-motor physiology.

The vago-sympathetic of a slightly curarised dog having been exposed and cut, its cephalic end is subjected to weak faradisation. The effects observed, are firstly, the well known dilatation of pupil, projection of the eye-ball and constriction of vessels, notably of the ear, tongue, epiglottis, tonsil, and soft palate on the side of the excited nerve; but, in addition, on the same side, vivid flushing of the lips, cheek, gums, hard palate and nostril. These are the facts; and we can indorse the authors' remark that it is impossible to realise an experiment more simple in its preparation, at the same time more evident and constant in its results. By other experiments the authors show that vaso-motor fibres conform to the law of Flagendie and Bell, inasmuch as they leave the spinal cord by the anterior nerve-roots. Hence (*a.*) the sympathetic nerve of the dog contains vaso-dilators derived from the spinal cord *viâ* the anterior nerve-roots; (*b.*) vaso-dilator nerves belong to the sympathetic, not to the cerebro-spinal system. These are the conclusions.

It must be admitted that this last generalisation, however probable in argument, is at present ill-supported by data; but it may also be admitted that such data must be of most difficult access. We may concede that vaso-constrictors greatly preponderate, and so mask the action of vaso-dilators, that one may therefore expect to demonstrate the latter only in the few special cases where they happen to have parted company from constrictors, *i.e.*, in branches such as the chorda tympani, superior and inferior maxillaries, and the nervi erigentes. But, apart from such concessions, there is but one clear fact to show that vaso-dilators are sympathetic, viz., the experiment above noted, which holds only in the case of the dog. To our knowledge this fact, however, Dastre and Morat have added that of another related to it, the interpretation of which, if somewhat less clear and certain, presents features of great interest. (*Ibid.* No. 7.) Stimulation of the cervical sympathetic causes, as is well known, constriction of the vessels of the ear. These physiologists now show on the dog, cat, and rabbit that stimulation of the thoracic sympathetic gives rise to dilatation of the auricular vessels. In other words, stimulation of the sympathetic above the inferior cervical ganglion causes constriction of the auricular vessels, whereas stimulation of the sympathetic below the ganglion causes their dilatation. From this they conclude that these dilators end in the inferior cervical ganglion, and that we have in this experiment a manifest instance of the mechanism supposed to underlie vaso-dilatation, viz., nerve-fibres terminating in ganglion-cells, and capable of suspending their tonic action.

DIPSOMANIA.

Dipsomania, according to Professor Lasègue, who has recently made a study of it in the *Archives Générales de Médecine*, is a neurosis closely resembling alcoholism, but characterised by intermittent accesses which continue until the moment, when the crises having passed, reason resumes its empire. The difference between drunkenness and dipsomania has been extremely well put by Trélat, in these terms: "drunkards are people who get drunk whenever they have the opportunity of drinking; whenever their attack overtakes them, dipsomaniacs get drunk; in the end, tipplers generally become physically and pathologically alcoholised; dipsomaniacs always become so." Dipsomania, M. Folleville regards (*Revue de Médecine*) as an always hereditary, always spontaneous neurosis, absolutely independent of the habits of the individual. Most dipsomaniacs are eccentric, impetuous, often cruel and sometimes completely insane. Sometimes persons are met with whose intelligence appears absolutely normal and shows no irregularity in the intervals of the attacks. At the approach of these attacks the patient experiences a vague uneasiness, he is uneasy, subject to motiveless fears, and often shows suicidal tendencies. Muscular vigour becomes weakened, the patient feels inclined to faint, and he is tormented by dipsomaniac symptoms which presently renew the morbid impulse. Resistance is impossible at the outset, but soon the crises becomes aggravated, the impulse becomes irresistible, and, in order to obtain drink, the patient has recourse to the most varied and incredible stratagems. Sometimes dipsomaniacs yield to their impulse cynically without any self-respect; sometimes on the contrary, they wrap themselves up in mystery and precautions, and seek to keep the secret of their habits. The fit of dipsomania does not last for ever; after a very variable time, sometimes days, sometimes weeks, sometimes months, the patient awakes. The impulse is calmed; repentance makes itself felt. It is often accompanied by dyspepsia, frequently intense, and by disgust for drink. These intervals of lucidity may be very prolonged, and last as long as months; but, in the majority of cases, they become shorter and shorter, till they reach what, according to Lasègue, is known in England as the diurnal type of dipsomania, in which the patient gets drunk every night, and repents every morning. The choice of drinks varies, and some patients intoxicate themselves with ether, or with chloroform inhalations. Various complications are observed, especially in women, such as great excitement, or an irresistible tendency to robbery, murder, anthropophagy, and suicide. The causes of dipsomania are, first, heredity; all the most various forms of alienation may be found in the history of the ancestors of patients. After this come alcoholism, sexual abuse; then all causes of debility, the puerperal state, abundant hæmorrhages, injuries, insolation, excessive labour, troubles, poignant anxieties, the menopause, and parturition. Dipsomania is often difficult to distinguish from the excesses which mark the appearance of insanity, and especially of general paralysis. The prognosis of dipsomania is absolutely hopeless, especially when the

case is one of hereditary and spontaneous vice, and not an acquired habit. These patients are never cured, in spite of the most various treatment. In dealing with dipsomania therapeutically, it is advisable at first to attack the dipsomania by means of an appropriate treatment, to employ such remedies as nitrite of silver, revulsives, bitter tonics, hydrotherapy. Finally, one only method appears to be of certain efficacy, and that is isolation, and lengthened confinement of the individual almost indefinitely prolonged.

THE third Lettsomian lecture on "Mitral Stenosis and Lesions of the Aortic Valves," will be delivered at the Medical Society on Monday next, by Dr. Sansom.

THE Gresham Lectures will be delivered in Gresham College, on February 5th, 6th, 8th, and 9th, by Dr. E. Symes Thompson. The subject will be "Alpine Health Resorts."

ARRANGEMENTS have been made for a series of three Health Lectures, to be given at the Assembly Rooms, Cheltenham. The first was given by Dr. B. W. Richardson, on January 27th, on the subject of Health in a Health-Resort. Dr. de Chaumont, on February 15th, will lecture on The Health of Armies in Peace and War; and Dr. Thorne Thorne is announced to lecture on March 14th, on the subject of Channels for Conveying Infection to Households: How they may be recognised and dealt with.

BRITISH MEDICAL BENEVOLENT FUND.

AT the first monthly meeting of the committee, held at the house of the Treasurer, on Tuesday, January 30th, there were forty-three applications for relief. Grants were voted to thirty-three cases, amounting in the aggregate to £377. This is by far the largest sum ever distributed at a single meeting; but the cases were not only numerous, but urgent.

CARDIFF MEDICAL SOCIETY.

AT the annual meeting, held on the 18th ult., the following gentlemen were elected as office-bearers for the ensuing year:—*President:* William Price, M.B. *Vice-President:* Charles T. Vachell, M.D. *Committee:* A. P. Fiddian, M.B.; C. E. Hardyman; M. G. Evans, M.D.; Albert Plain, M.B. *Honorary Secretary and Treasurer:* T. Garrett Horder.

CUMBERLAND AND WESTMORLAND HOSPITAL SUNDAY FUND.

THE total amount received from the Hospital Sunday and Saturday collections for 1882 was £1,403 6s. 11d. Part of this sum was specially appropriated for one or other of the institutions participating in the fund, by the churches or works in which collections were made. The remainder, after a small sum had been deducted for contingent expenses, was divided between the following five institutions: the Cumberland Infirmary, the Carlisle House of Recovery, the Carlisle Dispensary, Silloth Convalescent Institution, and the West Cumberland Infirmary.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

AT the annual meeting, held on January 30th, 1883, the following gentlemen were elected office-bearers for the ensuing year:—*President:* *Dr. D. Lloyd Roberts. *Vice-Presidents:* *Mr. Hardie, Dr. John Roberts, *Mr. Walmsley, Dr. Stevenson. *Treasurer:* Dr. Joseph Stone. *Secretaries:* Dr. A. Wahltuch; Mr. J. Broadbent. *Committee:* Dr. Barlow, *Dr. Collins, Dr. Cullingworth, *Mr. R. Dacre Fox, *Dr. Ledward, Dr. Mallett, Dr. Pierce, *Dr. Leech, *Dr. H. Simpson, *Dr. Walter, *Dr. John Watson, Mr. Westmorland. Those marked with an * did not hold the same office last year. The report showed that the Association continues in a prosperous condition, there being 125 members, an increase of six over the preceding year.

CORONERS IN NEW YORK STATE.

THE subject of the reorganisation of the office of Coroner, and the introduction of medical examination by experts in lieu generally of an inquest by a jury, has been taken into consideration by a committee of the Medico-Legal Society of New York, and this Committee has presented its report, recommending: 1, the abolition of coroners' juries in most cases; 2, the substitution of salaried medical examiners, who are to act in lieu of coroners till there is reason to suppose that a crime has been committed, and report in duplicate to the coroner—who is to be a lawyer—and to the District State Attorney; 3, the reduction of the number of coroners, since the duties of these will in great part be transferred to the medical examiners; 4, power to be granted to the medical examiners to call in the aid of skilled chemists to make analyses.

BIRMINGHAM CHILDREN'S HOSPITAL.

THE twenty-first annual report of the Birmingham and Midland Hospital for Sick Children, which has just been published, shows that the total number of patients treated in 1882 has been 13,724, 734 being in-patients, 12,928 out-patients, and 62 home patients; giving an increase of 24 in-patients, 897 out-patients, and 4 home patients, as compared with the previous year. The expenditure of the year has been £4,107 11s. 8d., and the income £3,884 0s. 2d., leaving a deficiency of £223 11s. 6d. The total deficit at the present time is £864 7s. 1d. During the summer of the year, a small ward was again devoted to the reception of special cases of diarrhœa, to enable Dr. Ballard, one of the medical officers of the local government board, further to prosecute his investigations into the causes of that disease among infants.

PROPHYLAXIS OF MALARIAL FEVERS.

MANY of the low hot parts of Ethiopia are so unhealthy, that European travellers, and even natives from the higher country visiting these districts, rarely escape grave remittent and intermittent fevers, while the indigenous inhabitants of this low country are not affected, or only suffer from slight attacks. It is said that natives from the higher country, resorting to these unhealthy parts in search of ivory, often escape the fever, and they believe that this immunity is to be attributed to their habit of fumigating their naked bodies with sulphur. Professor Silvestri, of Catania, at the instance of MM. d'Abadie and Fongué, has undertaken, in Sicily, in regions where fever prevails, an inquiry as to the protective influence of sulphur mines. Professor Silvestri has found that the miners are not exempt, but that they suffer relatively little, and in a proportion of not more than eight or nine per cent., while the rest of the population of the same villages are affected in the proportion of ninety per cent.

ANOTHER FALSE CERTIFICATE OF DEATH.

AT the Marlborough Police Court, this week, Mr. W. Hindhaugh, M.R.C.S., 49, Wells Street, Marylebone, was summoned for unlawfully and wilfully giving, in violation of the 40th section of the Births and Deaths Registration Act, 1874, a false certificate concerning the death of Mary Pamela Scace, 40 years of age, who died on December 17th, 1882.—Mr. Joseph Bedford, superintendent registrar of Marylebone, and Mr. R. T. Tubbs, assistant overseer of the parish, were in attendance. On the case being called, Mr. Bedford said he believed the defendant wished to plead guilty to the offence. The defendant said he was prepared to admit that he did not attend the deceased at her death. He had attended her before, but as he was in ill-health, another gentleman attended her, and then h

(defendant) assisted, and on the urgent appeal of the deceased's relatives, he gave a certificate.—Mr. Mansfield fined the defendant £5 and costs.

PHYSICIANS' PRESCRIPTIONS.

THE responsibility of chemists and druggists (*pharmaciens*) to the law, has recently been presented in a new light in France; and the Medico-Legal Society of Paris has been discussing whether it is obligatory on pharmacists to enter the names of persons for whom they dispense medicines containing poisons on medical prescriptions in the register of prescriptions, which, by law, they are obliged to keep. Until recently, this has not been done; and patients suffering from venereal disorders, sometimes very naturally object to their names being thus entered. But, latterly, the police have insisted upon not only the prescription, but the person for whom the medicine containing poison is dispensed being registered. On appeal, the judges have upheld the obligativeness of the registration of the name of the patient, and to this decision the Medico-Legal Society of Paris objects. Our readers will find a full account of the subject in the current number of the *Annales d' Hygiène* (January 1883, p. 69). The subject is of importance in relation to possible legislation in this country as to the sale of poisons.

DEATH FROM CHLORAL.

ANOTHER death, through the careless self-administration of an overdose of hydrate of choral, testifies once more to the great risk which persons incur who prescribe dangerous drugs for themselves, and to the fatal facilities which are afforded to the public for the purchase of poisons in the shape of patent medicines. In the case in question, the sufferer was the widow of an Admiral in the Navy, and resided at Kensington. She had gone to the house of a friend, who sent his servant to see her home, as she appeared to be in low spirits. This young woman went with the deceased lady into her bedroom, which was only dimly lighted, and saw her place a chloral bottle on the mantel shelf, at the same time exclaiming, "I am dying; I have taken fourteen doses." It transpired that the preparation of hydrate of chloral in the bottle was a patent medicine, known as "Hunter's solution of chloral." Evidence tended to show that the deceased did not premeditate suicide; and to a verdict of accidental death the jury added a rider, requesting the coroner to convey to the Home Secretary their opinion that restrictions should be placed upon the sale of patent medicines that may be used as poisons.

THE MILITARY AND CIVIL HOSPITALS AT CAIRO.

We are glad to hear from our correspondents at Cairo, that the British military and civil hospitals in that town are in many respects much improved recently, and are progressing satisfactorily. A thoroughly good feeling prevails between the members of the Army Medical Department and the administration of the New Victoria Hospital at Cairo, and the good offices of Surgeon-General Irvine in bringing about these completely satisfactory relations are highly appreciated. Surgeon-Major Warren is attending two of his cases in Lady Strangford's Hospital, one being an officer, the other a lady, the wife of an officer. Lord Dufferin has addressed an extremely complimentary and satisfactory letter to Lady Strangford, respecting the Victoria Hospital. One of the Victoria nurses is nursing Lady Strangford and her sister Mrs. Nicholson, who has recently been confined. The house they occupied belonged to Chérif Pacha, who left Cairo on account of the death of two of his children from diphtheria. It has been built on a part of the town which was formerly a rubbish heap," and it is said that the deposit is ten feet deep. Both ladies are doing well under the attendance of Dr. Grant Bey. At Abassieh vast improvements have, we are glad to learn, been made in the hospital arrangments. Much credit is given to the sisters. Surgeon-Major Tippetts brought five with him from Gozo, and there were eight, in all, on duty. The weather is most agreeable. We have received photographs of the wards of the Victoria Hospital and of a number of patients, which graphically indicate a most satisfactory state of things.

GASTRO-ENTEROSTOMY.

DR. FISCHER, of Strasburg, describes, in the *Deutsche Zeitschrift für Chirurgie*, a remarkable abdominal operation. In 1881 Freund removed a fibroid uterus from a woman, aged 30. Last May this unfortunate patient, who appears to have been predestined to be a victim to abdominal disease, was found, by Dr. Fischer, to be suffering, according to his diagnosis, from carcinoma of the pylorus. Lücke determined to attempt resection of that part of the alimentary canal. From May 13th, 1882, to May 25th the stomach was washed out, every day, and on the 25th, after an enema had also been administered, the operation was commenced, without spray. The parts were exposed by a free incision, but resection was found to be impracticable, owing to extensive adhesions between the pylorus and the neighbouring structures, especially the pancreas. The pylorus was therefore laid open and the aperture united to the abdominal wound, as in a gastrostomy. The opening left in the wound was dressed with iodoform, and covered in with thymol-gauze. After the operation, the patient did well, the temperature rose but little above normal, and she was discharged in thirty-seven days. Since then she has enjoyed very fair health, being free from attacks of vomiting, and can easily digest light, nutritious food.

PARALDEHYDE: A NEW HYPNOTIC.

THE actions of this drug were first studied by Dr. Cervello, of Palermo; and his experiments were made in the laboratory of Experimental Pharmacology at Strasburg, under the direction of Schmiederberg. Professor Morselli, of the Royal Asylum of Turin, has, in conjunction with Dr. Bergesis, the assistant medical officer, made an extensive series of observations with it. Its chemical composition is $C_6^{\pi}H_{12}O_3$; and it is a polymeric form of aldehyde. In physiological action it strongly resembles chloral. A dose of three grammes procures quiet and refreshing sleep for from four to seven hours. It differs from chloral in its action on the circulatory system, strengthening the heart's action, while diminishing its frequency. It has also a well-marked action on the kidneys; greatly increasing the flow of urine. The skin is not at all affected. The drug does not give rise to digestive disturbances, to headache, or to any other unpleasant symptom. Up to the present, Professor Morselli has used paraldehyde about 350 times. He has found it a valuable remedy in mania, melancholia, and other nervous affections, as well as in the sleeplessness that accompanies acute bronchial catarrh, lobar pneumonia, and heart diseases. He believes that it will to a large extent take the place of chloral.

FALSIFICATION OF DRUGS.

SOME amount of public excitement, especially among the poor, is said to be occasioned by a painful discovery just made by the medical authorities of the hospitals of Paris. The powder supplied as sulphate of quinine to several of those institutions turns out to have been sulphate of cinchonine and sulphate of cinchonidine. The fraud was first detected by the dispenser of the Children's Hospital. He noticed one day that the powder on the bottom of an empty quinine box presented a different appearance from that which he had taken out of the box. Having reported his observation to the Director of Public Assistance, a careful examination was ordered of the boxes in stock, which had been supplied by the Central Hospital Dispensary, when it was found that there was sulphate of quinine at the orifice and centre of the boxes, but that the remainder was filled with the two other sulphates mentioned. Investigations of the quinine stores at other hospitals, and it is said also at several druggists, have given like results. Proceedings have

been taken against the contractor supplying the hospitals; but he protests his good faith, declaring that he supplied the quinine just as he imported it from foreign manufacturers. There is reason to believe that the hospitals in question have been thus defrauded for several years. Sulphate of quinine is the favourite medicine in France in cases of typhoid fever, which prevails in Paris in autumn.

NEPHROTOMY.

In a recent number of the *Berlin Klin. Wochenschrift*, Dr. Reinhard Bruntzel, of Breslau, contributes the details of a case of successful extirpation of the left kidney, which contained in its capsule a fibromatous tumour weighing thirty-seven pounds. The operation was exploratory, the nature and seat of the tumour not having been previously diagnosed. A portion of adherent intestine was ruptured in the course of the operation, and a long tubular structure, taken at the time for a blood-vessel, was found in the pedicle of the tumour and ligatured. The patient made an excellent recovery, complicated at first by a fæcal fistula caused by the injury to the intestine. On examining the tumour after its removal, the tube was found to be an ureter, and the kidney lay deeply imbedded in the growth. Pathological records prove that large tumours of this kind, localised even after they have obtained large proportions, as in this case, not unfrequently develop in the kidney, which lies flattened behind the new growth or hidden in its substance. Being thus circumscribed, such tumours can be removed by a bold and dexterous operator, experienced in abdominal surgery; nor is ligature of the renal vessels so difficult a task as it would at first appear, considering the great depth of those vessels, within the abdominal cavity, under natural circumstances. In the case of a tumour, these vessels are much stretched and elongated, as are the vessels of all pedicles, nor can the pedicle of a renal growth become so broad and thick as the corresponding part of certain uterine and ovarian growths.

OPERATIONS BY MIDWIVES.

How far is a midwife entitled to operate upon an infant, is a question which was discussed at a recent inquest at Smithwick, a suburb of Sunderland; and the legal question was enlarged upon by Mr. Graham, the district coroner. It appears, from the report of the inquest, that a midwife attended a woman in labour, and that she was subsequently given into custody on the charge of having caused the death of the infant; and there appears to be no doubt that it died from an operation performed upon it. Dr. Mathie, on being called in, examined the newly born female child, and found it blanched from extensive hæmorrhage. There was a tumour at the back of the head, on the left side, which had been cut, evidently with some sharp instrument, such as a pair of scissors. The skull had not been properly developed, so that the membranes of the brain protruded. He should have left the tumour alone, and not operated. And our readers will, no doubt, be inclined to agree with him. In charging the jury, the coroner said he thought the evidence was not sufficiently strong to warrant the conclusion that the woman was not fit to perform her duties; but she had unfortunately taken upon herself surgical duties which did not belong to her as a midwife; and she had undoubtedly caused the death of the child. So far, we are thoroughly with the coroner. But he is reported to have said further, that he "thought" the law should be applied to her which would be applied to a medical man, *i.e.*, that a medical man was bound to use proper skill and caution; and if he did not do so, and death ensued, he would be guilty of manslaughter. The coroner left it for the jury to say whether the midwife had neglected to use proper skill, or whether what she had done had been performed through "an error of judgment." We do not observe that he referred to the charge of Mr. Justice Williams (Taylor's *Med. Jurispr.* vol. i., p. 594), where it was held that, to constitute the offence of manslaughter, it must be shown that the accused party, a midwife, was guilty of criminal misconduct, either arising from *gross ignorance*, or want of skill, or gross inattention. As the woman is still in custody, we prefer not to further comment upon the case; but we may add that the jury found that the midwife had committed an error of judgment only, although they severely censured her. It will be interesting to have it determined whether the same strict rule of law applies to a surgeon as to one not of the profession. Midwives are, of course, supposed to be ignorant of surgery; but does this ignorance shield or convict them if are unfortunate enough to operate on infants and cause their deaths?

HYDROPHOBIA.

An inquest was held by Dr. Danford Thomas, on the body of a lad named Thomas Jenkyns, aged 14, who died in St. Mary's Hospital on January 20th. The boy's mother stated that in September last he was bitten by a dog on the right forefinger. The wound appeared to have caused him little trouble, and he did not consult any doctor; but on the day after the bite he went to a chemist, who applied caustic to the wound, which soon healed. On January 16th he went home, and appeared then to be suffering from a cold; he was dull and heavy, and refused to eat or drink. On the following day he was worse, and on January 18th he was admitted to St. Mary's Hospital. Mr. Scanes Spicer, the house surgeon, in his evidence said, the boy was admitted at 3.30 P.M. on January 18th. He was extremely pale, his countenance was expressive of intense anxiety and despair, and he seemed quite exhausted. There was no trace of the wound inflicted by the dog on the lad's hand, nor had there been any subjective sensations in the seat of the wound. After being removed to the ward, he had spasms, which were at first confined to the muscles of the head and neck, preventing him from swallowing. Later, convulsions became general, and were excited by the slightest touch, or by uncovering the body. The saliva was secreted in excess, and dribbled freely away, and he foamed at the mouth. The patient died on the morning of January 20th, from exhaustion, consequent on convulsions and inability to take sufficien nourishment by enemata. The cause of death was hydrophobia following the dog bite received in September 1882. The jur returned a verdict in accordance with the medical evidence. This i the second case of hydrophobia which has recently occurred in S Mary's Hospital, and we understand that both cases will shortly b recorded in a full and permanent form.

PHTHISIS AND AGUE.

The antagonism between phthisis and ague is relative rather th positive; that is, phthisis occurs more frequently in regions whe intermittents are not endemic, and *vice versâ*; we cannot say, whe intermittents are dominant there phthisis is not met with. Bo diseases, too, may occur simultaneously in the same person. I Vieta, writing in the *Genio Medico-Quirurgico*, of January 15 describes his experience in Azagra, in the kingdom of Navarre. T situation of the town is very damp and low; it is surrounded by t rivers Ebro and Ega, and formerly these constantly overflowed th banks, inundating half the town. The streets were unpaved, a full of holes, in which the water lodged. In the outskirts, m hemp was cultivated, and there were innumerable stagnant pools which the hemp, after being cut, was macerated. Severe interm tent fevers were very prevalent. Now the streets arepaved, the riv embanked so that they are confined to their proper channel, hemp is not so much grown, market gardening being more profita The town has become much more healthy, and intermittents ar longer endemic. The few cases of ague which occur are sin without the marked paludic cachexia and tendency to relapse, yield readily to treatment. But with this diminution of inter tents, there is a decided and marked increase in the number of of chronic affections of the lungs, especially phthisis, which formerly all but unknown in this locality. Dr. Vieta does

attempt to account for this antagonism. He attributes the phthisis o neglected bronchial catarrhs, and says that hereditary influences nd diathesis play no part in its causation. He therefore hopes that, vith improved hygienic means and knowledge, this also may be radicated.

CLINICAL SOCIETY OF LONDON.

THE last meeting of the Clinical Society was signalised by the appearance for the first time in the chair of the newly elected President, Dr. Andrew Clark, who delivered, before a full audience of members of the Society, the thoughtful and high toned address of which we publish elsewhere a portion. At its conclusion, Dr. Glover said that, as it had dwelt at length on therapeutical principles, it was sure to receive the fullest consideration of the members. For the furtherance of such principles, the Society had been founded, as Sir Thomas Watson had stated in his inaugural address. He proposed that a vote of thanks should be given to Dr. Clark for his address, and that he should allow it to be published in the Society's *Transactions*. Dr. Day seconded the proposition, which was carried unanimously, amid much applause. The rest of the evening was devoted to the reading and discussion of a paper on the infectiousness of scarlet fever.

THE INFECTIVE POWER OF SCARLATINA DURING THE EARLY STAGES OF THE DISEASE.

asked to name one point respecting the infectiousness of scarlet ver about which physicians are generally agreed, most men would obably reply that experience had demonstrated the very slight fectiousness of the disease during its earliest stages, and the extremely infectious nature of the malady during the later stages, particularly during the period of desquamation. The majority of the ge audience assembled at the Clinical Society last Friday, to listen the new President's address, must, therefore, have been the more rtled to hear the grave advocacy of views entirely antagonistic to se usually held on this subject, and based upon evidence which med far too slight to bear so weighty a conclusion. Not a single aker was found to coincide with Dr. Longhurst in the opinions advocated, viz., that scarlatina is infectious even in its pre-eruptive ge, and is not infections after it has run its course about fifteen wenty days, at which date patients may be removed to the sea-. The grounds upon which the author based the former opinion e, in the words of the President, "not proven"; inasmuch as the inal source of the illness which affected about five young mem- of a family, all within a few days, was not determined. And trust that no one will be found to follow the example given in paper, of allowing patients in the third week of their illness to e their homes. No surer way of spreading the disease could obably be found; and if an outbreak should occur as the result of proceedings, we are not sure how far the sanitary authority of district to which the malady was imported, might not feel itself fied in instituting legal proceedings against the medical adviser might have sanctioned or advised the removal of the infectious nt to its midst.

THE WEST MALLING POISONING CASE.

CORONER'S jury has returned a verdict of manslaughter against Rev. John Henry Timins, vicar of West Malling, Kent, for ng the death of Sarah Ann Wright, the daughter of a labourer s parish, by the administration of volatile oil of almonds. It ars that the girl was ill, and the vicar prescribed for her and supher with medicine, administering to her the highly poisonous fied "essential" oil of almonds, presumably in mistake for the uous fixed oil of almonds. In spite of overwhelming medical nony to the contrary, and adduced at the inquest, Mr. Timins o ill-advised as to attempt to escape from his responsibility by vouring to show that the girl died of apoplexy; and he asserted her symptoms corresponded with those described in Dr. Copland's work on Medicine, as characteristic of that malady. The coroner, Mr. J. Rogers, in summing up, said the point to be considered was, whether Mr. Timins was or was not criminally responsible for his action in the case. On this question of responsibility, he gave a clear exposition of the law. He stated that the law, as laid down by the late Lord Lyndhurst, was, that there was no difference between a physician or surgeon and a person acting as such without a licence, and any accidental mistake in the treatment of a patient resulting in death did not necessarily amount to manslaughter; but if, when proper treatment could be had, a person totally ignorant of the science of medicine took upon himself to administer a violent and dangerous remedy, and death ensued in consequence, then the person so administering it was guilty of manslaughter. It was a fact beyond dispute, said the coroner, in the case before the jury, that death resulted from poisoning by prussic acid in the oil of almonds given by Mr. Timins to the deceased. The jury returned a verdict of "Manslaughter against the Rev. J H. Timins;" adding, "that they believed he did not administer the poison with an evil intention."

THE BIRMINGHAM EYE HOSPITAL.

THE authorities of the Birmingham Eye Hospital seem unable to agree upon the details of the projected increase of the surgica staff of the institution, which we announced a fortnight ago, and which is contemplated in connection with the erection, now in progress, of a new building for the charity. The acting staff at present consists of four full surgeons, who practice privately as specialists. Last week, a special meeting of governors was held, and it was proposed from the chair that the staff be forthwith increased by the addition of two assistant-surgeons, and that a third assistant-surgeon be added upon the occurrence of a vacancy in the staff as at present constituted, so that the staff might in future be formed of three full and three assistant-surgeons. In advocating the proposed change, the chairman of the hospital, the Rev. B. J. Bateman, stated that at present the four honorary surgeons had about 3,360 patients a year each, as compared with 1,117 to each honorary surgeon in the case of the Eye Hospital at Moorfields. The chairman's proposals were strongly supported by one of the present acting surgeons to the charity, and as strenuously opposed by one of his surgical colleagues, the latter gentleman contending that all that was wanted was a second house-surgeon to assist the honorary staff in dealing with the growing pressure of out-patient work. After a long discussion, during which a judicious proposal that the committee be requested to confer with the surgical staff on the questions raised, with the view of bringing any recommendations upon which they might agree before the governors at a future date, was rejected, the chairman's motions were not pressed to a division, and it was resolved to adjourn the meeting till the 22nd of March next. It seems to be generally held amongst the authorities of the hospital, both lay and professional, that the out-patient work of the charity is pressing unduly upon the present staff; that some increase in the surgical officers is needed, and that the occasion of the removal of the institution to new and extensive buildings is opportune for effecting the required changes; it is, however, to be regretted that the committee of the hospital, and the surgeons, have brought the questions at issue prominently forward at a public meeting, before they had secured a distinct and workable basis of agreement amongst themselves.

PECULIAR PEOPLE.

IN a spirited article, the *Birmingham Daily Post* exposes and condemns the fatalist tenets of the persons who call themselves "Peculiar People", as exemplified in the evidence given at an inquest held last week by the Southwark coroner. In the case under notice, the father of the deceased child appeared to be a clerk in the War Office, and both parents were said to be industrious people. Their

child was naturally delicate, owing to some "spinal weakness;" and it had been ailing for a long time past. Before they joined the peculiar sect to which they have belonged for the last eighteen months the parents consulted a medical man, who prescribed for the little patient plenty of nourishment and the use of a back-board; but, although the condition of the child had been rapidly becoming worse for some months before its death, no medical assistance was called in, and the little sufferer was allowed to sink gradually into its grave without an intelligent effort to save it. There was no suspicion of neglect or of want of natural affection on the part of the parents. The child, to all appearance, had been well cared for as regarded diet and tending; but no attempt had been made to combat the painful disease to which it eventually succumbed, simply because the parents believed, with the other members of this unfortunate sect, that it was unnecessary, if not impious, to resist sickness or other physical affliction. This lamentable fatalism was strikingly brought out at the inquest, in the answers of the parents and relatives to the coroner's inquiries. "Suppose for a moment," said the coroner to the mother, "that you were to be knocked down and run over, and get some of your bones broken, what would you do?" "The Lord says not a bone of the righteous shall be broken," was the confident and complacent reply—importing, of course, that those who did get their bones broken could not be righteous, and were not worth caring for. "But if a bone were broken?" asked the coroner. "I have never known of a case where it has occurred to any of us," rejoined the witness, evidently with the smug conviction that Peculiar People were miraculously preserved against accidents. As to doctors, she added, in years gone by she had proved their value herself, and she did not know what those who were not of her faith would do without them. "But the Lord is sufficient for me now." Similar sentiments were expressed by the aunt of the unfortunate infant, who declared that she "did not deem a doctor necessary, as the Lord had often undertaken for the child, or he would not have lived so long." This witness also could not conceive the case of an accident happening to her co-religionists; "she did not believe the Lord would let such a thing happen to those who trusted in Him." Pressed by the coroner as to whether she meant to suggest that those who did happen to get run over were wicked people, the witness frankly remarked: "Well, there is the promise in the Psalms" (her own narrow interpretation of it, she should have said), "and everybody could lay hold of it if they liked." Finally, the father, after being duly cautioned by the coroner, admitted that he "did not call in a doctor, because he trusted in the Lord, and believed His word to be true." It did not appear why the trust of this presumably educated witness in Divine interposition was limited to the case of sickness, and why it did not extend, for instance, to the case of thirst, hunger, and mental distress. If doctors be unnecessary, one would naturally suppose that butchers and bakers were superfluous; and, considering the raiment of the lilies of the field, the Peculiar People might just as well dispute the *raison d'être* of tailors and dressmakers, while they are about it. From tradesmen to Government clerks would be an easy transition; and, if individuals are warranted in trusting idly to the Lord to rid them of illness, nations might fairly plead a like trust for dispensing with armies to guard them from external foes, and so get rid at once of the costly machinery of the War Office. There are some beliefs, however, which are not to be reasoned about, but simply dealt with in a practical manner when they cross the lines of law or public policy; and the creed of the Peculiar People seems to be of this complexion. Whether a resort to medical aid would have saved or prolonged the life of the child in this case, we do not know; but the child was certainly entitled to the benefit of the experiment; and, for depriving it of that advantage, the parents are morally responsible. We understand that the grand jury at the Central Criminal Court have thrown out the bill charging the father with manslaughter. It would be well, however, that the issue should be tried, and that parents should be taught, that the law does not allow any religious plea, however plausible, to relieve them of the obligation of providing medical succour for their offspring in the hour of need.

THE MEDICAL UNION SOCIETY.

THE Medical Union Society, which has been recently established to supply a means of intercommunication and organisation among the students of the various London schools, held its first annual *conversazione* in the Holborn Town Hall, on Wednesday, January 31st; the chair was taken by Mr. Henry Power, and an address was delivered by Dr. B. W. Richardson. Among those present, we noticed Dr. Sieveking, Dr. Broadbent, Mr. Arthur Durham, Dr. Southey, Dr. Spencer Cobbold, and Dr. Fothergill; and the audience was very largely made up of ladies. Mr. Hulke, of University College Hospital, introduced the subject of the evening by giving a short account of the objects of the Union. He insisted especially on the fact that it consisted of students entirely, that its President would be a student, and that the committee of management was representative; each hospital sending one student. Dr. Richardson commenced his address by referring to the great changes which had come over the English system of education since the time when he was a schoolboy; he thought that, though he had been himself exceptionally fortunate in the excellence of the education he had received for the time in which it was given, as good and as much education was now within the reach of every child in the kingdom who chose to seek it This progress and extension of education included the biological sciences botany, physiology, zoology, and anatomy were now being studied by vast numbers, and thus the territory which was formerly the undisputed property of the medical profession was now invaded on all sides, and the fight to hold it became fiercer and fiercer every year Beyond this competitive struggle, there was another obstacle in the way of maintaining the old pre-eminence of the profession; it was the absence of representation among the ruling bodies of the nation The Church had its peers; and the law had its peers and its members of the Lower House. But the medical profession was altogether unrepresented in the Upper and barely represented in the Lower House. In the House of Commons the aristocratic interests had 272 representatives; the fighting interests, 168; the landed interest 267; the law interests, 122; the liquor interests, 18; the money interests, 25; the literary and scientific interests, 80; the official interests, 113; the railway interests, 113; the trading, commercial and manufacturing interests, 155; the medical interests only and the labouring interests, 2. The programme of the Union included a scheme by which ready access to the best reading of the time would be afforded to the members, and this was a most hopeful and satisfactory feature. He counselled a large and wide reading and a giving of time and interest to subjects outside the course of medical studies; above all, he would warn students, old and young, not to forget the great writers and doers of the past, and on this account he strongly recommended the study of biography. Opportunities of forming a library of reference ought to be urged, and to this end the best periodical literature of all countries ought to be carefully preserved; and he strongly advised the Union to ask the medical officers of health, and all factory surgeons, to supply their reports in regular course; this plan alone would supply a library of reference the like of which no other institution would possess. He deprecated giving too much time or consideration to debates, and questioned the value of the kind of facility in speaking gained in such a way. He cautioned his hearers against seizing on accepting new views and speculations, when these led to sudden and abrupt departure from the beaten path laid down in the grand old history of medicine. He would not for a moment recommend them to ignore true discovery, or the experimental methods by which discoveries were made; but the members must take care not to promise the world anything until they were sure they could

give what they promised. "At this very moment in the career of medicine, it is coming under rebuke of this kind. A vague hypothesis as to the origin of one particular class of disease excites exaggerated expectations on grounds lying away from the course of practical medical observation and research. The credulous world, believing the speculation, has leaped, naturally enough, to the conclusion that, by a grand stroke of discovery, one, at least, of the worst and most fatal of human diseases is about to be all but miraculously enchanted away. But time goes on; the disease remains unchanged; and the expectant world, seeing the vanity of the expectation, begins to turn round and to treat as wanton delusion, not only the speculation, but any measure of good which may incidentally come out of it." Finally, he expressed a hope that the Union would not occupy itself with the curative side of medicine, to the exclusion of the preventive side. Their usefulness and their chance of success would be minimised by neglecting this caution. Pathology would diminish in importance as the causes of diseases became better understood. What a large part of the book of pathology would be closed when the use of only one disease-producing agent, alcohol, was thrown out of use! Materia medica must also grow of less importance; for presently all men would become wise in their estimate of drugs, and would call for them as reluctantly as the members of the profession did themselves when they were out of health. There was a race to run, in this direction of preventive medicine, with the general public; and, if the profession flagged, the public would get ahead of it, and undermine curative skill altogether by leaving nothing to cure. Dr. Richardson concluded by expressing a hope that the Union had a long career of usefulness before it. A vote of thanks, moved by Mr. Gresswell of the Westminster Hospital, and seconded by Mr. Reade of St. Bartholomew's, was carried by acclamation. A vocal and instrumental concert was subsequently given, under the direction of Signor Zucchi and Mr. Cave. A large number of microscopical preparations were shown by the Quekett, the Hackney, Croydon, Highbury, West London, and other Microscopical Societies. The guests fully appreciated the efforts which had been made to amuse and interest them, and were especially gratified by the presence of the celebrated Chinese giant, Chang, who arrived soon after the conclusion of Dr. Richardson's address.

THE NEW CODE FOR THE SUEZ CANAL.

The Sanitary Council of Constantinople, is about to publish an account of its acts and deliberations from May to December 1882. The council might safely have left the defence of its quarantine regulations in the Red Sea to Dr. de Vlaccos. This gentleman, who is the nominee of the Turkish Government at Camaran, has recently addressed a memoir to the *Société d'Hygiène* of France, in which he maintains their perfection, and declares that but for the foresight of Dr. Bartoletti and the council, and the diligence of himself and his fellow medical brethren on the island, Europe would again have had to deplore a visitation of cholera. He admits the severity of the regulations, but is sure that it is before all things necessary "to subordinate mercantile and political interests to the interests of humanity," and (he might have added) to those of the Turkish officials of Camaran. The island is situated in the Red Sea, one hundred and fifty miles north-east of Cape Bab-el-Mandeb, and forty miles distant from Hodeida, the maritime port of Yemen. It is seven miles long, and three and-a-half broad. Although the temperature is very inconstant, the climate is salubrious and superior to that of the neighbouring coast, where pernicious paludal fevers abound. He states that the water-supply is abundant, solid, and of good quality; but numerous impartial observers have affirm that the water is brackish and insufficient in quantity, and this is upheld by the admission of Dr. de Vlaccos that there is no vegetation, and, indeed, no native means of subsistence on the island. There was a difficulty in provisioning so vast a number of pilgrims, but he is confident that in the future everything will be right. The *arich*, or mat huts, in the lazarets, of which so much complaint has been made, are explained to be preferable, on sanitary grounds, to more solid masonry. Up to September 29th, when the memoir was written, 7,000 pilgrims had been detained in the lazarets for periods varying from five to forty-five days. The length of detention depends on the fiat of Dr. de Vlaccos and four other medical men, whose authority is maintained by the presence of three hundred Turkish soldiers and a gun-boat. On the 8th of August the steamship *Hesperia* of the Anchor line, which had already performed ten days' quarantine at Aden, arrived, and "the ship and the pilgrims underwent, in spite of the protestations of the captain, forty-five days' quarantine, and did not quit Camaran until ten days after complete cessation of cholera." No allusion is made to the two deaths that occurred amongst the pilgrims while they were being re-shipped. (*Vide* "Narrative of Quarantine," BRITISH MEDICAL JOURNAL, page 952, November 11th, 1882.) Dr. de Vlaccos describes the anchorage as "vast and secure," while, on the contrary, the *Hesperia* found that "the dangerous nature of the quarantine moorings made it necessary to keep up steam continually." The proceedings of the council indicate the inspiration of the memoir. On May 23rd, Dr. Dickson, the British sanitary delegate, presented an official communication from Lord Granville and Lord Dufferin, dealing with the subject of cholera in British India, and refuting the idea that India is its sole birthplace. Two questions were raised. First, Do Indian ports and the vessels sailing from them offer any real danger for Egypt or other countries? And, secondly, In such case, are the present measures of quarantine efficacious? With regard to the alleged danger to Egypt, it is shown that, in the terms of the declaration made by Collucci-Pacha to M. Calvers in 1877, since Egypt has been in direct communication with India for more than thirty years, the pretended danger may have existed, but has never manifested itself. The cholera of 1865, attributed to vessels arriving at Jeddah from India, was due, according to the reports of Messrs. Simon and Radcliffe, "to a cholera epidemic which broke out in the south of Arabia, and the provinces of Yemen and Hadramont." For fifteen years, Egypt has been entirely free from cholera, while India has suffered from numerous epidemics. The example of Aden is even more remarkable. It was visited by cholera in 1865 and 1867, but not since then. Yet that port is only a few days' sail from Bombay, and is in daily communication with it and with other Indian ports. But if Indian cholera has failed to infect Aden, Egypt, and Europe, the doctrine of the conference of Constantinople, as to its importation, is practically refuted. The uselessness of quarantine is shown by an appeal to our Indian experience, and the valuable suggestion thrown out, that the money spent in its maintenance would be better employed in improving the sanitary condition of Mecca. On September 19th, a report upon this communication was made by a Commission, composed of Dr. Mahé (France), Dr. Stécoulis (Netherlands), and Bartoletti-Effendi (Turkey); and, on October 17th and 31st, the Council discussed the various points that had been raised. Finally, on December 5th, Inspector-General Bartoletti proposed a new sanitary code, which, though far from being satisfactory, is a slight improvement on the old rules. As the *Journal d'Hygiène* remarks, it is impossible to expect an official commission to reform itself out of existence; and the new code, which was unanimously adopted, is the utmost concession which, as yet, the British Government has been able to obtain. The following must now perform quarantine before entering the Suez Canal or receiving the *visa*: 1. Vessels with deaths from cholera, plague, or fever; 2. Vessels from an infected port, in an unhealthy state; 3. Vessels bound for a port in the canal; 4. Vessels carrying pilgrims. But vessels coming from an infected port, not in any of the four above-mentioned states, may pass "in quarantine", and, while in transit, pilots may go on board under the following conditions: the hatches must be sealed, and the pilot and his officers must go into

quarantine, when leaving, for the time the ship should have served. Vessels from an infected port, but with no deaths on board after "quarantine simple", and having the inhabited parts disinfected, may dispense with disinfection of cargo, and pass through under "seal" and with pilot on board. Vessels which, in transit, shall have a death on board, must hoist the yellow flag, cease intercourse with the shore, and report Bodies must not be put into the canal, nor buried on shore. Captain and doctor held responsible. "Quarantine simple" (where there has been no death on board) lasts seven days; but, should the agent find the vessel healthy, the quarantine may be lessened as follows: after eight days' passage, six days' quarantine; and, for each additional day of passage, one day less of quarantine.

SCOTLAND.

ROYAL MATERNITY AND SIMPSON MEMORIAL HOSPITAL, EDINBURGH.

DR. ANGUS MACDONALD resumed duty as Physician on February 1st at the Royal Maternity Hospital, Edinburgh, in succession to Professor Simpson, whose term of office has expired. Messrs. Robert J. Collie and Francis W. Sinclair, M.B., C.M., have been appointed house-surgeons.

SANITARY INSTITUTE OF GREAT BRITAIN.

As previously noticed in the JOURNAL, it has been decided to hold the next meeting of the above association at Glasgow in the autumn of the year. A meeting has just been held in Glasgow for the purpose of making all the necessary arrangements for the visit of the Sanitary Institute, and resolutions were passed pledging the support of the meeting, and approving the raising of a fund by public subscription to meet local expenses. A working committee was also appointed to take all necessary steps for the meeting of such a congress. The meeting was a most influential one, and was attended by a deputation of seven members of the Institute, one of whom, Professor de Chaumont, gave a very interesting account of the work and aims of the association. Everything points to the meeting in Glasgow being a most successful one

GLASGOW EYE INFIRMARY.

AT the fifty-ninth annual meeting of the supporters of the above institution, held on January 27th, the report, which was read and adopted, showed that the total number of cases under the care of the medical officers during the past year reached the high figure of 13,207, which was an increase over the preceding year of 2,334. Of these 13,207 patients, 6,906 were cured by ordinary treatment, and 1,193 by operation, while 1,253 were relieved by ordinary treatment, and 138 by operation. The incurable cases numbered 53, while 3,608 cases are still on the books of the institution. The indoor patients amounted to 994, their average residence in the house being 23½ days. The total income for the year was £3,531, and the total expenditure, £3,515; leaving a small balance in hand; and one very gratifying feature about the income is the large increase in the amount contributed by the working classes, who are the ones benefited by the charity.

HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending January 20th, states that there were 590 deaths registered, as compared with 631 in the fortnight preceding, which gives a death-rate of 30.4 per thousand, instead of 32. In his report, Dr. Russell alludes to the out-break of small-pox, which recently occurred at Cathcart, and to which reference was made in the JOURNAL of January 20th. As was stated then, the disease originated among the workers at a paper-mill in the district, and the infection was traced to a quantity of foreign rags which had been worked up at the mill. All the necessary preventive measures were at once put in force, chief among which was the re-vaccination of the work-people exposed to infection; and so far, the efforts of the local authorities have been successful in controlling the spread of the disease. The whole facts of the outbreak are of much importance, as illustrating well the physical phenomena of infection, and of the unity of interest, from a sanitary aspect, which prevails throughout a community, and also among nations widely separate.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending January 20th, show that the death-rate in the eight principal towns during the week was 26.8 per 1,000 of estimated population. This rate is 4.7 above that for the corresponding week of last year, and the same as that for the previous week of the present year. The lowest mortality was recorded in Perth—viz., 17.0 per 1,000; and the highest in Paisley—viz., 30.8 per 1,000. The mortality from the seven most familiar zymotic disease was at the rate of 4.7 per 1,000, or 0.4 above the rate for the previous week. Whooping-cough was the most fatal miasmatic disease, the deaths therefrom being most numerous in Glasgow and Dundee. There were 159 deaths from acute diseases of the chest, or 29 fewer than in the previous week. The mean temperature was 42.5°, being 1.6° above that of the week immediately preceding, but 2.6 below that of the corresponding week of last year.

EDINBURGH ROYAL DISPENSARY.

FROM the report submitted to the contributors to the Royal Public Dispensary at their annual meeting held last week, it appears that during the year 1882, 8,322 persons have been treated by the medical officers of the institution. Of these, 5,594 attended personally at the dispensary; 1,803 persons were visited and treated at their own homes, being an increase of 618 over those similarly treated last year; 245 poor women were attended during their confinements, and 691 infants were vaccinated. All drugs and appliances necessary in their cases were supplied. The financial statement submitted to the same meeting showed that the income amounted to £370 12s. 11d., and the expenditure to £360 18s. 11d., leaving a balance of £9 1s. Including this balance, the funds of the institution amounted to £4,339 14s. 4d. The post rendered vacant by the death of Professor Spence was filled by the appointment of Dr. John Duncan as consulting surgeon. Drs. W. A. Jamieson and J. M. Cotterill were re-elected medical officers.

HEALTH OF THE EIGHT PRINCIPAL SCOTTISH TOWNS.

THERE were registered in the eight principal Scotch towns during December, 1882, the deaths of 1,469 males and 1,532 females. The total, 3,001 is 85 above the average for the same month during the preceding ten years, due allowance having been made for proportional increase of population. It is a very long time since the deaths, in any one month in those eight towns, have been greater than the average of the preceding ten years. The respective death-rates were per 1,000 of the population of each town—in Edinburgh, 23; in Leith, 24; in Aberdeen, 25; in Greenock, 28; in Perth, 29; in Paisley, 30; and in Glasgow and Dundee, actually 33. Fully 39 per cent. of the entire mortality was of children under five years of age, and the per centage of each town was, in Perth, 26; in Edinburgh, 29; in Aberdeen, 31; in Paisley, 34; in Greenock, 37; in Leith, 39; in Greenock, 41, and in Glasgow, 44 per cent. Zymotic diseases contributed 17.1 per cent of the entire mortality. This rate, however, was considerably exceeded in Glasgow, where 6.5 per cent. of the deaths was due to whooping-cough, and 4.1 per cent. to scarlet fever. Whooping-cough, as usual, was the most fatal, having caused 5.1 per cent. of all the deaths, while, in Dundee, 7.7 per cent. of the deaths was attributed to it. Of 62 deaths caused by fever, were registered as typhus (2 of which were in Glasgow, 3 in

burgh, 8 in Aberdeen, and 4 in Leith), 42 as enteric fever, and 3 as simple continued fever. Five and a-half per cent. of all the deaths in Perth were due to fever. Scarlet fever caused 84 deaths; measles 3; croup 41; diarrhœa 40; diphtheria 29; metria 13, and dysentery . To apoplexy 63 deaths were attributed; to paralysis 70; to cardiac diseases 181; to hydrocephalus 50, and to premature birth debility 71 deaths. Phthisis pulmonalis contributed 257 deaths, or 8.6 per cent. of the whole, whilst inflammatory affections of the respiratory organs, other than those referred to already, contributed 864 deaths, or 28.8 per cent. of the entire mortality. Of 74 deaths resulting from violent causes, 3 were of suicides. One male and 10 females died over 90 years of age, the eldest of whom, aged 96, was a widow. As to meteorological conditions, the month of December, 1882, was characterised by low barometic pressure, very low temperature, great depth of rainfall, and moderate amount of wind from every quarter. The lowness of the mean temperature was attributable to an excessive depression of the temperature near the beginning of the month, and the great rainfall to the very great snowfall coinciding with the cold period. As to details, the mean barometric pressure was less by 0.185 inch, and its monthly range less by 0.417 inch. The mean temperature was less by 4.3°, and its mean daily range greater by 0.3°. The mean humidity was equal to the average; the rain, in number of days, greater by 1, and in depth of inches, greater by 1.68 inch; and the wind pressure less by 2.7 lb. than the average of the same month during the previous 25 years.

IRELAND.

It is stated that an outbreak of small-pox, of a most virulent type, has taken place in Glennamaddy Union; and that the workhouse is almost filled with patients.

MONKSTOWN HOSPITAL.

In consequence of the proceeds obtained from the bazaar held last October, and the gift of £100 for the erection of a memorial tablet to the late Major Grogan, the committee are now able to pay off all the outstanding debentures, amounting to £400. The number of persons attending the Monkstown Dispensary has increased so much of late, that the committee have determined, if funds will permit it, to erect a consulting-room, and to provide accommodation for an apothecary, so as to afford increased facilities for carrying on the work of the extern department of the hospital.

THE DUBLIN BRANCH.

The annual meeting of this Branch was held on Thursday, January 31. The attendance was larger even than usual, as it was generally known that a discussion would be raised on a special Report which the outgoing Council had issued to the members on the subject of the Report of the Royal Commissioners on the Medical Acts. The majority of the Council held views contrary to those expressed by the Medical Reform Committee of the Association, and consequently could recommend the Branch to petition Government in favour of legislation based upon the lines of the Report of the Royal Commissioners. With a view of explaining their action, the Council drew up an analysis of the Report, with remarks thereon, which was sent before the meeting to each member of the Branch. To the statements in this Report, a minority of the Council present at the meeting at which it was adopted objected; and one of those members, Dr. Atthill, moved an amendment at the annual meeting, to the motion for the adoption of the annual Report of the out-going Council, to the effect that "the Report be referred to the incoming Council for reconsideration, with a recommendation that the policy of the parent Association in reference to medical reform, be supported by the Dublin Branch." This amendment was supported by Dr. Grimshaw, another member of Council. The debate on the subject, which is looked forward to in Dublin with much interest, has been adjourned to Tuesday next the 6th instant, at 4 o'clock P.M., at the College of Physicians, as it was found impossible to get through all the business of the annual meeting in one afternoon. Dr. Mahomed also addressed the meeting on the subject of the Collective Investigation of Disease, and a large local committee to aid in the work was formed. The annual dinner in the evening was, as usual, a great success; although, to the regret of all, the President was unable, through recent domestic affliction, to be present.

A CONJOINT EXAMINING BOARD FOR IRELAND.

The President and Council of the Royal College of Surgeons in Ireland addressed a letter to the President of the King and Queen's College of Physicians in Ireland, requesting that that College should take into consideration, in connection with a committee of the Council of the College of Surgeons, the propriety of establishing a conjoint Examining Board, for the purpose of examining candidates for a double qualification in medicine and surgery. The College of Physicians has acceded to this request, and have appointed a committee consisting of the President (Dr. William Moore), Dr. Grimshaw (Registrar-General), and Dr. Finny (late Registrar of the College). The College of Surgeons' committee is composed of the President (Mr. Barton), Mr. Wharton, and Dr. Kidd. This is a movement in the steps of the London Colleges. The history of former attempts and failures on the part of the Irish Colleges was amusingly given by the Rev. Dr. Haughton before the Medical Acts Commission, and it would seem to be rather too late in the day to recommence the attempt now.

THE LATE DR. SHINKWIN OF CORK.

A special meeting of the trustees of the Cork North Infirmary was held last week, to express their regret at a death of a member of the medical staff of the institution, and to convey to his family their sympathy. The High Sheriff proposed the following resolution, which was unanimously adopted: "That we, the trustees of the North Charitable Infirmary, deeply and sincerely regret the death of our senior surgeon of this hospital, Dr. Thomas Shinkwin. We cannot allow the occasion to pass without publicly recording our gratitude for the services which, for twenty years, Dr. Shinkwin so generously rendered to this institution. Eminent as a physician, courteous as a gentleman, kind and considerate to the poor, the trustees had always regarded him as one of their most cherished officers. We deplore his loss, and we tender to Mrs. Shinkwin our respectful sympathy in the sorrow that has fallen on her home."

ULSTER EYE, EAR, AND THROAT HOSPITAL.

The annual meeting was held on the 26th ult., presided over by the Mayor of Belfast. During the year, 1,852 patients were in attendance, of whom 199 were admitted to the wards. A larger number than usual were treated in the internal department, although the wards were closed for nearly two months, and the need of day-rooms and of some additional ward-accommodation has come to be very urgently required. Additional buildings for this purpose will cost about £1,500. The attention of the committee having been directed to the alleged want of clinical instruction in diseases of women and children, and diseases of the eye and ear, for students attending the Belfast medical school, they proposed to place their hospital at the disposal of that school, and suggested an amalgamation of all the hospitals in Belfast for teaching purposes. They regret, they state in the report, to find that their suggestion did not, for various reasons, meet with any response. They are, however, glad that they have aided in directing attention to this important matter, and they hope that the insufficiency of clinical teaching in Belfast will be remedied at no distant date.

REGISTRATION OF MIDWIVES IN ENGLAND AND WALES DRAFT BILL.

THE following is the text of the Bill drafted by the Subcommittee appointed by the Parliamentary Bills Committee last year, and considered by the General Medical Council last year. The Subcommittee consists of: Mr. Hart, Chairman, Dr. Quain, Dr. Barnes, Mr. Sibley, Dr. Priestley, Mr. Nelson Hardy, Dr. Playfair, Dr. Holman, Dr. Grigg, and Dr. Aveling, Chairman of the Board of Examiners for Midwives in the Obstetrical Society of London.

Whereas it is expedient that provision be made for the Registration of persons qualified to practise as Midwives in the United Kingdom.

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled, and by the authority of the same as follows:—

1. *Short Title.*—This Act, may, for all purposes, be cited as the Midwives Act, 1882.

2. This Act shall not extend to Scotland or Ireland.

3. *Definitions.*—In this Act, if not inconsistent with the context, the following words and expressions have the meanings hereinafter respectively assigned to them, that is to say—"General Council" means the General Council of Medical Education and Registration of the United Kingdom established under the Medical Act, 1858, and Acts amending the same. "Midwifery Board" means the Board to be appointed by the General Council for the purposes of this Act. "Registrar" includes General Registrar and Local Registrar. "General Registrar" means the person appointed to be registrar by the Midwifery Board. "Local Registrar" means a person appointed by the Midwifery Board to be registrar within an examination district as hereinafter defined. "Qualified Medical Practitioner" means a person who is duly registered in accordance with the Medical Act, 1858, and any Acts amending the same. "General Practitioner" means a qualified medical practitioner who habitually attends medical, surgical and obstetrical cases. "Midwife" means a woman whose name is on the register required by this Act. "Register" means the register of midwives required by this Act. "Medical authorities" means the bodies and universities in England and Wales who choose members of the General Council. "The metropolis" means the city of London and all parishes and places mentioned in Schedules A, B and C, to the Metropolis Management Act, 1855.

PART II.—AUTHORITIES FOR EXECUTION OF THIS ACT.

4. *Formation and Powers of Midwifery Board.*—The General Council shall, at its first meeting after the passing of this Act, appoint, and always thereafter maintain, a Board for the control of the examination and registration of midwives, in this Act called the Midwifery Board, for the purpose of carrying out the provisions of this Act. The said Board shall consist of not less than *seven* nor more than *eleven* members, who shall be qualified medical practitioners, but need not be members of the General Council; and *three* at least of the members of the said Board shall be general practitioners. All persons appointed to be members of the said Board shall continue to be members thereof for the period of three years from the date of their appointment as such members, and may, at the expiration of the said period, be reappointed. The General Council may, if and when they think fit, so long as the number of the members of the said Board is not reduced below *seven*, and if the number is so reduced, shall forthwith appoint qualified persons to fill up any vacancies that occur on the said Board, whether by reason of the death, resignation, or expiration of the term of office of any of the members thereof, or otherwise. The Board shall meet from time to time for the despatch of business, and, subject to the provisions of this section, may regulate the summoning, notice, place, management, and adjournment of such meetings, the appointment of a chairman, the mode of deciding questions, and generally the transaction and management of business, including the quorum; and, if there is a quorum, may act notwithstanding any vacancy in their number. For the purpose of investigating any matters referred to them, the Board may, if they think fit, refer such matters wholly or in part to the local examining Board of the district wherein such matters arose, to inquire into and report upon, and may adopt such report wholly or in part. Provided always, that any person injuriously affected by such report shall be entitled to be heard thereon by the Board before they adopt such report.

5. *Midwifery Board to report to General Council.*—The Midwifery Board shall, on or before the 31st day of March in every year, send to the General Medical Council a report showing fully the amount of money received and expended by or on behalf of the said Board for the purposes of this Act and generally of the proceedings of the said Board during the preceding year, together with any suggestions which the said Board may deem desirable for the amendment of the rules or procedure under this Act, and the said Board shall furnish such further information as to their proceedings as the General Council may from time to time require. The General Council shall submit the said report, and information, and suggestions to the Privy Council, and shall report to the Privy Council whether they approve of the said report and suggestions, and of the proceedings of the said Board, or any of them, and if they disapprove their reasons for so doing, and the Privy Council may thereupon make such order as shall seem fit.

6. *Treasurers to be appointed by Midwifery Board.*—The Midwifery Board shall appoint, and shall always keep appointed, two of their members to be joint treasurers. All monies received under or for the purposes of this Act shall be paid, or accounted for to and held by the said treasurers, and shall by them be applied for the purposes of this Act in accordance with the rules in that behalf for the time being in force.

7. *Examination Districts.*—For the purposes of this Act, England and Wales shall be divided into districts to be called examination districts, and a town in each district shall be called the examination town of such district. The first examination districts shall, unless it shall be otherwise ordered as hereinafter provided, be the metropolis and the several counties and ridings in England and Wales, and the first examination towns shall be the towns in the said counties at which assizes are held. The Midwifery Board may, from time to time, prescribe other examination towns, and form other examination districts, or unite two or more examination districts, or alter or revise the boundaries of any existing examination districts or counties, and prescribe the towns within such altered districts which are to be the examination towns thereof.

8. *Registrars to be appointed.*—For the purposes of this Act there shall be a registrar appointed by the Midwifery Board to keep the register required by this Act, who shall be called the General Registrar. The Midwifery Board shall also appoint a local registrar for each examination district, who shall reside in the examination town and perform within his district the duties prescribed by this Act and by the Midwifery Board in pursuance of this Act. The Midwifery Board shall, out of the funds at their disposal for the purposes of this Act, pay to the several registrars such sums as they shall from time to time order, having regard to the amount of work to be performed by the said registrars respectively.

PART III.—REGISTRATION.

9. *General Register to be kept.*—A register shall be kept by the General Registrar, to be called the Midwives' Register, and that register shall contain, in two alphabetical lists, all persons who are registered under this Act as entitled to practise as midwives. The first list, to be called list A, shall contain the names of those persons who, whether in practice as midwives before the passing of this Act or not, shall have obtained a certificate from an examining board in accordance with the provisions of this Act. The second list, to be called list B, shall contain the names of such persons as, without passing an examination, are registered in pursuance of the provisions of section 12 of this Act. The said lists shall be made out alphabetically according to the surnames of the persons registered, and shall contain the full names and addresses of the registered persons, and the date of their registration; and, subject to the provisions of this Act, shall contain such particulars, and be in such form, as the Midwifery Board shall from time to time direct. The Midwifery Board shall cause a correct copy of the midwives' register to be from time to time, and at least once a year, printed under their direction, and published and sold, which copy shall be admissible in evidence. The midwives' register shall be deemed to be in proper custody when in the custody of the General Registrar, and shall be of such a public nature as to be admissible as evidence of all matters therein contained on mere production from that custody.

10. *Midwives to be Registered.*—From and after the *1st day of January*, 1883, a person shall not be entitled to take or use the name of midwife or accoucheuse, or any name, title, addition or description implying that she is registered under this Act, or is a person qualified to practise as a midwife unless she is registered under this Act. Any person who, after the *1st day of January*, 1883, not being registered under this Act, takes or uses any such name, title, addition, or description as aforesaid, shall be liable, on summary conviction, to a fine not exceeding £5; provided that nothing in this section shall apply to legally qualified medical practitioners. No person, except those qualified in accordance with section 12, shall be entitled to be registered who is under the age of twenty-one years.

11. *Registered Persons only may recover Fees for Practice as Midwives.*—A person registered under this Act shall be entitled to practise as a midwife in any part of Her Majesty's dominions. From and after the *1st day of January* 1883 no person shall be entitled to recover any charge in any court of law for attendance or services rendered as a midwife, unless such person is registered under this Act, or is a duly qualified medical practitioner.

12. *Persons Practising already may be Registered.*—Any person who is at the passing of this Act, and for not less than twelve months previously thereto has been *bonâ fide* in practice as a midwife within the United Kingdom, and who on or before the *1st of June* 1883 shall produce or send to a district registrar the certificates hereinafter mentioned, shall be entitled to be registered under this Act. Where any person shows that she has passed an examination in midwifery before a competent medical board, and has received a certificate in any foreign country, or British colony, entitling her to practise as a midwife in such country or colony, and produces a certificate of character in the Form C, as required by this Act, or such other certificates of character as the Midwifery Board shall deem sufficient, the Midwifery Board may, without further examination, admit such person to be registered in list B of the Midwives' Register, on payment of such fee not exceeding the registration fee as the Board shall direct.

13. *Requisites for Registration of Persons already Practising.*—Any person desirous of being registered in accordance with the first part of the preceding section must produce to the registrar a declaration signed by her in the Form A in the schedule to this Act, or to the like effect, and also a certificate of competency signed by a qualified medical practitioner who is personally acquainted with such person, and can testify of his own knowledge that she is competent to practise as a midwife, and has a fair knowledge of the subjects mentioned in the first and second parts of the Schedule to this Act. She must also produce a certificate of her moral character in the Form C in the schedule hereto, signed by some justice of the peace, clergyman of the Church of England, or other minister of religion, or by a qualified medical practitioner residing in the district in which she lives. The certificates of competence above mentioned must be in the Form B in the schedule hereto contained or to the like purport and effect. On receipt of the said certificates, and on payment of the sum of 1*l.* the local registrar shall enter the name of such person in the register. Provided always that the said registrar may, if he sees fit, require the truth of such declaration and certificates, or either of them, to be affirmed in manner provided by the Act of the session held in the 5th and 6th year of the reign of King William the Fourth, chapter 62, intituled "An Act to repeal an Act of the present Session of Parliament, intituled 'An Act for the more effectual abolition of oaths and affirmations taken and made in various departments of the State and to substitute declarations in lieu thereof, and for the more entire suppression of voluntary and extrajudicial oaths and affidavits', and to make other provision for the suppression of unnecessary oaths."

14. *Removal of Names from Register for Ceasing to Practice.*—The general registrar may erase from the midwives' register the name of any person who has ceased to practice as a midwife, but not, save as hereinafter provided, without the consent of such person. If the general registrar has reason from the report of a local registrar, or otherwise, to believe that a midwife has ceased to practice, he may send by post to the address contained in the register a notice inquiring whether or not such midwife has ceased to practise or has changed her residence, and if the general registrar does not, within three months after sending the notice, receive any answer thereto from the said person, he shall within fourteen days after the expiration of the said three months, send her by post in a registered letter, another notice referring to the first notice, and stating that no answer thereto has been received; and if the general registrar receives the second notice back from the dead letter office of the postmaster-general or does not, within six weeks after sending the second notice receive any an-

thereto, or if the general registrar shall receive, in answer to either of the said two notices, an answer purporting to be signed by the person to whom such notices were sent, and stating that she has ceased to practise, or is not desirous of continuing to practise, that person shall, for the purposes of the present section, be deemed to have ceased to practise, and her name shall be erased accordingly. The registrar shall also remove from the register of midwives the names of all persons who shall become disqualified as hereinafter mentioned. In the execution of his duties the registrar shall act on such evidence as in each case appears to be sufficient.

15. *Removal of Names from Register for Misconduct.*—If any midwife has, either before or after she has been registered, been convicted of any felony or misdemeanour, or has been twice convicted of drunkenness, or been guilty of misconduct as provided by this Act, or of any infamous or disgraceful conduct in her practice as a midwife, that person shall be liable to be suspended from practice for such period as the Midwifery Board shall order, or to have her name struck off the register. The Midwifery Board may, and, upon the application of any of the medical authorities or local examining Boards, shall cause inquiry to be made into the case of a person alleged to be liable to be suspended, or to have her name struck off under this section, and on proof of such conviction or misconduct, or of such infamous or disgraceful conduct, shall cause such person to be suspended for such period as they shall order, or cause the name of such person to be erased from the register. If they shall order the name of any person to be erased from the register, they shall, and if they order any person to be suspended, the Midwifery Board may, also, cause such order to be endorsed on the certificate of registration of the person whose name is so erased, or who is so suspended (they may also, if they think fit, cause the fact of such person having been struck off the register, or suspended from practice, to be published in some local newspaper, or newspapers, circulating in the districts in which she resides). Provided that her name shall not be erased on account of a conviction for an offence which, on account of its trivial nature, or of the circumstances under which it was committed, does not disqualify a person from practising as a midwife. The fact that a person has been, or may be, suspended from practice, or struck off the register pursuant to this section, shall not prevent her being liable to any proceeding or penalty to which she would, by virtue of this Act or otherwise, be subject.

16. *Restoration of Names to Register.*—Where the Midwifery Board direct the erasure from the midwives' register of the name of any person, or of any other entry, the name of that person, or that entry, shall not be again entered in the register, except by the direction of the said Board. If the Midwifery Board think fit in any case, they may direct the restoration to the register of any name or entry erased therefrom, either without fee, or on payment of such fee not exceeding the registration fee, as they think fit, and the registrar shall restore the same accordingly. The name of any person erased from the midwives' register at her own request, or with her consent, shall, unless it might, if not so erased, have been erased by the orders of the Midwifery Board, be restored to the register, on her application, on the payment of such fee not exceeding the registration fee, as the said Board from time to time fix.

17. *Examining Boards to be Appointed.*—The Midwifery Board shall, from time to time, and for such periods as they shall think fit, appoint Boards, to be called local examining Boards, composed of legally qualified medical practitioners, for the purpose of examining persons who are desirous of obtaining certificates of fitness to practise as midwives. There shall be one such Board appointed for the Metropolis, and a Board for each registration district. Each local Board shall consist of five members, of whom, if possible, two shall be medical officers of some lying-in hospital, hospital, infirmary, or dispensary within such district, and the other three shall be general practitioners practising within such district. If any local Board cannot conveniently be constituted as above prescribed, the Midwifery Board shall appoint such medical practitioners residing within the district, as appear to them to be the most fit to serve on such Board. Unless they previously die or resign, or cease to practise within the district, the members of such Boards shall respectively continue to be members thereof for a period of their appointment as such members. At all meetings of the Boards three members shall form a quorum, and the senior medical officer present shall be the chairman. In case of equality of votes, the chairman shall have a second or casting vote.

18. *Midwifery Board to make Examination Rules.*—The Midwifery Board shall, within three months after their appointment, and from time to time thereafter as may be necessary, cause to be framed and approve, and when approved may revoke, alter, and add to, rules for regulating the examination of persons desirous of obtaining a qualifying certificate under this Act, and determining the subjects thereof, in this Act called examination rules, and the standard for passing and the method of conducting the same. The examination rules shall determine the conditions of admission of candidates to the examinations and the course of study to be pursued by them previous to examination. They shall also prescribe the amount of the fees payable for examination and registration, so as that such fees shall in no case exceed the prescribed sums for each person who shall be examined or registered in pursuance of this Act. The examination rules and any revocation or alteration thereof, so far as they relate to the admission of candidates, shall be submitted by the Midwifery Board to the Privy Council for approval, and the Privy Council, after obtaining the opinion of the Medical Council thereon, and after giving the examining boards and medical authorities opportunity of objecting, and after considering any objection made, may, if they think fit, by order confirm such rules, revocation, or alteration, either without modification or with any modifications therein of which notice has been given to the examining boards and medical authorities and General Council. If the Privy Council refuse to confirm any examination rules, the Midwifery Board shall, as soon as may be, in like manner propose to the Privy Council new rules.

19. *Examination requisite for Future Registration.*—No person, except such as is entitled to be registered by virtue of the provisions of section 12 of this Act, shall after the passing of this Act, be registered as a midwife unless she has satisfactorily passed an examination in the prescribed subjects, and has received a certificate from the board of examiners to testify that she has so passed. Such certificate shall be in the Form D given in the schedule to this Act, or to the like effect.

20. *Preliminaries to be observed by Persons applying to be Examined.*—Every person who, whether already in practice as a midwife or not, shall after the passing of this Act be desirous of being examined for the purpose of being placed on the register of midwives, shall apply in writing to the local registrar of the registration district wherein she resides, stating that she is desirous of being so examined, and when she will be ready to present herself for examination. Before being admitted to examination, she must pay the prescribed fees, and prove to the satisfaction of such registrar that she is over the age of 21 years. She must also forward to the registrar a certificate of her moral character in Form C in the schedule to this Act, or to the like purport and effect, signed by a justice of the peace or a clergyman of the Church of England, or some other minister of religion, or of a qualified medical practitioner. The registrar shall, on receipt of such application, certificate, and fees, notify to the applicant the time and place at which the examination will be held, and she shall thereupon be entitled to present herself to the board for examination at such time and place.

21. *Certificate.*—When the examiners are satisfied that any person examined by them has been sufficiently instructed in midwifery, and has shown by examination that she is qualified to practise as a midwife, they shall grant her a certificate to that effect in the form D in the schedule to this Act. The certificate shall give no right to the person therein named to practise, or be registered as a medical practitioner, or any way, except as a midwife, in accordance with the provisions of this Act. Any person deeming herself aggrieved by the refusal of any local examining Board to grant her a certificate, may appeal therefrom, by complaint in writing, to the Midwifery Board, who shall make inquiries, and either grant or refuse to such person her certificate, or direct that she shall be examined by another local examining Board, with or without payment of any further fee, or make such other order in the matter as shall seem just.

22. *Certificate to Entitle a Woman to be Registered.*—On production to the registrar of her certificate of having satisfied the examining Board, and on payment of the prescribed fee, the person named in such certificate shall be entitled to have her name inserted in the register of midwives, and such registrar shall forthwith insert the same, together with the particulars concerning her required by this Act.

23. *Certificate of Registration to be Given.*—Every person, on being entered on the register, shall receive from the registrar who enters their name thereon, a certificate of registration signed by him, stating that she has been so registered. Such certificate shall be in the Form E in the schedule hereto, and shall bear a number corresponding with the number placed against the name of such person in the register. Such certificate, if in the proper form, and purporting to be signed by the registrar, whose duty it was to issue it, shall be admissible in evidence in any court of the United Kingdom, and shall be evidence of the facts therein appearing. No person shall, after the passing of this Act, be eligible for any public appointment as a midwife who cannot produce such certificate.

24. *Penalty on Persons Representing Themselves to be Midwives when not Registered.*—Any person who, having been suspended from the register of midwives, or having had her name erased therefrom otherwise than for misconduct, shall, while she is so suspended, or while her name is so erased, by means of her certificate of registration or otherwise, represent herself to be a registered midwife, or attempt to obtain any employment as a midwife, shall, for every such offence, be liable, on summary conviction, to a fine not exceeding £10.

25. *Penalty on Unqualified Persons attempting to Procure Employment as Midwives.*—Any person who, not having been registered in accordance with this Act, or having been struck off therefrom by reason of misconduct as in this Act provided, shall, by the production of a certificate of registration, or document purporting to be such certificate, or otherwise represent herself to be a registered midwife, or attempt to procure for herself any situation or employment as a midwife, shall be guilty of a misdemeanour, and shall, on conviction, be liable to the penalties imposed by law on persons who are convicted of obtaining money by false pretences.

26. *Penalty on Obtaining Registry by False Representation.*—Every person who wilfully procures, or attempts to procure, herself, or any other person, to be placed on the register of midwives by making, or producing, or causing to be made or produced, any false or fraudulent declaration, certificate, or representation, either in writing or otherwise, and any person aiding and assisting her therein, shall be deemed guilty of a misdemeanour, and shall, on conviction thereof, be liable to a fine not exceeding £10, or to be imprisoned for any term not exceeding two months.

27. *Penalty on Registrar.*—If the General Registrar, or any local registrar, wilfully makes, or causes to be made, any falsification in any matter relating to the register of midwives under his care, he shall be deemed guilty of a misdemeanour, and, on conviction thereof, shall be liable to a fine not exceeding £50, or to be imprisoned, with or without hard labour, for any term not exceeding three months.

Part IV.—Duties of Midwives.

28. *Midwifery Board may make Scheme as to Duties, etc., of Midwives.*—The Midwifery Board may, from time to time, frame and submit to the Privy Council for approval, a scheme containing rules for regulating the practice and duties of midwives, and the cases in which they may attend patients either alone, or under the direction of a qualified medical practitioner. The Privy Council may, on receiving such scheme, obtain the opinion of the General Medical Council thereon, and may approve the said scheme either in whole or in part, or refuse to approve thereof, and remit it to the Midwifery Board. Such scheme, if approved by the Privy Council, shall have effect as part of this Act, subject to being, from time to time, revoked, altered, and added to by a subsequent scheme submitted by the Board to, and approved by, the Privy Council.

29. *Penalty on Midwife Neglecting Rules.*—Midwives attending patients shall, as far as possible, observe the rules for the time being in force in pursuance of this Act. Any midwife who shall wilfully neglect or refuse to observe any of the said rules shall be deemed guilty of misconduct within the meaning of this Act.

30. *Midwives not to Perform Operations, etc.*—No midwife shall, except as authorised by the rules for the time being in force in pursuance of this Act, perform any operation, or prescribe or administer any drugs or medicines whatsoever, unless under the direction of a qualified medical practitioner. Any midwife contravening the provisions of this section shall be deemed guilty of misconduct within the meaning of this Act.

31. *Liability to Indictment Retained.*—Nothing in the two preceding sections shall extend, or be construed to prevent a midwife who commits an offence under the provisions of those sections, from being liable to a prosecution or indictment, if the act or omission with which she shall be charged shall be such as would have rendered her criminally liable if this Act had not been passed.

Part V.—Miscellaneous.

32. *Midwifery Board may make Rules.*—Subject to the provisions of this Act, the Midwifery Board may from time to time make, alter, and revoke such orders and regulations as they see fit for regulating the general register, the meetings of the local examining Boards, and the remuneration of the members of such boards, and the practice of registration under this Act, and the fees to be paid in

respect thereof, provided that such fees shall in no case exceed a sum of £2 as an examination fee, and £1 as a fee for registration.

33 *Fees Devoted to Purposes of this Act.*—All fees shall be paid to the local registrar, and accounted for by him to the treasurers of the Midwifery Board, who shall devote the same to carrying out the purposes of this Act.

34. *Fines to go to Midwifery Board.*—All fines under this Act shall, notwithstanding anything in any Act relating to municipal corporations or to the Metropolitan Police Courts, or in any other Act public or local, be paid to the treasurers of the Midwifery Board, and be by them applied towards defraying the expenses incurred under this Act. The General Council may also devote to the purposes of this Act any funds which they may from time to time have at their disposal, and the Midwifery Board may accept and hold the same, or any grants or bequests of money or land, for the purpose of carrying out the purposes of this Act, and of encouraging and assisting the education and instruction of persons desirous of practising as midwives.

35. *Appeal to Quarter Sessions.*—Where any person deems herself aggrieved by any order, conviction, judgment, or determination of or by any matter or thing done under this Act by any court of summary jurisdiction, such person may appeal therefrom to the Court of Quarter Sessions for the county, division, or place in which the cause of appeal has arisen.

36. *Appeal to Privy Council.*—Where any person deems herself aggrieved by the decision of the Midwifery Board in any case in which the said Board has decided to refuse to admit such person to or to erase the name of such person from the midwives' register, such person may, within one month after such decision, address a memorial to the Privy Council, stating the grounds of her complaint, and shall deliver a copy thereof to the General Registrar. The Privy Council may make such order in the matter as they may think right, and such order when made shall be binding and conclusive on all parties.

37. *Orders to be laid before Parliament.*—Any order confirming a scheme or examination rules under this Act, and the scheme and rules therein referred to shall be deemed to have been duly made and authorised by this Act, and the validity thereof shall not be questioned in any legal proceedings whatever. Every such order, together with the scheme and rules therein referred to, shall be laid before both Houses of Parliament as soon as conveniently may be after it is made if Parliament be then in session, and if not, after the beginning of the then next session of Parliament.

38. *Powers of Privy Council to be exercised by two Members.*—Any powers by this Act vested in the Privy Council may be exercised by any two or more of the Lords and others of Her Majesty's Most Honourable Privy Council. All such orders shall be published in the *London Gazette*.

SCHEDULE.

Form A., Declaration Required to be Made by a Person who Claims to be Registered under the Midwives' Act, 1882, *on the ground that she was bond fide Engaged in Practice as a Midwife at the time of passing of the Midwives' Act*, 1882.—I , residing at , hereby declare that I was actually in practice as a midwife at , at the date of the passing of the Midwives' Act, 1882, and for twelve months previously thereto. Signed . Witness . Dated this day of , 188 . *Note.*—Any person who wilfully procures, or attempts to procure herself, or any other person, to be registered under this Act by making, or producing, or causing to be made or produced any false or fraudulent representation, either verbally or in writing, and any person assisting her therein, is liable under the Midwives' Act, 1882, to imprisonment for two months.

Form B, Certificate of Competence of Person Applying to be Registered as a Midwife.—I , residing at , being a legally qualified medical practitioner, hereby certify that I have known , of , for years (or *months, as the case may be*), and have had sufficient opportunities of knowing her capabilities, and I am satisfied that she possesses an adequate knowledge of the duties of a midwife, and is competent to attend and take the care and charge of women in ordinary cases of labour. Signed . Dated this day of , 18 . See note to Form A.

Form C., Certificate of Moral Character required by this Act.—I, A. B , residing at , hereby certify that I have known for years, and that she is sober, honest, and respectable, and a fit person to undertake the position and duties of a midwife. Signed . This day of , 18 . *Note.*—This certificate must be signed by a justice of the peace, clergyman of the Established Church, or minister of religion, or qualified medical practitioner, who has known the applicant personally for not less than two years previously to the date of making the certificate. Any person signing or using this certificate untruly, is liable to penalties under section 26 of the Act.

Form D, Certificate of having satisfied the Board of Examiners.—I , hereby certify that , of , appeared before (*insert names of examiners present*) , being members of the Board appointed to examine candidates applying to be admitted on the register of midwives for the district of , and that the said Board are satisfied that is possessed of a moderate elementary education, and is competent to discharge the ordinary duties of a midwife, and is a fit person to be entered on the register of midwives. Signed , chairman (*or other member appointed by the Board to sign*). Dated this day of , 18 .

Form E, Certificate of Registration in accordance with the Midwives Act, 1882.—Registered number . I , being a registrar appointed under the Midwives Act, 1882, , hereby certify that (*state whether married, a widow, or single*), being a person who is qualified to be registered as a midwife in accordance with the said Act, has this day been duly entered on the register of midwives , and that, as long as she shall continue to be registered, she is qualified to practise as a midwife in any part of the United Kingdom. Signed , registrar, residing at . This day of , 18 . *Note.*—This certificate may only be used while the person to whom it refers is registered in accordance with the Midwives Act, 1882. If used otherwise, the person using it is liable to punishment.

DR. CHARLES ARNISON has been placed on the Commission of the Peace for the County of Durham.

MYXŒDEMA.—M. Guerlain has observed a remarkable case of myxœdema, or pachydermatous cachexia, supervening on a wound of the neck. M. Verneuil points out that the nervous nature of this affection now appears to be clearly demonstrated; and that it is perfectly admissible that, in the case above referred to, as in many other diseases, the wound may have an influence on the central nervous system capable of bringing on special phenomena.

MEDICAL REFORM.

ON Friday February 5th, Dr. Jacob, the President of the Medical Alliance Association, had an interview with the Right Hon. A. J. Mundella, M.P., Vice-President of the Privy Council, at the Privy Council Office, and presented a memorial adopted by the Executive of the Irish Medical Association, of which the following is a copy.

TO THE RIGHT HONORABLE THE LORD PRESIDENT OF HER MAJESTY'S PRIVY COUNCIL.

The Memorial of the President and Council of the Irish Medical Association

HUMBLY SHEWETH—

That your Lordship's memorialists are the executive body of an incorporated association, which numbers amongst its members more than one-third of the entire body of registered medical practitioners in Ireland, and which for more than forty years has been maintained in order to unite the members of the medical profession in Ireland, and so form a body competent to exercise influence in sanitary and medical affairs for the public benefit, and to protect and promote the interests of the medical profession.

"That your Lordship's memorialists have learned with much satisfaction that it is the intention of Her Majesty's Government to introduce to Parliament a Bill for the amendment of the Medical Acts, based upon the recommendations of the Royal Commission appointed in the year 1882 to investigate the subject.

"That the Irish Medical Association has, at many successive annual general meetings, declared its approval of the principles embodied in the recommendations of said Royal Commission, and has petitioned Parliament in favour of those principles, and furthermore expressed its opinion thereon by testimony given on its behalf before said Royal Commission.

"That your Lordship's memorialists will be prepared to give the best support of the Irish Medical Association to any Bill which embodies the following principles:

"*a.* To restrict the privilege of registration as a medical practitioner to persons who shall have passed before a Central Examining Board for each division of the kingdom an examination adequate to ensure their competency, registration being granted throughout the kingdom upon equal terms as regards standard of examination, duration of study, and amount of fees payable prior to examination.

"*b.* To reconstitute the General Medical Council, so that an adequate direct representation therein of the registered medical practitioners throughout the kingdom shall be secured.

"*c.* To amend the existing law, so as to check effectively the prevalent practice of medicine and surgery by uneducated and unlicensed persons, and the use by such persons of titles calculated to deceive the public as to their competency to practise.

"Your Lordship's memorialists therefore humbly pray that H Majesty's Government will take steps during the next Session Parliament to have the existing law amended in these respects.

"Signed, JAMES MOLONY, F.R.C.S.I., President.
JOHN H. CHAPMAN, F.K.Q.C.P.I., Honorary Secretary of the Irish Medical Association."

In presenting this memorial, Dr. Jacob stated that the Execut of the Irish Medical Association desired to support the action the Medical Reform Committee of the British Medical Associat in requesting the Government to introduce, during the coming s sion of Parliament, a Medical Acts Amendment Bill, based on Report of the Royal Commission on the Medical Acts. In the cou of his observations, Dr. Jacob stated that he would have acc panied and supported, on behalf of the Irish Association, the de tation of the British Medical Association to the Lord President November 22nd last, the views of both associations being identi but that the Irish Association deemed it better to make a separ representation to the Government. Dr. Jacob expressed the u unqualified approval of the action of the Medical Reform Commi in carrying out the instructions given at the last annual meetin of the Association at Worcester. The profession must realise the that no private Bill can possibly be carried through Parliam which is not distinctly supported by the Government. It is s delusion to suppose otherwise; and at the present favourable mo after the Royal Commissioners have reported in favour of all principles which the profession has, for more than fifty years, advocating, and when the Government are disposed to legislat the lines laid down by the commissioners, it would be worse a folly—it would be simple madness—not to support the Govern

in the arduous struggle in which they are about to embark in the interest of the public and the profession.

Our attention has recently been called, by more than one correspondent, to a circular said to be widely distributed, which denounces any Bill that may be framed on the basis of the Report of the Royal Commission. This circular is signed by Mr. R. H. S. Carpenter, a licentiate of the London College of Physicians and of the Apothecaries' Society, as Secretary of the Medical Alliance Association. This gentleman, on his door-plate, syles himself "Dr. Carpenter." In doing this without the possession of a degree of doctor of medicine, he is, unfortunately, contravening the rules of the college of which he is a licentiate. This, however, is only a small matter in comparison with the fact that the terms of the circular to which we have referred, signed by him as the secretary of the Medical Alliance Association, are distinctly disclaimed by Dr. Jacob, the president of the same association. This complication certainly stands in need of explanation. To the outside world, having no knowledge of the proceedings of the Alliance, it appears inexplicable that the secretary should have drafted and distributed a circular which the president condemns.

The name of Carpenter is far from being so common as that of Smith or Brown. But that there may be no mistake as to the identity of the secretary of the Alliance Association, it is important that he should not be confounded with Dr. Alfred Carpenter, the late President of the Council of the British Medical Association, and for several years, and at present, an active member of the Medical Reform Committee, which committee may safely be trusted not to neglect the just rights of the profession for which it has so long contended.

THE HEALTH OF THE CUSTOMS OFFICERS OF THE PORT OF LONDON.

THE annual report on the health of the Customs Officers of London has a special value as an exposition of the sanitary condition of the metropolis in relation to the adult male middle-class section of the population, of which those officers may be considered a fair example. Their duties are of varied character, in many cases laborious and involving much exposure to the weather; and the effect of our inconstant climate in causing the various forms of disease is clearly exhibited in the complete and elaborate tables which Dr. Dickson, the medical officer of the department, has for many years presented with his report. The number of officers on the establishment is about one thousand, whose ages range from twenty to seventy, with an average of about thirty-seven years. The mean daily number disabled by disease or accident during the year 1881 was 36, or 3½ per cent. The mean duration of each case was 20 days. The loss of time per man by reason of illness was 12 days. Deaths from disease were in the proportion of 16 per 1,000; from accident, 1 per 1,000. Invaliding or superannuations on medical certificate were in the ratio of 7 per 1,000. The combined death- and invaliding-rate was therefore 23 per 1,000, which corresponds in the main with the figure of the preceding year, and is slightly above the average. Dr. Dickson gives an interesting summary of the meteorology of the year in its relation to health. The weather of 1881 was marked by extraordinary vicissitudes and exceptional temperatures and rainfalls. January was unusually cold, 7° below the mean; July, very warm, 3° above the mean; August cold and wet; October extremely cold, 4° below the average; and November was remarkably warm and dry, the mean temperature of that month having been 4° higher than that of October, and 5° in excess of the average. The rainfall in the last half of the year was nearly double that of the first half. The extreme rigour of the winter told most unfavourably on the health of the customs officers. After the great snow-storm of January 18th, as many as 90 were on the sick list, and the number of admissions in the winter quarter exceeded by 25 per cent. the average of the season. Pulmonary and rheumatic diseases formed 17 per cent. of the whole amount of sickness at this time, and the prolonged and protracted cold prostrated the old and weak, and retarded the convalescence of the less serious cases. The unprecedented cold of October was less pernicious, as its effects were to a great extent neutralised by the genial warmth of November. The extreme heat of July was not unfavourable to health, and there was a remarkable immunity from bowel-diseases during the whole year.

The numerical ratio of diseases is an important feature of this report. General diseases constituted 22 per cent., and local diseases or injuries 78 per cent. of the cases that occurred in the year. The miasmatic and zymotic group comprised only five per cent. of the cases. Among those were six cases of small-pox in men who had been well vaccinated in infancy, and some of whom had come into contact with small-pox patients in recent years with impunity. But in none was there clear proof of revaccination. Two cases were severe, and one died; the patient's removal from Limehouse, where he resided, to the Small-pox Asylum at Highgate, having probably contributed to the fatal issue. It is to be regretted that so long a journey should be necessary, and the more so that sites for such institutions could be obtained more cheaply and easily at the eastern extremity of London than in any part of the metropolis. By a recent regulation, revaccination is made compulsory for all candidates previously to admission to the service, which will probably lessen in the future the occurrence of this disease, or at least its severity. Rheumatism and gout yielded 15 per cent. of the whole amount of sickness; phthisis 5 per cent., but causing, as usual, a large mortality—in this year one-third of the whole number of deaths. Other respiratory diseases constituted 27 per cent. of the sickness, and 13 per cent. of the mortality. The same percentage of deaths was due to heart-disease, and also to affections of the brain; and half the superannuations of the year were caused by insanity and other cerebral disorders. Diseases of the digestive organs comprised but 8 per cent. of the cases, and no mortality. Diseases of the skin and cellular tissue occurred in the ratio of 11 per cent., and accidental injuries in that of 10 per cent.; and it is remarkable that these proportions have obtained almost uniformly through a long series of years. The mean age of those who died from all causes was 47 years; of those superannuated for senile debility, 64 years; and of those prematurely retired by reason of physical incapacity, 48 years. Other interesting details, relating to the effect of laborious occupation and climatic exposure in inducing disease in the various classes of officers in Dr. Dickson's charge will be found in his report, which forms an appendix to the annual report of the Commissioners of Her Majesty's Customs to the Lords of the Treasury.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Hotel, Stafford, on Thursday, February 22nd, at 3.30 P.M.—VINCENT JACKSON, General Secretary, Wolverhampton, January 30th, 1883.

BORDER COUNTIES BRANCH.—The spring meeting of this Branch will be held at the Central Hotel, Carlisle, on Thursday, February 22nd, at 6 P.M. Members intending to read papers or show specimens are requested to give notice to RODERICK MACLAREN, M.D., Carlisle, Honorary Secretary *pro tem.*; or to J. SMITH, M.D., Dumfries, Honorary Secretary.

DUBLIN BRANCH.—An adjourned special general meeting of the Branch will be held on Tuesday next, February 6th, at the King and Queen's College of Physicians, Kildare Street, at 4 P.M., to resume the debate on the resolution proposing the adoption of the annual report of the outgoing Council, and upon the amendment thereon, moved by Dr. Atthill, and seconded by Dr. Grimshaw, Registrar-General.—GEORGE F. DUFFEY, M.D., Honorary Secretary, 30, Fitzwilliam Place, Dublin, February 1st, 1883.

PROCEEDINGS OF COMMITTEE OF COUNCIL.

AT a meeting of the Committee of Council, held at Exeter Hall, on Wednesday, January 17th, 1883; Present, Mr. C. G. WHEELHOUSE, President of the Council, in the chair; Dr. W. Strange, President; Dr. A. T. H. Waters, President-elect; Dr. W. F. Wade, Treasurer; Dr. Bushell Anningson, Dr. J. T. Arlidge, Dr. D. Drummond, Mr. B. Barrow, Mr. T. H. Bartleet, Surgeon-Major J. P. H. Boileau, Dr. L. Borchardt, Dr. A. Carpenter, Dr. C. Chadwick, Dr. J. Ward Cousins, Dr. A. Davidson, Dr. G. F. Duffey, Dr. J. L. H. Down, Dr. B. Foster, Dr. E. Long Fox, Dr. J. H. Gibson, Dr. W. C. Grigg, Mr. A. J. Harrison, Dr. C. Holman, Professor G. M. Humphry, F.R.S., Mr. W. D. Husband, Dr. H. T. Lanchester, Mr. C. Macnamara, Mr. F. E. Manby, Mr. F. Mason, Mr. R. H. B. Nicholson, Mr. Rushton Parker, Dr. C. Parsons, Dr. S. Rees Philipps, Mr. R. J. H. Scott, Dr. R. C. Shettle, Dr. A. Sheen, Mr. S. W. Sibley, Dr. E. H. Sieveking, Dr. E. M. Skerritt, Dr. A. P. Stewart, Mr. T. Sympson, Dr. E. Waters, Mr. J. Wood, F.R.S.;

Read letters of apology for non-attendance from Mr. Alfred Baker, Dr. Bartolomé, Dr. Eyton Jones, and Dr. Leslie Jones.

The minutes of the last meeting were read and found correct.

The President of Council reported that the Subcommittee appointed at the last meeting to consider and report upon the resolution of the Council upon the representation of the Branches on the Committee of Council had met twice, but were not prepared at present to report, but that the report would be drawn up as soon as possible, and, after it had been approved by the Subcommittee, a copy would be sent to every member of the Committee of Council in time to consider it before the quarterly meeting in April next.

Read letter from Dr. Vawdrey Lush, asking for the recognition of the Dorset and West Hants Branch.

Read minutes of subcommittee appointed to consider the proposal to form a Dorset and West Hants Branch as follows:

At a meeting of the Subcommittee appointed to consider the application of the Bournemouth and Dorsetshire members to be allowed to form themselves into a District Branch of the Association, held January 17th, 1883, present: Dr. Carpenter in the chair; Mr. Husband, Dr. Ward Cousins; Dr. Parsons, Honorary Secretary—Resolved: That the request of the Dorset members be granted.

Resolved: That the recommendation of the subcommittee be approved and carried into effect, and that the Dorset and West Hants Branch be, and it is hereby, recognised as a Branch of the Association.

Resolved: That the by-laws of the Dorset and West Hants Branch be approved.

Read communication from Mr. Bartleet offering the sum of £20 for an instrument for deadening the sense of sound.

Resolved: That the matter be referred to the Otological Section at the annual meeting, and that Mr. Bartleet be informed of this, and requested to hold over his offer.

Read resolution of the Town Council of Worcester, of which the following is a copy:

At a special meeting of the Council of the City of Worcester, acting as such, and as the urban sanitary authority for the said city, holden in the Council Chamber, Guildhall, in the said city, on Monday, the 28th day of August, 1882, the Mayor in the chair.

Annual meeting of the British Medical Association. It was moved by the Mayor, seconded by the Sheriff, and resolved unanimously:

"That the best thanks of this corporation be, and are, hereby tendered to the British Medical Association for the valuable bust of the late Sir Charles Hastings, which the Association have generously presented to this city.—William Stallard, Mayor."

Resolved: That the treasurer be empowered to sign cheque for £8 15s., balance of amount due to Mr. Brock, on account of the Hastings bust.

The By-laws of the North of Ireland Branch were considered.

Resolved: That the by-laws of the North of Ireland Branch be approved.

It was moved: That the working expenses of the Investigation Committee be defrayed from the general finances of the Association, and that no portion be borne by the Branches.

Whereupon an amendment was moved that the subject be referred to the Collective Investigation Committee.

The amendment having been put from the chair, the same was declared to be carried.

Resolved: That the 116 candidates for election, whose names appear on the circular convening the meeting, with the correction of one name, be and they are hereby elected members of the Association.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date, together with those of the Printing and Office Subcommittee of the 16th inst. be approved, and the recommendations carried into effect, with the exception of that of the constitution of the Journal and Finance Committee.

The minutes of the Journal and Finance Committee contain the particulars of accounts for the quarter ending 31st December last, amounting to £3,268 12s. 8d., and recommendation that the Treasurer be empowered to sign cheques for those still unpaid; also recommendation for the further investment of £2,000.

The minutes of the Printing and Office Subcommittee contain particulars respecting the contract for machining the JOURNAL.

Resolved: That the consideration of the constitution of the Journal and Finance Committee be deferred till the next meeting of the Committee of Council.

Read minutes of the Arrangement Subcommittee.

Resolved: That the final settlement of the arrangements for the annual meeting be deferred till the quarterly meeting of the Committee of Council in April next. The recommendation to appoint a Section in Otology was approved.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, January 24th; J. F. SPENDER, M.D., President, in the chair. There were also present forty-three members.

New Members.—The following new members were elected:—Surgeon-General T. C. O'Leary, M.B., Bath; R. Davies, M.R.C.S., Bath; J. Wigmore, M.D., Tiverton; J. M. Rattray, M.A., M.B., C.M., Frome; C. Curd, M.R.C.S., Bath; W. White, M.R.C.S., Bath; Lawrence, Esq., M.R.C.S., Bath; F. F. Welsh, F.R.C.S., Clifton.

The question of the devotion of a meeting to the discussion of one of the subjects selected by the Collective Investigation Committee was referred to the Council.

The late Dr. F. K. Fox.—The following resolution was proposed by Mr. AUGUSTIN PRICHARD:—"That the members of the Bath and Bristol Branch desire to place on record their sense of the great loss which they and the whole profession have sustained by the death of their respected associate Dr. Francis Ker Fox, of Brislington House, the oldest member of the Branch, and one of the oldest and most valued members of the British Medical Association; and also to express their warm sympathy with Dr. Fox's family." This resolution was seconded by Dr. FYFFE, supported by Dr. DAVEY, and carried unanimously.

Papers.—The following communications were made.

1. Dr. Aust Lawrence read notes on Cases of Placenta Prævia. Dr. Swayne, Mr. Parette, Mr. Ewens, and the President took part in the discussion which followed.

2. Mr. Chalmers Norton read a paper on a Case of Successful Excision of the Shoulder-Joint, and exhibited the patient. Observations were made by Mr. Greig-Smith, Dr. Davey, Mr. Crossman, and Mr. Bousfield.

3. Mr. Frederick Parsons communicated a Case of Uterine Fibroid removed by Abdominal Section, which gave rise to a discussion in which Dr. Swayne, Mr. Ewens, Dr. Waldo, Mr. Dobson, and Dr. Aust Lawrence took part.

BEQUESTS AND DONATIONS.—T. W. R. has given £1,000 to the Middlesex Hospital.—Mrs. Elizabeth Atcherley Syme has given £550 to the Chelsea Hospital for Women.—Mr. John Oram of Taunton bequeathed £500 to the Cottage Infirmary at Devizes, his native place.—The Metropolitan Hospital Sunday Fund has received a fourth £100 from the trustees of the will of the late James Drew.—The Charing Cross Hospital has received £152 from Mr. J. L. Toole, the proceeds of an afternoon performance at his theatre on the 17th instant.—Mrs. Hull Martin has given £1,000 to the West Wing Building Fund of the West London Hospital.

CORRESPONDENCE.

THE PROPOSED MEDICAL BENEFIT SOCIETY.

SIR,—So many letters have lately appeared in your columns re-arding a proposed Medical Benefit Society, that I need not trespass n your space by detailing reasons why such an institution should xist. I merely ask whether you would be willing to receive, and ublish in your JOURNAL, the names of all medical men, who, wish-ng to join such an association, should write to you saying so. If beginning were thus made, many men now too busy or too pathetic to move in the matter, would, I am sure, join the move-ent, and something might eventually be done to forward so neces-ry a reform. In this town alone, I know of many men who only ait an opportunity to give such a scheme their eager support.

A medical benefit society has failed once, but many other now ourishing commercial undertakings have had to make more than ie beginning. Perhaps the entrance fee and scale of payments in e Provident Association of 1866, were fixed too low, or its failure ay have been due to the fact that it was not sufficiently pushed by e local secretaries.—Your obedient servant,

WILLIAM CLIBBORN, B.A., M.D.

Bradford Street, Birmingham, January 9th, 1883.

*** We commend the above letter to the consideration of our aders. We have carefully considered the subject; and if the count of support received be such as to afford evidence that any nsiderable number of medical men, members of the Association, practically and really interested in the subject, we are prepared give adequate assistance to develop the preliminary arrangements, as to furnish the material for a decision as to whether the matter ne which can be taken up with a reasonable prospect of success. er some preliminary consideration with competent assistance, are of opinion that it would be possible to carry it on l to make it useful and successful. Such a society is, indeed, a y difficult actuarial problem, as there is little real information as he amount of risks against which it is proposed to provide. The nbers of the British Medical Association are, however, in a posi-l to obtain this information; and we desire, as a first step, to en-vour to learn what amount of interest this proposal elicits, and many, approximately, in the first instance, are likely to be de-us of taking a serious part in it, so as to provide securely against ure. It would be desirable in the first instance, from any such list dhesions as may be forwarded to us, to form a strong provisional mittee. In the event of such a committee being formed, and n a number of adhesions as to justify the committee in taking iminary steps, we should be prepared to suggest what those iminary steps should be.

SCOT'S *DISCOVERIE OF WITCHCRAFT.*

R,—Would you allow me the favour of a small portion of your e to secure, if possible, the attention and sympathy of my pro-onal brethren for a literary undertaking which only requires a nedical names out of the many thousands of your readers, to le it to be carried out to a satisfactory conclusion. I enclose u herewith a circular concerning "a Proposed Reprint of *Scot's verie of Witchcraft*"; the editorial work of which will be rtaken by my friend, Dr. Brinsley Nicholson, 306, Goldhawk , Shepherd's Bush, so soon as a sufficient number of subscribers 100) can be obtained as to form a security against positive loss. Nicholson, who is well known as a contributor to the New espeare Society, has all the qualifications necessary for an ; and as I am responsible in a measure for engaging him, *more*, in this endeavour to rescue a scarce and valuable work of 6th century from neglect in the 19th, I should like to say a few s as to the grounds on which I believe the interest of the work dical readers would be one of a very peculiar kind. Having ccasion some years ago to go into a course of reading on the t of Scot's work, as bearing on the wider one of mental aber-ration, I was not only amused, but interested beyond measure, at finding in it, not only a specimen of racy and admirable English nearly contemporary with Shakespeare, but a work brimming over with both humour and pathos, and written with a personal independence of judgment exceedingly rare in that or any other age. When I found this book bracketed along with that of John Wier (probably better known to your readers) by King James I, as containing "damnable opinions" as regards the non-existence of witchcraft in a supernatural sense, it was evident enough that it must have been a work of some power and influence in its day, and yet it does not appear to have ever been reprinted later than 1605. But, further, it seems almost certain (and no one is better qualified to bring this out than Dr. Nicholson) that Shakespeare had read the book, and perhaps borrowed from its curious lore some of the imagery of the "Midsummer Night's Dream." The ground, however, on which the work is specially to be commended to the medical profession is, the thorough-going humane and one would say, modern spirit of the book, as regards the whole machinery of demonology as then, and long after, currently believed in. Comparing the book, for instance, with that of Glanvil, a century later, one would be inclined to reverse the position of the two in history; and it is painful to think that between the two epochs our Puritan forefathers, led or misled by King James, had shown themselves no whit more merciful or more enlightened than the authors of the *Malleus Malleficarum*, or the doctors of the darkest age of the church; nay, that such eminent and good men as Sir Matthew Hale and Sir Thomas Browne should have been wholly preoccupied by the popular doctrine, so as not to be able to take in (if they indeed had read them) the noble pleadings to be found in Reginald Scot's work, published eighty years before, on behalf of the wretched creatures who were hunted to death for an impossible crime. I can most heartily recommend any of my brethren who feel able to do so not to omit this opportunity of forwarding a good work, and in time adding to their libraries a book which is a perfect treasury of learning and of folk-lore, as well as one of the most interesting milestones in the history of the human mind and its aberrations.—I am, etc.,

University of Glasgow, W. T. GAIRDNER.
Christmas Day, 1882.

P.S.—The price of the reprint, which will contain somewhat less than 600 pages, will be £2 2s. in the event of there not being more than 100 subscribers; or less in proportion to the number above 100. About half the number required have already subscribed.

COLLECTIVE INVESTIGATION.

SIR,—The suggestive and altogether admirable addresses of Sir William Gull, Sir James Paget, and others, on Collective Investigation, must have stirred many thoughts in many minds. In some, they would rekindle the dying embers of a zeal for work; to others, they would point out the long looked for opportunity of bringing unobtrusive labours to light and criticism; in all who see in their profession anything beyond a mere means of livelihood, they cannot fail to strike a chord of sympathy, and to elicit a hearty response.

It has been shown that the humblest members of our great Association may do yeoman's service to science, with but slight effort or inconvenience to himself; and that the return of even one of the admirable cards issued by the Central Committee is an appreciable addition to the sum of scientific knowledge.

Among the many important subjects for investigation mentioned by Sir William Gull, and others which must suggest themselves to anyone engaged in practice, that which struck me as being at once of greatest promise and most difficult of attainment was, the record of life-histories or genealogies of health and disease. No more ready means could be devised for carrying out the lines of investigation indicated in the Bradshawe Lecture of Sir James Paget—a lecture which has opened up vistas of research hitherto unsuspected, or at least undefined.

It has always seemed to me, however, that such investigations might be resented to a large extent, as inquisitorial and inconvenient, by a public whose zeal for scientific knowledge is as yet scarcely sufficient to overcome its known repugnance to an exposure of family weakness or inherited disease.

The same objection does not hold with the members of the medical profession, who are ever ready to lead, even at considerable sacrifice, when the interests of science are to be served. If but a fraction of the 10,000 members now numbered in the Association were to engage themselves so far in this work as to contribute their own life-histories and descent, a mass of reliable data would be accumulated, which could not fail to yield valuable results. The members

of the medical profession are drawn from all ranks, and may be considered a fairly representative body; and, if a skeleton guide as to the line of research were supplied largely by the Central Committee, the returns would be given with an intelligent appreciation of their object, with a fidelity and a completeness which could scarcely be looked for elsewhere.

The analysis of such returns, a solid piece of work, no doubt, would amply repay the labour by the light it would throw on many vexed questions connected with the etiology of disease—on relationships unknown, or barely suspected to exist, between forms of disease which differ as widely, and yet are possibly as closely allied, as heat to the electrical or mechanical forces.

But, apart from the general scientific interest of this inquiry, I should be much surprised if it did not, in some instances, amply and at once repay the individual investigators, by the new light which might be thrown on the origin of a peculiar temperament, a puzzling susceptibility to certain forms of disease, or anomalous symptoms in themselves or in their families.—I am, sir, yours faithfully, EDWARD T. WILSON, M.B.Oxon., F.R.C.P.,

Cheltenham, January 29th, 1883.

SIR,—In Sir William Gull's admirable address last week, on Collective Investigation of Disease, there occurs the following passage, which may mislead if it is not explained.

"The first intention of the Association respecting this movement was to obtain a better notification and more complete statistics of disease; and this was carried out to some extent by Dr. Ransome in Lancashire and Cheshire, but apparently not much came of it."

An inquiry was indeed instituted some years ago by the Lancashire and Cheshire Branch into the question of the Duration of Infection, a subject which may with advantage be again investigated by the present Committee, for it comes strictly within the scope of its functions; but other much earlier efforts at combined observation have been made by the Association. Thus, in 1853, observations of Disease and Meteorology were made by several members of the then Provincial Medical Association; and their results, which were published in the JOURNAL, have been used for the investigation of several interesting points, such as the influence of atmospheric pressure and the direction of the wind upon certain diseases.

Then again, in 1864—and I presume that this is the undertaking alluded to in the text—a committee was appointed at Leamington for "the Registration and Observation of Disease." It was intended that the line of work of this committee should be exactly that now taken up by the Association, but its attention was entirely absorbed by the first branch of the inquiry. It is scarcely correct, however, to say that it did not come to much. For nearly sixteen years, weekly returns of disease were made in Manchester and Salford, upon the schedule prepared by this committee; and these returns now form a body of vital statistics that are quite unique for their completeness and accuracy. Many important deductions from them have been made respecting epidemic and other diseases. Similar returns were obtained by Dr. Philipson at Newcastle-on-Tyne, by Dr. R. C. Brown at Preston, by Mr. Alfred Hill at Birmingham, and by Dr. Whitmore at St. Marylebone. The work of this committee seems now likely to end in the accomplishment of a national registration of disease.

These facts in no way detract from the honour due to the present committee, and especially to Professor Humphry and Dr. Mahomed for the energy with which they have pushed forward the present movement; but it seems right at the present time to show that its importance has not been lost sight of during the past thirty years.—I am, sir, yours sincerely, ARTHUR RANSOME.

Devisdale, Bowdon, January 27th, 1883.

REGISTRATION OF UNCERTIFIED DEATHS.

SIR,—In your issue of this day, page 138, in answer to J. Fitzgerald, you state: "is entered in the death-register as 'uncertified.'" I am sorry to inform you that you are wrong in this statement. Inquire of any registrar of births and deaths. He will inform you that he is not allowed to insert the word "uncertified" in his register book.—I am, yours faithfully, EDWARD MILLS GRACE.

Park House, Thornbury, Gloucestershire, January 20th, 1883.

*** Mr. Grace appears to have misunderstood the meaning which we intended to convey by the words "enterred in the death-register as 'uncertified,'" which is the more surprising, inasmuch as we believe that he is himself a registrar of births and deaths, as well as a registered medical practitioner. Mr. Grace must be aware that, in accordance with his official instructions, there are two ways of recording a cause of death in the death-register, one for certified deaths, and one for uncertified deaths; and further that, at the end of each year that he has to report to the Registrar-General the number of uncertified deaths recorded by him during the three months. Mr. Grace is correct in saying that the word uncertified is not inserted in the register, but the cause is so entered that there can be no question about its being uncertified. The fact is that, after the births and Deaths Registration Act had enacted, that the name of the certifying practitioner should be inserted in the register, the use of the word "uncertified" was discontinued, because the very absence of the name of the certifying practitioner is sufficient evidence that the cause of death is uncertified.

IS PHTHISIS COMMUNICABLE?

SIR,—I have read with much interest the recent articles in your paper on this subject, and for the last forty years I have pretty carefully studied the matter, having had ample means of doing so, through the enormous number of phthisical patients who have come here during that time, to try the effects of our mild climate to benefit their health (and a great many do benefit thereby). The result of my observations of the very many cases which have passed through my hands is, that phthisis is neither infectious nor contagious.

From a few cases which were under my care, I fancied at the outset that the relations between man and wife might lead to the communicability of the disease; but the result of further and more particular investigation of these cases proved to my mind that such could not be so, for I discovered that some hereditary taint existed originally in both man and wife.—I am, sir, yours truly,

Fernfield, Bridge of Allan, N.B., ALEX. PATERSON, M.D.

January 17th, 1883.

THE HOUNSLOW TRAGEDY.

[Copy of letter to Dr. Joseph Rogers.]

SIR,—I write to thank you most warmly for your kind and practical letter in the BRITISH MEDICAL JOURNAL of the 27th inst.

The fact that the medical profession appears to be as unanimous in its approval of the finding of the jury, as the public generally, is an inexpressible consolation to us who mourn, for I consider that only medical men can view such a case as it should be viewed.

But it is my duty to write to you at once in reference to the fund proposed to be raised for the benefit of Mrs. Whitfield Edwardes and her children, in order to acquaint you with the fact that, fortunately they are amply provided for.

Mrs. Whitfield Edwardes desires me to express to you her deep sense of your consideration for her.—Believe me, dear sir, yours most sincerely, EDWARD J. EDWARDES, M.D.Lond.

17, Orchard Street, Portman Square, W., January 31st, 1883.

SIR,—Referring to the letter in to-day's JOURNAL, I gladly recognise Dr. Joseph Rogers's sympathy with the late Dr. Edwardes and his family, a sympathy which does him honour, and is similar to that which, as many members of the Association will recollect, Dr. Rogers has shown on other fitting occasions. I would wish to point out to him, however, the decided impolicy, and in my opinion the great injustice, of endeavouring to promote the profession's manifestation of corresponding sympathy, by attempting to make such manifestation serve, at the same time—as the letter suggests—as an opportunity for our medical brethren to sit in judgment upon their other medical brother whose name is so inseparably connected with Dr. Edwardes's death by his own hand. I, for one, although I have carefully read the evidence given at the inquest, must confess that I have not been able to come to any definite conclusion in the matter; certainly I have not found in that evidence any sufficient justification either for the verdict of the jury, or for the strong expression of local popular animosity against Dr. Whitmarsh. I feel assured that it is quite as necessary in his case, as in that of Dr. Edwardes, that we should remember how liable we are to err when we take upon ourselves to sit in judgment upon our fellow men; and whilst I am certainly unable to condemn either one or the other of being guilty of the charges which have been brought against them, I feel that whilst such is the case, both should be rather objects of sympathy than of reproach.

I had better add that I have no knowledge of either Dr. Edwardes or Dr. Whitmarsh, other than that which I have recently gained from the public papers.—I am, sir, yours obediently, JAMES TUBLE

Woodside Grange, Woodside, North Finchley, January 26th, 18..

SIR,—I have read in our JOURNAL of this date the letter of Dr. Rogers on the unfortunate case at Hounslow. It appears to me to be difficult to judge how we may best show our sorrow for the

happy death of Dr. Edwardes and our sympathy with his widow. I should think that a pecuniary testimonial may possibly be very objectionable to the representatives of Dr. Edwardes. Would it not be better to wait a little as regards any movement of that kind? If such a testimonial should really be necessary, far from opposing it, I shall be very willing to indicate my opinion on the subject of professional brotherhood, by adding my name to the list.—I am, sir, yours truly,

GEORGE D. BROWN.

Ealing, January 27th, 1883.

MR. STEELE'S CASE OF INTRAMURAL PREGNANCY.

SIR,—As Dr. Braxton Hicks's letter in your last issue might lead your readers to suppose that I am responsible for a diagnosis and treatment of this case otherwise than prescribed by himself—which I should be very sorry to be thought true—I hope you will allow me to correct it.

Dr. Hicks, in repudiating his share of responsibility for my treatment of the case, says: "I was asked to visit the patient in consultation with Dr. F. Moon of Greenwich. I and he both arrived at the conclusion that she had been pregnant, but that there was nothing in the uterine cavity. I therefore concluded it was of the nature of an extra-uterine pregnancy, and in this Dr. Moon concurred. As inflammatory attacks had occurred many times, and as much thickening was felt around, no parts of a fœtus could be felt. I was then particularly asked to decide whether she should be removed to Liverpool, as she had at once to leave her home, and wished to join her husband in Liverpool. We assented.....provided that she were furnished with a letter to give her doctor, setting forth our views of the case, to guide him in his future treatment."

The letter was accordingly sent; and, since it sets forth those views, I ask your indulgence to quote a portion of it once more, to compare with Dr. Hicks's statement, and give your readers an opportunity of judging whether I was justified or not in my reply to Dr. Lawson Tait, and in the more important matter of the diagnosis and treatment of the case. The italics are mine.

"I was puzzled, and got Dr. Braxton Hicks to see her with me. *We decided that it was a case of missed labour; that, in the previous labour, there had been a yielding of the uterine wall, not amounting to rupture, but forming a hernial sac, into which the next conception fell and shut itself up; that the fœtus is enclosed by a sac formed by the uterine wall. The patient seemed to be in good health; therefore, beyond the wearing of a supporting bandage, it was not thought advisable to interfere.* (Signed) Fredk. Moon, M.B."

I may add that I did not publish the case and this statement without first communicating with both Dr. Braxton Hicks and Frederick Moon, and that no question of either diagnosis or treatment was ever suggested. I leave the above quotation of Dr. Hicks's own views at the time he saw the case to settle a discussion which was unnecessarily raised, and need not have remained open long, had those gentlemen who commented upon the course I adopted in the case read the original report in the JOURNAL a little more carefully, and thus avoided irrelevant and contradictory statements.—I am, etc.,

CHARLES E. STEELE.

THE FEEDING OF INFANTS.

SIR,—I have observed the letter of Dr. Saundby of Birmingham in our JOURNAL of January 20th; and, although I cannot lay claim to wide experience, I quite agree with his statements with reference to condensed milk. My practice is a small one, and consequently I am not in a position to speak with such authority as Dr. Saundby against the use of this food. I have seen it used in only two cases, where the mothers were young, and did not find it convenient to rule, as they had to go to service as soon as possible to work for their daily bread, the children being illegitimate. I forbad the use of condensed milk, for the reason that both children, after using it a short time, became quite emaciated, and would have died had they not been put on cows' milk. With this change of diet, they both rapidly improved. Shopkeepers vaunt it as a splendid food for children, but in my small experience, it is only splendid for killing. It would have suited well in past times for the purposes of baby-farming.—I am, yours respectfully, QUINTIN MCLENNAN, M.B.

Lanpont, Dumfriesshire, January 26th, 1883.

CLINICAL THERMOMETERS.

SIR,—In a dozen clinical thermometers recently obtained, the following serious discrepancies existed, when compared with a Kew certified instrument.

Obs. 1. ("Kew," 105.2° F.).—No. 1, 94° F.; No. 2, 97.4°; No. 3, 99.8° No. 4, 99.9°; No. 5, 100.8°; No. 6, 105.1; No. 7, 105.2; No. 8, 105.3°; No. 9, 105.5°; No. 10, 105.9°; No. 11, 106.2°; No. 12, 108.5°.

Obs. 2. (Three only, 6, 7, and 8 were tested)—("Kew," 98·4° F.) No. 6, 98·2° F.; No. 7, 98·2°; No. 8, no index left.

The thermometers had each a constriction in the stem just above the bulb, having thus what is usually described as an indestructible index; but in several of these the constriction was seen to permit of the column of mercury retreating to a greater or less extent from the highest point touched before breaking its connection with that in the bulb. Obviously this is a serious defect in the instrument where it exists, especially so if, as in the behaviour of No. 8 in the two observations, the error may vary with the temperature employed to so great an extent.

In the ordinary form of clinical thermometer with separate index, when this has been shaken into the bulb in setting it, a new portion of the column of mercury can usually be readily detached by sharply tapping the upper end of the stem on a table two or three times; nor, unless the detached portion be large, is the index so formed apt to run back into the bulb.—I am, sir, yours very truly,

ROBERT ROBERTSON, M.B., Resident Medical Officer.
National Hospital for Consumption, Ventnor.

"A PRESCRIPTION FOR ACUTE GOUT."

SIR,—Doubtless by one of those "accidents" which will happen in the best of printing offices, and which not the most diligent and expert editing can always prevent, your Press played me false last week, impugning both my latinity and my arithmetic. Under these circumstances, will you kindly allow me to repeat my "prescription for acute gout," as it ought to have been printed; and as (unless I am the victim of a strange delusion) I wrote it, in *for me*—alas, that I should have to ask you to put the qualification in italics!—a very plain caligraphy?

℞, ammonii chloridi ℥ij; potassæ chloratis ℥iss; tincturæ iodi ℥i; glycerini ℥vj; aquâ destillatâ ad ℥vj; misce, fiat mistura, cujus sumantur cochlearia duo magna quartâ (vel tertiâ) quâque horâ.—Yours obediently,

J. MORTIMER GRANVILLE.

16, Welbeck Street, W.

THE FINANCIAL CRISIS AT THE LONDON HOSPITALS.

SIR,—A very excellent article, containing much valuable statistical information, is published under the above title in the JOURNAL of January 20th, and gives a very fair insight into the financial disadvantages under which our London hospitals are now labouring; but, while clearly demonstrating these difficulties, it omits to suggest any remedy for the same. This grave question has doubtless been for some time a subject of anxious reflection to many; but no one seems as yet to have arrived at any solution of the difficulty; in my individual opinion, an efficient remedy is available, the application of which is simplicity itself. Let every hospital throughout the metropolis make a small charge for all assistance rendered to midwifery cases, a charge proportionate to the means of the patient. Every member of the profession must have observed in the course of his early curriculum, that members of the well-to-do lower classes avail themselves of the gratuitous obstetric aid originally instituted for the benefit of the indigent poor. From this source alone, a very effective contribution towards the replenishment of the hospital funds will be obtained; bnt in order that this expedient be eventually successful, it is obvious that it should be adopted in every hospital without one single exception; otherwise it will never answer. I am glad to say that some of the surgeons at King's College Hospital have adopted the excellent system of making such patients as their appearance or occupation show to be able to do so, contribute, according to their means, to the charity-box which is placed in the consulting room. It is evident that, at the conclusion of several hour's consultation, these accumulated small fees, insignificant to their donors, will swell into importance. People ceased to laugh at good old John Wesley's quaint recipe, "The blessing of God, and a penny a week," when they saw the excellent application of the large sums his followers thus collected among themselves. A contribution-box placed in every consulting room throughout each hospital, to which contributions from all who are able should be enjoined, would work wonders, coupled with the midwifery fees suggested above. In short, the solution of the difficulty lies ready to our hand; there is no difficuly in the way of its application.—I am, etc.,

J. BRINDLEY JAMES, M.R.C.S.,
Fellow of the Medical Society.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE GREENOCK INFIRMARY.

FOR some months past, it has been a question whether the medical officers to this institution should be represented on the board of directors, and the question has just been settled in the negative. From a correspondence, which extended, at intervals, from 1853 to 1882, and of which a copy has been forwarded to us, it appears that the circumstances of the case were as follows. In November 1853, the medical officers of the infirmary unanimously resolved to request the committee of management to grant them an annual remuneration, to commence on May 1st, 1854. This led to various communications between the medical officers and the committee of management; and ultimately, it was agreed (December 10th, 1856) that the acting surgeons should receive salaries at the rate of £25 each *per annum*, and the consultants (with charge of out-patients) at the rate of £5 each *per annum*. It was further resolved, that the medical officers for the time being should cease to be trustees of the institution or members of committee.

This arrangement appears to have continued in operation up to the present time. But, in November 1881, the Greenock Medical Society requested the co-operation of the directors of the infirmary in their efforts to obtain a representation on the board of management. This gave rise to further correspondence, which extended over more than twelve months, and which resulted in the managers of the infirmary adopting the following resolution (under date December 12th, 1882): "The board, having carefully considered the whole question, is not prepared to recommend any alteration in the existing composition of the directorate."

It appears to be argued that, as long as the medical staff receives a salary, however small, they can hardly expect to have a place on the committee of management. Under the present circumstances, if a medical subcommittee were formed, having an official relation to the board, they would no doubt be able to influence the board upon all medical matters; or, if they were willing to forego their salaries, we have little doubt that the two senior members of the staff would before long be elected *ex officio* directors, as suggested by Dr. Paton. We do not think, however, that the question of salary need be an insuperable objection to the proposition.

THE KILMARNOCK INFIRMARY.

THE fourteenth annual report of the Kilmarnock Infirmary states that, the institution continues to extend its sphere of usefulness, and each department reveals activity and progress. The year ending November, 1882, has been signalised by the largest number of admissions to the medical and surgical wards that has yet occurred since the opening of the infirmary. There has not been a single case of erysipelas, pyæmia, septicæmia, or hospital gangrene; indeed, it is now upwards of four years and a half since any such "hospital disease" made its appearance in the wards. The only preventive measures used consist, as regards individual cases, of rigid cleanliness and simplicity of wound-dressings; and as to the hospital in general, of the same cleanliness combined with attention to hygiene. New fever wards have been erected adjacent to the infirmary, with accommodation for thirty-two patients; and the institution may now be considered complete, and equal to any emergency.

HOSPITAL MANAGEMENT IN BELFAST.

A NEW departure appears to have taken place in the management of hospitals in Belfast. The tendency at present is to either make them self supporting, by payment from the patient, during treatment, or to draw their support largely from the working classes, who most avail themselves of their benefits. The system of indiscriminate charity in hospital management is condemned as injurious, not only to the interests of the Institution but to the recipients themselves. Some of the special hospitals in this town, especially those founded by the late Mr. Benn, have for some time been insisting upon all those who are able to pay, contributing towards their own support while under treatment in hospital. The result of this has been that the funds are always in a satisfactory condition, and the hospitals in a high state of efficiency. A special meeting of the committee and life governors of the Royal Hospital was held on the 18th instant, for the purpose of considering the best plan of enlisting the co-operation of the working classes in the support of the institution. The necessity for this movement has become the more urgent owing to the diminution of subscriptions, and the falling off of the Hospital Sunday Collection, which now only amounts to a few hundreds yearly. Deputations were appointed from the meeting to visit several factories and workshops, for the purpose of addressing meetings of the workers, and asking them to subscribe some small monthly or weekly payment in support of the hospital. The promise of free admission and attendance in time of sickness is held out to those who thus subscribe. Some of the deputations have been already at work and have met with a very hearty reception, and have received liberal promises of support in the future. It is hoped that the thorough working of this system will relieve the hospital from all financial difficulties for the time to come.

THE SAMARITAN HOSPITAL, BELFAST.

THE Annual Meeting of the subscribers of this hospital was held in the Board Room, on the 19th instant. The secretary's report and the financial statement were most satisfactory. The medical report showed 1,067 extern patients were treated during the past year, and these made 5,851 visits. There were 133 intern patients treated during the year, and those who were able to pay were asked to do so according to their means.

COLTISHALL NURSING HOME.

THE first report of this nursing home has been forwarded to us. As far as we can gather it appears to be a cottage hospital, under another name. The home contains three beds, one of which is reserved for accidents, and a cot for a child. The first patient was admitted in October, 1881, and during the subsequent year sixteen persons received the benefits of the institution. Of this number, twelve were cured; two were much relieved; one died; and one remained under treatment. The subscribers to the home nominate the patients, and each patient is required to pay a certain weekly sum, not exceeding five shillings, the amount to be fixed by the nominator and the secretary. The home appears to be economically managed, as the expenses of each patient have not exceeded 4s. 7½d. a day.

Dr. BRYCE SMYTH has resigned his appointment of Senior Physician to the Belfast Hospital for Sick Children, King Street. An election will soon take place to fill up the vacancy.

MILITARY AND NAVAL MEDICAL SERVICES.

FINANCIAL POSITION OF JUNIOR OFFICERS OF THE ARMY MEDICAL DEPARTMENT IN INDIA.

COMPLAINTS from young surgeons, of the Army Medical Department serving in India, reach us from time to time, to the effect that the relative rank of captain, confirmed by the last royal warrant, does not carry with it an increase of pay in India; but it must be remembered that, when this warrant was promulgated, it was distinctly intimated that this was the determination of the India Office; so there is not, as some suppose, any breach of faith on the part of the India Office.

EXPERIENCES OF AN ARMY SURGEON DURING THE EGYPTIAN EXPEDITION OF 1882.

UNDER the above heading, Surgeon-Major L. Corban, M.D., who was in medical charge of the Duke of Cornwall's Light Infantry in Egypt, has recorded his experiences, with a view to improving military sanitation in future campaigns. He suggests improvements of various kinds which, if adopted, would, he considers, go far towards benefiting the troops. Dr. Corban landed in Egypt on July 2[illegible], and remained with his regiment until after the termination of the active operations by the capture of Cairo, which permitted the withdrawal of the greater portion of the troops; his regiment was always to the front during the campaign, and Dr. Corban was in every battle, so that he had ample opportunities of noting deficiencies. Bad and scanty food, the want of blankets and tents, etc., were probably answerable for most of the sickness of the troops. As to future expeditions, the author considers that all the medical portion of the force should be complete and combined; should be shipped together in the same steamers; and arrive, as far as possible, at the point

descent on the hostile shore at the same time. Hospital ships should also accompany these transports, in order to receive the first sick and wounded, and invalids, who, after a short sea-trip, would soon return to their duty.

The following points, embracing the well-being and physical fitness of an army in the field, are particularly noticed, viz., food, clothing, equipment, and medical aid. Dr. Corban thinks that, from all he saw and personally experienced in Egypt, some improvement in the food of the troops is desirable and possible. He objects to the hard ship's biscuits, over which he has known instances of men breaking their teeth; and advises a more frequent issue of cocoa in the place of coffee, for which the ordinary cocoa and milk in tins would suffice; the bread should also be white and otherwise good; Australian tinned beef may be useful, but the tinned mutton seems to have been most objectionable; "Erbswurst" should have an issue of pork made with it, with some compressed vegetables, which would make a good rich stew. The cooking might be improved, curries occasionally given instead of the ever-recurring stews, and altogether more variety introduced into the dishes. He advises the keeping of cold tea as a wholesome drink, and is of opinion that an evening issue of rum in such campaigns as that in Egypt tends to prevent much illness amongst the forces.

As regards clothing, Dr. Corban condemns the present campaigning dress, and considers that worn by the Mountain Battery, the Seaforth Highlanders, and the Manchester Regiment, much superior. He would put cavalry, artillery, and infantry into this "kakhee" clothing, which might be lined with thick flannel, for campaigning in a cold climate.

As to equipment, several suggestions are made for the better carrying of the soldier's tools on the march; and alterations in the water-carts and bottles are proposed, with the object of purifying the bad water supplied during a campaign.

As respects medical aid, the author is in favour of independent medical aid for regiments and batteries, according to the equipment given for the Duke of Cornwall's Light Infantry, which he found invaluable for the good of the regiment. The contents of the panniers need revision, and more medical comforts than are now carried might be transported. The surgeon's pocket-case also comes in for some criticism; and Dr. Corban has devised a new pattern belt and pouch, which contains several new instruments, bullet forceps, aneurysm needle, hypodermic syringe for morphia, etc., from which the doctor under no circumstances would thus be separated, nor would he find himself unequal to any of the emergencies of a campaign. Dr. Corban is also emphatic as to the great advantage of the early treatment of the sick, and the keeping of all the ordinary mild cases in camp. Altogether, this pamphlet of twelve pages seems to contain many valuable suggestions. It is published by Westcott, 14, Frankfort Street, Plymouth.

;—In view of the approaching competition for admission to the Army Medical Department, I beg to point out the following facts for the consideration of intending candidates. 1. The likelihood that the regimental system may be reintroduced in some form, in which case a junior surgeon cannot live upon his pay. 2. The Indian Government refuse to recognise the new warrant, so that a junior surgeon only receives lieutenant's pay and allowances in India. Brigade-surgeons in India only receive the pay of surgeons-major. 4. While an Indian surgeon is commissioned from the day he enters Netley Hospital, a British surgeon's commission dates from the day he leaves Netley.—I am, &c.,

SMALL MEANS.

A MEMORIAL in granite and Sicilian marble to the memory of the late Deputy-Inspector General George Birnie Hill, R.N., who died whilst serving in the Royal Naval Hospital, Malta, has been erected in the Naval Cemetery, by his friends in the service there, as a mark of esteem and respect.

SURG.-MAJ. EDGAR CROOKSHANK, who was attached to the Army Medical Department, in Egypt, has received, by desire of H.R.H. the Field-Marshal Commanding-in-Chief, the Egyptian medal, with clasp (Tel-el-Kebir), in recognition of his services during the late campaign.

THE weekly health returns from Cairo show that 1,440 officers and men are sick, out of a total British force in Egypt of 12,976. This is a general improvement in every corps; though the cavalry have over 20 per cent., and the artillery over 14 per cent. of their number in hospital.

VACCINATION.—Mr. O. Lowsley, of Reading, has received from the Local Government Board the sum of £68 5s. for efficient vaccination. This is the fifth time he has been granted an award.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

A PROPOSED INQUIRY INTO VACCINATION.

MR. MONTAGUE D. MAKUNA, late medical superintendent of the Fulham Small-pox Hospital, has addressed a letter to public vaccinators, leading physicians and surgeons, and public authorities throughout the country, in which he asks for their opinions and the result of their experience on various points bearing on the value of vaccination, its pathology and practice. The questions put are: 1. What are your views regarding compulsory vaccination? 2. What regarding the protection afforded by vaccination against small-pox? 3. What diseases have you, in your experience, known to be conveyed, or occasioned, or intensified, by vaccination? (Please give cases.) 4. What opinion do you hold as to the quantity and quality of vaccination as determined by the cicatrices? 5. What as to the relative values of humanised and animal lymph, both as regards efficacy and safety? 6. What as to the relations subsisting between variola and vaccinia, and the theory of vaccination? 7. How far do you consider unsanitary conditions responsible for small-pox epidemics; and how far can small-pox be controlled by improved sanitation?

While duly appreciating the motives which have led Mr. Makuna to take this course, we must be allowed to doubt whether the value of the information received will bear any proportion to its amount. Men and their opinions must be weighed, not counted; and on several of the questions proposed, mere numbers will be of little worth. As regards the modes of performing the operation, the relative advantages of numerous small punctures, or a few large scarifications, producing cicatrices of equal aggregate area; with the former, every public vaccinator and medical officer of a small-pox hospital is competent to form an opinion, and the latter has ample opportunities of judging of the protection afforded by cicatrices of various character and size; but how few have had any experience of animal vaccination, and how, until the persons, who of late have been thus vaccinated, are not only numerous enough, but have been for twenty, thirty, or forty years exposed to the chances of infection, can any valid idea be formed of its relative protective power? Again, the result of many official inquiries into alleged cases of communication of disease by, or death from vaccination, shows the need of great caution in accepting as facts any statements without the strictest investigation. How often is the conclusion merely an example of the *post ergo propter* fallacy, the case one of coincidence, or of disease existing in the vaccinated infant prior to and, therefore, independent of vaccination. The vaccination of a child is postponed on account of syphilis or eczema in countless cases. Suppose the child to have been vaccinated shortly before the disease was destined to manifest itself, the disease is at once said to be the effect of the operation. Again, few will, without the authority imparted by an official mission, be able to elicit such information as to the sanitary surroundings, the home treatment, and other accidents of a case of erysipelas, as to be able to decide whether it was erysipelas from vaccination, *i.e.*, the result of a virus contained in the lymph employed, or erysipelas after vaccination, *i.e*, introduced into the puncture, as it might have been into a prick from the mother's brooch-pin, irrespectively of the fact of vaccination.

The relation subsisting between variola and vaccine and the theory of vaccination is even less likely to be thus elucidated. Few medical men, we venture to think, have any clear notion of the pathological relations of the diseases of man and cattle; and of those who hold one or other opinion, the vast majority have taken it on the authority of their teachers or some standard work. Very few indeed have taken the trouble to read and compare the researches and arguments of Jenner, Ceely, Badcock, etc., on the one hand, and Chauveau and Fleming on the other; and still fewer are as yet acquainted with the brilliant experiments of Virgh, who, within the last two years, has succeeded in transforming a virulent variola into unimpeachable vaccine, has explained the conflicting results obtained by Ceely, etc., and by Martin in America, and has triumphantly vindicated the reputation of the immortal Jenner against his French detractors. These are not points to be decided by majorities, but problems to be solved, if not solved already, by long and careful experimentation, reasoning, and observation. The last question is, one would almost think, added as a sop to the antivaccinators, or at least to give them a kind of chance. We imagined that no competent man believed that small-pox was in any way directly favoured by un-

sanitary, or checked by good sanitary conditions directly, in the same sense as enteric fever, typhus, diphtheria, and perhaps scarlatina; for, of course, overcrowding will tend to the spread of any disease, while isolation, fresh air, and domestic comforts will have the opposite effect.

That improved sanitary conditions will of themselves lead to the extinction of small-pox, is a favourite dogma of the antivaccinationists, but one for which not a particle of proof is forthcoming; the comparative immunity enjoyed by the well-to-do classes being doubtless due to the facts that they are less exposed to infection, are almost universally vaccinated, and are frequently revaccinated; whereas the lower classes rarely avail themselves of this latter protection, except in times of panic, when too often the operation is imperfectly performed on account of the excessive demand on the stock of lymph.

The uselessness of inspection and disinfection alone was well shown in New Orleans, where small-pox, previously only sporadic, increased year by year from 1870 to 1877, until in the last named year there were 4,263 cases, with 1,727 deaths. During this period, every means was employed to check its progress, but in vain; every means except the right one—vaccination and revaccination. Since that year, every person who had not had small-pox has been vaccinated or revaccinated, and the deaths have ranged from 0 to 1 *per annum*. Certainly there are fewer susceptible persons left, but the sudden cessation of the epidemic cannot be accounted for otherwise than by the adoption of vaccination; since it would be absurd to suppose that the limit was thus abruptly reached, and that five-sixths of the population, as well as the immigrants and infants, were all insusceptible.

It would have been well if Mr. Makuna had sought information as to authentic instances of small-pox in persons who had been twice efficiently vaccinated. Such cases do occur, but they are extremely rare, rarer than cases of second small-pox, and seldom, if ever, fatal. Indeed, we do not think that the value of revaccination, far greater as it is than that of infantile vaccination, is sufficiently insisted on by the profession and the press. The majority of cases of small-pox among persons more or less efficiently vaccinated, and the vast majority of the deaths, occur between the ages of 20 and 40, and especially from 30 to 40, when the effect of the early vaccination is wearing off, and before old age has brought with it a comparative insusceptibility.

That small-pox has been more prevalent of late than it was twenty years ago, is repeated on every antivaccination platform as proof of the uselessness of the preventive. We admit the fact, but deny the inference. All infectious diseases, notably measles, show periodical exacerbation or cycles of epidemic and non-epidemic years; there are in every community a number of persons more susceptible than others; and when all, or nearly all these have been attacked, the epidemic declines, until the susceptible part of the population has been recruited by births and migration. In this, small-pox follows the general rule, and such periodical rise and fall in the mortality is observed in every country; but there is a second factor, and one peculiar to this disease. If vaccination be neglected or, what is equivalent, imperfectly performed, the proportion of susceptible persons is greatly increased; that this is the case in England we unhesitatingly assert, and the opponents of vaccination are working hard in this direction; while we regret that many members of our profession sanction the popular error that failure to take vaccination, due in nearly all cases to want of skill in the operator, or to the use of too small a quantity of lymph, its excessive dilution with glycerin, or its poor quality, implies insusceptibility to small-pox, and that one or two small cicatrices are as good as more and larger ones.

In other countries, and notably in Holland and Prussia, where, since the great wave which passed over all Europe in 1871, vaccination has been rigidly enforced and thoroughly performed, no such recrudescence of the disease has been observed. But, admitting the worst, what is the truth as regards England? The mortality in the epidemic years of 1871 and 1880 did not exceed, if it reached, the general average which obtained previously to the introduction of vaccination in whole decades, epidemic and non-epidemic years taken together. The ratio of deaths from small-pox to 1,000 deaths from all causes in each decennium, from 1760 to 1880, has been, 108, 98, 97, 88, 64, 42, 32, 23, 16, 11, 11, 11.

FEES FOR MEDICAL ATTENDANCE.

SIR,—I shall feel very much obliged if you will kindly give me your opinion in the JOURNAL upon the following.

"September 10th, 1882.

"Dear Sir,—Our groom's little boy has been kicked by a pony, and we fear his leg is broken. Could you come as soon as possible?—I remain, yours truly, ——."

I attended at once, six miles from my house, and found the case to be one of fracture of the lower third of the femur. At my visit on the 19th, I was presented by the mother of the child with an official order from the relieving officer, dated 11 A.M. of the 19th day of September.

I continued to attend the case until recovery, and thought nothing more about it until making up my bills to the end of last year. I sent one to the husband of —— (a large farmer), charging him for my attendance upon his groom's child from the 10th to 19th September. I received the following answer.

"I am much surprised at receiving a bill from you for attending my groom's child. I find it quite enough, at the present time, to pay my own bills, without paying accounts which belong to the parish."

Did I do wrong in charging for my attendance from the 10th to 19th September, the date of receiving the order of the relieving officer? Neither —— or husband are private patients of mine, and there are no extra fees allowed by the board of guardians, such being included in the fixed salary.—I am, sir, yours truly, ROBERT SHIELS, L.R.C.P.Ed., Mem. Brit. Med. Assoc.

Sutton Scotney, Micheldever, Hants, January 24th, 1883.

*** We consider that, under the circumstances named in our correspondent's communication, he can, if he be so minded, recover through the county court reasonable remuneration from the party who sent for him, as his written communication establishes his liability; but only for the attendance, etc., between the 10th and the 19th, when the parish order was given. The case supplies a melancholy instance of the very sharp practice followed by so-called gentlemen farmers and guardians in their dealings with parochial medical officers. Our advice would be this: before visiting under such circumstances, to inquire, Who is going to pay me for the services rendered?

MEDICO-LEGAL NOTES AND QUERIES.

MEDICAL ATTENDANCE UNDER THE MARRIED WOMAN'S PROPERTY ACT.

SIR,—Will you be kind enough to inform me if, under the above Act, a man will be able to refuse to pay for attendance on his family, on the ground that his authority for such attendance had not been obtained? and if he would be able to sustain his refusal in the county court? If such is the case, what steps would you advise the medical practitioners to take so as to secure to themselves payment, and yet avoid hurting the susceptible feelings of the patients?—I am, sir, yours truly, EDWARD MATHEWS, L.R.C.S.I.

Redditch, January 19th, 1883.

*** The liability of a husband to pay for goods or anything else ordered by his wife depends in each case on the question whether the wife was his agent to order them. If she be living separate from him, he may, in certain circumstances, be liable to pay for such things as are necessary for his wife, having regard to his position in life; but, if they be living together, the question of necessaries does not arise. "In the ordinary care of the management of a household, the wife is the manager of the household, and would necessarily get short and reasonable credit on butcher's and baker's bills, and such things, and for these she would have authority to pledge the credit of her husband." If the husband and wife be living together, a jury (or county court judge) may presume from that fact that the husband has given his wife authority to pledge his credit for anything ordinarily wanted for his household. "But, even then, the authority would not arise so long as he supplied her with the means of procuring the articles otherwise." Medical attendance stands much on the same footing as the supply of anything else that is ordinarily wanted in a household. If a child or a servant be ill, it is usual for the head of the household to provide that child or servant with medical attendance; and there is a presumption, if a wife or housekeeper send for the doctor in such a case, that she has the authority of the master of the house for so sending. This presumption is, however, liable to be rebutted, as in any other case where an agent pledges the credit of another person. That person may always prove that his supposed agent had not, in fact, authority to pledge his credit. A husband might, for instance, tell his wife to send only for one particular doctor, and refuse to pay for the services of any one else. In all cases where credit is given, and the husband afterwards refuses to pay, there is an apparent hardship on the creditor; but, in any rate, in the case of a doctor, the Married Woman's Property Act, 1882, puts him in rather a better position than formerly. If the husband refuse to pay, and the wife have means, he might maintain an action against her, with a very fair chance of success; but he would generally be able to prove his case against the husband, as medical attendance is a matter which would be included in usual household expenditure, and which the wife, therefore, would presumably be authorised to order. As regards children, at any rate, *parents* are by law, under the obligation of providing medical attendance whenever they are seriously ill, so that both father and mother would

able to pay a doctor who attended in such a case. The husband ight decline to pay for attendance on his servants, and the agency f the wife to order it be less easily established; but, as a rule, a ife is her husband's agent for the purpose of ordering medical ttendance. There is no necessity for the doctor to be more careful an other creditors; but, if he anticipate any difficulty being raised, e had better send in his bill before it becomes too large; if that e paid, he can make the payer liable for subsequent services; and, there be any difficulty, a small loss is better than a large one.

LAW OF MALAPRAXIS.

HE full Supreme Bench of the State of Michigan, in reversal of the ilings and findings of a lower court, have given a decision of in- rest to the medical profession. A surgeon, being called in con- ltation to a case of compound fracture of both legs below the iee, advised amputation of both extremities, which was refused. ne leg was amputated, and the other finally recovered with formity. The plaintiff sued for his pay, and the defendant aimed malpractice. The decision of the Supreme Court establishes e following points. There is no presumption of law as to the lue of a surgeon's services, nor that a jury can ascertain their lue without testimony from persons knowing something about it. r has a jury the right to reduce the compensation claimed for such vice where undisputed testimony shows it to have been appro- ate, or, on their own unsupported notions, that the treatment opted should have been different. A jury has no right to ignore timony that has not been discredited, and form independent con- sions, without testimony, on matters that require proof beyond ir conjectures or opinions. The fact that a surgeon changes a rse of treatment adopted by another, does not in itself show that former course of treatment was not proper at the time; nor is patient's failure to recover perfect soundness of limb, in itself, dence of malpractice; nor is the fact that he survived, although refused to allow a particular course of treatment, evidence that h course might not have been proper under the circumstances. jury, in an action for the value of surgical services, has no right find malpractice without testimony from persons who are lified to give opinions on the methods of treatment.

MEDICAL NEWS.

OYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Mem- . January 25th, 1883.

shby, Henry, M.D.London, Manchester
eckett, John, M.D.Glasgow, Windermere
arpenter, Alfred, M.D.London, Croydon
aig, Alexander, M.B.Oxford, 23, Chepstow Villas, W.
ing, David Alexander, M.B.London, 51, Pembridge Villas, W.
cConnell, James Frederick Parry, M.D.Aberdeen, Calcutta
hillips, Sidney Philip, M.D.London, 12, Radnor Place, W.
ichardson, Adolphus Joseph, London Hospital, E.
hite, William Hale, M.D.London, 4, St. Thomas Street, S.E.

itted Licentiates.

llen, Frank James, Shepton Mallett
ateman, Hinton Ernest, St. Bartholomew's Hospital, E.C.
oxall, Robert, Cranleigh, Guildford
rowne, Ralph Henry, Guy's Hospital, S.E.
uol, Florian, Davos Platz, Switzerland
iger, Frederick Foord, St. Thomas's Hospital, S.E.
hadwick, Charles Montague, London Hospital, E.
ckburn, Lestock Weatherley, St. Bartholomew's Hospital, E.C.
dd, Arthur Frederick Gambell, 72, Clarendon Road, W.
ward, Richard Courtenay, 41, Penywern Road, S.W.
msey, Edgar Ralph, Middlesex Hospital, W.
ches, William Robert, Guy's Hospital, S.E.
aham, Samuel, Carnaughliss, Ligoniel, Belfast, Ireland
ant, James Alexander, jun., M.D.McGill, 103, Guildford Street, W.C.
iffith, Walter Spencer Anderson, St. Bartholomew's Hospital, E.C.
illim, Richard Davis Hoyle, Marlborough
bbert, Charles Alfred, 7, Sanctuary, S.W.
nes, Owen Clayton, City of London Hospital, Victoria Park, E.
nes, William Hugh Fenton, 28, Duke Street, Manchester Square, W.
ham, Charles Speight, West Pelton, Chester-le-Street
ford, John, 27, Villa Road, S.W.
get, Charles Edward, 21B, Princes Street, Hanover Square, W.
mer, Frederick Stephen, M.D.Brussels, Compton Lodge, East Sheen, S.W.
wer, Charles John, 3, De Laune Street, S.E.
ngley, Henry John, West Cowes, Isle of Wight
gate, David John, 126, Cannon Street Road, E.
mon, Arthur Guy, 37, Granville Square, W.C.
ppard, William John, Rotherwood, Oakhill Road, Putney, S.W.
re, Thomas William, 43, Beaumont Street, W.
tzly, John Henry, 9, Grange Road, N.
derland, Septimus, Montague Road, Edgbaston, Birmingham
ing, Edward Thomas, University Hospital, W.C.
Travers, Geoffrey Frederic, 18, Nevern Road, S.W.
Tresidder, Edward Stanley, Guy's Hospital, S.E.
Wakley, Thomas, 96, Redcliffe Gardens, S.W.
Waring, John Arkle, 39, Princes Gardens, S.W.
Winder, William Henry, 255, York Street, Cheetham, Manchester.
Wynter, Walter Essex, Templecombe, St. Margaret's, Twickenham.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 25th, 1883.

Clarke, Charles Frederick, Crescent Road, Plumstead.
Evans, Willmott Henderson, Montagu Place, Russell Square.
Josling, Charles Langford, The Parade, Epsom.
Murray, Charles Stormont, Cumberland Place, Hyde Park.
Orford, John, Villa Road, Brixton.
Vinrace, Edward Dennis, Hockley, Birmingham.

MEDICAL VACANCIES.

ANTRIM UNION.—Connor Dispensary, Medical Officer. Salary, £95 per annum, with fees. Election on February 13th.

BEDFORD PROVIDENT DISPENSARY.—Dispenser. Salary, £60 per annum. Applications to the Honorary Secretary.

CASHEL UNION.—Cashel Dispensary, Medical Officer. Salary, £140, with fees. Election on February 14th.

CHARING CROSS HOSPITAL.—Medical Registrar. Applications by February 19th.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester. Honorary Surgeon. Applications to the Honorary Secretary, A. Fox, Esq., 53, Princes Street, Manchester.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Manchester.—Honorary Surgeon. Applications by February 6th.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Manchester.—Honorary Assistant Medical Officer. Applications by February 6th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by February 12th.

DORE UNION, Hereford.—Medical Officer. Salary, £70 per annum. Applications by February 6th.

GLASGOW MATERNITY HOSPITAL.—Out-door Accoucheur. Applications to the Secretary by February 3rd.

HOSPITAL FOR WOMEN AND CHILDREN, 3 and 4, Vincent Square, S.W.—Honorary Physician and Honorary Surgeon. Applications to the Honorary Secretary by February 3rd.

KENSINGTON DISPENSARY.—Resident Medical Officer. Salary, £125 per annum. Applications by February 10th.

LONDON FEVER HOSPITAL, Liverpool Road.—Assistant-Physician. Applications by February 3rd.

NEW ROSS UNION.—Felhard Dispensary, Medical Officer. Salary, £115, with fees. Election on February 8th.

PADDINGTON GREEN HOSPITAL FOR SICK CHILDREN.—Honorary Surgeon. Applications to the Honorary Secretary, 12, Bell Street, Edgware Road, by February 8th.

PADDINGTON GREEN HOSPITAL FOR SICK CHILDREN.—Honorary Ophthalmic Surgeon. Applications to the Honorary Secretary, 12, Bell Street, Edgware Road, by February 8th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, St. Marylebone Road, W.—Resident Medical Officer. Salary, £60 per annum. Applications by February 9th.

ROYAL MEDICAL BENEVOLENT COLLEGE.—Morgan Annuitant. Applications by the end of February.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by February 8th.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary, £75 per annum. Applications by February 6th.

SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—Honorary Surgeon. Applications to the Secretary by February 6th.

THE HOSPITAL, St. Albans.—Dispenser. Applications to the Honorary Secretary.

WESTERN GENERAL DISPENSARY.—Honorary Surgeon-Dentist. Applications by February 12th.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho.—Resident Medical Officer. Salary, £100 per annum. Applications by February 17th.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Second Dental Surgeon. Applications by February 6th.

MEDICAL APPOINTMENTS.

BAILEY, J. J., L.D.S., appointed Honorary Dental Surgeon to the Denbighshire General Infirmary, *vice* E. Lloyd-Williams, L.D.S., resigned.

BERRY, John B., M.R.C.S., L.S.A., appointed House-Physician to the Roya Free Hospital.

BOOTH-CLARKSON, James, L.R.C.P. and S.Edin., late Medical Officer Inman Royal Mail Service, appointed Medical Officer to the American United States Mail Service.

BOOTH, E. Hargrave, appointed House-Surgeon to the Seamen's Hospital, Greenwich.

CRICHTON, George, A.M., M.B., L.R.C.S.Ed., appointed Medical Officer of the Twickenham Provident Dispensary.

HUMBLE, George A., M.D., M.R.C.P.Lond., appointed Physician to the Sociedad Universal de Socorros Mutuos y Beneficiencia de Patagones, Argentine Republic, South America.

KING, David A., M.B., M.R.C.P., appointed Casualty Physician to St. Bartholomew's Hospital, *vice* Percy Kidd, M.B., appointment expired.

PAGE, F. J. M., B.Sc., appointed Lecturer on Physics to the London Hospital Medical College.

WITHERS, J. S., M.R.C.S., appointed Resident Medical Officer to the St. Mary's Hospital, Manchester, *vice* W. Bain, L.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

LEIGH—JONES.—January 24th, at St. John's Church, Cefn Coed, Breconshire, by the Rev. R. Williams, Rector of Vaynor, and the Rev. D. Leigh, Rector of Llanfabon (uncle of the bridegroom), William Watkin Leigh, M.R.C.S.Eng., L.R.C.P., eldest son of John Leigh, Esq., F.R.C.S.Eng., J.P., of Llanfabon, Glamorganshire, to Jessie Louisa, youngest daughter of William Jones, Esq., of Glanyrafon, Cefn Coed, Breconshire.

REDMAYNE—BLOMFIELD.—On the 25th instant, at Brothay Church, Ambleside, by the Lord Bishop of Colchester, assisted by the Rev. Prebendary Brook, Rector of Hackney, uncles of the bride, and the Rev. H. S. Callender, Vicar of the Parish, Hugh Redmayne, M.R.C.S.Lond., L.R.C.P.Ed., of Ambleside, second son of Giles Redmayne, of Brathay Hall, to Katharine Mary, second daughter of the late Rev. J. G. Blomfield, Rector of St. Andrew's, Undershaft, London.

SMITH—WALTERS.—On the 17th instant, at Holy Trinity Church, Winchester, by the Rev. John Vodin Walters, M.A., Vicar of St. Columba's, London, formerly Rector of St. Martin's, Salisbury, and cousin of the bride (her father, and also the Rev. Geo. A. Seymour, M.A., Rector of the parish, taking part in the service), James Snowden Smith, M.R.C.S.Eng., and L.R.C.P.Ed., of St. Austell, Cornwall, and son of Mr. Geo. Smith, Solicitor, of Westbourne, Salisbury, to Frances Mary Flamstead, elder daughter of the Rev. Alfred Vaughan Walters, B.A.Oxon, formerly curate of Amesbury and Allington.

DEATH.

SWINSON.—On the 26th instant, at 31, Braithwaite Road, Birmingham, Henry Swinson, L.F.P.S.G. and L.M.

HEALTH OF FOREIGN CITIES.—It appears from statistics, published in the Registrar-General's last weekly return, that the death-rate recently averaged 34.8 per 1000 in the three principal Indian cities; it was 27.4 in Bombay, 39.8 in Madras, and 43.2 in Calcutta. Cholera caused 97 deaths in Calcutta, showing a further increase upon recent weekly numbers, and small-pox 22 in Bombay; fever mortality showed the largest excess in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty of the largest European cities, was 27.9, and was no less than 5.5 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 41.4, and exceeded the rate in recent weeks; the 737 deaths included 28 fatal cases of small-pox and 28 of diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 25.7, and ranged from 18.3 in Christiania to 28.8 in Stockholm; scarlet fever caused 6 deaths in Stockholm, and whooping-cough showed fatal prevalence in Christiania and Copenhagen. In Paris, the death-rate was equal to 25.8, and the deaths included 56 from typhoid fever, 42 from diphtheria, and 14 from small-pox. The 190 deaths in Brussels were equal to a rate of 24.3, and included 3 fatal cases of small-pox, and 3 of "fever". The rate in Geneva did not exceed 21.6. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.6, the rate being equal to 28.7 both in Amsterdam and Rotterdam; small-pox caused 4 deaths in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 26.1, and ranged from 21.9 in Berlin and 22.2 in Dresden, to 30.6 and 36.2 respectively in Hamburg and Trieste. Small-pox caused 3 deaths both in Vienna and Buda-Pesth; diphtheria continues to show fatal prevalence in most of these German cities, especially in Dresden and in Trieste. The death-rate was equal to 37.4 in Venice, where 9 of the 97 deaths resulted from measles. In four great American cities, the mean death-rate was 25.6; the rate ranging from 22.6 in Brooklyn, to 30.8 in Baltimore. Small-pox caused 79 deaths in Baltimore, showing a further increase upon previous weekly numbers, and 4 in Philadelphia. Diphtheria fatality was excessive in each of these American cities, but most so in Philadelphia.

WHAT A BLIND MAN SEES.—The French scientist, Plateau, who for the last forty years, had been totally blind, has published a little paper on the sensations which he experiences in his eyes. He states that he has constantly in his eyes the sensations of light; his field of vision is divided into spaces, of which some are very clear, and others sombre or almost black. These spaces are not precisely limited, but run into each other at their borders; but what is remarkable is, that their general tint alternates between grey and reddish. For example, if it be grey that M. Plateau perceives now, in a few hours it will be red; then, a few hours later, the grey again and so on. The reddish tint is that obtained by mixing pale rose colour or rather flesh colour, with a certain quantity of black. The relative arrangement of these different spaces is always the same, but the intensity of their tints varies. The central space shows itself some times very clear, and sometimes very sombre; above and below, as far as the limits of the visual field, there is sometimes clearness sometimes obscurity. It is the same with the space to the left there is generally a vertical, almost black band, and the space to the right of that, as far as its limit, is almost always clear and ruddy. These appearances seem, to M. Plateau, to fill the whole extent of his ordinary visual field. He believes the distance at which they are is small. These same appearances follow all the movements of the eyes, as if they resulted from a modification of the retinas. It appears to M. Plateau that the two eyes do not participate in the same manner in the tints in question; but he is absolutely incapable of distinguishing what belongs to the one from what belongs to the other. He has not been able to establish any coincidence between the changes of the general tint and the work of digestion.

ST. JOHN'S AMBULANCE ASSOCIATION.—The certificates which have been awarded by the St. John's Ambulance Association to the members of the local centre of this association, have been distributed by the Princess Christian at the Windsor Guildhall. The Rev. R. Tahourdin, after thanking the Princess for her presence, and the interest she manifested in the association, alluded to the very valuable assistance which the members had received from the instructions contained in Her Royal Highness's translation of "First Aid to the Injured," a manual by Professor Esmarch, of Kiel, who is brother-in-law of Princess Christian. At an examination held last month, the members of the Windsor centre passed, and fifteen of them had the honour of receiving their certificates from Her Royal Highness, in the presence of the company assembled in the hall. The remainder had already received certificates of proficiency. The Princess returned at the close of the brief ceremony to Cumberland Lodge.

NEW HOSPITAL FOR NORTH LONDON.—The first general meeting of the Provisional Council for obtaining increased hospital accommodation in the northern districts of London, has been held in the Highbury Athenæum. The report of the Executive Committee, bearing on the dispensaries and other medical charities of North London, having been received, it was resolved that the time had come for the active promotion of the new scheme. This aims at providing largely increased hospital accommodation for the North of London on new lines of management, its principal features being the combination of special departments with a general hospital, and the adoption of a graduated pay system. It was further resolved that a meeting should be held after Easter, at which the proposals should be definitely brought before the public.

FRENCH HOSPITAL.—The fifteenth annual dinner in aid of the funds of this institution has been held at Willis's Rooms. The Chairman, in the course of some remarks, said that this hospital, which was opened on December 1st, 1867, for the relief of distressed foreigners of all nations, and enlarged in 1878, now contained 36 wards; four for men, two for women, one for children, one lying-in, and one for accidents, besides a consulting-room and a dispensary. It was attended by the leading French medical men of the metropolis, by a resident house-surgeon, and by sisters of charity, who act as nurses. Since the day of its opening, it had afforded relief to 2,929 in-patients, and 69,794 out-patients, divided into more than twenty-four nationalities, for, although French in name, it was quite cosmopolitan in character. The Lord Mayor and Mr. Alderman Sheriff De Keyser responded to the toasts, and Mr. Rigg read a list of subscriptions collected during the evening, which amounted to about £1,200.

MR. J. GRAHAM'S BEQUEST.—It may be interesting to note that of the £98,000 left by the late Mr. James Graham, to be devoted to charitable purposes, his executors have shown a wise discretion in distributing £50,000 of this great bequest among the metropolitan charities of the metropolis. This sum is apportioned as follows among 48 hospitals and other kindred institutions—General hospitals, £19,500; Special hospitals: 5 Consumption, £6,750; 3 Ophthalmic, £1,750; 1 Orthopædic, £250; 1 Skin, £500; 6 Women, £2,750; 4 Children, £4,500; 2 Lying-in, £750; 6 Miscellaneous, £3,500; 3 Lock and Fever, £2,000; 1 Cancer, £1,000, 2 Incurable, £3,000; 1 General Dispensary, £500; 3 Convalescent Homes, £750; 2 Nursing Institutions, £750; 2 Truss and Surgical Aid Society, £1,000.

DONATION.—The sum of £1,000 has been presented by an anonymous donor to the Sick Children's Hospital in Aberdeen.

OPERATION DAYS AT THE HOSPITALS.

ONDAY. .....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

ESDAY. .....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

EDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

URSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

IDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

URDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

RING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, Th.; Dental, M. W. F., 9.30.

'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; e, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, . Th. F., 12.

'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, . 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

ON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. ., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, , 9.

LESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S.,); Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; , W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, , 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

EORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., , 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, , 2; Dental, Tu. S., 9; Th., 1.

ARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., ; Dental, W. S., 9.30.

HOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; , W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; a, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

ERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, . 2.30; Dental, W., 10.30.

MINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

DAY.—Medical Society of London, 8.30 P.M. Dr. Sansom will deliver the third Lettsomian Lecture on the Treatment of some Forms of Valvular Diseases of the Heart—Mitral Stenosis—Lesions of Aortic Valves.—Odontological Society of Great Britain, 8 P.M. Inaugural Address by the President. Casual Communications: Mr. Sewill will open a discussion on the Proofs of the Present Theories of Caries in the Teeth. Mr. Stevenson will explain his Electric Lamp.

DAY.—Pathological Society of London, 8.30 P.M. Dr. Mahomed: Clot from Pulmonary Artery; Cancer of Undescended Testis. Dr. Norman Moore: Deep Ulceration of Cranium; Rheumatic Arthritis. Dr. Samuel West: Tubercle Bacilli; Aneurysm of Arch of Aorta (two cases). Mr. Sutton: Rickets in a Lizard. Mr. Godlee: Unilateral Anophthalmos (living specimen). Dr. Silcock; Aneurysm of Abdominal Aorta. Mr. Lockwood: Abnormality of the Bones and Muscles of Shoulder-Joint.

ESDAY.—Obstetrical Society of London, 8 P.M. Annual Meeting. Election of Officers and Council. Specimens will be shown. President's Address. Dr. Godson: Clinical Cases of Interest, with Remarks thereon.—Epidemiological Society of London, 8 P.M. Deputy Surgeon-General A. C. C. De Renzy: The Sanitary State of the British Troops in Northern India.

AY.—Clinical Society of London, 8.30 P.M. Mr. Shuter: On Subperiosteal Amputation at the Hip-Joint. Mr. Bennet May: On a Case of Nephrotomy; Stone weighing 473 grains; Complete Recovery. Dr. J. K. Fowler: On Two Cases of Pseudo-hypertrophic Paralysis in Adults (patients exhibited). Mr. Godlee: On a Case of Fracture of the Radius and Dislocation Forwards of the Ulna at the Wrist, in which the lower end of the latter Bone was removed to effect Reduction (patient to be shown).

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

ON A BETTER PROVISION FOR MARINE MEDICAL OFFICERS.

SIR,—May I call your kind attention to a most important matter? The existing provision for a valuable and truly deserving class of men, the medical officers of the mercantile marine, is perfectly insufficient in respect of their actual services, their antecedents, and position as gentlemen. To them is, to a large extent, confided, or ought to be confided, the material welfare, health, and the prevention of disease regarded, of all those who fare by sea. The number of persons afloat on the immense ocean is always very great. They are liable to all the diseases which beset human beings on dry land, with the further risks that the sea entails. The present pay of medical men in the mercantile marine is wholly inadequate. They are at the mercy of owners, who in too many instances screw down their remuneration to the merest pittance. They are debarred of any control over those conditions, such as food-supplies, ventilation, clothing, lodging, and sanitary appliances, which subserve, or at least ought to subserve, human health and well-being; and if they venture upon any suggestions that involve trouble or expense, they incur the disfavour, if not the enmity, of employers. All this ought to be changed by Act of Parliament. It ought not to be optional to mulct the reasonable remuneration of marine medical officers. The pay ought to be on a parity with that of the highest class of army and navy surgeons, with a further allowance set apart for superannuation, or otherwise a life assurance, so that the medical man, when, owing to disease, accident, or advanced years, he should no longer be able for the exercise of his profession, would not be thrown adrift without resource. The assurance or superannuation ought not, I submit, to be less than a thousand pounds, and the minimum of pay, say, twenty pounds a month, and at least that sum for any run, however short. But these are matters of detail which could be arranged by a medical commission. I only desire to suggest that the interests of a most deserving and hardworking class of men should not be literally cast overboard. The labourer is worthy of his hire; and science, humanity, nay common morality, are alike insulted in regard of the wretched pecuniary return now awarded medical officers serving in the great commercial marine.—Yours, etc.,

Belfast, January 15th, 1883. HENRY MAC CORMAC, M.D.

SUICIDES.

SIR,—Would you kindly inform me where I can obtain reliable statistics showing the number of suicides committed in Great Britain during the last ten years? also the different ages and sex, etc.? I enclose my card, and remain, your obedient servant,

M.B.

*** Much statistical information respecting the suicides in England and Wales during the ten years 1871-80 is to be found in the Registrar-General's Forty-third Annual Report, relating mainly to the year 1880. These reports are published by Messrs. Eyre and Spottiswoode, Queen's Printers, of East Harding Street, Fetter Lane, London.

CHLORAL IN ALBUMINURIA.

SIR,—Mr. Thomas Wilson's paper in the JOURNAL of December 23rd is one of great interest, and the profession is undoubtedly indebted to him for bringing forward his observations. Mr. Wilson, however, says: "No explanation is offered as to how the chloral was followed by such beneficial results." Will you allow me to suggest one?

Chloral lessens arterial tension, and it is in this property, I venture to think, that its value resides. In kidney-diseases, accompanied with albuminuria, we have always high arterial tension. Partly, no doubt, the effect, this factor must necessarily (by delaying the passage of the blood through the renal capillaries, and at the same time increasing the pressure to which the vascular contents are subjected), act as a persistent cause. That this explanation is a probable one, is shown by the fact that several agents which have recently been much praised for their efficacy in albuminuria, viz., nitro-glycerin, amyl nitrite, and hydrocyanic acid, are all possessed of this property of lowering arterial tension. At the same time, considering the destructive effect of chloral upon the red blood-corpuscles, is it not a somewhat dangerous remedy to use freely in a case where cyanosis indicates an already degenerated blood-condition?—I am, yours faithfully,

Kineton, December 29th, 1882. KENNETH W. MILLICAN.

A YOUNG SHETLANDER will see, from a notice published in our Notices columns of the week before last, that the information which he is good enough to send us had already reached us, and been acted upon. We are indebted to him for his communication.

GERMAN TRANSLATIONS.

SIR,—The letter which you were good enough to publish for me in reference to obtaining assistance in making abstracts and translations from the Italian, brought me many applications which have fully answered the end in view. I am now in want of assistance in translating and abstracting from the German, and should be glad to hear from any medical man well versed in the German language who would like to undertake the work of translating German medical literature.—I am, etc.,

X.

Medicine and Pharmacy.

SIR,—Your correspondent "Examiner in Medicine" (BRITISH MEDICAL JOURNAL, November 25th, 1882), rightly considers the question of the connection between medicine and pharmacy as one of vital interest, to our own profession at all events. I question if the public good would not be equally secure whether medical men themselves dispense or not, provided that, if a change be made, it is rationally brought about. No one, probably, doubts that the general practitioner's social position would be improved by his ceasing to dispense. The public even know full well that medical practice is in itself a most exacting kind of work, and that, in order to do it justice, study must accompany it; and they naturally conclude that one who devotes himself to his professional duty ought to be better equipped to diagnose and treat than another, much of whose time is given to matters which lie properly within the province of the druggist, and they place him accordingly. But I think it is clear that other and even greater advantages would follow from such a division of the practitioner's labour. I have spoken of the need of study. Surely it is advisable to secure time for this; yet, in a busy practice, leisure time is spent in dispensing. There are men also, no doubt, in general practice, whose inclinations lead them to add their quota (but for want of time) to the knowledge which investigation in our energetic times is daily accumulating. These would welcome any means which could be devised of removing the burden of details which load their daily work, and are not of the essence of it. Then, as regards patients, would they not be, on the whole, safer in the hands of men who, having no alien and interrupting duty to perform, would have time to examine their symptoms minutely, and to follow the progress of medical opinion upon their diseases?

I have tried to show that there is promise of much advantage every way from our ceasing any longer to interfere with the chemist's proper function. But how? The practitioner usually agrees with this principle, but cannot find a plan; and certainly there are practical difficulties in the way of the proposed change. These are partly on the side of the patients, who object to increased expense—not the poor only, but often also the well-to-do. But there is a way out of this objection. The patient in comfortable circumstances would often find that the advantage of having a prescription in his hand, by saving him the time and cost of a consultation, would more than make up for his payments to the dispensing chemist, while his doctor would make up his loss by the saving on surgery expenditure. The same applies to the poor in their own degree; and, as a rule, the thrifty poor man who can pay eighteenpence, could pay a little extra for medicine, especially as it is not commonly necessary to prescribe afresh at every visit to a patient. The chemist in a poor district (no doubt he charges somewhat according to station in life) might reasonably moderate his fee if he knew that all dispensing would come his way.

This brings us to the druggist difficulty. I cannot help thinking that the persistence of this class in prescribing in spite of Acts of Parliament is greatly due to their feeling that it is fair, though not legal, that they should interfere with the minor practice of medical men who absorb much of their retail trade. Were the chemist's legitimate gains abandoned to him, he might have more consideration for the practitioner, and more fear of the law than he now seems to have.

For ourselves, have we no faults which hinder our emancipation? Might we not be more united, have less rivalry, less of the underselling, the provident dispensing on one's own account, a surer aim at our professional duty without too much neglecting our commercial success? After all, I fear the greatest difficulty we have to meet in trying to do without dispensing is our want of combination. What will one man do if he initiates such a change as this unaided—that is, one ordinary man? He may succeed, but more probably will only direct injury against himself. In union only, we are likely to prove in our case the old truth, that where there is a will there is a way.

It is not clear to me in what way this question affects the teaching bodies. In any case, a practitioner ought, in his student days, to learn the principles and methods of pharmacy as a part of therapeutics; he may, as your correspondent suggests, have an occasion to prepare a linseed-poultice; and, if necessary, let him not be ashamed to do it. But there is not an equal need that he should carry on a business in drugs on behalf of his patients. I have heard it said that men grow rusty in professional work if they do not habitually compound medicines. Alas, then, for the heads of our profession! surely they are blind leaders! Again, why should the general standard of medical education be lowered, even for one class of practitioners? It is very questionably fair to the sick that colleges and universities should send men to practise in their name, whether in town or country, on proof merely of their proficiency in pharmacy, materia medica, and minor details in medicine and surgery; and it is not more creditable to the colleges. Let the standard rather be high, or we may find our very patients read themselves up to our level; and, in countries where medical skill is valued, our own practising qualifications will come to rank only as premiums for incompetence.

Let me not forget to thank "Examiner in Medicine" for bringing this question before practitioners. He deserves many answers, and I hope may have them from the many medical men who are wishing to alter the present system in England, and who can do so only by strengthening professional bonds, and working together for the common good.—Yours, etc.,

GENERAL PRACTITIONER.

SIR,—The discussion on the dispensing or non-dispensing of their own medicines by medical men, has interested me much, and, as I have had some experience in both modes of practice, I should like to give it.

I commenced as a general practitioner in Radnorshire in 1845, of course dispensing my own medicines. A partnership on the south coast offered, of which I wished to avail myself, and I asked the druggist in the town if he would take the drugs I had off my hands. This he acceded to, offering me the same price at which he bought his drugs, showing me the price current he had from his wholesale house, and telling me candidly that he went in for second-class drugs; and on this list I observed that there were, in some instances, articles quoted at three or four different prices, which I presume found purchasers. What would be the position of a man who wrote his prescriptions here, if he depended on these drugs? and this was a market town, where the chemist was doing a large business, not only in his legitimate work, but also in prescribing over the counter.

This, my first experience, rather forcibly impressed on me the advice of my old master, "Nothing like working with your own tools, my boy." The negotiations led to my joining a practice that had been established thirty or forty years—a first-class one, dispensing our own medicines; and this I have continued to do, with modifications, moving with the times, and consulting the wishes of my patients, as the question of inferior drugs would not apply in this town.

I work my practice in this way: to those who prefer prescriptions, I give them. For all beyond a certain radius, I write prescriptions; or, if they prefer having medicines from my surgery, they have to send to it, which many like doing, as there is still a lurking idea in the public mind that doctors' physic is best.

Again, when medicines are sent out from the surgery, they are delivered without any further trouble to the patient, a matter of some importance if servants be scarce. I frequently find, though not to the same extent as formerly, when I ask for paper to write a prescription on, I am met with the question, "Don't you send your own medicine?" and when I say, "just as they like," I am answered, "We should prefer your sending it." I have always tried to avoid the degradation of being supposed to send in medicine before it was wanted, or more than was really necessary.

Though I have never objected, and am, indeed, pleased to give a copy of the prescription from which a patient thinks he has derived benefit, yet, on the other hand, I do not see why that which might legitimately go into my pocket should go into the druggist's. It is, I presume, the experience of all "family doctors," that patients constantly send to their surgery for medicines that have done them good in what they suppose were similar attacks; and then, if they do not get set to rights, you are asked to call; many of these would have drifted first into the druggist's hands. Of course, it would be all very nice and very dignified if the public would at once come to their doctor, and if druggists were not allowed to remake up prescriptions without the prescriber's sanction; but, in the present state of the case, a young man desirous of starting as a prescriber is very heavily handicapped. His rent is due—thinks he must have a carriage, as he is much knocked up by straggling patients, but cannot see his way to meet the expense. When brooding over this, he meets a patient who much appreciates his talents. "Well, doctor, I thought I should have to send to you, but I took your prescription (having asked the druggist's advice about it), and am all right again." The poor doctor is, of course, flattered, but the impression comes over him that he has been bilked of his fee, and the work of his brains has gone into the chemist's pocket. This thing ought not to be; but, as long as it is, I think the man who keeps his practice as much as possible in his own hands, does best for his patients and his own interests.—Faithfully yours,

M.R.C.S. & L.A.C.

ADVANCE.—The most recent small handbooks answering the description of our correspondent are those of Bristowe and Aitken.

Medical Subjects Mentioned by Herodotus.

SIR,—To those who read the interesting communication headed "Medical Subjects Mentioned by Herodotus," and signed "G", in the JOURNAL of November 25th, and to "G" himself, I should like, with your permission, to point out that the "female sickness", with which the Enarels were afflicted, was supposed by Hippocrates to have been due to venesection. I think I am also right in saying that he took it to be a form of impotency. In Rawlinson's edition of the *History of Herodotus*, the editor says in a foot-note that traces of this impotence are still, it is reported, to be found among the inhabitants of Southern Russia.

In Book ii, chap. 3, of Herodotus, we are made aware of the fact that the ancient Egyptians, notwithstanding their superior greatness and grandeur the present dwellers in the land of the Pharaohs, were no more exempt from one of the ills which Egyptian flesh is peculiarly heir to, namely, ophthalmia for we are told that they bathed their eyes in urine as a cure for that trouble some disease—a practice which, I believe, is still observed by the lower orders in Egypt.

The Ancients, according to Herodotus (Book iii, chap. 32), called epilepsy the "sacred sickness." This is, indeed, the very reverse of the diagnosis the disease as given by the Jews in the time of Christ, for with them epileptic was one possessed by a devil, or a legion of devils; and, far from wishing to reverence their diabolical antics, they considered it, and justly so, a praiseworthy act to exorcise them.

Colonel Fred. Burnaby, in his work *On Horseback Through Asia Minor*, writes of a remarkable practice in vogue with the Koordish mountaineers; and, as they inhabit some of the lands through which Herodotus once travelled, and which he has made classic, perhaps it would not be altogether out of place to mention it here. These Koords, in order, perchance, to get exempted from serving in the Turkish army, purposely rupture themselves. "This they do by pressing firmly with their finger and thumb on the lower part of the stomach until a swelling arises." The operation hurts, naively remarks Colonel Burnaby. The medical man who gave him this information, observed that they had a method of curing ruptures not generally known to the faculty; and as the remedy is quite as remarkable as the process of causing the disease, I beg to give you the benefit of it. They burn the skin around the seat of the hernia with a hot iron; the muscles then contract (presumably in cicatrising) and a cure is in this way often effected.

We hear much of the radical cure of hernia just now. May one be allowed to suggest, in all humility, the preceding as an operation, the efficiency of which might be tested by some of our leading surgeons?—I am, etc.,

H. L. I

Sheffield, November 28th, 1882.

The Blindness of King George V of Hanover.

MR. G. D. BROWN (Ealing).—We have been unable to arrive at a precise knowledge of the circumstances under which George V of Hanover lost the remainder of his eyesight. It is impossible to conceive that an "eminent German oculist", or, indeed, anyone else, could by an accidental shake of the hand have severed the optic nerve, as asserted by the writer of the article upon "The Last of the Georges", in *Temple Bar* of November last. In the first place, none of the operations then undertaken for the improvement of sight would have led the surgeon into the neighbourhood of this nerve; and then, again, it is to us at this day totally incredible that so large and tough a structure could have been divided inadvertently. It would be interesting to know the authority upon which the author of the article in question has made his statement. Meanwhile, we can but be very sceptical upon the subject.

ERRATUM.—In Mr. W. F. Phillips's letter on Deaths from Chloroform, in page 190 of last week's JOURNAL, line 4 of second paragraph, *for* "faradising", *read* "paralysing."

Sick Headache and Astigmatism.

IR,—In the JOURNAL of November 4th, 1882, you quote from Dr. Savage's paper on sick-headache and its connection with astigmatism and hypermetropia. I am twenty-six years of age. My sight has been bad as long as I can remember. Four years ago, whilst a student, working at practical histology, the ocular weakness and fatigue produced by working the microscope, compelled me to seek advice, which was very readily afforded by my lecturer in ophthalmic surgery. He told me I had both astigmatism and hypermetropia well marked in both eyes. Since then, I have constantly used the glasses prescribed by him when I have them by me, but it often happens they are not; whereon I never think of putting off my reading, unless the light is a very bad artificial one, but read on till my eyes are tired, and then resting for a time, read on again. Sometimes, when moving with troops, my glasses have been mislaid or left somewhere, during which time I manage without them. Two of my sisters are now (through proper advice) wearing similar glasses. During all this time, before and after using glasses, I never suffered from a headache or sick stomach, unless after exposure to the sun or during an attack of ague. Frequently during the hot weather I have read papers through at a sitting without glasses. This never produced a sick stomach in me, or any way weakened it. My sisters have never complained of sick-headache or stomach. All the rest of our family have very good sight and stomachs.

Perhaps in the cases Dr. Savage mentions, there exists some family idiosyncrasy, nervous sympathy, faculty of imitation, or some of those subtle influences whose action we do not understand. According to the remarks in the JOURNAL, he announces that he has discovered a real cause, and consequently a certain cure, for a most puzzling and intractable malady. To say so on the results of observations on four cases is surely premature, no matter how carefully he watched them and how speedy the relief.—Faithfully yours,

E. H. MYLES, Surgeon, Army Medical Department.

Peshawar, Punjaub, November 29th, 1882.

Since writing the above, I have heard the particulars of another case. A lady, married about twenty years, suffering from slight astigmatism, using glasses for the last few years. She has never been the subject of sick-headache or stomach; and as her health is always good, the glasses caused no improvement. Neither her husband nor any of her children are subject to sick-headache.

Transfusion in Hæmophilia.

e following particulars of an interesting case of hæmophilia, published by r. Dedolp in the *Transactions* of the Minnesota State Medical Society, are iven in the *Chicago Medical Review*. "The patient was attacked with angina nsillaris on both sides, and was nearly suffocated when first seen. The doctor cised the tonsils, which commenced bleeding at once, and continued to do for three days. Circumligation was performed, but as soon as the ligated asses came away, the bleeding recurred. The patient's history, as well as at of his family, pointed to a hæmorrhagic diathesis. On the twelfth day, ie patient was so exhausted that transfusion became necessary. None of the mily would give the blood. Accordingly, the carotid of a sheep was opened, id the blood passed into the man's basilar vein. No force was used beyond e pumping power of the sheep's heart. The bleeding stopped at once, when out eight ounces of blood had been transfused, and not a drop of blood was st from that time forward. The patient made a full recovery."

—Your correspondent "Kaliston Udor" needs nothing more distinctive than s confident manner of laying down the law, and his ready precedents, to oclaim him a teetotaller militant. One is sorry to undeceive him as to the otives of the Devonshire magistrates in withdrawing beer from their asyn; but I feel constrained to point out that their action was probably not ended as one of deference to the teetotal creed so much as to the creed of nomy. They, however, are not the only disciples of total abstinence from nomical reasons; and, indeed, if I were to say that Dr. Bucke of Canada, d Dr. Davies of Kent, had ulterior motives which assisted their reports, I esay I should have quite as much right to do so as "Kaliston Udor" has to l us what "accumulated experience" has done; for in neither case would re be any proof of the statement made being at all correct.—Yours obentlly,

J. D. P.

The Late Professor Georgii.

-Loving respect for the memory, and jealousy of the honour, of my master ow no longer with us—will, I trust, excuse this letter, and insure its ertion.

n your review of the late Professor Georgii's work, *Kinetic Jottings*, the d "Professor" is placed in inverted commas, almost as if the title were of questionable origin. As a matter of fact, Georgii had right to the title law, and, in the continental sense, was Professor, and not in any way so self-assumption or mere courtesy; and that in Sweden, a country where h education is carefully fostered, and the unauthorised appropriation of s not permitted.

had the great privilege of the Professor's friendship from my boyhood till death; and, during the thirteen years of my pupilage and assistantship, , for the greater part of each year, in daily and intimate communication him. With this knowledge of the man, may I ask your kind permission ay a few words regarding him?

eorgii was a highly accomplished and educated gentleman, thoroughly ued with the spirit of his master, the great Gymnasiarch Ling, to the elopment of whose views he entirely devoted his life; endeavouring, by dvancement of the rational physical training of mankind, to render them thy and, within their vital capacity, strong; and, by the relief of human ering, where deformity or disease could be alleviated by means of Ling's em, to add to the sum of human happiness or usefulness. In himself, for own self-interests, he was of far too modest and retiring a disposition; but, e same time, he was entirely enthusiastic and fearless in the expression s views, even when he was aware they might be subjected to severe criti- or even ridicule; and it was at these times perhaps, most of all, when riends, who might not be able altogether to follow him, most admired his e-minded truthfulness and courage. In his professional life, I have never m nor heard of a man more thoroughly sensitive to honour in the high- egree, or more desirous to avoid giving pain to those from whose opinions ssented.

so far as what I have written is eulogistic, it falls far short of the merits e man; and, perhaps, no greater evidence of this can be given than the hat, in Sweden, notwithstanding his residential absence from his native try from 1847 to 1877, and that it is now more than a year and a half his death, I found, when visiting Stockholm only last October, his memory still green, and held in the highest esteem—amongst many, with almost veneration. But what is, perhaps, more to the point than mere personal regard, however extensive, is the circumstance that, on the occasion of Professor Branting's retirement from the Directorship of the Royal Central Institute in 1862, the post was offered by the Swedish Government to Professor Georgii, even though the governing council were desirous of separating it into three departments under different directors, a scheme which, on his declining the post, was carried out, the several sections—medical, educational, and military—being now respectively under the able administration of Professor Hartelius, Professor Ling (*fils*), and Colonel Nyblæus, each in their several departments, assisted by a large staff of competent assistants, some among them holding other important official positions.

It may seem ungracious to criticise kindly criticism; yet, should your space permit, I would ask your permission to allow me to add a few brief remarks upon some other points in your review.

By implication, you are a little severe on what you term some of the "very remarkable cures" mentioned. In relation to these, I would point out that the work is a storehouse of opinions and facts relating to Kinesitherapy, and that the mere narration of these does not of necessity render the present author responsible for them, nor indicate that all the accidents or practices are to be imitated or followed by the medical gymnast, but are intended for his consideration and thought; in the same way as medical science in its other departments has profited by accidental circumstances, such as poisoning, etc. Thus, although no medical gymnast would have the rashness—I had almost said the imbecility—to attempt the cure of idiocy or other diseases of the nervous system by severe blows on the head, it is perfectly legitimate that he should consider—indeed, he would be blamable did he not—the teachings of such cases, especially when authenticated by the observations of skilled authorities, as Nélaton, Forbes Winslow, J. C. Prichard, Brown-Séquard, etc; and it is not unreasonable that he, already having knowledge of the great curative results of frictions and vibrations as a part of more active muscular treatment, should be led to reason out from such cases that the results may be due to some at present unexplained action on the cells of the nervous centres, with the hope that, as physiological science becomes more precise, the phenomena may be better understood.

With regard to Kinesitherapy as applied to uterine disease, I recently profited by a conversation on the subject with Dr. Salin, one of the leading gynæcologists of Stockholm, on which subject he is lecturer at the Royal Carolinian Medical School; and he spoke from actual knowledge, and in terms of great approval, of the effects of the treatment in cases such as you have mentioned; and in some measure regards favourably developments which have not received the full approval of the higher gymnastic authorities, such as the "interior manipulations" to which you refer.

As respects the cases mentioned of the effect produced on the uvula by pulling the hair, while amusing, and undoubtedly an objectionable and very rough mode of treatment, it may not be so physiologically absurd as at first sight it appears, when we remember that some of the cutaneous nerves of the scalp are branches of the fifth pair, from which also the branch supplying the azygos uvulæ is derived; and it is certain that a remarkable stimulation of the lachrymal glands occurs when the hair is pulled, and that quite in excess of the pain caused; a fact which may probably be due to a similar reflex stimulation of the nerves implicated.

As regards Admiral Henry's case, it undoubtedly was narrated by him in perfect good faith, and from some cause or other, apart from surgical operation, his cataract was cured. At the same time, it is an unique case, and a mode of treatment which I fancy no gymnast would even attempt to follow, except with the most extreme caution, combined with the approving observation of a skilled ophthalmic surgeon.

Such subjects as the foregoing, however, while of interest as extreme cases from which teaching may be derived, have only a remote bearing upon Ling's system, regarded generally as a scientific application of exercises, and of active and passive movements, in such cases of chronic disease and deformity to which they are suitable; and to the good effects of which many eminent medical men of various countries have testified, and to which the all but universal consensus of medical opinion in Sweden has for some time been added.—I remain, sir, your obedient servant,

London, December 20th, 1882. JOHN HOLM.

D. M. omits to state the distance of the patient's cottage residence from his own, by which, and the time occupied by the visit, the charge should be regulated according to the respective classes of society laid down in the Medico-Chirurgical tariffs, issued by the late Shropshire Ethical Branch. As far as we are able to judge from the facts communicated, 2s. 6d. for each visit is as moderate a charge as could reasonably be made. Dr. M. will probably do well to refer to the tariffs alluded to; and, if necessary, submit the charges therein specified to the dissatisfied patient; and should he still remain unconvinced of the reasonableness of the charge made, he must, we fear, be content to lose an unreasonable patient; for he owes it to himself and to his profession not to degrade either by immoderately low charges.

Care of Insane.

SIR,—May I add the name of Mr. Boys, of Pill, Somerset, to the list of medical men, personally known to myself, who are willing to take an insane patient on non-exorbitant terms?—I am, yours faithfully, H. SUTHERLAND.

6, Richmond Terrace, Whitehall, S.W.

Hypertrophy of Gums.

SIR,—I have at present a case of the above in a male adult which has resisted several plans of treatment. I would be thankful for any suggestions. On the upper side in front, the teeth are almost covered down to the cutting edge by an apron of gummy tissue, which readily bleeds. It has not extended so far on the lower side. No cause known. Astringents have proved useless.—Yours faithfully,

M.D.

*** Removal with the scalpel, and application of the actual cautery to stop bleeding, is the radical cure. Tannic acid and tincture of iodine may be tried first, and all local causes of irritation should be removed.

DR. GRATTAN'S letter to the *Irish Times*, which a graduate of Dublin forwards to us, on the subject of the surgical treatment of Gambetta's wounds; was certainly very much out of place in those columns; and it is to be regretted, if this gentlemen had any professional comment to make, that he did not choose a professional journal as the medium for his observations.

A Question of Treatment.

SIR,—May not the "supposed" cause be the "real" one, and the case be one of local rheumatism. Acting on this supposition, I would suggest that "Dum Spiro, Spero" should try the use of a liniment composed of one part of tincture of iodine and three parts of soap-liniment, or else the smearing with oleate of mercury and morphia, five per cent., locally, and the internal administration of syrup of iodide of iron in drachm-doses three times a day.

Some time since, I treated the case of a boy who had rheumatism of the feet due to prolonged paddling in the water, by applying to the feet a bandage soaked in a lotion of potash nitrate and opium.—Yours, etc., H. A. L.

SIR,—I would suggest to "Dum Spiro, Spero" to give to Mrs. F. tincture of actæa racemosa twenty minims every four hours. I believe it to be well worthy of a trial. I had a similar case some time ago, in which it was rapidly successful.—Yours faithfully, ESPERANZA.

SIR,—Having read the note "A Question of Treatment", which appeared in the number of the JOURNAL for January 20th (p. 140), I beg to be allowed to add some remarks which may prove of use to "Dum Spiro, Spero."

"The patient is otherwise in fair health, but for phthisis pulmonalis, which, however, is at present quiescent." Even if the phthisis be absolutely quiescent, this fact would not prove that it was not connected with the affection of the foot, or that it could not be the sole cause of that affection; as injury, rheumatism, and syphilis, are out of the question, the probability of phthisis playing the chief part in the case becomes all the more plausible. The absence of signs of periostitis does not exclude osteitis, or some degenerative change in the bone of similar character (*vide* Howship). If phthisis be known to exist, there is no further reason to be doubtful of the pathology of the case. The treatment should be directed accordingly.

However, there is yet another combination possible, which must be taken into serious consideration, and that is the presence of hysteria. As far as I can judge from a verbal description of the case, this supposition is rather preferable to the first.—I am, etc., WILHELM VON VRAGASSY, M.D.

Hôtel Tirol, Innsbruck, Austria.

Germ-Theory of Disease.

SIR,—I recently met with the following interesting passage in *Sturm's Reflections*—Sturm was a Professor at Magdeburg, born 1750.

"Very eminent physicians have maintained that those disorders which are attended with blotches and pimples, and even certain fevers, are occasioned by worms. It is very likely that the atmosphere is often peopled with animals, the extreme smallness of which prevents them from being seen. Who knows whether that trembling motion sometimes seen in the air during summer may not be produced by millions of insects swarming in the air?"—Very truly yours, H. M. M.

D. C. C.—The question is not one which we can answer upon an *ex parte* statement. It is always the duty of a professional man to keep his word.

P. Q. K. should inquire through Williams and Norgate, or some other foreign bookseller.

Smoking.

SIR,—I am a moderate smoker, and prefer a cigarette, but I am told that a cigarette is more injurious than a cigar or a pipe. Will any of your readers tell me what part of the cigarette is injurious, and if it is the paper? I presume the paper of a cigarette is simply rice-paper.—Your obedient servant, M.R.C.S.

INQUIRER asks: In a medical partnership, is it the usual custom to add in the rent of houses, taxes, etc., to the working expenses of the practice, before dividing the nett profits? or does each partner provide and pay for his own house, independent of the practice, or of his share in the practice?

*** We have obtained answers to this question from two leading medical agents. The opinion of the first is that each partner should pay his own rent, and that it should not be charged on the revenue of the practice. The opinion of our second authority is that the rent of surgery and consulting-rooms should be charged to the firm, and nothing more.

Palmar Psoriasis.

SIR,—In answer to a communication of "Member" in your issue of January 20th, I would recommend him to try for his case of palmar psoriasis free blistering with emplastrum cantharidis liquidum (Smith's). I have had several intractable cases of the same, in all of which I first used chrysophanic acid, then that combined with subcutaneous injections of Fowler's solution, but all to no purpose. The treatment mentioned cured the disease in several instances.—Yours, etc., R. CALDWELL SMITH, M.A., M.B.

Motherwell, N.B., January 25th, 1883.

SIR,—I would suggest that "A Member" should try an alkaline lotion, *e.g.*, bicarbonate of soda, dilute hydrocyanic acid, and glycerine. A patient of mine is improving fast under this treatment, when all the remedies named by "A Member" have proved futile.—Yours, etc., H. A. L.

Dr. Neale's Chemical Lung at Aden.

SIR,—I fail to see how Mr. Colson can charge me with inaccuracy in my description of the experiment with the chemical lung at Aden. I transcribe the *ipsissima verba* of my informant. "The case in which the punkah was tried was that of a man suffering from phagedænic ulceration of the leg—a disease which gives rise to the most foul and offensive odours, so offensive to other patients in the ordinary wards that it was necessary to isolate him in a small room. It was in this that the punkah was tried with the most beneficial effects, the air being kept odourless and inoffensive so long as the punkah was working; all other disinfectants were discontinued, with the exception of a charcoal-poultice immediately over the ulcer, of itself quite incompetent to prevent smell."

I presumed the small room was a small ward, and that the patient rendered the atmosphere unbearable without the punkah, which was placed after the man was there. I can assure Mr. Colson that, had the patient remained in the larger ward, he would have found the ventilation insufficient, while, with the aid of the punkah, all would have been pleasant.—Yours obediently, RICHARD NEALE, M.D.Lond.

60, Boundary Road, South Hampstead, N.W., January 27th, 1883.

SIR,—If any gentleman has a copy of my lecture on Puerperal Fever, of which I distributed all that remained of the first edition some months ago, and will kindly send it to me, I shall be greatly obliged.—Yours, etc., ROBERT J. LEE.

Savile Row, W.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

A Text-Book of Pathological Anatomy and Pathogenesis. By Ernest Ziegler Professor of Pathological Anatomy in the University of Tübingen. Translated and Edited for English Students. By Donald Macalister, M.A., M. Part I: General Pathological Anatomy. London; Macmillan and C 1883.

Burdett's Official Intelligence for 1883. By Henry C. Burdett, F.S.S. Londo Effingham Wilson, E. Couchman and Co.; For Europe and the Colonie Sampson, Low, Marston, and Co. 1883.

Selections from the Works of the late J. Warburton Begbie. Edited by Dr Duckworth, M.D.Edin. London: The New Sydenham Society. 1882.

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ABSTRACT OF AN ADDRESS ON CLINICAL INVESTIGATION.

Delivered before the Clinical Society of London,

BY ANDREW CLARK, M.D., LL.D.,
Physician and Lecturer on Clinical Medicine, London Hospital; President of the Clinical Society.

(Concluded from page 193.)

REVIEWING anew the completed *Transactions* of the Society, I am struck with the inadequate representations found therein of that interesting and instructive group of clinical affections which is unconnected, except causally, with sensible structural alterations of the tissues and organs. The group contains numerous members of divers sorts, and I cannot doubt that every one of them would repay thorough investigation with fresh additions to our knowledge of the origin, the nature and the relations of disease. Many of them, familiar to experienced practitioners, have no sufficient recognition in medical literature, and a full account of them all would contribute more than any other account that I can imagine to a just understanding of the relations of dynamic to static conditions, and of physiological to pathological processes.

Let me make mention of such members of this group of affections as lie nearest my thoughts at this moment.

And first, there is the morning agony of middle-aged nervous people, often the herald of melancholia. A man awaking at early dawn is conscious of undefinable *malaise* and unrest; his mental and moral outlook become dark and gloomy: aching pains arise in the limbs; unable to lie still, he tosses restlessly about his bed; the *malaise* deepens into distress, and he groans; a cold sweat breaks forth over all his body, and then in a few minutes the attack subsides, and the patient finds himself in his accustomed health and spirits.

And in the second place, I will mention the temporary incomplete hemiplegias with aphasia which, closely allied to migraine, occur often in women, and occasionally in men otherwise healthy and strong. A woman, neither hysterical nor nervous, suddenly fails to see distinctly; the field of vision is invaded by moving zigzag lines of light, arranged either in circles or in forms resembling the outlines of a fortification; there are slight ringing noises in the ears, and trifling confusion of thought: numbness follows about the tip of the tongue, on one side of the lips and mouth, in the right thumb, and more rarely in the right leg; the connection between ideas and their correlated words is interrupted; articulation falters; there is perhaps passing loss of power in the right hand or arm; the breathings and the pulsations of the heart are quickened; the feet and hands become moist and cold; and then, after a period of time varying from ten to thirty minutes, with or without a slight headache; the attack ends with a few deep sighs and a discharge of limpid urine. Curiously enough, when headache occurs early in attacks of this kind, and is severe, sickness soon follows; disturbances of speech, sensation, and motion seldom arise; and the disjunctions which, in its fully developed form, separate this affection from migraine are obliterated.

In the third place there is the dry barking cough of boys and girls about the age of puberty. This curious but not uncommon affection is characterised chiefly by recurring paroxysms of a dry guttural cough, which resembles the barking and the howling of a dog. This affection is usually associated with various slight disorders of the nervous system, and with defects of will; it is greatly influenced by the emotions, and sometimes instantaneously cured by sudden surprise or shock; it is occasionally so distressing to others that servants, and even friends, cannot stay in the house in which the patient dwells; it is only in a small degree amenable to treatment; lasts from three or four months to as many years, and ends, in my experience, always in complete recovery.

In the fourth place, I would call attention to the cases grouped under the term renal inadequacy; cases in which, without discernible structural alterations of the kidneys, they are nevertheless incapable of producing an urine of sufficient density and of healthy constitution; cases in which the blood, getting charged with excrementitious matters, and nutrition and ennervation becoming thereby disordered, the patients suffer in general health, fall immediately into peril from attacks of acute disease, and cannot, with ordinary chances of success or of safety, undergo a common surgical operation.

In the fifth place, I will mention the numerous and important cases occurring among young persons in whom, under the strain of prolonged competitive examinations and great excitement of any sort, the urine temporarily falls in density, loses its healthy characters, and becomes albuminous. Of the young men competing for places in the Indian Civil Service examination, I have ascertained, by repeated personal examination, that more than a tenth become albuminuric. And not to weary you further with illustrations, necessarily imperfect, of this group of affections, I will conclude with merely mentioning the glycosuric storms which, without sensibly damaging the body or materially impairing health, come and go throughout a lengthened life, the gouty spasms of the diaphragm, so often mistaken for affections of the heart, and those strange cases of autochthonæmia in which the blood, when divided into minute streams, is ready to clot on the slightest provocation from the structures around.

Next in importance to the work of the Society are the manner and circumstances in which that work is done. Under these heads, many reflections occur to me as worthy of being submitted to your consideration; but the time at my disposal is so short, and the list of cases for consideration so long, that I must confine myself to the setting forth of a very few of them.

The general meetings of the Society have been well attended; but, whilst the junior members have been conspicuous by their presence, the senior members have been conspicuous by their absence. This is much to be regretted, for the sake of the work of the Society and the discipline of its members. The seniors themselves suffer in manifold ways from their non-attendance. They miss the stimulus which comes from contact with youthful enthusiasm; they slide into stereotyped habits of thought, expression, and work; they lose their receptivity; they cease to adjust themselves to their ever-varying environments; and thus they become old, and the labour which should be life is transfigured into virtual death. The Society suffers; for it needs the large experience, the wide views, the sharp insight, the cautious temper, the sober judgment of disciplined age, to control, regulate, and carry to their best issues the minuteness of detail, the flow of imagination, the hasty generalisation, the speculative passion, and the dogmatic fury of our fervid youth. The pleas of pressing occupation, and of consequent fatigue, are doubtless true; but nevertheless they must be disallowed. For no good can be got without sacrifice; and the sacrifice of ourselves even at the cost of suffering is the only, or at least the chief, occasion of getting the strength which we need for the greater purposes of our lives.

* * * * * * *

Of late years there has arisen in the domains of general literature and of controversial theology, a habit of dealing with the relations of ideas to words, which is calculated to throw into confusion all the higher controversies of the time, and to inflict some injury upon letters, the advancement of knowledge, and even the moral life of man. Under cover of a particular word, connected by long usage and by common consent with a sufficiently definite idea, a new idea, totally different from the old, is introduced, and is then used as if the one had become merged into the other, and as if there were no doubt or difference between them. For example, by a religious man, most people would understand a person devoutly loyal to his ideal of a divine Ruler of the universe, and fervent in his endeavours to die to himself, that thereby he might live to God. But in these days all this is being changed; a man who is emotionally interested in anything—in art, or physics, or science, is a religious man. His sanctity is to be measured by his fervour; and morality has just this relation to this religion, that, if it interfere with its culture, so much the worse for morality, which is a defect or a disorder that forthwith must be thrust aside. Now, this juggling with words and ideas—this throwing of dust into people's eyes, so that controversies which cannot be settled may be stifled—this unpardonable sin in literature is threatening to invade the realms of medicine, to confuse our discussions, and to render hopeless our progress in some departments of knowledge. For instance, the word tubercle is now often so used as to comprehend the most diverse ideas, and to give apparent reconciliation to the most conflicting views. One may not object to an author using in his works words in the sense, usual or unusual, in which he has defined them; but one must protest with all one's power against the habit of a man who puts on the clothes of another man, and struts along the common highway pretending to be him.

* * * * * *

A few more words upon a different aspect of the workings of our society, and I will hasten to a conclusion.

The cases recorded in our *Transactions* are for the most part admirable. It cannot justly be said of any one of them that it is destitute of interest or of instruction. Many are fertile in fresh expedients for treatment, or conclusive in their bearings upon questions still contended or unsettled, and in not a few one finds the spell of original, creative, and far reaching thoughts. But however highly we may rate the value of any one of those cases standing by itself, its value for every purpose conceivable in our relation to it would be doubled, standing side by side with a record of the debate which the case has excited. For thus we should secure various views connective or confirmatory of the position taken up by the narrator of the case; and we should obtain in this way what we can rarely, if ever, obtain in any other way, the ripe experience, judgment, and wisdom of busy practical and successful men. For the literary and practical faculties are seldom combined in one person. Nay, in the course of time there often arises a sort of antagonism between them. The man who can observe, collect, classify, reason, invent, apply, is often, through the direction of nature or the force of circumstances, deficient in the qualifications necessary in one who is to speak and write with ease. His habit of accumulating and using knowledge for practical purposes weakens the power of methodical exposition, so that from his improving treasury we get fewer gifts, and the habit of continuous literary effort is not only neglected, but shunned. And yet these are the very men whose knowledge is in an especial manner worth the getting; these are the men whose halting words, straight from the watchings and questionings of nature, are oftentimes more precious than eloquent speeches. These are the men whose experiences, worked into a few clear ideas, packed into a few awkward sentences, and spoken in so many minutes, will sometimes bring to a conclusive close the discussions of many days. And when you cannot induce such men to write, you may tempt them successfully to speak, and the temptation will not be made more difficult, nor the responsibility in speaking less, by the knowledge that their words will be preserved in that storehouse of facts, experiments, and reflections which this society will give to the generations that follow after this.

And as of like, although not equal importance, I shall venture to ask the council to permit the publication, in the *Transactions*, of the reply made by the author of a paper to the criticisms which it has elicited. After reading, in one of our journals, the record of some interesting and important debate, in which various, and, perhaps, contradictory views have been advanced, we are told that, "the author having replied, the society adjourned." But what the author exactly said, how he dealt with the facts, cases, and criticisms adverse to his views; what he admitted or what he refuted; whether the case collapsed or succeeded we are not informed. And thus, deprived of the most important witness, we decide the case according to prepossessions, which neither necessarily nor usually influence us aright.

And now that our work awaits us, let us turn to it with justly attempered minds. For surely the burden of it is not mere occupation or interest, not mere success or failure, not mere profit or loss, not mere distinction for ourselves, nor even honour for the profession to which we belong. The true and serious burden of our work, as we smoothly say so often, and entirely realise so seldom, is the prevention of disease, the relief of suffering, and the prolongation of life. And this is the burden of it—not in a loose and general sense, but in a solemn and particular sense; it is the burden of it, as it affects not merely many persons, but one person—one with whom we have to deal as if he were the sole object of interest and importance in the world, as if all the momentous possibilities of life and death, of the preservation or the destruction of the family life, and of all the good or evil which might issue out of recovery or of death were centered in him, and depending upon us.

And important as our work thus is to the life and welfare of the individual and the family, it is not less important to the life and welfare of the State and the World. For this work, as it is sound or unsound, successful or unsuccessful, affects, for good or evil, the numbers of the population and its physical constitution; the supply of labour and the sources of wealth; the education of the young and the direction of their energies; the moral conditions of society and the objects of political organisations; the development of the race and the fulfilment of its destinies. Such reflections, common as they are, serve to remind us of what our familiarity with them makes us forget—the momentous and far-reaching influences of our work, and of the solemn responsibilities which lie upon us in undertaking and discharging it. Such reflections may further help us to cherish the spirit of self-sacrifice in active endeavour to overcome our ignorance of disease, till at last, with fulness, more or less, knowing and foreseeing, preventing or controlling, stilling pain or curing disease, repulsing death and renewing the conditions of commencing life, we may justify the boast of our father Hippocrates, and to men, in their extremities of need, give help like gods.

I cannot close these desultory and imperfect remarks without adverting to the honour which you have conferred upon me in electing me to the presidential chair. It is an honour which, although unanticipated and unsought, is not unvalued. I regard it, indeed, as the highest honour which I or any physician could receive. For titular honours may be got by royal favour or the influence of a great minister, or may fall upon one through accidents of position and of service. But this honour, no favour, influence, or accident, can purchase. It is a spontaneous gift of the profession; and the recipient of the honour must be free from reproach, and at least credited with some sort of merit. I do not deceive myself with the thought that I am sufficiently worthy of this great honour; nor do I forget that there are others before me worthier of it than I. But I am not here to-night to quarrel with your judgment. Humbly and gratefully accepting it, I shall strive to justify it by endeavouring, in singleness of heart and fervour of purpose, to co-operate with you in the divine work which you are doing for the relief of suffering, the advancement of knowledge, and the higher discipline of ourselves for the better service of both.

ARTIFICIAL FEEDING OF INFANTS.—Dr Arthur V. Meigs has devised a new food with which he states he has attained very good success in as many cases as he has had the opportunity of trying it. He says that it contains the same elements as are found in human milk, and in more nearly the same proportions than any other food heretofore recommended. It consists of two parts of cream, one of milk, two of lime water, and three parts of a solution of milk sugar of the strength of 17¾ drachms to the pint of water. The milk to be used should be good ordinary cows' milk, and the cream such as is usually sold in cities, and not too rich, containing about 16 or 17 per cent. of fat. The quantity of this food taken by a new-born infant should be two or three fluid ounces every two hours. And if it thrives it will soon take as much as a gill every two hours. The best way to prepare and use this food is to order five or six packages of milk sugar, containing 17¾ drachms each; the contents of one of these to be dissolved in a pint of water; and each time the child is to be fed let there be mixed together, and then warmed, three tablespoonfuls of the sugar solution, two of lime water, two of cream, and one of milk. This makes about a gill, and as much of it as the child does not take should be thrown out, and a fresh mixture made for the next feeding. The solution of sugar should be kept in a cool place, and at once thrown away if it sours, as occurs if kept more than a day or two in warm weather. The dry sugar keeps indefinitely, and is easily dissolved in warm water. A pint bottle should be kept for the purpose of containing the solution, to serve also as a measure of the quantity of water to be used with each package dissolved, and also to save further measuring.—*Med. News*, November, 1882.

DIPHTHERIA AND SCARLATINA IN RUSSIA.—A *Times* correspondent writes:—The ravages of diphtheria in Russia, which have so long defied the efforts of doctors and sanitary committees, have now been surpassed by the fatal effects of scarlatina. According to a statistical paper just published, the mortality in St. Petersburg from diphtheria and scarlatina has continually increased from 1878, until during the past year there were no less than 1,323 deaths from the latter, and 1,146 deaths from the former, making the alarming yearly total of 2,469 deaths from these two diseases alone, in a population of about 800,000. From other official statistics it appears that during five years there have been 156,027 fatal cases out of 463,018 persons attacked by these two diseases in the empire. The *Golos* remarks on the subject that no war has ever been so disastrous, and that, considering the large percentage of young people among the victims (95 per cent.), it is really the future of the country that is in question. At the same time, the medical statistics do not extend as a rule beyond the large towns. In the whole of Russia there are not more than about 14,000 doctors, properly so called. The Empress has given particular attention to the inadequacy of medical aid in contending against the enormous spread of disease, and recently, when the Government, instigated by the Minister of War, determined upon abolishing medical schools for women, as a precaution against female Nihilism, Her Majesty distinctly expressed herself against the measure. As soon as it was known that the Empress recognised the necessity of female medical education, large sums of money flowed in, from all parts, to support the threatened institution.

LECTURES
ON
CYSTIC TUMOURS OF THE JAWS, AND ON THE ETIOLOGY, GENERAL CHARACTERS AND RELATIONS OF TUMOURS.

By F. S. EVE, F.R.C.S.,
Erasmus Wilson Lecturer and Pathological Curator of the Museum of the College, and Surgical Registrar to St. Bartholomew's Hospital.

Lecture III.*

a time when the test of direct experiment is being applied for elucidation of many of the complex problems of animal life and modification by disease, it would be surprising if the mystery of mour formations had not been attacked from the same direction. though no conclusive results, yet some suggestive facts, have eady been arrived at by this method.

In dealing with the subject it will be more convenient to consider, t, the changes which portions of normal tissues undergo when planted into various parts of the bodies of animals; and, secondly, results of the implantation of portions of tumours.

To John Hunter, the founder of this great museum, we owe the t facts with regard to the behaviour of implanted tissues. You doubtless all familiar with the experiments by which he succeeded transplanting human teeth and cock's spurs into the combs of ks; I will therefore only remind you, in passing, of the remarkable wth of the spurs when transferred to this highly vascular soil.

Many other experimenters have been at work in this field, but it is in exhaustive series of investigations by Leopold†, that we owe the e complete knowledge now possessed.

Van Dorremal, Goldzieher, and Zahn, found that portions of such ues as the epithelium of the lower lip, of the conjunctiva and of the al mucous membrane, grew to a slight extent when placed in the erior chamber of the eye of animals, rabbits being generally used. thelium was also produced from the under surface of a portion of nea implanted in the lymph sac of a frog.

Leopold implanted into the anterior chamber portions of costal epiphysals cartilage, and unstriped muscular tissue, from rabbits, er fully grown or half-a-year old, with the result, that in the fully wn animals not the slightest tendency, and in young animals only ace of growth, was observed in the implanted tissue. I am, ever, able to state, that portions of the intermediary cartilage, the periosteum attached, of recently born animals, will increase ight to ten times their original size, when transplanted into the erior chamber; but they finally become reabsorbed.

Cohnheim and Maas sought to ascertain if portions of fresh nal tissues would grow and produce new formations within the od-vessels. They inserted portions of the periosteum of rabbits the jugular veins of dogs and chickens. These, lodged in the nches of the pulmonary artery, became vascularised in the same nner as a simple thrombus, and produced within two weeks cartilage and then true bone. But these portions of bone began, nout exception, to disappear within the next week, and after the week not a trace of them remained.

The experiments on the transplantation of tissues from adult ani- show, therefore, that fully formed tissues, such as cartilage, ea, and nerve, are absorbed; but growth is observed when such nes are used as periosteum, and the deep layers of epithelial aces, which more nearly resemble fœtal tissues. Growth also s place when tissues from very young animals are used.

Experiments on the transplantation of embryonic tissues were performed by Zahn, and they have since been supplemented by old's researches. Leopold used, in different groups of experiments, nte portions of various tissues from embryo rabbits, twenty-four, nty-one, and seventeen or eighteen days old. The portions were in- d into the anterior chamber of the eye, the peritoneal cavity, and ubcutaneous tissue of rabbits. The best results were obtained n portions of cartilage were inserted into the anterior chamber; but th also ensued, as a rule, when the same tissue was implanted in the peritoneal cavity. Minute portions of the epiphysal cartilage, when introduced into the anterior chamber, became adherent to the iris; from this structure, minute vessels passed to the cartilage, and soon invested it with a delicate network. In one of the most favourable cases, the implanted cartilage began to grow in eight days; and at the end of fifty days the cartilage had increased forty to sixty times its original size. By the ninetieth day, the tumour filled the anterior chamber, and was nodulated and tuberculated. By the hundred and twentieth day, the tumour almost completely filled the anterior and posterior chambers, and had reached its greatest size. On the hundred and eighty-eighth day, the animal was found dead from pneumonia, the portion of cartilage having increased three hundred times its original size. The implanted portion of cartilages became ossified to a greater or less extent, whether placed in the anterior chamber or in the abdominal cavity. Microscopic examination showed that the formation of bone and cancellous spaces took place in the same manner as under the natural conditions; and, in the portions examined, abundant evidence of proliferation of cartilage-cells was obtained. By the introduction of portions of embryonic cartilage into the pulmonary circulation, Leopold obtained much the same results as those previously recorded by Zahn. Eight days after the introduction of four small portions into the pulmonary circulation, only two unaltered portions were found in the branches of the pulmonary artery. In another similar experiment, one cube of cartilage was found lying in a much thickened vessel; but in another portion of the lung the finest divisions of the pulmonary artery contained numerous minute grains and knobs of scattered particles of hyaline cartilage.

These experiments of Leopold's were undertaken in order to apply the test of experiment to Cohnheim's theory, that all tumours are derived from latent rudiments of embryonic tissue. As regards the congenital tumours, the result is extremely favourable, for the greater power of growth possessed by embryonic than by adult tissues is distinctly demonstrated; but the perfect ossification of the implanted cartilage, also indicates its capability of development, and thus separates it from the elemental tissue of the tumours of later life, the chief characteristic of the majority of which is the imperfection of their power of organisation. This difference is also seen in other respects: in the most successful experiments the masses of cartilage had ceased to grow by the hundred and twentieth or the two hundred and fifth days respectively; and in another experiment the cartilage became reduced by absorption to one half the size it had attained, a phenomenon almost unknown in the history of tumour-formations. We must, therefore, conclude that the continuous and destructive growth of the more malignant tumours, among which some forms of enchondromata may be reckoned, depends on some other property than their supposed embryonic nature.

Considering the favourable results obtained by the implantation of embryonic tissues, it might be expected, from the supposed analogy of structure, that portions of tumours would also grow when transferred to the bodies of animals. But in spite of the greatest care and precaution exercised in performing the experiments, especially by Billroth, it cannot be said that the transplantation of a tumour has been satisfactorily accomplished. The small nodules, found in the lungs by Langenbeck and Follin, after the injection of cancer juice, were evidently due to embolism. Billroth's results were negative, in three cases of inoculation of portions of tumours, chiefly cancers, from men to dogs; and in six cases, in which portions of similar tumours were injected into the veins of dogs. He thinks that possibly better results may be obtained with sarcomata. After the injection of the juice of a medullary cancer of the upper jaw into the femoral vein, by Otto Weber, in sixteen days a mass of medullary granulations, of the size of a fist, consisting of small round cells, grew up in the wound. Finally, the tumour became necrosed, and disappeared. The dog escaped and, therefore, no *post mortem* examination could be made. The same results followed a similar experiment performed on a cat. The nearest approach to satisfactory results were obtained by Goujon. In one experiment, a small portion of an encephaloid tumour was placed under the skin of a guinea-pig. The animal died twenty-five days subsequently, and a knot, about the size of a pea, consisting of epithelial cells like those composing the encephaloid tumour, was found in the operation wound. The lymphatic glands were thickened, hard, and showed, on section, specks, which were found to be composed of epithelial-like cells. In another experiment, a deep ulcer with an everted edge, followed the injection of the substance of a tumour into the femoral vein. After cicatrisation of the ulcer, small knots or tubercles remained. The animal escaped two months after the operation. Owing to the strong tendency to the formation of tubercle which

* Given at the Royal College of Surgeons, June 1882. The latter part of the lecture, treating of the relations of tumours to each other, has been extended, but the conclusions have not been altered.

† Virch. *Arch.*, Band xxxv, page 283.

guinea-pigs exhibit, even after slight injuries, the results of these experiments must be accepted with considerable hesitation. Zahn introduced particles of an enchondroma, from an old woman, into the anterior chamber of the eye, and into the circulation; but no growth ensued, except in one instance, when a small portion of cartilage in the lung was found to have increased. Negative results have also followed the transplantation of tumours from one animal to another of the same species.

The failure in all these experiments to produce a permanent tumour-formation, except perhaps in one of Goujon's experiments, may probably be referred to two causes. In the first place, a fully formed portion of the tumour may have been taken, for no growth might be expected to take place, unless a portion of the advancing or growing part of the tumour were implanted. It is, however, also probable that a favourable condition of the tissues in which the growth is implanted is required, such as may be assumed to exist in the highest degree in advanced age. That the tissues and organs themselves possess a varying resisting power to the growth of pathogenic materials when introduced into the circulation is shown by the experiments of Grawitz. When various cultivated fungi, such as penicillium, were introduced into the circulation, he found that they affected different organs, in an inverse proportion to their nutritive activity. Those organs, such as the lungs and brain, which possessed the most rapid circulation and the highest nutritive activity, showed the greatest immunity from the fungus-disease, and were only affected by highly malignant forms. Perhaps the same resisting power is shown by the lungs to the formation of cancer; secondary deposits being found, not uncommonly, in the liver, kidney, and bones, while the lungs remain perfectly free, although the cancer elements must have passed through the pulmonary circulation in order to reach the organs first named. In such cases, small fibrous nodules are occasionally met with in the lungs, which, like those in Langenbeck's and Follin's experiments on the inoculation of cancer, may be considered probably as cancer emboli which have not grown, but have given rise to a formation of fibrous tissue around them. The lungs, on the other hand, apparently offer more favourable conditions for the growth of sarcoma, as they are frequently the seat of secondary deposits in cases of sarcoma of the bones.

The failure of all experiments to inoculate animals with tumours from man, or from other animals of the same species, stands out in remarkable contrast to the daily evidence we have of the auto-inoculation of tumours, either by transference of nuclei of the tumour-cells by means of the blood-vessels and lymphatic vessels to other organs, or by direct implantation. Direct implantation is frequently observed, as in case of cancer or papilloma of the peritoneum, secondary to disease of the ovary or Fallopian tube; and it occasionally occurs in cystic adenoma of the ovary. In a case of cystic adenoma of the ovary, which had ruptured, Mr. Knowsley Thornton found a minute cyst implanted in the peritoneum, which was an exact miniature of the tumour of the ovary. Sometimes a primary or secondary cancer of the peritoneum even extends through the lymphatics of the diaphragm, and affects the pleura, just as is sometimes observed in tubercle.

Sir James Paget quotes a case in which a tumour appeared in the abdominal walls in the course of a puncture, by which the abdomen was tapped for cancer of peritoneum. Mr. Cripps has recently described a case in which an ulcer, having the appearance of an epithelioma, formed on the inner side of the elbow of a woman, whose arm had, at this point, been kept for two months in constant contact, by means of bandages, with an ulcerated cancer of the breast. The precise nature of the ulcer, however, was not ascertained by microscopic examination.

Permit me now to call your attention to a theory of the mode of origin of tumours, which has been advanced by Professor Cohnheim.* He endeavours to prove "that a fault, an irregularity of the embryonic rudiment, is the true cause" of the tumour-formations; that, at an early stage of embryonic development, more cells are produced than are necessary for the formation of the affected part; so that a certain quantity remain over unused, of perhaps only the minutest dimensions, but having a great proliferative capability, on account of the embryonic nature of the cells. The period of the excessive production of cells may probably be referred to a very early stage of development, possibly to the period between the complete differentiation of the blastodermic layers, and the perfect formation of the rudiments of the particular organs. Possibly, the superabundant cell-material is distributed more or less generally over a histogenetic embryonic layer, or is confined to a single spot, so that the morbid growth may affect an entire system, such as the osseous or cutaneous; or may be confined to a single organ. He concludes "that a fault, an irregularity of the embryonic rudiments of the organs and tissues, is the true cause of the later tumours."

The tumour-rudiment may remain latent for an indefinite period, until stimulated to growth by an increased blood-supply, from any cause whatever. A diminished resistance in the surrounding tissues, as in the atrophy of advancing age, is also supposed to favour the growth of a tumour-rudiment.

Professor Cohnheim supports his theory by reference to the teratomata and many congenital tumours, as moles, angiomata, and multiple enchondromata, fibromata and lipomata of the subcutaneous tissue which he has observed in new-born infants; also, other tumours occurring in the earlier period of life, as the muscle-tumours of the kidney, gliomata of the retina, and sarcomata and cancers of various organs. The most conclusive example is furnished by the dermoid cysts of the subcutaneous tissue. Although their existence can be made out by dissection in infants, they rarely attract attention until puberty. These cysts, lined with epidermis, and often containing hair, are probably, as Lücke pointed out, derived from an abnormal involution of the external layer of the blastoderm into the middle layer; this displacement occurs in those localities where there is a normal involution of the epiblast, or where the closure of fissures or folds takes place in the embryo, as around the orbit, in the lines of the branchial fissures, or in the median line of the thorax.

He ingeniously applies his theory for the elucidation of many of the obscurities surrounding the origin and causation of tumours. The following are among the principal conclusions at which he arrives. This theory renders comprehensible the occurrence of tumours in any tissue, whether capable of production during the whole of life as epithelium, or as connective tissue; or such as only increase on the application of a physiological impulse, as the muscular and glandular tissues of the uterus and breast.

The liability of particular localities to cancer, such as the lip, orifices of the stomach, the rectum, the os uteri, upon which Virchow founded his hypothesis of irritation, receives an ingenious explanation, by the supposition that a reason exists in the embryonic development of the part. Cohnheim points out that at or near these orifices a complication occurs in development, either an invagination of the epiblast, an union of this with another epithelial layer, or a transition from one form of epithelium to another; in these parts, he thinks a slight irregularity may easily come about leading to the formation of an excessive mass of epithelium, which may furnish the elements of a tumour. Further, the origin of the heterologous tumours, viz., those which differ in their structure from the tissues in which they lie, is explained by the theory of *displacement* of embryonic tissue; as, for example, the dermoid cysts of the skin already mentioned; the striped muscle tumours of the kidney, which he believes to be produced by a faulty segmentation of the protovertebræ; and certain heterologous tumours occurring in some of the principal organs of the urogenital system, as the enchondromata of the testicle, and the dermoid cysts of the ovary, testicle, and pelvis; the original of these is attributed to the close connection existing between the Wolffian body, with the epiblast in the one side, and the protovertebræ in the other, a relation which may lead to the formation of a mixture of embryonic cells formed in excess from either of the structures with the rudiments of the urogenital organs. In a similar manner, an explanation of the enchondromata of the parotid gland is furnished by the inference, that they are derived from misplaced portions of Meckel's cartilage. Again, the supposed embryonic nature of the tissue comprising the sarcomata is referred to the early stage of development at which their rudiments are believed by Cohnheim to be cut off; he observes, that the histological prototype of a spindle-celled or round-celled sarcoma must be sought in the first beginnings of the development of the connective-tissue organs. The tumour-rudiments cannot, he thinks, be expected to form tissues as perfect as the normal structures, owing to the differences existing between the conditions of their growth, both as regards the time and the place of their development.

I have endeavoured, as far as time will permit, to give an impartial account of Cohnheim's exposition of his theory, and of the manner in which he applies it for the explanation of the origin of tumour-formation.

Some facts on which the theory is based, render it highly probable that the rudiments of a large number of tumours appearing in the earlier part of life are congenital, perhaps of a larger number than we are disposed at present to admit.

Maas has found, among 278 cases of tumours, 26, that is 9·3 per cent.

* *Ueber, Allgemeine Pathologie.*

children, which must be considered congenital. But no facts have present been brought forward, which even remotely indicate that e sarcomata and cancers of later life originate from pre-existing diments formed in the embryo.

Such an assumption appears to me altogether incompatible with r knowledge of the life-history of the individual structures and ements of the body. For from the time of their earliest formation til death, growth, and even development, of the individual units rmed by growth goes on continuously in the epithelial and glandu- tissues of the mucous and cutaneous surfaces. It is in these uctures, and especially in the breast and uterus—which possess til late in life a remarkable reserve of formative activity—that mour-formations most commonly occur. The reparative power is pable of producing in the most advanced age highly organised sues such as bone, connective tissue, and epithelium, in a manner nforming to the general type and outline of a part, as is seen in e union of fractures and the healing of wounds; and surely, such a llular activity would, under certain conditions, be capable of form- a tumour, which truly possesses the greatest capacity for growth, th the most limited power of development. The following facts, also, pear to me to be opposed to Cohnheim's theory. All cartilaginous mours of bone are not composed of embryonic cartilage, nor do ey all originate from the centre of the shaft or the centre of the iphysis, as those congenital tumours composed of fœtal cartilage ariably do. For many cartilaginous tumours are hyaline, and ginate from the intermediary cartilage, and others originate in the riphery of the shaft. Again, if all tumours of bones were derived m embryonic rudiments, they would begin in the long bones, her near the centre of the shaft or that of the epiphysis; any embryonic rudiments of the fœtal shaft would grad- lly be separated from the epiphysial line by the growth the extremities of the diaphysis, and from the surface by formation of fresh layers of bone beneath the periosteum. nilarly, a rudiment remaining in the epiphysis would gradu- y be separated from the line of junction with the diaphysis, l from the surface by a similar increase of the peripheral struc- es. But, on the contrary, we observe that by far the larger pro- tion of the sarcomata of bones originate in the latest formed ts, viz., either beneath the periosteum, or at the line of junction the epiphysis and diaphyses; in fact, precisely in those positions ere embryonic rudiments would be least likely to be placed.

Nor is it necessary to go back to embryonic life to find the ele- nts from which the sarcomata of bones are formed. These nours much more nearly resemble the imperfect stages in develop- nt of the structures formed in the processes of repair and inflam- tion, than those which we may presume would be produced from embryonic round cells, constituting the rudiments of the con- tive tissues, and which, Cohnheim observes, are only found at earliest period of embryonic life; these, embryonic cells, if ding to a higher type of development, would produce fœtal cart- ge and not osseous tissue, as is observed in most sarcomata.

Further, the history of the development of the breast renders it in- ceivable that the rudiment of an adenoma or a cancer can be ually formed at an early stage of fœtal life; the first rudiment the gland itself does not appear as a bud-like ingrowth of the blast until the fifth month of fœtal life, and it is only repre- ted at birth as a delicate rosette of radiating rudimentary gland es.* And if the rudiment of a cancer actually be congenital, how t that it does not develop under the physiological incitement of erty?

(To be continued.)

* See Kölliker and A. A. Bowlby, BRITISH MEDICAL JOURNAL, 1882.

OIL OF WINTERGREEN IN THE TREATMENT OF ACUTE RHEUMATISM.—Dr. F. P. Kinnicutt draws the following conclusions from results obtained in twelve cases of acute rheumatism, treated by of wintergreen. 1. In the oil of wintergreen we possess a most ient salicylate in the treatment of rheumatism. 2. In its efficiency ontrolling the pyrexia, the joint-pains, and the disease, it at t ranks with any of the salicyl compounds. 3. The best method s administration is in frequently repeated doses, continued in inished doses throughout the convalescence. 4. Its use possesses advantages of being unattended with the occasional toxic effects, frequent gastric disturbance produced by the acid or its sodium , even when prepared from the oil of wintergreen; that its agree- taste, and finally its comparative cheapness, are further recom- dations in favour of its employment.

ABSTRACT OF LETTSOMIAN LECTURES

ON

THE TREATMENT OF SOME OF THE FORMS OF VALVULAR DISEASE OF THE HEART.

Delivered before the Medical Society of London.

BY ARTHUR ERNEST SANSOM, M.D.Lond., F.R.C.P.,
Physician to the London Hospital, Senior Physician to the North-Eastern Hospital for Children.

LECTURE III.—MITRAL STENOSIS.

Pathology and Etiology of Mitral Stenosis—Points of Difference from the Lesion which induces Regurgitation—Compensation—Special Treatment in Mitral Stenosis—Complications—Embolism and its Treatment.

I PROPOSE now to consider the morbid conditions associated with a structural change at the left auriculo-ventricular aperture, a change which narrows this outlet, and impedes the influx of blood into the left ventricle during the period of diastole. No disorder of function can bring about such a condition as this. The lesions are always organic. We will first glance at the morbid anatomy of the affection. If the mitral aperture be viewed from the auricle, it may, in many cases, be seen that a smooth septum presents itself between auricle and ventricle, crossed by a narrow slit, almost straight but inclining to be crescentic; such slit may be no larger than a sixpenny piece, or a shirt-button, will pass through; and, from its appearance, the orifice has been termed the "buttonhole orifice." The natural form of the curtains may be entirely lost, their place being occupied by a thick fibrous structure, welded at its circumferential attachment with the cords and fleshy columns, which may all be transformed into a dense tendinous mass. In certain cases, this fibrous material, as well as the septum, is infiltrated with calcareous salts to such degree, as to make it closely resemble bone.

Another, but less frequent form of obstruction is that in which the mitral orifice, as seen from the auricle, resembles a hollow cone. This is known as the "funnel-mitral;" its ventricular outlet may be so small that it will scarcely admit the point of the little finger. Dr. Hilton Fagge has recorded forty-six examples of the buttonhole to one of the funnel form of construction; Dr. Hayden thirteen of the former to one of the latter. And of my own records of twenty necropsies in cases of mitral stenosis, two only were "funnel-mitral." M. Lancereaux has described a case of mitral stenosis, in which, amongst the vegetations which surrounded the thickened orifice, he discovered hard granules, which were shown by chemical tests to consist of urates. When treated with nitric acid, they gave rise to a yellowish product (alloxan); and this, on the addition of ammonia and distilled water, gave the characteristic red colour of murexide or purpurate of ammonia. The granules when dissolved in acetic acid crystallised in the characteristic rhomboids of uric acid. I draw attention to this observation, because it may have an important bearing on the question of etiology and treatment. I have myself met with a case of mitral stenosis in which there were abundant gouty deposits in the joints, some of which suppurated and gave exit to uratic deposits intermixed with the pus.

It is obvious that the great difficulty created by such alterations as these is the due filling of the ventricle from the auricle. In addition, there is, however, in many cases necessarily a reflux into the auricle at the systole of the ventricle. In proportion as the slit is narrow, the possibility of such reflux is less, and in extreme cases of stenosis it appears probable that no regurgitation is possible. In all cases, the main difficulty is the obstruction; that of regurgitation is subsidiary though frequently coexistent. It requires only a slight consideration to be convinced that quite a different set of conditions obtains in mitral stenosis to that manifest in mitral regurgitation. Morbid anatomy teaches us that in stenosis the left ventricle is usually not dilated; it has its normal capacity, or is even smaller than natural. We should expect so: for the difficulty is not that the ventricle is habitually overfilled, as in regurgitation, but that it is insufficiently supplied owing to the imposed obstruction.

Upon the left auricle, the consequences of mitral stenosis are very manifest. It is usually not only dilated, but hypertrophied. When

dilatation preponderates, it is through an unusual failure of muscular power. The signs by which we may recognise the lesion of mitral stenosis are (1) the murmur; this is heard in the neighbourhood of the apex of the heart, in the mitral area; but, according to my experience, usually rather to the right of the apex. It occupies the diastolic period—the long pause—usually the concluding portion of it, and it terminates abruptly with the first sound. The distinction between the murmur indicating mitral stenosis, and that indicating mitral regurgitation, is to be made partly by the character of the sound, and partly by the rhythm. The stenosis-murmur is usually of a rattling and rolling character, but its chief characteristic is its abrupt termination; it ends with a sudden stop, as the murmur of regurgitation never does. Even when the murmurs of stenosis and regurgitation are combined, there is usually a spot in the neighbourhood of the apex at which the former is heard to stop suddenly, and the systolic murmur to "tail off" from it. The rhythm is determinable by ascertaining the relation to the second sound, and to the impulse of the heart. In approaching the apex from the base, one may be convinced of the commencement of the murmur after the second sound. Near the apex, one may hear that the termination of the murmur is with the impulse of the heart as felt upon the chest-wall, or, where this cannot be determined, the pulsation of the carotid in the neck. Such are, very briefly, the chief characters of the murmur which is so commonly known as the presystolic murmur, that has been considered to be almost, if not absolutely, pathognomonic of mitral stenosis.

I am able to afford the crucial proof of the view that the causation of the presystolic murmur may be independent of the auricle. First, because in many cases I have observed that, though there has been present a prolonged presystolic murmur, commencing in the long pause almost immediately after the second sound, cardiographic evidence has shown the auricular systole to occupy its normal position just anterior to the upstroke indicating the commencement of ventricular systole. Secondly, in a case under my observation, the auricle could have had no share in producing such a murmur, for *post mortem* examination showed that, not only was the left auricle so dilated that its wall could have exerted no appreciable muscular power, but it was lined by a closely adherent old laminated blood-clot. I consider that it is clearly proven that the so-called presystolic murmur may occur during the diastolic as well as the presystolic period, and that it may be due to the entrance of blood into the ventricle directly diastolic relaxation permits, the blood being urged through the stenosed aperture, owing to the tension under which it has been retained in the elastic and distended auricle and the pulmonary veins. The contraction of the auricle may reinforce the murmur, and make it loudest just before the ventricular contraction.

In a few cases, I have found the presystolic murmur closely simulated by the murmur of aortic regurgitation, when this is conducted towards the apex, and especially, as is sometimes the case, when it is heard only in the mitral area. Cases have been recorded in which a presystolic murmur has been noted during life, and the necropsy has demonstrated, not mitral stenosis, but aortic regurgitation. Another possible source of error is the existence of pericarditis, when friction may be occasioned by the auricle, and cease at the moment of systole. Again, I think most observers will agree that, in some cases, the presystolic murmur is extremely variable, and may be inaudible during repose, and yet very evident when the patient is made to manifest some slight exertion. Again, it may be absent for considerable periods, and then be readily discoverable. Although, therefore, I consider that, in the great majority of cases, the presystolic murmur declares with precision the existence of mitral stenosis, it is necessary to consider other signs before committing one's self to a positive opinion. Another auscultatory sign of great importance in indicating the obstructive lesion is reduplication, or a seeming reduplication, of the second sound of the heart. This phenomenon is to be noted in, at least, a third of the cases of mitral stenosis, and only rarely in other conditions. It becomes, therefore, a valuable aid to diagnosis. I have formerly developed before the Society my views as to the mode of production of this seeming reduplication. I will only say here that I believe it to be due, not to any want of synchronism in the closure of the aortic and the pulmonary semilunar valves, but to the normal second sound, followed by another sound, due to a sudden tension of the mitral valve itself. The blood, accumulated under pressure in the auricle, rushes through the stenosed aperture as soon as diastolic relaxation permits, and jerks the mitral curtains, or the thickened material which represents them, on the ventricular aspect. This gives rise to a sound of tension which, coming closely after the normal second sound, appears like a reduplication of the latter.

A third sign of importance in establishing the diagnosis of mitral constriction is thrill. A thrill at the apex is rarely met with in mitral regurgitation, but very commonly in mitral stenosis. Its rhythm is determinable in like manner with that of the murmur; and, if it be presystolic, the diagnosis of mitral constriction is assured. I have observed presystolic thrill when there has been no presystolic murmur, and where the condition of stenosis has been indicated by other signs. A fourth means of differentiation is the determination by percussion of the outline of the heart. If this be done accurately by means of a pleximeter, and marked upon the chest-wall with a copying pencil, a transfer may readily be taken upon paper, and kept for reference. By this method, I have shown in some cases (1) an abnormal bulging in the situation of the left auricle; (2) a dilatation of the right cavities and of the pulmonary artery, with an absence of dilatation of the left ventricle. The concurrence of these signs has strongly suggested the diagnosis of mitral stenosis when other signs have been obscure. Lastly, a valuable aid to diagnosis may be received from the employment of the sphygmograph and cardiograph.

Very contradictory opinions have been put forth as to the pulse of mitral stenosis. My own observations point strongly to a notable irregularity of the pulse in mitral stenosis; and this in such degree as to afford valuable diagnostic evidence. In mitral regurgitation the pulse is usually regular until compensation is beginning to be imperfect, and the right chamber commences to yield. In mitral stenosis, however, irregularity may be evident when compensation is perfect. It is true, that many observations may be made with recording of an even and regular pulse. With repeated observations, the peculiarity of mitral stenosis becomes manifest in the trace. A double or even triple pulse is recorded before the base-line of the sphygmographic trace is reached. These pulsations are due to repeated systoles, the normal correlation between auricle and ventricle being disturbed. In the later stages, when the right side of the heart commences to fail, irregularities in volume of the pulse may be observed; in a case where there was great dilatation of the auricle, I found the pulse become extremely slow, its rate falling from 80 to 56, and then to an average of 40 per minute. At one time, it was 36.

The evidence afforded by the cardiograph when mitral stenosis is suspected is, in my opinion, extremely valuable. The trace enables one to judge of the relative length of systole and diastole. In free mitral regurgitation, a very short interval separates the systoles, the duration of the systole, instead of being, as in the normal, less than that of the diastole, is greater. In stenosis, on the other hand, the interval between the systoles may be greatly prolonged; or in stenosis the diastolic intervals may be observed to vary greatly in duration, two systoles may occur with no appreciable diastolic interval, and another interval may be abnormally protracted. More characteristic, however, is the appearance of a number of vibrations in the diastolic part of the trace—in fact, the vibrations which are heard by the ear as murmur, or felt by the finger as thrill, may be written on the smoked paper by the needle of the cardiograph. I show you many examples. In some it will be seen that the diastolic portion is serrated, and there is no indication of the elevation caused by the auricular systole just before the main stroke indicating the grasp of the ventricle; in others, vibrations seen to precede a defined systole of the auricle; in a third set, the auricular systole is well marked, and the sonorous vibrations or murmur, though murmur existed, are not recorded. So I think we have a means of determining in some measure the degree of constriction. If such were considerable, it is unlikely that the auricular systole would be readily transmitted and recorded; on the other hand, it is likely that the finely serrated line of vibrations would be produced by the extrusion of blood through the narrowed aperture. Some of my tracings show in a marked manner the effect and effort in rendering evident vibrations in the diastolic portion which were not visible during repose. By a comparison, too, of the characters of the systolic and diastolic portion, I think we are enabled to obtain some indications whether in combined stenosis and regurgitation, the former predominates over the latter or otherwise, and whether or no hypertrophy preponderates over dilatation of the ventricle.

I pass on now to consider the clinical evidence as to the origin and course of the morbid changes which bring about the obstructive lesion. We are at once met by a body of evidence which shows that mitral stenosis, like mitral regurgitation, has a strong relationship with rheumatism. From the morbid anatomy standpoint, it is

een supposed that, at least in some cases, the lesion might have een congenital. Many observations, however, show that the lesions f stenosis, which in appearance suggest a congenital causation, are ıet with in cases which are undoubtedly rheumatic. The associa- ıon with rheumatism is an intimate one. If we inquire, however, s to the degree of such association, we find it decidedly less ıarked in the case of mitral stenosis than in that of mitral regur- itation. I have found, from statistical inquiries, that stenosis is far ess associated with the acute forms of rheumatism than in the re- urgitant lesion. Again, it is obvious that repeated attacks of cute rheumatism tend to produce the latter rather than the former. n the cases of children, I have found that it is not the more severe, ut the slighter forms of articular rheumatism which are attended ith the obstructive lesion, whilst the opposite is the case as regards ıe regurgitant. My observations show that the proclivity to the bstructive lesion is in a very marked manner greatest where arti- ılar phenomena are not manifest at all. It might be thought that ıis was evidence rather against the view that rheumatism is a cause f mitral stenosis; but, as I have shown in my former lecture, the ivent of endocarditis, having the essential characters of that asso- ated with rheumatism, may be so insidious that no subjective gn marks its onset; and we have found, in many instances, that ıe course of the affection in the non-articular examples, and the orbid changes, as shown by *post mortem* examination in the fatal ıses, do not differ in any appreciable way from those which are an fest in cases having a distinct history of rheumatic causation. would therefore appear most probable that the correct conclusion , not that mitral stenosis is independent of rheumatism, but that is associated with the less pronounced forms of it—with insidious, and not, so to speak, with its explosive varieties. bring before you examples of: 1. Presystolic murmur, developing sidiously without signs of rheumatism. 2. Systolic murmur at ex, becoming changed to presystolic murmur. 3. Presystolic ırmur, developing insidiously, subsequently found to be ac- mpanied by a systolic murmur. The evidence, I consider, tends show that, in a considerable number of cases, the origin and course e insidious and gradual. The disease is not independent of rheu- ıtism, but is accompanied by no pronounced rheumatic phenomena; is initiated by the form of endocarditis which I sketched in my st lecture, as manifested by no subjective sign, accompanied by no ominent symptom, and yet differing in no essential feature from ıt which occurs in obvious relation with rheumatism. The endo- ditis which results in mitral regurgitation is more violent, so to ak; whilst that which initiates stenosis is more protracted, giving e to a slower formation of fibrous, quasi-cicatricial tissue, that, der the even pressure of blood in the auricle, tends to form the ooth septum which has erroneously suggested a possible congenital ısation.

Not all the cases of mitral stenosis, however, originate in this nner. In some, there has been, first the induction, in association h the phenomena of acute rheumatism, of the lesion of mitral urgitation; then has occurred, probably, a slow welding of the tains, and, in the repeated attacks of endocarditis, the changes e been slower than those which result in retraction of curtains, ds, and columns to the ventricular wall.

By either of these modes produced, it is probable that secondary nges take place in the diseased tissue. Under the tension of od, the fibrous septum thickens: for it has to bear the chief ain of the auricular pressure, and not the ventricle, as in the case mitral regurgitation. In some cases, it undergoes calcareous de- eration; and probably in others, where gouty signs are mani- , it becomes infiltrated with the earthy lithates.

Compensation, in cases of pulsal stenosis, may be maintained, as mitral regurgitation, for long periods. It may even be more simple he former case than in the latter: for it is only a hypertrophy he right ventricle, and not of both ventricles, that is needed to ain it.

o long, therefore, as a good nutrition maintains the muscular er of right ventricle and left auricle, any special methods of tment of a simple condition of mitral stenosis may be unneces- . In course of time, however, the right ventricle or left auricle, oth, may begin to fail. Usually, it is the former; but I have ted a case in which it was markedly the latter; and in this, I e no doubt, the muscle failed on account of the great privations ch the patient had undergone. The right chambers dilate, on ount of the pressure which is maintained within them, if the pensating muscular power begin to fail. Then ensue the dys- a, the œdema, ascites, etc., which we are familiar with in analo- s cases of mitral regurgitation. To restore compensation, we may use, for the most part, similar means to those which we have considered in regard to mitral regurgitation. Even when orthopnœa and dropsy have supervened, I have in many cases found that rest, combined with the administration of nutrients and tonics, with digitalis, have restored the *status quo ut ante* often for a considerable period.

Coincidently with the use of means for increasing muscular power, I consider that small and repeated abstractions of blood are even more valuable in mitral stenosis than in mitral regurgitation. The tension of the right heart may be sensibly relieved even by a leech or two applied over the præcordium.

As regards the special action of digitalis in restoring compensation in cases of mitral stenosis, I am not convinced that this is so markedly proved to be beneficial as in the cases of mitral regurgitation. I have found that in some instances, as shown by the sphygmograph, digitalis has restored regularity, whilst in others it has increased irregularity of pulse. I believe it to be most valuable where stenosis and regurgitation are combined. Where the right ventricle is chiefly at fault, I do not think its good effect is so manifest. Where it can induce an efficient systole of both ventricles, and co-ordinate them, then, I think, it is the more valuable. In failure of the right heart, therefore, in extreme mitral stenosis, I look more hopefully to caffeine and to convallaria maialis. M. Sée has recorded instances showing the good effects of the latter in mitral stenosis.

Though the production of the obstructive lesion is more gradual, I do not think the prognosis is more favourable than in the case of the regurgitant. We can point to many instances of mitral regurgitation, where fair health has been maintained for long periods of years, where compensation is perfect, and where disease of the valves does not progress. Such instances are, I think, less common in stenosis—there is not a like quiescence, and degenerative changes or intercurrent, morbid phenomena are more likely to occur.

In mitral stenosis, as well as regurgitation, it is not alone with the simple dynamical problem of restoration of compensation that we have to deal. Certain complications are almost of the essence of the disease, and call for consideration when question arises as to treatment. Such are (1) recurrence of endocarditis, or pericarditis, or both (2) embolism. I consider that one of the great interfering causes, spoiling the chance of compensation in children and young people, is the occurrence of pericarditis with adhesions.

Embolism, of some sort, is a source of danger and an element to be considered in a large proportion of cases of valvular disease, especially of mitral stenosis. These clinical examples are brought forward showing the occurrence of this, (1) on the venous, (2) on the arterial sides of the circulation.

Embolism of a branch or twig of the pulmonary artery is a very common cause of the bronchopneumonia observed in mitral disease, a characteristic feature of which is hæmoptysis. The occurrence of such a symptom in a case which has hitherto been quiescent, tells us that compensation is disturbed, that circulation is sluggish in the right chambers; and we are called on to strengthen the ventricles by cardiac tonics as well as to maintain rest. In all such cases it is desirable to restrain the tendency to coagulation of the blood, by the administration of alkalies, especially ammonia. I bring forward also examples where arterial embolism has been the first clinical sign of mitral stenosis, the embolism giving rise to hemiplegia, hemichorea, epilepsy, etc. In cases under treatment for cardiac diseases, the one sign which I have found to indicate the probability of the occurrence of embolism is a sudden rise of the temperature of the body. In all such cases, the most perfect rest should be enjoined. I think also that an attempt should be made to render the deposit of fibrin less likely by the administration of ammonia or other alkalies. The induced phenomena, of course, call for treatment according to the origin or situation in which infarction occurs.

PRURITUS ANI, says the New York *Medical Record*, often proves a most annoying and obstinate symptom, persistently refusing to yield to our therapeutic endeavours. It is, therefore, very comforting to be assured that we have, in two well-known drugs, two equally efficient specifics. Thus, Dr. Steele, of Denver (*Lancet and Clinic*), has found quinia sulphate, rubbed up with only sufficient lard to hold it together, a never-failing specific in this affection. He uses it in both pruritus ani and vulvæ. The nearer you get to the full strength of the quinine, the more efficacious it will prove; and some other physician is similarly confident about the local application of Peru balsam. Hence, we are told, there need be no more itching about the anus, and medicine has achieved a new triumph.

ON THE PRODUCTION AND EXCRETION OF URIC ACID.

By EDMUND ALLEYNE COOK, F.C.S., L.R.C.P., L.R.C.S.Ed., etc.

In studying the composition of any excretion, the animal body may be viewed in the light of a manufactory, in which the substances administered are the raw material, the sum of the excretions the finished product, and the substances remaining in the body undergoing change may be regarded as the stock in process of manufacture. If this view be taken, we can easily see that, although we may measure in the raw material, and strive to regulate the physical conditions with mathematical accuracy, yet, inasmuch as our power over physical conditions is deficient, and our power of regulating mental emotions nearly *nil*, we cannot determine with mathematical accuracy what will be the precise outcome of a given ingestion of material. Causes of change are at work beyond our control, and beyond our powers of measurement, and therefore a mathematically exact result following a given ingestion, would rather prove error than accuracy. Since, then, we cannot hope to determine exactly the varying causes of change in the body, we must admit that results of observation of excretions are bound to vary within limits; and that the utmost we can expect from observations of the effects of drugs on any given excretion is, that such results shall be approximate, or in the same direction in several experiments, and when a slight variation is noticed, even in several experiments, it is not enough to warrant us in attributing it to the drug administered.

The experiments, of which the subjoined are a portion, were undertaken with a process for the estimation of uric acid, in which the usual sources of error in the estimation were believed to be eliminated, which was published in this JOURNAL, April 15th, 1882. A set of conditions under which an accuracy up to 1 or 2 grains of uric acid production were not to be obtained, and therefore in the experiments themselves such variations of result were not deemed important, although, in most estimations, agreeing duplicate results were obtained before the estimation was considered satisfactory.

A preliminary series of estimations led to the determination to consider an elimination of 400 grains of urea, and 11 grains of uric acid as normal under the conditions. The urea was subject to much greater variations, without apparent cause, than was the uric acid.

The diet taken during the experiments was: breakfast, bread or toast, 6 ozs.; butter, not noted, but not varying; tea, 12 ozs. Midday dinner, bread, 2 ozs.; meat, 8 ozs.; potatoes, 4 ozs.; green vegetables, 4 ozs.; pudding, 8 ozs., with variations; water, 10 ozs. Tea, as breakfast. Supper, bread 4 ozs.; butter, not noted, but not varying; water, 10 ozs.

The exercise taken daily amounted to four miles of walking. When any variations occurred, they are mentioned in the experiments. No alcohol or tobacco was used in any form.

The above diet was found to be that which best suited the individual, and had practically been in use for some period prior to the experiments being commenced; a moderate variation in the direction of increase being followed by lassitude and langour, while a diminution soon made itself felt as hunger. The weight varied one pound above or below 140 lbs. The experiments were regularly commenced in October 1881. The twenty-four hours was made to commence at 8 A.M., after emptying the bladder and before breakfast; and the date always refers to the day on which the collection of the quantity ended. The first variation experiment was commenced unwittingly.

	Amount of urine.	Colour to litmus.	Sp. gr.	Urea.	Uric acid.
Oct. 20	40 oz.	acid	1020	349 grs.	9.9 grs.
„ 21	36 „	„	1023	488 „	14 „
„ 22	50 „	„	1023	654 „	19 „
„ 23	40 „	„	1020	458 „	10.8 „
„ 24	41 „	„	1025	382 „	8.5 „

So great an increase in the amount of uric acid and urea on the 21st and 22nd was certainly surprising; and, as there was no consciousness of any marked change of diet from the scale given, it seemed, at first, unaccountable; and it was only after carefully thinking over every item, that it was remembered that on the 20th the green vegetables of the dinner had been changed to tomatoes, and it was surmised they had an influence on the secretion. The tomatoes were only taken once, on the 20th, at 2 P.M., and therefore their influence, if any, would be felt on the urine collection of the 21st; but whatever caused the increase, affected also, in larger degree, the urine of the 22nd. The weather had been dry all the time. The first portion of the urine of the 22nd was cloudy on cooling; but the whole collection was clear.

On the 24th, when the urea and uric acid had returned to the normal, a small quantity of tomato was added to the diet, and no other change was made. The effect was seen on the 25th, and on the following day it had passed off.

	Urine.	To litmus.	Sp. gr.	Urea.	Uric acid.
Oct. 25	38 oz.	acid	1023	482	11.5
„ 26	41 „	„	1018	447	9.9

The tomatoes were abandoned until November 13th. The urine collection was as follows:—

	Urine.	To litmus.	Sp. gr.	Urea.	Uric acid.
Nov. 12	32 oz.	acid	1030	478	12.4
„ 13	31 „	„	1028	403	10.7
„ 14	50 „	„	1020	508	19.3
„ 15	43 „	„	1023	432	18.4
„ 16	56 „	„	1013	400	15.3

On November 13th, half a pound of tomatoes was taken in place of green vegetables, the whole of the other conditions remaining the same. The weather was bright and clear; the health perfect. On the 14th, another half a pound of tomatoes was taken, and six ounces extra water. The urine of the 15th was cloudy when cold, but cleared on slight warming.

It is to be noted particularly that the liquids taken during these experiments amounted to forty-four ounces, and any variation is mentioned; but although this was the case, the urine passed varied in amount, and did not follow the weather, *i.e.*, it was not regularly greater in quantity on wet days and smaller on bright days. Dr. T. L. Brunton suggested to me that this might have been due to variations of blood-pressure.

The acids to be found in tomatoes are malic and oxalic. In the experiments of Mesner and Kock, it is stated that malate of lime increases the uric acid, but in some experiments of my own it was found that a practically unlimited quantity of apples might be eaten without increasing the uric acid excreted. Malic acid cannot therefore, be credited with the large increase in the tomato experiments, and we are forced to consider whether it be not due to the oxalic acid, especially as the presence of this substance would cause a deficient oxidation of the blood. There is one other article of diet which contains oxalic acid, viz., rhubarb, and this was found to largely increase the excretion of uric acid when added to the fixed diet. The fact has since been noted in various patients liable to gout, that both tomatoes and rhubarb will cause discomfort and disorder of the urine. One gentleman who complained of what he called "poor man's gout," admitted he had been eating largely of stewed rhubarb, and stated that the pain in the toe disappeared when he, under advice, abstained from it.

I can find no chronicle of the effect of oxalic acid or oxalates on the excretion of uric acid; but the following experiment confirms the view taken that it was the oxalic acid of the tomatoes which caused the increased excretion.

	Urine.	To litmus.	Sp. gr.	Urea.	Uric acid.
1882 Sept. 8	49	acid	1017	339 grs.	11 grs.
„ 9	46	„	1020	384 „	12.3 „
„ 10	60	„	1014	416 „	18.6 „
„ 11	46	„	1020	340 „	12.4 „

The fixed diet had been resumed for some days prior to September 8th, 1882, and the collection of that date is seen to be normal as to uric acid, as, also, is that of the 9th. On the 9th, after breakfast, two grains and a half of oxalic acid neutralised with sod carbonate were taken in one ounce of water, and after dinner three grains and a half in a similar manner—making in all, six grains oxalic acid. After the first dose, there was headache, which continued through the morning. After the second dose there was renewed headache and considerable eructations, with sleepiness. At 3 P.M., went to sleep; slept for about an hour, and awoke with flushed face and headache, with chilliness and general dazed feeling. This passed off after tea, and the headache diminished towards evening. The following day, all effects of oxalic acid seemed to have passed off. There was no pain in the lumbar region, nor pain in passing urine during the experiment. Nevertheless, the urine collection of 10th contained about twelve or eighteen tube casts, a circumstance which had never been noticed before and has not occurred since.

It is well known that urea and uric acid always accompany each other in human urine. Wurtz has shown the blood to be a storehouse of urea, and as there is no satisfactory reason for supposing the healthy blood to be entirely freed from uric acid as that sub-

tance is formed, or, in other words, that its formation occurs in he kidney, it is legitimate, considering the evidence, to decide hat it is probable, if not certain, that the blood is also a store-ouse of uric acid, and that only the excess is daily eliminated. arrod states the blood in gout to contain at least .025 to .175 arts per 1,000 of uric acid, "whereas" he says, "in health and iany other diseases (than gout) it has been shown to contain mere aces." But Garrod also states that his test will not detect less ian .025 per 1,000, and Gairdner found in the blood of a boy ged 4, with bronchitis, evidence of uric acid, and he states his belief iat this acid is a constant ingredient of pure and healthy blood. his is confirmed by Strahl and Luberkühn.

There appears to be nothing in either tomatoes, rhubarb stalks, oxalic acid, which by process of digestion can be transformed odily into uric acid and so increase the daily production; therefore, hen we find that the ingestion of these articles is followed by a rgely increased excretion of the acid, we are driven to the conclu-on that this increased excretion arises from one of two causes. it is either an increased output from the store in the blood; or, more than normal is formed from the blood materials, or from e blood or tissues, and this excess is excreted, the blood remaining, before, in a condition of saturation under the conditions present. the increased output was caused by a diminished store in the dy, the cessation of the administration of the vegetable or oxalate uld be followed by an excretion below the normal amount, until e deficiency had been made up. This was never the case, and hence e conclusion seems irresistible that the excess excreted was due an increased production.

We know that the oxalic acid and soluble oxalates are poisonous, ether administered in a state of concentration or dilution; that estive disturbance is a marked symptom of their action; and this sonous action has been ascribed to the power which oxalic acid sesses of absorbing oxygen and becoming carbonic acid, thus bing the blood of its vital oxygen. The presence of excess of acid in the system has again and again been ascribed to deficient lation. Todd, it is true, disbelieves in the theory of deficient lation, and points out that digestive disturbance, such as gastric rrh with formation of acid, are commonly attended by a sediment urates in the urine. This occurrence of sediment used formerly, even now, to be frequently taken as proof of an increased forma-and elimination of uric acid. Todd states this inference to be e erroneous, and says "that there is not the slightest evidence ny real increase in the amount of uric acid produced in the system; even if there were, the increase could only be transient and of t duration, since the digestive disorder would tend to limit the ply of nourishment; and therefore of the material from which acid is formed, and would this interfere with any continued ssion of acid in the system, and with the production of uric acid rasia." This inference may be correct, always supposing that the acid is always found from the food ingested and is never found fasting animal, or from the decomposition of the tissues of the —which may be doubted. Todd further quotes the experiments Wochler and Frerichs against the deficient oxidation theory, these rvers having introduced uric acid into the blood and found it inated as urea, and decides: "We are thus forced to conclude , in gout, there is either so great a disproportion between the rate hich uric acid is formed and that at which it is eliminated, as use it to accumulate in the blood to an extent beyond the nt capacity of that fluid, or else that the solvent power of the l itself is diminished." Garrod takes the view that, "Condi-similar to those which cause a premature deposit of uric acid ts salts in urine without the quantity being augmented, may ccur in the interior of the body. *Among these conditions is an ase in the proportion of acids, or acid salts.*" Both these ob-rs thus seem to favour the idea that the production of uric acid rly, if not always, a constant quantity, and variations in its nation are due to variations in the power of the blood to hold solution, a deficient elimination meaning an increased accumu-; an excess of elimination meaning a decreased accumulation. his view be correct, we have but to note the normal elimina-from day to day, and then any excess when it occurs, and t that this excess of the normal, will be surely followed by a sponding deficit. During more than three months of experi-I have noted a good many instances of excess, and but one ution from the normal of upwards of two grains. I believe a careful consideration of this matter will lead to the conclusion he production of uric acid is increased in the body under n circumstances, and that either this increased production, or ient elimination may produce gouty symptoms.

GUMMATA OF THE SCLEROTIC.

By CHARLES HIGGENS, F.R.C.S.E.,

Ophthalmic Surgeon to Guy's Hospital, Lecturer on Ophthalmology in the Medical School.

THE following cases, which have been under my treatment at Guy's Hospital, are well marked examples of that rare affection, gumma of the sclerotic.

Case I has been already published (BRITISH MEDICAL JOURNAL, October 23rd, 1880), but at the time of publication I did not recognise the true nature of the disease, and called it an "Unusual Case of Episcleritis." I am indebted to Mr. Nettleship—under whose treatment the patient had previously been—for a correct diagnosis.

The disease is extremely chronic, and for a long time resists all remedies.

The first case was constantly under treatment, taking either iodide of potassium, or mercury, from the second week of June till the last week in August, 1880. At the beginning of July there was marked improvement, which, however, was only temporary. On one occasion I punctured one of the swellings, only blood escaped. A small circular ulcer formed, which took a long time to heal.

Towards the end of August I decided to cut into the swellings, and, if possible, ascertain their true nature; the patient, however, made some objection, and disappeared till the middle of September, when she returned, the swellings being larger than ever, and extremely painful.

She was again ordered iodide of potassium, in ten-grain doses, and a mercurial purge. The eye rapidly improved, and by the middle of October had entirely recovered, with normal vision. Subsequently, in January, 1881, the patient again came under treatment with severe interstitial keratitis of both eyes, from which she eventually recovered with rather thick corneal nebulæ.

The second case was different from the first, in that the gumma was single, and affected the internal, as well as the external, surface of the sclerotic, projecting into the eyeball and displacing the retina to a considerable extent; and although the swelling eventually subsided, the eye was left blind from the total retinal detachment; and when the patient was discharged, the globe appeared to be shrinking.

In this, as in the other case, I was uncertain as to the nature of the tumour. On two occasions I fixed a day for excision of the globe, but was deterred from performing the operation by noticing some slight improvement. In this case excision would probably have been the best treatment, and may yet have to be performed.

In another case, that of a woman, the notes of which I have lost, the patient left another hospital because removal of the eyeball had been recommended; I certainly thought that no other treatment would be of much avail, but determined to try, with the result that, after some months of antisyphilitic treatment, and once or twice deciding to excise the eyeball, perfect recovery took place.

The diagnosis of gummata of the sclerotic is not easy. They appear as more or less prominent, well defined bosses, the conjunctiva over them is greatly congested, giving them a red appearance. They may be single, or there may be two or three swellings. They are likely to be confounded with sarcomata and episcleritis. From the former they can be distinguished more by their progress, which is, though slow, towards recovery, than by any distinctive physical signs. A syphilitic history, or other evidence of syphilis, should also put the surgeon on his guard. From the latter, by the more severe symptoms, larger size of the swelling, and its resistance to treatment. Further, they do not recur or shift their position, as is the case with patches of episcleritis. They may also be confounded with cyclitis, or scleral staphyloma.

CASE I.—Mary Ann L., aged 27, case previously reported (BRITISH MEDICAL JOURNAL, October 23rd, 1882, p. 660), was under treatment from June 11th, 1880, till the middle of October, up to the fifth of which month the previous report extends. When first the patient came under my care the disease had existed nine months; she had been under treatment for some time. She was married, and brought with her a syphilitic infant suffering from purulent ophthalmia. The baby, however, was not her own, as stated in the report referred to. The conjunctiva of the right eye was congested throughout, but intensely so over the outer two-thirds of its ocular portion. Beneath it were three large bosses, the largest of which was situated about the insertion of the external rectus muscle; the other two were placed one above the other below the largest one. The appearance was that of staphylomata near the equator of

the eyeball. There was slight iritis; vision was little, or not at all, affected; the tension of the globe was normal; the note made was "growth?" The treatment prescribed was atropine drops to the eye three times a day; iodide of potassium in eight-grain doses, with twenty minims of compound tincture of bark in water three times a day, and a blister to the right temple.

On June 22nd the swellings were larger. She was ordered a pill of mercury and opium three times a day. On the 25th she complained much of pain in the eye, which kept her awake at night. She was ordered a grain of opium at bedtime. On July 6th the upper swelling had disappeared, and the others were smaller; the gums were sore.

July 20th there was no improvement; the gums were very sore; the mercury was discontinued. On the 25th she was ordered iodide of potassium again. On August 3rd the iodide was discontinued, as it did not agree with her; she was ordered liquor ferri dialysat. instead. August 6th the swellings were increasing in size; the lower was punctured, but only blood escaped. On August 10th the punctured swelling was larger than the other. Seven days later a superficial circular ulcer had formed at the seat of the puncture. On August 20th the swellings were much larger, and the pain was so severe that the patient was anxious to have the eye excised. Vision was still unaffected.

It was decided to give an anæsthetic, and cut into the swellings. An attempt was made to administer the chloroform, alcohol and ether mixture on August 30th; but the patient became so alarmed, and struggled so much at the first inhalation, that she was allowed to go. She was not seen again until September the 10th. She was then in great pain and the swellings were larger than ever. She was ordered iodide of potassium in ten-grain doses, leeches to the temple, and opium at night.

On September 14th she was ordered, by Dr. Brailey, a mercurial purge, followed by a black draught; the eye to be bandaged with lint soaked in belladonna lotion, and belladonna ointment to be rubbed into the forehead. To continue the iodide. A fortnight later there was marked improvement, and in another three weeks recovery was complete. Three months later, January 1st, 1881, the patient again came under treatment for interstitial keratitis of the right eye. In March the left eye was affected. She remained under treatment for several months but eventually recovered.

CASE II.—William E., aged 27, admitted June 2nd, 1882. He had had a sore on the penis two years before. Nineteen months later swelling of the left testicle and lumps on the shins. The testicle was very painful at first. At the time of admission the testicle was large, hard, and painless; there were several tertiary sores about the legs and thighs.

The sight of the right eye had been failing four months. For about the same time the patient had noticed what he called swelling of the eye. The sight gradually grew worse and the swelling increased. On admission, the eye was quite blind, a large red projection extended from the upper and outer margin of the cornea back to the equator of the eyeball; the conjunctiva over the swelling was intensely injected. The retina corresponding to the external swelling was detached, there was a yellow reflection from behind it. There was dark floating opacity in the vitreous.

The patient was ordered potas. iodid. gr. xv, mist. hyd. perchlor. one ounce ter die. On June 23rd, I determined to excise the eye on the 26th. On the 26th there was some improvement, the dose of iodide was increased to gr. xx; excision was postponed.

July 21st, there was considerable decrease in the size of the tumour.

August 4th there was corneal ulceration, the medicine was discontinued, and the eye bandaged with lint soaked in belladonna lotion.

August 18th, the corneal ulcer had healed. The tumour was rather larger. I again thought of excising the eye, but determined to try the iodide mixture again.

On August 30th the tumour had disappeared, its former position was marked by a dusky red patch. The eye was quite blind, and slightly diminished in size. The retina appeared to be entirely detached, there was still a yellowish reflex from the fundus. The sores on the legs and thighs had healed. The patient was discharged.

DONATION TO HOSPITALS.—The funds of King's College Hospital and the Middlesex Hospital have recently received a welcome addition of £1,000 each, by the benevolence of a donor signing himself "T. W. R.," who has also given £500 to the Brompton Consumption Hospital and to the British Home for Incurables.

A CASE OF APPARENT PHTHISICAL INFECTION.

BY F. J. B. QUINLAN, M.D., M.R.I.A.,
Fellow of the King and Queen's College of Physicians.

AT the present moment, when the question of the infective character of pulmonary consumption is receiving so much attention, the following case may possess some interest. I have carefully and minutely searched out its details with the aid of our house surgeon, Mr. Kenna, and am clear about the matter. Dr Mahomed, Secretary to the Committee of Collective Investigation, was kind enough, during his recent visit to Dublin, to examine and inquire into the history of this patient; and has authorised me to say that, in his opinion, the existence of phthisis in this case "is if not a pure coincidence, a distinct instance of infection."

Bridget O'L., aged 37, a widow, residing at No. 1, Mackey Terrace, Lower Leeson Street, always enjoyed the best of health up to February, 1881. Her father, William Breslin, a hale man of over seventy years of age, is at this present moment coachman to a gentleman residing at Annefield Clonsilla, near Dublin. His mother, a healthy vigorous woman, about fifty-five years, resided with her. She had two brothers and two sisters, one of the former is alive and healthy, and the other died when very young of convulsions; of the latter, one died in childbirth, and the other when an infant; in fact, there is no phthisical history whatever in her family.

On the husband's side things were very different. His mother, aunt, and sister died of pulmonary consumption. He enlisted in the army in the year 1870, being then 18 years of age; and was discharged for ill health after seven years' service, and with a small pension. He married the subject of the present case in January 1878; and had two children, one of whom died of water on the brain, at 18 months, and the other of convulsions at 10 months. During their married life they lived in a single room, where there always kept a fire, partly for cooking, and partly on account of the husband's susceptibility to cold. Towards the end of the year 188 he fell into rapid consumption, and died in the April of the following year. During the last two months of his illness the wife was troubled with a cough, and spat blood for the first time in June, 1881. Since that time she has steadily lost flesh and has been much troubled with night sweats.

Her present condition is clear and unmistakable. There is diminished movement of the left side of the chest, best seen in the infraclavicular region, and dulness over a considerable area of the apex of the left lung, with a moist crepitus both on inspiration and expiration. She has the usual sputum, and it contains tubercular bacilli. She had constant cough, and night sweats. Her case is not a very acute one, and her symptoms are relieved. It, however, admits of no doubt, and the termination is certain.

My attention was first called to the possibility of phthisical infection by the breath of persons in very close personal contact, especially husband and wife, during a visit to Italy in the year 18; and since that time I have carefully observed the matter. It appears to me that when a phthisical person occasionally breathes directly into the mouth of another, it is possible that bacilli might be conveyed into, and might propagate in, that other's respiratory passages. It is well known that phthisical bacilli require a temperature of nearly 100° Fahr. to live, different from those of splenic fever, and were it not for this circumstance, the former disease would probably be as virulently infective as the latter. It would be interesting to discover whether there are bacilli in the breath of the patient; and for that purpose she is wearing a respirator, charged with gun cotton, for several hours daily. When this cotton has had time to become charged with the bacilli (should they be there) I will convert it into collodion, and examine it, in the manner pointed out in your columns about a fortnight ago, and with the aid of a very eminent observer, who has kindly promised to examine the cotton. The patient is at present in St. Vincent's Hospital, where I will be happy to show her to any member of the profession interested in this question.

A SURGEON'S REWARD.—The American papers announce the death of Dr. Samuel Mudd, who set the broken leg of John Wilkes Booth, the assassin of President Lincoln. Mudd was sentenced for life and sent to the dry Tortugas, where, during the yellow fever epidemic, he rendered such valuable services that, after a few years, he was pardoned.

CEREBRAL DYSPEPSIA.

By JOHN S. MAIN, M.D. (Glasg.), C.M.,
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MONGST the common complaints met with in practice, perhaps ne are more common than the various forms of dyspepsia. That ese are on the increase at the present day, few, I think, will gain-y; nor can this be wondered at, when we bear in mind the "high essure" system under which many of us live, and which the pirit of the times" almost necessitates. More than ever, is the pre-it age an aspiring one; and so the truth of the poetical quotation m Beattie—

"Ah! who can tell how hard it is to climb
The steep, where Fame's proud temple stands afar"—

ecoming more and more felt—no doubt in more senses than the et had in view when he wrote this.

That people differ, in the amount of steady and continuous exer-n to which they can put their mental faculties, is as much a truism that the amount of muscular effort capable of being put forth different individuals varies; and so, as in the latter case, a person ing to put forth an equivalent amount of muscular effort to his erior in muscular development, can only do so at the expense of much our and pain, with subsequent muscular exhaustion, and fatigue; l, moreover, cannot continue the same for any length of time; so in former, an equivalent amount of mental effort can only be put th at an increased amount of cerebral exertion, over and above at the brain is normally certified for, so to speak. This, acting n the "reserve fund" of cerebral activity, may not at first be felt lo any or much harm. Nay, it is possible that, in some cases, the in may accustom itself to it, and grow in its power of withstand-fatigue *pari passu;* but this is, undoubtedly, by no means erally the case: for, just as surely as making an increased mus-ar effort, by the power alcoholic stimulants have to call forth the serve fund" of the nervous system, is followed in the long run collapse, and a total loss of even this power; so surely, in the ority of cases, will the extra calling forth of the cerebral powers, he stimulus of the will, lead to a collapse in that quarter, with ch other quarters sympathise. It is to this "extra calling forth he cerebral powers" that I have applied the term "high pressure em", under which we live.

nd now to the point I have more particularly in view, in intro-ing this subject in connection with dyspepsia; and offering to a new form to the already many forms of this disease—a form hich I have given the name of "cerebral". To the close sym-y that exists between the cerebrum and the stomach, I need refer. This is amply testified by the vomiting which generally ows injury to its substance, and by the vomiting of sea-ness, etc., which is no doubt due to its functional disorder. in, a disturbance (functional) of the cerebrum, through the sions, grief, fear, etc., also acts powerfully on the stomach. s, a sudden arrest of appetite and digestion by the receival of a e of bad news—the stomach sympathising with the brain in this —is a fact too well known, as is also the quotation from Shakes-e bearing on this point, viz.:

"Read over that, and after that
And then to breakfast,
With what appetite you have."

ut, perhaps, of all conditions acting on the brain in this manner, through the brain on the stomach, no one is more injurious, ore jarring to the cerebral elements, than uncertainty, and the y caused by the same, more particularly in preternaturally able subjects. On this point, the poet Mallet has well remarked:

"Uncertainty!
Fell demon of our fears! The human soul
That can support despair, supports not thee."

fact, it is in connection with this same worry that the form of epsia I have at present under consideration most frequently rs. The mind, in such cases, preys upon itself; the cerebral ents seem to get jarred and out of gear; and with this condi-the stomach sympathises. But, in addition to worry, the tual practice of calling into action the "reserve fund" of the orum, as already mentioned, will bring about the same conse-ces—namely, cerebral fatigue and exhaustion, indicated chiefly reternatural irritability; this condition, sooner or later, telling the digestive organs. Having said this, it is almost unnecessary ld, that such cases are most commonly met with amongst those are engaged in the hottest part of the "battle of life", or ggle for existence"; and, again, amongst these, chiefly those whose business or profession leads to much anxiety, uncertainty, or over-stretching of the mental powers.

Lastly, I would remark that, in over-aspiring, over-ambitious natures "hope deferred" may bring about the same results; or, according to the biblical expression, "it maketh the heart sick." My attention has been drawn to several cases of dyspepsia, connected with one or other of these conditions; and what made me more strong in my view of these cases being cerebral, and not stomachic at all in their origin, was their obstinacy under all forms of ordinary treatment. Latterly, I have found that the only treatment capable of doing these cases any permanent good, is a change, in the wide sense of the term—a relaxation from business or study; and, as regards medicines, not such as are meant to act on the stomach directly, but those meant to act on the cerebrum. Amongst these, I have found the most useful to be bromide of ammonium, or bromide of potassium—preferably the former—given in a sufficient dose at bedtime, to secure a good night's sleep, this being often very indifferent, and so tending to complicate the case; and, combined with this, to be taken three or four times during the day, such medicines as are known to have a building-up effect on the nervous system. Amongst these, the most useful are phosphorus, or the hypophosphites, and cod-liver oil. Arsenic and quinine are often also useful, and a generous diet is always indicated. Unless the stomach has passed into a state of disease (which it may do, if overtasked when in this weakened state), any of these medicines are generally well borne. It will be well to bear in mind, however, that if the mucous membrane of the stomach be in a state of irritation, quinine, arsenic, phosphorus, the hypophosphites, and sometimes even cod-liver oil, are inadmissible.

In conclusion, I would remark that, so far as my experience goes in the treatment of dyspepsia, in the broad sense of the term, I am inclined to think that it is rare to find only one of the conditions requisite to a healthy digestion at fault; and that, consequently, in order to make a successful cure, it is incumbent on us to inquire into all the circumstances of the case, and base the treatment accordingly. The cerebral element, if it be not the *fons et origo mali*, will often be found to complicate these cases, and to require treatment *per se*. Much has been written about dyspepsia; but perhaps, after all, in no class of cases is it more difficult to come to an accurate diagnosis.

ON THE THERAPEUTIC VALUE OF SULPHUROUS ACID IN SCARLATINA MALIGNA.

By KEITH NORMAN MACDONALD, M.D., F.R.C.P.Edin., L.R.C.P.Lond.

THE prevalence of scarlet fever of a more or less malignant type in different parts of the United Kingdom at the present time, induces me to draw attention to the therapeutic value of sulphurous acid in the treatment of that disease, and to comment upon the danger attendant upon an expectant plan of treatment, or of trusting to the use of stimulants, and nourishment only—which can seldom be administered—or any such half measures.

Every practical physician knows very well the inutility of the majority of the drugs with which we are acquainted, and which are ordinarily employed in combating this terrible scourge, and many are led, after repeated failures, to lose confidence in all our most approved measures.

I confess to having had some such notions until I began to use the sulphurous acid, and this was suggested to me on observing white patches at the back of the throat in some cases where there was a well marked scarlatina rash, in fact, in some of the severest forms of the anginose variety.

Some years ago the late Dr. James Dewar of Kirkaldy, strongly recommended the use of sulphurous acid spray in diphtheria and scarlet fever, and since then, I believe, its utility in these diseases has been firmly established.

Whatever pathological difference may exist between malignant scarlet fever and diphtheria, there can be no doubt of a certain similarity of action common to both, viz., blood-poisoning in its most acute and rapidly fatal form. Now, as sulphurous acid is known to destroy all animal vegetable organisms, and it is one of the most convenient agents for administration in such cases, I do not hesitate in affirming that, when properly applied, both locally and internally, it is by far the most efficacious remedy we possess. In order, however, to ensure success, it is necessary that its application should be both continuously and intelligently employed and when so used, the

most hopeless cases need not be despaired of, though, of course, there must be exceptions, as, for instance, when the patient is felled from the very commencement by the strength of the poison.

I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last four months, and I am bound to say that, of all remedial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows. The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied, every three hours, to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapour through the room, until the atmosphere begins to become unpleasant to breathe.

In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark sordes which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass. permang. *B. P.*, of the strength of about one drachm to six ounces of water, some of which should be swallowed if possible.

In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered, in rather large doses, in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush, several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once; the spray and permanganate solution will then prove of great service.

As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use.

I have purposely omitted any mention of diet in the above remarks, as seldom anything can be taken beyond a little milk, beef tea, and wine, until all danger has passed away.

REMARKS ON THE THERAPEUTIC USES OF OLEATES.

By JAMES SAWYER, M.D.Lond., M.R.C.P.,

Senior Physician to the Queen's Hospital, and Professor of Therapeutics in Queen's College, Birmingham.

About 1811, Chevreul,* discovered oleic acid, and soon afterwards notices of the chemical and pharmaceutical qualities of medicinal oleates were published in France.† Professor's Attfield's is the first English paper on the subject, and it was published twenty years ago.‡ From this time, I know of no other publication on the use of oleates until the appearance of Mr. John Marshall's well known paper in 1872. Since that date, many papers have been published on the chemistry, pharmacy, and therapeutics of oleates, and various methods of preparation have found favour. In 1879, I recorded my experience of the use of oleate of zinc in the treatment of eczema, and in the same year I published some remarks on the employment of oleate of lead in the cure of that affection.§ I used an ointment of oleate of lead prepared according to the following formula: lead oleate, 24 parts; heavy and inodorous paraffin oil, 14 parts. The lead oleate was prepared by heating a mixture of oleic acid and oxide of lead. I found this ointment a very reliable local application in cases of subacute and chronic eczema, when conjoined with the employment of suitable general therapeutic and hygienic measures. A few months ago, Dr. Shoemaker of Philadelphia read an important paper before the Medical Society of Pennsylvania, on the preparation and uses of oleates.* He claims to have introduced, for the first time, the use of chemically true oleates, in contradistinction to those previously prepared by the direct union of the acid with the base, with or without heat.

The new oleates are obtained by the double decomposition of sodium oleate with solutions of neutral salts, the sodium oleate being prepared by the saponification of oleic acid with a solution of sodium-hydrate. A solution of the sodium oleate in eight parts of water is precipitated by a neutral salt, and the precipitate, washed and dried, is the oleate required.

Messrs. Southall, the well known pharmacists, have prepared various oleates according to Dr. Shoemaker's directions, and some of these, namely, the oleates of lead, zinc and copper, I have examined and tested in practice. The new oleates present the great advantage, which practitioners will at once appreciate, that they can be used as dusting powders as well as in the form of ointments, so that they may be employed in those troublesome acute and discharging affections of the skin in which greasy preparations of any kind cannot be borne. Zinc oleate, which is a fine pearl-coloured powder, with a soft soapy feel, like powdered French chalk, or lead oleate, may be used alone as a dusting powder for the skin, or it may be so used diluted with powdered starch. One drachm and a half or two drachms of either of these oleates, mixed with an ounce of petroleum jelly or benzoated lard, makes a good ointment, which I have found efficient in cases of subacute and chronic eczema. Dr. Shoemaker has introduced oleate of copper as a remedy for ringworm. I have used it in the form of ointment, of the strength of one drachm and a half of the oleate to six drachms and a half of petroleum jelly, in some mild cases of ringworm, with excellent result.

* *Recherches sur les Corps Gras.*

† Squibb's *Ephemeris of Materia Medica.*

‡ "On a Method of Dissolving Alkaloids in Oils", *Pharmaceutical Journal*, 1862-63, vol. iv, p. 388.

§ "Oleate of Zinc in the Treatment of Eczema," British Medical Journal, April 19th, 1879; "Notes on the Treatment of Eczema," the *Practitioner*, November 1879; "Oleate of Lead in Eczema," British Medical Journal, May 29th and June 19th, 1880.

* The *Medical Bulletin*, July 1882. An excellent summary of Dr. Shoemaker's paper appears in the *Pharmaceutical Journal*, October 14th, 1882, under the following title: "The Oleates and Oleo-palmitates in Skin-diseases."

OBSTETRIC MEMORANDA.

CASE OF INTERSTITIAL TUBO-GESTATION.

The following case, that occurred recently in my practice, may be of some interest, as an instance of the danger attending such cases and as an illustration of the fact that extra-uterine pregnancy may exist unsuspected, and interfering in no way with the patient's health, until the moment of rupture, when all the resources of our art are often powerless to save the patient's life.

Mrs. S., aged 35, sent for me hastily, at 8.30 P.M., on July 26th last. On my arrival, I found her in bed, lying on her right side with the knees drawn up, complaining of intense pain in the left inguinal region. On examination, I found her fairly nourished, but very anæmic; the lips, gums, and conjunctivæ, being exceedingly pale. The surface of the trunk was warm; but the legs, arms, and face were cold. The face was clammy, and bore a very anxious expression. The radial pulse was almost imperceptible, and could not be counted. Respiration was 42 to the minute, and sighing. Nothing abnormal could be detected in the lungs. Temperature in the axilla was 95° Fahr. Her mind was clear, but she showed a great disinclination to enter into conversation. The pupils were dilated, and equal, the tongue pale and moist. The abdomen was distended, and tender on pressure all over, especially in the left inguinal region. There was dulness on percussion over the hypogastric and both inguinal regions, reaching upwards to midway between the pubes and umbilicus. There was intense thirst, and the patient complained of feeling very cold. She was too ill to admit of any prolonged examination, especially of the internal organs.

I was able to glean the following particulars from her husband. She came of a healthy family, and had been married seventeen years. She miscarried during the first year of her married life, and bore a fully developed child three years afterwards. Nine years ago she suffered from symptoms of inflammation of the womb; and four years afterwards had an attack of inflammation of the bowels, since which time she had enjoyed good health. Menstruation had been regular and normal, since the birth of her child (thirteen years ago), until eleven weeks ago, when she menstruated for the last time. The usual symptoms showing themselves shortly afterwards, she considered herself pregnant. The day before the commencement of the present illness, she had walked to Beachy Head and back, a distance of about seven miles, without feeling any inconvenience. On the morning of the 26th, she felt in perfect health, and took her breakfast, with a relish, at about 9 A.M., after which she went out for a walk. Whilst standing in

shop, at about 11.30 A.M., she felt a sudden sharp pain in the left nguinal region, which caused her to faint. On recovering consciousness she vomited, and was with difficulty conveyed home, fainting wice on the way. She was put to bed; brandy and arrowroot were administered, and hot poultices applied to the abdomen. During he day, she passed two copious healthy motions, and was twice violently sick. She and her husband imagined the illness to be simply bilious attack, and consequently did not think it necessary to all in medical aid. However, at 8.30 P.M., as the pain and fainting ttacks still continued, her husband became alarmed, and sought my dvice.

From the condition of things at my visit, I came to the conclusion that the patient was suffering from shock and internal æmorrhage, the exact origin of which could not, with certainty, be etermined. The prostration was so excessive, that a very grave rognosis was given. She was too ill to admit of any operative inerference, with the view of searching for the source of, and arrestng, the hæmorrhage, so it only remained for me to endeavour to romote reaction, and ward off death as long as possible. I dministered frequent small doses of brandy in champagne, alternately with Brand's essence of beef; gave her ice to suck, and small oses of opium to relieve the pain. The patient was wrapped in arm blankets, and hot water bottles were applied to her feet and illa.

The vomiting and fainting soon ceased, and, by 11 P.M., the temrature in the axilla had risen to 99.5°; the extremities were arm, and the patient felt much better: she was free from pain, cept on pressure. The pulse was more perceptible, but could not counted. However, after that time, she gradually sank, and, in ite of all our efforts, died at 4 A.M., about sixteen hours after the mmencement of the attack. I obtained permission to open the domen on the following day.

There were about five pints of clotted blood in the pelvic and dominal cavities. On turning this out, the source of the hæmorage proved to be a sac, formed by the uterine portion of the left llopian tube and the wall of the uterus, which had grown outrdly to about the size of a walnut, and then ruptured anteriorly. orion villi were distinctly visible in the sac. The opening of the pe into the sac had become obliterated. There was evidence of previous partial rupture, in the shape of a small hæmatocele, on posterior aspect of the sac. The fœtus had escaped into the dominal cavity, and was unfortunately lost. The left ovary was sely attached to the left side of the uterus by old bands of lymph, contained several cysts. The right ovary was normal, and conned a corpus luteum. The uterus was enlarged, and its lining mbrane was red and thickened, forming a distinct decidua, that uld be easily detached. The bladder was healthy, but conned no urine. The abdominal organs were healthy, but very emic.

With regard to the cause of the arrest of the ovum in that parular spot, I may remark that nothing existed in the Fallopian pe or uterus, in the shape of polypus or fibroid, to cause obstruca, but that there were plenty of adhesions on the left side, matg the uterus, Fallopian tube, and ovary together, altering their ative positions, and, possibly, causing obstruction. Yet the presce of a corpus luteum in the right ovary, coupled with the cystic dition of the left, would point to the theory of transmigration of ovum as being the most probable explanation of the phenomenon.

HENRY HABGOOD, M.D., etc.

SURGICAL MEMORANDA.

EPITHELIOMA OF LOWER LIP IN A FEMALE.

January 11th, 1882, I removed an epithelioma from the left side he lower lip of an old woman aged 75, the wife of a farmer in a ghbouring parish. The tumour was of the size of a large Spanish , and was removed by the usual V-shaped incisions. Three dles with figure-of-eight sutures were used to bring the cut surs together. There was nothing remarkable about the operation, cept that I had no assistance, skilled or otherwise; and that the ent behaved with the utmost coolness and fortitude. On January , the needles were removed, the wound looking well, and having ed to a large extent.

That renders this case worth recording is the acknowledged rarity he disease in the female sex, and also the probable explanation hy it occurred in this case. On turning to Erichsen's *Surgery* edition, vol. ii, p. 400), I find he says: "Lip-epithelioma almost invariably occurs in men; I have never met with a case affecting the lower lip of a woman." As to cause, this woman has been in the habit of smoking a clay pipe for many years. In addition, she had one or two jagged and projecting teeth, which must have irritated the lip to a considerable degree. The worst of these I extracted about a fortnight before operating, and I intend to remove more when the wound is sound.

JOHN OSBERT WILSON, M.D. and C.M., Huntly, N.B.

THERAPEUTIC MEMORANDA.

NOTES ON THREE DRUGS.

BRIEFLY, I shall mention three materiæ medicæ, and their uses.

1. *Powder of Capsicum*, two drachms to the ounce of prepared lard, rendered elegant by the addition of one of the essential oils, is a seldom failing local application in subacute and chronic forms of rheumatism. It must be rubbed over the affected part for ten minutes by a gloved hand, and the application of dry heat intensifies the rubefacient action, which continues for a considerable time afterwards, being even somewhat revived by heat or walking. It is to be used freely night and morning, or at bedtime only (in lumbago, for example, the first thorough application often gives marked relief), according to the effect produced on the sensibility of the patient, and on his disease.

2. A year and a half ago, I published a note in a contemporary journal in reference to the antiseptic treatment of what are called the zymotic diseases (I trust we shall soon be naming them the protistozooic diseases), mentioning the administration of carbolic acid in scarlatina; but I have since then, with more advantage, used the *Benzoate of Ammonia* as my germitox (a word meaning germ-poisoner better expresses the idea of the various degrees of antiseptic action than a term meaning germ-slayer). In doses of fifteen grains every three or four hours to an adult, and proportionately for children, it is an efficient treatment in scarlatina anginosa, and milder forms, combined or not with liquor ammoniæ acetatis. I have been informed, by a friend, of its uncombined exhibition in an apparently hopeless case of scarlatina maligna, where recovery followed.

3. *Syrup of the Protochloride of Iron*, in drachm doses thrice daily, diluted with water, recommended, I believe, by Professor Fraser of Edinburgh, I have seen to be of great benefit, particularly in the anæmia of young females. It appears to me to take rank with, if not, all things considered, over, the famous Bland's pill.

These items may be as new to the mass of practitioners as a very great many *soi-disant* new things are, and I shall be glad to see the experience of others recorded in regard to them.

A. DRUMMOND MACDONALD, M.B. and C.M.Edin., Liverpool.

RECTAL CONSTIPATION.—Dr. Benjamin Lee, of Philadephia, makes two suggestions *(Med. Bulletin)* for the mechanical relief of this form of constipation. The first consists in applying pressure with the ends of the fingers, protected, if desirable, by a soft cloth, against the most prominent point of the protuberant mass, through the rectal wall, outside of the external sphincter, to convert the concavity of the pouch into an inclined plane, over which a comparatively slight expulsive effort will cause the mass to glide, especially if the inner walls of the anus have been anointed with some bland ointment. The point at which pressure usually proves most effective is just to the left of the sphincter posteriorly; but the finger passed rapidly around, will readily place itself where it will do the most good. Patients should be taught to use this simple manipulation when they became conscious of the presence of an accumulation in the bowel which they cannot extrude. The second suggestion relates to the shape of the opening in the water-closet seat. The hole of an ordinary seat is circular or oval in shape, and so wide as to admit a considerable portion of the fundament. As the body settles down the fleshy masses of the buttocks are forced together, thus crowding the anus, and effectually preventing the opening of the sphincters. The softer and fatter the gluteal regions, the greater will be the impediment thus produced, and hence females will be the more seriously affected. The remedy is to change the shape of the opening, by making its width not to exceed about one-third of the one in ordinary use. The upper edge should be slightly rounded off—not bevelled. Seated firmly upon such a support, the nates are pushed apart rather than forced together, so that an impulse to evacuate will be noticeably excited, and the evacuation will be comparatively easy, requiring but little action of the diaphragm and abdominal muscles.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS. January 18th, 1883.

Abdominal Tumour of Obscure Nature. Hydatid Fluid Evacuated on Tapping.—Dr. WICKHAM LEGG requested the opinion of his surgical colleagues on the nature and treatment of a case under his care. The patient was a young girl, seventeen years of age, who had first come under his care between three and four years earlier, on account of a tumour in the right hypochondrium. At that time the tumour was about the size, and had the shape of the kidney, and was exceedingly freely movable. It had gradually enlarged, and at the time of the consultation, had attained the size of a child's head, and had lost the uniform outline. It was situated in the right lumbar and hypochondriac regions, and reached across the middle line in front; it was movable to a most remarkable extent, so that it could be pushed over into the left iliac region. To the touch it was firm, hard and elastic, with rounded outlines, an almost spherical form, and an uniform surface. Dr. Legg said that a swelling had been noticed, five years earlier, on the right side; it had gradually and painlessly enlarged. Two or three years ago he had been inclined to regard the case as one of movable kidney, but it had now for some time become evident that this diagnosis was not complete. There appeared to be now two hypotheses which would account for the tumour. Owing to some pressure on, or dragging or twisting of the ureter, the pelvis of the kidney, and the organ itself, might be dilated, or a secondary cystic dilatation in connection with it might have occurred; or, secondly—and this he thought, on the whole, the more probable hypothesis—the tumour was a cyst of the omentum. There were no symptoms referable to the kidney, or to any derangement of the gall bladder.—Mr. WILLETT thought that the possibility of the tumour being connected with the gall-bladder could not be entirely excluded. The absence of jaundice did not afford positive evidence, and he had known instances where the enlarged gall-bladder was exceedingly movable. If the tumour were a cyst, there must be a very dense, unyielding wall, and it was not quite smooth; he would describe it as an encysted swelling, rather than as a cyst. It was, however, no doubt, most probably connected with the omentum. He thought it would be advisable to make an exploratory puncture, as Dr. Legg proposed, but believed that abdominal section would be necessary.—Mr. HOWARD MARSH did not think that the tumour was connected either with the kidney or the gall-bladder. Most probably it was a cyst of the omentum. To the touch it had very much the feel given by a dermoid cyst, and he thought it very probably of this nature.—Mr. WALSHAM thought that it was a solid tumour, probably connected with the kidney, since there seemed to be less resistance in the right loin.—Mr. HARRISON CRIPPS was decidedly of opinion that the tumour was cystic, probably a simple cyst of the omentum; if it were tapped, he thought that the finest possible needle ought to be used.—Dr. LEGG remarked that hydatid disease of the omentum might give rise to a very firm, hard tumour, and Dr. Matthews Duncan, who had examined the patient, had mentioned a case of hydatid disease where the tumour was quite as movable as in this case.

The tumour was shortly afterwards tapped by Mr. Langton, and a large quantity of hydatid fluid, containing many hooklets, was drawn off.

FEBRUARY 1ST, 1883.

Abdominal Tumour of Obscure Nature; Probably Renal.—Mr. WILLETT and Dr. CHURCH brought forward a very interesting case of abdominal tumour occurring in a young man. The patient was first admitted early in last year, suffering from hæmaturia, which had come on after an injury; there was at that time a large swelling in the left flank. This swelling was subsequently aspirated, and a large quantity of serous fluid containing altered blood was drawn off. The patient had latterly been aspirated twice, but on all three occasions the cyst had filled again with great rapidity; the last aspiration was on January 5th, and the swelling was now as great as ever; it occupied chiefly the left side of the abdomen, but extended across the middle line. The fluid drawn off by the aspirator on the second occasion was clear, and contained .1 per cent. of urea; on the third occasion also it was clear, but the quantity of urea had risen to .34 per cent. The urine was free from pus, but always contained some albumen. On each occasion, as the tension of the cyst increased, the quantity of albumen became greater.—Dr. CHURCH said that Dr. Gee and Dr. Southey both agreed with him in thinking that the tumour was in some way connected with the kidney, though all felt great difficulty in arriving at any conclusion as to the nature of this connection; whether the swelling was a cyst connected with the kidney, or whether it was a case of hydronephrosis. The man, when readmitted before the second tapping was very ill, suffering much pain, and had anasarca.—Mr. WILLETT said that the tumour was evidently in chief part, at least, cystic, and since it now filled so very rapidly after tapping, the question whether any more serious operation should be undertaken, was pressing; so soon as the cyst became tense, the albuminuria, the anasarca, and the general suffering and discomfort became very considerable. He proposed to make an incision through the abdominal parietes, to tap the cyst, and after drawing it out stitch its walls to the sides of the wound in the abdominal parietes, leaving the cyst to drain.—Mr. SAVORY thought that the swelling was a cyst, and not a dilatation of the whole renal substance. Though he did not feel that its close connection with the kidney had been sufficiently established, he thought it probable that there was some such connection. If any operation was undertaken, he thought the one proposed by Mr. Willett the best, but he would prefer to wait longer and try the effect of repeated tappings.—Mr. LANGTON believed that the tumour had some connection large or small with the kidney. He thought that since the cyst had filled so rapidly after previous tappings, to wait longer would place the patient in a less advantageous situation. He did not think the operation should be attempted from the loin, and advised Langenbeck's operation, in which an incision was made along the linea semilunaris.—Mr. MORRANT BAKER remarked that there was considerable uncertainty about the diagnosis, but that the probabilities were in favour of the tumour being more or less closely connected with the kidney. This being so, he thought that the operator ought to be prepared to remove the kidney, or so much of it as could be got away, should it appear advisable to do so at the operation. Taking this view of the case, he would not advise operation until the symptoms became rather more pronounced.—Mr. HOWARD MARSH said that the case reminded him of some cases published by Mr. Stanley in the *Transactions* of the Royal Medical and Chirurgical Society. This case if left alone would certainly, he believed, go from bad to worse. In the present state of abdominal surgery, he thought it quite justifiable to make an incision through the abdominal parietes, and on thus ascertaining the precise condition of parts, to complete the operation as might appear most desirable at the time.—Mr. HARRISON CRIPPS did not consider it necessary to incise the abdomen. He referred to a somewhat similar case, in which he had punctured with a large trochar, and afterwards introduced through it a drainage tube; so long as the drain remained in position the progress of the patient was satisfactory; he recommended a similar line of treatment in this case. Mr. WILLETT, however, expressed the opinion that drainage in the way recommended by Mr. Cripps, was more dangerous than a free incision.

A somewhat similar case was recorded in the JOURNAL, January 20th, 1883, p. 108, by Mr. Bennett May, who quotes in the course of his remarks Mr. Stanley's paper, referred to by Mr. Marsh.

BIRMINGHAM WORKHOUSE INFIRMARY.

PRIMARY LATERAL SCLEROSIS.

(Under the care of Dr. CORNELIUS W. SUCKLING.)

THE patient, J. R., was 38 years of age when the following notes were recently taken. His family history was good, but he himself had been a heavy drinker of spirits and beer; and, thirteen years ago, he had syphilis. Eleven years ago, he was carried to the infirmary, being, according to his own account, completely paralysed in both legs; he had also a large bed-sore over the middle of his back. He was in the infirmary for twelve months, and then recovered completely.

From this time (ten years ago), till within the last two years, he was in perfect health, and could walk about with ease. But, about two years ago, after a severe cold, caused by getting wet through, he noticed a sense of weariness of the legs after walking; this increased, and stiffness came on after any exertion. During the last sixteen months, he had noticed a tremulous condition of the legs, especially after any sudden contact, such as knocking his legs against the floor, etc. The difficulty in walking, tremors, and weariness, slowly increased up to the time at which these notes were

aken, but he had had no pain, the mental faculties were unimpaired, nd there had been no inco-ordination.

His condition, when examined, was as follows. He walked in ne manner characteristic of lateral sclerosis; he had difficulty in ising and projecting his feet. The back was strongly arched, the nest projected, and the hips alternately raised to a greater degree an natural. The toes scraped the ground, and he was constantly tching them in any irregularity of the floor. Spasmodic twitchngs and tremors came on whenever he pressed on the balls of the es, or attempted voluntary movements. The muscles responded to radism, and were not atrophied. The deep reflexes were exaggered; patellar reflex was exaggerated. Front tap was present. nkle clonus was present, and pushing down the patella caused vibraon of the quadriceps muscle.

The condition of the superficial reflexes was as follows: the antar was greatly increased; the cremastenic, the epigastric, the dominal, the gluteal, and the interscapular, were unobtainable. nere was great loss of power in the left leg, and also paresis of ne right.

Sensations of touch, pain, pressure, and temperature were normal. ne muscular sense was also unimpaired. When the eyes were shut, ere was no vertigo or unsteadiness. On ophthalmoscopic examiation, no neuritis nor atrophy could be detected, but there were a w white lines along some of the vessels. Sight was perfect.

With regard to the rectal and urinary reflexes, the patient said at his bowels were only open once or twice a week, and that he as obliged to go to the closet directly he felt the desire to defæcate, ing unable to control the act. The function of micturition was in similar condition; the urine was free from albumen.

REMARKS BY DR. SUCKLING.—These disturbances of defæcation d of micturition are characteristic of lateral sclerosis, or of any ion interfering with the transmission of cerebral influence along e lateral columns to the defæcation and micturition centres. I nk that the case is one of primary lateral sclerosis, and not one secondary degeneration of the lateral columns, for the two folving reasons. 1. The gradual onset of the paresis, accompanied rigidity: for the paresis and the rigidity came on together. 2. e absence of any interference with sensation, for sensation is fect. What was the cause of the paraplegia eleven years ago? l he at that time have a transverse myelitis? and, if so, is it posle for the inflammation in the sensory tracts to resolve, leaving y a descending sclerosis of the lateral columns? If so, how can diagnose between primary and secondary lateral sclerosis?

With reference to the former case of primary lateral sclerosis, olished by me in the BRITISH MEDICAL JOURNAL on December , 1882 (p. 1152), I may add that I lost sight of the case for seven nths, but have recently found the man in another hospital, where had been an in-patient for three months. The physician in charge dly allowed me to examine him, and I found that he was greatly proved. He still had the spastic gait (but much less severely), and re was also increase of both patellar tendon reflexes; ankle-clonus l the front-tap contraction were no longer obtainable. The latter signs had greatly diminished when I last saw him, and re was no disturbance of sensation. The great improvement s attributed to rest and good food for three months, and large doses of iodide of potassium. The man had had syphilis.

NTUSSUSCEPTION IN INFANTS.—Dr. W. R. Gillete (N. Y. *Med. r.*) states that he has succeeded in reducing three cases of insusception in infants by the administration of chloroform, inions of warm water, and the application of massage to the mass through the abdominal walls. He knows of two other cases re all the ordinary means failed, and reduction was effected by roform and massage. The children, in all these cases, were held, the injections forced into them against all voluntary and luntary efforts that they could make. In one case, the gut had n invaginated forty hours, and in another for three days. In case, the particulars of which are recorded, the water, after three our enemata were thrown in, was rejected. This was repeated stantly; it seemed almost impossible to get the gut to retain any er. Finally the assistant resorted to massage (the infant being er choloroform). Immediately there was a roar of flatus and er, and a large amount of water passed in and was retained. child was put to bed, surrounded by warm bottles; the bowels e soon moved, and a rapid recovery ensued.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 6TH, 1883.

J. WHITAKER HULKE, F.R.S., F.R.C.S., President, in the Chair.

Unilateral Anophthalmos.—An infant, four months old, in whom the left eye was absent from birth, was shown by Mr. R. J. GODLEE. The mother stated that the eyelids were not open until the seventh week, and subsequently for some time she noticed a muco-purulent discharge from between them. The eyelids, the puncta lachrymalia, and the orbit, were well formed, but no tears were secreted on crying; no trace of the eye could be detected, beyond a slight thickening at the bottom of the conjunctival sac. The term anophthalmos required some explanation; it seemed to be a good term, inasmuch as it associated the condition with complete anophthalmos, of which a few cases were on record; and also as it served to distinguish it from those cases in which the deformity appeared to be brought about by a fusion of both eyes into a single Cyclopean organ, and to which the term monophthalmos had been applied. Only a few cases were on record, indeed, up to 1875, but six cases had been recorded. In three of these cases, a *post mortem* examination had been made, and considerable malformation of the brain was found. In one case very similar to the one now shown, an imperfectly developed optic nerve was present, and all the muscles of the orbit, with the doubtful exception of the levator palpebræ, could be distinguished.—Mr. NETTLESHIP had seen two very similar cases, one published in the first volume of the *Transactions of the Ophthalmological Society*. In that case, when the child cried, tears flowed from both orbits; in the second case, this point had not been noticed; in both, a sort of button could be felt under the conjunctiva, which might have been the stump or imperfectly developed remains of the eye.—Mr. BOWLBY said that an exactly similar condition was found in a boy aged 11, who had recently been in St. Bartholomew's Hospital; in this case, the patient had control over the upper lid, so that the levator palpebræ was evidently intact.

Clot from the Pulmonary Artery.—Dr. MAHOMED referred to the scepticism with which most accounts of the formation before death of clots in the pulmonary or other large arteries were received, and the difficulty of understanding how they could be produced. Dr, Dickinson had described these clots twenty years ago; and Sir Joseph Fayrer had recently again stated that such clotting occurred frequently after operation in patients suffering from septicæmia or malaria. He had himself not met with a case in which he had felt the evidence of this occurrence to be strong enough, until recently when he made a *post mortem* examination of the body of a woman aged 49, who had been admitted into Guy's Hospital suffering from epithelioma of the cheek. She underwent two operations. Three days after the second operation, she died. Death was preceded by two attacks of faintness, but not by dyspnœa. The patient sank, and died quietly about two hours after the first fainting fit. The pulmonary artery was filled by a firm, dense, dry, dark clot, which pervaded every branch of the vessel on both sides. The clot was covered by a layer of whitish lymph; and in the centre was a thin firm zone of whitish lymph, which could be squeezed out of the more external part of the clot. No similar clot was found in any other vessel. The difficulty in understanding the case was great; but there was one other morbid condition which might throw light on it. Between the vagina and the rectum was a large dermoid cyst attached to one ovary; it contained pus, and also some small moulded fibrinous bodies. The cyst had pressed on the rectum, which contained many dilated veins. It was reasonable to suppose that a small fragment from a clot in one of these dilated veins had been dislodged, and thrown as an embolism into the pulmonary artery; there it might have produced the area of pulmonary apoplexy which was found. From this the clotting in the pulmonary artery might have started, the clot being thus formed by accretion. After death, or at the time of death, the bulk of the clot was probably greatly increased by further clotting upon the part already formed.—The PRESIDENT remarked on the clinical importance of the case from the surgical point of view.—Dr. NORMAN MOORE said that these clots were first noticed in the early part of the last century "Polypus of the heart" was one of the common subjects of pathological investigation at that time, and it had been associated with sudden death, as was shown by a passage in Fielding's *Amelia*. At the end of the last century, Dr. Mathew Baillie first showed that but few of these supposed cases of sudden death from polypus, were really of that nature. Dr. Moore concluded by referring to the nu-

merous cases not of sudden death where extensive clotting in the branches of the pulmonary artery was observed.—Dr. MORRISON referred to a case of gangrene of the lung, secondary, as he believed, to thrombosis of the pulmonary artery, which he had shown at a former meeting of the Society.—Dr. HALE WHITE described a case of heart-disease admitted into the Dreadnought Hospital, where, for some time before death, the heart would occasionally entirely cease beating for a few seconds. After death, a large clot was found extending up to the cardiac side of the innominate artery; it had apparently originated near the orifice of that artery.—Mr. A. E. BARKER suggested that the firm clots so often found in the right ventricle and pulmonary artery were formed in part during the last hours of life, but that the greater part was formed after death. He thought that, in examining these clots, a gradual transition might be traced from the appearance generally acknowledged to be that seen in *ante mortem* clots, to that of undoubted *post mortem* clots.—Dr. DAWSON WILLIAMS failed to see that Dr. Mahomed's explanation of the formation of the clot was complete. It might be allowable to suppose that the central decolorised portion of clot was derived by accretion from the pulmonary apoplexy, but he wished to ask Dr. Mahomed how he accounted for the decolorised clot on the surface except as due to some disease of the vessel-wall.—Mr. SUTTON said that, in the numerous cases of cancer in the Middlesex Hospital, where there was an extreme asthenia, and especially where there had been serious hæmorrhage, a condition was brought about in which it was easy to foretell that there would be a large amount of clot found after death in the pulmonary artery.—Mr. BOWLBY did not think that Dr. Mahomed had proved that his case was one of clotting in the artery before death. He had not shown that there was any clotting in the rectal veins, and even if there were, he had not shown that the clotting in the pulmonary artery was connected.—Mr. LOCKWOOD pointed out that any clots reaching the lung from the rectum would have to pass through the capillaries of the liver; only a few of the lower veins of the rectum were in direct connection with the systemic circulation.—Dr. MAHOMED, in reply, said that, in the case referred to by Dr. Morrison, the clotting might very well have been secondary to the gangrene. He wished to ask Dr. White whether there was any disease of the artery; if not, his case was one of very great interest. Surgeons had recently attributed death after severe surgical operations to this clotting in the pulmonary artery, and he had hoped to elicit some positive evidence on this point. The rectal veins were not examined, but the hypothesis was, that the clot was very small, and had been swept into a terminal division of the pulmonary artery, and had there become infarcted. With regard to the mode of formation of the clot, he imagined that the central part of the clot was first formed, and projected freely into the lumen of the artery; after death, a further coagulation had, he supposed, formed around this clot, and the outermost decolorised layer was formed, he imagined, by a subsequent contraction of the clot and squeezing out of the colour.

Cancer of Undescended Testis.—Dr. MAHOMED also showed specimens from a case of undescended testicle which had been free in the abdominal cavity. The patient had only experienced any pain for about six weeks before admission, and had noticed a swelling for only three weeks. When admitted, a large tumour could be distinguished in the hypogastric region, which gave indistinct fluctuation, and moved with, but was not, the bladder. No sign of secondary disease could be found. The tumour was found, after death, to be attached by a small thin pedicle to the side of the pelvis; in addition, there was a huge cancerous mass in the retroperitoneal glands. This had pressed on the duodenum, and caused great dilatation, and some ulceration. The gall-duct was pressed on, and the hepatic gall-vessels were much dilated; but there were no inflammatory changes in the liver. The bronchial glands and the thymus were also involved.

Ulceration of Calvaria.—A specimen of an unusual form of caries of the skull, obtained from the body of a man aged 42, who died of abscess of the brain, was shown by Dr. NORMAN MOORE. The scalp was entire, but for many months had felt puffy all over. When raised, there was found beneath it a quantity of pus, with loose pieces of necrosed bone, and much granulation tissue. The calvaria, which could easily be cut with a knife, was ulcerated over its whole outer surface. There were also several patches of necrosis. A lesser degree of the same condition existed on its inner surface. The dura mater was entire, but there was a superficial abscess in the right cerebral hemisphere at its posterior part. Dr. Hensley, who had treated the case, could obtain no history of syphilis, and there was no scar of a sore. The viscera were free from amyloid disease and from gummata. In the museum of St. Bartholomew's, there were many similar calvaria collected by Mr. Stanley from cases of syphilis, and probably they were almost invariably attributable to that cause.—The PRESIDENT inquired what occupied the spaces on the surfaces of the skull? Were they filled with pus, with granulation tissue, or with cheesy material?—Mr. A. E. BARKER had met with caries of the parietal bone in one case, where there was no question at all of syphilis. The caries occurred on the inner surface of the skull. The patient was a boy who died of caries of the spine. A large mass of caseous material lay under the dura mater, and the parietal bone, in that situation, was excavated and filled with the caseous material.—Dr. NORMAN MOORE stated, in reply, that a large quantity of pus and much greyish œdematous granulation tissue filled up the spaces on the surface of the bone.

Visceral Syphilis.—Specimens illustrating visceral syphilis, from a man aged 56, who died in St. Bartholomew's Hospital, were exhibited by Dr. NORMAN MOORE. In November, 1881, the patient had hæmatemesis, and was admitted with ascites and general indications of cirrhosis of the liver. He came in again, after a partial recovery, in January 1883, and died, in a few days, of general dropsy. A distinct history of syphilis was obtained, and there was a scar on the penis. His viscera showed three forms of morbid change attributable to syphilis. 1. A general uniform thickening of the capsules of the liver and spleen, without any general peritonitis; the spleen weighed nineteen ounces. The liver was reduced in size, and its substance was not distinctly cirrhotic. 2. Amyloid disease of the kidneys. 3. Extensive calcification of the aorta with two aneurysms, one just beyond the arch, the other two inches above the diaphragm.—The PRESIDENT pointed out that it ought not to be too hastily assumed that a diseased condition in any given case was due to syphilis because there was a scar on the penis. On the contrary, a scar was not left, commonly, by the true Hunterian chancre, while it was a common consequence of the soft non-infecting sore.—Mr. ALBAN DORAN considered that it was most important to ascertain what was the signification of perihepatitis found after death in cases where there had been no symptoms pointing to disease of the liver during life. In the large number of cases of ovarian and other abdominal tumours in which he had performed necropsies, he had very rarely found perihepatitis, though disease of the capsules of the kidneys, so that they adhered firmly to the parenchyma of the organ, was common.—Mr. HENRY MORRIS remarked that, he did not think it safe to assume the absence of syphilis merely because the patient denied infection. In a case of extensive necrosis and caries of the jaw recently under his care, the man strenuously maintained that he had never had venereal disease under general treatment, however, no improvement occurred, while so soon as antisyphilitic remedies were given, it became marked.—Dr. MOORE pointed out that in this case the man gave a very definite history of general syphilitic infection.

Tubercle Bacilli.—Dr. SAMUEL WEST showed some microscopical preparations which demonstrated grouping of the bacilli into large masses. The specimens were obtained from scrapings of cavities in the lungs. Both the cases ran a very rapid course; one was a policeman, aged 33, who had been in perfect health and at active work up to within nine weeks of his death. When admitted, he was in a hopeless condition, the temperature was very high (103° to 104° Fahr.), and he was very tremulous and nervous; the physical signs were comparatively slight, there was only some dulness at both apices, and widespread crepitation over both sides. The *post mortem* examination revealed small cavities in both apices, with scattered areas of consolidation, chiefly yellow in colour and softening down. There were no grey granulations. Microscopical preparations of the lungs, and of the contents of these cavities were made. In the lungs themselves no bacilli could be found, but in the cavities they were found in large numbers. The second case was that of a labourer, aged 30, whose illness only lasted about seven months; when admitted, the physical signs pointed to consolidation and breaking down at both apices, and the temperature was high (102° to 103° Fahr.). He died of exhaustion, and at the necropsy numerous small cavities were found at the apices of both lungs, scattered throughout the lungs were patches of consolidation, which had mostly become caseous. The arrangement and distribution of the bacilli were the same as in the former case. In all the cases of phthisis he had examined, he had found the bacilli. In the rapid cases they occurred in considerable numbers, but groups or masses such as these he now exhibited, were rare. Some writers had described the bacilli as varying in size, but they seemed to him to be in different cases all of the same size; he had noticed in a few cases the bright points in the bacilli, which had been described as spores, and in some cases he had observed similar small bodies, lying in various situations

. As a general rule he found that the gravity of a case might measured by the number of the bacilli; that is to say, the more idly excavation went on, the greater the number of the bacilli putum; but this did not hold with all cases. He did not wish nter on the question of the relation of the bacilli to the cause of erculosis, but would content himself by pointing out the large nbers in which they existed in the walls of the softening cavities hese two cases.—Mr. ALBAN DORAN observed that the relation which these bacilli stood to the phthisical process, needed much cidation. Dr. West's cases, and others of the same kind, seemed how that the more numerous the cavities, and the greater the unt of debris, the greater the number of bacteria; from these s it appeared quite allowable to conclude that the presence of bacilli was to be attributed to the process of putrefaction; in ious teeth, for instance, micro-organisms were found in the debris nimal and vegetable matter; they were not the cause of the es, but merely the consequence of the accumulation of putre- ble matters.—Dr. GOODHART inquired whether the bacilli were nd in all cases of phthisis; and also whether by the term phthisis West meant to include all destructive diseases of the lungs.—SAMUEL WEST, in reply, said that he desired to speak with great tion with regard to the causal relations of the bacilli to tubercu- s; the fact that they were found in great numbers in the cavities, not in the lungs, might be due to their requiring for their de- pment an albuminous medium and the presence of air. By term phthisis, in these cases, he meant to include those cases monly called tubercular, where the disease began in the apices iout previous inflammatory mischief.

Viscera from a Case of Poisoning by Sulphuric Acid.—Dr. HALE ITE showed the stomach and transverse colon, taken from a an who had died thirteen hours after swallowing strong sul- ric acid. The stomach was intensely inflamed, and in places its ous surface was quite black. The chief interest of the case was, the inflammation of the stomach, set up by the acid, was so nse, that the process had extended right through the gastric walls ie transverse colon, and through the latter into its interior. piece of the large intestine was intensely inflamed, whilst the of the intestine was perfectly healthy, none of the acid having ed the pylorus. Dr. White believed that this was the only ex- le on record of this condition of things. Another point of interest that, on the larynx, a slough was produced exactly resembling ie diphtheritic membrane. The specimens were quite recently ined, and showed the appearances referred to in a very marked ner.

rcoma of the Kidney.—Mr. KNOWSLEY THORNTON observed a specimen he exhibited ought, perhaps, to be described as oma of the capsule of the kidney, since the organ itself did not ar to be infiltrated; the specimen, however, had only been ob- ed a few days ago, and had not yet been thoroughly examined. growth was first noticed by the patient about six years ago, as tinct tumour. When she came under treatment recently, Mr. nton at first diagnosed a tumour of the kidney; but subsequently hanged his opinion, owing to there being some resonance on ussion behind the tumour in the flank. He accordingly e a median incision of the abdomen; and then, on the first dia- is proving to be the correct one, had been obliged to leave the er free in the abdominal cavity, and had inserted a drainage- through a counter opening in the loin. Up to the present time, patient was doing well. The tumour, when removed, weighed 1 pounds.

struction of Intestines by Persistent Vitelline Duct.—Mr. WELL showed a recent specimen of this rare condition. Symp- of obstruction existed altogether for six days in the patient, was a boy. On February 5th, after all other means had been and failed, the abdomen was opened, and a firm band was l, extending from the lower part of the ileum to the umbilicus; ening this, it was found to contain fæcal matter. Believing the obstruction was due to this diverticulum, which he re- d as a persistent orivitelline duct, Mr. Barwell ligatured two places near its attachment at the umbilicus, and divided The boy died from general peritonitis thirteen hours later. *ost mortem* appearances fully confirmed the diagnosis made g life, and Mr. Barwell thought that the fatal result was o the long delay before operating.

rd Specimen.—Dr. MAHOMED. Paravaginal cyst from the n whose case was described under the heading of "Clot from ulmonary Artery" *(vide supra)*.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 1ST, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Pleuropneumonia.—Mr. W. H. LAMB read notes of a case of this disease, which presented several interesting features. The President, Dr. Ewart, Dr. Hayes, and Mr. Cripps Lawrence took part in the discussion which followed.

The Treatment of Fevers and Exanthemata by Antiseptics.—This paper was read by Mr. H. C. STEWART. The author said that his attention had first been directed to this subject in the year 1837, when, as a student, he saw cases of glanders and farcy treated with creasote by the late Dr. Elliotson, with considerable success. Since that date, he had treated cases of small-pox, some of them of the most virulent nature, with sulphite of soda, the results being decidedly favourable. He found that this drug cut short the usual periods of the different stages; that maturation began and ended earlier under its influence, and that the scabs were more quickly thrown off, and with less pitting. For scarlet fever, he used a linctus, composed of one part of sulphurous acid to seven parts of honey, which combination he found very efficacious for the relief of the throat distress in scarlatina anginosa. Measles, typhoid fever, diphtheria, and erysipelas, treated with the sulphite of soda or with sulphurous acid, quickly subsided. Salicylic acid, combined with potash, soda, or ammonia, was found useful in catarrh, influenza, and the milder cases of scarlet and typhoid fevers, and measles; but, in the severer cases, the sulphites were to be preferred. The author then quoted M. Ramonet of Algeria, and M. Desplats of Lille, who had treated many cases of typhoid fever successfully by enemata of solutions of carbolic acid, of a strength varying from one to fifteen grammes to 150 grammes of water. He mentioned the discovery by Ehland of Stockholm of a vast number of peculiar cellular bodies in the blood and urine of scarlatinal patients. This discovery had recently been confirmed by Dr. Octerlong in America; and, if the views of these observers were correct, the infective material of scarlet fever had been discovered.—In the discussion which followed, the PRESIDENT and Dr. EASTES took part, and Mr. STEWART briefly replied.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 5TH.

FREDERICK LAWRANCE, M.R.C.S.Eng., in the Chair.

Colloid Cancer.—Dr. THOROWGOOD exhibited a patient believed to be suffering from malignant disease of the abdomen. The abdomen was much distended. Slight evidence of localised fluctuation could be detected in the flanks; and he said that, when in St. Mary's Hospital, last August, he was tapped in the left flank, from which serous fluid was drawn. When admitted to the West London Hospital on December 13th, he was losing flesh, had a quiet pulse, clean tongue, and did not vomit. The heart and lungs acted normally. On feeling the abdomen, a hard mass was felt below the ensiform cartilage, about two inches by two inches in size; below this was a zone of resonance; then, across the abdomen could be traced, at the level of the umbilicus, a chain of hard, tender, irregular masses. Liver-dulness was somewhat increased upwards. Twenty years ago, he came home from India, invalided for dysentery; and ten years ago, he had slight hæmoptysis. With these exceptions, his health had been good. His present illness commenced with enlargement of the abdomen five weeks before his admission into St. Mary's Hospital, on August 21st, 1882. The liver did not then extend below the margin of the ribs. Paracentesis abdominis was performed, and after that the liver-dulness extended eight fingers' breadth upwards in the right chest. No lumps were felt in the abdomen at this time; but a hard mass was felt below the xiphoid cartilage. The urine contained lithates, but no albumen. The case was set down as cirrhosis, with ascites; and, on November 2nd, the patient left St. Mary's. Before tapping, his abdomen measured thirty-eight and a half inches at the umbilicus. The present measurement was thirty-four inches. Dr. Handfield Jones told Dr. Thorowgood that he considered absence of pain and presence of ascites was against cancer and in favour of cirrhosis. Dr. Thorowgood believed that the disease was colloid cancer. The age of the patient favoured such a belief, as did also a case of colloid cancer reported by Dr. Ord (*Pathological Transactions*, xxxii). Dr. Thorowgood could not say whether enlargement of the mesenteric glands, set going by the Indian dysentery, contracted twenty years ago, could have much to do with the development of the abdominal tumours. The masses

felt on the abdomen were growing rapidly after the manner of colloid cancer. The part invaded, apparently the peritoneum and omentum, was especially liable to colloid cancer. Dr. Ord's case showed how collections of fluid would form in the abdomen in company with colloid; and thus it appears to be with the patient, for his flanks were, to some extent, resonant; and yet, by a little manipulation, a sense of fluctuation would be obtained at certain points. At present, the functions of the stomach and intestines were not much affected, but he lost flesh rapidly, and the prognosis was unfavourable. The treatment had consisted of saline purgatives to relieve congestion and oppression, and, at night, extract of conium to relieve pain.—Dr. SCHACHT said that there was lately, in the obstetric department of St. Bartholomew's Hospital, a case where a mass could be felt, by deep palpation, in the hypogastric region, which was diagnosed as malignant, and was found, after death, to be encephaloid cancer.—Dr. ALDERSON remarked that cirrhosis of the liver was excluded from the diagnosis by the absence of contraction.—Mr. LLOYD had made a *post mortem* examination in the case of a young woman who had cancer of the ovaries, and where the omentum was much diseased.—Dr. THUDICHUM asked whether the conium had any medical effect whatever? It was not chemically definable.—Dr. POPE knew a case of an old man who had large masses in the abdomen, swelling in both sides, and much obstruction in breathing. There was also localised fluid easily felt in the flank. It turned out to be sarcoma, originating in stone and chronic kidney disorder.—Dr. DANIEL said that he preferred morphia to conium, as a sedative, because it was more certain in its operation.—Dr. ALLDEN OWLES did not regard the comparative absence of pain as weighing much against the symptoms of cancer in the case.—Dr. THOROWGOOD said that it was possible to have abdominal cancer without pain. This might be a case of sarcoma, but the locality indicated that it was a colloidal form of cancer. He regarded extract of conium as a useful sedative, although it was not clear what was its effective principle, and although its mode of action was obscure; the science of therapeutics was ahead of that of chemistry; and not unfrequently they had to be content with observing the effect of an agent of whose action they were uncertain.

Posthemiplegic Chorea.—Mr. PERCY POTTER showed a case of posthemiplegic hemichorea with hemianæsthesia, in which there were some peculiar clinical features. The patient, aged 32, had been a soldier, and had always enjoyed good health previously to the present affection. He never had rheumatic fever nor syphilis, nor was there history of injury to the head. The family history was good, except that his mother had temporary chorea. Eighteen months ago, whilst playing a wind instrument, in India, he became suddenly unconscious. The patient could not say how long this lasted, but when he recovered there was right hemiplegia without aphasia. This improved to some extent, but the muscles of the legs became atrophied, and the flexors of the foot tonically contracted, assuming the form of talipes equinus. On his return to England, tenotomy of the tendo Achillis was performed at Netley Hospital—three months after the outset of hemiplegia. This did not influence the deformity. Three weeks ago, the patient was frightened by a mastiff dog, which knocked him down. Two days after, there appeared chorea of the affected side. There was now well marked right hemiplegia, including the face, without aphasia; the vision of the right eye was defective; the senses of smell, hearing, and taste (as tested by aloes and colocynth) were blunted. There was anæsthesia, complete in the right side of the face and leg, less complete in the arm, trunk, and thigh. The symptoms of chorea consisted of sudden and unexpected jerks of the right arm and thigh, and of the right side of the face. The muscular movements were quite uncontrollable. Tendon-reflex and ankle-clonus were increased. No cardiac *bruit* was heard. The urine was normal. Professor Charcot described three cases of this disease, all occurring in the female sex. He found that the lesions in the encephalon were in similar situations—namely, the posterior part of the optic thalamus, the posterior portion of the nucleus caudatus, and the back portion of the corona radiata, these lesions consisting of cicatrices, probably hæmorrhagic. Apoplexy was very rare in men so young, but there was very little doubt as to the apoplectic nature of these phenomena.—Dr. SCHACHT made some remarks on the disease.—Dr. THUDICHUM thanked Mr. Potter for exhibiting this interesting case. Inquiries were also made by Drs. James Thompson, J. Frankish, Ralph Richardson, B. Daniel, Pope, and Bennett.—Mr. POTTER said there was no doubt that apoplexy was caused by exposure to a hot sun. The chorea was unquestionably due to fright. It was difficult to ascertain if there was reflex action, as, the moment he attempted to touch the limb, the man winced. On one occasion, however, when the man's attention was diverted, he observed that the tendon-reflex was exaggerated. He had not been able to observe the patient during sleep.

Tumour of the Forehead.—Dr. JAMES THOMPSON showed a tumour removed from a woman, aged 36, after its fifth recurrence. Its situation was in the median line, at the border of the hair in the forehead. The size was that of a goose's egg, springing from a base only three-quarters of an inch in diameter. The original tumour was removed in 1869. At least four surgeons had operated. Both caustics and the knife had been used. Dr. Thompson operated with Richardson's scissors, and applied an actual cautery to the root.—A committee was appointed to report upon the character of the tumour.

Calculus in Ureter.—Dr. THOMPSON also exhibited a calculus, believed to have been formed in the ureter. W. D., aged 45, market dealer, plethoric, free liver, suffered for years from lithiasis, and passed several small stones. He applied while suffering from severe pain in the left loin and down the thigh. The diagnosis was a stone passing through the ureter. After driving in a cart some distance, he obtained sudden relief. A few hours afterwards, two stones were passed with the urine, one with a facet on one end, the other with a facet on each end, about one-sixteenth of an inch long, and cylindrical. Two days after this, a third was passed, about three-quarters of an inch long, of the same shape and with a facet at one end, which fitted that already passed. Two months afterwards, the patient had a similar attack, which terminated fatally in two days, with symptoms of acute peritonitis, possibly caused by a similar condition of the other ureter. No *post mortem* examination was obtained.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, JANUARY 5TH, 1883.

J. M. PURSER, M.D., President, in the Chair.

Dermoid Tumour of Ovary.—Dr. F. HEUSTON exhibited an ovarian dermoid tumour of the right ovary, the circumference being ten inches, and the diameter nine. He had removed it from the body of a dissecting-room subject aged 65. The tumour was connected by adhesions with the surrounding viscera. Microscopic sections of the wall of the cyst showed bony plates and nodules of cartilage. A fibroma existed in the upper and posterior portion of the vagina.

Rupture of Choroid.—Mr. ARTHUR BENSON exhibited drawings of two cases of rupture of the choroid from external injury. Case I was from the left eye of a man aged 33, who had received the injury three weeks before admission to St. Mark's Ophthalmic Hospital, by a fall from a horse. The rent in the choroid was seen to occupy a space midway between the disc and the yellow spot, and was concentic in form, its concavity being directed towards the disc. The rent was marked by a considerable accumulation of pigment. The retinal vessels ran over it without any alteration in their curvature or direction. The pigmentation occurred six or seven weeks after the accident, and was not the remains of hæmorrhage. Case II was from a girl aged 19, who had, six months before admission, received a blow from a portion of an exploding coffee-pot. There were three separate rents in the choroid; one at the yellow spot; the second, a small crescent above the disc; and the third, a large irregular rent above the last, and near the periphery.

Tumour of Cerebellum.—Mr. J. S. MCARDLE exhibited tumours of the cerebellum removed from a child ten years old, who, three days after a fall on his head, was admitted into St. Vincent's Hospital with all the symptoms of cerebro-spinal meningitis. Sections of the tumour prepared by Mr. P. S. Abraham showed giant-cells, with caseation of the central parts of the tubercular mass.

Fibroid Tumour of Toe.—Mr. MCARDLE also exhibited a toe with fibroid tumour attached. The tumour was painless and slow of growth until within a month of its removal. A short time before admission into St. Vincent's Hospital, caustics had been applied, with the effect of increasing the size and altering the surface of the tumour, as well as rendering it painful.

Thickening of Nasal Septum.—Mr. MCARDLE likewise exhibited a specimen of thickening of the nasal septum, removed from a patient who died of inflammation of the lungs, and in whom the nasal passages were almost occluded by thickening of the mucous membrane over the turbinated bones and septum.

Extracapsular Fracture of the Neck of the Femur.—Mr. ANTHONY H. CORLEY exhibited this specimen. The patient was over eighty years of age. It was not quite certain whether fracture was caused by a blow or by a fall, as it was stated that she was struck with a poker, and fell in consequence. She lived three weeks after

:ident, and had more power than usual in turning in bed. There re no signs of severe contusion. She suffered from bronchitis and physema, and died rather suddenly. The fracture was commi- ted, the great trochanter being split vertically.

Cirrhosis, or Fibroid Induration, of the Upper Lobe of the Right ng.—Dr. J. MAGEE FINNY exhibited this specimen. The disease s strictly limited to the right lobe, and had caused it to be converted o a series of cysts varying in size from a pea to a small marble. ere was a complete absence of the normal alveolar tissue, which s replaced by dense fibro-cellular tissue of a greyish-red colour. e cysts, which, as a rule, did not communicate with each other, tained a yellow muco-purulent secretion (free from special idity), and were lined with a mucous membrane continuous with t of the bronchi. They permeated the entire lobe, giving it a y peculiar honeycombed appearance. The bronchi were slightly ated in their tertiary division. It seemed as though the alveolar ue alone, to the almost total exclusion of the pleura, and to a tial exclusion of the bronchi, was the seat of the fibroid change. other exactly similar case had been observed; and, while the es of demarcation between bronchiectasis and the cirrhosis of rigan was by no means so marked as some recent writers (in- ling Juergensen, in vol. ix of Ziemssen's *Cyclopædia*) would imply, vas plain that, in the specimen, the bronchial dilatation had le, if anything, to say to the condition of the lobe. The pleura he right lung was thickened and adherent to a very slight de- e, and sent no fibroid prolongations into the substance of the g. The patient, a boy aged 17, was under observation for but a k, having been admitted to Sir Patrick Dun's Hospital on De- ber 21st, 1882, for a supposed attack of pneumonia of the upper e. On December 28th, physical examination showed the pre- ce of what was thought to be a multiple abscess of that lobe, and ral effusion of a latent type of the left side to the length of the h rib. In the course of the case, two days before death, the ritic friction was heard as high as the fourth rib. Over a limited nt, occupying the third and fourth costo-sternal articulations, a ble friction-sound, synchronous with the impulse of the heart, increased by pressure, was readily made out, and heard by ral observers. It was thought to be of pericardial origin, the mmation being secondary to extension from the pleura. The *mortem* examination showed that there was no pericarditis, and its real cause was the impact of the heart against the pleura, ch was roughened and granular in its narrow prolongation under sternum. Dr. Finny noticed the rarity, and commented on the cal significance of this physical sign. The cause of death was ope, due to the sudden outpouring of fluid into the left pleura, the incautious sitting up of the patient. On the evening before leath, the respirations were 28, pulse 123, temperature 102°, and e were no signs of any asphyxia. The patient was resting easily ne right side, and expressed himself easier and better than he been since admission; and during the day the fluid had not ned above the fifth rib in the semi-recumbent posture, and there no symptoms suggesting—not to say demanding—mechanical f. At 3 o'clock A.M. on the 29th, he sat up to cough, as he was e habit of doing, on waking out of sleep; and, whilst taking ishment and conversing with the night-nurse, he was noticed enly to become pale, and to be bathed in perspiration. He died 1 hour. Effusion of a very rapid nature, and to a very consider- extent, must have occurred during that night, as the pleural y was found full of fibrino-serum, and the lung compressed, out enlargement of the side or bulging of the intercostals. sseau's and Bartel's notice of the possibility of sudden death in isy, and their explanation of it as being by syncope, were led; Dr. Finny laying more stress upon the rapidity with n the effusion was poured out than on the amount.

uble Glioma Retinæ.—Mr. SWANNY read a paper on double ia retinæ, illustrated by a living specimen. The patient was 2½ years. His mother first noticed a peculiar appearance in terior of the right eye, twelve months ago, and four months in the left eye. At the first visit to the National Eye and Ear nary, six weeks ago, a growth of a pale yellow colour was found h eye. In the right eye it lay deep on the posterior surface globe; in the left eye it came most to the front, occupying hirds of the vitreous humour, and presented a lobulated surface. itreous humour in each eye was clear. There had been no iritis her inflammatory process, and there was no injection of the ior parts of the eyeballs. There were not, and had not been, ead-symptoms, and in all respects the patient's general health erfect. He had never had any illness. The only changes the case had been under observation, were a slight increase in the size of the growths, and a distinctly glaucomatous condition of the right eye. However, the child, who spoke remarkably well for his age, had lately spoken sometimes very indistinctly, and with much rapidity, and a forced repetition of the final letter of some words, thus, "bread-d-d-d-d."

Intra-ocular tumour.—Mr. SWANZY also read a paper on a case of intra-ocular tumour (illustrated by microscopical sections prepared by Mr. P. S. Abraham). The growth had commenced six years ago, and when removed was, with the eyeball, of the size of a hen's egg. It was still covered in front by conjunctiva and atrophied sclerotic, but had grown through the sclerotic above, and displaced the eye- ball downwards. The greater portion of the tumour was found to consist of a melanotic sarcoma, with round and spindle cells in the usual arrangement. Around the optic nerve, behind the globe, there was a considerable mass of tumour, containing less pigment, and in it there was an alveolar arrangement corresponding to Billroth's alveolar sarcoma. At one part of the highly pigmented portion, where it came into proximity with the conjunctiva, there were well marked alveoli containing epithelial cells, thus so far placing the tumour in the category of carcinomatous sarcomata, described by Virchow.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, JANUARY 19TH, 1883.

J. W. TRIPE, M.D., President, in the Chair.

THE Council brought up a report, recommending that the tables of the Society be modified to make them harmonise with the new tables of the Registrar-General, and that the causes of death be arranged in similar groups, but abbreviated to suit the more immediate neces- sities of the medical officer of health; and that the Council be re- quested to draw up and publish such tables for the use of the Society. The report was adopted.

An Outbreak of Diarrhœa at Clapton.—Dr. TRIPE read a paper on this subject, of which the following is an abstract. On November 6th, 1882, he received information that the inhabitants of almost every house on Clapton Common had been seized with sickness and diarrhœa, accom- panied in some cases by more or less depression. Inquiry showed that the milk came from several sources. The chief outbreak occurred on November 4th and 5th. On the 7th, at the request of the author, the Clapton main was thoroughly scoured out; on the 8th, fresh cases occurred; and on the 10th, the main was again cleansed. Cases also occurred on the top of Stamford Hill, while those at Clapton were also confined to the higher part. An examination of the plans of the Company's mains showed that a cross main extended from Clapton to Stamford Hill and adjoining roads, and was connected with the Kingsland and Stamford Hill main at a point immediately below where the disease had occurred, and that the main at Clapton Common terminated in a dead end, without any valve. Some hundreds of persons were affected, often several cases occurring in one household. A house-to-house visitation was not made. The author heard of several cases in which water-drinkers alone in a family were affected. There were several striking instances in which visitors were attacked; thus, two ladies took luncheon at a house on the Common; one drank sherry, the other sherry and water; the former escaped, the latter suffered. Another visitor to another house took luncheon and drank water, with the result of being attacked, on his return to Chislehurst. There were three servants in one family, two of whom were water-drinkers, the last not; the water-drinkers alone were affected. The disease was not fatal to anyone. Analysis of the water showed but a very slight increase of organic matter; but on November 7th, Mr. Wigner, to whom a sample had been submitted, found some vegetable *débris*, consisting of fibres, mycelium, and some animalculæ, but no sewage-fungus; on the 9th, there were not any animalculæ or mycelium. The author believed that the presence of a main with a dead end at the top of the hill had allowed a growth of mycelium, and perhaps of other organic bodies, owing to the water remaining there unchanged for some time, and that it became suddenly mixed with the ordinary supply a day or so before the outbreak.—In the discussion which followed, Dr. Corner, Dr. Corfield, Dr. Gwynn, Mr. Shirley Murphy, Dr. Heron, and Dr. James Stevenson, took part; and Dr. Tripe replied.

BITTER and nauseous salines are best taken simply diluted with iced water. A mouthful or two of iced water, before and after the dose, to blunt the sense of taste, and the dose between them in a wine-glassful of iced water, renders it easily taken by most persons.—Squibb's *Ephemeris*.

REVIEWS AND NOTICES.

STUDIES IN PATHOLOGICAL ANATOMY. By FRANCIS DELAFIELD, M.D. Volume I. New York: W. Wood and Co. 1882.

THE first volume of the *Studies in Pathological Anatomy*, by Dr. DELAFIELD, has just appeared in America in a very handsome and sumptuously issued volume, containing ninety-three plates, many of which are coloured. The book represents a large amount of conscientious work, and testifies to much enthusiasm for the subject. We regret that a careful perusal of the contents of the book does not allow us to speak of its value quite so well as we could have hoped.

In the preface, the author announces that he adopts the objective method; this is true to the letter, since he does not even attempt to give a summary of what is known in pathological and microscopical anatomy, but offers solely a description of what his own preparations have revealed to him, engravings of which accompany the description. In this record of the author's research, we find, however, some rather startling assertions, of which the following is an example. "The basement substance ('a connective tissue'), while still alive, is transparent and nearly homogeneous. After death, it coagulates regularly into small fibres, composed of still smaller fibrillæ." We are thus forced to conclude that Dr. Delafield believes that the connective tissue, when alive, is nearly homogeneous. This is such a very unusual view that it will hardly be considered exacting if we ask the author why he rejects the opinion based on the researches of such distinguished histologists as Kölliker, Ranvier, and Boll, which lead to a very different conclusion. We may ask for the same explanation concerning the endothelial cells, which he considers as a simple variety of connective tissue cells, further stating that the endothelial cells which cover the connective tissue bundles have hitherto been but little studied. Connective tissue has been studied and described with great care by Recklinghausen, Ranvier, and Renaut, as well as by other notable histologists. Dr. Delafield's description of "endothelial" cells is an example of a good theory spoiled, and is only a confused and imperfect repetition of what has been said by these authors on connective tissue cells, in which Dr. Delafield has forgotten to speak of the *crêtes d'empreinte*, which put these cells so much out of shape that frequently it is difficult to recognise them.

Dr. Delafield's description of the normal anatomy of the pulmonary alveoli gives evidence of unquestionable originality; this is, however, a questionable merit in this case, as it leads him to attribute singular lesions to the respiratory apparatus, and to disagree with all the facts revealed by Kölliker's splendid researches.

The volume under notice is devoted to the study of the different pathological processes observed in the connective tissue. The author divides them into seven principal classes: 1. Cellular inflammation; 2. Inflammation with the production of serum, fibrin, and pus; 3. Necrotic inflammation; 4. Inflammation with the formation of abscesses; 5. Reparative inflammation; 6. Hyperplastic inflammation; 7. Tubercular inflammation.

This classification is somewhat arbitrary. The first class will serve as an example of this. The author tells us that, in cellular inflammation, the connective tissue cells become larger and more numerous; and, in the second class, the plasma of the blood transudes. It is evident that, as in cellular inflammation (first class), the cells increase in size and number, exudation of plasma is indispensable, in order to provide them with the elements required for their nourishment and change of form.

With regard to reparative inflammation, the researches of different histologists have determined that the reparative process is always preceded by an inflammatory process, producing more or less complete alteration of the tissues, which undergo the process of renewal, as Rigal and Vignal have demonstrated that, in the connective tissue, these processes are especially co-existent.

Dr. Delafield occasionally expresses opinions which would justify any adverse criticism. For instance, concerning the question of peritonitis being limited to a proliferation of the epithelioid cells of the omentum, he says: "It is worthy of special notice as an example of inflammation producing new cells without the presence of fibrin, serum, or pus." Dr. Delafield undoubtedly means without producing fibrin or serum in sufficient quantity to be visible, but it would have been more satisfactory had he made his meaning clear by the help of his own words, instead of relying on the knowledge of his readers; serum and fibrin are always circulating round the anatomical elements, their absence would cause the death of these elements. As to pus, we are anxious to know where the author has observed new elements generated by pus. His astonishment when he observed cell-formation, independent of the presence of serum and fibrin round the element, would have vanished, had he reflected that the omentum is in a large serous cavity, which in a normal condition contains an abundance of lymph. This increases in quantity when peritonitis is so unimportant as to manifest itself by only a slight cellular hypertrophy; indeed the lesions which present elements surrounded by free serum and fibrin are so rare that they can be counted.

The distinction which Dr. Delafield makes between serum and fibrin is far from good. The serum of the blood plasma conduces to cell-formation, that is to say, to the nutriment of cells capable of proliferating under given conditions.

As to the question of fibrin and serum, and their separating one from the other; we know that fibrin in the interior of an organism cannot operate directly in the formation of fresh elements, as it is either re-absorbed by lymphatic cells, or is encysted in a fibrous capsule and becomes sequestrated; it is most difficult to define with certainty the behaviour of the serum, but it is probably similar to that of fibrin.

It is to be regretted that Dr. Delafield restricted himself to examine pathological specimens collected at *post mortem* examinations. Had he gone a step further, and ventured on experimental pathology, he could have assured himself that, the fibrin which he detected surrounding the elements, was frequently due to the changes which take place after death; and he would also have observed that, during life, a mass of fibrin can only contribute to new tissue-formation by bringing to the spot lymphatic, or embryonic elements. These elements are transformed either into new tissue, or the capsule encysting the fibrin. The fibrin behaves in all respects similarly to a foreign body capable of being absorbed, such as an artificial sequestrum, either bony or of a softer substance, like catgut.

Simply examining and describing pathological specimens is no sufficient to help on pathological anatomy, such as it is at the presen time. Indeed, in its advanced state, in order to contribute to it further progress, it is necessary to have recourse to these exper ments which result in isolating complicated phenomena, and als permit the different periods of the lesion in the course of its evo lution to be carefully studied. It is equally necessary to carefull observe nature's own experiment.

It is difficult to explain Dr. Delafield's love for very large sized plate Had they represented preparations magnified by a lower power th from 500 to 750 diameters (most generally the latter), he wou have gained by the loss. His preparations are evidently good spec mens of ordinary pathological anatomy, and a power from 100 250 would reveal all that is represented in the plates. Such powe as those preferred by Dr. Delafield, are useful for rendering cle such detail as the structure of the nucleolus, in cellular divisio micrococci, bacilli, etc., details which are absent in the plates repr senting his preparations. Had a lower power been used, the dra ings would have been much clearer. It is both fatiguing a monotonous to examine plates which represent each element colossal.

The photographs which are added, are as satisfactory as pho graphic representation of histology, for the most part, can be. Th are unavoidably wanting in clearness, and might wisely be s pressed in the future columns of "pathological studies," It i disagreeable duty to indicate the faults in this book; we fulfi more pleasant one in referring to its merits. Anatomo-patholog may consult Dr. Delafield's volume with advantage. If the text not quite up to the present standard of scientific knowledge, shortcoming is almost atoned for by the series of plates, which rep sent a very interesting, and nearly complete, series of lesions of nective tissue. Dr. Delafield evidently possesses an important lection of anatomical and pathological specimens.

DONATIONS AND BEQUESTS.—University College Hospital received £1,000 from Mr. James Mason; and £65 further from People's Contribution Fund, making a total of £300 for the year 1 —Mr. Owen Clutton, of Bessborough Street, South Belgravia, queathed £100 to the Earlswood Asylum for Idiots, and £100 to Royal Hospital for Incurables.—Mr. G. W. P. Bentinck, M.P., given £100 to the West-end Hospital for Diseases of the Ner System (Paralysis and Epilepsy).—Mr. James H. Lermitte, of Marine Parade, Brighton, has given £100 to the Sussex County pital.—Mrs. James Packe has given fifty guineas (additional) t Royal Hospital for Diseases of the Chest.—The Mercers' Com have given fifty guineas to the Great Northern Hospital.

LIBRARY OF THE UNIVERSITY OF ILLINOIS

NOTES ON BOOKS.

Burdett's Official Intelligence for 1883, by HENRY C. BURDETT, .S.S., pp. 1040. (London: Effingham Wilson, 1883.) The ıoroughness and completeness of the work to which Mr. Burdett ırns his hand, has been many times demonstrated. In the now umerous capacities in which he has appeared before the public, for ıe most part sanitary and philanthropic, he has shown unusual ıpacity and zeal. To criticise in detail the massive volume before ; is beyond our province; but the excellent plan upon which the ook is devised, and the clear manner in which the particulars as to ıch security are stated, may be noted as deserving approval. The reface shows that the work contains information concerning early 3,000 separate joint stock undertakings known to the stock ıarkets of the United Kingdom. The information so given has een submitted to the authorities of the several securities, and has, ractically universally, been revised and corrected by them. Being rought out under the direct authority of the Committee of the ock Exchange, and the supervision of an official of universal nergy and clear-headedness, the work has thus a character of its vn. It may be regarded as thoroughly reliable, and as a valuable pertory of information for persons, of whatever grade, seeking ficial information in respect to investments.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN ETHER-FREEZING MICROTOME.

SIR,—By the simple method I am about to describe, at the cost a few shillings, Williams's well known freezing microtome can be apted for the use of ether as a freezing medium. Useful, and most indispensable, as this instrument is for the working of a rge class in histology, there are yet numerous occasions on which is inconvenient to prepare a freezing mixture when a few sec- ons only are required; moreover, ice may not be easily available. ım acquainted with Mr. Groves' modification for this purpose, but e instrument is rather costly, and, I believe, does not act well th common ether.

To adapt the microtome, fill the hole in the glass plate with a ɜc of brass $\frac{1}{8}$-inch thick, projecting by a flange $\frac{1}{16}$-inch above the ıte, fitted tight by a split-ring. This may weigh about forty grammes, d on the size of this depends the length of time it will be pos- ɔle to work without consuming more ether. Next turn a wooden ıg about $1\frac{1}{2}$-inch thick, 1 inch deep, and of internal diameter equal the aperture in the freezing-tub; mount this, by three legs, on a ɔoden stand about the diameter of the glass plate. This should clamped to the table, slightly projecting over the edge. In this ɔjecting portion cut a slot to admit the neck of a bottle of ether ted with a spray apparatus, which will thus be held in the proper sition, so that the upturned nozzle may be about $2\frac{1}{2}$ inches from e lower surface of the brass disc. A small evaporating basin aced beneath will catch the condensed ether, and thus avoid much ıste. Lastly, protect by a rim of putty the junction between the ıss plate and the wood on which it rests, or the ether will dis- ve away the asphalte by which it is fixed. A neater way, per- ps, would be to cut off the segment of the stand which projects er the table, and substitute a brass clip to hold the ether bottle, in the instrument designed by Mr. Bevan Lewis.

I have already tried this arrangement for some time, using the ezing mixture for long operations and the ether for short, and d it work most satisfactorily. The mucilage begins to freeze in if a minute after the spray is turned on; the tissue is com- tely frozen in one and a half to two minutes, and will then con- ue frozen for three to five minutes, according to the temperature the room, quite long enough to cut, with the plough-knife, a ficient number of sections; it works well with common ether. increasing the amount of metal in the brass disc, this time of ezing may be indefinitely extended; but if it be used to cut fresh ve tissue in the way recommended by Mr. Lewis in his recent rk, it is an advantage to be able to stop the freezing at any ment, which it would be difficult to do if a large mass of metal re acted on. I generally use about two ounces of ether.—I am,

ERNEST H. JACOB, M.D.

eeds, February 1883.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 10th, 1883.

A MARINE MEDICAL SERVICE.

III.

IT has been shown to be in every way desirable, that the Government should undertake the formation and control of a regularly constituted Marine Medical Service. Until some decided move has been made in this direction, it may seem premature to discuss in detail the requirements of the position of the medical officer upon a large passenger-ship. We think it well, however, that in response to the invitation of a contemporary (the *Daily Telegraph*), and with due regard to the various interests involved, we should suggest the lines upon which such a service may be instituted, to the advantage, and we believe, after fair trial, to the satisfaction, of all concerned.

In the first place, the Passengers' Act, which, as already stated, is in many respects unequal to present necessities, must be revised and altered. Section XLII, referring to "the medical practitioner", requires only that he should be "authorised by law to practise as a physician, surgeon, or apothecary." Such a qualification is manifestly insufficient. No person should be intrusted with the medical care of many hundred lives unless at least duly qualified as a physician and surgeon.

With reference to the minimum of age and experience, we would suggest that the medical officer should have reached his twenty-fifth year, and possess the necessary physique for laborious and often trying duties; and that he should have spent not less than two years in the practice of his profession, and made at least one voyage as assistant-surgeon, in order to learn the details of ship-work and discipline, and to prove the requisite immunity from sea-sickness.

His duties should be the medical and sanitary charge of the entire vessel, for which he alone should be responsible. In these matters, he should be supreme—quite independent of other officials; and allowed sufficient authority over the servants of the ship—especially those connected with the steerages, to insure their active and cordial co-operation. He should inspect the inhabited parts of the vessel at least twice daily, keeping an accurate record of hygienic particulars, such as humidity, temperature, etc.; and on these and all other matters connected with the health of the passengers, he should prepare a complete and careful report, to be handed to the authorities at the termination of each voyage. Such reports would not only insure the adoption of any sanitary measures which might be necessary before the ship started on another voyage, but would also, taken collectively, be of the highest value in advancing our knowledge of naval hygiene—a subject now thoroughly neglected. The surgeon should be allotted suitable accommodation: a cabin of such size and surroundings as would admit of moderate personal comfort, with reasonable facilities for study; and, distinct from it, a surgery or dispensary, of necessary proportions and fitting. He should be allowed proper assistance proportionate to the number of persons under his charge; never less

than one trained nurse, distinct from the matron or stewardess, a dispenser, and a boy for personal attendance, messages, etc. He should wear a uniform suitable to his professional capacity, with the distinctive badge of the Marine Medical Service. Brass buttons, gold lace, scarlet cloth, and similar decorations, seem to be unnecessary for a medical officer, and are, to our eye, unbecoming in what is, in most respects, a civil practice. His rank seems to need no special definition. We see little necessity to assert the ever invidious question of priority. Should, however, such occasion prove unavoidable, it ought to be distinctly understood that, in social matters, the medical officer yielded precedence to the captain alone.

On the question of remuneration we shall be equally candid. We believe that a sufficient and certain supply of surgeons of the calibre that we consider necessary for the post can never be secured at a lower rate of remuneration than from £250 to £500 per annum. By whom this should be paid, and whether it should be given as a regular salary, or as a facility for earning, are questions we would leave for later consideration; but we desire to propose a plan which seems to meet the requirements of the case—rendering justice to everybody, while imposing the least expense upon the shipowner.

1. Let the shipowner pay £10 per month for medical attendance upon the steerage passengers and crew, or, at the option of the surgeon, sixpence per head for every steerage passenger landed alive, this charge to include attendance upon the crew.

2. Let the American authorities be petitioned to allow a small fee (from 5 to 10 cents per head) for the vaccination services required by them to be performed during the voyage. These services being of a purely prospective character—required by no present necessity, and determined not so much for the benefit of those vaccinated, as for the protection of American citizens with whom these persons may subsequently come into contact—we have no doubt the American Government will recognise the justice of the demand, and respond liberally to it.

3. Let saloon passengers be required to pay the surgeon for his services, should they need them, according to a just and specified scale of charges.

It is notorious that gratuitous professional services are valued at the rate at which the remuneration for them is fixed. And we know no reason why saloon passengers, who are presumably of the well-to-do classes, should be pauperised in this respect. We have already denounced the present system of "tipping"—the mode of giving generally adopted, and the paucity of amounts offered, deserves no other name. It is entirely incompatible with the dignity of a professional gentleman, and must, in the eyes of givers, reduce the surgeon to about the same level as the table or smoking-room steward, who frequently receives, in the same way, a similar amount. Among our American cousins the term "doctor" is somewhat freely applied. As a consequence, we are informed that when many of the Americans, who on the Atlantic steamers form the bulk of saloon passengers, learn that "the doctor's services are thrown in on the ticket," although he may expect a tip at the conclusion of the voyage, they cannot believe that he is "a regular physician," and treat him or consult him accordingly.

We are satisfied that the arrangement we propose would not only benefit the medical officer, but also both the passengers themselves and the shipowner. Comparatively few passengers, at the time of engaging their passage, anticipate sickness, during the voyage, of a character to need professional attendance; and even if they did, the vast majority, whether delicate or not at the time of starting, would prefer a vessel which carried a physician of whose efficiency they were assured, although they should have to pay as anywhere else for his services, to one on which the uncertain services of the proverbial "experienced surgeon" were "thrown in on the ticket."

On the other hand, if the shipowner need guarantee, not only for the discreet behaviour of the surgeon, but also that he would use his influence in favour of the ship, what stronger could he have than that the ship should be the field of practice upon which the surgeon earned his livelihood?

THE CARBOLIC ACID TREATMENT OF TYPHOID FEVER.

DR. DESPLATS, of Lille, has recently published, in a local medical paper, the results of the treatment of typhoid fever by the internal administration of carbolic acid. His observations are based on 32 cases in which the temperature seldom exceeded 104° (these were not systematically treated with carbolic acid), and on 53 moderately severe cases, where the evening temperature reached 104°, as a rule, and occasionally exceeded 105.5°. Out of the 32 mild cases, 2 died of perforation of the intestine; whilst 2 of the 53 more serious cases died before the carbolic acid treatment was commenced. This leaves a series of 51 cases of typhoid fever treated throughout their course in the manner about to be described. Five of these died: 1 from congestion of the lung; 1 from fatty degeneration of the heart; 3 from exhaustion. Most of the 51 cases had lived under highly unfavourable hygienic conditions. Dr. Desplats does not consider that the mode of treatment caused the one death from changes in the heart, "for a sister of the patient in question, not treated with carbolic acid, died a few days after him, from typhoid, with fatty degeneration of the heart". He admits that the acid may play a part in causing or increasing pulmonary congestion, but "not more than any other antipyretic medicine".

The treatment was not commenced until the diagnosis of typhoid fever was clear, and the temperature at least as high as 104°. The patients ready to obey him implicitly, Dr. Desplats gave, every three hours, 100 grammes of lemonade containing 0.6 grammes of carbol, the dose being increased when the fever was high. Many of these patients made no objection to the lemonade. In a few, one or two daily enemata of 0.50 to 1 gramme of phenol were given. In those who could not bear the flavour of the lemonade, nor keep it long in the stomach without vomiting, the enema, passed by means of a long tube, was employed every three hours. The temperature fell, and the nervous symptoms became less marked after every dose of carbol; and this substance became tolerated so soon that the dose had to be increased in order to insure further beneficial effects. But Dr. Desplats was very cautious about increasing the dose of carbol above one gramme, that is, over fifteen grains and a half. In the cases where larger doses were given, neither pulmonary congestion nor albuminuria were produced, nor increased if already present. In one instance, however, collapse followed the administration of a very large dose, by mistake. The temperature fell rapidly and great torpidity was produced, but these symptoms disappeared in five hours. Dr. Desplats does not reckon rigors, and discoloration of the urine, and sweat, as signs of true poisoning by carbolic acid. M. Valude has observed tonic and clonic convulsions in a fatal case of typhoid fever, where only 0.25 grammes had been given, but pneumonia had long been detected before the treatment was commenced. Dr. Desplats has never seen convulsions in any of his cases, not even one where five grammes were given at a dose, nor in a child under two years of age where 0.15 grammes were given every three hours, the temperature being very high. In conclusion, Dr. Desplats expressed his opinion that the antipyretic properties of carbolic acid prove most useful in the treatment of typhoid fever; that experience in its administration can claim a great improvement in the condition of the patients, and a marked diminution in mortality, and that bad results in cases so treated have been proved to be due to the fever, and not to the treatment.

Dr. Dreyfus Brisac has, since the publication of Dr. Desplats's opinions, arrived at different conclusions. He denies entirely that carbolic acid can act as an antiseptic in typhoid fever, still less can it destroy the contagium, seeing that all the tissues must be already

filtrated with it long before treatment begins. He believes that ie acid may prove useful where antipyretics are urgently needed, it the rapid fall of temperature, cited by Dr. Desplats as one of .e great benefits following the use of carbolic acid, is looked upon ith distrust by Dr. Dreyfus-Brisac, who believes that a patient ffering already from conditions tending to produce profound haustion can ill support a sudden lowering of temperature to the tent of three or four degrees. He uses carbolic acid in the few ses where he thinks it likely to prove of benefit as an enema, for e disinfection of the contents of the intestine. Dr. Dreyfus-Brisac nnot withhold his belief that the carbolic acid fashion of treat- ent for typhoid fever will be most ephemeral in duration, notwith- nding the authority with which it has been supported by clinical servation. The last-named physician, it must here be observed, strusts any form of antipyretic treatment of typhoid fever, prefer- g the use of tonics and nourishment.

MEDICINE AS PRACTISED BY ANIMALS.

G. DELAUNAY, in a recent communication to the Biological ciety, observed that medicine, as practised by animals, is oroughly empirical, but that the same may be said of that practised inferior human races, or, in other words, by the majority of the man species.

Animals instinctively choose such food as is best suited to them. Delaunay maintains that the human race also shows this instinct, d blames medical men for not paying sufficient respect to the likes d dislikes of the patients, which he believes to be a guide that may depended on. Women are more often hungry than men, and ey do not like the same kinds of food; nevertheless, in asylums aged poor, men and women are put on precisely the same imen. Infants scarcely weaned are given a diet suitable to adults, at and wine which they dislike and which disagree with them. Delaunay investigated this question in the different asylums of ris, and ascertained that children do not like meat before they are out five years of age. People who like salt, vinegar, etc., ought be allowed to satisfy their tastes. Lorain always taught that with ard to food, people's likings are the best guide.

A large number of animals wash themselves and bathe, as ele- ants, stags, birds, and ants. M. Delaunay lays down as a general e, that there is not any species of animal which voluntarily runs risk of inhaling emanations arising from their own excrement. ne animals defæcate far from their habitations; others bury their rement; others carry to a distance the excrement of their young. this respect they show more foresight than man, who retains for rs excrement in stationary cesspools, thus originating epidemics. f we turn our attention to the question of reproduction, we shall that all mammals suckle their young, keep them clean, wean m at the proper time, and educate them; but these maternal tincts are frequently rudimentary in women of civilised nations. fact, man may take a lesson in hygiene from the lower animals. nimals get rid of their parasites by using dust, mud, clay, etc. se suffering from fever restrict their diet, keep quiet, seek dark- s and airy places, drink water, and sometimes even plunge into When a dog has lost its appetite, it eats that species of grass wn as dog's grass (*chiendent*), which acts as an emetic and pur- ive. Cats also eat grass. Sheep and cows, when ill, seek out ain herbs. When dogs are constipated they eat fatty substances, h as oil and butter, with avidity, until they are purged. The same g is observed in horses. An animal suffering from chronic matism always keeps as far as possible in the sun. The rior ants have regularly organised ambulances. Latreille cut antennæ of an ant, and other ants came and covered the nded part with a transparent fluid secreted from their mouths. chimpanzee be wounded, it stops the bleeding by placing its l on the wound, or dressing it with leaves and grass. When an nal has a wounded leg or arm hanging on, it completes the ampu- tation by means of its teeth. A dog on being stung in the muzzle by a viper, was observed to plunge its head repeatedly for several days into running water. This animal eventually recovered. A sporting dog was run over by a carriage. During three weeks in winter it remained lying in a brook, where its food was taken to it: the animal recovered. A terrier dog hurt its right eye; it remained lying under a counter, avoiding light and heat, although habitually he kept close to the fire. It adopted a general treatment, rest, and abstinence from food. The local treatment consisted in licking the upper surface of the paw, to which he applied the wounded eye, again licking the paw when it became dry.

Cats also, when hurt, treat themselves by this simple method of continuous irrigation. M. Delaunay cites the case of a cat which remained for some time lying on the bank of a river; also that of another cat which had the singular fortitude to remain for forty-eight hours under a jet of cold water.

Animals suffering from traumatic fever treat themselves by the continued application of cold, which M. Delaunay considers to be more certain than any of the other methods.

In view of these interesting facts, we are, he thinks, forced to admit that hygiene and therapeutics, as practised by animals, may, in the interests of psychology, be studied with advantage. He could go even further, and say that veterinary medicine, and perhaps human medicine, could gather from them some useful indications, precisely because they are prompted by instinct, which are efficacious in the preservation or the restoration of health.

A WELL attended meeting of Cambridge graduates was held at the house of Sir George Burrows on Friday, February 2nd, when it was decided to form a Cambridge Medical Graduates' Club.

PROFESSOR PARKER, F.R.S., will commence his course of lectures in the theatre of the Royal College of Surgeons, this day (Friday). Members of the profession are admitted free.

WE understand that the Government propose to nominate Dr. Pettigrew, of St. Andrew's University, to fill the vacant place in the General Medical Council, which has now for a long series of years been filled by a representative of the University of Glasgow.

IT is announced in the *Paris* that the Hungarian medical students, who have been attending the lectures at the Paris Faculty for four years, have been suddenly recalled, with a view to their being employed as assistant surgeons in the Austrian Army.

THE Hunterian Oration will be delivered by Mr. Spencer Wells, in the Theatre of the Royal College of Surgeons, at 3 P.M., on Wednesday next, February 14th. The Library of the College will be closed on Tuesday, Wednesday, and Thursday, February 13th, 14th, and 15th; the Museum, now open as usual every day except Friday and Saturday, will be closed at 3 o'clock on Wednesday, February 14th.

ST. THOMAS'S Hospital was on Saturday afternoon visited by the Malagasy Ambassadors, accompanied by their interpreter, Dr. Parker. At three o'clock, the visitors were met at the main entrance by Mr. Alderman Stone (the treasurer), and a number of the medical and surgical staff. They were shown over the various wards by the steward, Mr. F. Walker. There were upwards of four hundred patients in the wards, including the paying patients in St. Thomas's Home. The Ambassadors appeared highly delighted with the visit to one of the largest hospitals in the world.

BRITISH MEDICAL BENEVOLENT FUND.

A CONCERT will be given by the Strolling Players' Amateur Orchestral Society in aid of this fund, at St. Andrew's Hall, Newman Street, Oxford Street, on February 28th. Members of the profession and their friends are earnestly invited to give their support. Tickets, 5s. and 2s. 6d. each may be obtained of the treasurer, Dr. Broadbent, or either of the honorary secretaries, Mr. George Field, 31, Lower Seymour Street, and Mr. Edward East, 18, Clifton Gardens, W.

HIGHGATE WOODS.

IT is stated that the Hornsey Local Board contemplate petitioning the Corporation to purchase Highgate Woods.

DR. ANDREW CLARK ON RENAL INADEQUACY.

DR. ANDREW CLARK will deliver, on Thursday, February 15th, at a meeting of the East London and South Essex District of the Metropolitan Counties Branch of the British Medical Association, at the Hackney New Town Hall, his promised address on Renal Inadequacy, which he was prevented from giving at the last meeting, in consequence of a severe cold and loss of voice. The chair will be taken at half-past eight.

THE HEALTH OF LONDON.

ACCORDING to the official returns, there were 2,804 births and 1,663 deaths registered in London last week. Allowing for increase of population, the births exceeded by 28, whereas the deaths were 185 below, the average numbers in the corresponding weeks of the last ten years. The annual rate of mortality from all causes, which had been equal to 20.5 and 20.7 per 1,000 in the two preceding weeks, further rose to 24.9. The deaths included 3 from small-pox, 56 from measles, 42 from scarlet fever, 13 from diphtheria, 26 from whooping-cough, and 18 from enteric fever.

THE GLAMORGAN AND CARMARTHEN INFIRMARY.

ON January 30th, the Marquess of Bute laid the memorial stone of the new buildings of the Glamorgan and Carmarthenshire Infirmary, at Cardiff. The present infirmary was erected in 1837, and has since been added to, and now accommodates 58 patients, but this accommodation has for some years been recognised as insufficient. Lord Bute most generously gave a site of four acres, worth upwards of £10,000, with a donation of £1,000 towards the building fund, and further supplemented these munificent gifts by another £1,000 placed on the stone on the 30th. £21,000 has been already promised towards the cost of erecting the new infirmary, which is to accommodate, in the first instance, 100 patients, placed in two pavilions. The proceedings on the 30th were of a most gratifying character, and the noble Marquess entertained a large party at a sumptuous dinner at Cardiff Castle in the evening.

THE OBSTETRICAL SOCIETY.

AT the annual meeting of the Society, on Wednesday last, the retiring President, Dr. Matthews Duncan, gave the annual address. The reports of the Librarian, Treasurer, and Chairman of the Midwives' Board were read and adopted. The following officers were elected for the ensuing year. *Honorary President:* Arthur Farre, M.D., F.R.S. *President:* Henry Gervis, M.D. *Vice-Presidents:* John Brunton, M.D., Frederick H. Daly, M.D., Clement Godson, M.D. Jonathan Hutchinson, F.R.S., John Thorburn, M.D., J. L. Worship, *Treasurer:* J. B. Potter, M.D. *Honorary Secretaries:* A. L. Galabin, M.D., G. E. Hermann, M.B. *Librarian:* F. H. Champneys. M.B. *Other Members of Council:* H. C. Andrews, M.D., G. P. Bate, M.D., Henry Bennet, M.D., P. L. Burchell, M.D., T. E. Charles, M.D., C. J. Cullingworth, F.R.C.S., Alban Doran, F.R.C.S., Sir J. Fayrer, M.D., Edward Malins, M.D., Gustavus C. P. Murray, M.D., W. S. Playfair, M.D., Walter Rigden, George Roper, M.D., William Stephenson, M.D., W. H. Strange, M.D., J. K. Thornton, M.B., J. Wallace, M.D. G. E. Yarrow, M.D. The next meeting of the Society will be on March 7th, when the new President, Dr. Henry Gervis, will take the chair, and give a short opening address.

VIVISECTION IN MANCHESTER.

LAST week a remarkable meeting was held in Manchester. It was summoned by the "International Association for the Total Suppression of Vivisection," and the business to be brought forward by this society for the suppression of scientific research, was to give public information about the practice of vivisection, and to protest against it. The first resolution, condemning vivisection, was moved by a clergyman, and the reverend speaker charged vivisection with seeking knowledge by the wholesale torture of the most sensitive animals. Dr. Arthur Gamgee, F.R.S., the well-known professor of physiology in the Victoria University at Manchester, was present, together with a number of his medical brethren and medical students, and he vigorously opposed the resolution. In an able speech, which was received with much applause, he defended physiologists from the charges of inhumanity and cruelty brought against them, and explained the methods adopted at experiments by means of which he asserted that pain was reduced to an infinitesimal amount. He said that in 999 cases out of 1,000 no pain whatever was inflicted, and the scientific training of medical students in physiology was carried out by the aid of the living tissues of dead animals. The resolutions in support of the object of the meeting were rejected, amid much enthusiasm, by large majorities.

THE POTATO-FAMINE IN IRELAND.

THE papers now appearing in the *Freeman's Journal* give a terrible description of the misery and want from which the poorer people in some parts of Ireland are at present suffering. Whole villages are desolate, and men, women, and children have died, and are dailydying, of actual deprivation of food. Again the Irish potato-crop has failed, and again, with its periodical persistence, famine stalks through the unhappy land. A fortnight ago, we drew attention to the wise suggestion of Dr. Lyons, M.P., that an organised national effort, on a sufficient scale, should be forthwith made, to induce the peasantry of the sister island to cease their reliance upon the untrustworthy potato, which has so often and so sorely failed them as their staple food, and to teach them to transfer their allegiance to the hardy and wholesome oats of the Scotch, supplemented by the fish with which the Irish seas abound. We desire to support the eminent Dublin physician in his endeavour to ameliorate the sad distress of his poorer countrymen, although we recognise the almost insuperable difficulties with which he has to contend in his effort to change suddenly ancient and cherished popular domestic habits. Long ago, the famous political writer, William Cobbett, saw that the national diet of Ireland, was to be found the cause of much of the national distress. He wrote: "Whoever wishes to save the country must urge abandonment of the potato for cultivation of the pasture-land, which alone is suited to the climate." He condemned the "cold, wet, sloppy preparation of the potato," and predicted that the treacherous tuber "will be the ruin of all prosperity in the land."

SPREAD OF ERYSIPELAS BY A MIDWIFE.

APROPOS of the unparalleled diffusion of syphilis by a midwife suffering from the disease at Sheffield, referred to in a recent number, a somewhat similar occurrence, although by no means so calamitous or extensive, may be mentioned as having occurred not long ago at Bolton. Three cases of puerperal fever were found to have a common origin in a fatal case that had occurred shortly before. In each case the disease was communicated by a nurse, who, while suffering from erysipelas of the face and hands, undiciously attended the persons in confinement. Immediately the case was notified to the sanitary department the outbreak was

uired into; and the nurse, apparently ignorant of the harm she ad caused, was at once prohibited from attending further cases ntil the erysipelas had ceased, and satisfactory disinfection, etc., ad taken place. In addition to the above, one of the persons ho suffered from puerperal fever, lost her child six days after birth rom erysipelas; and, as the medical attendant did not feel justified n certifying as to the cause of death, a coroner's inquest was held. he jury returned a verdict, "that the child died from erysipelas, rought on owing to his mother being attended during her confine- ient by a person afflicted by that disease." This unfortunate occur- ence affords (the medical officer of health in his report on the ubject observes) another illustration of the urgent need of re- uiring women, who practise as midwives, to pass some examina- on to show that they possess the requisite knowledge for the ork.

FALLING CHIMNEYS.

UBLIC opinion will hardly be satisfied with the finding of the radford coroner's jury, that no one was to blame for the recent atastrophe at the Newlands factory, in which fifty persons were lled and many more maimed and mutilated by the fall of a huge himney which had long been known to be faulty in its structure. fter a lengthened inquiry, in which the jury were guided by the rough coroner, and assisted by a Government inspector and other perts, a verdict of "Accidental death" was found. The jury did t attach blame to anyone, or find anyone guilty of negligence; it they mildly ventured to add to their finding the statement that ey "regret the works were not stopped during the repairs" to the himney, which "repairs," aided by a strong wind, appear to have en the final cause of this lamentable disaster. We gather from a ily contemporary, that the unsoundness of the chimney was torious in the neighbourhood. "Cracks were abundant, great eces of the masonry were falling daily, people were warned not to near it, and experienced operatives refused to work under it upon e proposed repairs." In these days of protective legislation, it is satisfactory to learn that no one is to blame for the deaths of lf a hundred factory hands, who were crushed out of existence in moment, at their work, by the fall of a huge tower of tottering sonry; that the poor operative might go to work daily under the adow of a tall chimney, which was known to be seriously un- und, and that it was no one's duty to protect them from the peril hich was hanging over them.

DR. GEORGE M. BEARD.

E regret to have to announce the death of Dr. George M. Beard, ell known by his voluminous writings on mental and nervous seases, which took place at the Grand Hotel in New York, on the rd ultimo. Dr. Beard, who was still in the prime of life, was oubled by a decayed tooth which he had extracted a week before s death. He did not rally in a satisfactory way from the trifling eration, and it was at first thought by his physicians that he had en poisoned by an amalgam used by the dentist, but very shortly eumonia declared itself, and under this he sank rapidly. His ssion for psychological analysis, his ruling passion it might be lled, was strong in death, for a few hours before he passed away, said to those who watched by his bed: "Oh, that I had the ength to record the thoughts and feelings of a dying man. What interesting chapter would the story of the struggle I am going rough make." Dr. Beard was an ingenious speculator in medical ence, and as he had the command of a clear and attractive literary le, and dealt with subjects of universal interest, his works have ioyed a wide popularity. They contain curious observations and ite suggestions that are of value to medical men. Dr. Beard dressed himself a good deal also to a larger audience o dabble in hypnotism, electro-biology, or thought-reading, who are afflicted, or believe themselves to be afflicted, by nervous diseases. The titles of his books, such as *Electricity as a Tonic*, *Our Home Physicians*, *Eating and Drinking*, *The Prevention of Sea-Sickness*, *The New Theory of France*, sufficiently indicate their character and tendencies. His general culture and amiability of disposition secured for Dr. Beard many friends in all social circles that he entered; but there undoubtedly existed a strong feeling in medical circles that he was over-credulous, and too eager to press and even elbow his way to the front, wherever the fierce light of publicity shone. His demonstrations in mind-reading on subjects whose *bonâ fides* was not certainly on a level with that of Cæsar's wife, and his evidence in the case of Guiteau, did not meet with the approval of his profession in the United States. Dr. Beard's work on *American Nervousness* excited much interest here, and has been translated into German.

THE RECENT ENGLISH DEATH-RATE.

THE Registrar-General, in his summary of the vital statistics for 1882, is able again to report very satisfactorily of the recent health of the English nation, so far as this may be estimated from the standpoint of mortality statistics. He is not again able to report, as he did with regard to 1881, that the death-rate of the year was the lowest on record, that is, since the establishment of civil registration in 1837; but it appears that the death-rate in 1882 did not exceed 19.6 per 1,000, and was only 0.7 above the "unprecedentedly" low rate in 1881. The mean English death-rate in the first three decades of civil registration, 1840-70, was almost stationary, having been respectively 22.4, 22.2, and 22.5. That English mortality (in spite of fluctuations from year to year) should have remained practically stationary during those thirty years, did not by any means imply stagnation in health matters, as sufficient progress in sanitation must have taken place to counteract the otherwise inevitable effect of the rapid increase in urban aggregation which took place during this period. However, the fact remains that the rate of mortality showed no decline. Since 1870, however, in spite of fully maintained urban aggregation, a marked and increasing decline in the English death-rate has set in. In the ten years 1871-80, under the influence, it may be reasonably asserted, of the Public Health Acts of 1872 and 1875, the average annual death-rate declined to 21.5, signifying that 215,000 persons survived that period in England and Wales, whose deaths would have been recorded had the mean death-rate in the preceding thirty years been maintained. In 1881 and 1882, the first two years of the fourth decade of civil registration, 1881-90, the mean death-rate did not exceed 19.3 (the rate was 18.9 in 1881, and 19.6 in 1882); and the Registrar-General now tells us that this mean death-rate implies that more than 100,000 persons survived those two years in England and Wales, who would have died had the mean death-rate in the preceding decade been maintained. Such facts should supply the strongest incentive to further sanitary progress. It is no longer possible for the opponents of sanitation to urge, as they are never tired of urging, that no reduction in the death-rate has resulted from the expenditure of energy and money upon the development of improved health administration.

THE TREATMENT OF CASUALS.

THE county of Surrey has obtained an unenviable notoriety of late from its severity in the treatment of criminals, and it bids fair to become equally famous in a discreditable way for its treatment of paupers unconvicted of crime. Having fallen back into the long-exploded error, that the quantity of the penalty is the measure of its deterrent quality, it has now relapsed into the kindred absurdity that the best school of virtue is to be found amidst the conditions of vice. At least, so it must be inferred from the manner in which the guardians of the Croydon Union deal with the casuals who drop into their workhouse, to spend there the day of rest. The true way to elevate the moral tone of these casuals, to increase their self-respect, and give them a taste for honest labour, is, in the opinion of the

guardians, to shut them up in large parties for thirty hours at a time, clothed only in shirts, with a diet of twenty-four ounces of bread, and one ounce of cheese. Forty men were incarcerated in this way in one large room on Sunday, the 4th inst., under the supervision of a pauper attendant, but, strange to say, the refining influences by which they were surrounded did not exert that softening influence on their character and conduct which had been anticipated, for several of them were seized with what the late Professor Laycock used to call "A logodiarrhœa of bad language," and swore all Sunday. This incapacity on their part to profit by the tender provision made for them by the honourable board of guardians necessitated their appearance at the police court the following morning, where the exquisite internal economy of the workhouse was brought to light. The evidence was somewhat contradictory, one witness affirming that the casuals were put to bed *in puris naturalibus*, and another maintaining that they were one and all arrayed in shirts, but this, at any rate, was undisputed, that beyond this inner lining of human clothing they were unprovided with coverings. They were allowed to take exercise by walking up and down the room in this simple and unostentatious uniform, and when they desired to wash themselves they went forth into an outer yard, thus lightly encumbered, each man having the tenth share of one roller towel. Well might Dr. Carpenter and Mr. J. S Balfour, M.P., before whom the case of the profane casuals was heard, exclaim against the inclemency of the arrangements in the Croydon Workhouse, and declare that there was something rotten in the system which allows such a state of matters to exist. And yet this rotten system is what it is proposed to extend, so that it shall embrace more or less effectually all our great lunatic hospitals. Who need wonder, after reading this story of the Croydon Workhouse, that casuals are such sickly debilitated mortals?

ABDOMINAL SECTION FOR PUERPERAL PERITONITIS.

In a recent number of the *Wratsch*, Dr. Molodenkoff of Moscow describes the case of a woman, aged 28, who was admitted into hospital ten days after delivery, for diarrhœa, fever, and swelling of the hypogastrium. Ten days later, the abdomen was much distended, and on exploratory puncture purulent fluid was obtained. On the next day, an incision was made along the linea alba, and a great quantity of pus emptied out of a circumscribed cavity formed between the abdominal wall and adherent coils of intestine. To facilitate thorough drainage, a second opening was made immediately above the symphysis; and after tubes were inserted into the wounds, the whole was covered in with antiseptic dressings. On the next day, symptoms of carbolic poisoning appeared. Much pus escaped, great prostration set in, and the patient rapidly lost strength, dying on the fourth day after operation. At the necropsy, ten smaller circumscribed collections of pus were found between coils of intestine, inaccessible to the drainage tubes, as they had been arranged, besides the large cavity that had been effectually drained. The mucous membrane and peritoneal covering of the uterus and the ovaries were acutely inflamed. Dr. Molodenkoff concludes, from his personal experience in this case, that abdominal section and washing out of the peritoneum, with subsequent drainage, is not justifiable in cases of purulent peritonitis. Last year, Dr. A. Schmidt described, in the same Russian paper, a successful case of what he considered to be laparotomy and clearing out of an intraperitoneal collection of pus; but Molodenkoff believes that an abscess in the abdominal walls only was emptied, and that the peritoneal cavity was never opened. In the *Deutsche Medicinische Zeitung*, this point is disputed. There appears, according to that journal, to have been no doubt that Dr. Schmidt opened the peritoneal cavity; but, it is pointed out, this was a case of very chronic purulent peritonitis of half a year's duration, whilst Molodenkoff's patient was suffering from an acute puerperal complication. There can be no doubt as to which proceeding was the most justifiable.

OUR DEBT TO EXPERIMENTAL PHYSIOLOGY.

In view of one or two exceptional efforts to minimise the ascertained value to medical science and practice of the facts ascertained by the labours of physiologists, it is timely to remind a class of students, as Dr. Smyly did, in a recent introductory lecture at Dublin, that "it is well to remember that the truisms of one generation were the great discoveries of former generations, and that what is accepted by every one requires no proof. Thus the means by which these discoveries were made are forgotten. In this way, some medical men have been tempted to join in the howl against experimental physiology. Sir George Jessel, the English Master of the Rolls, quoted by Professor Stokes, well remarked that 'there are two things the public require to be instructed in: one that the future progress of medicine must rest on science; and the other the necessity for experiments on animals.' Though no experiments on animals have ever been made in our hospitals, much of our teaching is founded on the facts thus obtained. I therefore hope that none of you will join in the abuse which is heaped upon the heads of the great and good men who have devoted their lives to the study of physiology." Such a course, indeed, would seem to argue a singular power of oblivious self-deception, or eccentricity and ingratitude. But there are not wanting those who, seizing the tangled skeins of unravelled controversies, avail themselves of this opportunity of creating confusion to conceal or overshadow the patent facts, that no man can feel a pulse, or listen to the respiration, or examine the heart-sounds, or, indeed, perform any of the ordinary work of every day routine diagnosis and practice, without basing himself upon th wonders revealed and explained by the physiological and vivisectional experiments of Harvey on the heart, of Hope on the cardiac valves, of Boyle on the respiration, and of hundreds of other physiological experimentalists, who have followed out their clues, of the sights we see and the sounds we hear within the marvellously complicated human organism; who have touched and tried the springs which move it; the forces which excite or arrest its parts; the paths along which they travel; and the localised action of the drugs, and of the physical agents and conditions which constitute our arms in practice.

BITTER BEER.

The opinion which we recently expressed, that the objections which were urged to what is described as the adulteration of bitter beer by the use of other vegetable bitter principles than that of the hop for flavouring it, are founded on nothing but a quite unreasoning prejudice, have been much canvassed, and have apparently created a somewhat ignorant surprise. Lupulin, the bitter principle of the hop, appears to be regarded with a traditional and superstitious reverence, which is, perhaps, natural to those who are absolutely uninformed and incapable of receiving information on such a subject or of reasoning upon it. Calomel, quassia, chiretta, calumba root or gentian, are, we are told, pharmacopœial substances; but we are not told that lupulin is not a pharmacopœial substance. Water, orange-peel, and alcohol, we may add, are also pharmacopœial substances, and so is carbonic acid gas, and so are brandy and sherry, but we have not hitherto been accustomed to consider this an adequate reason for excluding them from the ordinary list of beverages. As a matter of fact, there is no more virtue in lupulin, the bitter principle of the hop, than there is in the bitter principle of chiretta, of calumba root, or of gentian. The one is as harmless as the other; and if the flavour is equally agreeable, and the brewer can produce bitter beer, which is as palatable by using their bitter principles, instead of those of the hop, we can see no valid reason why he should not do so, nor any reason why his doing so should be made the subject of reproach or of regret, except perhaps to the hop-grower. Whether or not bitter beer flavoured with the vegetable bitters in question be as agreeable and as acceptable to the public taste as beer flavoured with hop, is a ma

:r on which we are unable to form an opinion ; but the legation that they are successfully so used, appears to be a :esumption that they can be substituted without disadvan-ge. The notion which is put forward in some quarters that beer flavoured would be "an infusion of bitters instead of good sound :er" is a mere play upon words. The alcoholic properties of the :er depend of course upon the fermentable basis employed, and :e process of melting them; they have nothing whatever to do with :e flavouring bitter used. The peculiar value attached to hop-tter is a mere superstition, and one which has nothing that we know specially to recommend it.

POTTED MEAT.

HE manufacture and consumption of potted and minced meat have eatly increased during the last few years, and competition has be-me so keen, that the more unscrupulous manufacturers, in their xiety to undersell, do not hesitate to employ meat which is of such unsound condition, as to be quite unsaleable if presented to the blic in any other form. Horse flesh, on account of its cheapness, the favourite article with the sausage manufacturer, and large antities are being used every week for the manufacture of Ger-n and breakfast sausages. In London, the trade is almost entirely ried on in the East-end, the horse-flesh being procured either from country, or from unlicensed slaughterers. The inspector to the olar Board of Works, Mr. Raymond, succeeded in obtaining two victions against users of this substance; but although both were y bad cases, the magistrate contented himself with imposing a of £20. In the interests of the public we are, therefore, pleased see that at Aston, near Birmingham, William Henry White was victed and sentenced, on two distinct summonses, to six months' risonment, for having in his possession a quantity of unwhole-e rinds of bacon and pork; 352 pieces of partially decomposed se-flesh were also found on his premises, doubtless waiting to be verted either into sausages, or some cheap form of potted meat. magistrates stated that this was the highest penalty which they ld inflict. A few more sentences equally severe would go far to-ds putting down a most nefarious trade. It is contended by some t horseflesh is almost equal as a food to beef or mutton; but se who hold these views should remember that the source from ch it is obtained for the manufacture of potted beef and sausages uch as to cause it to be viewed with great suspicion and distrust. tainly the use as food of the produce of a knacker's yard, where sts in all stages of disease and starvation are slaughtered, can-be too strongly condemned, and it is possible that among our est population, much disease and sickness is caused by partak-of unsound meat, in a form where its objectionable characters masked by the flavouring matters added during preparation, but hich, nevertheless, exist the germs of putrefaction, waiting only a favourable soil to increase and multiply, and lay the founda-of disorders which seriously tax our medical resources.

SCHOOLMASTERS AS THE FOSTER-FATHERS OF EPIDEMICS.

.SLES, writes Dr. Robinson, in his annual health report, was the fatal disease of the zymotic class in Dover, accounting for than 41 per cent. of the total deaths from zymotics, a fact h alone demonstrates that measles is not that trivial form of dy so often attributed to it. When the first outburst of the mic became known, Dr. Robinson found it was confined chiefly e families of scholars attending one of the elementary schools e borough; and knowing well, from previous experience, how ul school attendance from infected houses becomes in spread-he disease, he made a request through the secretary that the l in question might be closed for a period, which, however, was d. This was three weeks before a single death from the se had occurred, and he states that from the number ases subsequently traced to connection with this school, he considers it proved a fertile source in propagating the disease. It is not difficult, moreover, to understand how infection is conveyed from one school to another; for, from inquiry made during the epidemic, he found that whilst some of the children of a family attended one school, others in the same household attended another school. It was in this way that a school at the north end of the borough became infected. It is no exaggeration to say that the greater part, if not the whole of those deaths from measles might have been prevented if the same energy had been exerted at the onset of the outbreak, and popular sympathy displayed with the efforts made for extinguishing the epidemic, as would have been manifested had a fire broken out in the same locality. Given, what is already known, viz., that measles spreads by virtue of its infectious property, just as fire extends on account of its inflammable character, it is evident that all that is necessary to do, in order to limit a spreading disease like this, is to isolate the attacked under proper conditions, until they are no longer a source of danger to the community, and the disinfection, or destruction, of those articles which have been in use by, or around, the infected. During the last ten years, not a single death from small-pox has occurred in Dover, although the disease has, on many occasions, during this period, been imported into the town: and it is reasonable to attribute this happy circumstance to the preventive measures that have been exercised, and cordially supported, whenever occasion arose for their display. Now, what can be done in respect to one infectious malady, can surely be accomplished in the case of others. Means, such as those described at the recent meeting of the National Health Society, on the plan of Mrs. Johnston at Hastings, would have stopped the epidemic, and saved life, health and money on a great scale; but the public education has to be made in this respect. The epidemic prevalence of diseases such as measles, scarlatina, whooping-cough and small-pox are the results of individual neglect and want of knowledge and of conscience. Schoolmasters and schoolmistresses are frequently active factors in spreading such epidemics by the self-delusions which they willingly practise on the subject of infectious diseases occurring among their scholars; by their slowness, their concealments, and their carefully practised omissions. The most highly placed often offer bad examples to their poorer and less competent brethren. Notable instances of the spreading of epidemics by the direct fault or persistent blindness of heads of public and private schools of great repute are not hard to find. This week, too, we hear, from more than one source, that "scarlet fever is very prevalent in various colleges at Oxford, but that it is kept very quiet."

THE SMOKE NUISANCE.

WITH reference to the recent resolution passed by the Board of Works for the Westminster district to present a memorial to the Home Secretary, supported by the Right Hon. W. H. Smith, M.P., Lord Algernon Percy, M.P., the Dean and Chapter of Westminster, and numerous influential ratepayers in the district, urging the desirability of Parliament taking steps to suppress the smoke nuisance in Lambeth, we should notice what the present law on the subject really is. Obviously, before any new or more stringent legislation is demanded, the powers of the existing Acts should be fully exercised. By the Smoke Nuisance (Metropolis) Act, 1853, and its amendment of 1858, it is enacted, "that the best practicable means for preventing or counteracting smoke" shall be adopted, and that "any person in charge of a furnace who shall so negligently use such furnace as to cause a nuisance, shall, upon summary conviction for such an offence, forfeit and pay a sum not more than £5 nor less than 40s., and upon a second conviction for such offence the sum of £10, and for each subsequent conviction the sum of double the amount of th enalty imposed for the preceding conviction;" and the only er given to remit these penalties is by Clause III of the 185 Act, in cases where the justice or justices

shall be of opinion that the person offending "has carefully attended to the furnace, and consumed or burned as far as possible the smoke arising therefrom." Thus, in cases where it is proved that from want of proper construction or use of the furnace a nuisance has been caused, a conviction must follow, and, by the language of the Act, it is not in the discretion of the bench to reduce the fine below the minimum penalties enacted. Yet, in spite of these clear and apparently sufficient provisions of the existing law, it is the practice of some of the metropolitan magistrates to treat cases of smoke nuisance very lightly, and impose merely nominal fines. In cases of recent prosecutions instituted by the authority of the Home Secretary against several Lambeth potteries and factories, in that district the defendants have been dismissed on payment of the nominal fines of half-a-crown or five shillings. If the Board of Works for the Westminster district were to take the initiative in appealing against such magisterial decisions in cases arising in their neighbourhood, it would probably be found a more effective course than to memorialise the Home Secretary. It must be remembered that at present the Home Secretary authorises all the proceedings which are taken against offenders, and the Commissioner of Police displays laudable activity in establishing the necessary evidence to secure a conviction. But Acts of Parliament, the authority of the Secretary of State, and the activity of the executive officers, are alike powerless to protect the public in the face of such magisterial decisions as we have referred to. The present law is evidently capable of better administration, and it should further be remarked that the persons annoyed with smoke from particular chimneys may proceed against the offenders for damages, or, if they prefer, may cause them to be indicted under the provisions of the existing Smoke Abatement Acts, by communicating particulars of the nuisance to the Commissioner of Police, at Whitehall, or the Superintendent of Police in the district where the nuisance arises.

CLINICAL SOCIETY OF LONDON.

A SUB-COMMITTEE of this society has recently been formed for the special purpose of inquiring into the results of the treatment of spina bifida by injection; the members being Messrs. Howard Marsh, A. Pearce Gould, H. H. Clutton, and the honorary secretary, Mr. R. W. Parker. This sub-committee has issued a circular, to be forwarded to registered members of the profession in the British Islands, explaining its object, and stating that "with this view we trust you may be able to furnish us with: 1st, Reports of any cases you may have treated by this method. 2nd, Descriptions of any specimens of this deformity you may possess. 3rd, Recent preparations, or any examples in still-born infants, which we may be allowed to dissect. Such specimens will be carefully returned to you, if you desire it; or, if agreeable to you, presented to the Museum of the Royal College of Surgeons, in your name. We shall also be very glad, should the occasion offer, if you would afford us the opportunity of examining any living examples of this deformity. Kindly address letters to Mr. R. W. Parker, 8, Old Cavendish Street, W.; and forward specimens, under cover, to Mr. F. S. Eve, Royal College of Surgeons, Lincoln's Inn Fields, W.C." It is hoped that this appeal will be well answered, and that a large number of cases and observations will be collected, so that the resulting report will be complete enough, as far as material is concerned, to prove of real authority, in future, in questions relating to spina bifida. The anatomy of this malformation still remains somewhat obscure; and one of the best features of the method pursued by the sub-committee is seen in the clause of their circular relating to dissection of specimens. It is not every practitioner who possesses the time, skill, and inclination necessary for the preparation of a specimen of spina bifida, in a form suitable for permanent preservation on the shelves of a museum. By the promised arrangement, the subcommittee will intrust the dissection of every specimen to experts who are skilled, both in the art of dissection, and in the still more difficult accomplishment of making a permanent preparation comprehensible to those that examine it without the services of a demonstrator, and, at the same time, without demanding, of necessity, the temporary removal of the specimen from its bottle. It is also to be hoped that the College of Surgeons may benefit by this arrangement. The series of spina bifida, in its teratological collection, is by no means either large or complete; and this appeal, for more examples of the malformation in question, is in harmony with a previous appeal made, at the suggestion of Sir James Paget, in a circular issued three years ago by Professor Flower, for the purpose of indicating to the profession certain deficiencies in the entire pathological collection, and relying on the scientific zeal and bounty of British medical men to make good such deficiencies. It is particularly advisable that so central and so widely famous a museum as that at Lincoln's Inn should be made as complete as possible, especially in specimens illustrating so interesting a malformation as spina bifida. With regard to the question of injection with iodine, any fresh knowledge likely to lead to successful treatment of this malformation, or to indicate the danger and futility of any method now in vogue, will be of the highest value to contemporary and to future surgeons.

HEALTH OF BIRMINGHAM.

THE report of Dr. Alfred Hill, medical officer of health for Birmingham, states that, during the quarter ending December 30th, 1882, there were registered in the borough 3,660 births, as compared with 3,590 in the fourth quarter of the previous year. The birth-rate, based on a population estimated at the middle of 1882 at 408,532, is 35.8, against rates of 35.2 and 35.7 in the fourth quarters of 1880 and 1881 respectively. The deaths amounted to 2,203, and are equal to an annual death-rate of 21.57 per 1000 persons living. In the autumn quarters of 1880 and 1881, the death-rates were respectively 18.87 and 20.99. The increased death-rate is pretty equally distributed among the two great classes of diseases—constitutional and developmental. Phthisis and old age are conspicuous examples in each class. The average death-age during the quarter was twenty-six years and eight months, as compared with twenty-four years and eight months in the fourth quarter of 1881. The deaths from the seven chief zymotics number 327, against 317 in the corresponding period of 1881, and represent a death-rate of 3.2 per 1000 of the population *per annum*. The rates for the autumn quarters of 1880 and 1881 were respectively 2.0 and 3.1. It will thus be seen that the zymotic death-rate has very slightly risen; and each of the zymotics, except measles and diphtheria, has participated in the augmented mortality. Scarlatina occupies the first place in order of fatality, having resulted in 102 deaths, as compared with only 54 in the corresponding period of the previous year, and 53 in the third quarter of 1882. The increase of prevalence of this disease was to be expected about this time, according to its well-known habit of recurring in an epidemic form once in about every four years. The malady has been less fatally prevalent in the registration subdistricts of Ladywood and Saint Thomas than in other portions of the borough. Whooping-cough proved destructive to life in 91 instances, against 87 in the fourth quarter of 1881. The registration subdistrict of St. Martin has experienced a greater mortality from this infantile scourge than the other districts of the town. Diarrhœa, which in the autumn quarter of last year was certified as the cause of death in 58 cases, during the quarter under notice occasioned 71 deaths; while those from measles, which in the last autumn quarter were as many as 75, amount to only 13. In the corresponding period of last year, not a single case of small-pox was reported. During the quarter under review, 93 cases, one of which occurred in the borough hospital, have been brought to Dr. Hill's knowledge; two of them having ended fatally. They were all treated in the borough hospital, to which institution were also admitted 4 cases of small-pox from neighbouring districts, and 220 cases of scarlatina, one of which was received from outside the borough.

THE PHYSICAL EFFECTS OF BURIAL.

DR. V. REINHARD has recently published a useful series of precise observations on the changes observed in corpses interred after the method still in general use amongst civilised Christian populations in all quarters of the globe at the present date. These observations are founded on the collected researches of parochial medical officers in the kingdom of Saxony. At the request of the local authorities, certain disinterments of bodies that had been buried at different intervals of time were undertaken, and the corpses carefully examined. To make the experiment thorough, no kind of sepulchre was overlooked, and the remains of those who had come in for more than the average share of the most substantial benefits of this world were subjected to criticism, together with the bodies of paupers, on principles comprehensible to all our countrymen who know the different nature of public opinion, and the profound and unquestioning respect for officialism, which prevails over most parts of continental Europe. These researches show that, in gravel or sandy soil, the destruction of the soft parts of the bodies of children is complete by the end of four years, at the latest; and the corpses of adults are entirely disintegrated, excepting the bones, in seven years. Retardation of the destructive processes is rare, and only occurs in one out of every sixteen bodies buried, in soil consisting of very fine-grained sand; even in this case, it is but the brain-substance that remains for long unchanged, the sand acting on all the soft tissues with which it can readily come into contact. In clay, the disintegration of children's corpses is complete in five years; in the case of adults seven years is sufficient. Retardation of the process is more frequent than in the case of sand. In one out of five bodies, adipocere is formed in greater or less proportions, with or without preservation, for an unusually protracted period, of brain-substance, or else the latter tissue is thus preserved without formation of adipocere. On the most careful scrutiny, it was found that the destructive processes did not proceed more slowly in the vaults of cemeteries than when the bodies were directly exposed to the soil. In churchyards, mummification of even limited portions of the bodies was found to be very rare, hardly occurring in 2 per cent. of the disinterred subjects. All minute examinations of the tissues in corpses containing adipocere lead the observers to the conclusion that adipocere is solely developed from pre-existing fatty tissue, and not from any other histological element. Cadaveric fœtor completely disappears from body, as a rule, in three months, but sometimes not till a year after death. In at least one-third of the corpses, the larvæ of flies, and other invertebrata, adult or larval, and certain fungoid growths, played a distinct part in the process of disintegration. This is a powerful argument in favour of cremation, especially from the sentimental point of view, which is the stronghold of the opponents of that innovation. Many of these opponents, incapable of conviction, will interpret the text, "though after death worms destroy this body," as a commandment that worms must not be prevented from so doing. The clothing of the corpses was found to resist changes longer than the corpses themselves; stuffs composed of vegetable fibres decayed first, next in order came textile fabrics from the animal kingdom, whilst silk and leather were the last to be destroyed. In hardly any of the cemeteries examined were the neighbouring streams found to be contaminated with organic material; nor was there any definite proof that the health of those who dwelt near churchyards was in any way injured on that account. These researches can hardly fail to prove of considerable value both from their hygienic and their forensic bearings.

THE OCEAN-CURE.

THE announcement by the Peninsular and Oriental Steam Navigation Company of a new and low scale of charges for the highest class of accommodation on their magnificent ships, has a special interest for medical men and their patients. The lowering of the tariff is on return tickets, and is designed to attract passengers who, for the purposes of travel or for the recruiting of their health, may wish to spend some months at sea, varied by excursions on shore in Egypt, India, Australia, China, and Japan; and the facilities which are thus afforded to persons of comparatively limited means for obtaining change of climate and scene, deserve to be widely known. It is sometimes the subject of reproach to the present generation of medical workers that, whilst rapid strides are being made in the fields of physiology and pathology, the art of therapeutics remains almost stationary. This reproach is not quite justified, even if we limit the healing art to the mere exhibition of drugs; but it fails entirely of justification if we include amongst the means of cure which the physician of the present day has at his disposal, the various ways by which disease can be arrested as well as prevented by simply changing the conditions in which a patient lives. What practitioner is not familiar with the experience that a patient whose life has been long embittered by dyspepsia and hypochondria, for which the pharmacopœia has found no cure, frequently regains health and happiness by a few weeks' holiday amongst the mountains? But whilst the surprising benefit, which often follows inland change, is universally recognised, it is doubtful whether the equally important therapeutic results that, in many cases, attend a voyage at sea, are sufficiently well known. This ignorance of what may be done for a certain class of patients by prescribing for them an ocean cure, springs from the difficulty which is felt in being able to assure them the care and comfort which the valetudinarian requires; and, perhaps, also, to some extent, from the want of knowledge regarding the kind of ailments to which it is specially adapted. Amongst the problems which must be worked out in the near future, is that of more accurately defining the class of cases in which the physician may reasonably hope to benefit his patient by sending him to sea, and, more especially, to be able to advise regarding the latitudes in which he should cruise. The benefits of a sea voyage, in certain forms of phthisis, are so well known, that it is needless to enlarge on them; but we doubt whether the majority of medical men are aware of the advantages that sea-travel in warm latitudes offers in many other chronic ailments. The passenger, for example, who makes a return voyage to Australia or Japan, is brought under conditions that exercise a powerful alterative influence on his vital condition. These may be shortly enumerated to be the constant breathing of pure air, the exposure to bright sunlight, and the free action of the skin—elements in themselves sufficient to effect a rapid cure in many forms of chronic visceral derangement unattended by organic disease. Their effect is nowhere better shown than in certain forms of kidney-irritation, and in congestion of the urinary passages, which will often, after having rendered a patient's life wretched for many months, disappear completely after a few weeks' voyage in the tropics. The powerfully tonic effect of a sea-voyage is better understood in the East than it is amongst ourselves. A patient who has been worn and exhausted by chronic inflammation of the mucous membrane of the lower bowel, left as a sequela of a dysenteric attack, will often get rapidly well from the day he leaves port. The inhabitants of these eastern settlements, accustomed to travel, and familiar with the steamships that come to their ports, have learned to recognise in a sea-trip a means of regaining health when medicine has failed to help them. Much of these striking results, with which medical men practising abroad are familiar, are due to the simply very powerfully tonic effect of sea-air; and we would in this country be equally familiar with them, if our patients could be brought to look on a voyage with less apprehension. To the brain workers of our large cities, to merchants and professional men of all classes, a voyage at sea offers a form of holiday which is probably unequalled. It is not every middle-aged man to whom the alpenstock or the grouse moor, or the salmon river, is either a source of enjoyment or benefit. Indeed, the attempt to recruit an exhausted nervous system by violent muscular exercise un-

suitable to a man who has spent the previous nine or ten months in his study or his office, too often leads to an attack of acute disease. To such a man, the rest which a voyage offers to the nervous system can hardly be over-estimated. The restoration of his exhausted energies begins with his first day at sea, as soon as he realises the intense relief of knowing that for a time he has escaped the Post-office and the telegraph wire. The importance of the bid for the patronage of the increasing number of persons who travel solely for health or pleasure, which has just been made by the well-known Peninsular and Oriental Company, is easily understood by examining their advertisement and prospectus. A passenger may travel on board their vessels about twenty-five thousand miles for a hundred guineas, which is about the sum for which return tickets can be had to Australia, China, and Japan. When we consider the large size and comfortable arrangements of the vessels composing their fleet, the safety insured by the tested ability and discipline of their officers, the liberality of their table, and, not least, their excellent medical staff, we recognise the importance of the step which the company have taken in popularising ocean travel.

GERARDE ON VERBASCUM THAPSUS.

In a recent number of the JOURNAL Dr. Quinlan spoke very favourably of the use of decoction, infusion, and extract of mullein in phthisis. Its extensive use among the peasantry in Ireland at the present day is but a relic of its former popularity, spread over a far wider geographical range Dr. Quinlan referred to Gerarde as a past authority who had a great belief in mullein. The chapter on this plant, in the famous *Herbal*, edition of 1598, page 629, is a good average sample of the entire work, showing how a truly great surgeon and botanist recorded knowledge to the best of his ability; learning that was clearly based on experience, but replete with errors due to a want of those organised methods of observation, the necessity of which has been impressed on modern scientists solely by the experience and example of three hundred years of precise scientific labour. With the imperfect methods of education, under which John Gerarde began his studies, he must be honoured for having completed so much sound work. His reliability has been far too much impugned, owing to his belief in the origin of the Barnacle-Goose from the barnacle (*Lepas anatifera*). He fell into error simply through imperfect observation. Determined to investigate the matter by personal observation, he examined some barnacles, between Dover and Romney, and found that some contained "living things that were very naked, in shape like a Birde," in others were "the Birdes covered with soft downe . . . which no doubt were the foules called Barnakles." He here was caught in the usual snare, a hasty inference from an observation commenced scientifically, but ceasing just at the point where it was most important that it should be continued. This kind of error is still only too common; though limited, in these days, to more recondite scientific problems. Gerarde, however, as a rule, expresses great doubts concerning popular opinions; thus, in the chapter on mullein, he writes: "There be some who thinke that this herbe being but carried about one, doth helpe the falling sicknesse, especially the leaves of that plant which hath not as yet borne flowers and that is gathered when the sunne is in Virgo, and the moone in Aries, which thing notwithstanding is vaine and superstitious." Yet in the same chapter he deliberately prescribes mullein as an emmenagogue; "the leaves worne under the feete daie and night in the manner of a shoe-sole or socke, will restore the catamenial flow, "when it is checked, in the case of young patients" being kept unto their feete with some socks." Here it clearly never occurred to him that the woolly leaves simply kept the feet warm and dry, and thus removed a very common exciting cause of amenorrhœa. As to the value of verbascum in pulmonary disease, Gerarde states that it "prevaileth much against the old cough," and that "the blacke mullein with his pleasant yellow flowers, boiled in water or wine and drunken, is good against the diseases of the brest and lungs, and against all spitting of corrupt rotten matter." We are also informed that the "countrey people, especially those husbandmen in Kent, doe give their cattell the leaves to drinke against the cough of the lungs, being an excellent approoved medicine for the same, whereupon they do call it Bullock's Longwoort." This shows us that Gerarde understood elementary collective investigation; indeed, in a preface to the *Herbal* written by George Baker, surgeon to Queen Elizabeth, we find that the author is highly extolled by his colleague for his untiring efforts in procuring specimens "upon his proper cost and charges," and in correcting errors and collecting facts. Lastly, considering the question of the true value of verbascum, the evidence of old and modern authorities tends to establish its use as a very comforting demulcent, which may supersede ordinary cough-mixtures, a great boon, as Dr. Quinlan observes, to phthisical sufferers with delicate stomachs. This physician, its modern advocate, does not attempt to rank the herb otherwise than as a palliative, checking the cough and diarrhœa of phthisis, but in this respect it resembles most other and less agreeable remedies employed in pulmonary consumption.

PRIZES OF THE ACADEMY OF MEDICINE OF PARIS.

THE following are the awards of the prizes of the Paris Academy of Medicine: The *Academy Prize*, on "The Clinical value of Antiseptic Methods in Surgical Practice," of the value of 1,000 francs (£40) was not awarded. Only one paper was presented. *Baron Portal's Prize:* On "The condition of the Uterus and its Appendages in Puerperal Fever," value 1,200 francs (£48), was awarded to the author of the only paper presented, Dr. A. Mayor, chief of the Histological Laboratory at the amphitheatre of the Paris hospitals. *Madame Bernard de Ciorieux's Prize:* "On Epileptic Accidents in Hysteria," value 1,500 francs (£60), was awarded to Dr. Louis-Gilbert Ballet, of Paris. The *Capuron Prize:* "On the Indications and Contra-indications for the use of Mineral Waters, Sea-baths, and Hydrotherapy during pregnancy," of the value of 2,000 francs (£80), was awarded to Dr. Alphonse Belugou, physician at the baths of La Malon (Hérault); honourable mentions were awarded to Dr Caulet, Inspector of the Mineral Waters of St. Saviour (Hautes-Pyrénées), and to Dr. Queirel, physician to the Lying-in Hospital at Marseilles. The *Barbier Prize*, value 6,000 francs (£240) is to be awarded to the person who shall have discovered complete methods of cure for diseases most generally recognised as incurable was awarded to M. Toussaint, Professor of Physiology in the Veterinary College of Toulouse, for his works on charbon, anthrax, fowl cholera, and acute experimental septicæmia. The *Godard Prize* for the best work on external pathology, value 1,500 francs (£60 was not awarded. The *Desportes Prize*, for the best work on practical medical therapeutics, value 2,000 francs (£80), was not awarded but the Academy gave premiums of 500 francs (£20) to Dr. Vidi of Paris, for his work entitled "Treatment of Rectal Prolapsus b Hypodermic Injections of Ergotine;" and 500 francs (£20) to D Campardon, for his memoir on "The Therapeutic use of two Indigenous Plants." The *Buignet Prize* of the value of 1,500 francs (£6 to be awarded yearly to the author of the best work on the applic tion of physics or chemistry to medical science, was award to Dr. Radal of Bourdeaux, for his "Ophthalmological Lectures honourable mention was awarded to Dr. Vincent Guéret (Creus The *Daudet Prize:* "On Epithelioma of the Lips," of t value of 1,000 francs (£40), was not awarded. The *Amus Prize*, for a work or researches based concurrently on a tomy and experimentation, which should have realised or the way to the most important progress of surgical therap tics, value 2,000 francs (£80), was awarded as follows: 1, francs (£48), to Dr. Lucas-Championnière, for his work " Trephining of the Skull," and a second prize of 800 francs (£32), Dr. H. Toussaint, for his memoir on the "Anatomy of the Pe Artery, and its Aneurysms"; honourable mention was also award to Dr. Larger, of Maissons Lafitte. The *Lefèvre Prize*, for the b

ork on "Melancholia," value 1,500 france (£60), was awarded to r. Liénard, of Sedan, and a premium of 1,000 francs (£40), was warded to Dr. Duponchel. The *Argenteuil Prize*, which is sexenial, to be awarded to the author of "The most notable Improvements in the Treatment of Stricture of the Urethra during the ixth Period (from 1876 to 1881); or, to the author of "The most mportant Improvement made during those six years in the Treatent of other Diseases of the Urinary Passages," value of 10,000 ancs (£400), was divided as follows: 1. 6000 francs (£240), to Dr. igelow, of Boston, author of the work entitled, "Cure and Prophyxis of Stricture of the Urethra by Urodynamic Dilatation", 4,000 francs (£160) to Dr. Anger, author of a work entitled; New Instruments for Operation with the Thermo-cautery Penorotal Hypospodias." The *Saint Leger Prize*, with regard to hich 1,500 francs (£60) is to be awarded for the experimentation hich shall have produced thryoid tumour, subsequently to the lministration to animals of substances extracted from the waters, from the districts, where *goître* is endemic. This prize will not given until the experiments have been successfully repeated by e Academical Commission. There were no competitors. *Dr. Yaro's Prize* is intended to discover, by what means it would be ssible to give a larger part to moral treatment, and to increase its eans of action in public and private asylums for mental diseases; o, to specially point out the objections to rigorous isolation in lancholic affections. It should be based on a sufficiently large mber of facts, thoroughly verified by science. The prize was arded to Dr. Lagardelle. The *Saint Pave Prize*, of 25,000 francs 1,000), is to be awarded to the person, without distinction of tionality or profession, who should find a remedy, recognised by Academy, as efficacious and complete, against diphtheria. Until s remedy is discovered, the accumulations of the income this donation are to be devoted to an encouragement ze, to be awarded every two years by the Academy to persons whose works and researches on diphtheria seem t to merit such reward. Six works and papers were pre- ted for competition, but not one of them was judged worthy. *Monbinne Prize*, of 1500 francs (£60), intended to assist, by an nual or biennial appropriation, scientific missions of medical, gical, or veterinary interest. In case of this Monbinne fund not ng used in the way intended, the Academy is empowered to employ proceeds, either as premiums, or as means of assistance, according ts desire, and according to the requirements. The *Prize of the mission on Infant Hygiene*—Question: To make known, by cise observations, the function of first dentition in infantile nology—value 1,000 francs (£40), was not awarded; but silver dals were given to Dr. Lavergne, Physician of the Children's pital, in the Department of the Allier, and to Dr. Sagnier, of nd Combe (Gard); and bronze medals to Dr. Juventin, of urepaire, Dr. Ory, Subinspector of the Children's Hospital, in the artment of the Loire, and Dr. Pippingsköld, of Helsingfors.

SCOTLAND.

ROYAL HOSPITAL FOR SICK CHILDREN.

ING the month of January, 43 new cases were admitted to the Children's Hospital, Edinburgh, which, with 59 already in the ital, made a total of 102 for the month. In the out-door dement, 504 were treated as dispensary cases; there were 23 vacions, giving a total of 629 for the month.

BEQUESTS TO SCOTTISH MEDICAL CHARITIES.

late Mr. Stoddard of Broadfield bequeathed to the Glasgow ern Infirmary £1,000, to the West of Scotland Convalescent es, Dunoon, £100; the Convalescent Home, Lenzie, £100; and the Greenock Infirmary, £500. The late Miss May Bain of Camelon bequeathed to the Edinburgh Royal Infirmary £1,000, to the Deaf and Dumb Institution £500, to the Edinburgh Destitute Sick Society £300, to the Edinburgh Institution for the Relief of Incurables £300, to the Edinburgh Medical Missionary Society £300, as well as many other handsome sums to charities not strictly medical.

THE ENDOWMENT OF EDINBURGH UNIVERSITY.

THERE exists in Edinburgh a Society or Association for the Better Endowment of Edinburgh University. It pursues its work quietly, and has already been of much benefit to the University. Its annual report for 1882 chronicles the endowment of many scholarships and prizes in the Arts Faculty, etc.; in the Medical Faculty, however, it is satisfactory to note the foundation of the "James Scott Scholarship" in midwifery, of the value of from £40 to £50; and the Murchison Scholarship, which is to be competed for alternately in London and Edinburgh.

AMBULANCE LECTURES IN ABERDEEN.

SURGEON-MAJOR ANGUS FRASER commenced a course of ambulance lectures to the Aberdeen Rifles on the last Monday of January. A general outline of the skeleton and parts of the human body occupied the first lecture. These lectures are intended to qualify the men for ambulance work. The interest evinced by the men was keen, and they turned out in large numbers. Already similar lectures have been given in Aberdeen to the policemen, to the artillery, and to the engineers.

SCIENCE LECTURES IN ABERDEEN.

PROFESSOR STRUTHERS commenced, on Saturday last, a course of four lectures on "The Relation of Man to the Higher Animals." These lectures, as is Dr. Struther's custom, are to be delivered in the anatomical theatre of the University, and are free to the public. As usual the attendance was large. After stating the problem of evolution, Dr. Struthers passed a high eulogium upon the work and genius of Mr. Darwin, and afterwards proceeded to compare the limbs of a man with those of the gorilla and higher apes. The lecture was illustrated by many anatomical specimens, and by a beautifully articulated series of skeletons of the anthropoid apes.

EDINBURGH DENTAL HOSPITAL AND SCHOOL.

THE directors and contributors of the above hospital held their annual meeting last week. The report submitted stated that, during the past year, there had been 4,630 patients—2,636 of whom were males and 1,994 females. Four hundred and thirty teeth had been stopped during the year, 59 of these with gold. A considerable number of cases requiring special treatment were also treated, and both chloroform and nitrous oxide had been frequently exhibited. As an educational influence, the institution continued to attract increased numbers of students. The income was £388 12s. 7½d., and the expenditure £377 15s. 3d., leaving a balance in hand of £10 17s. 4½d.

ROYAL MEDICAL SOCIETY, EDINBURGH.

THE Royal Medical Society of Edinburgh held its annual dinner on Tuesday evening, and, as usual, entertained the representative members of the various medical educational bodies in Edinburgh and distinguished citizens. The usual toast-list was gone through, but a memorable occurrence in the evening's proceedings was an important statement by Sir Alexander Grant, Principal of the University, that, under the inspiration of Lord Provost Harrison, an energetic movement is on foot to complete the new University buildings by the erection of the large University Hall and campanile tower; and that this movement, from the large number of promises of support already given, promises to be so successful as to permit the completion of these important features in the new buildings in time for the centenary of the University in 1884.

EDINBURGH ASSOCIATION FOR INCURABLES.

THE annual meeting of the above association was held last week. The report submitted was very satisfactory; and stated that the Longmore Hospital had been opened for two years, and the building afforded them every satisfaction. Until now, the hospital was almost fully occupied. On December 31st, there were 40 patients in the ordinary wards, 3 in the special wards, and 4 in the private wards. In accordance with the wishes of the late Mr. Longmore, four rooms had been set apart for persons of a paying class. The number of patients under treatment during 1882 was 93, which included 43 males and 50 females. Of these, 34 had died—namely, 12 males and 22 females; and 12 had left of their own accord or been discharged. The financial report submitted was satisfactory, and showed a continued increase in the annual subscriptions—the amount collected having risen from £693 11s. 2d., in 1879, to £1,943 13s. in 1882. A cordial vote of thanks was accorded to the medical officers and others engaged in the work of the institution.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending January 27th show that the death-rate in the eight principal towns during the week was 27.3 per 1,000 of estimated population. This rate is 4.7 above that for the corresponding week of last year, and 0.5 above that for the previous week of the present year. The lowest mortality was recorded in Leith—viz., 14.4 per 1,000; and the highest in Dundee—viz., 33.8 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 5.0 per 1,000, or 0.3 above the rate for the previous week. Whooping-cough continues to be the most fatal miasmatic disease, the mortality from it being greatest in Dundee and Glasgow. From acute diseases of the chest, 176 deaths were registered, or 17 more than in the previous week. The mean temperature was 38.2°, being 4.3° below that of the week immediately preceding, and 5.2 below that of the corresponding week of last year.

GLASGOW ROYAL INFIRMARY.

THE annual meeting of the supporters and friends of this large charity, was held on January 29th, when a lengthy report was read and adopted. From this report we gather that the total number of patients treated during the past year was 33,048. Of these, 5,564 were treated to a conclusion in the wards of the hospital, with 446 deaths, giving a ratio of 8 per cent.; but if those who died within 48 hours after admission are deducted, the mortality is reduced to 6.2 per cent. The daily average number of patients resident, was 507; and the average residence of each patient, was 32.22 days. The average cost of each bed, was £46 5s. Financially, the report is not altogether satisfactory, for while there has been an increase in the revenue over that of the previous year, the expenditure has fallen considerably short of the income. It is to be hoped that this state of matters will show an improvement at the end of the year just entered on, for the need of the charity is shown by the fact that last year five hundred more cases were treated than ever before in any one year.

GLASGOW BARONY PAROCHIAL BOARD.

AN important part of the business at the last meeting of this board, was the discussion on the question as to whether Woodilee Asylum should be sold. Those in favour of this course, hold that the cost of erecting the building is too great; that the expense of management is excessive, and that the class of inmates are more suited, to a large extent, for the wards of a poorhouse. It was, however, pointed out that it would be most unwise, at present, to dispose of the building, as it would leave the board in the very difficult position of providing for the five hundred inmates, seeing the great scarcity that exists at present of asylum accommodation in Scotland. Further, it was shown that the yearly cost of the establishment, as compared with others, was anything but excessive, and that its arrangements for the care and the improvement of the patients were admirable. Under all the circumstances, the board very properly decided to retain the asylum, and to carry it on upon its present excellent footing.

IRELAND.

AN Ambulance Association will shortly be established in Cork, and the necessary arrangements for classes of instruction will soon be completed.

BARRINGTON'S HOSPITAL, LIMERICK.

AT a special meeting of the Corporation, held last week to consider the half-yearly presentments, a deputation waited on the Council on behalf of the above institution, requesting that £250 should be allocated instead of £150 as on the previous occasion. It was shown that the hospital was considerably in debt, the income for the past year having been only £809, as compared with an expenditure of £1,239. After some discussion, the application was refused, and a grant of £150 for the half-year passed.

REPORTED OUTBREAK OF TYPHUS FEVER IN LIMERICK.

AN outbreak of fever having been reported in Limerick, the Local Government Board last week requested the Public Health Committee, during the prevalence of dangerous infectious diseases, to obtain weekly reports from the medical officer to the sanitary officer, in order that the necessary precautions should be taken to prevent the spread of the disease. The committee marked the communication "read," it having been proved to their satisfaction, that there was no disease or epidemic in the district.

THE SOUTH DUBLIN UNION.

THE Board of Guardians of the Union has resolved to make a new medical appointment in the workhouse. It is that of a resident medical officer, who is to receive a salary of £250 *per annum*, with unfurnished residence, coal and gas, washing and attendance. They are also about to appoint a dispensary apothecary (a licentiate of the Apothecaries' Hall) to attend at the workhouse daily and dispense medicines, and to perform also such other duties as the resident medical officer may direct, at a salary of £80 *per annum*.

THE ROYAL UNIVERSITY OF IRELAND.

THE Senate of the University has wisely enacted that—"The certificate, or certificates, of hospital attendance required from candidates for the degree of M.D., must show that the student has, during a period of three months of his hospital attendance, attended either a fever hospital of repute, or the fever wards of a general hospital." The senate has also ordered that the certificates of personal attendance on fever cases, similarly required from medical candidates, must show that at least ten fever cases have been attended. It has also been decided to hold a first examination in medicine next summer for those candidates who would, at that time, be eligible to present themselves under the regulations of the University.

DUBLIN LADIES' SANITARY ASSOCIATION.

THIS association has arranged for the delivery of a course of lectures "On the House and its Surroundings," which promise to be of much interest as well as of usefulness. The first lecture of the course is to be given this day (Saturday), in the rooms of the Royal Dublin Society, by Dr. Cameron, medical officer of health, Dublin, "On the Site of the House and the Basement Story." On following Saturdays, lectures will be given on "Drainage and Sewer Gas,

. Kaye Parry, M.A., B.E., architect; on "Heating, Lighting, and entilation," by Professor Barrett, F.R.S.E.; on "Window Gardenig," by F. W. Moore, Curator, Botanic Gardens; on "Furniture and ecoration," by T. Newenham Deane, F.R.I.B.A., F.R.I.A., R.H.A.; id on "Laws Affecting House Property," by R. O'B. Furlong, M.A. he lectures will be followed by an examination for ladies who have ained the certificates of the Association for Elementary Knowledge Domestic Sanitation and Hygiene, at which prizes will be given. is also intended to give a course of lectures on the management infants and children.

STIMULANTS IN WORKHOUSES.

DEPUTATION of ratepayers waited on the Board of the North ublin Union last week, for the purpose of impressing upon the ard the desirability that no "unnecessary use of stimulants" ould be permitted in the house, and calling for a Local Governent Board inquiry on the matter. The objects of the deputation re very clearly stated by Mr. Nicolls, whose father, the late Dr. colls, of Longford, he claimed to have been a pioneer in this ovement for a great reform, and whose workhouse and hospital came model establishments after he departed from the usual adnistration of stimulants. Mr. Nicolls adduced a mass of medical stimony as to the unnecessary use of alcoholic stimulants, in all ses of illness, and quoted the famous declaration, concerning the scription of alcohol, which this JOURNAL published some years o. He referred to the fact that in many workhouses the stimuits had been much reduced in quantity, with coincident improvent in the health of the pauper patients, and said that an inquiry a Local Government Board inspector would be the fairest course vards the medical officers of the workhouse and the ratepayers. was finally resolved that a committee be appointed to make iry as to the large amount of stimulants used in the union as npared with the South Dublin Union, to confer with the medical cers, and report at an early date.

THE GENERAL MEETING OF THE DUBLIN BRANCH.

E adjourned general meeting of this Branch was held on Tuesday t, in the King and Queen's College of Physicians, Kildare Street, Dr. nks, President, being in the chair. The debate, as will be seen on erence to our complete report of the previous sitting, on January h, was adjourned for discussion of the amendment proposed to resolution for the adoption of the report of the out-going ncil, to which we referred in our last number (page 221). Fifty mbers were present, and speeches were delivered in favour of the endment, and of supporting, in principle, the policy of the parent ociation as regards medical reform, by Drs. Quinlan, McDonnell, Jacob; and, on the other hand, Dr. Kidd, late President of the nch, spoke in defence of the report of the council. Much interest s aroused by the debate, which, as several members particularly ired to speak, was adjourned to Tuesday next, when a division l be taken. This meeting has excited the attention of the Dublin ly papers, being reported in full in the *Daily Express* and *man's Journal*, and the former paper devotes a leader to the sideration of the subject. The debate, it observes, "cannot fail rrest the attention of the public, whose interests are in reality e vitally concerned than those of the members who have taken in it."

DUBLIN HOSPITAL SUNDAY FUND.

ninth annual meeting of the friends and supporters of this fund held last week; Viscount Powerscourt presided. The report of Council for the year 1882 showed a substantial increase in the unt collected for the fund, in spite of the many depressing influs of the year, over 1881. Collections were made in two hundred thirty-two places of worship. The total amount contributed £4,193 16s. 10d., an increase of £127 8s. 3d., as compared with 1881. The amount of the fund for each year since its foundation in 1874 is shown in the following statement:—1874, £3,306 3s. 2d.; 1875, £3,619 12s. 4d.; 1876, £3,873 9s. 3d.; 1877, £4,106 14s. 6d.; 1878, £4,300 18s. 11d.; 1879, £4,344 18s.; 1880, £4,050 7s. 9d.; 1881, £4,066 8s. 7d.; 1882, £4,193 16s. 10d.; total, £35,862 7s. 4d. The Distribution Committee distributed £3,900 amongst the participating institutions, upon the same principles as those followed in former years. In addition to this sum, the committee distributed a further sum of £132 16s. to those hospitals which had complied with the recommendations of the Council with regard to their nursing arrangements. It will be remembered that the Council for 1880 gave the Committee of Distribution authority to "take into consideration the efficiency of the nursing arrangements in the participating institutions, and modify the grants accordingly." The Committees of Distribution for the years 1880 and 1881, believing that a sufficient time had not elapsed since special attention was drawn to this matter by the Committee on Nursing of 1878 and 1879, did not exercise this power. The committee now, however, considered that sufficient time had elapsed to enable the authorities of the Dublin hospitals to take such steps to remedy the defects in their nursing systems, and they have, therefore, out of the balance to the credit of the fund available after the division of £3,960, increased by 5 per cent. the awards to those which have complied with the recommendations of the Council with regard to nursing arrangements. The number of participating hospitals now amounts to sixteen, and the awards for this year were: Sir Patrick Dun's, *b*£437 12s. 2d.; City of Dublin, £518 15s. 6d.; Dr. Steevens', *b*£101 5s. 11d.; Meath, £361 15s. 6d.; Mercer's, £169 18s. 10d.; Whitworth (Drumcondra), £88 0s. 7d.; Coombe (Lying-in), *b*£334 9s. 2d.; Rotunda (Lying-in), *b*£140 8s.; St. Mark's (Ophthalmic), *b*£184 16s. 11d.; National Eye and Ear Infirmary, *b*£91 4s. 5d.; Convalescent Home, *b*£187 8s. 5d.; Cork Street (Fever), *b*£145 4s. 7d.; Adelaide, *b*£800 17s. 4d.; Monkstown, *b*£230 13s. 11d.; Orthopædic (Usher's Island), £105 4s. 11d.; National Orthopædic and Children's, *b*£125 19s. 8d.; total, £4,082 16s. The sums marked *b* include 5 per cent. on award for improvement in nursing arrangements.

MILK *v.* ALCOHOL IN THE TREATMENT OF INSANITY.—"The greater my experience becomes," writes Dr. Clauston, in the *Annual Report of the Royal Edinburgh Asylum for the Insane*, "I tend more to substitute milk for stimulants. I do not undervalue the latter in suitable cases; but in very acute cases, both of depression and maniacal exaltation, where the disordered working of the brain tends rapidly to exhaust the strength, I rely more and more on milk and eggs made into liquid custards. One such case this year got eight pints of milk and sixteen eggs every day for three months, and under this treatment recovered. I question whether he would have done so under any other. He was almost dead on admission, acutely delirious, absolutely sleepless, and very nearly pulseless. It was a hand-to-hand fight between the acute disease in his brain and his general vitality. If his stomach could not have digested and his body assimilated enough suitable nourishment, or if he could not have been taken out freely into the open air, he must have died. But to-day he is fulfilling the duties of his position as well as he ever did in his life. All acute mental diseases, like most nervous diseases, tend to thinness of body; and therefore all foods, and all medicines, and all treatments that fatten, are good. To my assistants, and nurses, and patients, I preach the gospel of fatness as the great antidote to the exhausting tendencies of the disease we have to treat; and it would be well if all people of nervous constitution would obey this gospel."

PROLONGED GESTATION.—Dr. Lewis A. Rodenstein (N. Y. *Med. Jour.*) claims to have authenticated four cases of prolonged gestation. In the first case, gestation occupied a whole year; in the second case, three hundred and twenty-one days; in the third case, three hundred and thirty-five days; in the fourth case, three hundred and fifty days. These cases tend very strongly to support the justice of the French law, that the legitimacy of a child born three hundred days after the death or departure of the husband cannot be questioned.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

DUBLIN BRANCH.—An adjourned special general meeting of the Branch will be held on Tuesday next, February 13th, at the King and Queen's College of Physicians, Kildare Street, at 4 P.M., to resume the debate on the resolution proposing the adoption of the annual report of the outgoing Council, and upon the amendment thereon, moved by Dr. Atthill, and seconded by Dr. Grimshaw, Registrar-General.—GEORGE F. DUFFEY, M.D., Honorary Secretary, 30, Fitzwilliam Place, Dublin, February 7th, 1883.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Hotel, Stafford, on Thursday, February 22nd, at 3.30 P.M.—VINCENT JACKSON, General Secretary, Wolverhampton, January 30th, 1883.

BORDER COUNTIES BRANCH.—The spring meeting of this Branch will be held at the Central Hotel, Carlisle, on Thursday, February 22nd, at 6 P.M. Members intending to read papers or show specimens are requested to give notice to RODERICK MACLAREN, M.D., Carlisle, Honorary Secretary *pro tem.*; or to J. SMITH, M.D., Dumfries, Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—A meeting will be held at the Royal Hospital School, Greenwich, on Thursday, February 15th, at 8 P.M. Papers: Dr. Robert J. W. Oswald: On a Rare Sequela of Scarlet Fever. Mr. Brindley James: On the Influence of the Mind over the Body.—W. JOHNSON SMITH, Acting Honorary Secretary.—February 5th, 1883.

DUBLIN BRANCH.

THE sixth annual meeting of the Dublin Branch of the Association was held on Thursday, January 25th, in the College of Physicians, Kildare Street, when Dr. KIDD resigned the presidential chair to Dr. BANKS, the incoming President.

Report of Council.—Dr. G. F. DUFFEY, honorary secretary, read the report of the Council. The report mentioned the different Bills for the better notification of infectious diseases introduced during last session, and proposed thanks to Mr. Meldon for the great trouble he had taken with his Bill.

The report specially referred to the Report of the Royal Commission on the Medical Acts—a matter of great importance and of deep interest to the Association, inasmuch as it goes far to embody the great principles of medical reform for which the Association and the profession have unceasingly struggled during fifty years. The Association, at the jubilee meeting at Worcester in August last, distinctly authorised the Medical Reform Committee to memorialise the Government to introduce a medical Bill during the ensuing session of Parliament, based on the Report of the Royal Commission; and, on November 22nd, the President and chief officials of the Association, accompanied by representatives of all the leading organs of the medical press, were introduced to the Lord President and the Vice-President of the Privy Council by His Grace the Duke of Westminster, and were most favourably received. The deputation, in obedience to the mandate of the Association, distinctly pledged the Association to support a Bill to remedy the defects of the Medical Act of 1858.

1. To remedy the defective constitution of the General Medical Council.

2. To establish a minimum uniform qualifying examination for practitioners by conjoint examining boards, established one in each of the three divisions of the kingdom, conferring a licence in medicine, surgery, and midwifery.

3. To strengthen the so-called penal clauses of the Medical Act, so as to afford adequate protection to the public against the false assumption of medical titles by unqualified and unexamined persons.

To remedy these defects has been the aim of medical reformers, and at no former period has so promising a prospect of success been afforded as through the Report of the Royal Commission and the present favourable support of the Government. The report stated that the Council of the Dublin Branch were divided in opinion as to the merits of the proposition to change the constitution of the General Medical Council by the admission of direct representatives of the profession into it, and therefore on this point made no recommendation.

The adoption of the report was proposed by the Rev. Dr. HAUGHTON, and seconded by Dr. WHEELER, Vice-President of the College of Surgeons. On this point, Dr. Haughton said he was strongly in favour of direct representation, and had been for many years, because the profession contributed the funds which were disposed of by the General Medical Council. He thus held to the opinion he gave before the Select Committee (Query 3558), that direct representation would bridge over the chasm which exists between the Medical Council and the profession. He was certain that the men who would be sent forward as direct representatives of the Council would be men that he would feel it an honour to sit beside and legislate with in the Medical Council.

The Council of the Dublin Branch is in great part composed of members who are closely connected with Trinity College and the Dublin corporations. It is notorious that these corporations have failed, after repeated futile attempts, to frame a conjoint board of examination for granting licences to practise. The conjunction even of the two Royal Colleges—Physicians and Surgeons—broke down. Witness Professor Haughton (Query 3549, Select Committee evidence), who replied: "That combination appeared more practicable than the others; but still the inevitable money question turned up at the end between the two corporations, and that failed. Under such circumstances, and in such a locality as Dublin, it is not to be marvelled at if approval of the Report of the Royal Commission was wanting. It was, however, unanimously agreed that—

"The name of no person should be admitted to the register who has not passed a satisfactory examination, or examinations, in medicine, surgery, or (*sic*) midwifery. Each of the medical authorities ought to be compelled, either to give a complete examination or to combine with other bodies for the purpose."

The Association, in 1858, drafted a clause to interdict registration to all who did not possess a qualification both in medicine and surgery, but was forced to withdraw the clause in order to retain the support of the Government to the Bill. Since 1858 experience has, however, proved the impossibility of supervising the examinations of nineteen bodies; visitations, if they are to serve any good purpose, must be continuous. The whole of the examination should be inspected from the beginning to the end by the inspectors. This was the opinion given by Dr. Haughton before the Select Committee (6,506, 6,508). Compare this with the evidence of Dr. William Stoker, of Dublin, before the Royal Commission (5,169): "The rejection rate has been very much higher at that examination at which the visitation took place;" and (5,170) "afterwards the examination was unaltered." In the face of this evidence, it is manifest spasmodic fitful visitations are almost the reverse of useful; to be beneficial, they must be regularly carried out. The movers of the report said nothing as to the means by which this could be done; evidently the less said, the better. Three conjoint boards may be

fficiently supervised. Nineteen examining bodies, involving inevitble inequality in their examinations, with a tendency to competion downwards, as the natural consequence of their number, may vell be considered quite independent of effectual supervision. egislation would be necessary to enforce even this recommendaion. What sane man could hope for legislation on such a basis? he thing is impracticable, and, therefore, though the Council were nanimous on this point, no good result can follow.

The one portal scheme, and an uniform standard of examination, ere stigmatised as destructive to the corporations, and injurious to he profession as well as to the public. In supporting this part of he report, Dr. Haughton acknowledged: "Over and over again he ad known friends, whose lives were of importance, to be attended y practitioners to whom he would not entrust the drawing of a ooth." What can well be worse than this picture? And yet, in onnection with this statement, he alleges his chief objection to nat proposal of the commissioners was, "that the portal must ecessarily be a very low one," thus inferring what no one, profesonal or otherwise, can ever be led to credit that Sir William Jener, Mr. Simon, and Dr. Robert McDonnell, together with their ighly gifted fellow commissioners, have lent themselves to a scheme or lowering, instead of improving and elevating, a profession, on ie proper education of which the issues of life and death depend. hat Dr. Haughton should hazard such a statement in face of the etails of crass ignorance and incapacity revealed in the evidence efore the Royal Commission, is inexplicable.

It is not easy to conceive a more simple proposal than the formaon of a conjoint examining board, one in each division of the ngdom, in the framing of which board representatives of the existing edical authorities shall coalesce under the sanction of a medical ouncil, in which council all interests—those, namely, of the public, the ofession, and the corporations—are represented. The interests of ie universities are specially protected by the exemption of their udents from all but the practical subjects of examination, and the terests of no single corporation are disregarded. Provision is also ade for the admission into the scheme of such new colleges and niversities as may hereafter be established.

So adverse a report to the policy of the Association, and so supted, did not pass unchallenged. Dr. ATTHILL, a member of the uncil from which the report emanated, moved an amendment to e effect:

"That the Branch approves in principle of the policy of the rent Society."

Dr. ATTHILL commenced his very able speech by remarking that it as unusual for a member of council to move an amendment to the port of his council, but that he considered he was on this occasion stified in doing so from the want of unanimity in the council, for at several important amendments to the report, which would have tered its complexion materially, were lost by a majority of only ie, and that even that majority would have disappeared had not r. R. McDonnell thought himself bound not to vote because he d been a Royal Commissioner, in fact there was no majority. He ated that, when he was Registrar of the College of Physicians stances frequently came before him in which men were rejected being dangerously ignorant, and would reappear after a few days weeks fully qualified and would be impressed with the same mark the licentiates of the college. Both the Colleges of Physicians d Surgeons had failed to exclude that class of men.

The framers of the report of the council of the Dublin Branch re satisfied with the *status quo ante*. He was not; he considered essential that there should be some reform. Their profession was l of the lame, blind, and halt. There was no warrant for the erence drawn by the report and re-echoed by Dr. Haughton, that standard of examination under a conjoint system, which would present each division of the kingdom, would be on the low level licensing bodies which had acquired a most disastrous representon for laxity and incompetency. At present there were nineteen lies competing with each other in order to obtain fees and the ult of this was a downward tendency in the qualification of the n they passed. With three licensing bodies, the downward petition would be modified, and their examination could be ter supervised by the medical council. The corporations had e good, but they should remember that they existed for the blic. He maintained that they ought to do everything in their er to elevate their profession and to exclude from it men who e a disgrace to it, which they could not do unless they reduced atly the number of portals to it.

he Registrar-General, Dr. GRIMSHAW, in seconding the amendt, said that he also did so as a member of the Council. He did not believe that the demand for medical reform was an ignorant demand. He affirmed that it came from the best half of the profession. They knew also that it came from the public. Ever since the British Medical Association was established, its policy had been in favour of medical reform. The corporations were now face to face with the recommendations of a powerful Royal Commission, and the public would not listen to men who set themselves against it. He believed that the tendency of the conjoint examination would be to elevate the profession, and so far from dwarfing the standard of qualification, as had been stated, would make the dwarf a giant compared with the minimum. If the General Medical Council had been an efficient body, no legislation would have been necessary now, but the existing state of things was the result of twenty-five years of its inefficiency. The corporations all seemed afraid to criticise each other and report on one another. The only remedy for this was, the introduction into the Council of the independent element, by the direct vote of the profession. He hoped that the sound corporations would be retained.

On the motion of Dr. JACOB, seconded by Dr. ROBERT MCDONNELL, the debate was adjourned.

This important debate was resumed on February 6th, and a short notice of the proceedings will be found in our "Irish Week," p. 271. The principle of direct representation, having received the *imprimatur* of the Royal Commission, its advocates may well be satisfied. It is true the name of Sir James Paget was adduced against it, but his advocacy of its adoption by the Royal Commission was omitted.

The public press is gradually becoming enlightened on the subject of medical reform. In commenting on the meeting of the Dublin Branch, the *Freeman's Journal* of January 26th, in reference to Dr. Atthill's mention of dangerously ignorant men becoming licentiates, remarks: "Is this to continue because the vested interests of the 'corporations' may be hurt? Surely, such a proposition is absurd. Let the existing corporations remain. If they maintain a high standard, their degrees will still be of value; but let there be some official test that will satisfy the public that all medical men have at least a certain qualification. At present, the public have not perfect confidence in the 'corporations'."

NORTH LONDON DISTRICT.

A MEETING of this Branch was held on Friday evening, January 26th, at the house of J. Wallis Mason, Esq., No. 1, Osnaburgh Terrace, Regent's Park, when Dr. Felix Semon gave an address on "The Diagnostic Importance of Paralyses of the Glottis Openers."

A somewhat intricate subject was made very plain, and invested with much interest by the exhibition of a large model of the larynx and diagramatic references. These rendered the following of the anatomical points of the lecture very clear and distinct. The influence of the nerves and muscles in their action on the vocal apparatus was first pointed out and fully explained. Numerous cases were read, illustrative of paralysis of the right or left vocal cords, and of the causes which produced these effects, some of them being thoracic and others cerebral.

It was shown that if the laryngoscope gave evidence of paralysis of the vocal cords, serious mischief may be expected to manifest itself perhaps in the brain in connection with the floor of the fourth ventricle, or else in the chest, by aneurysm of the subclavian, or pressure in the recurrent laryngeal nerves by goïtre, or other causes. The paralysis of the vocal cords gave very early and decisive testimony of grave and serious disease being present, when other symptoms failed to attract much attention, and thus was made manifest by the recital of cases in illustration of Dr. Semon's views. Therefore, the laryngoscope has a value, not only in giving knowledge of diseases actually existing in the throat, but of indicating the presence of disease in somewhat distant parts. A discussion followed on a few points brought out in the address, and the meeting separated.

DEATH FROM CHLOROFORM.—Another of those sad occurrences which are occasionally to be expected when powerful remedies are used to produce insensibility to pain, observes the *Canadian Journal*, took place in Quebec. The patient was a boy, ten years of age, about to have a tooth extracted. The anæsthetic was administered by Dr. Russel, junior, with every possible care. On the first indication of alarming symptoms, the doctor immediately discontinued the inhalation and commenced artificial respiration. In this case life was maintained for about two hours after the discontinuance of the chloroform, the patient seeming to die of gradual paralysis of the nerves of respiration and circulation.

CORRESPONDENCE.

PROPOSED MEDICAL BENEFIT SOCIETY.

[In our last number we expressed, at the instance of many correspondents, an opinion on the proposals which have from time to time been frequently published in our columns for the formation of a Medical Benefit Society, by which medical practitioners should, by annual subscription during the years of health and strength, provide against periods of sickness and disablement, and, by such providence, secure to themselves payments to enable them with less difficulty to tide over the difficulties and hardships of such disablement.

Provision of this kind, to be made effectually, must be commenced on a basis which has the sanction of actuarial investigation. We are advised that it would be possible to form such an association with adequate prospects of success, if it be found that any considerable number of medical practitioners are desirous of taking part in it, and of assisting its formation. The first step towards this end appears to be the enrolment of names of those who favour the proposal, who take an interest in ripening it into a more mature shape, or who will help in the preliminary organisation, and those who would desire to become members of such a society if it be formed on a sound basis. With this view, we intimated last week that we were prepared to receive names of those interested and willing to take part in the formation of a Medical Benefit Society. It will, in the first instance, be necessary to form a strong provisional committee; and that committee would be able to take the preliminary steps necessary to obtain the actuarial data required. We publish below some letters received, and a list of the further adhesions forwarded. Great results often flow from small beginnings. We shall be glad to receive further lists of names. Those who are interested would do well not only to forward their own names, but to ascertain and communicate the views of their medical friends and neighbours. So soon as an adequate list of names is at hand, a preliminary meeting will be convoked. Meantime, we shall be happy to receive further communications.]

SIR,—It is with much pleasure that I see the question of forming a Medical Benefit Society is now likely to be taken up by the JOURNAL. From time to time some members have touched upon this subject, but no definite scheme has been arrived at, and your favourable annotation on Dr. Clibborn's letter appears most opportune. I know of many who would willingly join such a movement were it to assume a practical aspect. When the Provisional Committee is formed, as you suggest, I have some points to put forward for its consideration.—Your obedient servant,

FFENNELL MACCARTHY, B.A., M.B.

Blenheim Lodge, Worcester, February 6th, 1883.

SIR,—I am glad to see Dr. Clibborn's letter in the JOURNAL of last week; it was simply an accidental stress of work that prevented me from writing a somewhat similar proposal to you immediately after reading the letter of Mr. T. H. Ravenhill, in the JOURNAL of January the 20th last.

If only a small society could be formed on a sound basis, I am persuaded that it would increase and succeed in the course of a little time. I believe one great element towards success would be the having of good working "stewards" in different parts of the country, and am afraid that to form a society, and then simply advertise it, would end in disaster. Strange though it may appear, I believe it is nevertheless true, that societies of this kind do not prosper unless they are brought directly before the notice of the parties they are intended to benefit by a personal representative.

Will you please to accept my name as that of one who feels a great interest in the project, and who would be willing to aid in advancing such an undertaking in any way possible.—I am always, sir, yours most faithfully,

FRANCIS BOYNTON LEE,
President of the West Riding of Yorkshire Medical Charitable Society.

The Elms, Heckmondwike, February 6th, 1883.

SIR,—I have read with pleasure in last week's JOURNAL (p. 227), your remarks upon Dr. Clibborn's letter on the above subject, and feel sure that the medical men of Manchester and the neighbouring districts will gladly avail themselves of any scheme that is likely to meet the requirements of such a society.

There seems, indeed, no doubt, that the want of a "Medical Benefit Society" has been for a long time sadly felt by the profession generally; and if one were now started on commercial principles, and backed at the same time by the support of the British Medical Association, there is every reason to believe it would not only be a successful undertaking financially, but, would also be a means of affording much comfort and assistance to numbers of our hard worked practitioners when laid aside temporarily through illness.

For my own part, I am convinced that a movement in favour of this proposed society deserves the consideration of the profession; and, since in unity there is strength, may we see before long every member of the British Medical Association adding his unit of power towards furthering this truly charitable and much needed undertaking.

I may mention, in conclusion, the names of two gentlemen in Manchester, Dr. Emrys-Jones and Dr. Brierly, who have expressed great willingness to help as far as they can the promotion of the proposed society.—I am, sir, yours truly,

WILLIAM WALTER, M.D.

20, St. John Street, Manchester, February 7th, 1883.

SIR,—As one of the members of the British Medical Association deeply interested in the formation of a Medical Sick Benefit Society, I enclose my card, and earnestly hope that a sufficient number of adherents will forward their names to you in order that such a society may be constituted with as little delay as possible.—I am, sir, yours faithfully, GEO. FRASER HENRY, L.R.C.P.

105, Risbygate Street, Bury St. Edmunds, February 3rd, 1883.

SIR,—I am glad to see that at last a real step has been taken for the formation of a Medical Benefit Society. I feel certain that if a few members could be brought together to form a committee, *pro tem.*, so as to whip the suggestions into some shape, and then keep it well before the profession, that in a very short space of time, it would be taken up earnestly, and largely supported.—I am, sir, yours truly, WILLIAM J. STEPHENS.

41, Grand Parade, Brighton.

SIR,—Will you kindly add my name to your list as one of those who would gladly join any such society as that proposed.

I do hope the present opportunity will be well taken up. I hold that it would be of the greatest possible good to the great bulk of our profession.—Yours very truly, W. NEWMAN, M.D.Lond.

Barn Hill House, Stamford, February 5th, 1883.

WE have also received letters of adhesion from the following gentlemen:—Lawson Tait, Esq., Birmingham; J. R. Minnitt, Wesley Place, Nenagh; J. H. Sewart, Lostwithiel, Cornwall; G. Malcolm-Smith, M.B., Howard Lodge, Hurstpierpoint; A. H. Boy L.R.C.P., Lodway Villa, Pill, Cornwall; Chas. McCaskie, 3, N North Road, Huddersfield; G. Birt, M.B., Stourbridge; J. Bain S cock, Bridgwater; Walter Johnson, M.R.C.S., Norwich; F. Dorr Grayson, M.R.C.S., Rayleigh; W. Johnstone, Smethwick, near B mingham; T. G. Vawdrey, Handsworth; John Watson, M.D., 1 Stockport Road, Manchester; S. Woodcock, M.D., 215, Ches Road, Manchester; W. Bartlett, M.R.C.S., 1, Castle Road, Deal; F. Brook, M.R.C.S., Fareham; and L. M. Griffith, M.R.C.S., Hanover Place, Clifton.

MEETINGS OF BRANCHES.

SIR,—I shall esteem it a favour if the President or Secretary of any Branch holding more than two meetings a year (annual and autumnal?) would kindly answer, in the JOURNAL, the following queries; viz.:

1. How many meetings a year are held by the ——— Branch?
2. Were there formerly fewer than that number?
3. Why was the number increased?
4. What has been the result?

—I am, sir, your obedient servant, C. J. EVANS,
President of the South Midland Branch

THE GERMAN MEDICAL CONGRESS.

SIR,—The Committee of "the German Congress for Internal Medicine" desire me to ask you to make known that the next meeting will be held at Wiesbaden from the 20th to the 22nd of April, and that the participation of members of the profession in England will be welcome.

The committee consists of Professors Gerhardt, Leyden, Liebermeister, and Seitz, and the subjects proposed are the following:

First day: Tuberculosis: the influence of the discovery of the tubercle-bacillus on the pathology, diagnosis and treatment of the disease (Drs. Rühle and Lichtheim).

Second day: Diphtheria: its parasitic nature, relation of the local process to the general infection, contagiousness, treatment, and prophylaxis (Drs. Gerhardt and Klebs).

Third day: The abortive treatment of infectious diseases (Drs. Bing and Rossbach).

Other papers are announced by Professors Seitz, Leube, Mosler, and Seiffert. By directing attention to this subject, you will much oblige, sir, your obedient servant, HERMANN WEBER.

10, Grosvenor Street, London, W., February 6th 1883.

MEDICAL REFORM.

SIR,—My name has been mentioned in your last issue as a supporter of the policy of the Medical Reform Committee of the Association, and at the same time as President of the Medical Alliance Association; and, as it is inferred that there is an incompatibility in the two positions, I feel that I ought to explain.

I am in favour of the Bill of the Alliance, formerly known as Rush's Bill. It is thorough in its principle of reducing the number of the Medical Council, combining corporate representation, providing for an influential voice of the profession at large in the Council, and, above all, legislating, as no other Bill does, for the suppression of quackery and illegitimate practice. But a distinction must be drawn between what is best and what is possible; and, as the Bill promoted by the Medical Reform Committee asserts, in a modified form, all the principles of the Alliance Bill, and attempts what is more practicable and attainable, I am anxious to support it as any Bill which, as the Government Bill probably may, asserts the same policy.

Above all things, union and earnestness in the promotion of reform, is necessary at this juncture. Powerful corporate interests—the concrete influence of the Medical Council, and the free trade notions of a certain section of the House of Commons are against us; and if we are not ready to sacrifice our individual ideas with reference to medical reform, we shall most certainly accomplish nothing. In this view, I gladly accept the Bill approved by the Medical Reform Committee, and would give it my most earnest support, in the hope that—in the committee stage—it might be extended so as to make it a more trenchant measure and, therefore, more like the Alliance Bill.

I deprecate two Bills, promoted on behalf of the profession, and wish it were possible to combine in one measure, neither more nor less than may be asked of Parliament, with reasonable prospect of success. Still more do I deprecate and—on my own part—repudiate recriminations and the use of hard words, in reference to matters respecting which there is really no serious difference of opinion.—Yours truly,

A. H. JACOB, M.D., F.R.C.S.I.

Dublin.

THE ABSENCE OF SANITARY AUTHORITY ON ATLANTIC STEAMERS.

SIR,—In confirmation of the views recently expressed by Dr. Ewin, and of your own just strictures upon the present unsatisfactory state of the sanitary administration upon Atlantic steamers, it may be interesting to quote the following description from the *Montreal Daily Witness* of September 30th last. As you have noted, similar complaints not unfrequently appear in American newspapers; the steamship companies generally pass them unnoticed. In this instance, however, an action for damages has been threatened, and is still pending, against the editors of the *Witness*, who have, it appears, declined, after fully investigating the circumstances, to retract in any way.

The writer, having described the general incivility of stewards to others, and the impossibility of obtaining even hot water to make their own tea, or the privilege of cooking their own food for a delicate infant, goes on to say: "The scuppers were made a receptacle for various kinds of offensive matter, liquid and solid, and a considerable portion of this was permitted to remain in them to the end of the voyage. On the fifth day after sailing, the odours of the steerage became very offensive. I spoke to the steward about the propriety of having the scuppers washed out; but he said it could not be done, and promised to apply disinfectant powders; but this seemed only to prevent the offensive smell without preventing the evil consequences; and diarrhœa became general among the children, and some of the older passengers were also affected by it. On the evening of the last day two children died, and were consigned to the bosom of the St. Lawrence only a short distance below Quebec. Several other sick children, who were still alive when the ship reached Levis were, I fear, too far gone to recover. I almost shudder to think what the consequences might have been had the voyage been prolonged for a few days more." Comment at this moment might prejudice future litigation; it is, however, interesting to know that this is the same company which obliges its surgeons to sign articles for one shilling per month, and on whose latest and finest steamer, the surgeon's room measures five feet eleven inches by five feet three inches.—Yours, etc.,

DA DEXTRAM MISERO.

SIR,—I read with pleasure your article in this week's number on the above. I spent six years of my life as surgeon in one of the best Atlantic lines. I have been settled in private practice for some years past; but, still taking an interest in my old life, would be glad to see something done to improve the position of surgeons at sea. In the best Atlantic lines, there is not much to complain of as regards your position or the authority you possess on board; but, as a rule, in the mercantile marine, the surgeon's position is most unsatisfactory, and often depends on the jealous caprice of the captain.

What I suggested to the manager of my old company, some time after leaving, was that, if he wanted to keep good men, they must be offered some inducement; increase of pay every five years until twenty years' service were completed; and, above all, to give the surgeon a habitable cabin.

I sailed for a couple of years on one of the Atlantic cracks, on which the captain had three rooms, two of which he never used, but which brought him in a revenue of at least three hundred pounds a year, while I was located in a cabin quite unfit for any human being. It is time that such a state of things should be improved, as, with the health of thirteen hundred persons (as I have had to look after) on board, which is sometimes the case, the surgeon on board is entitled at least to a good cabin.—I am, yours truly,

A SURGEON WHO HAS CROSSED THE ATLANTIC ONE HUNDRED AND TWENTY TIMES.

LIFE AND DEATH IN ENGLAND.

SIR,—It is with the utmost confidence in your fair dealing and generosity, that I have dared to hope that you will permit me briefly to review the severe, yet kindly, criticism to which my paper on the above subject is treated, in the leading article of January 13th. The writer of the article referred to, being in favour of maintaining the "national system" of mortality statistics, by which the death-rate, at certain specified ages, is given in relation to the numbers estimated to be living of the same ages, and finding fault with me for wishing to inaugurate, for England as a whole, a new system, by which, as far as practicable, the death-rate shall bear relation to the births which occurred in the years in which the deceased persons were severally born, considers that he has disposed of the question by showing, as he thinks, a transparent fallacy in an illustration which I give. In the course of his attempted demonstration, he makes use of these remarkable words: "Mr. Biddle says nothing about a 'fearful pestilence' in the second year; but it is clear, that an equally strong fatal influence is necessary to kill 200 out of 400, as that which killed 400 out of 800!" Is this so very clear? Let the author of the statement prove it at the War Office, and I feel convinced the authorities will give him rapid promotion. At present, those functionaries find such arithmetic to be deceptive when tested in the day of battle. But if ten out of twenty sheep were slaughtered one morning, and only five out of ten the next, I think the five surviving sheep might congratulate themselves that "an equally strong fatal influence" was not brought to bear upon the fold on both days. No doubt, I am illustrating my case by reference to deaths from violence; and deaths from violence form

only a small portion of those on which the Registrar-General reports But I contend that, if other deaths are governed by a different law from that which is easily seen to obtain in these, proof should be given of it. The circumstance that the number of persons surviving to a given age, per one thousand born, is less or more, as the case may be, must be regarded as due to the vicissitudes, favourable or otherwise, through which the birth-group has passed in bygone years. Surely, then, the deaths of those belonging to any one birth-group should be viewed year by year in relation, as far as practicable, to one common denominator, namely, the number starting in life together, and not to a constantly diminishing and ever varying series of denominators, such as are the numbers surviving in successive years. This would be, to my thinking, the best plan, even if, as supposed, we wished to compare the death-rates of two nations. It is still more serviceable when we wish to compare the death-rates, at different ages or in different years, of any one nation, and to illustrate the principle, I naturally selected England.

But there are certain difficulties to be contended with; and here I beg to say that the writer of the leading article fails to give sufficient weight to portions of my paper. Thus, he seems to have lost sight of the fact that it is admitted by me, and not only so, but that I take much trouble to prove, that births occurring before 1840 cannot be ascertained with accuracy. It was for this reason I cut down Tables D and E. But time is all that is requisite to make them perfect, as I have shown. Again, as to the effect of emigration and immigration, I have, by your kind permission, devoted about a column of letter-press (not to mention a long table which you were obliged to exclude) to showing that, during the years 1845-1880, the balance was so nearly preserved between the numbers entering and those leaving England, as to leave our calculations practically unaffected. We have no right to assume, without further knowledge, that emigrants (taken in the widest sense) differ from immigrants as regards their several ages when crossing our boundary-line, or that the several groups of persons in England, classed according to age, are not proportionately compensated by immigration for the losses they sustain from emigration, though I did surmise that the exchange might, to some slight extent, affect the longevity of the population as a whole owing to differences of race and hardiness. In any case, my tables can accommodate themselves to any further light we may obtain. They are absolutely truthful in giving the proportion of deaths in England to births in England, such births having occurred in the year in which the deceased persons were severally born; and I contend that this is what we require as a basis for further calculations regarding the health and vitality of the nation. No illustration is applicable in all points, unless it be an actual instance; but suppose a railway-train to start daily from some terminus on a journey of 100 miles, having in it 1,000 passengers; it is to the interest of the company that as many as possible should have taken tickets for the more distant stations. Suppose, however, there were no means of checking the number of tickets that were issued for any particular station on the line, and the company had to depend on the station-masters to report the number of passengers alighting at each station, would the company be likely to adopt such a cumbersome method as the "national system," when making their daily record? Would their statement be anything like the following: 250 alighted at five miles, leaving 750 in the train; 25 got out at ten miles, being 33.3 per 1,000 of those carried thus far; of the 725 remaining, 12 got out at fifteen miles, being 16.5 per 1,000 of those in the train at that point; and so on? Certainly not. Such a calculation would serve no earthly purpose. In order to learn the progress made from day to day, the company would keep a record of the passengers alighting at the several stations, as compared with those starting on the journey; and it would be matter for rejoicing when the numbers fell for the shorter distances and correspondingly rose for the longer. Their calculations would doubtless be affected by passengers alighting short of their proper station, and without being counted; but if disturbance from this cause were approximately rectified by casual passengers entering (without payment) to take the place of those thus leaving, the record would prove substantially correct.

I shall look forward with great interest to the paper which Mr. Humphreys has promised to read before the Statistical Society, on the question of life-tables. I have no doubt it will be ably written, and give much food for thought. But a life-table, to be of value as an index of the average life of a nation, must be ever shifting like a kaleidoscope. Moreover, it must take into consideration all the lives comprised by that nation—the whole lives spent in its midst from birth to death, and the lives only partly spent there. Now this I do most completely by taking into my calculation every birth and every death that occurs. The only lives left out of my tables are those which begin and end abroad, but are lived in England during more or less of the intervening portion. Of course, it would be advantageous to know their number, together with the periods of life spent here. But we have no reason to assume a want of compensation even in this instance, for Englishmen, whose lives are spent abroad from youth or early manhood, are quite as prone as others to return to their Fatherland to die. I shall, therefore, be anxious to see the improved method by which the mean duration of life is to be denoted, and the vitality of England annually measured.

I would, in conclusion, observe that the writer of the leading article markes no mention of those of my tables which give the distribution of deaths over the several groups, classed according to age; and, singularly enough, when I paid a visit to the Registrar-General's office, a short time since, I was informed that such tables, though undeniably based on facts, and strictly true, might mislead the unwary; that medical officers of health were peculiarly liable to be misled; and that, according to a little fiction, in the shape of tables based on estimates as distinct from facts, was far better for them, and indeed, needed to keep them right!

But I wish to repeat the statement with which my paper closed, viz., that per 1,000 deaths, whether of males or females, the number occurring in England under sixty-five years of age, has declined during the last thirty years; and this, notwithstanding the fact that the mean age of the population has a tendency to become less and less as years roll by, owing to the almost uninterrupted increase in the number of births. The nation is becoming younger, and yet a greater proportion of those born live to old age. I think, tables that can prove this have some value.—I have the honour to be, Sir your obedient servant,

D. BIDDLE.

Kingston-on-Thames, January 18th, 1883.

A NEW MODE OF AFFORDING PERMANENT RELIEF TO INTRACTABLE CHRONIC CYSTITIS, AND TO CONFIRMED PROSTATIC RETENTION OF URINE.

SIR,—If Sir Henry Thompson will kindly refer to my letter o December 9th, he will find that the operation advocated by me wa external urethrotomy, not cystotomy, which was not mentioned. I is quite true that, in the case of operation for chronic cystitis, whic I exhibited at the Clinical Society, I incised the prostatic urethr "to the extent of half an inch," only, as reported, to permit th finger to be passed into the bladder for an exploration. That oper tion was performed seven years ago. Subsequent experience taug me that the desired object could be equally attained by limiting th operation to a puncture of the membranous urethra, for the inse tion of a drainage-tube in the bladder. Hence it was that, at later period, I practised and advocated external urethrotomy onl I have not, as yet, been able to discover any essential differen between my old case of cystotomy, and Sir Henry Thompson recent one of external urethrotomy. Each operation was found on the same principles, and had common objects in view. Ea operation was commenced at the same point, in the same mann and each was concluded by passing a similar instrument, the left fo finger, into the bladder. Now, the introduction of the finger i the bladder forms no part of the performance of the operation external urethrotomy, and, so far as I know, cannot be accomplish without a solution of the continuity of the prostatic urethra. matters but little that, in one instance, the necessary lesion w effected deliberately by the knife, and in the other, unconscious by the finger; the broad facts of the similarity of the two operati stand out in bold relief.—Your obedient servant, W. F. TEEVA

12, Christchurch Road, Folkestone, January 29th.

FINANCIAL CRISIS AT THE LONDON HOSPITALS.

SIR,—I am glad to see that Mr. Burdett has drawn attentio the financial condition of some of our principal hospitals, and you have followed up the subject by a forcible leading article.

These financial difficulties will perhaps call attention to som the social questions that are involved in the administration of medical charities. As they are at present managed, our hosp inflict a gross injustice upon the medical profession, by offering charitable gift that which ought, in very many instances, to be for, and by stopping a stream of payments which, under a b system, would find their way into the common treasury of the fession. This is an injustice which, I believe, bears very h upon the younger medical men.

Again, these medical charities have a pauperising effect up

ery large circle of people, leading them to believe that, in the im-ortant matter of health, they need make no provision for themelves, but may trust to the charitable assistance they are sure to eceive when the time of sickness arrives.

It is a curious circumstance that while, in the administration of he Poor Law, the aim at the present day is to reduce out-door relief ithin the strictest limits, because of its pauperising effect, the out-door relief" offered by our hospitals is rapidly extending, and assuming gigantic proportions.

I trust, Sir, that the financial questions, which are now beginning o press for a solution, will have this good effect, that they will cause he managers of our great hospitals to give due attention to the im-ortant subject of the reform of the out-patient departments.—ours faithfully, W. FAIRLIE CLARKE.

Southborough, Jan. 24th, 1883.

CERTIFICATION OF LUNATICS.

SIR,—I was ordered, under due notice form, by one of our justices f the peace, to visit, examine and report upon, a supposed lunatic, who was not a pauper and who was not wandering at large." hese are the words of the order. I visited the said lunatic, and ade a report on him to the said magistrate. Would you please form me what fee I ought to charge for the case, and to whom I ould apply for the fee?—Yours truly, ARTHUR ROBERTS.

Keighley.

*** Our correspondent is entitled to a fee of two guineas for the ofessional visit, and five guineas for his report.

HE QUESTION OF THE COMPOUNDING OF PRESCRIPTIONS.

SIR,—I think there is something to be learned from the history of e Army Medical Department, as regards the compounding of drugs estion. Until the era of the Crimean War the assistant-surgeons the army were supposed to compound all the regimental prescrip-ns, and a certificate to that effect formed part of the old Monthly ck Return.

After 1855-56 a new departure was made, and sergeants were ught compounding, and received one shilling a day for doing the rk. The system has answered admirably on the whole. The rely mechanical compounding of drugs has been done well by ese men, and accidents are as rare, or probably rarer than, in civil e. In the French service there is still a highly paid body of com-ssioned *pharmaciens* ranking up to General of Brigade, and all for at? to compound drugs.

One has no desire whatever to undervalue the higher walks of armacy, where the latter touches chemistry; but to employ highly id and educated men to compound ordinary prescriptions is em-ying a razor to cut down a tree. In a word, with us, the great resentatives of State-paid physicians, the compounding has sunk wn to a purely mechanical employment.

Now I would make a suggestion. We must yearly send into civil from the army hospital corps a number of steady, sober, dis-lined old sergeants, who know how to compound, and how to ep books. Could they not find such employment amongst the il profession? I imagine if it is lawful for us to use such men, is equally lawful for any civil physician to do so. There could ily be some scheme by which civil doctors could get at these n, and employ them on their retirement into civil life.

Hoping you may consider these suggestions worthy of a place, am, etc., G. E. H. EVATT, M.D., Surgeon-Major, A.M.D.

Royal Military Academy, Woolwich, January 1882.

STRUCTION OF BEDDING, ETC., AND DISINFECTION FOR PHTHISIS ON THE CONTINENT.

IR,—In your leading article of January 6th on the "Communica-ty of Phthisis," there is one little matter on which light must be wn; as perhaps it may have some bearing on the dread of agion, which presumably exists in various parts of the conti-t, after a death takes place from lung disease.

would ask your Florence correspondent, who stated—"Con-ption is considered by all here to be contagious; anyone dying onsumption in a house, the bed is entirely destroyed, and also all clothes of the deceased, and the room thoroughly cleansed and igated, and often shut up and never used."—whether in the event atients dying in hotels, as much as £40 or £50 is demanded the bereaved friends, as a compensation for this wholesale plan isinfection?

If such be the case the fear of contagion would not be an unprofitable idea for some persons to foster. Secondly, I ask whether any precautions are taken in disinfecting *all rooms* which have been occupied by cases of phthisis, when no death has taken place? I ask this purely for information, as I am not aware of any such extortion existing in Italy, but in France I have heard that this charge is imposed. In Switzerland I know it to be so. A friend of mine was shocked by a demand for 1,000 francs for this supposed or real destruction of bedding, etc.

In Davos Platz the gross imposition of a charge of this character has not been denied, although pointed out by Mr. Muddock in *Davos Platz as an Alpine Station*—where he says: "there is yet one extra which all the hotel circulars preserve a solemn reticence about. We refer to the charge that is made to the relatives of a deceased person for the bed and bedding upon which the death takes place. As much as a thousand francs are charged in some of the hotels, while, we believe three hundred francs is the minimum price." I consider this such an unexpected mine to be sprung on mourning relatives that full publicity should be given to the subject. Those who benefited from sums of money obtained in this manner would not hesitate to popularize exaggerated notions of the infectiousness of consumption.—I am, Sir, yours faithfully,

Wiesen, Canton des Grisons. ALFRED WISE, M.D.

THE COLLEGE OF PHYSICIANS AND THE COLLEGE OF SURGEONS AS CLUBS.

SIR,—Would it not be possible to utilise the buildings of the College of Physicians and the College of Surgeons as clubs for social purposes by the members of these institutions? I frequently pass by the fine College of Physicians' building. It is admirably situated, has a fine series of rooms, an excellent library, yet it is, night after night, closed as a social centre. Do you not think that, at small expense, it could be made into a regular club? It would need only some arrangement for food and cooking, and the money needed would be obtained by a subscription of an annual character of a certain amount for metropolitan members, and a nominal sum for country members. In all clubs, the coffee room and dining arrangements pay their way, and a profit is made on the sale of wine, etc. It would be simply adding on a commons' room to the college; and that is quite an academic custom. To many London physicians such a club would be of use, and to a still larger number of country and army medical doctors it would be a real boon. It would then be possible to give dinners of a public character, and to take part in those social duties in which the medical profession, as yet, take little share; but which it must do if it desires to hold its own.

All these remarks apply, I imagine, equally to the College of Surgeons at Lincoln's Inn Fields. It also could easily develop itself into a club, and become a social centre for the members of the college.

I understand that there is a difficulty in medical men getting into some London clubs, surely here is a way out of the difficulty by developing clubs of our own. The fabric of the edifices in question is admirably suited for the purpose, many servants are at present engaged in the buildings, and the feeding arrangements suggested, pay their way, and even make a profit. Hoping you will give these lines a place—I am, etc., SURGEON MAJOR, A.M.D.

anuary 1883.

THE ARTIFICIAL FEEDING OF INFANTS.

SIR,—During the period I have engaged in practice, my attention has been considerably drawn to the above subject, because I have seen many infants suffering from the bad effects of injudicious feeding. Not only this, but I have seen numerous deaths which I could only attribute to this cause. The system I have for some time adopted, where the necessity has arisen, for primary artificial feeding, and which has proved very successful where properly carried out, is somewhat similar to that recommended by M. Guéniot and Dr. Giberton-Dubreine, as given in the leading article on the subject, in the JOURNAL for January 20th. Thus, during the first few days of life, I have directed slightly sweetened water, to which has been added one-sixth part of cow's milk, to be given every two hours, about two tablespoonfuls at a time. The proportion of milk and quantity of fluid is gradually increased, until at the end of a week it has reached one-third of an ordinary feeding bottle, and the strength is one-third milk and two-thirds water. This is continued until the infant is two months old; the quantity of fluid taken being increased to half a bottle every two hours then, but the proportion

of milk not increased until the child is three months old. Then, half milk and water is given, and continued until the age of six months, when pure milk is substituted, and continued until the child is able to assimilate stronger food. When I have tried larger proportions of milk than those mentioned, vomiting of "curdled milk," and often diarrhœa, have been produced. Occasionally, children thus fed are troubled with constipation, but this is easily combated by substituting, now and then, a little thin gruel for the milk diet. Secondary artificial feeding I have carried out from the above rules, according to the age of the infant. Primary mixed feeding my experience has led me to discountenance.

There is undoubtedly a lamentable ignorance among mothers as to the proper feeding of infants, and a large proportion of infant deaths is primarily due to this cause. The question, it seems to me, is: How are mothers to be educated on this point? It may be said, that their medical attendant should instruct them; but numbers of women are attended by midwives, and the latter are generally as ignorant of the subject as the mothers themselves. The infants are not brought under medical notice until severe gastric disturbance has taken place. Could not some such plan as the following be adopted? Let the Government cause to be formulated, by the College of Physicians, or some other competent authority, a series of rules for the proper feeding of infants during the first year of life. Let these be printed and delivered to the Registrar-General, for distribution to all district Registrars, with instructions that a copy be given to every mother on registering the birth of her child. Coming into the hands of the mothers in this way, I believe the rules would be read and observed, and a considerable saving of infant life be thus effected. Apologising for trespassing so much on your valuable space.—I am, sir, your obedient servant,

Lozells, Birmingham. A. C. BRIDGES, M.R.C.S., etc.

MORTALITY FROM ALCOHOL.

SIR,—I think the Committee of the Harveian Society have assuredly done excellent service in preparing the report published in your last number, and the names appended to it are a sure guarantee of its accuracy. But as statistics are proverbially liable to mislead those who are unfamiliar with their use, I desire to point out one misapprehension which may arise, and from which I venture to think the report is not sufficiently guarded.

The Committee deal exclusively with the returns of deaths. It was obviously impossible for them to obtain returns of the numbers of living, who used or abused alcohol. Hence their conclusions are based solely on the proportion borne by the deaths from a specific cause, to the deaths from all causes, a method known to statisticians, if I mistake not, as the *Chiffre Lethale*. This method is very useful as far as it goes, but its results are imperfect. It does not give us the mortality (*i.e.* death-rate) of the population, or of a section of the population, from any cause, so that it can be compared with another year's returns, or with another section of the population; for the total number of deaths may vary greatly. Thus, to take an illustration, in an unhealthy year the deaths from phthisis may be 15 per cent., and in a healthy year 25 per cent. of the total deaths, and yet the actual number of deaths from phthisis, and the actual proportion they bear to the population living, may be exactly identical.

Similarly in the present case we have no means of knowing what the mortality of the intemperate is, simply because we have no returns of the number living who belong to that category. We have the return of deaths caused by alcohol, and it is very interesting to know what proportion they bear to the deaths from all causes, but unless we know the proportion borne by the intemperate to the population at large, we could not tell the relative mortality of the intemperate.

When, therefore, this committee tell us in their valuable summing up, that the mortality of the intemperate shows "a fourfold increase in the deaths from diseases of the liver, etc.," we must not be misled; the increase is purely relative to the total number of deaths. Intemperate persons may be actually no more subject than temperate, or they may be ten times more subject; all we know is that if we take the total number of deaths amongst the intemperate, we shall find that liver disease will account for four times as large a proportion of them as it does of the total deaths of the population at large. And further on, where "marked decrease in the deaths from bronchitis, emphysema, phthisis, etc.," is stated to obtain amongst the intemperate, we must understand, as before, that it is only a decrease relatively to the total number of deaths. I strongly suspect that the relative decrease is in fact an absolute increase. Thus if, (at a conjecture,) we may take the total mortality of the intemperate to be double that of the community generally—a point on which the statistics before us, can throw no light whatever, then the 13.1 per centage of total deaths among the intemperate ascribed to phthisis, would represent twice that proportion, that is 26.2, per cent. of total deaths, among the population. This would exceed the usual mortality (20.0 per cent. of all deaths), said to be prevalent, and would show, if my conjecture is admitted, that phthisis was absolutely more fatal to the drinkers. The same reasoning applies to bronchitis, heart disease, etc., which are not proved by the statistics before us to occur less frequently to the intemperate.

Lastly, I question on similar grounds the 36th section of the report. A large abnormal increase under one disease, *i.e.*, an increase in the proportion of deaths from that disease as compared with other diseases, may occur without any actual reduction under the head of others—although if the increase be very large there is certainly a probability of such reduction. R. HINGSTON FOX, M.R.C.S.

Finsbury Park, N., January 20th.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE BELFAST HOSPITAL FOR SICK CHILDREN.

THE tenth annual meeting of this hospital was held on January 26th under the presidency of the Hon. T. F. O'Neill. From the secretary's report, it appeared that 348 intern, and 7,335 extern patients were treated during the past year at a cost of £934 19s. 4d. There are now three funds in connection with the hospital. "A Memorial Convalescent Fund," "a Convalescent Fund," and a "Ren Extinction Fund." The two first have been promoted to give aid t those patients who, when cured of their actual diseases, require change to the country or seaside, in order thoroughly to establis their health and strength. The third is for the wiping out of th ground-rent of the hospital.

An unsuccessful effort was made to get the certificates of attendance recognised by the Royal University; but, notwithstanding th fact, thirty-eight senior students are attending the practice of th hospital. An alteration has been made in the rule relative to th appointment of medical officers. Hitherto, their appointment w permanent; now it will be for a period of four years. A physici and surgeon shall vacate office each year alternately. The retirin officers shall, however, be eligible for re-election.

THE TEWKESBURY RURAL HOSPITAL.

THE 18th annual report of this institution shows that it goes f ward on its way, relieving a great deal of sickness and doing a gre deal of good. It contains ten beds, and last year 77 in-patie were treated, besides 412 out-patients. The number of severe ac dents and urgent cases, admitted during the year, was unusua large; but notwithstanding this strain upon its resources, the fin cial condition of the hospital seems to be well sustained. Happy the country that has no history, and happy is the hospital ab which there is nothing to say except that it has been actively carr on during another year.

MILITARY AND NAVAL MEDICAL SERVICES.

FEMALE NURSES IN NAVAL HOSPITALS.

SIR JOHN WATT REID, K.C.B., Director-General of the Med Department of the Navy, who was present at the distribution prizes in the Army Medical School on the 5th instant, remaine Netley till the following day, and made particular inquiries into working of the system of female nursing at the Royal Vic Hospital. We have reason to believe that introducing nu sisters into some of the hospital establishments of the Royal is under consideration. At present, the nursing in naval hospit entirely carried out by male attendants, many of whom ar naval pensioners.

CLOSE OF THE INQUIRY INTO THE ORGANISATION OF ARMY MEDICAL SERVICE.

THE committee of inquiry into army hospital organisation, the presidency of Lord Morley, met at Aldershot on Tuesda 6th instant, in the mess-room of the officers of the army m department. Various subjects engaged the attention of the mittee, but it was understood that the manner in which the

l requirements of the camp are administered, and the system of aining which the nursing orderlies of the army hospital corps ıdergo at the training depôt, formed the special objects of their vestigation. The committee took the opinions of several of the lficers commanding regiments in the camp on these and other lied topics. In the course of their visit, the committee went over e Cambridge Hospital, and carefully inspected its capacity and terior arrangements. It is said that the examination of witnesses now concluded, and that the committee will shortly be in a con- tion to prepare and submit its report for the consideration of the ;cretary of State for War.

ARMY MEDICAL SCHOOL AT NETLEY.

HE winter session of the Army Medical School was brought to a)se on Monday, the 5th instant. Sir Ralph W. Thompson, K.C.B., rmanent Under-Secretary of State for War, arrived from London out noon, for the purpose of addressing some remarks to the rgeons on probation before they quitted the establishment at tley, and also of delivering the prizes to the surgeons who had ccessfully competed for them in the examinations at the termina- n of the session. Sir Ralph Thompson was accompanied by Dr. Crawford, Director-General of the Army Medical Department; Sir hn Watt Reid, K.C.B., Medical Director-General of the Navy; and J. Fayrer, K.C.S.I., F.R.S., Physician to the Council of India. reaching the Royal Victoria Hospital, they at once proceeded to principal lecture-room of the school, where the surgeons on pro- ion and their friends had already assembled. Sir C. K. Pearson, .M.G., Commandant; Colonel W. R Farmar, Assistant-Com- ndant; Surgeon-General J. Holloway, C.B., Principal Medical ıcer; and the medical and surgical staff of the hospital, were sent; as were also the professors and assistant-professors of the ool, together with a considerable number of members of the dical profession, and other visitors.

'he proceedings commenced with the announcement of the names l positions of the probationers who had qualified for commissions he Army and Indian medical services, and the reading of the ;ial reports by the professors on the work done during the session heir respective departments of the school. The names of the geons who had gained the prizes in the gift of the school were) declared, the mention of the names being generally received h applause by their colleagues and companions. In our next issue, shall give the names of the gentlemen who were successful in competition for prizes, together with the lists of the surgeons on bation who have just passed through the school, and the number he marks gained by them.

fter the preliminary business had been concluded, Professor gmore introduced the gentlemen who had won the prizes in suc- ion to Sir Ralph Thompson, who then presented the prizes to ch they were respectively entitled, with some kind and ap- ›riate remarks to each recipient. When they had all been dis- uted, Sir Ralph made an address to the whole body of young ·eons who had just passed through the courses of instruction at school. He glanced briefly at the changes which had taken ·e during recent years in the army medical department, and re- ·d more particularly to the advantages in status, pay, and position ıedical officers contained in the last army medical warrant, with ch he, as chairman of the committee that had recommended ı, was directly connected. He considered it a subject of con- ulation, not merely for the medical department, but for the e army, that the beneficial provisions of that warrant had led ı active competition for army medical commissions, and, as a con- ence, had secured the acquisition of gentlemen of more ad- ed knowledge and higher professional attainments for the ce. In the course of his address, Sir Ralph alluded to the com- ıe of inquiry that was now at work in the War Office under the dency of Lord Morley, and of which his friend the Director- ral of the army medical department, who was sitting near him, ı member. He reiterated, what had been stated elsewhere, that ommittee was not sitting to inquire into the conduct of the rs of the army medical department; had it been, its proceed- would have been speedily closed, for it was no secret that he evidence that had been brought before it had gone ow that the medical officers individually had done all could be desired of them, and throughout the war had in a manner deserving of great praise. The chief ies of the committee, he said, were directed to matters of hos- organisation, especially with reference to active service in the and it was, of course, a right thing, and only a prudent course to follow, when any defects in organisation were rendered apparent by actual experience in war, or were supposed to exist, that a sifting examination should be made into them, with a view to effecting improvements for future occasions. The very fact of the inquiry taking place, appeared to him to be a proof of the great importance to be attached, in military organisation, to the medical establishments being in an efficient state whenever an army proceeds on active service. Sir Ralph touched on sundry other topics connected with the army and Indian medical services; and concluded by expressing an earnest hope, that all the young surgeons listening to him might live to do honour to them, and to reap abundance of credit and honours for themselves, in the course of their future careers.

The Director-General, Dr. Crawford, then addressed the probationers; and, after expressing his satisfaction that all, without exception, had qualified for the commissions which they had wished to obtain, and particularly congratulating those who had gained the distinctions at the disposal of the authorities of the school, he gave them some valuable hints for guidance in the course of their military service, and tried particularly to impress them with the necessity of continuing professional study, even as commissioned officers in the army.

The proceedings terminated shortly after the conclusion of Dr. Crawford's speech; and Sir Ralph Thompson, and the other visitors, then adjourned to the spacious messroom at the officers' quarters for luncheon.

DEPUTY Inspector of Army Hospitals Johnson Savage, M.D., late of the Royal Artillery, died on January 27th at Dover, in his seventy-ninth year.

DEPUTY Surgeon-General A. J. Dale, M.B., has been transferred to the Punjaub Frontier Force from the date of his relief by Deputy Surgeon-General R. F. Hutchinson, M.D.

CONSEQUENT on the return from privilege leave of Surgeon-Major A. Stephen, M.B., Statistical Officer to the Government of India in the Sanitary and Medical Departments, the services of Surgeon-Major W. Center have been replaced at the disposal of the Government of the Punjaub.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

SIR,—In the JOURNAL of the 20th ultimo, there appeared a correspondence between the Honorary Secretary of the Lancashire and Cheshire Branch and myself, regarding a statement made by me, in a letter to the *Glasgow Herald*, on this subject; and also copy of a resolution, passed by the "Medical Institution of Liverpool," condemning me for having made that statement.

I have since that date also received, from the Secretary of the Irish Medical Association, copy of a resolution of its Council, expressed in similar terms.

The passage in my letter to the *Herald*, to which exception has been taken, was in these words: "To-day we have the medical profession there protesting against loss of fees, were any of their patients, however badly housed, removed to hospital, so as no longer to be a source of danger to the community. Dublin, too, follows suit; and the profession there protests as loudly, and this after the awful revelations of a special Commission."

The letter containing this remark was dated December 9th. It appears to have been in answer to a leading article in the *Herald* upon my previous letter to it, which was dated November 28th. In that letter I had said: "The bugbear, however, that is always urged is, that notification necessarily implies removal of the patients to a hospital, and the consequent loss of fees to the medical attendant. This was unblushingly pled in regard to Liverpool, and to Ireland generally, at the meetings lately held at Worcester and Nottingham."

I submit, therefore, that the sentence in my letter of December, which has been complained of, clearly refers to the statement contained in my previous letter, and must be held as based entirely upon what I allege to have been said at the Worcester and Nottingham meetings, with regard to Liverpool and Ireland. I think I am entitled to the benefit of the assumption that all who considered themselves interested in the matter had perused both letters. At the same time, I frankly admit that I erred, in referring in my

letter of December 9th, to the "medical profession," protesting against loss of fees, without then repeating the foundation for the statement. It certainly did not occur to me that anyone could suppose that such a statement could be intended, or held to apply to the medical profession, anywhere, as a body; but I readily express my regret for having used these words, and beg leave to withdraw them.

The question remains, whether I was justified in stating that the loss of fees had been put forward at Worcester and Nottingham, in the interest of Liverpool and Ireland, as an argument against compulsory notification. On that point I can only say that this statement was founded on my own recollection of what I had heard said by Drs. Fitzpatrick and Whittle, of Liverpool; and Dr. Jacob, of Dublin. I cannot suppose that any of these gentlemen would dispute that this was one of the arguments adduced by them on the occasions referred to, and although I can well conceive that they had no express authority to do so, it was, I submit, not unnatural for me to assume that their remarks were to be taken as typical of the views of at least a section of the profession in their own localities.

One of the gentlemen named, Dr. Jacob, also wrote to me, repudiating the motives which he regarded my letter to the *Herald* as attributing to the profession in Dublin, and asking me to state my authority for the observation in my letter of December 9th. In the reply which I sent to that gentleman some time ago, I referred him to the following passage in a leading article in the *Medical Press and Circular* (of January 10th, p. 34), of which he is himself the editor.

"Let us not pretend to more virtue for medical men than for other classes of practitioners of similar social standing; let us, therefore, not forget that a very numerous section of our profession will certainly not, if they can help it, do anything which will interfere with their own interests in practice. With such practitioners, 'business is business'. If the notification fee is half a crown, they will notify for the purpose of earning it; but if it pays them sixpence more to pretend not to recognise a case of infectious disease, they will certainly be very slow to find out what in reality is wrong with the patient. If they are earning daily fees by attendance on a case in private, they will scarcely be expected to put an end to their own profits by reporting the case, and thus causing it to be taken off to hospital."

I do not quote this passage with the view of justifying an allegation that "the medical profession" of Liverpool or Dublin, or any other city, would be actuated by such motives; and I regret exceedingly that any corporate body should have supposed me capable of charging the profession with opposition to a public movement on selfish grounds. But I trust I have shown that, in representing my views on this important question, I was entitled to refer to this among many other arguments which had been advanced in opposition—although, I repeat that, I regret having done so in terms liable to misconstruction.

I may add, that I have referred my correspondents in Liverpool and Dublin to this letter.—Yours, etc.,

HENRY D. LITTLEJOHN, M.D.

SCARLET FEVER AND THE CLOSING OF SCHOOLS.

THE Local Government Board having received, on November 20th 1882, information that scarlet fever had been for some time prevalent in the town of Potton, and that its rapid spreading was attributed to the mingling of children from infected households with others at the Board Schools, Dr. Parsons was instructed, in connexion with the general question of the influence of schools on the spread of infectious disease, to inquire into the circumstances of the case. He notes that in his inspection, he was accompanied by Dr. Prior, Medical Officer of Health, and Mr. Miller, Inspector of Nuisances to the Biggleswade Rural Sanitary Authority, two able officers, for whose assistance he expresses his gratitude.

Potton is a small market town of 2,640 inhabitants. It has been well sewered in recent years by the Sanitary Authority; most of the privies have been converted into hopper closets and drained into the sewers; the water supply is obtained from wells about 40 feet in depth, and is considered to be of good quality; so that altogether the sanitary condition of the town may be regarded as satisfactory.

Potton had been free from scarlet fever for two or three years before August 1882. On August 6th a child named Sharp, five years old, was taken ill of scarlet fever, and was followed in the course of a few days by five others in the same family, making six cases, of which two were fatal. This boy and some of the other children had been attending the Board School at Potton, but none went there after August 6th. A young man named Carrington, whose home is in Potton, but who had been living at Royston, working in a house where the children were ill of scarlet fever, and had indeed been in the same room with them, came home on August 2nd, and after his return had been to Sharp's, and may possibly in some way have brought infection.

The next case, which commenced on August 21st, was a boy of 13, named Carrington, and brother of the young man above mentioned. He lived at home, but worked by day at Sharp's, and played with the children there, even after their illness. He and a younger brother, who was taken ill on August 25th, were removed to hospital on August 26th; but about a day after their removal two other children of the same family were taken ill. The latter were not removed, but had slight attacks and went back to school in three weeks. The house was not disinfected, in consequence of the presence of another invalid.

The school which the younger Carringtons attended was a private school, kept by a Mr. Paul; they returned to school about September 17th, and on September 20th and 25th two children of different households attending this school were taken ill. No other cases, however, are known to have occurred among the pupils of this school until the latter part of November, although the boy taken ill on September 20th returned to school after only a fortnight's absence.

On September 29th a child attending the Board School left school ill with ulcerated throat, which proved to be scarlet fever, but the nature of the illness was kept secret, the other children attending school until, a fortnight later, three of them began to be ill, when all four with their mother were removed to the hospital.

A few other cases occurred among children attending the Board School, in October and the beginning of November.

Mr. Walker, surgeon, of Potton, states that on October 6th a child was at school whose skin was peeling after scarlet fever, and that on the same day another child was sent home from school having the scarlatinal rash well developed.

In all the instances quoted, however, the children had been sent home as soon as the nature of their complaint was known, and it did not appear that the school authorities had knowingly allowed any child in an infectious condition to remain at school.

In the middle of November a sudden outburst took place, 1 households being attacked from November 10th to the 19th; th first case in all of these being a child attending the Board Schools.

Dr. Ballard learned that children from an infected house had bee attending the Board Schools up to about November 7th; and it very probable that others did so whose illness was not recognise or did not come to the knowledge of the authorities.

Altogether, up to November 25th, 67 cases of scarlet fever we heard of, with, up to the same date, nine deaths, the number households invaded being 29. Of the 29 persons who, in their r spective households were first attacked, 19, including little Sna first mentioned, had up to the time of their illness been attendi the Board School, four had attended Mr. Paul's school, one anot private school, one the parish school in another village (but h been to Potton shopping), and the remaining four did not go to a school. Of these four, however, in three cases it was ascertain that other members of the family who did attend school had suffe a few days previously from sore throat or feverishness, in all pro bility latent scarlatina; the other was an adult, a dressmaker, w had been in communication with infected houses, and was thought have predisposed herself to an attack by her excessive timidity garding the disease.

Most of the children attacked with scarlet fever had also been the habit of attending one or other of the Sunday schools, of wh there are four in Potton, connected with different places of wors but Dr. Ballard finds himself unable to separate the influence, if a over the spreading of the disease, of attendance at Sunday sch from that of attendance at day schools.

On October 11th, Mr. Walker communicated with the Sc Board, recommending that the school should be closed, on ground that occurrences such as those before mentioned would to spread scarlet fever. The School Board, however, with whom medical officer of health concurred, thought, and not unreasona upon their then information, that the outbreak was not at that sufficiently grave to call for the closing of the schools, but pas resolution requiring the master and mistress to exclude fro schools all children from houses affected with scarlet fever. step would probably have been sufficient if all the cases of sc fever had come to be known in time; but in a considerable pr tion of even well marked cases no medical advice was call Dr. Ballard himself saw several smartish cases upon which no m man was in attendance, and there were doubtless other milder of which the nature was not recognised.

Moreover, it was not until about November 21st that the m officer of health received intimation of any fatal case, for alt

four deaths had previously occurred, viz., on August 12th, September 19th, (both members of the Sharp family), October 17th, and November 2nd; yet in three of these Mr. Walker did not enter on the certificates of death what was, as he admits, the primary disease, viz., scarlatina, but returned them as from "cerebral congestion," "cervical abscess," and "acute nephritis" respectively, terms which would not ordinarily suggest an infectious nature. Thus, although the Registrar of Births and Deaths is required to send to the medical officer of health, in addition to a quarterly return of deaths from all causes, immediate notice of all deaths from infectious diseases, the deaths in question escaped recognition as such. The parents, however, seem to have been made acquainted with the infectious nature of the disease, and to have been advised to keep the children from school, and take other steps to prevent it from spreading. In the remaining case, although the child died on October 17th from "scarlatina," the registrar neglected to send notice of the death to the medical officer of health until November 24th.

The Board School is a modern building, well ventilated and in good sanitary condition; it has two sides, one for infants, the other a mixed school for elder children; these are held in two detached though closely adjoining buildings. Mr. Paul's school is 20 feet square by 8 feet high, affording 100 cubic feet for each scholar; it has only one window that will open, and that to the extent only of 1½ square feet.

A special meeting of the Potton School Board was held on November 22nd to consider the question of closing the school, at which, in view of the recent extension of scarlet fever the School Board decided to close their school until after the Christmas holidays; a step which, under the circumstances, Dr. Ballard considers to have been judicious. The Board School was accordingly not opened on the following morning; and the proprietors and managers of the other day schools and of the Sunday schools in Potton agreed to do the same.

The Rural Sanitary Authority have at Biggleswade an excellent hospital for the accommodation of cases of infectious disease. It has a ward block containing twelve beds, and five more can be made up in two spare rooms in the administrative block. There is a disinfecting stove there (Nelson's), which is used for the disinfection of the clothing of hospital patients and others. It is said to act efficiently if care be taken to place the articles at a distance from the heated walls and not to put too many in it at a time. Ten cases of scarlet fever from three families have been removed to the hospital from Potton, all of which have done well. Unfortunately, in some of the earlier cases, even where timely notice had been received, the parents' consent to the patients' removal could not be obtained, or not until after other children had contracted the infection, and hence the disease was able to establish itself. The prejudices with which at the outset such institutions have to contend, have not as yet been quite overcome, and many parents have an objection to parting with their children when sick; but those whose children had been at the hospital spoke highly of it. Latterly, the use of the hospital for the isolation of scarlet fever cases from Potton has not been pressed, for the reason that cases of that disease and of diphtheria have been cropping up in other villages, and have been removed to the hospital until the limit of the accommodation which it affords had been nearly reached, and it was deemed advisable to reserve the few remaining beds for the isolation of first cases occurring in other places, rather than to fill them with cases from Potton where the disease had already established itself.

The results of the removal of the patients to hospital in the several households have been as follows. The first household was that of the Carringtons (above mentioned), two cases were removed to hospital August 26th, two other cases began on the following day, having already received the infection when the others were removed. In the second household one case, taken ill on October 4th, was removed on October 5th and returned cured on November 7th. On November the 15th and 16th a brother and sister were taken ill; they had, however, been attending the Board School at a time when so many others were affected, and it is as likely that they contracted the disease there as from the girl who had been at the hospital. The third household was that above mentioned, in which the child was taken ill on September 29th. Two later cases from the same house were removed on November 11th and 13th. These cases of scarlet fever were not confined to any one part of Potton, but were scattered all over the town, and some occurred in outlying houses a mile away. The disease did not, except in a few instances, attack households in the immediate neighbourhood of those previously invaded, nor were many cases heard of in which the disease appeared to have been propagated by personal intercommunication otherwise than at school. Inquiries as to milk-supply failed to show special incidence upon the customers of any particular dealer, and in some instances milk had not been used prior to the illness.

On a review of the circumstances, Dr. Ballard is of opinion that the attendance at school of children in an infectious condition, as regards their person or apparel, has been the principal means by which the disease has been spread. The case appears to show that when an epidemic of scarlet fever threatens, it will not always be sufficient to exclude from school the children of households known to be affected with the disease, but that it may become necessary to close the schools for a time in order to guard against the presence of children affected with slight and unrecognised forms of scarlet fever, or carrying about infection in their clothes, and who, intermingling with their fellow scholars, may infect them with the disease in a grave or dangerous form. This further action is the more likely to become requisite when the existence of the disease is wilfully concealed.

With the view of ascertaining what effect the closing of the schools had had upon the progress of the epidemic, Dr. Ballard paid a further visit to Potton on December 19th. He found that four more deaths had occurred, and that about twenty fresh cases had come to knowledge. Of these, some were in households in which there had been previous cases, but six fresh households had been invaded. In one of these, indeed, the first case had occurred on November 14th, although not known at the time of his former visit. Of the six cases, in two there was evidence of communication with other families previously attacked, in two other cases the families lived next door to others previously attacked, under the same roof, and using also the same privy, etc., though direct communication was denied. In the two remaining cases, there had been scarlet fever in the same yard, though not next door; in one of these last the patient began to be ill on the day week after the school was closed, so that infection might possibly have been contracted at school. In only three of the six households was the first patient a child of school going age.

Between November 1st and November 22nd, the date of the closing of the schools, twenty-two fresh households were invaded with scarlet fever; while from November 23rd to December 19th only five fresh households were invaded. Dr. Ballard is of opinion from these facts that the closing of the schools thus appears to have partially checked the progress of the epidemic. The mode of spreading of the disease appears also to have been altered: for while before the closing it occurred at random in all parts of Potton, but picked out especially children attending school, since the schools were closed the fresh cases that have occurred have been mostly in houses in the vicinity of those previously invaded.

OUTBREAKS OF ZYMOTIC DISEASE.

APPLICATION having been made by the Guardians of the Holbeach Union for sanction of the Local Government Board to the postponement of the October vaccination attendances in the Gedney Vaccination District, on account of an outbreak of diphtheria therein, and a report of the medical officer of health, dated October 12th, 1882, having shown the outbreak to have been one of some severity, Dr. Parsons was instructed to make inquiries respecting it. On putting himself into communication, on November 1st, with the rural sanitary authority, Dr. Parsons found that up to that time, when the disease appeared to be dying out, the last known case being convalescent, from the commencement of the outbreak in February last, about twenty or thirty cases had come to the knowledge of the medical officer of health, with seven deaths; but, since almost his only sources of information were the death-returns and the Poor-law medical officer's sick-list, there were doubtless a good many cases of which he had not heard. Several instances were met with during the inquiry in which families had been attacked by a sore-throat, recognised as diphtheria by some of the older inhabitants, who, from experience gained in former years, were familiar with the symptoms of the disease, but in which, owing to the mildness of the cases, or the distance from the nearest medical man, medical aid had not been called in. The outbreak appears to have been almost wholly confined to two adjacent places called Dawsmere and Gedney Drove End.

The Holbeach Rural District had been, so far as is known, free from diphtheria for some years, until February 1882, when the first cases occurred at Gedney Drove End. There had, however, been an epidemic of diphtheria at King's Lynn, eleven miles as the crow flies south-east of Gedney Drove End. This epidemic commenced in

September 1881, and was the subject of a report to the board by Dr. Airy. One at least of the Gedney cases was connected with it—viz., a boy at the Lynn Grammar School, among the pupils of which two or three had had diphtheria shortly before; he came home unwell on February 17th, to an isolated house two or three miles from Gedney Drove End, and died of diphtheria on February 25th. With the exception, however, of another member of the family, who subsequently suffered from diphtheria, no connection is known between this case and any other in this district. This, moreover, was not the first case which occurred in the district, for, on February 12th, a girl named Elford, daughter of a coastguardsman, residing at Gedney Drove End, had been taken ill of diphtheria, and two other members of the family followed at successive intervals of a week. No history of exposure to infection from a previous case could be ascertained, and the father stated that he had not been to Lynn nor had he had any recent communication with that town. Before their illness, the children went on week-days to the school at Dawsmere, and on Sundays to a chapel and Sunday school at Gedney Drove End, but, after the diphtheria occurred, all members of the family, so far as Dr. Parsons could learn, were kept strictly secluded for about two months. The house was, as regards sanitary condition, better than most of those in the neighbourhood, being dry and well ventilated; the earth-closet, far superior to the usual privy of the district, is at a sufficient distance to prevent nuisance. The well, however, which, like others in the district, is a shallow excavation in the silty soil, is only four yards from the pigstye. In the adjoining cottage, where the same water is used, no diphtheria occurred.

On February 27th, a child named Lawrence, residing at Dawsmere, was taken ill of diphtheria; she had attended the same day-school, chapel, and Sunday school that the Elfords went to before their illness; and it was stated that the Lawrences were the only children in Dawsmere who went to the Sunday school at Gedney Drove End. At the time that she was taken ill, however, the Elfords had been kept away from school for a fortnight, which is a longer period than that of the incubation of diphtheria, so that, apparently, she could not have contracted the disease from them. There were, however, about this time, cases of sore-throat, not improbably of a diphtheritic nature; several such were incidentally heard of in the course of the inspection, in which the children went to school as usual; and it is possible that the Lawrences' illness may have been contracted from some of these unrecognised cases. Three other members of the Lawrence family took the disease, and one died. The cottage is one of a pair, standing in a field at a distance from any others; the privy abuts on the house; no illness has occurred in the adjoining cottage.

In April, four young adults were successively taken ill of diphtheria in an isolated farmhouse at Lutton Marsh, a mile and a half south of Dawsmere, and the same distance south-west of Gedney Drove End, but about twice as far from either place by road. The first well-marked case began on April 6th, but a brother of a patient had had an ulcerated throat a month before. All communication with either Dawsmere or Gedney Drove End was denied, the house being in a different parish. As regards sanitary condition, there is indoors an untrapped sink, discharging through a short drain into an open dyke, and the privy vault is only eight feet from the house; well-water, filtered, is drunk.

Between this time and the end of May, only one or two mild cases are known to have occurred; but in June seven households were attacked, and thence a succession of cases continued up to October. Of the seven families attacked in June, several resided in very out-of-the-way places; but in all cases but one (and that a girl residing in the village) the child first taken ill had been attending the Dawsmere school. On June 12th, the Dawsmere school was closed for cleaning, and because, as the medical officer of health states in one of his reports, a "large number of children absented themselves from school, their parents believing that the children were liable to infection at the school." The school was reopened on June 27th, in preparation for the approaching examination, but was again closed, by the advice of the medical officer of health, on July 21st, and remained so till November 6th. The Sunday schools, both at Dawsmere Church and Gedney Drove End Chapel, were closed at the same time. It was considered that the closing of the schools had had little or no influence in checking the spread of the epidemic, a result attributed to the children of different households, infected ones included, frequently playing together when not at school. Dr. Ballard, however, points out that, after the closing of the schools, the fresh cases which occurred were in the villages of Dawsmere and Gedney Drove End, none being in the outlying places, except one instance, in which there was evidence that the patient had been exposed to infection in church. The closing of the schools seems thus to have been successful in preventing the extension of the disease where members of different households had few opportunities of coming in contact except at school, but not among those who had frequent opportunities for meeting elsewhere than at school.

In this outbreak, direct transmission of infection from person to person appears to have had a large share in the propagation of the disease; at any rate, there were ample opportunities for such transmission. As an example, the following group of cases may be given. Being the latest that occurred, particulars could more readily be obtained concerning them. About August 24th, a little girl named M., residing at Dawsmere, was taken ill with sore-throat; she is not known to have been in communication with any other case, and she was not seen by any medical man. A fortnight later, her brother was taken ill, and died on September 13th of diphtheria. On September 25th, a little boy, H., living in a neighbouring cottage, was taken ill of diphtheria, and died on October 7th. Inquiries showed that his mother, who had been to M.'s cottage when little M. was ill, had had a sore throat before the boy, but had not been seen by a doctor. On October 9th, a boy named C. began with diphtheria. He lived in the adjoining cottage to H., under the same roof; his mother had helped to lay out the body of little M. On October 17th, a young lady, L., governess at an outlying farmhouse, was taken ill with sore-throat, which turned out to be diphtheria. It was remembered that she had been at Dawsmere Church on October 15th, and that Mrs. H. had sat just on the other side of the aisle.

The influence of sanitary conditions upon the occurrence or severity of the disease has not been marked; indeed it was considered that Gedney Drove End, where many of the cottages are old, cramped for space, and surrounded by deposits of filth, had escaped more lightly than Dawsmere, where the cottages are new and well built, standing in pairs in the midst of gardens; and some members of the sanitary authority had argued from this the futility of sanitary improvement. Dr. Parsons's investigations, however, did not quite bear out the alleged fact. There have been more cases, and more households attacked, at Gedney Drove End than at Dawsmere; there have been more deaths at Dawsmere, but the number is too small to ground a conclusion upon either way. It must, however, be admitted that the houses at which diphtheria has occurred, or have been most severe, have not been, as a rule, as regards drainage, water-supply, privy accommodation, or the existence of nuisance, in a worse sanitary condition than their neighbours. There is no system of sewerage at either place. Slops are disposed of by being thrown on the garden, or are run into neighbouring ditches, or more commonly into so called "dry wells" or cesspools with porous sides from which the liquid soaks away into the silty soil. The emptying of these cesspools is a very offensive process, and, when emptied they are soon again filled to the level of the subsoil water by the return soakage.

At a few of the houses where diphtheria occurred, complaint was made of offensive exhalations from decaying vegetable matter in brackish marsh ditches, especially in summer when the weather was hot, and the water in the creeks was low, so as to leave the mud exposed. The privies in common use in the district have either brick vaults or mere holes dug out in the earth to receive the soil. In both cases, soakage can take place more or less freely from the pit into the earth, or *vice versâ*. In several instances, privies were in undue close proximity to dwelling-houses or wells. Some of these had been removed before my visit, or were then under notice; but those which had been rebuilt were constructed on the same principle as the old ones.

Water for domestic purposes is obtained either from wells or rain-water cisterns. The latter are underground, and are built of brick, receiving the rain-water off the roofs. The rain is apt to wash into the cistern any impurities which it may meet with on the roof or spouting. If some simple form of catchpit and filter could be brought into use, by which these impurities could be intercepted and removed from the water before it entered the cisterns, its palatableness, and probably its wholesomeness, would be much improved. It is said that the water collected off a slate roof is both cleaner and more abundant than that off a tile roof, which is more absorbent and affords more lodgment to impurities. A cistern, such as is in general use, costs from £5 to £10, according to size; so that for a cottage, one can be constructed for a sum within the limit (£8 13s. 4d.) of the compulsory powers of the Public Health (Water) Act, 1878. The wells are shallow, dug in the porous silt, the water-level being near that of the surface of the ground. They are, in some cases, much too near to dry wells, privies, and

lections of filth. Probably, however, the danger of injurious con-
ination is somewhat less where the intervening soil is a finely
ided homogeneous material like the silt, than in the case of loose
vel or fissured rock, filtration being more efficient in the former
e. Both wells and cisterns are also, in some cases, liable to con-
ination through the running in of dirty surface-water; the
uths not being properly raised above the ground-level. In cleanly
seholds, a special vessel is kept for the purpose of dipping water;
, where this is not done, the water in the well or cistern is apt to
fouled by the dipping into it of dirty vessels.

At Gedney Drove End there is an open pond or pit in the middle
the village, which was, till lately, the only source of water-supply
some cottages; this was formerly liable to be fouled by cattle;
, by the advice of the medical officer of health, it has been
ed round, and a well and pump have been constructed close to it.
ne of the old cottages in Gedney Drove End have, for bedrooms,
garrets with sloping roofs, sometimes unceiled, and with
fficient windows. One or two cases of serious overcrowding were
) met with.

In a review of the circumstances of the case, Dr. Ballard finds
self unable to say in what way diphtheria was introduced into
ney Drove End, though it is equally difficult to account for the
reak on the supposition of an origin in defective sanitary con-
ons, such as those to which he has alluded, for similar local
umstances have existed at Gedney Drove End for a number of
's past, during which the place has nevertheless been free from
itheria. Any meteorological, or other conditions of a general
ire, would, apparently, affect equally the adjoining villages,
h have, nevertheless, escaped diphtheria, although local con-
ns of a similar nature to those mentioned are to be met with in
n also.

view of the suggestion that the infectious matter of diphtheria
be conveyed long distances by the wind, Dr. Ballard procured
the coastguard at Gedney Drove End a table of the wind and
her from January to October 1882, as recorded in their log-
. From this, it appears that, if it be conceded that infectious
icles may be transmitted through the air without losing their
ity for distances so great as that from Lynn to Gedney Drove
the meteorological conditions in the latter part of January and
aning of February were favourable to such transmission, the
ls being light from E., S.E., and S., and the weather foggy, with
or no rain.

the beginning of April, when the cases of diphtheria occurred
itton Marsh, the wind, which through March had been strong
westerly, veered to E. and N.E., *i.e.*, it blew to Lutton Marsh
the direction of the places where diphtheria had previously
ed.

e prevailing winds, however, are from the W. and S.W., and
, after passing Dawsmere and Gedney Drove End, would blow
the wash, where there is no resident population.

e action of the sanitary authority, besides the closing of the schools
the postponement of the October vaccinations, has included
llowing precautions: Chloride of lime and "Jeye's disinfecting
" have been furnished to households where diphtheria was
n to exist, with verbal directions as to their use. At the ter-
tion of the illness the cleansing and limewashing of houses
e diphtheria has been known to have occurred has been seen
it sulphur fumigation has not ordinarily been found practicable
ant of accommodation for the inmates of the house while it
eing carried out. The medical officer of health recommended
during the prevalence of diphtheria a man should be specially
ed to attend to the disinfection of infected houses, to report
sanitary authority any breaches of section 126 of the Public
h Act, 1875, and to see that orders for the abatement of
ces were promptly carried out; but this suggestion was not
ed by the authority. Handbills have been printed cautioning
s against exposing themselves or those under their care in
places when in an infectious state. The medical officer of
has made repeated house-to-house inspections in Dawsmere
edney Drove End, and has reported various nuisances; some
ch have been remedied.

authority have no accommodation for the isolation of cases
ctious disease, nor any disinfecting apparatus.

ning that enteric fever had been endemic for the last two
t Whaplode Drove, and that scarlet fever had also been pre-
there, Dr. Ballard deemed it advisable to visit this place, and
companied on his visit by Mr. R. R. Harper, medical officer
lth for the Holbeach division of the district, and by Dr.
n, Poor-law medical officer.

Whaplode Drove is situated nine miles south of Holbeach, in a low-lying fen country. The soil is clay. The village is somewhat scattered, the houses standing alone in clusters of two or three along the course of two parallel roads and a connecting cross road; a good many of the cottages are old and ill built, and overcrowding seems to be not infrequent. The only drainage is into ditches or cesspits, and in some places accumulations of stagnant dirty water were seen standing in the immediate neighbourhood of the houses. The privies are of the roughest construction, standing over holes dug out in the earth. The water supply is on the whole very bad; some houses have proper cisterns, but at others rain-water has to be caught in tubs or pails, and when these fail, resort has to be made to ponds and ditches. At other houses again, there are wells, but the subsoil being impervious clay, the water consists merely of the soakage from the superficial soil, and is liable to be fouled by surface runnings, and by soakage from neighbouring privies, pigstyes, etc.; it has commonly a yellowish or brownish hue, and contains floating impurities.

Dr. Crowden has had, during the past two years, about thirty cases of enteric fever under his case at Whaplode Drove, some of which have been severe and well-marked, although with the following exception, no deaths have occurred among them. The earliest case appears to have been a woman who had recently come to Whaplode Drove from Crowland, and who died on December 2nd, 1880, of an illness which, although not so certified, was subsequently recognised to have been enteric fever. Close to the house where she died a small school was then kept, the children in which were taken in to see the corpse and allowed to kiss it; some of them shortly afterwards suffered from fever. Not far distant is a yard called Big Yard, containing six cottages in three pairs; the sanitary condition of this yard, since somewhat improved, was then very bad; there was no drainage, the house slops being thrown "anywhere;" the only water supply was an open well, which being in the lowest place in the yard, received not only the surface water off the yard, but also drainings from a privy, now disused, abutting on one of the houses. In four out of the six houses in this yard there have been, at intervals during the past two years, cases of enteric fever. The first of these were in the family of a woman who had nursed the case first mentioned. In this family six cases of enteric fever occurred, but several of them began after the removal of the family to another house, where similar unsanitary conditions exist. Rain-water cisterns, new privies, and a cesspool have since been constructed, for the use of the houses in Big Yard. In one household in Whaplode Drove, in which enteric fever occurred, the disease appeared to have been imported, the parties having only arrived from Spalding a few days before. Scarlet fever was prevalent in Whaplode Drove in the winter of 1881--82; it seems to have been spread by unrestricted intercourse between children of different households.

The want of wholesome water in parts of the Holbeach division, among which Whaplode Drove is conspicuous, was laid stress on by Mr. Harper in his annual report to the Holbeach Rural Sanitary Authority for 1881, and formed the subject of a subsequent correspondence between the board and the sanitary authority. The action of the authority under the Public Health (Water) Act, 1878, seems to have been limited to the serving of "threatening notices," which some owners have complied with by constructing rain-water cisterns, and others have disregarded with impunity.

THE ALLEGED CASE OF DEATH FROM VACCINATION.

SIR,—The Local Government Board has published a report by their medical inspector, Dr. Barry, on an alleged case of death from vaccination. With a copy of this report I was not furnished, nor was any opportunity of explanation of its so-called facts afforded me; and for my knowledge of its existence, I was indebted to the local newspapers, to whom it was communicated by the antivaccinators, who appear to have been first favoured by the Board with a copy. I feel assured no impartial person can peruse this report without perceiving both a personal animus and an evident desire to propitiate the antivaccinators; and, in fact, I find from their organ, *The Vaccination Inquirer*, they fully recognise this: an editorial article conclu ding "Vaccination is in peril, and to save it from destruction public vaccinators begin to be pitched overboard." The history of the case, as related by the inspector, is based entirely on the unsupported testimony of the mother; he did not even see the father, whom he states to have been in good health, and he finishes what he admits to be his "imperfect account," by the conclusion, unjustified by the evidence, that the symptoms were "apparently" due to septic infection; yet of this infection, he subsequently admits, "there is no direct evidence." Having thus constructed what he is obliged to confess is an "hypothesis" respecting the child, he next inquires into the history of the thirty children vaccinated or examined on the same days. Here again he is compelled to report that not one other suffered from untoward symptoms in consequence of vaccination; but in the course of his narration, he brings two charges against me; one, the unsupported statement of mothers that I made no examination of their children, which I deny, though I certainly do not think it necessary, in every case, to strip a child, and so further annoy its mother,

before being able to ascertain its fitness for vaccination. The other charge is one of untrustworthiness of my register, and this, first because of a clerical error in mistaking an 8 for a 6, and next because I attached my initials to the name of a child not brought for inspection, which I was perfectly justified in doing, as I received a private message from my predecessor that the child was to ill from bronchitis to be brought out; but that I had his authority for stating the vaccination was successful. Dr. Barry next proceeds to criticise my method of vaccination as "peculiar," and performed with "complicated apparatus;" it is precisely that practised by both my predecessors in the office, and both simple and expeditious. The report of Mr. Fasse is then quoted respecting a parcel of tubes, which I distinctly told the inspector were not intended to be used. As to the state of my instruments, I purposely use a lancet with the point broken off, in order to scratch; and I deny that "dirty and rusty" is a correct description of a lancet which had been recently used, and was not in the state in which it would be used at the station, where it is my invariable custom, on arriving, to wash, wipe, and rub on a bit of sand-paper both lancet and needle before using them. Dr. Barry says "if" the instruments were habitually in a certain condition, then, etc., but his duty was to prove they were so; this he has not done, not even taking the lancet he found me using at the station. He also specifies, as one of my "manifold disobediences," my "habit" of vaccinating for the cure of eczema, when he is perfectly aware that, in answer to his own question, I told him I had never done so at the station, but that in private practice I had done so (not, as he says, in the "hope" of curing, but) successfully, though the red tape rules would prohibit my even attempting it. Finally, Dr. Barry sums up his report with five conclusions. 1, "a probability" of septic infection, for which he advances no proof; 2, a pure assumption that disease was communicated at inspection, for which also he advances no proof; 3, the only true one of the five—that no infection was conveyed by the lymph used for vaccination; 4, still an unproved assertion that I use "dirty instruments," and habitually store lymph in unsealed tubes; and then, coupled with the confession of his inability to find any evidence in proof, the gratuitous, and, I must say, impertinent assumption that infection "was inoculated into that particular child from some dirty appliance used by Mr. Legge." And so this scientific report grants to the antivaccinator that there is a possibility of "inoculating infection" by pricking a vaccine vesicle, which is not an absorbent surface like a wound. While, then, I protest against a charge of manslaughter being fastened upon me by the slipshod inferences of a report which is altogether based on insufficient data, which proves the incapacity of its author to weigh evidence, and which blunders in the commonest principles of induction, I protest more against the altogether unnecessary handle it furnishes to antivaccinators.—I am, sir, your obedient servant,

WILLIAM LEGGE.

Derby, February 1st, 1883.

THE IRISH MEDICAL ASSOCIATION AND DR. LITTLEJOHN.

SIR,—I am directed by the Council of the Irish Medical Association to forward you the inclosed copy of a resolution passed by them. Hoping you will be able to insert the same in your next issue.—Yours faithfully, THOMAS GICK, Assistant-Secretary.

Dublin, January 31st, 1883.

(COPY.) Resolved—"That this Council repudiates the unfounded imputation upon Dublin physicians, contained in a statement publicly made by Dr. Littlejohn, Medical Officer of Health for the city of Edinburgh in a recent letter to the *Glasgow Herald*, to the effect that 'the profession (in Dublin) protests loudly against a loss of fees where any of their patients, however badly housed, are removed to hospital, so as no longer to be a source of danger to the community.' That this Council expresses its surprise and regret that Dr. Littlejohn should have publicly attributed such motive to the members of his own profession in Dublin, without attempting, in any way, to substantiate the accusation. That a copy of this resolution be forwarded to Dr. Littlejohn and the weekly medical journals."

REPORTS OF MEDICAL OFFICERS OF HEALTH.

GATESHEAD.—Mr. Green's report on this crowded and increasing borough is an exceptionally good one, which it is a pleasure to read after the arid productions too commonly affected by medical officers of health. Basing his calculations on a population of 65,550 souls, Mr. Green reports that there were 2,677 births and 1,342 deaths registered during 1881, representing rates of 40.00 and 20.4 per 1,000 respectively. As compared with 1880, the general death-rate has declined 4.0 per 1,000, the zymotic rate 2.9, and the infantile rate 38 per 1,000, while the deaths in children between one and five years were 126 less than the number registered in the previous year. Mr. Green devotes considerable attention to the prevalence of the seven principal zymotics. Altogether there were 166 deaths from this class, or 2.5 per 1,000 of the population. Diarrhœa was the most prevalent of the zymotics, and caused 82 deaths. Mr. Green is inclined to hold heat to be chiefly responsible for this prevalence having due regard to insanitary surroundings. Whooping-cough caused 32 deaths, and "fevers" 21, fifteen of these latter being from typhoid, and five from typhus. The sanitary condition of the borough appears to have been constantly supervised by the health-officer, who, while showing that some improvement has been made, points out the ash-pits are inefficiently cleansed, and that the few water-closets are defective in structure, and the pipes insufficiently ventilated. Slop nuisances also continue, and are very offensive. Alluding to the subject of the compulsory notification of infectious disease, the health officer states that he received a considerable number of reports of cases of the more serious infectious diseases from the medical men in the town. What, however, is required is legal powers to compel their compulsory notification. It is a system, Mr. Green adds, which is generally in favour with medical men, as it allows them to report cases, and removes from them the responsibility with their patients for so doing. During the year the fever hospital received 58 cases, of whom 42 recovered, 8 died, and 8 are still in hospital at the date of reporting.

HASTINGS.—In preparing his first annual report (for 1881) Mr Knox Shaw has omitted to include therein, any statement of his sanitary work, or of any systematic inspections which he may have made. No doubt, in a borough circumstanced like Hastings, the health-officer is most necessarily aware of the sanitary condition in it requiring improvement, but Mr. Shaw would do well in future to place on record the improvements which he may have suggested and the steps which have been taken by the Town Council in consequence of his recommendation. In other respects the present report is very satisfactory. The recent census shows that the borough has now a population of about 42,258 souls, being an increase of 12,96 upon the enumeration of 1871. The total births registered during the year amounted to 1,138, giving a birth-rate of 29.29 per 1,00 which is the highest rate recorded during the last seven years. Th deaths registered were 663, but of these 139 were either visitors persons who had died in the borough, though not belonging to Deducting these, the death rate is equal to 14.0 per 1,000, extremely low rate, and of importance, having regard to t increasing popularity of the town as a health resort. To zymot diseases, 42 deaths were attributed, including 21 to diarrhœa, 6 fever, and 6 to whooping-cough. Scarlet fever was somewhat p valent towards the close of the year, but the disease was of a ve mild and non-fatal character, and only two deaths from it occurre Small-pox was introduced into the district, but prompt isolati with thorough disinfection, prevented the spread of the disease any great extent. In alluding to this, Mr. Shaw states that sanatorium was of great service during the year, many famil having willingly and gladly availed themselves of it. Of the cases that were admitted, 77 were suffering from scarlet fever, four from small-pox. The three cases admitted were ultimat discharged as non-infectious.

LYTHAM.—In consequence of the borrowing powers of the lo authority having been exhausted, very little work of importa was carried out in this district during 1881. Minor sanitary provements, such as the disconnection of private drains, slopsto and the ventilation of sewers, etc., were well looked after under Pountney's supervision. The local board have not, unfortunat adopted the health-officer's recommendation for the provision disinfecting stove, the absence of which was severely felt. Amo an estimated population of 4,121 souls there .101 births an deaths last year, equivalent to rates of 24.5 and 17.4 per 1 respectively. Fifteen deaths, however, were those of visitor that the actual death-rate becomes 13.8 per 1,000. Infec diseases were somewhat prevalent, but fortunately but four d were registered from these causes. Diseases of the chest were in ten cases, heart diseases in six, and phthisis in six. It is a worthy fact that not a single death was registered from March to April 14th, and that throughout the year no death occurred either diarrhœa or dysentery. Mr. Pountney includes in his r a useful series of directions to be observed in cases of infec diseases.

LEWES.—During the year 1881, there were 302 births and 161 d registered in this borough, giving rates of 26.9 and 14.3 per 10 spectively. Both are below the average, and the latter is the l rate recorded by Mr. Braden during his nine years of office district. Six deaths only were attributed to zymotic causes. I the summer months, a moderate amount of diarrhœa was obs but it was generally of a mild type, and only three deaths were buted to it. The health-officer descants at some length up comparative absence of typhoid fever. In a few non-fatal which came under his notice, he was unable to find the wa milk supplies at fault, nor could he satisfactorily account fo in any other way. Such cases appear to Mr. Braden's m strengthen his opinion, that diseases of a zymotic type ar capable of "autogenesis", or self-generation, without there be absolute necessity for the presence of a particular germ. This he has formed, not only upon observation of several isolate which have occurred in his own practice, but that of others.

ox appeared in the town for the first time during the last twelve ears. In all, five cases occurred; and, had it not been for the ıcility afforded by the infectious hospital for immediate isolation, ıe disease might probably have developed itself in a dangerous and xtensive form. In the matter of sanitary improvement, the public ater-supply is gradually replacing the use of private wells, which ill in time be totally abolished. In other respects, the condition of ıe town seems to be progressing satisfactorily.

SUNDERLAND PORT.—As Mr. Harris did not succeed the late Dr. eld until January 1882, his annual report for 1881 is of necessity atistical only. Of the total vessels examined (1,955) 85 per cent. of aft examined were found in a healthy state, the remaining 15 per nt. needing improvement. In 239 instances the cabins, forecastles, ıd peaks, were in an unsanitary condition, while in 66 cases the osets and conveniences were found in a filthy state and injurious to alth. The service of notice upon the owners or masters of unsani- ry vessels, pointing out the need for improvement, seems to have en successful in securing the desired results, since out of 153 otices served, 145 were complied with, while 152 nuisances were ated without any notice from the port authorities.

TODMORDEN.—For this district Mr. C. W. Thorp reports for 1881, rth and death-rates of 28.8 and 20.2 per 1,000 respectively. The tal deaths from zymotic causes amounts to 47 against 79 for the evious year, and 61 in 1878, and were equal to a death-rate of 1.9 r 1,000. The health-officer explains that this low per centage of rtality is due more to the milder types of these diseases than eir absence from the district. "Could we have some means of mpelling householders to report the first cases of epidemic eases much might be done to isolate them. At present the nerality of our population look upon it as a necessity for children have these diseases sooner or later, and take no precautions what- r against scarlet fever, measles, and whooping-cough." Nine ıths happened during the year from enteric fever. Six of those re sporadic, and could not be traced to any specific cause. Two urred in one part of the district where the disease became demic, and were due, in Mr. Thorp's opinion, to the choking of some and badly constructed drains. Active measures were taken to infect the surroundings, and the disease did not spread to any at extent. Thirteen deaths were attributed to scarlatina, five to ooping-cough, and three to measles, a mortality which leads the lth-officer to complain of the carelessness of parents in allowing ir children to mix with others while in an infectious state. Some rovement is promised in the water-supply, but the pollution of streams still exists, and produces considerable nuisance. reover, the mode of discharging the sewage, from a portion of the rict, seems far from satisfactory.

PPING RURAL DISTRICT.—In this district, there were 684 births 316 deaths registered in 1881, which, based upon a population 21,755, represent birth- and death- rates of 31.4 and 14.0 per 1,000 pectively. From zymotic causes the rate was 1.3 per 1,000. rlatina, although somewhat prevalent, was not fatal in any in- nce, while measles were entirely absent. Fifteen cases of small- came under the notice of the health-officer, and it is stated that ach case where the source of the disease could be discovered, it found to be some part of London. The active measures adopted ented the extension of the disease, and only one death occurred. rovement continues to be made in the sanitary condition of the rict, one of the most noteworthy alterations being the extension house drainage, no less than 399 houses having been provided sewer connections. Overcrowding, however, prevails rather ex- ively. Mr. Fowler's tabular summary of cases of infectious ases reported, with the result of the action taken by the health orities is both novel and useful.

ARNSLEY URBAN DISTRICT.—Dr. Sadler congratulates his ority upon the fact that the rate of mortality for 1881 (20.54 ,000) was, with the exception of 1877, the lowest he has had to d during the fifteen years that he has acted as health-officer eir important borough. Two hundred and one deaths, or 31.83 ent. of the whole, were those of infants under one year of age, 16.75 per cent. of the registered births. This, though decidedly the average of the preceding ten years, is, Dr. Sadler thinks, igh a proportion. The explanation of this high rate is to be t, no doubt, as Dr. Sadler observes, in the great demand which for female labour, by which infants are deprived of that care ttention which are so essential for their well-being. It is satis- y to note a considerable reduction in the mortality amongst en under five years of age, these deaths representing (612) 48.01 nt. of the total mortality, being a little below the average of n previous years (49.55 per cent.), and decidedly fewer than in 1880 (52.02 per cent.) Under the head of zymotic diseases, also, Dr. Sadler reports a great improvement, the total deaths from such causes (86) being 81 less than in the previous year. Scarlet fever only caused four deaths, while in 1880 the fatal cases of this disease alone were 46 in number. Measles and whooping-cough were some- what prevalent, and caused together 47 deaths; but diarrhœa and typhoid fever were less fatal than usual. Dr. Sadler takes a short retrospect of the district for the last fifteen years, and he thinks that it is obvious that the trouble and money expended in improving its condition have borne valuable fruit. "The improved water-supply, the more efficient sewerage, better scavenging, and the enforcement of a due attention to the requirements of health in the construction of new houses and streets, with freer access of air and better drainage than used to be the case, have been attended and followed by a steadily lowering rate of mortality, and a diminution of those diseases, such as typhoid fever, which are directly caused by bad sanitary conditions."

MEDICO-LEGAL NOTES AND QUERIES

PARTNERSHIP RIGHTS.

SIR,—Will you kindly reply to the following query in your next issue? Has the senior partner any right of option as to placing the partnership brass plate on his private residence? Five years since, the junior partner takes a house in the High Street, where the partnership business is carried on, and the partner- ship brass plate is conspicuously placed. The senior partner takes a private house half a mile off; and, following the invariable custom of medical partner- ship in the neighbourhood, puts his private plate on the door. The junior is about to move from the place of business. He now thinks we should both put partnership plates on private houses as well as present surgery. I reply that I consider it optional; and, looking at surrounding partnership, decline to start a precedent. I may add that our difference is a purely friendly one.—I am, obediently yours,

SENIOR.

*** In reply to this question, we are advised that the senior partner cannot be compelled to place the name of the firm on his private house. The firm centres "in the High Street", and the senior partner is entitled to treat the residence in every way as private. Any alterations in the original partnership arrangements must be by mutual consent; and if the junior partner did not stipulate, at the time of the change of residence, that the firm plate should be placed on the senior's door, he cannot do so now.

ACQUITTAL OF A SURGEON.

WE are glad to be able to report that the trial of Mr. Joseph Noakes, a surgeon of Halton, near Leeds, has resulted in an ac- quittal. It will be remembered that Mr. Noakes, in conjunction with a woman named Hudson, was charged with having employed artificial means to procure the abortion of a woman named Laidler. It appears that Mr. Noakes himself took the deceased woman to stay at the house of the woman Hudson, alleged by the prosecution to be a house of ill-fame, and then wrote to her master, giving him false information of her whereabouts. He continued to attend the deceased woman during her stay with Hudson; and, during her illness, no one but Mr. Noakes and Mrs. Hudson was permitted to enter the room of the deceased. Subsequently, Mr. Noakes took the deceased to the railway station at Leeds, and sent her to Wakefield, her home, where she arrived in a dying state. After her death he gave a certificate, assigning as the primary cause of death, valvular disease of the heart, and, as the secondary cause, acute pleuro-pneumonia. In defence, it was ad- mitted that Mr. Noakes had given false accounts of the woman's movements, but it was urged that he had done this to screen the deceased from disgrace. We congratulate Mr. Noakes on having disproved the grave charge made against him. The peril in which he has been placed will doubtless act as an effective warning against repeating the perilous line of conduct on which he em- barked.

BEQUESTS AND DONATIONS.—Mr. Frederick William Rock, of Hyde Cliff, Greenwich, has informed the hon. secretary of the Royal Kent Dispensary, that he and his sister, Mrs. Payne, have each by their wills bequeathed £1,000 to the proposed infirmary; but that both amounts will be handed over forthwith, if three other persons will contribute like amounts, so as to make up an immediate £5,000. —The Viscountess Opington has given £500 to Miss Mary Wardell's Convalescent Home for scarlet fever patients.—Mr. George Hood has given £300 towards the Bexhill sea-side branch of the Metropolitan Convalescent Institution.—The Bath Eye Infirmary has received £200 under the will of Miss Richardson.—The Orthopædic and Spinal Hospital, Birmingham, has received £100 under the will of Mr. Thomas Yates.—Miss Campbell has given £100 to the West- minster Hospital.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 25th ultimo.

Messrs. F. Charles Wallis, Southampton; John Paley, Bournemouth; F. William Shore, L.R.C.P.Lond., Southampton; R. Henry Browne, L.R.C.P. Lond., Southend; H. Walter Pigeon, B.A.Cantab., Clifton; J. W. Francis Long, Stamford Street; Arthur de Prenderville, Cornwall Road, W.; J. Henry Spitzly, L.R.C.P.Lond., Canonbury; C. J. Willmer Tatham, Dallington; E. Ernest Goddard, Cambridge Gardens, N.W.; H. L. Richards Dent, L.S.A., Woolwich; William Huntington, Liverpool; H. John Prangley, L.R.C.P.Lond., West Cowes; R. Courtenay Coward, L.R.C.P.Lond., Penywern Road, W.; R. M. Bruce, L.S.A., Lordship Lane; G. Charles Gaudin, L.R.C.P.Edin., Jersey; Raheem Buksh, Calcutta; and J. Duncom Bluett, Montague Street, W.C.

Four candidates passed in Surgery, and when qualified in Medicine and Midwifery will be admitted Members of the College; and nine candidates were referred for six months, and three for three months.

The following gentlemen passed on the 26th ultimo.

Messrs. E. Ralph Dimsey, L.R.C.P.Lond., Highgate; W. Essex Wynter, L.R.C.P.Lond., St. Margaret's; W. Augustus Norry, L.S.A., Wokingham; E. Ferdinand Grün, L.S.A., Putney; C. O'Brien Harding, Hornsea; W. Thomas Partridge, Luton; Edward A. Bewes, L.R.C.P.Edin., Ladbroke Grove; A. H. Nicholson Lewers, L.S.A., Gower Street, W.C.; Howard Downes, Canonbury; Rothesay C. Stewart, L.S.A., Clifton Gardens; and J. Howard Champ, L.S.A., Chelmsford.

Eight gentlemen passed in Surgery, and when qualified in Medicine and Midwifery will be admitted Members of the College; two candidates were referred to their studies for three months, and five for six months.

The following gentlemen passed on the 29th ultimo.

Messrs. J. Edward Cave, L.R.C.P.Lond., Melbury Osmond; A. Watson Griffin, Peterborough; Henry Roberts, L.S.A., Shaftesbury; E. Booth Meller, Newport, Isle of Wight; A. John Dalton, South Norwood; H. George Plimmer, Waldegrave Road, S.E.; Harry Harlock, Ely; A. William Fairles, Seymour Street, W.; Arthur Longman, L.S.A., Andover; A. de Courcy Scanlan, L.S.A., Eastbourne; and W. A. Dawson Montgomery, M.B Toronto, Toronto.

Six gentlemen passed in Surgery, and when qualified in Medicine and Midwifery will be admitted Members of the College; and one candidate was referred for three months, five for six months, and one for nine months.

The following gentlemen passed on the 30th ultimo.

Messrs. Henry Green, L.R.C.P.Edin., Norfolk Crescent; W. Dobinson Hallidburton, Upper Norwood; Michael O'Kane, L.S.A., Camberwell; Charles W. Parsons, L.S.A., South Hackney; W. B. Crawford Treasure, L.S.A., Crewkerne; A. Probus Trinder, Highgate; R. Walker Watson, L.S.A., Highbury New Park; T. Harry White, L.S.A., Lincoln.

Of the 181 candidates examined during the past fortnight, 83 passed to the satisfaction of the Court, and obtained their diplomas; 32 passed in Surgery, and when qualified in Medicine and Midwifery will be admitted Members; the remaining 66 failed to reach the required standard, and were referred to their further professional studies. Twenty candidates who passed in Surgery at previous examinations, having subsequently obtained a medical degree or licence recognised by the College, were also admitted Members.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 1st, 1883.

Dodd, Anthony, Newcastle-on-Tyne.
Lane, Frederick Herbert, Rochester Square, N.W.
Rodman, George Hook, Selhurst Road, South Norwood.
Williams, Arthur John, Wallingford, Oxon.

The following gentleman also on the same day passed the Primary Professional Examination.

Ley, Herbert, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

ANTRIM UNION.—Connor Dispensary, Medical Officer. Salary, £95 per annum, with fees. Election on February 13th.

ATHLONE UNION.—Athlone Dispensary, Medical Officer. Salary, £140 per annum, with fees. Election on February 16th.

BEDFORD PROVIDENT DISPENSARY.—Dispenser. Salary, £60 per annum. Applications to the Honorary Secretary.

BELMULLET UNION.—Knocknalaver Dispensary, Medical Officer. Salary, £110 per annum, with fees. Election on February 12th.

BRADFORD FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Assistant Medical Officer and Dispenser. Salary, £120 per annum. Applications to D. J. Sloane, 80, Arcadia Street, Manningham, Bradford, Yorks., by February 15th.

CASHEL UNION.—Cashel Dispensary, Medical Officer. Salary, £140, with fees. Election on February 14th.

CHARING CROSS HOSPITAL.—Medical Registrar. Applications by February 19th.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester. Honorary Surgeon. Applications to the Honorary Secretary, A. Fox, Esq., 53, Princes Street, Manchester.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by February 12th.

FIRTH COLLEGE, Sheffield.—Professor of Chemistry. Salary, £150 per annum. Applications to Ensor Drury, Registrar, by March 1st.

KENSINGTON DISPENSARY.—Resident Medical Officer. Salary, £125 per annum. Applications by February 10th.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum. Applications by February 23rd.

MORPETH DISPENSARY.—House-Surgeon. Salary, £120 per annum. Applications by March 1st.

PETERBOROUGH GENERAL DISPENSARY AND INFIRMARY.—Honorary Physician. Applications by February 13th.

ROCHESTER AND DISTRICT FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications to H. S. Kybett, 55, High Street, Chatham, by February 16th.

ROYAL MEDICAL BENEVOLENT COLLEGE.—Morgan Annuitant. Applications by the end of February.

SALFORD ROYAL HOSPITAL.—District Surgeon for the Pendleton Branch Dispensary. Salary, £80 per annum. Applications to G. H. Larmuth by February 13th.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Junior Assistant House-Surgeon. Salary, £50 per annum. Applications by February 14th.

ST. MARK'S OPHTHALMIC HOSPITAL, Lincoln Place, Dublin.—Resident Surgeon. Salary, £52 10s. per annum. Applications to the Chairman of the Board of Governors of the Hospital, by February 17th.

THE HOSPITAL, St. Albans.—Dispenser. Applications to the Honorary Secretary.

WESTERN GENERAL DISPENSARY.—Honorary Surgeon-Dentist. Applications by February 12th.

WEST LONDON HOSPITAL, Hammersmith.—Assistant Physician. Applications by February 27th.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho.—Resident Medical Officer. Salary, £100 per annum. Applications by February 17th.

WOLVERHAMPTON FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £225 per annum. Applications to J. Williams, 71, Newbridge, Wolverhampton, by February 13th.

MEDICAL APPOINTMENTS.

COLLINGWOOD, David, M.B., B.S.Lond., M.R.C.S.Eng., appointed one of the Senior Demonstrators of Anatomy at University College, London.

HADDEN, William E., M.D., M.Ch., appointed Assistant House-Surgeon to the South Dispensary, Liverpool.

HART, George H., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer of Health for the Urban Sanitary District of Harborne.

HOLT, H. L., M.R.C.S., appointed Resident House-Surgeon to the Brixton, Streatham, and Herne Hill Dispensary, *vice* G. J. Wilson, M.R.C.S., resigned.

MELLER, C. M., M.R.C.S., appointed House-Surgeon and Registrar to the London Temperance Hospital.

MOORE, S. H., L.R.C.P., appointed Resident Medical Officer to the Chelsea Workhouse and Infirmary, *vice* W. H. Netherclift, F.R.C.S., resigned.

NEIL, J., M.B., appointed Assistant Medical Officer to the Portsmouth Lunatic Asylum, *vice* A. N. Davis, L.R.C.P., resigned.

PRINGLE, J. J., M.B., appointed Medical Registrar to the Middlesex Hospital, *vice* J. W. Browne, M.B., resigned

WILLIAMS, J. Alexander, M.B., M.R.C.S.E., appointed House-Surgeon to the London Hospital.

WILLSON, H., M.R.C.S., appointed Medical Officer of the First District of St. Saviour's Union, *vice* T. S. Worboys, M.R.C.S., deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 2s. which should be forwarded in stamps with the announcements.

BIRTHS.

SUCKLING.—On the 7th inst., the wife of C. W. Suckling, M.D.Lond., of Newhall Street, Birmingham, of a son.

WHITBY.—On the 30th ult., at Summerfield, Birmingham, the wife of F. Vickers Whitby, M.R.C.S., of a daughter.

MARRIAGE.

SMYTH—ABBOTT.—On February 1st, at St. Margaret, Ormesby, by Canon Venables, Vicar of Great Yarmouth, and Rural Dean, assisted by the Rev. S. Blofeld, M.A., Vicar of the parish, Francis Sydney Smyth, L.R.C.S., of Brockley, S.E., youngest son of Spencer T. Smyth, M.D., F.C. Eng., of Forest Hill, to Fanny Elizabeth, only daughter of the late S. Abbott, Esq., of Castleacre, Norfolk.

DEATH.

TOULMIN.—On the 4th instant, at 36, Thurloe Square, South Kensington, Frederick Justus Toulmin, M.R.C.S.E., aged 84 years.

SURGEON-MAJOR CUFFE, of Woodhall Spa, has been presented with a gold keyless chronometer and chain, bearing the following inscription: "Presented to Robert Cuffe, Esq., by a few grateful patients and friends. Woodhall Spa, January 1883." Great regret is, we hear, expressed at the near prospect of losing Mr. Cuffe's valuable professional services at Woodhall.

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's last weekly return, that the death-rate recently averaged 35.2 per 1000 in the three principal Indian cities; it was 28.6 in Bombay, 40.2 in Calcutta, and 42.4 in Madras. Cholera caused 79 deaths in Calcutta, showing a decline of 18 from the number in the previous week; the deaths in Bombay included 15 from small-pox and 16 from measles, while the largest proportional fatality of "fever" was recorded in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-one of the largest European cities, was 27.1, and was no less than 3.4 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 43.7, and showed a further increase upon the high rates in recent weeks; the 778 deaths included 29 fatal cases of small-pox, 26 of scarlet fever, and 22 of typhus and typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 26.1, and ranged from 17.1 in Christiania to 29.6 in Copenhagen; scarlet fever caused 6 deaths in Stockholm, and whooping-cough 4 in Copenhagen. In Paris, the death-rate was equal to 26.7, and the deaths included 45 from typhoid fever, and 15 from small-pox. The 210 deaths in Brussels were equal to a rate of 27.2, and included 3 fatal cases of small-pox. The rate in Geneva did not exceed 20.8. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.3, and ranged from 26.9 in Amsterdam, to 28.2 in Rotterdam; small-pox caused 7 deaths in Rotterdam, and diphtheria 6 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.6, and ranged from 21.5 and 23.8 in Berlin and Dresden, to 35.4 and 39.4 in Prague and Trieste. Small-pox caused 5 deaths in Vienna and 2 in Buda-Pesth; diphtheria showed the largest proportion of fatality in Dresden. The death-rate was equal to 29.8 in Turin, and 38.9 in Venice; typhoid fever caused 6 deaths in Turin, and measles showed fatal prevalence in both these Italian cities. In four of the largest American cities, the mean death-rate was 26.2; the rate ranged from 19.4 in Brooklyn, to 34.5 in Baltimore. Small-pox caused 83 deaths in Baltimore, showing a further increase upon previous weekly numbers, and 10 in Philadelphia. Typhoid fever caused 15 deaths in Philadelphia, and diphtheria showed excessive fatality in most of these American cities, especially in Baltimore.

ANTISEPTIC VALUE OF CARBONIC ACID.—The preservative action of carbonic acid on meat has recently been demonstrated by Professor Kelbe, of Leipsic. He hung pieces of beef, including fat and lean, in cylindrical tinned-iron vessels, which were kept in a warm room of the laboratory, where the temperature at midday rose to 89° Fahr. Each piece was hung from the cross bar; a plate for dropping fluid stood below; just over this was a tubular passage for entrance of carbonic acid; the cylindrical lid of the vessel entered an annular trough holding glycerine, and had a tube in the middle. When nearly all the air was supposed to be driven out through the latter tube by the entering gas, the elastic tubes connected to both tubes were pinched with screws. After eight days in the vessel the beef was not distinguishable from fresh beef in aspect or taste after cooking, and the gravy was like that from fresh beef. After a fortnight the beef had become somewhat gray externally, and only a practised palate could distinguish the gravy from that of fresh meat. Sometimes beef and gravy had a weakly acid taste, which was easily remedied with a little carbonate of potash. After three weeks the beef was still of the same good quality, only softer than fresh beef and requiring less time to cook. It was quite free from bad smell even after from four to five weeks, but the cooked gravy was no longer tasted so good as fresh gravy. The experiment ended at that point, and it is believed to establish that carbonic acid is an excellent means of preserving beef from putrefaction, while maintaining its good taste for several weeks. It is noteworthy that mutton under like treatment began to smell badly after eight days; veal, also, could not be kept so long as beef. Fowl and game have not yet been operated upon; but fish, lobsters, oysters, and shrimps could be kept for a short time. Further tests are to be made of the antiseptic. The antiseptic value of carbonic acid gas has long been known to those interested in the question, and has been the subject of many previous experiments. The effort has been made on more than one occasion, we believe, to make this agent available for commercial purposes; and those who are familar with the specimens in the Great Exhibition of 1851, will remember that on that occasion a variety of articles of food were shown, which had been preserved in carbonic acid gas for very long periods of time, and which were then perfectly fresh and sweet. Hitherto, however, the difficulty has been how to make this prove available, on a large scale, for commercial use.

BETHLEM HOSPITAL AND ITS TRUSTS.—A curious point, which is of considerable interest to the trustees of charitable funds, has just arisen in connection with the bequests made to Bethlem Hospital, London. It would seem that, about a century ago one John Baynard bequeathed the sum of £1,000 to the governors of Bethlem Hospital on condition that the hospital should at any time receive for treatment an insane patient to be nominated by the churchwardens of St. Margaret's parish, in the city of Rochester, who were appointed the sole trustees of the fund. From time to time patients have been duly received at the hospital from the parish of St. Margaret, but within the last few years difficulties have arisen between the governors of the hospital and the churchwardens as to the reception of patients, the hospital authorities on various pretexts, declining to admit the patients nominated by the churchwardens. The trustees accordingly brought the matter before the Charity Commissioners, who called upon the governors of the hospital to fulfil the conditions required of them, the result being that the hospital authorities expressed their wish to pay back the amount of the sum left to the hospital by Baynard—namely, £1,000—and so relieve themselves of their obligation. This the Charity Commissioners have allowed to be done, and a new scheme is about to be arranged for the disposal of the funds of the charity. In the meantime the churchwardens of St. Margaret's insist that the hospital authorities should repay a much larger sum than the original £1,000, considering the great difference in the value of money as compared with the present time and the date of the bequest. The point urged by the churchwardens is now under the consideration of the Charity Commissioners.

BRITISH HOME FOR INCURABLES, CLAPHAM.—A pleasant gathering took place on the evening of January 25th, at this institution, on the occasion of an entertainment under the direction of Mr. R. G. Salmond, the secretary. The programme of the evening was varied and included some capital singing by Messrs. Brett, Read, Hall, and Morgan; recitations by Mr. C. W. Annesley Trollope, which were enthusiastically received; and, by the kindness of Messrs. Mead and Deverell, the audience were treated to ventriloquism and conjuring by Professor Hellis, of the Royal Polytechnic Institution, a noticeable and thoroughly appreciated feature of which was the wonderful production of a packet, properly directed to each patient, containing a welcome and suitable present; nor were those forgotten who, owing to their terrible and incurable maladies, were confined to their beds, as Professor Hellis paid them all a visit, and distributed the gifts. The idea of bringing together in friendly intercourse, at this season of the year, all those connected with the management of the charity, is an excellent one; and, this being the first Christmas entertainment that has taken place at the Home, it is a pleasure to record that it was a complete success, and gave intense satisfaction to both visitors and patients. It is to be hoped that it may be the means of bringing the urgent claims of this most deserving and national charity before the public. Among those present were: His Highness the Raja of Rampur; Captain Bedford Pim, R.N.; Mr. Krishualal Datta; Dr. Gardiner; Dr. and Mrs. Rugg; Dr. and Mrs. Cooper; Mr. and Mrs. J. A. Shaw Stewart; Mr. and Mrs. Frank Bevan; Colonel and Mrs. Clifton Gascoigne; Colonel and Mrs. Dugmore; Colonel Bates; Major and Mrs. Dundas; General and Mrs. Eliott; Mr. and Mrs. John Young; Mr. Baber; Mr. and Mrs. Hubert Scott; Miss Ripley; the Misses Cooper; the Rev. E. Maughan; Mr. and Miss Clarke; Mr. and Mrs. Forrester.

CORONERS' EXPENSES FOR MIDDLESEX.—The following were the disbursements of the different coroners for Middlesex, passed at the January Sessions: Sir John Humphreys, Eastern District, 312 inquisitions from November 13th to December 31st, £478 14s. 6d.; Dr. George Danford Thomas, Central District, 301 inquisitions, from November 11th to December 31st, £581 19s. 6d.; Dr. Diplock, Western District, 134 inquisitions, from November 13th to December 31st, £258 3s.; Mr. W. J. Payne, Liberty of the Duchy of Lancaster, 16 inquisitions, October 1st to December 31st, £38 19s. 6d.; Mr. Charles St. Clare Bedford, City and Liberty of Westminster, 59 inquisitions, from November 1st to December 31st, £123 18s.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.—The annual meeting of the Microscopical Section of the Manchester Medical Society was held on the 23rd ultimo. The following were elected officers for the ensuing year. *President:* Dr. J. Dreschfeld. *Vice-President:* Dr. D. J. Leech. *Committee:* Mr. J. Broadbent; Dr. J. Dixon Mann; Dr. J. S. Bury; Dr. A. H. Griffith; Dr. H. Tomkins; Mr. A. W. Stocks. *Treasurer:* Dr. H. Ashby. *Secretary:* Mr. A. H. Young.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. C. Theodore Williams will re-open the adjourned discussion on the Association of Bacilli and Tuberculosis.

TUESDAY.—Royal Medical and Chirurgical Society, 8 P.M., Ballot. 8.30 P.M., Mr. Christopher Heath: Aneurysm of the External Carotid Artery, Ligature of the Common Carotid. Mr. Howard Marsh: Ligature of the Carotid and Right Subclavian Arteries for Aneurysm of the Aorta. Mr. Henry Morris: Aneurysm of the Arch of the Aorta, involving the Innominate Artery, with Remarks on the Distal Ligature.

WEDNESDAY.—Hunterian Society, 7.30 P.M., Annual General Meeting for the Election of Officers. 8 P.M., The Annual Oration will be delivered by Mr. E. G. Gilbert in the theatre of the London Institution.—Royal Microscopical Society, 8 P.M. Annual Meeting.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. Morton will open a Discussion on the Report of a Committee of the Society appointed for the purpose of Inquiring into the Mortality referable to Alcohol.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

SAD CASE OF A SURGEON'S WIDOW.

SIR,—May I acknowledge the following donations I have received in answer t the appeal I was enabled, through your kindness, to make in your JOURNAL o January 20th for poor Mrs. Stephens? T. Smith, F.R.C.S., £2 2s.; Dr. Bul Hereford, £1 1s.; Henry Stear, Esq., £1 1s.; Dr. Gardiner, £1; J. A. Shaw Stewart, Esq., £1; L. L. Powell, Esq., 10s.; "K.", 10s.; H. A. L., 5s.; ditto, 5 I only require a few pounds more to supply her with some necessary clothing and hope to obtain a passage for her in the *Drummond Castle*, sailing o the 27th instant.—I am, sir, your obedient servant,

R. G. SALMOND, Secretary.

British Home for Incurables: Offices, 73, Cheapside, E.C., February 6th, 1883.

M. R. C. S. (Carlton).—Dr. Duhring's *Atlas of Skin-Diseases*.

ALCOHOL AND INTOXICATING DRINKS.

SIR,—I regret to see so devoted a friend to temperance as Miss Richardson, f into an error very natural to all who, from having had no medical trainin are practically unacquainted with the facts of the pathology of alcoh Danger to the reformed inebriate does not lie in alcohol as alcohol, but drinks in which this narcotic poison is present in intoxicating proportio I have found 1½ per cent. of alcohol in ginger-beer, which has been drunk, only without harm, but with considerable benefit, by the reformed. I ha also seen marked good follow the administration of various unintoxicat beverages containing from 5 to 2 per cent. Alcohol, probably (1, for one, h been unable to invalidate the conclusions of M. Muntz) exists in the air, ear and water around us, as a product of organic decomposition. The total stinence movement and the rescued inebriate are concerned simply w intoxicating drinks of all kinds, and of every strength. With unintoxicat drinks, whether these contain, or do not contain, alcohol, the temperan reformation wages no war. If I am not misinformed, the Inland Reve classes all liquors with less than 3 per cent. of proof spirit (=1.37 per cent absolute alcohol by weight) as non-intoxicant. I should be glad to see limit raised, as you suggest, to 2 per cent. of absolute alcohol by weight (= per cent. of proof spirit), as any drink containing not more than this quan by natural fermentation, is practically unintoxicating. A sample of un toxicating raisin wine, containing 1.61 per cent. of absolute alcohol by we (=3.54 per cent. of proof spirit) is now before me. It is perfectly safe for reformed drunkard, and it is practically non-intoxicating, for it is impos to conceive of anyone drinking enough of it to produce even incipient in cation. It would, in my judgment, be a severe blow to total abstinen the Government were to impose a spirit duty on the great variety of favo non-intoxicants which have done so much, in recent years, to popularise extend the practice of temperance.

When we speak of any article as a poison, we, of course, mean in a s sufficient to produce the symptoms characteristic of the particular p Of the effects of a minute dose of alcohol, or aconite, or any other poiso know nothing. We cannot tell whether there has been a beneficial or i jurious effect, or, indeed, any effect at all. In a word, the total abstine the temperance movement is total abstinence from all *intoxicating* liqu

NORMAN KERR, M.

Your obedient servant,

January 20th, 1883.

A COLLECTOR.—The portrait of Dr. John Arbuthnot is rare; the autogra B. S. Albinus very rare. Pettigrew states there is not one in the Leyde versity, where he was so long a professor: neither is there one at the U sities of Oxford or Cambridge, or the Royal College of Physicians; the College in Lincoln's Inn Fields is more fortunate, possessing two; but M. Stone has several, formerly in the possession of John Abernethy.

WATER CONTAMINATED WITH LEAD.

SIR,—I have read the letter of "Mr. Arthur Roberts" in your issue of th instant, in which he says: "I have always found that filtering remo the lead." It is a great pity that such a statement as this should be pub There are many cases in which water contains lead, and filtration is q efficient to remove it. It very often happens that water of certain contaminated with lead, will not give it up even to a charcoal filter evident that the experiments which Mr. Roberts has made have some classes of water only.—Yours truly,

G. W. WIGNER, F.C.S., 37, Lombard Street, E.C., January 23rd, 1883.

THE OLDEST MEMBER.—Both John and William Hunter were members old Corporation of Surgeons. John Hunter was buried under the ch St. Martin's-in-the-Fields; the remains were subsequently removed t minster Abbey. The remains of William Hunter were buried in the vault of St. James, Piccadilly; he was the founder of the Hunterian in Great Windmill Street, to which he removed in 1770.

Homes for Imbeciles.

R,—In reply to the letter of Mr. Cassan, in your JOURNAL of this date, asking for information on the above subject, I beg to inform you that cases are received here for annual payments, varying from fifty guineas upwards, according to circumstances. Although called an "Asylum," this institution is really a home and school for the education and training of children of weak intellect. The majority of the pupils are elected by the votes of the subscribers to the institution; but we have also a large number of payment cases. Applications for the admission of patients, and all communications of a business nature should be addressed to the secretary, Mr. William Nicholas, at the office, 36, King William Street, London Bridge, E.C.—I am, yours faithfully,

CHARLES S. W. COBBOLD, M.D.,
Redhill, Surrey, Jan. 20, 1883. Medical Superintendent, Earlswood Asylum,

R,—A patient of mine, in only moderate circumstances, is wishful to find a uitable place where he can send his daughter (who is weak-minded and very bstinate, and of whom they can make nothing at home), aged 15 years. Can ou give me any information?—I am, sir, yours truly,

F. A. CAMPION FLETCHER.
Crosshills, *viâ* Leeds, Yorkshire, December 23rd, 1882.

*** The Royal Albert Asylum, Lancaster, we think, takes in patients belonging to Yorkshire. Most of the patients are admitted there on the voting ystem, but some patients are admitted by payment. Dr. Shuttleworth, the edical superintendent, will no doubt furnish particulars. If the charges ere be too high, the Western Counties Idiot Asylum, Star Cross, Exeter, ight be tried, and a letter asking particulars should be sent to the superindent.

A Personal Query.

—I hoped some person having more experience than I have would have plied to the letter of your correspondent "A.M.D." under this heading in e JOURNAL of January 20th, as it refers to a matter in which I am personally terested. However, as no one else has replied, although I have had only out seven years' experience of India, he is welcome to this experience, such it is. In the first place, his case is incomplete for a definite diagnosis. Did e irregular cardiac action begin very suddenly? Is there not irregularity of e bowels? Is there not occasionally copious urinary deposit? Is there not eplessness (but this will depend on his age)? Were the intermissions de-ted by any other doctor than himself? Without answers to these questions annot make sure, but I presume his is similar to cases I have successfully ated with ℞ Ferri et quiniæ cit. ʒj; acid hydrochlor. dil. ʒj; aquæ ad ʒviij. lf a wineglassful three times a day; occasionally for a while adding one-teenth of a grain of strychnine to each dose. Rawdon McNamara's wine is metimes like a charm in those cases; equal parts of the wines of aloes, iron, l rhubarb, a teaspoonful of the mixture in a glass of sherry an hour before ner. Galvanism to the transverse colon I have found to dissipate those nptoms. In the case as it is given, the probabilities are all against its being anic.—Yours faithfully,

JOHN MARTIN, Surgeon A.M.D.
'ork, February 1st, 1883.

'AMPBELL.—The lines were written by Sir William Browne, M.D., and are ollows:

"The King to Oxford sent a troop of horse,
For Tories own no argument but force;
With equal skill, to Cambridge books he sent,
For Whigs admit no force but argument."

Abolishing a Fever.

E are, it seems, more ways than one of abolishing disease. Surgeon-or Henry King, Principal of Madras College, and Professor of Medicine in College, publishes, in the *Dublin Medical Journal* of this month, a "Report Case of Enteric Fever treated in the General Hospital, Madras,"—a report ch he naively says has little other interest than that it is a typical case of nary typhoid in an old Indian resident. He explains this interest as ows:

Sir Joseph Fayrer, in his recent valuable Croonian Lectures on Indian ıate and Fevers, states that he does not gather from any writings which ad seen by Dr. Gordon (late Surgeon-General of the British Medical Service fadras), that this officer denies the existence of enteric fever, identical ı what we know in this country, in India; but that he denies its pytho-c origin, and attributes it to climatal, probably malarial, causes. I think ıy venture to say that a different impression prevails among medical ers in the Madras Presidency. It is a grim joke there, that Surgeon-eral Gordon had 'abolished' enteric fever, partly by denying its existence, partly by making its appearance in returns of sick exceedingly trouble-e to the diagnoser through the formidable official catechism to which d."

is mode of abolishing disease should perhaps be designated as the official ıod. It is, however, not unknown to nosologists elsewhere.

. (Liverpool).—There is plenty of time, as the election will not take until Thursday, July 5th. This answer applies also to a "Fellow by ı.", Birmingham.

Cigarettes and Pipes.

ı reply to "M.R.C.S.", may I state that I believe that the reason cigarette ing is more injurious than using a pipe, may be found in the fact that tter retains the injurious parts of the smoke, whereas, in the former, find their way on to the lips, and so on? Some say that taking the e into the trachea (as is usual in cigarette smoking) is the cause; but I t is not so, for I inhale the smoke from both pipe and cigarette, and I hat the pipe still does me less harm. May I suggest to "M.R.C.S." that se of a tube would enable him to smoke his favourite with the minimum consequences?—Yours, etc.,

AN OLD SMOKER.
cigarette is more injurious than a cigar or pipe, because, in smoking ttes, smokers generally inhale the smoke straight into the lungs. If ly thinks of the irritation smoke causes the eyes, one can easily imagine jurious effects of smoke over the whole mucous surface of the lungs.—faithfully,

JAMES SHUTER.
ew Broad Street, E.C., February 3rd, 1883.

—Not being an apothecary, our correspondent cannot legally charge for nes supplied, and no such claim would be allowed. 2. The charge of a visit would, under the circumstances, be moderate.

Unqualified Practitioners.

SIR,—In your article on the inquest lately held by me at Castleford, the following points demand from me a brief explanation. First, as to the fact of Mr. Jackson not having been called as a witness, allow me to state that it was his own fault that he was not present, as I had sent a policeman to him the day before the inquest, to tell him that he could be present and give evidence, but that I could not treat him as a medical witness. Had he desired to give evidence, it would have been my undoubted duty to have sworn him. Next, as to there being no *post mortem* examination, allow me to ask you what possible light it could have thrown on the inquiry? There was no doubt at all in the mind of Dr. Kemp that the child had died of laryngismus stridulus. It had been under his care for that disease; he had recognised the symptoms from the first; had given the mother an unfavourable prognosis; and, after hearing all the evidence at the inquest, he deposed that the child had, without doubt, died from laryngismus stridulus. Surely the cause of death was sufficiently proved by this medical testimony! One point more, and I have finished. You observe that I called Mr. Jackson a "charlatan." I did so, and used it as a word befitting the occasion. I would fain have excused myself from holding this inquest, and it was my intention to have passed it on to my deputy, who is a lawyer, but I reflected that the case required medical handling, and, as it had occurred outside the limits of my own practice, I hoped that no professional bias would be apparent in my remarks to the jury, notwithstanding that it would be my duty to speak plainly in the public interest. In this, however, I fear I have failed.—I remain, sir, your obedient servant,

Pontefract, January 23rd, 1883. CHARLES GRABHAM, M.B.Lond.

Warts after Performing a Necropsy.

SIR,—I notice, in the BRITISH MEDICAL JOURNAL of December 9th, a letter on the subject of warts after *post mortem* examinations. Possibly my own experience may be of interest. In 1867, while sewing up a body after a *post mortem* examination, I ran the needle through the skin over the last joint of the third finger of the right hand. I cleansed the wound as carefully as possible, and applied lunar caustic. The finger became swollen, and very painful, the glands in the axilla somewhat inflamed. Some time afterwards, a wart appeared, which has defied treatment for removal for fifteen years. It is at times somewhat inflamed, and even painful. The finger has been my weak finger; and after writing for some time becomes painful to the joint; the pain sometimes seems to extend even into the wrist. A rheumatic pain, which occasionally troubles me in the right elbow-joint, may or may not have some relation to this cause. I notice always after performing *post mortem* examinations, that this finger is more sensitive, and the base of the wart redder than usual. A week ago, I performed a *post mortem* examination, and this same condition has resulted as formerly. I shall use the acid nitrate of mercury which you recommend. I think that this treatment is also recommended in Holmes's *System of Surgery*, vol. i. May I ask, in this connection, if you consider smearing the hands with carbolised vaseline desirable as a protective in *post mortem* examinations? Can you recommend any better protective?—Very truly yours,

W. THORNTON PARKER, Acting Assistant-Surgeon, United States Army.
Fort Elliot, Texas, January 16th, 1883.

SIR,—Having had a severe personal experience with the so-called "wart tumour", which sometimes follows abrasion of the fingers during a necropsy, I beg to send to "B. C.", even from this distance, a word of sympathy, and perhaps a method of easy cure. In my case, the tumour had existed for six years; and being upon the first finger of my left hand, occupying entirely the posterior surface of the second phalanx, and being, at its highest point, fully a third of an inch in thickness, with an inflamed base and several shallow openings, was a great disfigurement. A great variety of treatment had been tried without avail, when, at the suggestion of a friend, I kept it constantly covered by a thick coating of collodion, making daily several applications. The tumour was immediately flattened, and in less than three weeks had wholly disappeared. The *modus operandi* of the remedy is too apparent to require remark.—I am, sir, yours truly,

STEPHEN G. HUBBARD, M.D.
New Haven, Connecticut, U.S.A., January 18th, 1883.

Damiana.

SIR,—I should feel much obliged for information about "damiana", which is described as "a Mexican plant, useful in the treatment of impotence." Can any of your readers tell me what are its preparations, and where procurable? Also whether they have any experience of its efficacy?—I inclose my card, and am, sir, yours faithfully,

S.

*** Damiana is the *Turnera Aphrodisiaca*, a native of Mexico. It is much recommended in the treatment of spermatorrhœa and impotence. The best known preparation is the fluid extract made by Parke, Davis, and Co., of Detroit. The dose is one drachm three times a day, and it should be given in combination with some aromatic, to cover its disagreeable taste.

New Treatment for Paraphimosis.

SIR,—In your issue of the 6th instant I have just read a communication from Dr. M. R. O'Connor, describing a new treatment for paraphimosis, by "winding ordinary twine firmly and closely from before backwards, around the constricted portion of the penis." For some years past I have used a piece of narrow flat elastic, in exactly the same manner, and with very satisfactory results, and always carry in my pocket-case a piece of elastic for this purpose. I think the elastic preferable to ordinary twine, as it exerts more equable pressure on the swollen part of the penis, and is less likely to cut into it. I believe I am indebted for the suggestion to a paragraph in your JOURNAL, but when published I cannot recollect, but am sure it was some years ago.—I am, sir, yours faithfully,

GEO. N. COLLYNS, M.R.C.S.Eng., L.S.A.Lond.
Moretonhampstead, January 22nd, 1883.

Treatment of Menière's Disease.

SIR,—If your correspondent "Percunctari a Peritis" will turn to the *Lancet*, vol. i, 1882, page 180, he will see a note of a case of acute auditory vertigo treated successfully by the application to the mastoids of ointment of biniodide of mercury. Mild cases of labyrinthine pressure, or as called by Dr. Woakes (*Transactions of the International Medical Congress*, vol. ii, page 81), "paresis of the Lower Cervical Ganglia", are not uncommon, and frequently yield to purgatives and tonics; but where the lesion is inflammatory, or apoplectic, as in true Menière's disease, counterirritation seems to promise the best results, and I should be glad to know that it had succeeded as well in other cases as it appeared to in mine.—I am, sir, yours faithfully,

ALAN REEVE MANBY.
East Rudham, January 23rd, 1883.

STEAM DRAFT KETTLE.

SIR,—I am sorry that Dr. R. J. Lee feels himself aggrieved by Allen's advertisement of a "steam draft kettle." I have written to request him not to use this term, and not again to mention my name in connection with it. As Dr. Lee rightly says, I was formerly house-surgeon at Great Ormond Street, and was therefore acquainted with the details of his invention. This acquaintance with details enables me to say authoritatively that the croup kettle, as made by Allen, was not an imitation of any machine then in use at Great Ormond Street.

In my little work on Tracheotomy (published in 1880), when advocating the value of steam, it is stated (page 41) "for this purpose, the ventilating croup-kettle is the most useful. It was made at my suggestion, on the principle of the ingenious 'steam draft inhaler' invented by Dr. Lee; differing from it chiefly in size and in one or two minor points, which, while they render it more convenient as a 'croup kettle', they lessen its value as an inhaler."

In suggesting to Messrs. Allen the kettle as at present made by them, my object was to utilise that which is obviously good in Dr. Lee's inhaler, and to modify, in practical detail, those points which rendered the employment of the inhaler impossible for the croup-bed. Further, I took the earliest opportunity, in my book and elsewhere, of acknowledging the share which belonged to Dr. Lee in the "invention", such as it is. For myself, I have no ambition to become known as an inventor of kettles; neither do I aspire to be considered "either original or ingenious" in this department of work.

During my residence in Great Ormond Street, Dr. Lee's inhaler was frequently used; we did not, however, and could not, use it for the croup-bed. The reason will be apparent to anyone who cares to examine for himself Dr. Lee's instruments as made at the period to which I refer.—Yours faithfully,

ROBERT WM. PARKER.

London, January 29th, 1883.

SIR,—We notice a letter in reference to the above in last week's issue of the JOURNAL. In justice to Mr. Parker, we desire to say that we alone are responsible for the advertisement, and for the use of the term "steam draft kettle"; and we would also say Mr. Parker has no personal interest of any sort whatever in our croup kettle. We are aware that the late Mr. Napier stated that our kettle was an imitation of one in use at the Children's Hospital in Great Ormond Street; this statement, however, is quite inaccurate, as anyone who examines the two articles will at once see.

Though not able to give the date when first introduced, because of the death of the medical man and the break-up of the firm who used to supply them, we should say it is over twenty years since a steam draft inhaler was first introduced, not under that name, but under the simple name of "inhaler"; so the principle of the steam draught has nothing novel about it, even in application in this sense.

In conclusion, we assert that when our first kettle was made, it met a want, and that there was nothing in use at all like it, either at Great Ormond Street or elsewhere. To convince yourself of this, you have only to compare the two instruments together. We further assert that the article now being sold as "Dr. Lee's Steam Draft Kettle" was not made or introduced until after ours, which Dr. Lee carefully inspected on our premises. We have now advertised this article for four years in all the medical papers, so must leave your readers to decide for themselves as to which has the priority.—We remain, your obedient servants,

JAMES ALLEN AND SON.

21 and 23, Marylebone Lane, W., January 30th, 1883.

DR. N. GRATTAN (Cork) wishes it to be stated that the letter concerning the treatment of Gambetta last week referred to in the JOURNAL was not written by him.

A. R.—No legal right whatever.

PRURITUS AFTER HERPES ZOSTER.

SIR,—As I have seen no reply to the question asked on this subject, and as I have been the subject of this itching on more than one occasion, I think perhaps the treatment I adopted successfully to myself may be of use to "Inquirens". The cause of the itching, I believe, is capillary stagnation, and consequent irritation to the peripheral nerves. I therefore bathe the part thoroughly for a quarter of an hour, with water as hot as can be borne, and then rub with a rough towel sharply for about five minutes. This should be done three times a day, or oftener, and I find great benefit result therefrom; in three or four days it is well. Of course the habitual constipation must be attended to. There is always a certain amount of itching after the separation of a scab, due, I think, to the cause already mentioned; if it is not due to this, I do not see how the friction treatment would allay or cure it.—I am, faithfully yours,

A. H. BOYS, L.R.C.P.Ed., etc.

Pill, Bristol.

A MEMBER (Manchester).—No double qualification is necessary for your purpose.

SURPRISED.—The plagiarism is well known, we find, to the author, but he does not desire it to be noticed.

PREVENTION OF SMOKE.

SIR,—I would supplement your letter on the prevention of smoke by the following bits of information gleaned during a year's residence in Canada.

1. The hard coal is broken by machinery, and screened to sizes from a large potato to a bean, to suit the different kinds of furnaces and stoves in which it is to be burned. The same practice should be followed here by the coal-merchants.

2. The bottoms of the grates can be shaken, so that the ashes fall out without the use of the poker.

3. The American self-feeder stands about five feet high, and has a reservoir of coal which keeps it going for twelve hours. There is a round grate in the centre full of glowing coals, and you have a full view of it through mica windows. It is simply perfection in a hall, and warms the whole house. Why does not some manufacturer get it over, and make one on the same pattern, instead of supplying the wretched black affairs which are sold at present?

4. The same remark applies to the cooking-stove. I have had experience of Smith and Welstood's, and have one of Constantine's, but none of them come up to the best American. But I suppose it is the old story. The American affirms he can "lick creation", but takes all he can find best from everyone else. The Englishman says nothing, but sticks doggedly to his own plan, and will learn from nobody.—Yours, etc.,

A. W. WALLACE, M.D.

Parsonstown, January 27th, 1883.

A MEDICAL PRACTITIONER.—There is no legal enactment to prevent anyone from applying a dressing to a wound.

LINSEED MEAL (FREED FROM OIL) AS A MATERIAL FOR POULTICES.

M. LAILLER (*Répertoire de Pharmacie*) recommends linseed meal which has been deprived of its oil as far superior to that which is freshly ground and used in its natural state; his own experience is added to the authority of Deschamps in support of this statement. The latter says: "The oil of the grain is so imprisoned by mucilaginous matter when warm water is added to the linseed meal, that no one has ever observed any trace of the oil; neither the linen nor the part poulticed is ever greased." When the oil is present, it quickly becomes rancid, and seriously affects the skin. M. Lailler states that the meal deprived of its oil makes a lighter poultice, retains its heat longer, and is less liable to give out unpleasant odours and cause unpleasant results than one made of oily meal.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. W. Johnstone, Smethwick; Mr. T. G. Vawdrey, Handsworth; Mr. Thomas P. Smith, Reigate; Mr. Walter Johnson, Norwich; Dr. Jacobs, Dublin; Dr. Murrell, London; Mr. F. Dowell Grayson, Rayleigh; Mr. Alfred H. Young, Manchester; Dr. R. C. Shettle, Reading; Dr. William Walter, Manchester: Messrs. William Galschio and Co., Paris; Mr. E. Burt Callander, London; Dr. Paul Boerner, Berlin; Messrs. C. Griffin and Co. London; Dr. William Legge, Derby; Dr. R. S. Archer, Liverpool; Mr. E. Mason Scott, Kingstown; Dr. H. C. Martin, London; Dr. Fairlie Clarke Southborough; Mr. N. A. Humphreys, London; Our Edinburgh Correspondent; Mr. Theodore Garrett, London; Dr. Crichton Browne, London; Dr. Dudfield, London; Mr. Dentelmain, Weybridge; Spongy Iron Domestic Filter Company; Mr. F. E. Stanlan, Malta; Dr. Ball, Paris; Mr. Thos. H. Pullin, Sidmouth; Dr. Manson Fraser, London; Prof. Vulpian, Paris; Mr. E. Vickers Whitby, Birmingham; Mr. James Ferguson, Perth; Dr. J. Allan, London; Mr. N. H. A. Jacobson, London; Dr. John Gill, Stratford-on-Avon; Mr. W. Cox, Cheltenham; Mr. Frank Slater, Knottingley; Dr. Thi London; Mr. N. Grattan, Cork; Dr. J. K. Spender, Bath; Mr. J. Beatt Stockton-on-Tees; Mr. C. F. Tombs, London; Mr. R. Clement Lucas, Lo don; Mr. H. De Styrap, Middlesbrough; Mr. C. F. Webb, Basingstoke; M W. Young, London; Dr. Borchardt, Manchester; Dr. Warren, Boston; M J. J. Knight, Carlton; Mr. E. East, London; Mr. M. F. Bush, Bristol; M F. Swinson, Birmingham; Dr. Steele, London; Mrs. Mary Wardell, L don; Mr. K. R. Allen, Tipton; Mr. C. Smith, Christiania; Mr. J. Erne Lane, London; A Medical Practitioner; Dr. H. Gervis, London; Dr. Wilson, Leamington; Mr. W. J. Le Grand, Dublin; Dr. F. Robinson, Ea bourne; Mr. James E. Adams, London; Mr. James Shuter, London; G. E. Shuttleworth, Lancaster; Dr. Sawyer, Birmingham; Dr. F. W. Bar London; Dr. D. Adams, London; Dr. Brailey, London; Mr. W. E. L. Bat Birkenhead; Mr. W. Thornton Parker, Texas; Mr. E. Clarke, London; E. F. Scongal, Huddersfield; Dr. John S. Main, Withington; Dr. J. Stowers, London; A Member; Mr. C. J. Evans, Northampton; Mr. G. Henry, Bury St. Edmund's; Mr. David Collingwood, London; Mr. G. Hart, Birmingham; Dr. Littlejohn, Edinburgh; Messrs. Krohne and S mann, London; Mr. A. H. Boyes, Pill; Dr. Bradley, Jarrow; Dr. B. T kins, Manchester; Mr. F. Cooper, Ross; Mr. Thomas Richards, Birmingh Mr. Roger William, London; Mr. T. B. Carlyon, Buenos Ayres; Mr. Ch McCaskie, Huddersfield; Dr. A. Reid, London; Dr. Hermann Weber, don; Messrs. Castell Brothers, London; Mr. A. Rüffer, London; Mr. W Lamb, London; Mr. A. Hirst, Prestwich; Mr. John McDonald, Bushey; Huggard, London; Dr. W. Newman, Stamford; Our Aberdeen Corresp ent; Mr. C. H. Wise, London; Dr. A. Drummond Macdonald, Liver Mr. James Davison, Ballinakill, Queen's County; Our Birmingham C spondent; Mr. George Eastes, London; Mr. John Martin, Cork; Dr. son, London; etc.

BOOKS, ETC., RECEIVED.

The Principal Southern and Swiss Health-Resorts; their Climate and M Aspect. By William Marcet, M.D., F.R.S. London: J. and A. Ch 1883.

Knight's Annotated Model By-laws of the Local Government Board rela (1) Cleansing of Privies, etc., (2) Nuisances, (3) New Streets and Bui London: Knight and Co., Local Government Board Publishers. 188

SCALE OF CHARGES FOR ADVERTISEMENTS IN T "BRITISH MEDICAL JOURNAL".

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Post-Office Orders should be made payable to the British Medical Ass at the West Central Post-Office, High Holborn. Small amounts may b postage stamps.

THE HUNTERIAN ORATION,

livered February 14th, at the Royal College of Surgeons of England

By T. SPENCER WELLS, F.R.C.S.,
President of the College.

t. Vice-President, My Lords, and Gentlemen,—Just seventy
ırs ago, Matthew Baillie and Everard Home, being, to use their
n words, "desirous of showing a lasting mark of respect to the
:mory of the late Mr. John Hunter, which shall at the same time
press the very high sense they entertain of the very liberal con-
ct of the Royal College of Surgeons, in supporting and preserving
: Hunterian Collection," agreed with Sir William Blizard and Mr.
ne to endow "an annual oration, to be called the Hunterian
ıtion, which shall be read or delivered in the theatre of the said
lege on the 14th day of February in each and every year (being
: birthday of John Hunter)." They devised that such oration
ıall be expressive of the merits in comparative anatomy, physio-
y, and surgery, not only of the said Mr. Hunter, but also of all
h persons as are or shall be from time to time deceased, whose
ours have contributed to the improvement or extension of chirur-
ıl science." After the first oration in 1814, one was delivered
ry year until 1849. Since that year, it has been biennial; and
indefinite phrase, "from time to time deceased," has been inter-
:ed as applicable to the Fellows and Members and other distin-
:shed men who have died since the delivery of the previous oration.
s custom I shall follow; and, before alluding to any other sub-
, I will endeavour to bring before you some account, necessarily
/ brief, of a few of the men who have died since February 1881,
hose labours have contributed to the improvement or extension
hirurgical science."

/ere I to attempt to do more than make a passing allusion to such
ı as Schwann, and Bischoff, and Darwin, and Rolleston, and in-
le comparative anatomy and physiology in the term "chirurgical
nce"—which in the home of the Hunterian Museum I should
ost be bound to do—the short space of one hour would be so
y taken up as to exclude any other subject. And even if I were
nclude some of our countrymen who have rather advanced the
lical department of chirurgical science, and allude to such veterans
Christison and Billing, or Alderson, or Watson, whose loss is so
:nt, and to whom personally I shall always be grateful for kind
ouragement in the earlier years of my practice in London; or to
Scotch brethren, as Pirrie and Spence; or Thompson, of Lisburn,
did the first ovariotomy in Ireland; or McClintock, a leader
ng our Dublin brethren—any notice must be so brief as to be
ess. Still more so, were I to include those of our brethren abroad
ı America, like Pirogoff, Busch, Hueter, Davaine, Atlee, who now
st from their labours," and whose "works follow them." I am
pelled, therefore—not from want of respect or appreciation of
ı men, but simply from want of time—to limit my remarks to
se Fellows and Members of this College who have died since Mr.
den's eloquent oration was delivered here two years ago.

hree hundred and sixty-eight Members and Fellows are included
his death-roll of only two years. A hundred years ago, in 1783,
n Hunter had just bought the house in Leicester Square, which
s altered form of Alhambra was burnt down last year, the mem-
of this College numbered 835. In a hundred years, we have
eased in number more than twentyfold: for we have now 16,093
ıbers and 1,186 Fellows—a total of 17,279 men associated in our
t. In the two years which have passed since the last Hunterian
ion, 368 of the associates have died. The average age of the Fellows
about sixty-six years, and of the Members fifty-seven years. One
ow and four Members attained the age of ninety years and upwards,
other thirteen Fellows and twenty Members ages upwards of eighty.
w Members died within five years of obtaining their diplomas,
we lament the loss of one Fellow who was only admitted last year.
vo of our deceased Fellows, Luke and South, had attained the
est position in our College. Both were members of council,
examiners, both had been president twice, and both had been
hers of surgery in large metropolitan hospitals.

t. Luke was twice president of this College, in 1853 and 1862.
delivered the Hunterian Oration in 1852. For many years he
one of the examiners, and he was connected with the London
pital from 1860 as a pupil, till his death at the age of eighty-two, when, after having long retired from private practice, he held the office of consulting-surgeon. He attended the lectures of Abernethy and Astley Cooper, and was one of the personal links connecting these great masters of our art with the surgeons of our time. Luke's work as hospital surgeon and as teacher certainly contributed to the advance of surgery in his time. In his operation for femoral hernia, by small incision and division of the stricture without opening the sac, his success was very remarkable. In his Hunterian Oration, Mr. Luke refers to a letter of Hunter's, urging upon this College the establishment of a library, which he "would consider one of the happiest wants of his life," as a proof that he regretted his own deficient early education. And Mr. Luke strongly insisted upon the necessity of a good general education for all medical men, and upon the study specially of French and German; and he spoke with great satisfaction of the examinations in the classics recently instituted by the council of this College. Turning to the study of Hunter's character as an example to ourselves, he noted the "perfect honesty and integrity of all his scientific and professional acts," his indifference to money—except as enabling him to promote his favourite objects—his beneficence, his wonderful industry, and his careful subjection of all his doctrines to the test of fact or experiment.

South was one of the last surviving relics of the staff of the then united hospitals of Guy's and St. Thomas's. Apprenticed to the younger Cline of St. Thomas's, and after very many years' service as assistant-surgeon there, succeeding too late in life to the full surgeoncy. He was a member of our Council from 1841 to 1871; was an examiner for many years: was Arris and Gale Professor; delivered the Hunterian Oration in 1844; and twice, in 1851 and 1860, was honoured by the highest distinction his colleagues on the council could bestow. His works are, translations of Otto's well known *Compendium of Anatomy* and of Chelius's *Surgery*, which he greatly enriched by his own notes. His text-book on the *Bones* and his *Household Surgery* have both done useful service. When Frank Buckland discovered the coffin of John Hunter in St. Martin's vault, it was owing to the exertions of South that the body was removed to Westminster Abbey, and the inscription on the tablet, which has been placed over the grave in the abbey, was written by South. For many years he had been engaged on a history of this College and of the Barber-surgeons. His widow has permitted me to read the manuscript volumes—most beautiful specimens of neat and distinct handwriting, and very extraordinary evidence of industrious research. One extract from these volumes I may now use as illustrating the advancement of the College since Hunter's time.

A former President—then styled Master of the Corporation—Mr. Gunning, wrote as follows, on retiring, in July 1790, from the office of Master. John Hunter was one of those present when these remarks of the Master were read. After some complaints of the imperfect way in which the College books were kept, and the unnecessary expenditure on dinners, he said: "Your theatre is without lectures; your library-room, without books, is converted into an office for your clerk; and your committee-room has become an eating parlour.....If, gentlemen, you make no better use of the Hall than what you have already done, you had better sell it.....I am sorry to observe that you have instituted lectures neither in surgery nor indeed in anatomy of any degree of importance, nor have you held out any gratification or reward for rising merit."

Now, our library contains about 39,000 volumes, and every year becomes a more complete library of medicine and the auxiliary sciences. Our museum is our chief possession—the most complete of its kind in the world; and the offices of assistant-conservator are valued as rewards to rising merit. Our hall is not only used for the lectures of Flower, Parker, Power, and Eve, and of a succession of our leading practitioners, but for the examinations of the young men who will become the surgeons of the future. The Council has already taken the first step for providing additional accommodation for the examinations by securing the services of one of the greatest architects of our time—Mr. Waterhouse—to report upon different plans, which will have to be carefully considered. I am also hopeful that, by a judicious outlay of part of our accumulated funds—assisted, perhaps, by contributions or legacies—we may supply what is now felt to be a great want; I mean such a complete central pathological laboratory as may assist the men who are leading the advance of experimental physiology and pathology. Dr. Ogston's work at Aberdeen, on Micrococcus Poisoning, has already proved how very useful such a laboratory may be, and more than justifies the most sanguine hopes of the good to be expected from the endowment of a chair of pathology in the northern university by the munificence of my predecessor in the presidency of this College—Sir Erasmus Wilson.

George Gulliver, who died last year in his seventy-eighth year, was a pupil of Abernethy, dresser to Lawrence, surgeon in the Guards, one of the first Fellows of the College under the new charter—elected "in recognition of purely scientific merit"—for twelve years a member of our council, and Hunterian Professor of Comparative Anatomy and Physiology. In 1863, he delivered the Hunterian Oration in this place, warmly criticising some who had said that the material for these orations is "nearly exhausted." He maintained that "there is a perennial interest and instruction in reviewing the works of a man of genius, in the now steady and now fitful lights and shadows of advancing science;" and he warmly upheld, against what he believed to be unfounded claims of French and German physiologists, the just merits of the British school of physiology; instancing the labours of Hunter and his disciples, especially of Hewson, who "fairly entering that prolific field of cells and endosmosis which was left utterly forgotten and barren for upwards of half a century afterwards, until new minds, with the aid of better instruments, found in it such a variety of rich fruits, and confirmed so many of his long-neglected conclusions."

In one of Gulliver's lectures, he asserted that a moderate quantity of beer may promote the formation of a chief product of digestion—the chyle. His illustrations of the molecular base of the chyle, of the intimate structure of tubercle, of the softening of fibrine, and his investigations into fatty degeneration of tissues and their relation with arterial changes and apoplexy, were all in advance of the pathology of his day. He argued that the modern "protoplasm" is but a synonym of the old "coagulable lymph," and that a delicate shut sac might be formed by coagulation of fibrine without any cell-agency. His demonstrations that the red blood-corpuscles in the mammalia are non-nucleated, while in the oviparous vertebrated they are nucleated, was a distinct addition to the knowledge of the age; and his experiments upon the conditions under which fractures of the patella are united by bone or only by ligament, as well as his observations upon shortening of the neck of the thigh-bone in young persons, were important additions to surgical diagnosis and pathology. Gulliver's life affords another proof that the career of an army surgeon is far from being unfavourable to the cultivation of science. His son, now assistant-physician at St. Thomas's, has already shown that he is worthily following in the path which earned honour for his father.

The name of George Critchett recalls to many who hear me, meetings for several years at our council table, and his pleasant companionship at many less serious gatherings; and it would be difficult to name one whose loss has been more sincerely regretted. His life and work are remarkably illustrative of the recent extraordinary progress of ophthalmology in this country. It has been said of him that his career commenced in the "pre-scientific period of ophthalmology." But it must not be forgotten that the foundations for the most important of the advances of the German school were laid in England by Hunter, in ground prepared by Isaac Newton and Thomas Young. The anatomy of the eye was well known before Hunter's time; and Haller and Hunter, with Newton and Young, had done much to increase our knowledge of the physiology of vision. Daviel's extraction of cataract, Cheselden's iridotomy, and the treatment of diseases of the lachrymal sac, were already proofs of great progress. But it was not until after the beginning of this century that well educated surgeons in any country devoted themselves to the study of diseases of the eye. Hunter's papers on the use of the oblique muscles, on the colour of the pigmentum of the eye in different animals, his investigations into the structure of the crystalline lens, and the large number of specimens illustrating the comparative anatomy of the eye, now in our museum, are proofs of his interest in the subject. The foundation of special hospitals in London in 1808 and 1810, followed soon after in other large towns and in Scotland and Ireland, and the works of such great surgeons as Travers, Lawrence, Guthrie, and Tyrrell—of such an anatomist as Jacob, and such an oculist as Mackenzie—did much to increase the general knowledge of diseases of the eye. In Germany, until about thirty years ago, the school of Vienna occupied the most important position. Then the school of Berlin entered upon the path which has led to as great, as rapid, as extraordinary a progress as ever has been recorded in the history of any other branch of medicine, equalled only by the advance gained during a still more recent period in abdominal surgery, surgical gynæcology, and the use of antiseptics.

It was in 1851 that the great physiologist Helmholtz invented the ophthalmoscope, and thus enabled us to investigate some diseases of the eye which before were completely hidden in darkness. Just at this time Albrecht von Gräfe began his brilliant but short career, and in twenty years he worked out all the most difficult an complicated questions in ophthalmology for the aid of the practic surgeon. Gräfe called to his side many able men to assist in h great work. Heinrich Müller worked out the microscopical an pathological anatomy of the eye; Donders, the affections of refra tion and accommodation; and one distinguished German, wh joined this college after a brilliant career in Berlin and Paris- Liebreich—devoted himself mainly to the study and teaching of t ophthalmoscope. I well remember, when in 1853 I brought fro Berlin almost the first ophthalmoscope which was tried in th country, with what delight Critchett watched its earliest tria When some called it a "toy," and others feared its possible dange to a sensitive retina, Critchett eagerly tested its utility. He, a a fellow-workman, happily still among us, beloved by many a honoured by all, who had done much to increase knowledge of t "parts concerned in the operations on the eye," and whose mic scopical researches had greatly increased our knowledge ocular histology (even to our visitors I need not name Bowma side by side, with generous rivalry, and throughout a long and u ful career, either by improvements in practice, or by clinical tea ing and additions to our literature, greatly assisted in the rec progress in the science and art of ophthalmic surgery. How mu of this progress is due to the teaching and example of Critchett Moorfields and the Middlesex Hospital, it is perhaps difficult to s But it is certain that no one could see him operate without admi tion, or without some desire to be able to imitate his perfect co ness, his delicate touch, and his exact precision; while all mi learn how a successful operator, by attention to every detail wh can influence the result, deserves and obtains his success and reputation. A junior colleague, Soelberg Wells, had studied Berlin under Gräfe, and his handbook became a valuable gu for our students. His faithful and fertile work at Moorfields a King's College will not be forgotten in the annals of those inst tions. Liebreich will be remembered by his enthusiastic and s cessful work for ten years at St. Thomas's, and the translation of "Atlas of Ophthalmology" (equally distinguished by artistic s as by a faithful and trustworthy interpretation of intra-oc changes), will always be valued as a notable contribution to literature of modern ophthalmology. Our public schoolrooms h also been greatly improved by the seats and desks suggested by endeavour to remove some prevalent causes of defective vision. now enjoys artistic leisure in a sunnier clime. George Critch labours are over, but his son remains, and we may rejoice in continued accession of able workers in this special field; and w we have so many special hospitals, and eye departments in so m general hospitals, and such men as work in all, there is no fea the future of ophthalmic surgery in the country where its fou tions were laid—in optics by Newton, and in physiology by Hur

Probably no man in the whole world, during the last twen thirty years, has done so much with his own hands to preve relieve severe pain as Joseph Clover. As an administrator of c form, or of some other anæsthetic, his services were in almost stant demand. For many years resident in University College pital, then extensively occupied in general practice, he becan well known for his careful and precise mode of administering cotic vapours or gas, that little time was left him for other pur In some respects, although he supplied a real want in daily tice, this limitation of his work is to be regretted; for the va improvements he made in several surgical instruments, especia the double-current exhausting syringe, so useful in lithotrity, wards improved by Bigelow, prove that, with less delicate heal more leisure, his many friends would have been able to record numerous and enduring memorials of the life-work of a sing industrious man. Now they must be content with thinking

> "On that best portion of a good man's life,
> His little, nameless, unremembered acts
> Of kindness and of love."

I should hardly do more than mention the name of Dr. Pe though one of our Members, as he was so purely devoted practice of a physician, if he had not been one of our Exa And now I can do little more, for want of time, than allude valuable gift to our museum, in recognition of which, in 18 received the Honorary Gold Medal of the College. He die visiting St. Thomas's Hospital, in a ward which had been un own charge during his years of active work and teaching.

[Mr. Wells briefly recapitulated the services of Edwards Cri was a remarkable instance of a man who, busily employed daily work of a large general practice, also took an active medical politics, while assisting usefully in the advance of zo

nce and human and comparative pathology; of Dr. Griffith, of ver Street, who died at the age of ninety, after having honour- carried on a very large general practice for more than sixty rs; of George Macilwain, so well known at the Medical Society the Royal Institution for so many years, who wrote the *Life of rnethy*, and a thoughtful book entitled *Medicine and Surgery Inductive Science*, and reached the age of eighty-five; of the octo- arian Francis Godrich, one of the founders of the Medical Bene- nt College; of John Merriman, of Kensington, one of a very old lical family; of Frederick Toulmin, who died in his eighty-fifth only ten days ago, after having practised for nearly fifty years Clapton; he had been a dresser under Sir Astley Cooper; of hen Alford of Hampstead, who took an active and useful part in the mpts made for several years past to protect and reform habitual kards; Hemming, who worked hard at disease of the ear; and Duke laphain; of Donald Napier, a surgeon who inherited mechanical us, and though he devoted himself specially to dental surgery, he tructed and improved many ingenious surgical instruments. The ciation of Surgeons who practise Dental Surgery owe a great deal to ier's zeal, and he did very much, although he died at fifty, to ove the position of dental surgeons. Nor was Hardwicke for- en, who left practice on being elected Coroner for Central llesex, and died at his post; nor Heckstall Smith, almost as known in London as in Kent, where he practised for more than years. The lives of most of these gentlemen have already fully recorded in our obituary columns.

rning from London to the provinces, Mr. Wells spoke first of who reached old age, namely, Thomas Radford, who attained ge of eighty-eight, and for sixty-three years had been asso- d with St. Mary's Hospital for Women in Manchester.

phens, of Shields, was an octogenarian, whose services to the town rved were gratefully acknowledged; Greenhow of Newcastle one of the original Fellows of the College. At his death, at ge of ninety, there was only one senior Fellow on the list.

re of Bath, was also an octogenarian. Green, superintendent of irmingham Lunatic Asylum, died at eighty-one. Williams of sea, who died at the age of seventy-nine, the son of a surgeon practised nearly a century ago, and was, at that time, the only per of this College in South Wales. Symonds of Oxford, and of Colchester, both old friends of the lecturer, were next ed to.

Wells then spoke of Drewry Ottley, who died last month, aged e author of the best Life of John Hunter—that published Palmer's edition of Hunter's works. Lastly, the lecturer spoke hn Postgate, a most successful teacher in Birmingham, who uch to prevent adulteration of food, drinks, and drugs. Several were introduced into Parliament by the Members for Birming- influenced by Mr. Postgate, and the Amended Acts of 1872 875 are mainly due to his exertions.]

Wells then continued: Time alone prevents me from ng to many other of our deceased brethren whose aver- ge at death represents for each about thirty-five years ofessional work. Pray consider for a moment what that is. Walter Scott wrote: "I have heard the celebrated ler Mungo Park, who had experienced both courses of rather give the preference to travelling as a discoverer in , than to wandering by night and by day the wilds of his land in the capacity of a country medical practitioner." Only ll proportion of our brethren have acted purely as consultants rating surgeons. By far the larger number, some without, but with, some medical qualification in addition to our diploma, been the general practitioners, or "family doctors," of the —the trusted medical attendants of at least nine-tenths of the tion. Wherever their lot may be cast—in town or country— nstruct both rich and poor how to preserve health, and remove id known causes of disease. And although little may be ed of many, we do know that the nation is as much indebted m as to any other class of public servants. By night and by the service of any one who may require help in sickness, at ening or the close of natural life, in mental aberration or in suffering, injured by wound or accident, at almost any dis- in any weather, sometimes suffering themselves from illness -fatigue, the members of this college, often without expecta- reward—perhaps bestowing money, hard earned and ill spared, as affording surgical aid to the needy—ungrudgingly, cheer- gladly do their duty day after day and year after year, until, own, unhonoured, and unsung," they rest in peace. But no— honoured. There may be no monumental epitaph, no bio- nor memoir, nothing beyond the erasure of a name from the College calendar, and yet the nation has lost a good and faithful servant, whose place must be filled by others, who in their turn pass through our portals, and enter upon the work which is prepared for them.

And it is the most important duty of this College, while maintaining the scientific value and character of its diplomas, to guarantee to the public useful and skilful practitioners, really fitted for the daily practice of the healing art. In order to insure the value of the diploma as a proof of education and knowledge and skill, the Council and the examiners, recognising the necessity that the surgeons of the future must be well educated gentlemen, and that their scientific and practical knowledge shall fit them for their daily work, have been earnestly endeavouring to fill up our ranks by attracting, as far as possible, young men who, before they begin professional studies, have had the advantage of as high general culture as can be obtained in our best schools. In this desire, we have the hearty concurrence of the Medical Council and of the College of Physicians; and I trust the day is not far distant when, without either aid or interference from the State, the two Royal Colleges will correct mistakes in the working of the Medical Act, prescribe a common course of study for students, and agree upon a mode of examination which shall secure for the country a body of well-educated medical men, who, either as teachers or as students, in the metropolis or the provinces—as army or navy surgeons, or as civilians, at home or abroad—by observation, by research, by experiment, by improvements in the practice of our art, by additions to our literature, by daily attempts to relieve the sufferings of others, may emulate the best of their predecessors, and, like them, while living be honoured and loved, and when dead not forgotten.

So far I have spoken of deaths among our brethren at home. In India, in our colonies, at sea in our navy, or in our mercantile marine, other losses might be deplored. But I must pass on to speak of some of the army surgeons, who in India, at the Cape, and in Egypt have done honour to their country and their calling. Brigade-Surgeon Martin, who died in India last March, was mentioned in despatches as "attending to the wounded under heavy fire."

Forty years ago, one of our oldest Fellows, whom we all congratulate upon continued vigorous health and continued interest in the progress of modern surgery—a teacher of many who are now themselves teachers—Mr. Arnott—when delivering the Hunterian Oration, spoke of the great French army-surgeon, Larrey, who had recently died, as "the first military surgeon who dressed the wounded under the very fire of the batteries," and said that to him we "owe our place of honour on the field of battle." The army surgeons of our day well maintain their reputation—not only for gallantry, but for self-sacrifice to duty. What can be finer than the conduct of Shepherd, who, riding away from the bloody field of Isandhlwana, with a good chance of escape, dismounted to assist a wounded man, and was killed by the assegais of the Zulus; or of McCrea, who, severely wounded in the chest himself in the first charge, continued to attend the other wounded, as he was the only doctor on the field?

In the military operations on the Transvaal frontier against the Boers, the courageous devotion of army surgeons to their duty was conspicuous. At Lang's Neck, "as the 58th regiment advanced and the men were falling rapidly, Surgeons King and McGann moved up behind the advancing column, and, on its retirement, remained, amidst a hail of bullets, attending to the wounded.....At the final disaster at Majuba Hill, the officers of the medical service remained faithful to their duties even unto death. Dr. Cornish was shot as, with a piper of the 92nd Highlanders, he was carrying a wounded man on a stretcher." [Mr. Wells then described the noble self-devotion and the glorious end of Surgeon Landon, a narrative well-known to our readers.] He added: Well have the men of St. Bartholomew's done by placing a tablet in their chapel, to keep in memory his bright example, by a record of his last words: "I am dying; do what you can for the wounded." And not Bartholomew's men only—not only this College—not army surgeons only, but the whole profession, the whole nation, will rejoice with me when it is made known that Her Majesty the Queen was so much impressed by the story which I have just read to you of Landon's noble conduct, that the report has been preserved among her private records—another proof of the Queen's interest in her soldiers, and in the men who are devoted to them.

The last Egyptian campaign has added another to the list of army surgeons killed in action while attending to the wounded. George Shaw had served in cholera camps in India, in the field in Afghanistan, and in the advance through the Khyber. He was a very gentle, amiable man, most devoted to the soldiers. He went to Egypt with the Bearer Company; and at Kassassin, whilst dressing wounded under fire, was shot through the head.

It is gratifying, also, to be assured that in Egypt, as in South Africa, the men of the Army Hospital Corps worked as bravely and as well as the examples of the medical officers led them to do.

My old comrades, the naval surgeons, also deserve full credit for the way they did their work during the Egyptian campaign. On board ship at the attack on the forts of Alexandria, or on shore with blue-jackets and marines, alike under fire with the fighting line, or in the armoured train, or combating disease in camp, or on the march, we have been assured by everyone in a position to know—from the Commander-in-Chief downwards—that the naval surgeons were always ready, willing, and cheerful. And while we speak with pride and satisfaction of the manner in which our brethren, both in army and navy, who served at the seat of war acquitted themselves, we must not forget those who laboured at home: the heads of both the Medical Departments and those under them have well merited a generous recognition of their forethought and good service.

And what a change for the better has taken place in the practice of army surgeons since Hunter's time! Military surgery, before the publication in 1794 of his last work, so far as the treatment of gun-shot wounds is concerned, was influenced by the false doctrine of the poisonous nature of the wound—the necessity for the escape of the poison—and therefore for the dilatation of the wound and the keeping up of suppurative discharge. Hunter served as staff-surgeon in the army in the expedition against Belleisle in 1760, and in Portugal in 1763. In 1776, he was appointed Surgeon-Extraordinary in the army; in 1786, Deputy Surgeon-General; and in 1791, Surgeon-General—as Longmore says, "a laborious office, corresponding with that of the Director-General under existing arrangements." He held this office during the early part of the war with France which preceded the peace of Amiens. After Hunter's death, the simpler treatment of gunshot wounds which he taught has been generally followed, and other great improvements in military surgery have been accomplished. Secondary amputations have been shown to be more fatal than those performed soon after the wound. Amputations have been often avoided by excision of joints or of injured portions of bone. The use of anæsthetics, and latterly of antiseptics, in spite of the much larger number of wounded after modern battles, have greatly lowered the death-rate; while, thanks to our experience in the Crimea, and the perfection of the system of ambulance transport in our Indian army (all admirably worked out by the indefatigable perseverance of one of our own Fellows—the Professor of Military Surgery at Netley)—the transport of our sick and wounded in time of war is so perfect as to have been copied by other armies; while all the administrative arrangements for the care and treatment of sick and wounded, the organisation of military hospitals in time both of peace and of war, and the service in the field, were proved in the late Egyptian expedition, under all the disadvantages of a rapid and unexpected change of base, to have been most creditable to the Army Medical Department. Out of 1,783 admissions to hospital in Egypt from ophthalmia not one man lost his sight. On the other hand, in 1861-2, amongst the French and English armies in Egypt, 1 man in 54 lost the use of one or both eyes. If the Army Medical Department obtains such a control over its own affairs as other branches of the army, we need not fear for its future efficiency. To insure this efficiency, the medical officers and the Army Hospital Corps should be made one Royal Corps—placed on a perfect equality with other corps, and receive a fair share of honorary distinctions. The Director-General and the Principal Medical Officer of a division should be secured rank and pay proportionate to their arduous and responsible duties, and be provided with a subordinate for secretary's duty. A field hospital fully equipped for the field should be maintained at Aldershot, or elsewhere; and the whole corps be frequently exercised during peace in all the duties they may be called upon to perform in war. Let us trust that this may be the result of the Commission which has been sitting under the presidency of Lord Morley, and of which one of our fellows, Sir William Mac Cormac, is a member. Under their own head—a united body, having entire control over and command of their own department, subject only to the general officers commanding—our army surgeons will cheerfully accept the responsibility of collecting, removing from the field of battle, and attending to the first wants of the wounded, and for their subsequent care and treatment, as well as for the equally important duties of sanitary officers in preventing disease and maintaining the physical condition of our army; and, if the corps desire a motto, let me suggest one, well deserved by their conduct in the past, and encouraging to good service in the future: "Faithful unto Death."

[*To be continued.*]

AN ADDRESS
ON MEDICAL REFORM.

Delivered at the Annual Meeting of the Dublin Branch, Thursday January 25th, 1883.

By JOHN T. BANKS, M.D.,
Regius Professor of Physic in the University of Dublin; Physician in Ordinary to the Queen in Ireland, etc.; President of the Branch.

In addressing you to-day, my first duty is to return my cordia thanks to the Dublin Branch of the British Medical Associatio for the honour which has been conferred upon me by electing m to the presidential chair. I gratefully remember that it was th wish of those to whom the happy thought occurred of establishin the Branch, to elect me the first president. Deeply sensible of th intended honour, and much as I appreciated it, I considered it m duty to decline it, knowing that I held views on the subject medical reform divergent from the majority of the members of th parent Association. I have been led to believe that my first im pression was mistaken, and I now accept the position, feeling, as have ever felt, that I am as anxious as the most advanced reform to promote the best interests of the profession by all means, and the utmost of my power uphold its dignity.

In the brief address I am about to deliver, I propose taking short retrospect of events, to us of great importance, which ha taken place since my distinguished predecessor, Dr. Kidd, so ab and efficiently performed the duty which now devolves upon m Some of the events I mean to refer to are of general, some of loc interest to our profession.

The event upon which the greatest interest centres is the report the Royal Commission to inquire into the grants of medical degre etc., recently published, and upon which the council of the Bran has placed in your hands a special report. It is needless at th meeting to dwell upon the ability and experience which the medic members brought to bear on the difficult and vexed question th had to deal with. Who amongst us is unacquainted with the rep tation of Sir William Jenner, of Mr. Simon and Professor Turne and I am satisfied that I express the unanimous opinion of our meeti when I affirm that no man could have been selected to repres this country on the Royal Commission, who more entirely comma the confidence of his professional brethren, than Dr. Robert J Donnell. A commission so constituted medically, aided as was by the non-medical members, formed so highly influentia body, that its judgment, if unanimous, was calculated to influe the legislature in framing a Bill in accordance with the recomme ations.

A majority, however, dissent from parts of the report, and, bu observed, not on matters of little moment, but upon some of t most important; for example, Professors Huxley and Turner, Simon, and Mr. Sclater-Booth, dissent from the proposal to g universal suffrage; other members dissent from other parts of t report, which are also of great importance.

Some of the plans which have been proposed to meet the alle defects of the present licensing system are discussed. The in duction of a "Staats-Examen" finds favour with the Bishop Peterborough, as calculated to attain the desired result with l disturbance to existing interests. This, however, is objected to the ground of the profession being against adding an examina to those already existing; an objection, however, which falls to ground in the event of conjoint boards being formed—a sch which is now being considered by joint committees of the Coll of Physicians and Surgeons of London, and the sister college Ireland. A State examination should, in my humble opinio adopted, be to a great extent a test of practical knowledge, a should follow a degree or diploma from one of the recogn medical authorities; following the example of Germany, in w the *Abgangs-Zeugniss*, or university testimonial, must be prese by the candidate for the *Staats-Prüfung*, the passing of which titles him to practise. The proposal in the memorandum of fessor Turner has much to recommend it, namely, the appoint of assessors who should report to the council such examinatio are not of a sufficient standard of proficiency, the council h in such case the power of suspending; a power, I may observe t possessed by the present General Medical Council. Eithe

Staats-Examen or the appointment of assessors is preferable to the one portal system as proposed by the commission, and against which I feel bound earnestly to protest. I believe such would have the effect of inflicting irreparable injury, if not total ruin, on the medical corporations; some of which, at least, have for many years done all in their power to advance medical education by the introduction of improvements, voluntarily adopted, which leave nothing to be desired in the thoroughness of their examination tests.

The report attributes this in a great measure to the General Medical Council. It says, "It is in our opinion clearly proved that the General Medical Council has rendered valuable services to the profession and the public. It is to the General Medical Council that the universal adoption of a preliminary examination for intending medical students is mainly due." The Council has also elaborated and published fully detailed recommendations, which have had a very beneficial influence upon the education and examination of medical students. The report then goes on to state their opinion that the visitations instituted by the Council have had an excellent effect in improving particular examinations, and generally raising the standard of examination. For myself, I must express my regret that they have not been more frequent; for, conducted as they have been by men whose very names are a guarantee for the possession of all the qualifications which such a responsible duty demanded, they were calculated to be of inestimable advantage. The report further observes that "the large majority of the licensing authorities have shown a praiseworthy readiness to introduce improvements."

Having borne such testimony, does it not seem strange and inconsistent that the Commission should recommend a measure certain to act ruinously on the bodies which have been found worthy of such praise, because there are some few whose standard is of a low level? Is it not punishing the many for the delinquencies of the few? Could no other remedial measure be devised except this so-called "Minimum" Examination, through which all must enter, high and low—the University graduate in Arts and Medicine, the pure surgeon, and the rank and file, whose chief ambition is to find a place on the *Register*.

I now, in my superficial review of the Report of the Royal Commissioners, come to the constitution of the Council which is proposed, and particularly to one of the provisions for the election of some of those who are to be the governing body of our profession. It assumes that the demand of the general practitioners for representation is well grounded; but when this is fairly examined, it is found to be a manifest mistake. Mr. Lister has pointed out the fallacy by calling attention to the fact that they are represented on the present Council by the Societies of Apothecaries of England and Ireland; and that the College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, are always likely to be represented by general practitioners. If this demand be acceded to by Parliament, the report says—"We have no reason to suppose that the members elected by direct representation, will be less eminent than those nominated either by the Crown or the Divisional Boards."

Let us now glance at the mode of election to the present Council, and take illustrations near home which equally apply to cognate bodies. I cannot conceive any mode of election less open to objection than that of the King and Queen's College of Physicians in Ireland. The Fellows at large, now a numerous body, select their representative. Is it to be supposed that the lower grades in the College are likely to exercise a more judicious selection? The Royal College of Surgeons selects its representative by the votes of its Council, which is chosen by the body of the Fellows. It is true the University representatives are nominated by the ruling body, a limited number; but who, from interest, if from no higher motive, are not likely to send to the Council unworthy or incompetent representatives.

In objecting to add four members to the proposed Council by universal suffrage, it is satisfactory to me to know that I am in unison with some of the most eminent members of our profession, who for many years were acquainted with the working of the Council, and thus are high authorities on the subject; and, at the same time, being no longer connected with it, may be considered unbiassed and impartial judges. Sir George Burrows, ex-President of the British Medical Association, thinks "whether the Council remains with its present duties, or has its functions greatly extended, it would be injurious to have any of its members elected by universal suffrage." Dr. Paget, Regius Professor of Medicine of Cambridge, and ex-President of the British Medical Association, thinks "it is not likely that members elected by the general suffrage of the profession would add to the efficiency of the Council for that which is its principal duty, the supervision of medical education; they are not likely to be superior to those members representing universities, who, besides being medical practitioners, are, or have been, engaged in medical teaching and examining." Sir James Risdon Bennett believes "that election to a body having such functions as those exercised by the General Medical Council, appears to be the worst possible mode of election." Professor Lister says: "I should grieve to see existing institutions jeopardised by a revolutionary measure passed in pursuit of the ideal of a so-called one-portal system." Sir James Paget is of opinion, "that the direct representation of the whole profession does not afford sufficient guarantee for the selection of the person best qualified to perform the duties which devolve on the Council." One of its most important functions, its judicial, it could no longer exercise; it could not remove from the *Register* persons guilty of infamous conduct. A Council, any considerable part of which was elected by universal suffrage, would be out of harmony with the constitution of other courts of justice in the United Kingdom or any European State.

One other I may add to the goodly list of the opponents of the "revolutionary measure" of electing members by universal suffrage, Sir Thomas Watson, the old man eloquent, "who being dead yet speaketh." "To add to the number of members by universal suffrage of the profession would simply, in my judgment, prove the ruin of the Council for its professed purposes." It may be that the judgment of him who has so lately gone to his honoured rest, sounding as it does like a voice from the world beyond the grave, comes with even more weight than the opinions of such men as the illustrious President of the International Medical Congress, and of the discoverer of the antiseptic method, speaking of whom Professor Volkmann, of Halle, says: "England darf stolz darauf sein dass es einer seiner Söhne gewesen, dessen Name mit diessem grössten Fortschritte, den die Chirurgie jemals gemacht hat, unzertrennlich verbunden ist." Strange would it be if the opinions on universal suffrage which I have summarised, do not receive that attention and respect to which all must admit they are entitled. One may confidently ask: Could any new mode of election secure the services of better representatives of the profession than the Crown, the universities, and the corporations have sent to the Council—Brodie, Paget, Watson, Corrigan, Stokes, Christison, Lister, Syme, Apjohn, and others I might mention—and would such men condescend to submit to the toil and turmoil of a contested election?

I now turn to the prospects of medical education and examination in Ireland, and to the changes which have taken place within the last year or two. But let me not be understood as undervaluing the previous training and testing of our students. The examinations of the University of Dublin, of the College of Physicians, and of the Royal College of Surgeons, were admirably calculated to ascertain the fitness of the candidate to practise the healing art. In the course of time, changes and improvements were called for in the curricula and examinations; and our University and corporations have, as ever, led the van in educational progress. That is no vain or baseless boast; for it was the Irish Colleges who introduced the clinical part of examinations and the performance of operations and dissections in the presence of the examiner: the Royal College of Surgeons in Ireland being, I believe, the first body which required the latter. Of our ancient University, the first in honour as in place, I may say that changes, silently but effectually, have been passing over her medical school. The necessity for increasing its accommodation has arisen from the fact that many of her graduates, who in former times would have gone into the Church or the other learned professions, now turn their attention to Medicine. The discouragement to commercial enterprise that looms over our country—of which it may be said, as of Scotland in the time of Macbeth—

"When shalt thou see thy wholesome days again?"

—tends also in the same direction. One great improvement in the School of Trinity College has taken place. The Museum of Comparative Anatomy, now palatially housed in the new buildings, stands unrivalled as a storehouse of morphological illustration. Important changes have lately been made in the King and Queen's College of Physicians by the introduction of an examination in State Medicine. In the Royal College of Surgeons, it seemed to the advocates of reform that changes were needed in three directions: 1. To lessen the courses of lectures—a great boon to the over-lectured student; 2. To make the courses as much as possible practical; and 3. To extend the period of medical education to a minimum of four years. The College has also made it obligatory on the student to pass an examination at the end of each year before

allowing any of the next year's work to be commenced. The curriculum thus divides itself into four definite portions, as separate and distinct as the water-tight compartments of a ship. The College has expended a large sum in improving its school, which may now be considered as one of the best arranged in the kingdom.

I have now to bring under your notice an event of no small importance to all who take an interest in general and medical education in this country. I allude to the inauguration of the Royal University, which has been called into existence as a successor of the Queen's University, of which I would speak with all respect, as having done good service for education in Ireland, bringing high-class training to the doors of those who never otherwise could have obtained such inestimable advantages. Many of the alumni of the Queen's University are at this moment filling the highest positions in various parts of the empire, and reflecting honour on their Alma Mater, which has ceased to exist. The Royal University, however, is something more than a mere successor of the Queen's. The medical curriculum, like every other part, has been recast, remodelled, and excellent as was that of the Queen's, I hope improved. There are new features which are worthy of especial attention, and to which I would refer. The first is the requirement of one year of arts from the students in medicine; the other is the requirement of three months' clinical instruction in a hospital for the insane. I believe the Royal University and the University of London, are the only bodies into the curricula of which this course enters. The importance of an acquaintance with mental disease it would be difficult to overrate. Medical men have frequently been placed in positions in which their ignorance of the subject has been a source of regret and humiliation. It is no light matter that the medical witness has frequently to deal with when called to give evidence in courts of justice. In his hands may be the issues of life or death. The question as to responsibility or irresponsibility of the person accused of crime may rest on his decision; as may the rights of property, the question of testamentary capacity, of mental soundness or unsoundness. It might be supposed, from the neglect on the part of the medical authorities in requiring teaching in mental disease, that a knowledge of it comes by intuition; that every fairly educated physician should be as competent to undertake the investigation of mental disease as he is of bodily—to the study of which he has devoted years—albeit he may have never previously seen a single case. It would be no difficult task to point out the lamentable mistakes often made, and the disastrous consequences to the reputation of the medical man who has no acquaintance with the mind diseased. Insanity is said to be on the increase in all civilised countries. This may be so, or, like heart-disease, cases of it may be more regularly recognised and tabulated. Anyhow, it forms, unfortunately, no inconsiderable factor in our social life. Now, I do not for one moment mean that every medical man should be a specialist in psychology, any more than he should be a specialist in ophthalmology, but that, like the latter, I contend that he should have some training in it; that, for example, he should be able to discriminate between curable mental maladies—the results of worry and emotion—and incurable disease—caused by tissue-change or the cumulative tendencies of preceding generations. It is satisfactory to observe, in the report of the Visitors appointed by the General Medical Council, that the absence of the subject of mental disease from the curricula has been noticed. The report recommends "that the subjects of hygiene, ophthalmology, and mental disease will demand serious consideration, and perhaps admission, under careful limitation, as distinct elements of examination." It is to be hoped, from the fact that the omissions have been noted, the corporations will be induced to direct their attention to this much needed reform in medical education and examinations. When I remind you that this admirable report was the result of the self-sacrificing labours of men so eminent in the profession as my friends Dr. Gairdner, Professor of Medicine in the University of Glasgow, Mr. Teale of Leeds, and Mr. Stokes, Professor of Surgery in the Royal College of Surgeons in Ireland, I feel that it would be needless for me to say one word in the vain expectation of lending weight to their authority. The subject of special clinical instruction in fever was not omitted in framing the medical curriculum of the Royal University, following the good example set by the University of Dublin, and the King and Queen's College of Physicians. Upon this point I lay much stress, from the fact that I have known men, otherwise well educated, launched on the world, some with the degree of an university of the highest reputation, who have never seen a case of fever during their years of hospital attendance. At the first clinical examination of the Royal University, a candidate, to whom a case of fever was assigned, refused to examine it, I need scarcely say with what result; and if the refusal were caused by cowardice, the sooner he seeks another calling, which does not involve danger to life, the better for him, and I may add, for the patients who may have the misfortune to fall into his hands. I doubt not you will excuse my dwelling on the subject of the Royal University, because I feel to some extent responsible for its medical curriculum—a responsibility, however, which I share with my medical colleagues of the Senate. We endeavoured to perform our duty influenced by a conscientious desire to send out a body of graduates well trained, and in this effort we were aided, one and all, by the non-medical Senators. Short a time as the university has been in existence, we have to deplore the loss of one, honoured and respected by us all, who by his great experience as a hospital physician and teacher was of incalculable value in our deliberations on the subject of the curriculum of the Royal University. The Duke of Abercorn, in his admirable and eloquent address at the inauguration of the University, well described our lamented friend, and late president of this Branch, Dr. Hayden, as "a physician of great eminence and remarkable ability." I have always held the opinion that all who aspire to the highest rank in our profession should have a full education in arts, a requirement, I am proud to say, demanded by the ancient university, with which I am more intimately connected than with the new.

If we dispensed with the year of arts and made our medical curriculum more facile, we might attract more students to our portals, but would we be doing our duty to our profession or to the public? We, above all things, have endeavoured that they should be safe practitioners of medicine, surgery, and midwifery. We trust that, like the old goddess of wisdom, springing in full panoply from the head of Jove, they may enter the lists fully equipped to fight a good fight, in the war which it will be their duty to wage against disease and death.

I fear I have trespassed at too great length on your attention, but I must notice one other event which is of surpassing interest. I refer to the amalgamation of the four medical societies of Dublin into one Academy of Medicine in Ireland—"*C'est l'union qui fait la force.*" Separate, they have done good work in the past, and now that they are welded together, we may hopefully look forward to a development of fresh vigour and renewed energy. It has been my lot to have received many favours at the hands of my professional brethren, but on no mark of their approbation do I reflect with greater gratification than that I have been deemed worthy to be the first president of the Royal Academy of Medicine in Ireland.

THE SALICYLATES AND HÆMORRHAGES IN ENTERIC FEVER.

By JAMES FERGUSSON, M.B., Perth.

At a time when salicylic acid and its compounds are receiving so much attention, may the following facts be regarded as at least worthy of statement? Last year, while resident in the infirmary here, I had an opportunity of testing the efficacy of certain drugs as antipyretics in enteric fever. These agents were used successively, each over a group of cases, and included the salicylate of soda. The latter had not been long in use when an increased frequency of hæmorrhages from the bowel raised the question, Could the salicylate be favouring the production of that complication of the malady? Whether it were or not, the suspicion aroused dictated the withdrawal of the salt from use in cases of typhoid. Shortly afterwards, I noticed that a foreign observer had reported the salicylate of bismuth, and, I think, also, salicylic acid (though of the latter I cannot be certain, as I am not able now to find the report in question), to cause intestinal and nasal hæmorrhages. The subject would not have been revived by me at present, but for the recent experience of my successor in the resident's office of the above-mentioned institution, Dr. H. McLean Wilson, who joins me in placing the facts before the readers of this JOURNAL. Dr. Wilson, in having recourse to the soda-salt in typhoid, found the same striking frequency of hæmorrhages to follow closely. His employment of the agent differed from mine, in that he administered small doses of ten to fifteen grains frequently over the twenty-four hours, while I gave half-drachm or drachm doses at longer intervals apart. In the other respect, however, our experiences have been so similar as to warrant the facts being brought under notice, so that the important practical question involved may, if possible, be decided by the evidence of a number of observers. I hope you may favour such an inquiry.

PRESIDENTIAL ADDRESS,

Delivered at the Annual Meeting of the Obstetrical Society of London.

By J. MATTHEWS DUNCAN, M.D., LL.D., F.R.S.E., etc.,
President of the Society.

AFTER a brief mention of the Fellows of the Society who had died since the last annual meeting, an enumeration of the papers read before the Society during the year, an announcement of the intended removal of the Society's library to more suitable premises, and a eulogy of his successor (Dr. H. Gervis), Dr. Duncan proceeded:

This great Society has many functions to fulfil, and of these not the least important is a moral one, which gets little place in our statement of "objects", and which has, for two years, occupied no part of our time. On, happily, very rare and extraordinary occasions, the Society may be called upon to censure and even expel a fellow, thus exercising moral discipline in a decided manner; but it wisely avoids discussion of such matter, and keeps within very narrow limits the direct exercise of control over its members, leaving this branch of medical police to the Colleges of Physicians and of Surgeons, who have long taken charge of it. But silence does not indicate forgetfulness or low estimation; and our active juristical interference, concerned as it has been only with minor disorders in individuals, gives no indication of the supreme importance of our moral interests as a society. In no way can we, or do we, do more good than by increasing and diffusing a kindly spirit and mutual goodwill in our ranks. Nothing contributes more to our dignity and for success than sense of honour and love of truth. By promoting science, we increase the weight and power of truth. Without high moral qualities in the practitioner—qualities of heart and of head—the work he does will all be tainted by his imperfections, and correspondingly fall short in its utility to his patients, his profession, and to himself. The intellect may be stored, the judgment may be sound, the hands may be skilful; yet the work does not reach an attainable degree of perfection if the heart is not right.

The promotion of science is avowedly our great object, and accordingly it is our chief performance. The work has been done in previously announced papers and in casual contributions. Of these, some have been purely scientific, or, in the view of the mere practical man, apparently useless; some have been more or less practical or immediately useful, or intended to be so. We want still a great increase of the, at first sight, useless kind; and we shall hold the best evidence of the progress of the Society that they appear and are cordially received. A great master of medical method—Helmholtz—has said, that he who pursues science with practical results in view will pursue in vain. The papers combining practical aims with scientific elaboration have been admirable, and must be useful and honourable to us. This Society will always regard such papers as deserving of encouragement, but they need no special fostering care, for the fruits of their application in practice are a sufficient stimulus, sometimes more than sufficient. The more this kind of activity is paramount, the less is scientific severity, and the greater the departure from the guidance of logic, and consequently the less reliability. A great result, indeed, of our scientific work has been to show us what we should not expect to be able to do, and what we should avoid attempting or doing.

Besides scientific and mixed scientific and practical papers, we have had before us proposals purely therapeutical, and several stories of splendid work in practice. The surgical achievments which find place in our *Transactions* are as brilliant and wonderful and successful as any to be found in the history of the art. They show what skill, guided by science, can dare and do; and the novel operations contribute, in this and other ways, to the solution of important practical problems. That a thing can be done successfully, is not enough, however, to show that it should be done. It is not judicious to excise the uterus in elderly women in order to prevent cancer of it. For myself, I have no doubt that the novel operations in series of them which have, in last session, been laid before us, will not be, in any sense, without good fruit, helping towards a sound judgment as to the extent or the limits of their applicability.

It is natural that the ingenious and bold surgeons who devise and execute new operations should press them strongly upon the profession, demanding quick approval, and it is to be lamented that we should sometimes misconstrue the relative slowness or silence of their brethren. Were new therapeutical proposals to be quickly adopted, our whole practice would, by their number and variety, be brought into utter confusion. The silence or slowness of the profession regarding them is a kind and useful reception, for nothing more violent is required to secure for most of them speedy oblivion; while the stronger and better few, surviving, demonstrate their merits and demerits, and secure or lose a place in medicine. By slowness and silence, even with some active depreciation, the profession obtains the best results, and this without any unnecessary delay. The use and acceptation of a new and good operation has never been a simple proposal and jubilant reception, and should not be; the whole matter must have time to ripen, and the special operation must exhibit plainly its qualities—what it can do, measured against what the corresponding disease does. Sometimes, as when the issue of disease, not cancerous, is in all cases, or nearly all, certain early death, the problem to be solved is a comparatively easy one: death for all *versus* a certain amount of cure. But when there is uncertainty as to the nature, difference of opinion as to the importance, or doubts as to the very existence of the disease to be remedied, the profession does well to be silent and slow. The problem to be solved is a difficult one; and if the operation puts life in the balance, there is a heavy responsibility which demands increased slowness and care.

The history of the operation of ovariotomy is often, one may say regularly, cited as a warning against silence and slowness of recognition; but it is quite otherwise, being a good example of an operation gradually and in due time gaining for itself a beneficent position of eminence. That theoretical and other mistakes were made in opposing it, may be very true; and theoretical mistakes made in supporting it too. But these neither hastened nor delayed the adoption of the operation in ordinary practice. As soon as it made a clear and sufficient saving of life, it was accepted enthusiastically everywhere, and not till then; and we cannot wish a better fate for any similar proposal. Even now, wherever there are not skilled ovariotomists, ovariotomy is not an accepted operation; the poor sufferers have life prolonged by avoiding it.

The proposer of a new operation should not expect his brethren to see it in the same light as he does. For him it is gilded, and he jealously guards and promotes it. His judgment of it is that of an enthusiast. The wise practitioner may discommend it, or he may abstain from recommending it; and the proposer is too ready to interpret this conduct as indicating disapproval of him and of his bold and original method, while it is really quite consistent with admiration, and even encouragement short of avowed approval. As evidence in favour of it gradually gets strength, so the practitioner at length is justified in making trial of it, and he may at last adopt it; and his slowness, differing as it does from the inventor's wishes, is wise, and not hostile to him.

Proposers of new operations have generally expended much labour, and ofttimes much money, in developing them; and the profession should, and does, admire the zeal and recompense the sacrifice, even though it may reject the operation. But there is often too much expected by the zealous proposer, and too little care taken by the critics, even by those who are essentially kindly, to avoid injury to the natural sensitiveness of such proposers. Against these evils we can only urge the force of moral obligations, which, though possibly too often in the mouth, cannot be too potent in the heart.

Dr. Duncan then asserted his belief that promoters of novel operations do not appear to attach the same value to life as the profession generally. There is now a demand, in connexion with this matter, for the combined work of the surgeon and the actuary. Data might surely be obtained which would be sufficient to settle, approximately, the value of life in the diseases calling for tooth-extraction, removing of piles, excision of the mamma, lithotomy, oöphorectomy, ovariotomy, hysterectomy, and others; and, on the other hand, the danger of the operations themselves; and from the two results, viewed in the light of established professional practice, might be deduced a scale of justifiable or of ordinarily incurred risk, which might facilitate and corroborate judgment as to the due proportion of danger in new operations. Already some limited computations of this kind have been made, but they have been done by special pleaders and are insufficient.

A well-conducted inquiry would lead to conclusions which might, on the one hand, diminish our estimate of the value of life, or increase our estimate of the importance of mere chronic ailing; or the inquiry might confirm the opinions on these subjects which are at present generally held. We might thus be able, with great assurance, to judge whether or not a mortality of one in five, or one in twenty, is to be encountered in an operation for the relief of mere chronic ailing; and so on, according to the gravity of the ailing, or the danger to life arising from the disease.

LECTURES
ON
CYSTIC TUMOURS OF THE JAWS, AND ON THE ETIOLOGY, GENERAL CHARACTERS AND RELATIONS OF TUMOURS.

By F. S. EVE, F.R.C.S.,
Erasmus Wilson Lecturer and Pathological Curator of the Museum of the College, and Surgical Registrar to St. Bartholomew's Hospital.

Lecture III.*

(Concluded from page 243.)

We will now pass on to consider the relation which the different varieties of tumours bear to each other, and to the malformations by excess. As an example of the malformations by excess, let us take the supernumerary digits occurring on the hands and feet. They are distinctly hereditary; usually there is only one, placed either on the outer or inner side of each hand or foot; for they are almost invariably symmetrical. The additional digit may be represented merely by a tubercle containing a small mass of bone, or all the bones may be represented; it is, however, never absolutely perfect in structure. The nature of the supernumerary digits in man and some of the domestic animals, has been discussed by Professor Gegenbaur, *(Journal of Anatomy and Physiology*, 1882.) His paper has been recently translated by Drs. Garson and Gibon. By a train of reasoning, founded upon anatomical details, he shows that the formation of a supernumerary digit in man is the result of a reduplication of one of the terminal rays at the extremity of a limb. It cannot be referred to a reversion, for no multidigitate animal now exists, except the fishes, from which such a tendency might be traced. A supernumerary digit in man must therefore be considered a reduplication the result of a tendency to variation. In some instances, this reduplication is apparent, as in a specimen (No.311) in the Museum of the Royal College of Surgeons, in which it does not extend further back than the first phalanx; but in the majority of cases the additional member may rather be considered a partial or imperfect reduplication resembling an outgrowth, by budding from the base of another perfectly developed digit.

The most remarkable point with regard to the supernumerary digits is a tendency which they occasionally exhibit to grow again after removal, even when this is performed at the joint by which they were connected with the hand. In one case, quoted by Mr. Darwin, this occurred twice. In this power of regrowth, they exhibit a resemblance to the recurring sarcomata, and manifest in this respect, as Darwin says, an embryonic condition. He regards their recurrence as a process of budding similar to that observed in the reproduction of the limbs of some amphibia after removal.

Some further insight into the nature of the tendency to abnormal growth giving rise to true tumours may be gained, perhaps, by reference to the congenital hypertrophies of extremities, leading to the production of the so-called giant-limbs. A specimen (No. 4061a) was presented recently to the College Museum by Mr. Macnamara, consisting of the left foot of a young woman greatly enlarged and deformed by a prodigious overgrowth of the skin and subcutaneous tissue of the sole; the whole limb below the knee was much longer than the opposite extremity, and the half of the brain, face, and tongue on the same side of the body were also distinctly enlarged. The left foot had been continuously increasing, out of proportion to the growth of the rest of the body, since birth. A similar growth had commenced on the sole of the right foot four months before the patient's death. A remarkable latency of the tendency to growth had therefore existed in this foot, which has been also observed in other cases, and may be compared to the latency of some tumours of congenital origin, as the dermoid cysts. These hypertrophied limbs show the imperfect nature of the tissue composing them, not only in their continuous growth, but also in a tendency to a form of ulceration somewhat resembling epithelioma, which I have observed in two cases. It does not appear probable that in the hypertrophied foot just referred to there was primarily an excess of formative material, but rather that, owing to some faulty organisation of the tissues, its growth was not correlated with that of the body generally.

Similarly, in the case of a supernumerary digit, the formative elements of the limb need not necessarily be in excess of the normal standard, until, by a bifurcation or by a budding-out of the cells of a rudimentary digit, the rudiment of an additional member is formed.

An analogous process occurring at the earliest period of embryonic life, at the anterior or posterior extremity of the blastoderm, would lead to one of the forms of double-headed monster in the one case, or to reduplication of the lower extremities in the other. And if we refer a similar budding-out of redundant formative tissue to a much later period of embryonic life, when the various structures have acquired their natural form, the abnormal growth will involve a few of the individual cell-elements of the structures, and as a result we shall have the various tumours appearing in early life (or in the process of development of the affected organ), as the multiple exostoses and enchondromata, and the adenomata.

Further still, if we trace the manifestation of the same tendency to a much later period of life, we may, perhaps, thus form an idea of the origin of the sarcomata and cancers.

An imperfectly formed supernumerary digit (as shown in specimen No. 310a Royal College of Surgeons' Museum), consisting only of a of a small nodule of bone surrounded by skin and attached to the ulnar side of the metacarpal bone, cannot by any definition be separated from true tumours, as the exostoses, which are distinctly hereditary.

Closely analogous to such imperfect supernumerary digits are the accessory and detached glandules and adenomata met with near or in the mammary and thyroid glands. Lücke* mentions a case in which a tumour grew in a superadded lobe of the thyroid gland. It was of the size of a fist, and occupied the submaxillary region. The patient, a maaged 21, stated that the tumour was noticed soon after birth, but that it had grown quickly only in later years. It was obviously "a lobul of the thyroid affected with colloid degeneration", or, in short, an accessory lobule of the thyroid gland having the structure and general characters of an adenoma.

In dissecting a breast recently, I found a firm nodule, about the size of a hazel nut, lying near the axillary border of the gland, but completely detached from it. The nodule consisted microscopicall of fibrous tissue containing large tubules or duct-spaces lined wit short columnar epithelium; these were, in places, enormously dilated Smaller ducts branching into small terminal pouches or acini wer also observed. This nodule deserves almost the name of an accessor glandule, owing to the high type of its structure, which differs from that of the normal gland rather in the confusion of i arrangement than in other respects. It may be regarded, with muc probability, as an intermediate step between the ordinary adenoma and the accessory mammary glands occasionally met with in th axilla. For while the high type of its structure connects it close with the accessory glands, it is shown to be allied as closely wi the adenomata, by the existence of a small tumour above and the inner side of the nipple in each breast. These lay upon, and we partially embedded in the breasts, were separated easily from t gland tissue, and resembled the detached nodule in their micr scopic structure. The growths produced no symptoms during li and were probably stationary. The patient, a woman aged 59, died bronchitis after the removal of an epulis of the lower jaw. Lüc states that he has frequently observed circumscribed adenomata of t breast near the axilla.

Analogous tumours are met with in other organs, as the glandu polypi of the rectum in children; these may be regarded also superadded portions of mucous membrane, composed chiefly gland-tissue.

Surely these supernumerary glandules and adenomata m in all respects, be compared to the supernumerary digits; l them presenting different degrees of perfection in their developme and like them also produced by a process of reduplication or a bu ding-out of some portion of the part from which they spring.

There are, also, some examples of overgrowth in glandular organs the same nature as the giant limbs to which reference has been ma As, for instance, the immensely hypertrophied breast in the Coll Museum (No. 4739), weighing thirteen pounds. It had enlarg for only a year and a half before removal from a girl, aged 19; other breast was affected in the same manner. Most worthy remark in this case is the fact that, a continuously progressive largement of both breasts should have occurred about the peri when adenomata commonly appear; yet this was a true hypertrop

* Given at the Royal College of Surgeons, June 1882. The latter part of the Lecture, treating of the relations of tumours to each other, has been extended, but the conclusions have not been altered.

* *Op. cit.*, Band ii, 1 Abth., s. 283.

r the glandular structures equalled in the perfection of their evelopment the normal breast. The fibrous tissue was much in-eased.

Now, having indicated a relationship between accessory glands id adenomata, let us further examine the relation between the lenomata and the cancers. There is a much closer resemblance in ie general structure and arrangement of these two groups of tumours ian is generally recognised.

The glandular tissue of an adenoma of the breast consists of land-tubes and acini in varying proportions; but we find also in ost tumours, solid columns or rods of small epithelial cells, which ay be traced through various stages of development to the forma-on of gland-tubes. They are the representatives in the tumour the solid ingrowths of the epiblast forming the rudiments of the ammary gland. By means of these solid columns of cells, we can ace the relation between the more highly organised epithelial ssue tumours, or adenomata, and the most elemental forms onstituting cancers. It can be made out in most specimens of ncer of the breast, that the epithelial cells are arranged in regular, tortuous columns; and that the alveoli, filled with cells, hich are said to be characteristic of cancer, are not closed spaces, it columns of cells cut transversely or obliquely. This fact is ceedingly clearly shown by some sections of cancer of a male breast hich I have.* These columns of cells may be considered analogous the rudimentary cell columns of adenomata; but in the cancers the breast, the further development into gland-tubes does not ke place as a rule, although, in some instances, it is observed. ie epithelial cells are much larger than those of adenoma; many them are multinucleated, and appearances of division may be en.

The glandular structure of cancer is most beautifully shown in ncers of the thyroid gland and of the large intestine. The morbid owth in the thyroid consists of gland-tubes lined with one or more yers of regularly arranged columnar or spheroidal epithelial cells.† Between the chief types or species of tumours, there are inter-ediate forms which connect these great groups. Thus, the ithelial elements in some cancers of the breast, much more nearly semble adenoma than in others. I have sections of a firm ammary tumour, removed from a woman aged 37, which had been owing eighteen months. The sections show, under the microscope, rgely dilated ducts filled with large multinucleated epithelial lls, in places undergoing granular degeneration. From the walls the ducts solid buds of similar cells project into the surrounding rous tissue; and these solid outgrowths of epithelium may be aced through every stage to the formation of duct-like tubules, ied with several layers of large irregularly shaped epithelial cells. iis tumour, perhaps, nearly occupies anatomically a position inter-ediate between adenoma and cancer of the breast.

Mr. Harrison Cripps‡ has described and figured tumours of the ctum, which appeared to lie between the innocent and malignant oups—tumours which resembled the adenomata in the slowness their growth, in the regularity of the arrangement of the epithe-al tubes, and in the perfection of the epithelial lining, but which curred after removal. Tumours of other organs, as the uterus id palate, might also be referred to in illustration of this point. gain, the rare co-existence of adenoma and cancer in the same east may indicate a genetic connection between the two forms of umour.

In many respects the adeno, or sero-cystic-sarcomata, may be id to form a connecting link between adenoma and cancer, both the age at which they occur, and in their clinical characters and ructure. Notwithstanding the diversity in their naked eye cha-cters, they consist essentially of gland-tissue embedded in various rms of sarcoma tissue. The gland-tissue presents the most diverse aracters, from tubules lined with most regularly arranged lumnar epithelial cells§ to simple columns of round cells.‖ The ore highly organised of these tumours are connected with the ro-adenomata by those more rapidly growing, softer, and smoother lenomata, the basis of which is composed of ill-developed con-ective tissue, containing abundance of spindle-shaped nuclei, or en crowded with round nuclei. A specimen, No. 4779A in the yal College of Surgeons' Museum, serves as an example. It was moved from a woman aged 36, and had been noticed for two years. Again, the more lowly organised forms of adeno-sarcoma are allied to the cancers by rare tumours, of which the following may be taken as an example. A tumour of the breast was brought me for examination; it had been removed from a middle-aged woman, living two years after operation, and was of a firm, indistinctly fibrous texture. It consisted, microscopically, of distinct spindle cells, coalescing to form fibrous-tissue, which inclosed columns and masses of small round epithelial cells. The columns, in a few places, possessed a lumen or central space. From the unusual combination of its structures, this tumour may be considered intermediate in type between the adeno-sarcomata and scirrhous cancers.

But in no instance is the direct continuity from glandular tissue to cancer exemplified with greater clearness than in the proliferous growth of sero-cystic disease of the breast; every possible transition is observed in these growths between rudimentary gland-tissue and cancer.*

In the first of these lectures, an endeavour was made to show the same relation between the highly organised and elemental multilocular cystic tumours of the jaws.

Certain benign glandular tumours of the skin show in general structure a close resemblance to epithelioma;† and the ordinary pavement-cell epithelioma, even, may be regarded as of glandular type in so far that it is an imitation of the earliest stage in the development of the cutaneous and mucous glands.

But if the existence of transitional forms can be proved between the innocent and malignant types of the epithelial-tissue tumours, these are as patent as any anatomical fact can be in the connective tissue series, whether of the hard or soft parts. Fibrous tumours occur in every variety, from the dense compact nodules, composed of parallel bundles of well-formed fibrous tissue, to the soft and sometimes semi-gelatinous growths, which, however, are not malignant. The loose fibrous tissue, of which the latter are composed, contains numerous round and spindle-shaped nuclei, of which the development into fibres can be distinctly traced. A specimen, No. 3,283 in the Museum of St. Bartholomew's Hospital, possesses such characters; it lay within the sheath of the ulnar nerve, and had been growing for nineteen years: a distinct capsule surrounded it.

The next step towards malignancy is to those tumours to which Sir James Paget gave the name of "recurrent fibroids"—the fibro-sarcomata; they are composed of fibrous tissue‡ with a few spindle-cells scattered among the fibres, or of small spindle-cells imperfectly fused into fibres. Such tumours are only locally malignant. Cases are met with, in which the growth has existed for nine or ten years before the patient applies for relief; and they may recur as many as eight times§ after removal without affecting the lymphatic glands or internal organs. Descending still lower in the scale of organisation, we reach the spindle-celled, and finally the round-celled variety of sarcoma, in which the elemental round-cell makes not the slightest effort in the direction of organization, not even to the formation of a spindle-cell.

Tumours of bone also may be studied with much advantage in regard to this question, for the amount and type of the osseous tissue produced offers a direct criterion of their power of organisation. It is only a step from the exostosis composed of perfect bone to the osteo-sarcoma; and this interval is broken by the diffuse osteomata, which may involve an entire bone, as the superior maxilla, or may form a large osseous mass prominently projecting from the greater part of one surface of a bone. These diffuse osseous tumours are perfectly innocent, and are composed of true bone. The osteo-sarcomata, on the contrary, are malignant, though in a low degree; and the osseous tissue produced in them may be compared to that of callus; the fibrillar or fibro-cartilaginous matrix of which had been formed, but had become calcified while still in an intermediate stage of its development to true bone. Again, the extent to which a sarcoma of bone is calcified, varies from the production of the heavy osseous masses resembling pumice-stone, to the soft sarcomata containing only a few spicules of bone, and composed chiefly of round-cells and spindle-cells. Tumours springing from the periosteum are rarely observed, which may exist for years without showing any signs of malignancy. In structure they consist of immature fibrous tissue, containing numerous round and fusiform nuclei. An example of such a tumour is in the Museum of St. Bartholomew's Hospital (No. 454). It is a firm, partially calcified growth, about a foot in diameter, springing from the middle of the shaft of a tibia. The tumour was first noticed eight years before amputation, and shortly after the

* Diagrams illustrating these points were shown at the lecture.
† See Lucke, Pitha, and Billroth's *Handbuch*, Band iii, Abth. 8, s. 94; and Warington Haward, *Trans. Path. Soc.* vol. xxxiii, p. 291.
‡ *Trans. Path. Soc.*, vol. xxxii, p. 87, plate vii, fig. 2.
§ As No. 4790a, Royal College of Surgeons' Museum.
‖ As No. 4783a, Royal College of Surgeons' Museum.

* *See* Nos. 3147 to 3151 St. Bartholomew's Hospital Museum.
† *See Transactions Pathological Society*, Vol. xxxiii., p. 335.
‡ *See* 4786a, Royal College of Surgeons' Museum.
§ *See* No. 4783b, Royal College of Surgeons' Museum.

patient had sustained a fracture near the middle of the leg. She was a woman aged 72 years, who appeared well in health, and there was no evidence of the existence of secondary deposits.

Lastly, some tumours of epithelial origin are met with which are so slightly differentiated, so elemental, that they cannot be distinguished, except in rare instances, from round-cell sarcomata. I refer especially to the melanotic tumours which originate in connection with the pigmented epithelial cells of the rete Malpighii.

Many other facts might be quoted to show that there are tumours occupying positions intermediate between the innocent and malignant types. But these will suffice to prove that a sharp distinction, as regards their anatomical structure, cannot be made between the innocent and malignant tumours. In proportion as a tumour is more highly organised will it be more innocent, more stable, and more circumscribed; while in the measure in which its tissue is elemental or "embryonic," will it be more malignant, more diffused, and more rapidly growing. We may, perhaps, infer, from these facts, as Sir James Paget* has already suggested, that the different varieties of tumours may be produced by evolution and involution through hereditary transmission; the evolution taking place from the higher to the lower forms, as from adenoma to cancer. Considerations have also been brought forward which indicate a probability that the formation of tumours is the result of the same tendencies to variation as those giving rise to the malformations by excess, such as accessory glands or glandules, multiple exostoses, or, perhaps, even the supernumerary digits. The existence of many tumours, the evolution of which cannot be traced, should not deter us from applying this law for the explanation of the origin of morbid growths; for many types may be produced by an involution or fading away of the tumour diathesis. And the exhibition of such latent tendencies especially, may be excited only by increased blood-supply and nutritive disturbance in a part.

As a general rule, the different varieties of morbid growths appear within certain periods of life, indicated in the last lecture; and however this may be brought about, it appears probable that the nature of each variety may have been partly determined by the nutritive condition of the affected organ or tissue at the time of the formation of the tumour.

The hereditary transmission of tumours in the same form, and at approximately the same stage of life, is in accordance with the law of inheritance at corresponding periods of life; a law by which Mr. Darwin† explains the appearance of peculiarities at certain stages in the metamorphoses of insects; such as the modifications of a larva to the surrounding conditions in its structure and instincts, by which it is enabled to lead an independent existence. This law is exhibited under the normal conditions in the changes occurring at puberty, as the perfect development of the generative organs, and the growth of hair at various parts of the body; in the atrophy of the ovaries and breast at the termination of the fruitful period; and in many other phenomena, as for instance the eruption of the teeth. If we analyse the manner in which it is brought to bear we must suppose that the influence of hereditary tendency is transmitted to each and every cell in the body up to the latest period of life; and that the form and peculiarities, as well as the hereditable diseases of the individual, are the combined result of the inherent tendencies of all the ultimate elements of the body.

In the rare occurrence of cancer or sarcoma congenitally or in very early life, we see an exception to the law of inheritance at corresponding periods. This may, perhaps, be referred to the tendency in characters due to reversion to appear at an early period of life; or to one of the numerous variations in hereditary transmission. Sir James Paget tells me that he has observed cases in which the offspring of cancerous patients have manifested the disease in infancy or at a much earlier period of life than the parents. And Mr. Hutchinson, in a recent lecture, mentioned the fact, that in all the cases in which malignant tumours appear very early in life a distinct history of direct transmission can be obtained.

The following are some of the conclusions to which I have endeavoured to lead. Although some tumours appearing before puberty, and, possibly, a few even later, may be derived from rudiments formed in embryonic life, yet many others, and especially the sarcomata and cancers, originate in the tissues existing at the time of their appearance. The malignancy of these tumours may be referred to the elemental or lowly organised character of their constituents rather than to their embryonic nature. Finally, the evolution of the different varieties of tumours from certain primary forms may be inferred; and the primary forms are allied to, and possibly originate by, the same tendencies, which, under other conditions, may produce some of the malformations by excess.

In concluding I must express my indebtedness to some authors, whose work I have not been able always adequately to acknowledge; and especially to Sir James Paget, from whose classical lectures I found it impossible to do otherwise than model some parts of Lecture II.

* *Clinical Lectures and Essays*, p. 412.

† C. Darwin. *Animals under Domestication*, vol i, p. 75.

AN ACCOUNT OF TWO HUNDRED AND EIGHT CONSECUTIVE CASES OF ABDOMINAL SECTION PERFORMED BETWEEN NOV. 1st, 1881, AND DECEMBER 31st, 1882.*

By LAWSON TAIT, F.R.C.S.Eng.,
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Analysis of the Series.

	Cases.	Deaths.	
Exploratory Incisions... ...	13	0	Mortality 5 per cent.
Incomplete Operations ...	8	4	
Operations for Cystoma:			
One Ovary...	36	2	
Both Ovaries	28	1	112 cases; 3 deaths.
Parovarian Cysts	12	0	Mortality 2.6 per cent.
Hydrosalpinx	16	0	
Pyosalpinx...	20	0	
Removal of Uterine Appendages:			
For Myoma	26	2	39 cases; 5 deaths.
„ Chronic Ovaritis ...	12	3	Mortality 12.8 per cent.
„ Menstrual Epilepsy...	1	0	
Hepatotomy for Hydatids...	2	0	
Hydatids of Peritoneum ...	2	0	
Cholecystotomy for Gall-stone	2	0	
Radical Cure of Hernia ...	1	0	
Nephrotomy for Hydatids...	1	0	
Nephrectomy	1	0	
Intestinal Obstruction ...	1	1	35 cases; 4 deaths.
Solid Tumours of Ovary ...	3	1	Mortality 11.4 per cent.
Hysterectomy for Myoma...	10	2	
Cysts of unknown origin ...	1	0	
Tumours of Omentum... ...	1	0	
Pelvic Abscess opened and drained	7	0	
Chronic Peritonitis	4	0	
	208	16	Mortality 7.7 per cent

When Simpson coined the word ovariotomy to describe conveniently the operations which were being done in large numbers, and with great success, by Charles Clay of Manchester, he conferred a benefit which was acceptable at the time; but he added a burden to our nomenclature which has become a real element of confusion. The word "ovariotomy," of course means cutting the ovary, not its removal, and therefore it describes an incomplete operation far better than the complete excision of the gland. By custom, its use was limited to the removal of large cystic tumours of ovarian origin, and it was a long time before solid tumours of the organ were recognised and included in the list of ovariotomies. But a far more serious mistake than this was made and is still maintained by Mr. Spencer Wells and others, by the inclusion of parovarian cysts in the list of ovariotomies. When we carefully read the descriptions of the early cases of "ovariotomy" in England, those between 1827 and 1842, we find that there is not a single real ovariotomy amongst them; they were all cases of removal of parovarian cysts. The first ovariotomy—that is, the first removal of a diseased ovary—in this conntry, was done by Charles Clay on September 27th, 1842.

I do not need to tell my present audience that the existence of a parovarian cyst does not necessarily involve any disease of the ovary or tube, nor that, in the great majority of cases, the ovary and tubes are not even associated intimately with the tumour. When they are so associated, they can be easily separated from the cyst, and their removal is no more necessary than is the removal of the uterus. Pathologically there is no relationship whatever between a parovarian and an ovarian cystoma; and, surgically, the only points they

* Read before the Birmingham Branch.

have in common is that, for the removal of both, the abdomen must be opened and their pedicles secured. The operation for removal of a parovarian cyst has had, in my experience, no mortality at all, and has very rarely difficulty of any kind in its performance, statements which could not be made about ovarian cystoma. It is perfectly clear, therefore, that for any general statistical purpose, all cases of parovarian cyst must be eliminated from the list of "ovariotomies."

We have, then, the word "ovariotomy" limited in its application to the removal of an ovary, and the question arises, shall it be confined to the removal of diseased ovaries, or extended to include cases where the ovaries are removed for reasons which do not arise in any disease of their own tissues? No precise answer has been given upon this question; and, though I have raised it over and over again, I cannot succeed in getting it discussed. All that is done, is to apply the word "oöphorectomy" to an undefined class of cases, this word having clearly a different meaning in the mind of each person who uses it. "Oöphorectomy," curiously enough, was the first technical term used for the removal of a cystic ovary; by many foreign writers it is still used with this meaning, and, for this purpose, it is by far the more correct of the two. It is evident that, for the sake of mere common sense, two words meaning literally different things, cannot be retained to mean the same thing; and it is equally clear that the more complete and exact term of the two cannot have the less complete and more inexact application.

I am, therefore, strongly disposed to throw both words overboard, and wait patiently for a new and better nomenclature, when the present evil traditions shall have lost their hold on the professional mind. This I have already done in the case of "oöphorectomy"; and, as I have narrated my reasons at some length in every paper I have written on the subject for the last five years, I might be excused if I passed the matter over in silence, as I should do were it not that I am persistently misrepresented on this subject by those whose interest it is to misrepresent their rivals in practice. If by "oöphorectomy" is meant removal of healthy ovaries, then I have performed the operation five times, and not seventy times, as Mr. Knowsley Thornton stated recently in the *Lancet*, ignoring what I had said in the very papers he was quoting. A very large proportion, more than half of these cases, were instances of cystic disease of the ovary, and, from my records, it would be easy to place a series of cystic ovaries in order, running from 100 grains in weight up to 109 pounds. Now, who is to say, or rather who has said, at what size or weight a tumour confers upon its operation the name of ovariotomy, as against the derided "oöphorectomy?" I say here again, what I have said at least four times before, that double cystic disease of the ovaries is so frequently associated with uterine myoma, that it is perfectly impossible, in many cases, to say whether we are removing the ovaries for cystoma, or the uterine appendages for uterine myoma. Again, in cases of occluded Fallopian tubes, we constantly find the ovaries cystic; and, as the glueing of the infundibulum on to the ovary is the fundamental cause of the occlusion, we have to remove the ovary. It is an "ovariotomy" in every sense of the term, pathological and surgical; and, as the operations are admitted by everyone who has tried them to be far more serious and difficult than what Mr. Spencer Wells calls "ordinary ovariotomy," for clinical and statistical reasons, they are far more deserving to be placed with removals of ovarian cystoma than are removals of parovarian cystoma.

My conclusion grows in strength as my practice extends, that it is in surgery, as everywhere else, absolutely impossible to draw hard and fast lines of separation, and, therefore, I adhere to what seems to me to be the only just line of record, to publish every case of abdominal section I perform in its order of date, leaving my critics at perfect liberty to make what use of my cases they please, but reserving that right for myself. I must, however, protest against such criticisms as that lately made by Mr. Knowsley Thornton in the *Lancet* in the cases of Dr. Keith and myself, by the use of the figures in absolute defiance of the clear explanations given in the context.

Even for the word abdominal section, we have no clear authorised meaning. By its use, I mean an incision through all the structures of the abdominal wall, opening the peritoneum. Yet even this clear meaning must be occasionally violated, as it was in my last series, in which I published two fatal cases of removal of cysts in which the peritoneum was not opened, and in which we never knew the source whence the cysts originated. In the various columns, in each of which details are given for every case, these details are given as fully and carefully as is within my power; but here there is doubtless great room for differences of opinion, if I may judge from the opinions I have formed from instances known to me outside my own practice. One or two illustrations will serve to indicate my meaning. Some years ago, I was present at an operation on a knee-joint performed by a very well-known surgeon. He was unfortunate or clumsy enough to divide the popliteal artery, and he had to finish his work by an amputation. In some statistics, I discovered this case figuring as an unsuccessful amputation; but was this true? Was it not an unsuccessful excision of the knee-joint? Similarly, I have an instance more to my purpose from a trustworthy eye-witness; and of it I can only say that the operation was not performed anywhere near Birmingham. For uterine hæmorrhage, it was resolved to remove the appendages. Unfortunately, the surgeon who operated has, or had, a theory that, for this proceeding, it is necessary to include the ovarian artery. He therefore planted his armed needles so close to the tumour, that, when he came to tie the ligatures, they cut through the bases of the pedicles, tore veins, and caused such hæmorrhage, that nothing remained but removal of the uterus. This case figures as an unsuccessful hysterectomy, and in a list of "oöphorectomies," where it should be, there is not a trace of it.

Similarly, concerning the word "recovery," there is apparently abundant liberty desired and taken by some recorders. I have, in the following list, one case in which there is doubt in my own mind as to whether I should rank it as a recovery or a death. It was the removal of a large cystic tumour densely adherent everywhere, and of an origin that is to this day somewhat doubtful.

At the time of the operation, the pelvis was in a condition of suppuration; the right iliac vein was completely occluded; the thigh and leg being enormously swollen, and in this condition they had been for weeks. The patient went on perfectly well till the ninth day; the wound had closed; the drainage-tube had been removed; the limb was greatly reduced in size; and she died, I would almost say suddenly, with clear indications of pulmonary embolism. I may be wrong in reckoning this as a recovery, but it is the only case where there is room for doubt: and, in support of my action, I may quote a case from Mr. Spencer Wells's last list, No. 917. At page 389 of his recent work, this case is recorded as a recovery; but it is stated that the patient died after the removal of a foreign body from the bladder. At page 336, it is explained that this foreign body was a pair of forceps, and this occurrence is regarded by Mr. Wells as inexplicable. I think an explanation would not be difficult to find; and I think that, if this case is to be regarded as a "recovery from ovariotomy," anything may be so regarded.

Here, then, we have abundant evidence to show that there is the widest possible difference of opinion as to the fundamental principles on which statistical tables are to be compiled; and, as long as this is the case, I think it perfectly needless to compare the tables of one surgeon with those of another. The real lessons to be drawn are those based on the gradual progress of each surgeon through the whole of his practice; and, unless the whole be recorded, the material is absolutely worthless. Therefore it is that I trouble you with everything that I have done. Very much of that, of course, is of comparatively little value; but, without any one case, the whole had better not be given.

The cases which are included in this series go over a period of fifteen months; and this enables me to bring my series up to the date December 31st, which closes the hospital record, a matter of convenience to myself, and one which obviates confusion. Compared with a like period in my last series, there is an increase of over 50 per cent. in the number of cases; and the total mortality is 7.7 per cent., as against 8.2 per cent. of the preceding series. The number of exploratory incisions is 6.3 per cent. as against 8 per cent., and amongst these, as usual, there is no fatal case; this experience being quite in accord with all my previous experience, that the mere opening of the abdominal cavity is a proceeding as devoid of risk as any surgical operation can possibly be. I have never lost a case; and, if all we find stated as to the omnipresence and omnipotence of germs were true, I think my experience would be somewhat different. Seven of these exploratory incisions were made merely for the purpose of ascertaining the correctness of the diagnosis of cancerous disease; and in two cancer was found where not previously suspected. In one case, the abdomen was opened for the purpose of removing chronically inflamed and adherent ovaries, a purpose it was found impossible to accomplish. In another, the operation was performed to ascertain the nature of a tumour which was found to be in the head of the pancreas. The patient was a girl aged 19, sent to me by Dr. Cunningham of Oldbury, and the

operation was performed on March 28th. Dr. Cunningham tells me the girl is now in perfect health, and the tumour has disappeared; the case being another of the mysterious cures effected by opening the peritoneum.

In my list, there are eight incomplete operations, with four deaths amongst them; this, again, being corroborative of what I have always said, that incomplete operations have a very high mortality. With two exceptions, these incomplete operations were cases of cancerous tumours. The exceptions were both, curiously enough, cysts of the mesentery, one of which died, and the other has been completely cured.

Of cystic tumours of the ovary and parovarium, I have operated in all upon seventy-six cases, with three deaths, or a mortality of 3.6 per cent., the mortality of my last series being 3.49 per cent.; and the coincidence here is so striking that I think I am quite justified in what I have repeatedly said, that in experienced hands the removal of ovarian tumours ought to have a mortality not exceeding five or six per cent. In all these cases, death seemed to be quite unavoidable. One was a case of an enormous tumour, which had been tapped sixteen times; another was a similar case in a patient aged 72; and the third was 65 years of age. I think if I had been merely regardful of my statistics, I might quite legitimately have refused to operate on the first and third of these fatal cases. All three show the dangers of delayed operations, and justify me in repeating what I have frequently said before, that if ovarian tumours are operated upon as soon as they are discovered, *and never tapped*, there would be a mortality hardly perceptible. The third case, 72 years of age, was sent to me from Bradford, and she was of such immense size that I had to tap her before she could lie down. She was very much exhausted, but rallied well in a few days. She began to fill again with great rapidity, so that the removal of the tumour had to be hastened. The adhesions were more dense than I have seen in any but one case. In this instance, I did not use a drainage-tube, and I regret it, though I do not think it would have brought about a different result. That tapping is rapidly being given up is proved by the fact that, of the other seventy-three cases, only two had been tapped. In the second fatal case, aged 65, I had to remove both ovaries, and an old myoma, recognised many years ago by Mr. Baker Brown, was left. There was no *post mortem* examination; but I suspect that, after the operation, this old tumour began to die, and its sloughing killed her. This patient also had her operation unduly delayed; so that, in all these fatal cases, I have a complete assurance that earlier operations would have almost obliterated my mortality.

Besides these seventy-six cases of what are known generally as "ovariotomies", there are two series, which include thirty-six cases without a death, which are as much ovariotomies for cystic disease as any of the previous seventy-six. They are cases of hydro- and pyo-salpinx, cysts formed by occlusion of the Fallopian tube by the infundibulum being glued on to the ovary or pelvic wall, or being closed on itself. Sometimes these cysts are of very large size, holding two or three pints, and in such a state their removal is very easy. Generally, they are much smaller, holding a few ounces; and then their removal, by reason of dense adhesions, constitute by far the most difficult class of case I ever have to deal with. Why the simplest operation of all, the removal of a parovarian cyst, should be classed as an "ovariotomy", and held up for admiration, and those most difficult cases dubbed "oöphorectomies," are held up to scorn, I cannot imagine. Adding these thirty-six cases to the seventy-six, I have one hundred and twelve cases of operation for cystoma with three deaths, giving a total mortality of 2.6 per cent.

The class of cases in which relief is afforded to patients by the removal of an occluded and distended Fallopian tube, associated, perhaps, with cystic disease or chronic inflammation of the ovaries, has, as yet, received no recognition in this country outside Birmingham. There must be hundreds of women suffering in this way in London, but I have as yet heard of no operation of the kind having been performed there. A large number of my preparations are in the College of Surgeons' Museum, and I have read papers on the subject at the London societies; but the first recognition of my work has come from America. In September last, Dr. Emmett of New York paid me a visit and saw some of my cases, and on his reporting what he saw, my example at once had an influence. He took away with him some of my specimens, and on December 21st Dr. T. Gaillard Thomas reported to the New York Academy of Medicine four cases of the kind I am now discussing—tubular cysts with diseased ovaries. The symptoms in his cases are precisely those I have described, such as recurrent pelvic peritonitis, intense pelvic pain, and profuse menorrhagia, no benefit from treatment, and increase of the suffering from the use of pessaries. The condition of the uterine appendages he describes just as I have described them, "ovaries covered with small cysts, and the tubes enormously distended with fluid, giving them the appearance of sausages." With equal correctness he describes the difficulties of the operation, and he gives to me an amount of praise and credit, with which it would be false modesty to say I am not deeply gratified. The complete confirmation of my work by such an authority as Dr. Gaillard Thomas is all I can desire.

My experience in these cases of chronic inflammation of the ovaries and tubes, has confirmed an impression which I have long had, that women who give way to narcotics and stimulants, have generally some strong reason for this excess, and that this is often to be found in pelvic pain. Quite a large number of the patients in these two classes have been habitual opium-eaters, and some have been drunkards, and the relief of their sufferings by the removal of the diseased organs has had the happiest results. One lady, who came to me from a very great distance, was in the most pitiable plight from the constant use of morphia. She had been taught the use of the hypodermic syringe, and her arms were covered with punctures, from the wrist far above the elbow, the skin presenting an appearance like that of chronic psoriasis. As far as I could discover, she was in the habit of injecting from five to ten grains of morphia daily, and she took an inordinate quantity of stimulants. The removal of two suppurating Fallopian tubes cured her of her pain, and she has taken no morphia and no alcohol since, now nearly twelve months.

The operation for the removal of the uterine appendages for the arrest of uterine hæmorrhage, has now received complete approval and the statements which I first made, that after the operation not only is the hæmorrhage arrested, but the tumours shrivel and often entirely disappear, have now received complete confirmation, so that, after ten years' fighting, I feel that, upon this point, I have completely attained my object. In the present series there are twenty-six cases of this operation with two deaths, giving a mortality of 7.7 per cent. One of these deaths was due to septic poisoning, obtained indirectly from a case of scarlet fever. I need not say that I regret the incident very deeply, but fortunately my conscience is free from the responsibility of it.

Within the period embraced by the present list, I have performed only one of Battey's operations—that is, an operation performed for the purpose of influencing disease indirectly by the artificial production of the menopause in a case of menstrual epilepsy. This is the fifth of its kind I have performed, and I am as yet very reticent as to my opinion as to its value. With the exception of these cases, I may here repeat what I have said in every discussion that I have undertaken on this subject—I never operate unless I have clear physical indications of pelvic disease, in addition to any narration of symptoms I may have from either patient, or doctor, or both, unless the medical attendant will accept the entire responsibility of the proceeding. This fact has been entirely overlooked by my critics, and it has recently been the subject of a correspondence between the Editor of the *Lancet*, and Dr. Eshelby of Milford.

In a paper published in the BRITISH MEDICAL JOURNAL for July last, I discussed at length the symptoms and treatment of chronic inflammation of the ovary, and, therefore, I need not say here anything on the general question. During the time covered by the present series, twelve cases have been sent to me, in which the state of the patient seemed, to her medical attendants and myself, sufficiently wretched to justify the removal of the ovaries. Of these cases, three ended fatally. In two, there was no doubt accidental infection of some poisoning occurred at the time of the operation, how I do not know with certainty, but the deaths were clearly septic. In one case, I suspect the sponges were at fault, the great reliance having been placed on the virtues of carbolic acid as a disinfectant; in the other, I believe a visitor brought puerperal infection with him. Three deaths out of twelve cases is a very heavy mortality, and, if it were a permanent one, would be almost prohibitive. But I have learned from Dr. Keith, that, in the great majority of cases of death, there has been something wrong in the operation. Impressed with this belief, I am always most anxious to discover the mistake, and profit by the lesson. Tracing the cause of death in one case, as I believe, to a septic visitor, I am more than ever stringent as to who shall be present at operations, and, in the other case, having the strongest reasons to blame the sponges, I reorganised my arrangements for these dangerous articles, and now such care is exercised, that I feel sure my risks are diminished. The third death of this group was one of two cases

hich gave rise to a somewhat animated discussion between Mr. nowsley Thornton on the one hand, and Dr. Keith and myself on ne other.

Mr. Thornton starts with the assumption that I either do not now, or that I will not admit, a death from septicæmia. The econd alternative, amounting almost to a charge of dishonesty, is asily disposed of, for I have just indicated three such deaths. The ther, a charge of careless ignorance on my part, or the assumption f omniscience on the part of Mr. Thornton, requires a little more otice; but it receives briefly an answer to the effect that neither Ir. Thornton nor I know precisely what septicæmia is. But we all ecognise a peculiar form of death after operations, characterised by o constant symptoms, and by no constant pathological appearances, hich used to be only too frequent, and to which, during my own fetime at least, half a dozen different names and different theories ave been attached. In my early days, it was called surgical or hos- ital fever; then it was called pyæmia, ichoræmia, mudanæmia, and ow septicæmia; and I do not think we know a bit more about it han we did twenty years ago. Then, as now, we knew that it as due to some kind of intangible injection, bred in dirty and vercrowded hospitals, carried from one patient to another by lovenly nurses and careless surgeons, and now we are gradually anishing it by complete hygiene. When I was a student, I can emember assisting or being present at about five and twenty ovari- tomies, and, I think, not one of those recovered. They were done y far more brilliant operators than I am; but these operators took one of the pains with minute details with which I burden myself orning, noon, and night. Everything was left to nurses and ssistants, and no heed was given to the possibility of visitors carry- ig infection. Now it is all changed, and a five per cent. mortality, nd the addition of numerous new operations of a kind undreamt of n my student days, are the almost daily results.

The question of Listerism has occupied a part of every paper I ave read on abdominal surgery for the last six years, and I hoped hat this year I should escape it; for, after trying it thoroughly, nd, after having seen it practised by many others, I have, for now early three years, entirely discarded it, as a source of no safety in bdominal surgery, but even of considerable risk. My published xperience on this subject has been followed by that of Dr. Ban- ock, Dr. Keith, and, lastly, by that of my colleague Dr. Savage. Ir. Spencer Wells, in his last work, has confessed that it has en- rely disappointed him; and Mr. Thornton stands alone in his sup- ort of it. The arguments against it are, that Dr. Keith and I have btained far better results without it than have been obtained with . We have both shown that it is especially dangerous in operating pon patients with feeble kidneys; and so has Dr. Bantock: and we ave quite independently expressed our belief that it will add four : five per cent. to the mortality. In the correspondence I have luded to, Mr. Thornton says, on this point (*Lancet*, January 1st): With regard to the action of carbolic acid on feeble kidneys, I an only say that I have not met with the dangerous results which ave befallen Dr. Keith, Mr. Tait, and Dr. Bantock." But Mr. hornton had forgotten, when he wrote this, what he had said in ne same journal on June 5th, 1880. He there publishes a case, and mongst the comments occur these sentences: "It seems to be pro- able that the extreme congestion of the kidney was due rather to he carbolic acid than to the sympathetic irritation. It is obviously ifficult to assign to each factor its share; but we know that there s often considerable congestion of the kidneys after ovariotomy, and hat this has been decidedly increased in severity since the introduc- on of Listerism in abdominal surgery." It will be seen that in 880 Mr. Thornton's experience was with us, but now his statement against us. But, in the correspondence, my allusion to feeble idneys was to Mr. Thornton's own renal organs. It is an open ecret that the carbolic acid has caused him trouble, and he has perated for some time with a mask of cotton-wool over his face on is account. All I can say about Listerism in abdominal surgery is is: there are five men in this country whose published cases show ey are largely engaged in the practice of abdominal section—Mr. ells, Dr. Bantock, Dr. Savage, Mr. Thornton, and myself; and, of ese, four condemn Listerism, one speaks doubtfully about it, and ly one supports it. A practically similar verdict is being arrived in Germany, and has been already pronounced in America; and, ntil something occurs of sufficient importance to make me re- nsider my present opinions, I shall trouble myself further neither bout Listerism nor Mr. Thornton.

The series concludes with a list of thirty-five cases of various perations, with four deaths. Two of these deaths occurred in cases f hysterectomy, two out of ten cases, giving a mortality of 20 per cent.—an immense advance on Mr. Wells's mortality, as given in his recent book; for, out of thirty-nine cases, there were twenty-one deaths, a mortality of 53 per cent. This difference I attribute entirely to the use of my wire clamp, which secures circular constriction of the pedicle. In one of the fatal cases, I used the ligature; and in the other, the clamp was put too low down, and strangulated a piece of intestine. With increased experience in the use of this clamp, I believe I shall have as good results in hysterectomy as in removal of ovarian tumour. It will be seen from this that I am very much disposed to alter the opinion I expressed in my last account.

There are two cases of hepatotomy for hydatids, and two cases of cholecystotomy for gall-stone, all four patients having recovered, and being now in perfect health. It may be perhaps necessary to say that, in these and in all similar operations now recounted, there was no adhesion between the tumour and the parietal peritoneum, but the wound in the sac was stitched to the abdominal wound in the way I have previously described.

This series also includes two cases of hydatids of the peritoneum, one tumour of the omentum, one case of radical cure of umbilical hernia by opening the sac and obliterating it, three large solid tumours of the ovary, one large cystic tumour of unknown nature, one case of nephrotomy for hydatids of the kidney, and one of complete removal of the kidney already published, one fatal case of abdominal section for intestinal obstruction, four operations for chronic peritonitis, and seven for pelvic abscess. These last cases, in which I have opened the abdomen, opened and emptied abscesses, stitched the two wounds together, and drained the abscess-cavity, constitute that advance in abdominal surgery of which I am most proud. Looking back, as I am sorry to say I can do, to a large number of cases prior to February 1879, in which I dealt with pelvic abscess by the various methods then in use, so far as I can discover, more than half of these were not cured, but are either dead or continuing an invalid existence by reason of suppurating sinuses. Until I made this inquiry, I had no idea, neither I am sure has anyone else, how difficult it is to cure a pelvic abscess. I have now operated on twenty-four cases in this way, and recovery has followed in every instance. In one case, the wound never completely healed, and the patient died of pulmonary phthisis—a disease which I suspected to be in existence at the time of the operation. A second is not quite well yet, but the other twenty-two are perfectly cured.

The group of cases of which I should like to speak somewhat in detail, are those in which I have performed abdominal section on account of peritonitis, have cleared out the abdomen and drained it for a time. In the present series there are only four classed under this head, but there really ought to be nine, as that is the number upon which I operated on account of peritonitis; but finding a cause for the disease after I had got inside, the others are classed under the pyosalpinx (2), parovarian cyst (2), and pelvic abscess (1).

This illustrates again how difficult it is to make a perfectly satisfactory classification of these cases. I opened the abdomen of a lady on account of acute peritonitis, and found its cause to be acute suppuration of the Fallopian tubes. She recovered completely, and is now in perfect health. On the 7th of November last, Dr. Pike, of Malvern, telegraphed for me to go over and make an exploratory incision in a patient under his care. When I got there I found that the patient, a young lady, of 20, under the joint care of Dr. Wadhams and Dr. Pike, had symptoms of intestinal obstruction, with undoubted peritonitis. Dr. Pike had a suspicion, which he expressed before the operation, that it really was a case of acute peritonitis, from some trouble with the right Fallopian tube, symptoms of that having been in existence for two years, ever since the patient had been chilled whilst skating. Dr. Pike's diagnosis proved quite correct. I removed a large quantity of purulent fluid from the abdomen, and I found the contents of the pelvis all glued together with purulent lymph. There was no obstruction of the intestines, but the right Fallopian tube contained pus, and had burst. I removed it, drained the peritoneal cavity, and she recovered perfectly. Now the abdomen and pelvis are perfectly healthy, but within the last three weeks she has begun to suffer from some mysterious symptoms of which we cannot make any satisfactory explanation, save that they are probably spinal.

In the last account of my practice, which I published in the *Medical Times and Gazette* about a year since, I spoke of inflammation, as follows: "So satisfied have I been with results in these cases, that the next case of peritonitis, to which I am called, of whatever sort it be—even puerperal—I shall advise and perform, if allowed, abdominal section, shall cleanse out the cavity and drain it, and if the operation be not deferred till the patients are

moribund, I believe this treatment will prove eminently successful. Our views of peritonitis will, I am certain, soon undergo an immense alteration. The terms 'septicæmia' and 'septic peritonitis,' for which Mr. Spencer Wells is mainly responsible, and which have appeared in the mortality column as the explanation of the deaths after ovariotomy, are simple nonsense, and have led us astray altogether. In future we shall treat the peritoneum on the same principles as we treat other suppurating cavities, and with quite as secure results."

I have nothing to alter in these sentences. The success of drainage in saving many of the cases which formerly died, proves that if we remove from the peritoneal cavity material which is over and above its absorptive power, or if we remove, in a similar way, its own effusion, under circumstances when its absorptive power is temporarily in abeyance and threatening, with the life of the patient, to be permanently destroyed, we can put a stop to all the trouble. It seems to me that, whilst there are cases of peritonitis which are really septic, that is, when some kind of poison gets into the peritoneum and speedily affects the whole system, just as the bite of a cobra does, they are in the minority, and that the great bulk of cases are not of this character at all, but are purely local, and that if we can help the peritoneum temporarily by drainage we can secure a triumph. In the cases of chronic peritonitis, this is constantly the case. One of these from my last series will suffice to illustrate my success.

E. T., aged 18, was sent to me in April last by Dr. Justin McCarthy of St. George's, Shropshire, who kindly gave me the following details of her history. She had been for some time under the care of an irregular practitioner, and came under Dr. McCarthy's care in a state of the greatest emaciation. Seldom had he seen anyone more emaciated, unless in the last stage of phthisis—the skin drawn tightly, as it were, over the cheek bones, and all the bony prominences visible under the skin. The abdomen was enlarged, the temperature about 102°, and the pulse about 120. The chief symptoms were vomiting and diarrhœa. When she came under my care, I found her quite as Dr. McCarthy described, and the presence of a large quantity of fluid in the peritoneum was apparent. I opened the abdomen on April 17th, and removed about three pints of purulent fluid, and a quantity of white flocculent clots. I emptied and cleansed the cavity as well as I could, and fastened in a drainage-tube. The tube remained in about a week, and, during that time, a large quantity of purulent fluid and small pieces of purulent lymph were discharged. When the stitches were removed, the wound opened completely, and several large masses of this white purulent clot were extracted, one of them being as large as a normal human kidney. The wound healed in June, and about September she had completely recovered her health. I saw her on October 31st, a stout robust young woman, whom I never would have recognised as the girl who came to me only six months before.

This is the kind of operation which would have been regarded as madness about five years ago, but I think its success is enough to justify my rule concerning all these cases—"When the doctor is in doubt, and the patient in danger, make an exploratory incision, and deal with what you find as best you can."

I have not yet had such an opportunity, as for a long time I have much desired, in trying the operative treatment in puerperal peritonitis. There is not so much hope in this field for its success, as I think there can be little doubt that the majority of these cases are purely septic. But, as very few of them escape, I think it would be worth trial; and I wish some of my brethren who are unfortunate enough to see these cases would give me an opportunity of trying it. The only difficulty is, that it is like tracheotomy in croup, it must be done before it is too late, and perhaps it may be done unnecessarily. This, however, is an argument against a great deal of our practice, both surgical and medical.

I cannot close this brief and incomplete record of my most recent practice without speaking, as I have done before, in terms of the highest praise, and with unfailing gratitude, of one to whom I owe much of my success, for his constant readiness and presence of mind in difficulty, and for his marvellous dexterity as an assistant—my friend Mr. Raffles Harmar.

[A detailed list of the cases, prepared in a tabular form, for purposes of reference and identification, accompanied the manuscript of Mr. Tait's paper, but through want of space we have been unable to publish it.—ED. *B. M. J.*]

MEDICAL MAGISTRATES.—Messrs. E. T. Atkinson, and T. Carter, have been placed on the Commission of the Peace for Richmond, Yorkshire.

ON THE DIAGNOSTIC VALUE OF THE TUBERCLE BACILLUS.

BY J. DRESCHFELD, M.D., M.R.C.P.,

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NOT many months have elapsed since Koch published his research on the tubercle-bacillus, and already we possess a number of observations showing the great diagnostic value which these pathogenic organisms have. Koch having demonstrated the presence these bacilli in the sputum of phthisical patients, and Ehrlich having described an easy and reliable method for their detection, reameans were thus obtained to test the accuracy of Koch's observations. Leaving out of consideration prophylaxis and treatment and considering the question simply from the diagnostic point view, it became a matter of great importance to answer definite certain questions.

1. Are the bacilli present in the sputa of all cases of phthisis?
2. Are they present in the earliest stages, when there are as few, if any, physical symptoms?
3. Are they absent in all other non-phthisical lung-affections?
4. Is there any relation between the quantity of the bacilli fou or their particular stage of development and the degree and progr of the lung-affection, or, in other words, what is their prognos value?

Answers to some of these questions have already been given several observers: Balmer and Fränkel (*Berliner Klinische Wochenschrift*, 1882, No. 45, p. 679), Guttmann (*Berliner Klinische Wochenschrift*, 1882, No. 52), D'Espine (*Revue Médicale de la Suisse Roman* December 1882), Lichtheim (*Fortschritte der Medicin*, No. 1, 188 and Heron (*Lancet*, February 3rd, 1883). As yet, however, t observations are few, and the results not altogether concordant. C sidering the importance of the subject, and the necessity for tensive observations, I beg to be allowed to give briefly the resu of my own investigations, which I commenced shortly after the p lication of Ehrlich's paper, and have continued ever since.

The material used was, in all cases, the expectorated sputum, m or less fresh. (It happened repeatedly that, in the sputum the same patient, when allowed to stand for a day or two, the qu tity of bacilli found was larger than when first examined. T seems to point to a further growth of the bacilli in the sputu The method employed consisted, till recently, in Ehrlich's method Gibbes's modification. Since the publication of Rindfleisch's mod cation of Ehrlich's method (Schill, *Deutsche Medicinische Wochenschrift*, 1883, No. 2)—which simply consists in warming the anil fuchsin or anilin-gentian solution, having the cover-glass with t sputum floating on it, over a flame till the fluid begins to steam have used this method, as it allows the whole process to be finish in five to seven minutes, and gives very satisfactory results. many cases, the specimen so treated, after thorough washing alcohol containing 2 to 5 per cent. of nitric acid, may be at o examined without a second staining, and shows the red bacilli sta ing out well in the unstained rest of the sputum; when, howev other bacilli are present, as in putrid bronchitis, or where the sp have stood for some time, I find (contrary to Lichtheim) that t second staining with methylin-blue facilitates very much the detect of the tubercle-bacilli, if present.

Summarising briefly the results of my observations, I found t tubercle-bacilli present in all cases (forty-six) of phthisis where t physical symptoms were well marked. The patients were to a gr extent hospital patients, either out- or in-patients; and their a varied from fifteen to forty, and most of them were in the second third stage of phthisis. In some, the disease was more acute; others, of a chronic type. In the sputa of all, tubercle-bacilli co be detected, though the quantity varied very much, as will be sho again hereafter. In all these cases, the diagnosis of phthisis co be arrived at easily without the presence of the bacilli.

These results, so far, agree with all but one of the other observe of whom Balmer and Fränkel found them in all their hundred a twenty cases of phthisis, D'Espine in twenty, Heron in sixty-t and Lichtheim in all his cases but two (and in these only one amination was made, and in one case the process seemed arreste Guttman alone states that he found the tubercle-bacilli in one-fou of his cases only.

Of far greater importance is the detection of the tubercle-bac

the earliest cases of phthisis, where the physical examination ıkes the diagnosis often a matter of doubt as to the presence or sence of phthisis. So far, we have but few observations. Hillier *leutsche Med. Wochenschr.*, No. 47, 1882) examined the sputa of ree patients suffering from hæmoptysis without any physical sym-ɔms of lung-disease, and found tubercle-bacilli in two out of the ree cases; and inoculation with the sputum of one of these pro-ced tuberculosis in two guinea-pigs. Lichtheim (*loc. cit.*, p. 5) tected the bacilli in a patient who, according to his statement and at of his relatives, had only suffered from cough and pyrexia for a tnight, and whose physical examination revealed nothing abnor-al. In some other cases, however, of very early phthisis, Lich-eim was not successful. As, however, all these cases were private tients, and allowed but a very limited examination of the sputa, d as in some the diagnosis of phthisis remained doubtful, Lich-eim himself does not lay great stress on these cases.

So far, I have only been able to examine three cases of doubtful ture. In two, there were no physical signs whatever, and in the ird the presence of apex-catarrh only; but in all three the bacilli re abundantly present in the sputum on the very first examina-ɔn. As these cases present somewhat interesting features, I will iefly allude to them.

A. S., aged 31, a gentleman whom I have known for years, and ated for various ailments, but who, though a phthisical family story, had himself never suffered from cough, and was in the joyment of very good health, consulted me on December 27th for moptysis, which had attacked him on the morning of that day. could not in any way account for it, except for a very slight fall he d on December 25th, which, however, did not hurt him in any y. The physical examination showed absolutely normal relations; ither was there loss of flesh, loss of appetite, or pyrexia. Exami-tion of the sputa on December 29th showed abundance of tubercle-cilli. The hæmoptysis continued, though in a lessened degree, for ne time. There appeared also morning cough, with expectora-ɔn. The general health, however, remained very good, and the ysical condition of chest unaltered. The sputum, however, con-ıued to contain the bacilli. For the last fortnight, the hæmoptysis s stopped; otherwise the patient's condition remains the same th as regards cough and bacilli.

A. M., clerk, aged 25, was seen by me for the first time on Novem-r 17th, suffering from hæmoptysis and cough, loss of appetite, and ght loss of flesh, all of which symptoms dated only four weeks ck. There were no physical signs of phthisis to be detected on amination. The sputa, tinged with blood, were rich in tubercle-cilli. The patient was ordered iodoform in pills and as an inhala-ɔn; and his general condition improved; the hæmoptysis stopped; gained weight; but the physical examination a few days ago ɔwed dulness over the right apex, and bronchial breathing, and the uta still contain the bacilli.

F. A., aged 38, I saw with Mr. French of Northwich, on January th this year. The patient had exceptionally good health till ɔvember 1882, when he commenced to suffer from slight cough d expectoration. This soon yielded to treatment, but with the mmencement of this year, cough and expectoration returned; the petite remained very good; there was no pyrexia, but slight loss flesh: no hæmoptysis. Physical examination showed the presence slight apex-catarrh on right side. The patient, at the time of y visit, expectorated a small quantity of tenacious mucus; this, ıen examined, was found swarming with tubercle-bacilli. It is teresting to note, in this case, that the patient, whose previous story and family history were exceptionally good, lost his wife ɔm acute phthisis about twelve months ago, and had nursed her ɔst assiduously during the whole of her illness.

Considering the constancy with which the bacilli are found in ses of fully developed phthisis, and the absence of these organ-ns, as will be presently shown, in non-phthisical diseases of the ıgs, I cannot help looking upon the first and third case (about e second there can be but little doubt) as cases of incipient thisis; and though, owing to the short time both cases are under servation, nothing can be said as regards the prognosis of the ses in question, yet the presence of the bacilli insured the early ıgnosis in what would otherwise be still doubtful cases. While ese cases then tend to show that even in the earliest stages of thisis the tubercle-bacilli are present, it would be equally in-esting to determine whether their absence in such doubtful, t suspicious cases, would negative the diagnosis of phthisis. It obviously difficult to arrive here at some definite conclusions, we have abundant proof, both clinical and pathological, that ɔipient phthisis may be arrested in its course, and that, therefore, recovery from such a condition of doubtful incipient phthisis to the normal condition, would not warrant us in excluding the presence of tubercular disease, unless by some accident or intercurrent disease the anatomical proof was forthcoming. Such a contingency, however, is not likely to happen often, and at present we have no such observation to record.

The next point in our inquiry was directed to test the absence of tubercle-bacilli in lung diseases, other than phthisical. It is here chiefly where Koch's great discovery will aid us most materially in the diagnosis, and also in treatment of lung disease. So far, all observers who have examined into this subject, are agreed that no tubercle-bacilli are found in any other lung disease but phthisis, without, however, giving an analysis of the cases examined. Aided by my clinical clerks, I have examined the following cases without finding bacilli in the sputa.

Chronic Bronchitis and Emphysema.—Six cases.

Bronchiectasis.—One case. The sputa very rich in the ordinary bacteria.

Pleurogenic or Fibroid Phthisis.—Two cases. One case, the result of pleuro-pneumonia, showed excessive retraction of one side. Physical examination gave all the signs either of a dilated bronchus, or a cavity in the affected side. The sputum was muco-purulent, but contained only the bacteria of putrescence.

Pneumonic Kionosis.—One case. The patient was a miner; the sputum, however, was not examined during life; the *post mortem* examination showed marked anthracosis, with softening of the lungs in some parts, and the presence of small cavities in both apices. Microscopically no tubercle could be found in sections of the lung, and the secretion in the cavities showed absence of tubercle-bacilli.

In contrast with this case, I may mention the case of a stone-mason who had suffered from symptoms of bronchitis, with loss of flesh and profuse expectoration. On physical examination, no dulness was to be detected, but subcrepitant *râles* in both cases, and the sputa contained numerous tubercle-bacilli. The patient has, since then, developed marked signs of phthisis.

Catarrhal Pneumonia.—I tried to examine the sputa in three children suffering from catarrhal pneumonia after an attack of measles. I found, however, great difficulty in getting proper sputa; several times the sputa brought to me consisted almost entirely of saliva. In one case, however, a girl, aged 12, who suffered from catarrhal pneumonia in both bases, there was abundant expectoration, but no tubercle-bacilli could be found in the sputum.

In a boy, aged five, with marked dulness and retraction of left side and slight hæmoptysis, the diagnosis between chronic pneumonia and phthisis, was considerably aided by the presence of tubercle-bacilli in the sputum. The subsequent history of the case proved the correctness of the diagnosis.

Syphilitic Lung Disease.—O. G., aged thirty, an out-patient, admitted November 14th, 1882, complained of hoarseness, cough, night sweats, and loss of flesh. Physical examination of the chest showed retraction of right side in its anterior upper part, diminished movements, excessive dulness, diminished breathing, and diminished vocal fremitus over the affected part. There was slight dulness, with diminished breath-sounds in the right infrascapular region. On laryngoscopic examination, typical syphilitic ulcers were seen on the fauces, and marked hyperæmia of the vocal chords. On inquiry, the patient now gave a history of syphilis, for which he had been treated six years before at the infirmary. Repeated examination of the sputa showed no tubercle-bacilli. An antisyphilitic treatment was marked by great improvement; there is, however, yet a patch of dulness, with lessened breath-sounds, though smaller in area in the right mammary region.

At the time the above patient was under treatment, my attention was drawn to another case, which showed signs of cavities in the lungs, and had been looked upon as a case of phthisis. One morning, the patient showed us a tubercular syphilitic eruption, which had only recently appeared; a more careful examination showed the cicatrix from an old syphilitic glossitis, and the remains of an iritis; the sputa were now examined for tubercle-bacilli, but with negative results, though several different specimens of sputum had been taken. The treatment was now changed to an antisyphilitic one, and for a time the patient did exceedingly well; latterly, however, he has suffered much from loss of appetite, and, in consequence, fell off in flesh again; though the physical signs had rather receded than progressed.

I will now only refer to two more cases, interesting, as the physical symptoms pointed to phthisis, while the sputa were free from tubercle-bacilli.

The one case is a patient under the care of my colleague, Dr.

Leech, who suffered from symptoms pointing to phthisis (dulness and slight retraction of left apex, diminished breathing, with moist *râles*, and diminished chest movements on that side, cough with considerable amount of mucopurulent expectoration, loss of flesh, but no hæmoptysis); repeated examination of the sputa showed absence of the tubercle-bacilli, and the further progress of the case now shows that the symptoms were due to some growth or mass obstructing the left bronchus.

The other case is a patient now under my care, suffering from diabetes, with excessive, though not fœtid expectoration and symptoms of phthisis. The sputa show no tubercle-bacilli, but contain large masses of a mycelium fungus (even if examined immediately after they are coughed up), which stains well with gentian-violet, but which can be easily distinguished from Koch's bacillus, by the size, form, and arrangement of its several parts. The chest symptoms are most probably due to some form of necrosis, a pathological condition often formed in cases of diabetes; possibly we have here some peculiar form of mycosis, for which the bronchial secretion in diabetes would form a favourable soil. The further progress of the case may give the solution of this question.

In all the above given observations, the sputa only were examined for bacilli, and I need not again draw attention to the valuable diagnostic aid we derived from the presence or absence of the bacilli in the different forms of obscure lung disease. But as the bacilli seem to occur wherever we have the tubercular process going on with any amount of intensity, the bacilli will aid us in the diagnosis of tubercular disease in other organs, if those organs themselves either are so situated as to be accessible to inspection (mouth, larynx), or form secretory organs whose secretions pass out of the body (intestines, urogenital tract). Already we possess a few observations on this subject. Fränkel (*Berl. Klin. Wochenschr*, 1883, No. 4) found tubercle-bacilli in the secretion covering laryngeal ulcers in fifteen out of sixteen cases of laryngeal phthisis, by simply brushing the ulcers and examining the secretion covering the brush. Lewin (*ibid.*) could confirm this observation, though Guttmann (*ibid.*) could not detect the bacilli in two cases of laryngeal phthisis examined similarly. The tubercle-bacillus would thus be of great diagnostic value to distinguish between syphilitic and tubercular laryngeal ulcers. Lichtheim (*loc. cit.*) found the tubercle-bacilli in cases of tubercular enteritis in the diarrhœic stools; they were not found in very large quantities, but they were found in every specimen examined.

Rosenstein (*Centralbl. für die Med. Wissensch.*, 1883, February 3rd) detected the bacilli in the urine of a patient who had symptoms of tubercular disease of the epididymis, the lungs being perfectly free. Lichtheirn detected the bacilli *post mortem* in the contents of the pelvis of the kidney in a case of tuberculosis of the kidneys; and hence it is only reasonable to suppose that, in cases of tuberculosis of the urinary tract, the bacilli would be found in the urine.

Lastly, Ransome having detected the bacilli in the expired air of phthisical patients, and C. R. Smith having given, in a recent number of this JOURNAL, a ready method of detecting them in the expired air, it behoves us now to see whether, in cases of acute miliary tuberculosis, especially in children, where there is no expectoration, the bacilli are present in the expired air.

I may also mention that Fränkel (*loc. cit.*) found numerous tubercle-bacilli in the pus aspirated from a scrofulous or tuberculous joint, and I can confirm this observation, as, in a marked and advanced case of phthisis under the care of my colleague Mr. Jones, with tuberculous arthritis of the ankle-joint, numerous tubercle-bacilli were found in the pus evacuated from that joint.

We come now to the last point of our inquiry, as to the prognostic value of tubercle-bacilli in the sputum.

Balmer and Fränkel (*loc. cit.*) believe, as the result of their numerous observations, that the prognosis of a given case depends on the number of the bacilli, and their full development. In the rapid cases, with pyrexia, sweats, etc., the bacilli were very numerous, large, and spore-bearing; they also found that the quantity increased with the advance in the destructive process of the disease; in phthisical persons where the process is very chronic, or where the disease is arrested, or where there is no pyrexia, the bacilli very few in number, small, and badly developed. D'Espine on the other hand, found no such relations between the bacilli and the process of the disease. Lichtheim believes that the bacilli are only found in the profuse puriform sputum of phthisical patients; that they depend on the existence of an ulcerative or rather destructive process in the lungs, communicating with the air-passages; and they are found wanting when, in spite of an existing tuberculosis, the destructive process is absent. They would, according to him, therefore, not occur in the acute miliary tuberculosis. Heron, on the other hand, seems on the whole to agree with Fränkel.

From the results of my own observations, I feel compelled to differ from Fränkel. I found very numerous fully developed bacilli in cases of phthisis, where there was little pyrexia, and where the process was slow and chronic; and I found but a scanty quantity in some cases of acute phthisis with profuse expectoration; thus, in a case which has just terminated fatally, and where *post mortem* examination showed dilated bronchi, small cavities, and marked tubercular infiltration of both lungs, and where the illness only extended over a little more than three months, repeated examination of the profuse and purulent sputum showed the bacilli in very sparing numbers. In several cases where the disease seemed to remain in *statu quo*, or where there were marked signs of amendment, the sputa continued to contain the bacilli in very much the same proportion as before. On the other hand, I cannot agree with Lichtheim, but rather believe, from the observations on the three cases of very incipient phthisis, that the bacilli occur very early in the sputum, before there are any signs of ulcerations, and when the sputum is by no means purulent. The presence of the bacilli in acute miliary tuberculosis I have as yet had no opportunity of examining into.

As the result of these observations, I think I am justified in saying that, though the bacilli in the sputum are of the greatest diagnostic importance in pulmonary phthisis, and though they occur in cases where there are as yet no physical symptoms whatever, we are not as yet justified in making the prognosis dependent either on their quantity or their fully developed state as found in the sputa.

Since the above was written, we have had two further additions to our knowledge on this subject. Licht (*Deutsche Med. Wochenschr* 1883, No. 5), observed 72 cases of phthisis, and found the bacilli present in all; and Dettweitzen and Meissen (*Berlin Klin. Wochenschr*, No. 7, February 12th, 1883), found them in 85 out of 87 cases of typical phthisis. As regards the prognostic value, both observers come to conclusions similar to those arrived at by me.

ON THE TREATMENT OF CERTAIN FRACTURES OF THE LOWER END OF THE FEMUR.*

BY FREDERICK TREVES, F.R.C.S.,

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THERE are certain fractures, through the lower end of the shaft of the femur, that are apt to be associated with a peculiar deformity, and to require, in consequence, a special treatment. These fractures are generally, either just above the condyles, or are directed through the shaft within a few inches of that spot. The fracture may be either transverse or oblique. It is more usually of the latter variety, the obliquity is often extreme, and its general inclination is from behind downwards and forwards. The more transverse fractures are probably due to direct violence; the more oblique, to a force indirectly applied. The position of the upper fragment is practically unaffected, while the upper end of the lower fragment is drawn forcibly backwards into the ham by the action of the gastrocnemius muscles. The lower fragment is, of course, always drawn upwards and from the twofold displacement, it follows that it may cross the axes of the upper fragment at a considerable angle, while it will lie behind that portion of the bone. These fractures are very often associated with a secondary vertical fracture, that extends into the knee-joint, between the two condyles, and that thus produces what is known as the T-shaped fracture. It is not implied that all fractures, through the femur above the condyles, are associated with this displacement; probably the majority are not. There are, indeed, many circumstances that would oppose such a displacement. There is, for instance, no reason why the obliquity of the fracture should not be such that this particular deformity would—after shortening had occurred—be impossible. Many muscular and tendinous fibres are attached along the bone across the fracture line, and the deformity mentioned would not be possible, without a considerable laceration of these fibres. If the fracture takes place when the knee is bent, the condition of the gastrocnemii would be such that it would hardly be capable of forcibly dragging the lower fragment backwards at the time of injury. This is of consequence, since it would appear that, not a few of the fractures about this part, that are due to indirect violence, are caused by falls upon the bent knee. It is common, in museum specimens, to find the two fragments overlapping (the upper in front of the lower), and the upper end of the

* Presented at the Section of Surgery at the annual meeting of the British Medical Association in Worcester, August, 1882.

wer piece of bone directed a little backwards, so that the whole agment is slightly oblique to the long axis of the upper portion of ıe femur. This trifling deviation may be due solely to the over- pping of the bones, the lower fragment being unavoidably directed ıckwards, as it passes up behind the upper fragment. The cases, ɔwever, to which reference is made in this paper, are those in hich the lower fragment is drawn very conspicuously into the ɔpliteal space, and where this displacement is, without much ques- on, due to the gastrocnemii muscles.

It is obvious that these cases cannot be treated in the ordinary ay. Extension in the long axis of the limb merely increases the ıformity by dragging upon the gastrocnemius, and so upon the wer fragment. Thus, if the long splint were to be applied in the dinary way, it would be possible for the limb to be put up appa- ntly straight, while the knee-joint was all the time considerably xed.

In one or two preserved specimens where the bones have united a conspicuous angle, it is not improbable that this treatment had ·en carried out. It would be useless to attempt to act upon the tle lower fragments by pads or pressure, and therefore the long lint being abandoned, the only available treatment is by some :m of the double inclined plane. By the double inclined plane the ee is bent, and the large upper fragment is brought to the lower e; the parts can be well fixed to the splints, and the weight of the ınk can be made use of as an extending force. In applying this atment, the actual double inclined plane is seldom made use of. is cumbrous, difficult to maintain in a rigid posture calculated to ıduce bedsores, and extremely uncomfortable. The principle, vever, of the double inclined plane can be applied in many less ectionable forms: as, for example, by a MacIntyre's splint bent siderably at the knee and slung from a cradle, by Nathan Smith's erior wire splint, by Hodgen's suspension splint, and the like. all these appliances the knee is bent, the parts below the fracture practically fixed, and the weight of the body—the limb being pended—acts as the extending force. Even to these ingenious ns of apparatus, a good deal of exception may be taken. The ient's body and the joint above the fracture are not fixed, and a ıewhat undesirable degree of movement in the upper fragment is sible. The comparative freedom allowed by suspension increases s possibility. Moreover it is a question, when dealing with a :ture close about the joint, whether it be well to fix that joint in exed position, unless it be intended that it should always retain t posture. It must be remembered that some of these fractures so near the joint, as to render unavoidable some damage to its parts, while many others actually enter the articulation. The spect of ankylosis after the latter form of injury is not a slight , and is well illustrated in those fractures of the humerus that ɔlve the elbow joint.

lthough, therefore, the treatment by the principle of the inclined ıe may serve to remedy the immediate deformity, it is not with- somewhat grave disadvantages when applied to these particular ons. The treatment, on the other hand, that appears to most com- ıd itself is that alluded to by Mr. Bryant (*Practice of Surgery*) in the owing terms: "In fractures of the lower third above the condyles ere the gastrocnemii muscles tend to draw the lower fragments :kwards into the popliteal space, some surgeons prefer the use of the lined plane, and where the bones cannot be otherwise kept in ɔsition, it is, probably, a sound practice. But what I believe turn out to be a better one, is the division of the tendo Achillis, the use of the long splint.....I have taught this for the last lve years, but have had only one opportunity of testing its value." the method here advocated, any deformity produced by the gas- nemii muscles can be entirely remedied, and the fracture treated ı all those advantages that pertain to the use of the long splint. treatment, indeed, recommends itself as a good surgical pro- ıre on many grounds, and enables the surgeon to carry out those ntial principles that, since the days of Pott, have been recog- d as important in the treatment of fractures. Inasmuch as no ils have, so far as I am aware, been given of this mode of deal- with the fractures described, I venture to record three cases in h I applied this treatment, and which appear to substantiate advantages ascribed to it. The patients were all males; the ures differed in each instance both as to their nature and e of causation; and in two of the cases the local result was ren- d more evident by *post mortem* examinations.

ASE I.—R, P., a drayman, aged 33, was admitted into the London ɔital under my care on November 13th, 1879. He had fallen his dray, and, while lying upon the ground, the wheel of the , which was heavily laden, had passed over his right thigh. The femur was fractured about two inches above the condyles; the fracture was slightly oblique from behind downyards, forwards, and outwards. There was some effusion into the knee-joint; the patella was a little displaced to the right; and the tibia, with the lower fragments, appeared to be so much displaced backwards as to give rise to an appearance not unlike that seen in dislocation. The lower end of the upper fragment projected forwards, and could be readily felt under the skin; the lower fragment was forcibly dragged back- wards into the popliteal space. The vessels were uninjured. On applying extension, the deformity was much increased, although the shortening that existed could be almost entirely overcome. The limb was at first put up on a double inclined plane. This proceed- ing brought the fragments at once into good apposition, and removed the outward evidences of the deformity. The man, however, was very stout, his weight being about sixteen stone; and it was soon found that, even with the greatest care, the parts would not be retained in position. He complained, moreover, a good deal of the pain occa- sioned by the apparatus. The limb was then placed in a Macintyre's splint, so that the knee should be considerably flexed; and the splint was slung from a cradle made for the purpose. The unwieldy size of the limb and the frequent movements of the patient (that the apparatus did not restrain) soon brought about a disturbance of the fragments; while the treatment, in addition, caused much incon- venience. On November 16th, I divided the tendo Achillis, and applied a long side-splint with a forty-pound weight attached; the lower end of the bed being raised to resist this extending force. The fragments were almost immediately brought into excellent posi- tion, and the whole extremity from the pelvis to the foot was firmly secured. The integument over the seat of fracture was so severely contused on admission, that I feared the skin would slough, and so make the fracture a compound one. I therefore dressed the part antiseptically as a precaution. A slough did form; but it remained for weeks dry and hard, and firmly attached. Not a drop of pus was produced. By January 10th, union appeared to be firm, and the shortening was one inch. The antiseptic dressings were discon- tinued; and in a short while afterwards the scab-like slough came away, leaving a granulating wound. The patient was kept in until this little surface healed. He left the hospital on March 1st, with the fracture firmly united, and able to walk without assistance of any kind. The knee-joint, however, was perfectly stiff. In this case, the great size of the limb seriously interfered with the suspen- sion treatment; and, since the knee-joint became ankylosed, it is as well that it was allowed to become rigid in the straight position. Passive movement of the joint was attempted as soon as it was deemed safe, but with no result.

CASE II. J. E., engineer, aged 46, admitted under my care May 26th, 1880. The patient was said to have fallen forty feet, alighting upon his feet. There was a compound fracture of the right thigh at its lower part. The skin wound easily admitted the finger, and was situated about two inches above the patella; it had been caused by the penetration of the sharp lower end of the upper fragment. The frac- ture was very oblique, from behind, downwards and forwards, and was situate about two inches and a quarter from the condyles. There was also a vertical fracture extending between the two condyles into the knee-joint. The upper ends of the two lower fragments were pointed, and were drawn forcibly into the ham. There were many loose fragments of bone embedded in the adjacent muscles, and in the tissues of the popliteal spaces. The great vessels were uninjured. The sharp lower end of the upper fragment had been driven through the quadriceps, so that the whole thickness of that muscle intervened between it and the lower fragments. This mass of muscle was detached from its contact with the upper piece of bone with the greatest difficulty, and had it not been possible to manipulate the parts through the wound, this detachment would have been quite out of the question. From many various manœuvres with the limb, I am convinced that, had the fracture been a simple one, no manipulation would have dislodged the piece of muscle between the fragments. With the finger in the wound, the exact position of the broken bones could be well made out and easily studied. Before chloroform was given, I was surprised to find to what an extent the lower fragments had been dragged back into the ham. When the knee was fully bent, the two lower fragments could be readily moved, but when it was extended they became quite fixed. The two lower fragments were separated by a finger's breadth alone, but were in contact below. Keeping my finger upon the lower fragments, I tried the effects of various positions of the limb upon their movements. When the limb was extended in the straight line, the fragments were drawn forcibly into the ham, and the more the extension the more the displacement. Flexion

over an inclined plane enabled the three fragments to come well together, but their mutual relations were considerably disturbed by comparatively slight movement of the body. The tendo Achillis was then divided, and the long splint applied, with an extra dress weight of thirty pounds. The parts fell into excellent position, and could be firmly and evenly maintained there. The wound was dressed antiseptically. The patient was greatly shaken by the accident, and had received, in addition to the above injury, a very severe laceration of the arm, and a compound fracture of the left leg into the ankle-joint. He never rallied from the shock, but, in a few days, became delirious, and died eight days after his admission. At the *post mortem* examination the observations above made were verified at leisure.

Case III.—R. B., basket-maker, aged 51, admitted January 4th, 1881. While under the influence of drink, the patient had slipped over a stone, and had fallen upon his hands and knees, striking the left knee against the kerbstone. There was a very oblique fracture of the lower third of the shaft, with a second fracture into the knee-joint that separated the two condyles. Both the lower fragments were found, on admission, to be drawn forcibly into the ham; and this deformity was exaggerated greatly by extension. The displacement had probably been effected by the patient's drunken attempt to rise. The limb was adjusted as above described. Shortly after admission, the patient had an attack of delirium tremens. During the attack, the value of the large splint, in allowing of the body being kept fixed, was well demonstrated. Had any suspension splint been applied, it would have probably proved useless, as the patient was extremely restless. The section of the tendo Achillis at least prevented the gastrocnemius from taking any part in promoting displacement. The patient never recovered from the delirium, but gradually sank into a state of dementia, lost all control over his sphincters, became comatose, and died exactly thirty days after his admission. The *post mortem* examination revealed a somewhat remarkable fracture. It was oblique from behind downwards and forwards, and, commencing six inches above the condyles, ran down to the trochlear surface in front. In some part of the course, it was nearly vertical. The two corner fragments were made up of the two condyles, with a sharp spicule of the shaft attached to each. The fragment of the shaft remaining with the inner condyle was six inches in length; that remaining with the outer condyle, four inches. There were but slight inflammatory changes in the synovial membrane. The fragments were already united by a good deal of sound callus, especially at their upper parts, and were in very good position. The specimen is now in the Museum of the Royal College of Surgeons.

FERROCYANIC TEST PELLETS AS A CLINICAL TEST FOR ALBUMEN.*

By F. W. PAVY, M.D., F.R.S.,
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Most who have stopped to give consideration to the matter, have, I think, felt that it would be exceedingly desirable if something more convenient than the method of procedure with heat and nitric acid which has been in use so long, were placed at our command as a reliable test for albumen. At least, such is the expression which has from time to time fallen from those I have met; and I have been so strongly impressed myself in this way, as to have been induced to turn my attention towards endeavouring to meet the want. The convenience of the cupric test pellet for sugar inclined me to look for something that could be kept and employed in a solid form; and I started with the view that, to be suitable for the purpose, it must be freely and quickly soluble, devoid of objectionable physical properties, and a sharply marked and reliable precipitant of albumen.

During the last two or three years, I have carried metaphosphoric acid in my urinary pocket-case, and have frequently been in the habit of otherwise employing it. It is known to constitute an excellent test for albumen, and I tried for some time to bring it into a convenient form for use. In a pure state, it is a glacial body, which, although deliquescent, does not quickly dissolve. Kept in fragments, these stick together in such a manner as to prove troublesome at the time of use. I mixed the acid with other agents, as citric acid, sulphate of soda, chloride of sodium, and cane sugar, but I failed to obtain a satisfactory product. Thus, finding that I could not succeed in getting what was wanted with metaphosphoric acid, I looked around for another suitable agent.

Yellow prussiate of potash and acetic acid, employed together, have long been known to furnish a valuable test for albumen. There may be other tests as good, but I think it may be said that there are none that can be spoken of as actually better. Citric acid may be made to take the place of acetic acid, and thus a test capable of being kept and used in a solid form is supplied. The precipitant of the albumen is ferrocyanic acid, and this is liberated just as effectually by citric as by acetic acid.

I, at first, thought that it would suffice simply to mix the yellow prussiate of potash, and citric acid, in the proper proportions, and compress into a pellet to obtain the test in the form I wanted. Experience, however, soon showed me that the matter was not so easily to be disposed of. Difficulties presented themselves which have taken time and consideration to overcome. With the willing and able assistance, however, which Mr. Cooper has rendered in carrying out the mechanical operations I have suggested, a pellet has been produced which seems, as far as I can at present judge, to supply all that can be desired. Its components are the sodic ferrocyanide, and citric acid. Grounds exist for the employment of the sodic instead of the potassic ferrocyanide.

All that is necessary in using the pellet is to crush it to a powdered state, within a folded piece of paper, with a silver or other coin from the pocket, or in any other way that may suggest itself and to run the powder into an ordinary sized test-tube, and pour in the urine to be examined to the height of about an inch. On simply agitating freely, without the application of heat, a precipitate will immediately, or almost immediately, appear when albumen is present. The test is so delicate, that the smallest amount of albumen gives rise to a distinctly recognisable opalescence, and, with a larger quantity, a dense white precipitate is produced. Instead of crushing the pellet, it may be broken in half, or placed in a whole state in the urine. Used in this way, it takes a minute or so for it to be dissolved, and the reaction to be produced.

An estimate may be formed of the amount of albumen present by allowing the precipitate to settle, and reading off its height in proportion to the contents of the tube, in the same way as is done after the application of heat. As no employment of heat is required in the application of the test, it is not necessary that a test-tube should be used. A wine-glass or medicine-bottle will answer instead, and the quantity of urine should be kept down to about that recommended when a test-tube is used. Enough acid exists in the pellet not only for liberating the ferrocyanic acid from the ferrocyanide, but for more than neutralising the alkalinity that is likely to belong to a specimen of urine limited to the quantity which has been recommended to be taken. Through this circumstance, the test acts equally well with alkaline as with acid specimens of urine.

Phosphates do not interfere with the validity of the reaction given by the test. They not only are not liable to be precipitated by it, but the acid present will promote the solution of phosphates already deposited.

Should the urine be turbid from lithates, it must be cleared by warming before the test is employed. A number of ways in which this can be done will readily suggest themselves, without recourse to the use of a spirit-lamp where no spirit-lamp happens to be at hand. If thought proper, the test may be used in the same manner as some persons are in the habit of employing strong nitric acid, viz., by bringing the specimen and the test into contact with each other without admixture, and looking at the line of junction for the precipitate. Thus used, the pellet should be dissolved in a little more than sufficient water to cover it, and the urine then allowed to flow gently down the side of the test-tube until a stratum of about half an inch in height has collected. The lamina of precipitate which is formed from specimens containing a minute amount of albumen comes out denser and more sharply defined than with nitric acid. Further, if the contents of the tube be afterwards shaken together, a diffused precipitate is visible; whilst in the case of the strong nitric acid the precipitate disappears.

With urine containing oleo-resinous matter consequent upon the administration of an oleo-resin medicinally, it is known that nitric and other acids occasion a precipitate. The same will naturally occur with the ferrocyanic pellets, and this is the only fallacious indication that I am at present aware belongs to the test. Error from this cause, whenever the conditions permit it to be presented, must be guarded against in the same way as has been hitherto done under the employment of nitric acid.

Since this communication was written I have seen the albumen precipitant test papers introduced by Dr. Oliver, of Harrogate. They certainly form a very neat and elegant adaptation. Without encountering the difficulties that presented themselves with the

* Communicated to the Clinical Society, February 9th, 1883.

tion in a satisfactory state of the ferrocyanic pellets, the idea ssed my mind of papers soaked separately in the two agents and d, but I did not act upon it, as I thought the presence of the er in the test tube would be undesirable, and that it would be t, if possible, to keep from any extraneous substance. In the lets there is nothing besides the two agents actually constituting test, and their nature is such as to be perfectly harmless in ry way. Properly preserved in a bottle I have no reason, from opportunity I have yet had of judging, to think otherwise than t they will keep for an indefinite time. They are made by Mr. per, of 58, Oxford Street.

SE OF LABOUR COMPLICATED BY CICATRICIAL OCCLUSION OF VAGINA.

By J. A. MANSELL-MOULLIN, M.B., M.R.C.P., ETC.,
Assistant-Physician to the Hospital for Women, Soho Square.

. M., aged 42, a thin spare woman, came to consult me on ac- at of the gradually increasing size of her abdomen, fearing that might have a tumour, and thinking that, for certain reasons, thing else was out of the question. The menses had appeared the first time at the age of eighteen, and had then been absent a year; they had never been regular. The patient had given h to three children, the youngest of whom was thirteen and a years old. Considerable difficulty had attended the last con- ment, which was conducted by a midwife. According to the ent's account, the child was a very large one, and the midwife d to extract the shoulders for two hours after the head had n born. *Post partum* hæmorrhage had been severe, and coloured harge persisted for five weeks.

nce that time, her general health had been very good, but the menia only made their appearance two or three times in the se of the year, although the menstrual molimina were more uent. When the catamenia were present, the discharge was dark in colour, profuse, and continued for about ten days. The period had occurred five months previous to my seeing her.

n examination, pregnancy between the fourth and fifth month diagnosed without difficulty; the fœtal heart-sounds were ly audible. On bimanual examination, the vagina was found e completely occluded; the finger passed into a *cul-de-sac* about ch and a half in depth, and not the smallest orifice could be cted either by the finger or with the aid of the speculum. The of the vagina was perfectly soft; there was no bulging or our, and I decided to let matters rest.

bour took place at the full term; and I was somewhat relieved d, on examination, that the stricture had yielded somewhat during process, and would just admit the tip of the finger; and further, it was a foot presentation. Three or four small incisions in the p margin of the stricture materially assisted the dilatation, and presence of the hand in the vagina set up strong uterine action. child was then delivered without difficulty, the patient declining anæsthetic.

me slight *post partum* hæmorrhage followed. This was found roceed from a small vessel in the torn cicatricial tissue, and was ly checked by the application of a little tinct. ferri perchlor. on all pledget of cotton-wool. A large fibroid tumour was then vered to occupy the posterior wall of the uterus.

puvalescence was uninterrupted. The vagina was syringed out three or four times with solution of permanganate of potash. rise of temperature occurred. There was no fulness of the sts, nor formation of milk.

ree months subsequently, the patient came to see me. I found, amination, that the fibroid had entirely disappeared, and the s had returned to its normal size. The annular stricture in the a was again closing, and would only just allow the point of the r to pass. The menses had not returned.

is case is of some interest in showing under what adverse cir- tances conception will sometimes take place. I imagine the nation of the case to be that the menstrual fluid was retained the stricture until a sufficient amount had been collected to he parts upon the stretch, and so cause slight dilatation, and followed the profuse dark discharge which appeared at intervals ve or six months. Conception accidentally occurred imme- ly after one of these discharges. The menstrual molimina took with more or less regularity in the intervals between the dis- res, and it is somewhat astonishing that no greater inconve- ce was occasioned necessitating medical interference.

SURGICAL MEMORANDA.

CASE OF EAR-DISEASE, WITH INTRACRANIAL ABSCESS: TREPHINING.

CHARLES C., aged 10, had been healthy, with the exception that, when two years old, he had scarlet fever; since which time he has been subject to discharge from the right ear. One week before admission, he was taken ill, somewhat suddenly, with headache, earache on the right side, vomiting, and bleeding at the nose. During the week, he was very ill, and had on one occasion a temperature of 105° Fahr.

The patient was admitted on September 8th, 1882. On admission, he was dull, but quite conscious. There was no rash, and no signs of disease in the heart or lungs. The spleen was enlarged. Temperature 104° Fahr. During the day, he complained of pain in the right ear, the membrane of which was destroyed. There was some general tenderness in the neighbourhood of the ear, but not confined to the mastoid region; no swelling or redness. In the evening, he had a rigor. Temperature 105.8°. During the next few days, the rigors continued, with high temperatures: on two occasions rising to 108.8°. The tenderness in the region of the right ear continued; and, on the 16th, there was some general swelling behind the ear, with pain on movement of the head. On the 18th, there was distinct and defined swelling, with redness and tenderness directly behind the right ear. He had now had, in the nine preceding days, ten rigors, three of which were on the 17th, with temperatures of 103.8°, 107°, and 109.2°; and, on the morning of the 18th, he had two more, with temperatures of 106.5° and 107.6° respectively. Consciousness was completely preserved, though he was somewhat restless, yet drowsy. It was decided to trephine at the centre of the swelling, three-quarters of an inch behind the right ear. Here, with the smallest sized crown of the trephine, an opening was made through the skull into the interior of the cranium (not into the mastoid cells, but behind them). About one ounce of thick, very offensive pus escaped; and it was seen that it had been contained in a space between the skull and dura mater, which were here completely separated; the separation was felt with the probe to extend for an inch posteriorly from the trephine opening.

The patient was much quieter after the trephining, and slept a good deal; the rigors ceased. He had had altogether twelve rigors during the ten days he had been in hospital; but they now ceased, and he had no rigor for seven days after the evacuation of the abscess. He became more drowsy during the next few days, and gradually passed into a comatose condition, which continued till his death. On the 20th, it was noticed, on syringing the ear, that some of the fluid injected at the meatus escaped through the trephine wound. On the 19th, there was some swelling of the right eyelid: this rapidly increased, and the next day there was also proptosis of the eye, and so much chemosis that the conjunctiva projected between the lids, and required pricking. The swelling of the lids and proptosis gradually subsided; but, on the 29th, a small abscess appeared on the inner side of the orbit. On the 25th, an abscess had formed in the neck, about two inches below the right ear; this was incised. On the same day, he had a rigor, with a temperature of 109° Fahr. (This was the first rigor since the trephining seven days previously.) On the 26th, 27th, and 28th, he had on each day two rigors, and, the coma gradually increasing, he died on the 30th.

Post Mortem Examination.—On opening the cranium, there was found general, though slight, purulent meningitis, more at the convexity than at the base of brain. The abscess cavity between the skull and dura mater, behind the right ear, was found to contain a few drops of pus. The right lateral sinus was plugged with firm adherent clot, which in places was breaking down into pus. The inflammation in the sinus had extended forwards, along the petrosal and cavernous sinuses, into the ophthalmic vein. In the orbit, several of the veins were found to contain pus, and the orbital fat was infiltrated with pus. There was a small defined abscess between the external rectus and the eyeball, and a second behind the upper eyelid. The jugular vein was natural. In the neck, on the right side, three distinct abscesses were found: one beneath the sterno-mastoid (which was opened on the 25th); this led down to the axis and atlas, on both of which there were small surfaces of bare bone. The petrous bone was not carious. The mastoid cells contained a cheesy, semi-solid material. The lungs contained numerous infarcts, some of which were suppurating. The spleen was much enlarged, but there were no infarcts.

REMARKS.—The abscesses in the right orbit, and in the right side

of the neck, were probably due to the extension of inflammation along the veins from the primary seat of the disease—the petrous bone. It was clear that trephining the mastoid cells would not have evacuated the abscess. W. EDMUNDS.

ACTIVE LOCAL TREATMENT IN GLEET.

G. B., aged 19, intelligent, of strumous temperament, came under my care over twelve months ago, suffering from gleet of five weeks' duration, following upon a sharp attack of gonorrhœa. The discharge was abundant and purulent; the patient himself in a weak condition, and suffering considerably from moral depression. Exploration, with a bulbous pointed catheter, enabled me to detect that the raw surface lay just behind the fossa navicularis, and so I thought it a good case for local treatment. Accordingly, having kept the patient in bed, and prepared him by giving, a few hours previously, thirty minims of laudanum, I inserted a medicated urethral bougie containing half a grain of nitrate of silver (the patient having previously emptied his bladder), the orifice of the urethra being kept closed by lateral pressure with the fingers. This "bit" rather severely, and was followed by the symptoms of acute urethritis. After these had passed off, however, I found that the treatment had been effectual, as no symptoms of gleet returned.

I have just lately seen this patient, and he informs me that the cure has been permanent. He mentions, however, that for some months afterwards, when he thought "his stomach was out of order," he felt a hot sensation at the part when making water, followed by a sensation of itching. The only other treatment in this case, was a tonic of steel and quinine to relieve the depression.

I would remark that, in such cases, unless the patient can be kept in bed for a few days afterwards, active local treatment cannot be entertained. I have known a case in which acute epididymitis with orchitis (testitis of Bryant) followed the use of a strong injection of sulphate of zinc, the patient being allowed to go about as usual. Supporting the testicles with a suspensory bandage is not sufficient in such cases. In all cases, however, where active local treatment is employed, it is useful and should not be omitted.—JOHN S. MAIN, M.D., C.M., Chorlton Union Hospital, Withington, Manchester.

THERAPEUTIC MEMORANDA.

THE OCEAN-CURE FOR PHTHISIS.

ALTHOUGH "the benefits of a sea-voyage, in certain forms of phthisis, are so well known that it is needless to enlarge upon them" (BRITISH MEDICAL JOURNAL, February 10th, 1883), yet a short account of one from among several illustrative cases of which I have notes may be interesting and encouraging.

On September 24th, 1878, Miss F., aged 17, was seen by me in consequence of weakness after an attack of left-sided pleurisy. The respiratory murmur was very feeble at the left base; a few crepitating sounds were heard; and over the seat of the pulmonary valves there was a very distinct systolic murmur. The patient made very slow progress, but derived some benefit from a prolonged stay at Torquay, and subsequently at Ilfracombe, gaining some of the flesh she had lost. A note on March 14th, 1881, says: "Not much cough; pulse 84; slight dyspnœa on exertion. Left lower third of chest dull, and crepitant *râles* are audible over this part of the chest. The systolic murmur over the pulmonary valves is very distinct." On this occasion I had the advantage of the opinion of Dr. Cayley, who confirmed the diagnosis as just given. Of the numerous remedies, such as iron, alkaline hypophosphites, mineral acids, etc., that had been steadily tried, none seemed to have done any material good; and, in June, I recommended a sea-voyage by a sailing vessel to Melbourne and back. At this time, the pulse had risen to 100, and there was a husky cough every morning. The right lung seemed sound, but there was much crepitant *râle* over the left. The patient was happily in a position to secure for herself and her mother first-rate cabin accommodation on board the *Sobraon*, a ship that, in my experience, has carried more than one consumptive invalid into a state of renewed health and vigour.

My patient sailed in September 1881. On June 7th, 1882, I again saw her, looking robust and strong. There was scarcely a trace of dulness over the left chest; no cardiac murmur to be detected; no cough or expectoration; and, beyond weak breath-sound generally over the left side, no sign of any pulmonary unsoundness. I had given her a letter for the ship's doctor, but she did not feel to need any medical aid either going out or coming home; and she has, to the best of my belief, retained the health thus restored.

Of the general arrangements and manner of living on ship-board the patient spoke most highly, and expressed her perfect readiness to make the same voyage in the same ship, should such a step be needful.

The caution that has been impressed upon me by ship-surgeons who have made the voyage to Australia and back with consumptive invalids is, Do not wait too long. If the patient is to go, let it be done at once, before the lungs are gone into cavities. The observant chief officer of the *Sobraon* impressed this same caution upon me and my friend Dr. Eustace Smith when he was showing us over the ship shortly before she sailed.

JOHN C. THOROWGOOD, Welbeck Street; W.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

WESTERN INFIRMARY, GLASGOW.

BURN-CICATRIX OF LOWER LIP TREATED BY TEALE'S METHOD.

(Under the care of J. CRAWFORD RENTON, M.D.Ed., F.F.P.S.G. Surgeon to the Dispensary of the Western Infirmary, and Assistant-Surgeon to the Eye Infirmary, Glasgow.)

E. B., aged 21, consulted Dr. Renton in July 1881, on account of deformity of her lower lip, which had existed for eleven years, and resulted from an extensive burn by paraffin, which had exploded. The lower lip was completely everted, and drawn downwards towards the sternum, being fixed there in all directions by dense cicatricial bands extending over the chest; the lower jaw was also everted from the continued dragging, and she was unable to retain any fluid for in her mouth, even when she bent her head downwards, which diminished, to some extent, the eversion.

Dr. Graham of Paisley, under whose care she was at the time of the accident, and to whom Dr. Renton wrote for particulars about her, stated that, eighteen months after she was burnt, he operated by dividing the cicatricial tissue, and bringing two flaps of sound skin from each side of the neck to fill up the gap; a portion of the flaps sloughed, and cicatrisation resulted, with very little improvement. The eversion of the eyelids was, however, much benefited by Samson's triangular flap operation.

Fig. 1 represents her appearance when she came under the care of Dr. Renton, who had charge of Professor George Buchanan's wards in the Western Infirmary at the time she was admitted. The following operation was performed as a preliminary to Mr. Teale's



Fig. 1.

Having divided the main mass of adhesions to the sternum, small remaining portion of sound skin was dissected up on each of the neck, and these were united in front; the gap was thus partly filled up, and although the entire flaps did not unite, still, with addition of a few grafts of skin from the arm, a certain amount gained, and the patient was sent home for two months.

December 1st. The patient was admitted to the Training Home r Nurses, and the following operation performed, with the assist- ıce of Drs. Beatson and Lyon. The everted lip was divided into ree equal parts; the alveolar portion of the central part was freely cised, and two vertical incisions, each an inch and a half long, ere made down to the bone from each end of the central one, and en carried upwards to a point one inch beyond the angle of the outh. The flaps thus marked out were dissected up, brought over e everted lip, and united by a few points of silver suture, one be- g placed deeply to give support. An apparatus constructed by r. Hilliard, surgical instrument-maker of this city, was now ap- ied to ensure fixity of the head during the healing process, and event subsequent contraction, which is an important part of any eration, and is much insisted on by Messrs. Earle, Gordon Buck, . James, and Francis Mason, who have all written valuable papers burn-cicatrices and their treatment.

The parts healed by first intention, and the patient was dismissed January 5th, 1882, with her appearance improved, able to open d close her mouth, and to retain fluid food in it. Some annoy-



Fig. 2.

e arose from the bent condition of the lower jaw, and the conse- nt irritation of the flaps by the teeth, but extraction of the teeth nedied that. At the time of the operation, the formation of arti- al joints in the jaw was discussed, but decided against.

Fig. 2 shows the result of the operation.

September 1882. The patient continued as well as at the date of dismissal.

THE CHEMISTS AND DRUGGISTS' SOCIETY OF GREAT BRITAIN. A special meeting of the members of the above Society was ently held in the Inns of Court Hotel, Holborn. Mr. Hanson, the sident, occupied the chair; and there was a very representative endance of members from all parts of the country. In opening proceedings, the Chairman dwelt on the grievances under which profession laboured, the principal of which was the permission orded to co-operative stores and others to sell drugs and patent dicines. He trusted they would be able to carry a new Pharmacy l next session, which would remedy these grievances. Mr. Holmes ved a resolution, expressing a hope that a Bill amending the rmacy Act of 1868 would be passed. This was seconded by Mr. lling, who maintained that members of the profession should be mpt from serving on juries. The resolution was carried. Mr. g proposed the next resolution, to the effect that patent medi- es containing poison, or being in themselves poisonous, should be ced in the same category as ordinary poisons. This was seconded Mr. Nicholls, and supported by Mr. Horncastle. Mr. Wightman per proposed an amendment, that the sale of all drugs should be fined to qualified chemists and druggists. After some discussion, amendment was lost and the resolution carried. Mr. Allen pro- ed a resolution, advocating the holding of periodical meetings in ious parts of London—not merely general, but sectional ones. s being seconded by Mr. Cooper, was carried unanimously. A e of thanks to the chairman brought the proceedings to a close.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

AT the meeting of the Society, on February 13th, a discussion was held on the treatment by ligature of aneurysms of the aorta and large arteries. Specimens were shown of aneurysms taken from the museums of Middlesex and University College Hospitals, and of various materials intended for ligature of aneurysms, viz., kangaroo tendons, strips of the aorta of a horse, and a sciatic nerve. Microscopic preparations were also exhibited of the silk ligature after it had been long in the body, showing the method of cellular infiltration which takes place, and of catgut ligatures which had been prepared in chromic acid, and were in process of absorption on the sixth day after their application. The PRESIDENT proposed that the three papers presented to the Society, having relation to the same subject, should be read consecutively, and this proposal was adopted.

1. *A Case of Aneurysm of the External Carotid Artery; Ligature of the Common Carotid, with Cure of the Aneurysm; death from Paralysis on the thirty-fifth day.* By CHRISTOPHER HEATH, F.R.C.S.—The author recorded this case in support of the view that ligature of the common carotid was sufficient for the cure of certain cases of aneurysm of the external carotid, and in opposition to the view that ligatures should also be placed on branches of the external carotid artery. A carbolised silk ligature was employed, with antiseptic dressings, and the wound healed by first intention, the silk being *in situ*. The patient was a young woman of twenty-three, with extensive disease of the cardiac valves. A month before admission, she came down in the morning speaking indistinctly, and found that the tongue deviated to the right side. Four days later she noticed a swelling near the angle of the jaw, for which she became an out-patient at a hospital, where the swelling was painted with iodine. On admission to University College Hospital, January 7th, 1883, there was a smooth, round, pulsating swelling just below the right mastoid process, reaching down to about the level of the upper border of the thyroid cartilage, limited in front by the ramus and angle of the jaw, and overlapped behind by the sterno-mastoid. The right tonsil was pushed somewhat inwards, and the tongue deviated much to the right, the right half of the organ being a good deal wasted. The heart's impulse was strong and heaving, extending far outside the nipple-line. At the apex a loud, well-conducted, mitral systolic murmur was heard, at the base a much fainter double aortic murmur. On January 11th, Mr. Heath tied the common carotid above the omo-hyoid, with a carbolised silk ligature, the ends of which were cut short and the wound closed throughout. An antiseptic dressing was applied after the wound had been washed out with carbolic lotion. A gutta-percha splint was bandaged to the head and shoulders to keep the face turned towards the left. Slight pulsation persisted till the seventh day, on which the wound was found to be completely healed. The patient made a good recovery until the thirty-third day, when, while eating dinner, she suddenly dropped her knife and fork and complained of pain in the spine. An hour and a-half later her speech became unintelligible, and four hours later her senses became obscured. During the night, swallowing became difficult, and the next day (thirty-fourth) the right arm, and soon after, the right leg became paralysed, and she died on the afternoon of the thirty-fifth day. The *post mortem* examination showed an embolus at the base of Broca's convolution, and five or six small patches of yellow softening were found beneath the grey matter of the surface. The heart was much hypertrophied, the mitral valve thickened, and with vegetations on both surfaces; each cusp of the aortic valve was also studded with vegetations. The wound was completely healed, and the sac of the aneurysm filled with firm clot. It sprang from the external carotid, half an inch above the origin of the artery, and stretched the hypoglossal nerve, which was of a yellow colour at that point. The silk ligature was embedded in connective tissue, and a firm red clot extended for three quarters of an inch above and a quarter of an inch below the ligature. Microscopic examination showed the silk to be unaltered.

2. *Ligature of the Right Subclavian and Carotid Arteries for Aneurysm of the Aorta; death from Rupture of the Sac on the fifty-first day after the operation.* By HOWARD MARSH, F.R.C.S.—F. B., a shopman, aged 30, was admitted into St. Bartholomew's Hospital, January 17th, 1881. Previous health had been good; he had never had syphilis; but was in the habit of lifting heavy weights, though he was unaware of having received any blow or strain. Nine months before admission, he had "neu-

ralgia" in the right side of the head and neck, and in the right shoulder and arm. A month later, his voice changed to a hoarse whisper. Seven weeks before admission he first noticed a pulsating swelling at the root of the neck to the right of the middle line. This was of the size of a bantam's egg. On examination the tumour was found rising above the right sterno-clavicular articulation. The clavicle and sternum were partially absorbed. No pressure signs or extended dulness could be detected in the thorax. No *bruit*. Heart normal. Pulse in the right radial somewhat more feeble than in the left; pulsation hardly to be felt in the right carotid. Pupils equal. In the next few days swelling increased slightly towards the left; neuralgic pains were severe, and the swelling became tender. January 31st.—Subclavian and carotid were tied with cat-gut prepared by the chromic-acid process. The wounds did favourably, but the operation was followed by rapid enlargement of the aneurysm to the left side; the swelling soon led to absorption of the sternum, and extended high in the neck. Repeated hæmorrhages occurred, and the patient died at the end of about seven weeks. The author remarked that the case illustrated what is probably a serious danger in the treatment of aortic aneurysm by ligature of the carotid and subclavian vessels, namely, disturbance of the blood pressure and consequent dilatation of the arch in some new direction, and he alluded to one case in which great pulsation of the sac followed the operation, and to another in which a second aneurysm was found, which had apparently commenced very shortly after the trunks had been tied. In the present case no *post mortem* could be obtained. He believed, however, the aneurysm was originally seated on the first part of the arch near the innominate, but that increased pressure after ligature led to rapid dilatation of the arch towards the left side. The cases of distal ligature for the aortic aneurysm previously recorded, were alluded to, and the improvement that followed the operation in many of them was referred to, yet the danger pointed out in this case was one, the author remarked, that must be carefully borne in mind.

3. *A Case of Aneurysm of the Arch of the Aorta involving the Innominate Artery, with Remarks on the Distal Ligature.* By HENRY MORRIS, M.A., F.R.C.S.—A married woman, aged 43, who described herself as a "farm-labourer," came under treatment on September 7th, 1882, for an aneurysm supposed to be of the innominate artery. The symptoms were partly characteristic of innominate, partly of aortic aneurysm, but the shape and position of the tumour favoured the opinion that it was chiefly, if not entirely, of the innominate vessel. Tuffnell's treatment was tried for nearly two months, with temporary benefit. As distal pressure on the common carotid produced marked effect on the aneurysm, and pressure on the third part of the subclavian did not, ligation of the carotid alone was decided upon. The operation disclosed a strongly pulsating internal jugular vein adherent to the sac of the aneurysm, but no common carotid could be found. In the search for the artery, the vein was wounded, and had to be ligatured above and below the wound. The patient died fourteen days after the operation, from asthenia, the result of diffused suppuration in the right side of the neck. *Post mortem* examination showed the aneurysm to be almost entirely aortic, though the innominate and roots of the subclavian and carotid were thickened and enlarged. The carotid was firmly occluded by a plug of fibrine, about an inch and three-eighths from its origin, and lay flattened and deeply bound down by a dense thick layer of sclerosed connective tissue, out of which it was dissected with much difficulty. The left innominate vein was occluded, so that the whole of the blood from the head had to return through the right external jugular and other smaller anastomosing veins of the right side; this had excited the fatal suppuration. The case showed: 1. The impossibility of diagnosing some aortic from innominate aneurysms; 2. The untrustworthiness of any conclusion which may be drawn from the effects of distal compression on the large arteries in connection with such aneurysms, as to the form of operation to be adopted for their cure; 3. That a very appreciable pulsation may be felt along the course of the carotid in the neck, though that vessel be plugged, if the internal jugular become incorporated with the wall of the aneurysm; 4. That it was not probable that this aneurysm would have been cured by the occlusion of the subclavian as well as the carotid. It was suggested that Mr. Heath's well known case had led to the double distal ligature being held in a far too favourable light; and that, in estimating the effect of this treatment, too much importance had, perhaps, been attached to cases, such as Fearn's and others, in which the aneurysm had been found filled with clot after death. As distinct from the effects of ligature, much importance ought also to be attached to the condition of the blood and the circulation which precedes death, as well as to the slow approach of death, circumstances which themselves favour in no small degree, the deposition of fibrine. Various reasons were given why the distal ligature on the right side should be performed only in desperate cases, and even in these the effect of ligature of the common carotid should be tried before the subclavian is ligatured. It was further submitted that, in suitable cases of aortic aneurysm, ligation of the left common carotid gives the patient a much better chance, because the method is more nearly allied to Brasdor's, whilst there is only half the risk of the double distal ligature.—The PRESIDENT, in returning the thanks of the Society for these very valuable contributions, remarked that the first might be regarded as a case in which ligature had proved successful as far as the aneurysm was concerned; in the second, it was unsuccessful; in the third, owing to very difficult circumstances, it had had no trial. He trusted that these results might be supplemented by the experience of many members present.—Mr. BRYANT remarked that Mr. Heath's case was a very good illustration of the Hunterian operation; and the results of the other cases left him still of opinion that, in certain circumstances, aortic aneurysms were benefited by distal ligature. At the same time, the results of operation for the relief of aortic aneurysms had not been thought very satisfactory lately; and that was, perhaps, because the remarkable success of a previous case of Mr. Heath's, in which he had used the distal ligature, and in which the patient lived four years, had led them to expect too much. It was often claimed for operation that it, on the whole, prolonged life and gave some relief from distress; but even this he thought doubtful, considering the length of life and comparative comfort that was sometimes secured in such cases by rest. The diagnosis of innominate aneurysm was nearly impossible; in fact, purely innominate aneurysm was a pathological curiosity of great rarity, for most aneurysms called innominate were only forms of aneurysms of the aorta. If the operation of distal ligature were tried, he preferred not to tie both the subclavian and the carotid arteries, but only one of them, for that halved the risk of the operation, and gave nearly equal relief. He had himself, in one case of aortic aneurysm, tied the carotid with the result of prolonging life; and in another, the subclavian, thereby giving some relief.—Mr. BARWELL considered Mr. Morris's case to be one quite unsuitable for distal ligature, for the occlusion of vessels on the right side when the left side of the sac of the aneurysm was giving way could only lead to further extension of the aneurysm. Whether two vessels or one had been tied would probably have made very little difference. Mr. Morris's conclusions as to the application of the distal ligature he hardly thought were fairly deducible from a case in which, in fact, no artery had been tied at all. As to treatment by rest, he urged that in some cases it was entirely impossible; the pressure on the trachea and on the recurrent nerves led often to a state of misery so extreme as to put rest out of the question. Mr. Bryant had expressed some doubts as to whether operation prolonged life, though it might possibly give relief. He felt no doubt, however, that in a case he had lately operated upon life had been prolonged by the operation, for it was the opinion of all who had seen the patient before the operation that he had only three days to live, and yet after the operation he had lived three months. The conclusion he would wish to draw from what had been brought forward would not be to throw discredit on the distal operation, but rather to study the cases most carefully, with a view to diagnosis before deciding upon the operation.—Mr. HOLMES observed that Mr. Heath's case reminded him of the first paper read to the Society (January 29th, 1806) when Sir Astley Cooper related a case in which he had tied the common carotid with a fatal result. There was also another case of Sir Astley Cooper's, in which the circumstances were more exactly similar to those of Mr. Heath's patient. In that, Sir Astley Cooper had tied the common carotid for aneurysm of the external carotid. The pulsation persisted for a few days but then subsided, and the symptoms were completely relieved. The man was cured, and, consequently, Sir Astley Cooper saw no more of him. Such cases showed the great value of the Hunterian operation, which was confirmed by its results in cases of aneurysms of the femoral and iliac arteries. When the distal ligature was used in aortic aneurysm, he quite agreed with Mr. Morris that either the carotid or subclavian should first be operated upon singly; and of these he should, as a rule, choose the carotid as being the easiest for operation, and as giving the best results. In the very successful case of Mr. Fearn of Derby, to which Mr. Morris had alluded, it was hardly accurate to say that the cure was due to coagulation in the sac. The specimen, which was in the Museum of the College of Surgeons, showed that it was rather the impaction of a clot in the aneurysm which had led to a cure of symptoms

of similar cases, he remembered one which was in St. George's Hospital under Dr. Ogle, perhaps more for observation than treatment. It was a case of aortic aneurysm, in which severe head symptoms came on suddenly, and, for a time, seemed to threaten death; but these gradually subsided, and with them the aneurysmal symptoms also disappeared, and the girl died of phthisis a year later. It was then found that the common carotid had been occluded, and that nothing remained pervious in her aneurysm beyond a channel, such as would be sufficient for the ordinary blood-stream. This was the only case in which he had operated by distal ligature for aortic aneurysm, relief had been obtained, but not cure. The patient was nearly moribund before the operation, and Dr. Dickinson, under whose charge he was, considered that he had not a week more to live. Nevertheless, after the operation, the aneurysmal symptoms were very greatly relieved, though the aneurysm was not cured, and he was able to do some light work for four years after the operation, and, possibly, longer, though the aneurysm still persisted. It was important to notice the effects on the aneurysm of compression of the arterial trunks leading from it: for it was a good rule to cure that artery which exercised most influence on the aneurysm. The effects of pressure in Mr. Marsh's case, he could not help thinking, were due to pressure on the aneurysm itself. After ligature of the third part of the subclavian, he had never been able to satisfy himself of the reasons why that should lead to obliteration of the whole trunk of the subclavian; in the cases where such a result has followed, he was induced to think it was due to some clot brought down from the sac of the aneurysm.—Mr. SAVORY pointed out, in commenting on some remarks of Mr. Marsh, that the immediate effect of ligature must be to increase the pressure on the proximate side of the ligature; and that it was only, if this pressure could be successfully borne for a time, that the remote effects might be beneficial. Mr. Morris had observed that it was very difficult to rely upon any conclusions which could be drawn from the temporary compression of arteries, as to what might be the effects of their ligature; and a case he had lately had under his charge, at St. Bartholomew's Hospital, illustrated these difficulties. In a case of aortic aneurysm, repeated trials had shown that compression of the right carotid artery caused diminished pulsation in the aneurysm; but further investigation proved that the same happened when the left carotid was compressed; and that the pulsation in the heart, and all the vessels in the body, was weakened at the same time by this pressure so that the conclusion was arrived at, that it was due to pressure on the pneumogastric nerve, and not on the artery.—Dr. DOUGLAS POWELL asked Mr. Marsh whether he had been able to ascertain, before operating, whether the aneurysm was sacculated or not? for, with sacculated aneurysms of the aorta, he had always found a "jog" given to the case along with the second sound, which he thought was diagnostic. If it were not sacculated, it would not be a suitable case for ligature. Mr. Morris had kindly given him the opportunity of looking at his case before operation, and he certainly considered it a case that might be picked out as fit for operation. The "jog" was present, and it was sacculated. If the diagnosis of the obliteration of the carotid had been possible before the operation, he should have suggested the advisability of tying the subclavian.—Mr. TREEVES brought forward some statistics to show the benefit of distal ligature in cases of aortic or innominate aneurysm, and cited a case of his own where, on the discovery of an innominate aneurysm, an attempt had been made to ligature both the carotid and the subclavian. The ligature of the carotid had failed to compress it, so that it was practically a case of ligature of the subclavian only; and, in that case, the sac had completely closed. He was inclined to think that about as much good would result from tying one vessel as from tying two. In many cases of innominate aneurysm, portions of the clavicle and sternum become involved in the sac, and, in these cases, cure was impossible, owing to the destruction of the bone. He had seen a case which remained partially uncured for this reason. The question of temporary compression was worth consideration, and he suggested that, in certain cases, it might be well to put a ligature round the vessel, leaving the ends free, and tighten it occasionally.—Mr. LISTER said the sight of the specimens of silk ligature which Mr. Heath had used, recalled to him his first experiments with silk as a ligature for the carotid artery of a horse. It remained for six weeks in the body without alteration. A specimen, which had been in the human body for a year, was nearly entirely absorbed; but a small abscess was left where the knot had been, and constituted a source of danger. The perfect material for ligature would be one which could be easily sterilised, which was impermeable to organic fluids, and not itself capable of absorption; but such a material had not yet been found, and, until it was found, he thought it best to continue the use of a material which could be entirely absorbed.—Mr. STANLEY BOYD remarked that, in the case of Mr. Heath's, which had just been brought forward, the silk was surrounded by a zone of chronic inflammation, such as at some future time might have developed into an abscess.—Dr. J. F. GOODHART asked to be allowed to say a few words about the treatment of aneurysms from a medical point of view. He complained that he was growing restive at the sight of so much use of Tuffnell's treatment for aneurysm, for the patients treated in that manner were subjected to starvation, sometimes to bleeding, and to much misery, and he doubted if any good was done after all. In looking back through the past ten years of *post mortem* records, he found fifty-five cases of large aneurysms near the root of the neck, and he observed that those that had been treated on Tuffnell's plan were in no better condition than those who had not. Even in those where some clot had formed, the aneurysm often grew nearly as fast as if there had been no clot, for the blood easily worked its way behind the clot. He should, therefore, advise that all cases of large aneurysm should be let alone, except where there is some special indication for treatment. The opinions expressed by the surgeons had left him in some confusion, for he believed Mr. Holmes advocated, in cases where the aneurysm was extending, the application of a distal ligature to stop the extension, and yet they had been told to-night that such cases were just the ones in which a ligature should not be used.—Dr. BROADBENT remarked that he did not look for his cures in a *post mortem* room, as Dr. Goodhart seemed to do. He had seen in life many ameliorations and some recoveries under treatment with iodide of potassium.—(Dr. GOODHART rose for a moment to explain that he had intended to include that under the head of the Tuffnell treatment.)—The *modus operandi* he took to be essentially the same as in Tuffnell's treatment, viz., by inspissation of the blood, and, further, by the weakening of the heart's action, which was brought about by the salts of potash.—The PRESIDENT called upon Mr. HORSELEY for some account of the materials for ligature exhibited, which was very briefly given, and added that, long as the discussion had been, he could not allow it to close without asking the authors of the papers for some reply to the comments which had been made.—Mr. HEATH remarked that his own case was a plain straightforward one, in which the cause of death was not in any way to be traced to the ligature. With regard to the use of the distal ligature, he quite agreed with Mr. Holmes that it was best to apply it to the carotid; but the point of difficulty was to know to which carotid to apply it, and he had been sorry to learn nothing from Mr. Holmes on that point. In a well known case which he had published, he had tied the left carotid, and the patient lived four years. But if Mr. Morris had happened to tie the left carotid in his case, there would have been no carotid at all left, for the right had been previously occluded. He had himself, in a case of aortic aneurysm, tied the left carotid, where the circumstances had been similar, viz., the right carotid had been previously occluded by inflammation due to the aneurysm, and the result was death in a few hours from anæmia of the brain.—Mr. MARSH wished to say a word on the question of the propriety of tying the vessels on the right side in his case, considering the extension of the aneurysm. The case, when he tied it, had certainly not extended beyond the limits of what might well be considered an innominate aneurysm; and that was what it looked most like, so far as diagnosis was possible. The aneurysm, he was convinced, was sacculated, although he had only had the opportunity of making a very imperfect examination of it after death, as a *post mortem* examination had been absolutely refused. Dr. Church, who had examined the aneurysm with him, had told him nothing of the "jog" to which Dr. Douglas Powell had referred.—Mr. MORRIS observed incidentally that Mr. Heath's cases showed that a *post mortem* room was sometimes the best place to look for cures. He thought that, throughout the discussion, it had been too readily assumed that consolidation of an aneurysm was equivalent to its cure, whereas he regarded it as only a means to an end, and needing to be supplemented by the shrinking of the clot. Mr. Holmes had directed their attention to a case of Sir Astley Cooper's, in which the cure was not considered to have been obtained until the tributaries of the carotid ceased to pulsate; and it had been the same in Mr. Heath's case, where the facial, lingual, and other branches had consolidated. There was no situation in the body which could accurately be compared to the carotids, for in them the circulation by anastomosis was very large, and that was a point which was not favourable to cure. He confessed himself hardly able to accept Mr. Holmes's suggestion of the method of formation of a clot in the trunk of the subclavian after ligature of the third part, but felt the

difficulty of adequate explanation. Mr. Savory's remarks upon the effects of distal pressure had been especially interesting to him; and he remembered reading of a case in which similar results had followed the use of this method, though they had not been adequately traced to the pneumogastric nerve.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 9TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

Subperiosteal Amputation at the Hip-joint.—Mr. SHUTER read notes of this case, and exhibited the patient. He said that on October 16th, 1881, he held a consultation with Dr. Samuel West and Mr. Rose on a patient, aged 18, in whom he diagnosed acute necrosis, without suppuration, in the lower end of the left femur. This had led to septicæmia and secondary inflammation of the left hip-joint. Although this diagnosis was not supported, it was agreed that nothing but amputation at the hip-joint would save the boy's life. The next day the following operation was performed: A circular amputation through the junction of the middle and upper third was done, followed by a longitudinal incision on the outer side of the femur down to the bone, the periosteum stripped off, and left in the flaps, and the whole of the bone enucleated. The patient made a good and rapid recovery. A little more than two months after the operation, he had a movable stump, and within six months he was wearing an artificial limb, on which he could walk and get about very satisfactorily, and continued to do so until a few weeks ago, when he was made to discontinue its use in order to allow a sinus to heal. In 1859, Professor Ollier of Lyons, after performing many experiments on the lower animals, devised subperiosteal operations on the human subject, with the view of affording bony supports to flaps cut for disarticulations. Among his suggestions was an operation similar to the one now performed on the hip-joint. This case, however, was the first successful subperiosteal amputation at the hip-joint which had been attended with the formation of bone in the stump, and in which the patient had been able to wear an artificial limb satisfactorily.—Mr. BRYANT congratulated Mr. Shuter on the success of his case. The stump was by far the best he had ever seen after an amputation at the hip-joint, and, from its length and solidity, was by far the most useful. He questioned, however, Mr. Shuter's opinion as to the presence of much bone in it; there might be small deposits, but not a new bone in a practical sense. The mode of operation, by amputating first at the upper third and, subsequently, by resecting the upper fragment—the method of F. Jordan—he believed to be good; but Mr. Shuter's plan of severing the periosteum from the upper fragment was a valuable improvement; for if such a method did not allow a new bone to form, it gave a good attachment to the muscles of the part, and evidently, as in the case before the Society, tended to form a firm and solid stump. The operation, unfortunately, was only adapted to a certain class of cases, that is, to such as Mr. Shuter's case represented, namely, disease of bone brought about by inflammatory action; for in bone that was healthy, if he might use the expression, it was by no means easy to strip off its periosteal covering; and, in cases of tumour, the operation was hardly applicable. In amputation for disease of the hip also, the operation was not applicable, since, in most cases, it was called for after an unsuccessful excision. When, however, Mr. Shuter's operation could be performed, it undoubtedly ought to be, since it had advantages, as proved by his case, over any other form of amputation at the joint.—Mr. CROFT was very pleased that he had seen the case. Looking at it from the point of view of subperiosteal excision of top of the femur, it was of special interest to him. It had been stated that subperiosteal excision of the top of the femur was an impossibility. This was a case which amounted to subperiosteal excision of the top of the femur, including the articular portion. The periosteum and its muscular attachments had been preserved, and with the happiest results, for this was one of the best stumps ever presented to any Society, and he congratulated Mr. Shuter upon it. Whether there were bone or not, the result of the operation was equally praiseworthy. For his own part, he believed that there was a small core of new bone present. He asked Mr. Shuter whether he had preserved the great trochanter. It was easy to preserve it on the child before it had become ossified to the shaft, but at the age of the patient before the Society, the trochanter had become ossified to the top of the femur, and considerable trouble might be experienced in denuding it of periosteum.—Mr. BARKER congratulated Mr. Shuter on the result of the operation alluded to, and was glad to be able to support his views by experience gathered in a case in which he had performed an operation identically the same, two years ago, in February 1881, and with a result which also fully justified Mr. Shuter's praise of the method. The case had been already recorded in the BRITISH MEDICAL JOURNAL of January 20th, 1883 (p. 100), and he would only so far allude to it as to say that the operation was not one of great difficulty, the femur shelling out of its coverings rapidly through an external incision, and that the patient made a very quick recovery. The stump was an excellent one, and was as freely movable as in the case under discussion; it had also the same hard core resembling a bone, upon which the muscles acted with remarkable power, but whether this was actually bone or hard fibrous cicatrical tissue he could not undertake to say. He would take an early opportunity of presenting the case to the Society if permitted, as the man had for a long time past been in perfect health.—Mr. CRIPPS said that the question for discussion was whether the method employed was a good one. He believed there was no new bone in the stump under the periosteum. This operation was similar to that recommended by Mr. Furneaux Jordan, which he (the speaker) had seen twice performed; and the objection to which seemed to be that it took a long time in its accomplishment. Mr. Jordan thought the flaps would heal so very readily, and that the fear of hæmorrhage during the operation was slight; but since Mr. Davy's method of controlling hæmorrhage through the anus had been employed, there was not much fear of bleeding when the usual method of amputation was employed.—Mr PICK said that the stump in Mr. Shuter's case permitted the patient to wear an artificial stump, which might be useful for the purposes of locomotion. In a case of amputation through the hip, performed by himself six years ago, he thought the result would have been better had Mr. Shuter's method been employed, as the patient had been always compelled to use crutches, and could not wear an artificial stump. It seemed to be impossible to devise an instrument for locomotion, for ordinary amputations through the hip, which should not be cumbrous. Mr. Shuter's patient with his artificial limb, could walk a mile and a half without much fatigue.—Mr. MARSH suggested that a committee might be empowered to inquire into two points; viz., as to the presence of new bone in the stump, and as to how the patient walked on the artificial limb. He (Mr. Marsh) thought the patient threw the limb forward by a jerk movement of the pelvis, rather than by motion of the stump. He also thought the difficulty as to hæmorrhage in amputation at the hip was now overcome by Mr. Davy's method of controlling it which was admirable. He had amputated after Mr. Jordan's method on two occasions, and had thought it very tedious.—Mr. BUTLIN thought there was some new bone in the stump; if not, it might be the remains of some bone left behind at the operation. The man had a better stump than after the ordinary amputation through the hip. If the thickening of the stump were due to a piece of necrosed bone in its substance, it should, at any rate, be left behind.—Mr. BARKER said that the bone in his case had shelled out, and there was no question that any of it was left behind.—Mr. DAVY said that, as to the aid given by instruments irrespective of the swing of the body very little aid to progression was usually gained from the stump itself in the usual method of hip-amputations. He was gratified to hear of the favour with which surgeons regarded his method of arresting hæmorrhage in these operations; but he would give an example of a misadventure from the use of the lever. He had appiled it himself to a man aged 40, during an amputation through the right hip. On the evening of the operation, the patient had symptoms of peritonitis; though at the end of the operation, in the afternoon, he had appeared to be doing very well, and on the next day the patient died. At the inspection, a rent produced by the lever was found in the rectum. The man had a very small meso-rectum. Mr. Davy had never known the same accident occur in the case of any other patient. About forty cases had now been operated upon according to his method, about twenty of which were on the right, and twenty on the left side, and there had been about sixty-five per cent of recoveries. He hoped the fatal case he had just mentioned would make surgeons more careful in the use of the lever, if that were possible. He had never seen a man walk better after amputation at the hip than did Mr. Shuter's patient.—Mr. M. BAKER had also never seen a patient walk so well before; but this, he thought, was due to the way in which the flaps were made. Mr. Shuter had begun the operation as if about to amputate at the junction of the upper and middle thirds, and had then amputated at the hip, the result of which was that the flap was very long. He thought there was some bone in it.—Mr. MORRIS said the man walked very well, and his mode of progression seemed due to the femur itself. He had been struck with the facility with which the periosteum could, in some cases, be removed from the upper part of the thigh.

membered a case in which the upper part of the shaft was seased, and the periosteum easily peeled off. Upon then sawing the bone with a chain saw, he had removed all the upper part of except the head and the trochanters. In another case, several eces of the thigh-bone had been removed, and the patient had now a ge development of new bone, with only 2¾ inches of shortening.—r. LUCAS had examined the case carefully, and thought, if there re any bone at all in the stump, it was in very small quantity. He d bent up the stump, and believed the muscles had been matted gether by the inflammation, and that the movement in it was due its muscle and skin.—Mr. SHUTER, in reply, could not certainly r there was bone in the stump. He had assisted a friend to do a nilar operation for another patient some time ago, and there was nd to be a portion of bone in the stump three months afterwards, ien the patient died of amyloid disease of the liver. His operan was not like that of Mr. Jordan; it had been devised by Ollier 1859. It could only be done in certain cases, when the femur ntained no malignant disease. In this case, the periosteum was removed from the great trochanter, as it was very adherent. In other case done by Mr. Shuter's friend, it was not difficult to ip it off the great trochanter. The difficulty was at the first rting; when once it began to peel, it was easily stripped. The eration was done in October 1881. The operation need not take y long in the doing. The advantage was, that it enabled the ient to wear an artificial limb. He found that patients who had l amputation through the hip had had artificial limbs supplied hem by the instrument-makers, but none of them had been rened to be repaired, from which he concluded that they could not e been habitually used.—The PRESIDENT said that three ques-ns had come up for solution: as to the condition of the stump, mode of progression, and the difference between this and other outations of the hip. He would nominate Messrs. Marsh, Lucas, Croft, as a Committee to inquire into these questions.

Successful Case of Nephro-Lithotomy.—Mr. BENNETT MAY, mingham, read notes of this case. This case showed an advance previous ones in point of size and weight of stone removed, this g 3 inches long and 473 grains in weight. The diagnosis rested the prominent symptoms of pain, hæmaturia, and pus in the e. The patient was a coal miner, aged 34, and the history left loubt that the stone must have been present and growing in the ey for eighteen years. For the past year he had only been able live in comfort by avoiding every exertion. The attacks of hralgia were very severe, always in the left loin, and followed æmaturia for a day or two. Examination of the loin showed plete absence of swelling or hardness, or tenderness on palpa-. The operation was done October 20th, 1882, the incision ering from an ordinary colotomy one in being higher up, so as kirt the rib. Manipulation failed to make out a stone, but acuture detected it at once. The kidney substance was incised in rtical direction until the wound appeared large enough to permit extraction, which was accomplished entire by a scooping action e forefingers. Bleeding of a venous character was profuse, but rolled by pressure. The parenchyma of the kidney appeared thy; there was no sign of pus or a sac. Urine came through wound on the following day, and continued to flow till the nty-first day, when it ceased entirely. The wound was soundly ed at the end of the fifth week. The urine had slowly returned nearly normal standard. For some time after operation it was ngly ammoniacal and turbid. It was now almost clear, acid, of ific gravity 1.020. The patient had tested his recovery by active cise. He felt perfectly well, free from pain, and fit for ordinary . The principal interest of the case lay in the question of re-y. There was every indication of this being complete, and of kidney having retained its functions as a healthy working n. This was no doubt due to the fact, as pointed out in pre-discussions at this Society, that no destructive processes had established in it. The patient was shown, with the stone. The was preceded by an expression of indebtedness to the Society's shed reports, whence the writer had derived the information enabled him to treat the case. In reply to the president, Mr. said the urine now was slightly opulescent, normal, except that ntained a slight deposit of pus, and acid. He did not know the nt of urea it contained.—Mr. HOWSE said that he had per-ed a similar operation three days previously, when the difficulty ding the stone was very marked. The calculus was a small one· alate of lime, weighing 36 grains only, and the diagnosis was difficult. The patient was a man 57 years of age, who had had on the right side, followed by the passing of gravel. wever, there had been no passing of gravel for the past two years. Nothing was found in the bladder. The pain in the right lumbar and iliac regions was as if needles were running into his kidney; so said the patient. Mr. Howse cut down on the kidney, notched the quadratus lumborum muscle, and felt a stone in the pelvis of the kidney, when examining its anterior aspect, but could not find it from the posterior aspect. Doubtless the position of the psoas major muscle behind the kidney formed a firm point of resistance when pressure was made from the front, whereas in examination from the back there was nothing firm against which the kidney could rest. Mr. Howse succeeded in fixing the stone between his thumb and finger, and then notching the pelvis at its lowest part with a director, he managed to remove the calculus through a small opening. The urine was still draining from the wound. The temperature had since risen to 102.1°, but was now about 99°, and the patient was doing well.—Mr. LUCAS said that with the majority of large stones the kidney structure was generally much injured, and then nephrectomy should be done. He had learned much from the case of Mr. Howse, which he had witnessed, as to excision of the kidney. In that case the stone could not be felt from behind, but was detected when the finger was passed over the anterior surface of the pelvis. When no stone could be felt from the posterior surface of the pelvis, the fingers should then be passed round to the front of the kidney.—Mr. BUTLIN said that Mr. May had talked of the stone as only a little larger than usual, whereas it was in truth a huge mass. It had been considered, in the case of a much smaller stone upon which he had himself operated, that it would be better to remove the kidney than not, looking upon it as an unhealthy kidney. His patient, after the removal of the stone from the kidney, had seizures of gravel, but all the signs were those of gravel in the other kidney. In another case, he thought the patient had stone in both kidneys. He had lived on charity; and refused to undergo an operation. He had afterwards married, and gone to work.—Mr. MORRIS asked if Mr. Howse would advise his procedure in all cases in which he cut down upon the kidney for the removal of stone. He (the speaker) thought the front of the kidney should not be examined until the posterior surface had been well scrutinised. The difficulty of detecting the stone from the back might be overcome by letting an assistant support the kidney well from the front of the abdomen. He would examine the front, if, from the posterior surface, he could find no stone, but not till then, as it seemed a serious thing to displace the fatty tissue from the front of the pelvis unnecessarily. He had lately had two cases, in which, having commenced the operation, he could find no stone, and the patients had recovered easily. One patient had apparently derived benefit from the operation, which Mr. Morris attributed to the fact that the kidney was very movable beforehand, and possibly the operation had fixed it more firmly, and, by preventing its motion, rendered it less painful.—Mr. MAY, in reply, said he thought his case might help to determine the point as to the size of the stone which might be removed. As to whether the kidney had recovered, he would in future add a complete clinical account of the urine to his report of the case. He believed the stone had fallen away from his touch, even when fixed by an assistant from the front, as it had been during the operation.—The PRESIDENT tendered to Mr. May the thanks of the Society for coming to London to relate the case.

Ferrocyanic Test for Albumen in Urine.—Dr. F. W. PAVY exhibited pellets made according to his directions for this purpose. A description of Dr. Pavy's researches and of the pellets will be found at page 308 of this week's BRITISH MEDICAL JOURNAL.

Test Papers for Albumen in Urine.—Dr. G. OLIVER (Harrogate) exhibited specimens of test papers saturated with various re-agents, more sensitive than heat or nitric acid to albumen, extremely portable, but little liable to deterioration from exposure to the air, and quite devoid of the corrosiveness which interferes with the portability of nitric acid. The papers were saturated with potassio-mercuric iodide, potassium ferrocyanide, potassic-mercurio-iodocyanide, sodium tungstate, and picric acid; and all gave sensitive re-actions with slightly albuminous urine.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

PATHOLOGICAL SECTION: ORDINARY MEETING, JANUARY 26TH 1883.

F. E. MANBY, F.R.C.S., in the Chair.

1. *Cholecystotomy.*—Mr. LAWSON TAIT showed a patient upon whom he had performed cholecystotomy in October last, and exhibited the sixteen gall-stones which he had removed. The patient had been suffering from the usual symptoms of distension of the gall-bladder, these

being, as usual, intermittent. During their existence a movable tumour over the right kidney could be felt. There seemed to be, as far as Mr. Tait could determine, a good deal of misunderstanding about the symptoms of gall-stone and its cause. As long as the stones were loose in the bladder they gave rise to little or no uneasiness, and this explained the frequent discovery of numerous gall-stones in the gall-bladder, on *post mortem* examination, although they had caused no suffering during life. But if a calculus gets into the neck of the bladder and then becomes impacted, the mucous secretion of the inner coat of the bladder collecting behind the stone, distends the cyst, and its spasmodic efforts to expel its contents becomes the cause of agonising pain. Till the calculus passes as far as the common duct there is no jaundice. Cholecystotomy is a very easy operation, and considering that it was originally proposed, in 1743, by Jean Louis Petat (*Mémoires de l'Académie de Chirurgie, Tome* i, p. 155), it is marvellous that no one ever attempted it till three years ago.

2. *Laparotomy.*—Mr. LAWSON TAIT, also exhibited a patient from whom he had removed a large tumour of an unknown origin. It had existed for more than a year, and during the six months preceding the operation it had grown rapidly, and had become very painful. It originated either in the liver or in the right kidney, but the viscera were all so matted together that Mr. Tait was quite unable to say which. It had a well marked capsule, and from the cavity about three pounds of flocculent broken up tissue was enucleated. The wound in the capsule was united to the parietal wound, and the cavity drained. Microscopic examination of the growth gave no assistance in identifying its nature or origin.

Papular Syphiloderm.—Dr. SAUNDBY showed a patient with a well-marked diffused papular syphiloderm, resembling lupus erythematodes.

Lymphosarcoma.—Mr. FURNEAUX JORDAN showed a tumour which he had removed from the neck, where it had existed for twenty years, but recently had ulcerated and given rise to hæmorrhage. The tumour was referred to a subcommittee, consisting of Dr. Barling, Mr. Jordan Lloyd, and Dr. Saundby, for a report upon its histological characters.

Cirrhosis of Liver without Ascites.—Dr. SAUNDBY showed a specimen of atrophic cirrhosis of the liver removed from the body of a man who had died rather suddenly of hæmorrhage into the stomach. He had never lost a day's work till a few days before his death. The kidneys were also in a state of chronic diffuse nephritis. The absence of ascites was noteworthy. The spleen was enormous, proving that the obstruction to the portal circulation undoubtedly existed.—Mr. FURNEAUX JORDAN reminded the meeting that the late Dr. Todd died rather suddenly from a similar cause; and, on *post mortem* examination, cirrhosis of the liver was found, though this had not been suspected during life.

Cancer of Pleura.—Dr. SAUNDBY showed a microscopical preparation taken from a case of primary malignant disease of the pleura. He was in some doubt as to the correctness of the term cancer, and would prefer to call it alveolar sarcoma.—Dr. BARLING agreed that the preparation had the characters of alveolar sarcoma.

Intracapsular Fracture of Neck of Femur.—Dr. BARLING showed a specimen of intracapsular fracture of the neck of the femur, from an old man aged 62, who had been struck on the hip by a barrow. At the time of admission to the General Hospital, there was eversion of the left lower extremity, nearly three-quarters of an inch shortening, inability to raise the limb, and great pain in hip when it was handled, but no crepitus. The patient stated that he had not fallen on his hip; that the leg had been everted for many years—in fact, that he had danced on it when young, although it was then everted; and that he had suffered from rheumatism in the left hip. Death was caused by uræmia, from chronic Bright's disease. *Post mortem*, a fracture of the neck of the femur was found entirely within the capsule; the cervical reflexion of the capsule was found untorn, and very much thickened. There were no rheumatic deposits around the joint. The principal points of interest in this case lay in the previous history of eversion of the extremity, and of rheumatism of the joint, and in the condition of the reflexion of the capsule, which could not have allowed of more than a quarter of an inch shortening.

Hæmorrhage after Reduction of Hernia.—Dr. BARLING also showed a specimen of intestine, from a case of strangulated inguinal hernia, in a man aged 63.* The hernia had existed for sixteen years, but had been strangulated for only six hours. It was reduced by taxis without chloroform, and, about an hour afterwards, the patient passed about three pints of blood *per anum*. During the time th patient lived (five days), symptoms of strangulation still existed but the hernial sac was three times filled with intestine, which wa easily reduced, and no other strangulation could be detected t account for the symptoms. Believing that the symptoms were du to non-recovery of the intestine from the constriction, Mr. Bartlee did not consider any operative interference justifiable. At the *pos mortem* examination, three feet of jejunum and ileum were foun much narrowed in calibre, and intensely congested, but no lesion c the mucous membrane could be detected. The hernial sac was foun to be distended with small intestine, not at all strangulated, and some distance from the part which had been strangulated. Th points of interest in this case were, the severe hæmorrhage from t congested mucous membrane, and the non-recovery of the intestin after such a brief and not very severe constriction.

Papilloma.—Mr. J. F. WEST showed a small pedunculated grow removed from the shoulder. It had recently begun to increase size, but was of old standing.

* A patient of Mr. Bartleet's in the General Hospital.

ACADEMY OF MEDICINE IN IRELAND: SURGICAL SECTION.

FRIDAY, JANUARY 11TH, 1883.

J. K. BARTON, President, R.C.S.I., in the Chair.

Exhibition of Specimens.—Specimens by cards were exhibited Messrs. Whicks (Vice-President), Thomson, and Stokes, and livi specimens by Messrs. Arthur Benson, Swan, Wheeler (Vice-Pre dent), and Croly.

The Use of Anæsthetics in Certain Operations.—Dr. FITZGIBB read a paper, advocating the use of anæsthetics in surgical ope tions upon the mouth, anus, and rectum, and especially in ope tions for the removal of internal hæmorrhoids. The anæsthetic recommended was bichloride of methylene, which he had larg used in the foregoing operations, employing Junker's inhaler.—T PRESIDENT corroborated Dr. Fitzgibbon's statement with regard the facility of exploring the rectum under anæsthetics.—Dr. HAMILTON pointed out that rectal surgery had for many years p undergone great modification. He alluded to a paper of his p lished several years ago, recognising the advantage of anæsthe in the treatment of hæmorrhoids. Anæsthetics were, he c sidered, more adapted to the rational and scientific treatment rectal diseases than any other department of surgery. Indeed did not think that any conscientious surgeon would operate with anæsthetics, which had the advantage, in addition, of minimising repugnance that many persons had to such physical examinat —Mr. THOMSON observed that, from the time he was a studen the Richmond Hospital, almost all rectal operations had been formed under the influence of anæsthetics, except in cases w there was some special contra-indication. His experience of as an anæsthetic was so favourable, that he did not see any re to substitute bichloride of methylene for it, especially as it was as safe as ether.—Mr. ORMSBY distinctly preferred ether, and poi out that statistics were against the use of bichloride of meth and chloroform. He doubted the propriety of advocating the of anæsthetics in all cases requiring rectal operations.—Mr. PI stated that his experience of bichloride of methylene was favourable. Its action was much more rapid than that of and the required quantity used much less, especially in protr operations.—Mr. MYLES asked Dr. FitzGibbon to state the gro upon which he claimed for bichloride of methylene advantages ether in operations on the tongue.—The VICE-PRESIDENT Wheeler) indorsed all that Dr. FitzGibbon had said in referen the advantages derived from the use of bichloride of meth He thought that the length of time patients remained intoxi after the use of ether, was a disadvantage which was got rid the use of bichloride of methylene, and that there was less lia to sickness after the latter. In cleft-palate operations, esp in very young children, the use of anæsthetics was indicated MACSWINEY alluded to the late Professor Morgan's researc anæsthetics, and asked Mr. Stokes what anæsthetic he had u the case of excision of the superior maxilla exhibited previ the meeting.—Mr. W. STOKES observed that, in the case Dr. Mac alluded to, ether was used, and he preferred it to any anæsthetic.—Dr. KILGARIFF also gave a preference to ethe enumerated various important operations about the mouth in he had employed it with success.—Dr. FITZGIBBON r emphasising the alleged advantages of bichloride of methyle ether and chloroform, particularly in operations about the and the mouth.

Trephining in Mastoid and Tympanic Disease.—The VICE-PRESIDENT Mr. Wheeler) read a paper on trephining in mastoid and tympanic lisease. He related the causes of purulent discharges from the ar, and the necessity for early trephining in diseases of the osseous tructures, if not yielding to other treatment within a reasonable ime. He recorded the last two cases he operated on; the first, that f an old man seventy years of age (who was present); and the econd, that of a patient aged 41, who suffered from acute inflam- nation of the mastoid process. Both made good recoveries. Sta- istics which he quoted showed that many of the cases left to nature r expectant treatment died. Having enumerated the various hannels through which purulent discharge found its way to the ranium, he advocated trephining in that situation where the mastoid ells and tympanum would be opened and the dura mater exposed, amely, anterior to a line which divides the mastoid process ver- cally, which would avoid the lateral sinus and the lower border of ne trephine, to be on a level with the external auditory meatus.— Ir. ARTHUR BENSON inquired what treatment previous to opera- on had been adopted by Mr. Wheeler, mentioning that Dr. Politzer nd other authorities did not despair of effecting cures in such cases, ven when there was caries of the mastoid cells. He also asked r. Wheeler to state on what grounds he had arrived at the conclu- on he did, which was now proved to be accurate.—Mr. DOYLE entioned cases of mastoid disease that had been successfully cated by making an incision on the mastoid process.—Dr. HENRY ENNEDY stated that, in his experience, such cases as had been tailed were not permanently benefited by incising the mastoid ocess.—Mr. THOMPSON asked whether Mr. Wheeler had adopted y other treatment than what he had stated in his paper; and also ether, in all cases of otorrhœa with tenderness over the mastoid ocess, he would at once recommend trephining.—Dr. BENNETT inted out that Mr. Wheeler had described his treatment only in ses in which, while there was otorrhœa, there was manifestly sease in the neighbourhood of the mastoid process capable of ing detected. There were a number of cases where bone was dis- sed, and where the disease was entirely remote from the mastoid ocess.—Mr. WHEELER, in reply, said that the previous treatment the case of the younger patient, alluded to by Mr. Benson, was mply syringing the ear. There was evidently disease of the bone. had not stated that they were to trephine without adopting ner means; but he had mentioned that, if the disease lasted any ngth of time, he would trephine, even in the absence of osseous ease. He alluded to the statistics of the operation, which showed at trephining was not, comparatively speaking, a serious opera- n. He had seen one where excellent results had been obtained incising the mastoid process; but in these there was no disease the cells. Dr. Bennett had asked if he would trephine in all es; and, if there were a piece of bone diseased at the apex of the rous portion of the temporal bone, whether there would be any sibility of doing good. He (Mr. Wheeler) doubted if diseased ne could be thus diagnosed; but, if the person had cerebral sym- ms and running from the ear, he would be induced to trephine. e operation was not done often enough.

THE SAN REMO LADIES' HOME.—This charitable institution for alid ladies of limited means, to which Her Royal Highness the own Princess of Germany has given her patronage, has been insti- ed and is being partially maintained by some of the more uential residents of San Remo, who are desirous of extending the efits which this warm and dry climate affords during the winter ths to those ladies who, from pecuniary reasons, have been ble to avail themselves of the change. This home, which is er the management of a general committee of ladies and gen- en, with a visiting committee of three ladies, an honorary plain, physicians, treasurer, and secretary, (all *ex officio* members ommittee) provides a temporary residence with board, medical , and medicines, on payment of the very moderate sum of 25s. week. From the report just published we learn that the and larger home was opened at the beginning of the season, and there is still a sum of £176 due for furniture, for which the mittee earnestly solicit donations. Dr. Daubery and Dr. Free- , the medical officers, have given their services gratuitously, and r free help has been given. Ladies desiring admission, not over age of 45, should apply to Miss Macdonald Lockhart, the Lee, ark, N.B., who will supply copies of the rules and any further rmation.

REVIEWS AND NOTICES.

NOTES FROM SICK-ROOMS. By Mrs. LESLIE STEPHEN. London: Smith, Elder, and Co.

ALTHOUGH in no way to be considered in the nature of a guide or manual for nurses, these notes by Mrs. LESLIE STEPHEN may be read with benefit by all to whose lot it may fall to be with their friends in sickness, for they contain much sensible information of a truly practical character; and, if they appear to some somewhat dogmatic, the fault will be readily condoned on account of the domestic interests always associated with family nursing. The notes deal almost exclusively with the minutiæ of nursing, and are specially applicable to the family circle; the writer's experience, both as patient and nurse, entitling her to speak with some authority on the subject, and, as a critical observer, to notice the shortcomings of certain trained nurses who had the highest character for efficiency, and the conduct of others who had no training whatever, but who yet had something to teach. Apart from what is usually spoken of as the vocation, Mrs. Stephen considers that a nurse, to be efficient, should possess what she terms the true nursing instinct; that is to say, she ought to sacrifice the feeling of tenderness that she might otherwise have for her patient for the higher motive of interest in the disease which afflicts her. It is not easy to see how the two feelings can be altogether dissociated; but there is little doubt that the primary object of the nurse must be to alleviate, to the best of her ability, the sufferings of her patient; and in doing so she demonstrates her affection in the best sense of the term. Among other counsels recommended to the nurse are cheerfulness of demeanour, caution to avoid everything which might disturb the fickle mind and too easily excited imagination of the patient; and, if a calamity does happen, to "lie freely" and without hesitation, so long as the person most interested is kept in ignorance. The mania for washing invalids all over at all times and seasons is very properly condemned; and the attendant is instructed how ablution may be effected to a limited extent daily with comparatively little fatigue, and without much risk of chill. The deodorants recommended for occasional use in the sick-room (by a common error among lady writers, termed disinfectants) are burnt vinegar, which is preferred to the more aromatic pastille or ribbon of Bruges. The spray of sanitas is also extolled, and the writer likewise speaks in the highest terms of the efficacy of boracic acid, which, although an admirable antiseptic, is scarcely suitable, on account of its sparing solubility and fixed character, for use as a deodorant. Mrs. Stephen has a deep-rooted objection to candle-smoke, arising from candles improperly snuffed, which she may now possibly waive since her discovery of a pair of snuffers which effectually extinguish the flame without causing smoke—a desideratum of material importance. A good deal is said in the notes about indulging a patient's whims and fancies, and many other apparently trifling matters, but which, in the aggregate, tend so much to conduce to the comfort of the sick-room. Irrepressible visitors, who are taken to task on account of the inopportuneness of their visits, are counselled how to comport themselves in the presence of the sick, and the nurse is instructed to turn them out, should their unseasonable gossip tax the patient's strength. Some excellent remarks follow on the feeding and dressing of patients, the arrangements of the room with regard to the position of furniture, pictures, flowers, and other surroundings which ladies best understand, and the proper disposition of which tends so much to relieve the monotony of sick-room life. The latter part of the notes refers to food and its preparation, and especially to beef-tea, for which every one appears to have a fresh recipe, the author in the present instance recommending it to be made with equal parts of beef and veal, and to undergo the stewing process for a period of three hours. The preparation of fomentations, poultices, and other domestic remedies and appliances which come exclusively within the province of the nurse, are separately dealt with; while the moral treatment of nervous disease, or rather of nervous patients, is referred to at some length, the nurse being enjoined to preserve a quiet and cheerful demeanour in spite of her patient's sufferings, whether they be real or imaginary. In the event of death, some remarks are appended condemnatory of the "terrible and unreal garb" in which we are in the habit of clothing the dead, the writer preferring a soft silk handkerchief for the head, and the warm coloured dressing-gown worn in life, to the pinked-out bands of hard white linen so universally employed—a subject on which we scarcely feel at liberty to offer an opinion.

CHROMATOPLOMETRICAL TABLE. By Dr. OLE BULL. London: Trübner and Co.

THE improved sheet recently published by Dr. OLE BULL of Christiania, Norway, appears destined to be, for the future, the one quantitative test of the colour-sense.

The principle upon which he proceeds is to mix the four principal colours, red, yellow, green and blue, with uncoloured (grey) light in different proportions, the weakest being such that the colour of a patch one cubic centimètre square is just recognisable by the normal eye at one mètre. To make the test quantitative, he makes the stronger proportions bear to the first relations of 1.5, 2, 3, 4, 6, 8, 11, 14 and 18 respectively. Thus, a patient will have his colour vision expressed numerically by the fraction whose numerator is unity, and whose denominator is the lowest number which he can recognise. The principal difficulty was to ensure that the oil colours employed were exactly complementary and of similar intensity. The first of these points was attained, with regard to red and green, by taking those colours which, at the periphery of the retina, appear of an identical grey; but with regard to blue and yellow, the difficulty was greater. For blue he has chosen that colour which shows no tinge of any colour under all degrees of admixture with white light; and as the complementary yellow, he has taken that which, when mixed with it in equal parts on the rotating disc, produces grey. The red and green have been similarly controlled as to their intensity by mixture in equal parts upon the disc.

A test, upon a similar principle, by Bruno Kolbé of St. Petersburg, has been recently noticed in these columns; but this, however admirable in principle, had its advantages nullified by defects of execution—defects which, by the method employed, were absolutely unavoidable. A less perfect form of Dr. Ole Bull's table was exhibited by the author at the recent International Medical Congress. Since that time the table has been considerably increased in size as well as improved in other respects. It appears to us, however, that Holmgren's wools still retain the advantage in those important cases where the patients try, by an effort of memory, to conceal their defects.

NOTES ON BOOKS.

The Irish Medical Directory, for the year 1883.—There is certainly no other single volume extant that gives such a variety of information upon legal, educational, statistical, sanitary, and other matters of general or of special interest to members of the profession interested in Irish matters, as does this directory. The volume for the present year deserves all the commendation former issues have received from the profession as well as from ourselves; and we are consequently not surprised at the continued success of so useful a publication.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE GROVES-WILLIAMS ETHER MICROTOME.

SIR,—I can fully endorse all that Dr. Jacob says in your issue of to-day regarding the value of Williams's Microtome, having introduced it into this laboratory some years ago, and having had it in constant use ever since. At the same time, I must take up the cudgels on behalf of Mr. Groves's modification of this instrument for ether freezing; for, after long trial of it, I find that it fulfils all that Dr. Jacobs claims for his, and works well with common ether of 720 specific gravity. It is cheaper to work, more cleanly, and as efficient as the ice machine, and the degree of freezing is under the operator's control exactly.

I hope, in the forthcoming volume of the *Guy's Hospital Reports*, to give a full account of it and its mode of working, in sheer gratitude for its faithful services.—Yours obediently,

C. HILTON GOLDING-BIRD.

Histological Laboratory, Guy's Hospital, February 10th, 1883.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 17th, 1883.

THE HUNTERIAN ORATION.

MR. SPENCER WELLS commenced his discourse, at the Royal College of Surgeons, last Wednesday, in a manner which may have appeared novel to many members of his audience. Its introductory portion, or rather, we may say more correctly, its first half, was devoted to a subject frequently dismissed in a few words towards the end of a lecture of this kind; viz., the obituary notices of surgeons, physicians, and men of science, who have died since the last Hunterian oration, which was delivered by Mr. Luther Holden in 1881. Mr. Wells took pains to indicate that his full obituary notices were not merely graceful tributes to the dead, useful for the ornamentation of the oration. They were a part of the trust, an essential feature of each biennial discourse, and in the terms on which the oration was founded, as important a subject as the constant revival of the memory of John Hunter itself. Each oration is to dwell on the professional merits "not only of the said John Hunter, but also of all such persons as are, or shall be from time to time deceased, whose labours have contributed to the improvement or extension of chirurgical science." Since the oration has become biennial, the reason for giving prominence to its obituary section has become all the more weighty.

Mr. Spencer Wells, carrying out his view of adhering to the second feature of a Hunterian Oration as intended by its original founders, had, unhappily, only too fertile a field for his labours in this direction; it would, perhaps, be more correct to say that he had a crowded graveyard of science at his disposal. Within a few minutes after the commencement of his lecture, were heard the names of Darwin, Rolleston, Christison, Pirogoff, Watson, Schwann, and Bischoff, all taken from us since the previous oration had been delivered: a sad reflection, but one which reminds us that there are yet giants in these days, and that these illustrious deceased have left worthy pupils to carry on their labours. We are next reminded of the loss of several veterans whose lives were particularly associated more or less with the government, the Council, or the Museum of the Royal College of Surgeons itself, such as Mr. Lee, Mr. South, Dr. Gulliver, and Dr. Peacock. Added to these, were reminded—if, indeed, we need reminding at all—of the loss of a gentleman who represents a new class in the medical profession, a class made necessary by what is perhaps the grandest discovery which directly concerns the interests of humanity, the introduction of anæsthetics. Joseph Clover's profession was to save the suffering from pain, a duty which the chloroformist performs in a practical and tangible manner, quite unassociated with abstract questions of sentiment, more comforting to the professor of humanity than to those that require his services. How different is the position of the philosopher who tells a sufferer that pain is a mere abstraction without entity, and need give no trouble if no notice be taken of it; to the good-humoured friend who merely encourages the patient to "bear it like a man, and it will soon be over", to that of the cl

rmist who plunges a fellow creature into complete insensibility nilst a great operation is being performed! As in all other self-nying vocations, the task of a chloroformist is most arduous, ery case under his care is associated with an amount of anxiety which the surgeon often has no share; a death on the table is t to damage his fame far more than that of the operator, and he also exposed in private practice to a source of defamation only too ll known.

Mr. Wells dwelt forcibly on the association of medicine th the United Services. The heroism of our army surgeons ring recent campaigns is well known to our readers. The orator, er speaking of those that fell in Afghanistan, South Africa, d Egypt, related at length the inspiring narrative of the death Mr. Landon at Majuba Hill, and informed the profession for the st time of the manner in which Her Majesty the Queen had given ractical proof of the intense interest which she took in the history a glorious act of self-devotion. The improvements in field and se hospitals during recent campaigns formed a particular source of ngratulation. So effectual were the sanitary precautions taken to eck ophthalmia in the Egyptian expedition, that not one of the 83 men admitted to the hospitals for that disease lost his sight; ugh, in the French and English armies in Egypt in 1801-2, one n out of every fifty-four attacked by ophthalmia lost the sight of e or both of his eyes.

John Hunter's fame, Mr. Wells observed, as he turned to the more ential part of the oration, as it has been generally understood, arose m his sound method of basing his surgery on physiology, and his siology on comparative anatomy. Had the establishment of proxi-l ligature of arteries for the cure of aneurysm, on the well-known nciples indissolubly associated with his name, been his sole work, still would have deserved well of fame. He was led to the con-sion which induced him to ligature vessels some distance above seat of aneurysm, by the result of numerous experiments which e originally discovered merely to find out truths. Certain senti-ntal zoophilists, who prefer "dumb animals" to those who relieve nan suffering and advance research, say that Hunter had no right ligature the arteries of deer, resolving themselves into an in-ible tribunal for the final settlement of questions affecting ality. They further argue that he could have found out the phe-nena following occlusion of an artery by observing the results of hological obstruction of vessels. But we know he had observed h conditions: they did not satisfy him: and the knowledge he acquired from experiments on deer afforded him a correct in-nt into the effects of artificial occlusion of a vessel surrounded by lthy tissue, upon which he acted. Hunter's power of thought s the real cause of his greatness; his powers of observation were efatigable; but, as Buckle has remarked, for one person who can nk, at least one hundred can observe. Hunter could do both; so t none of the fruits of his observation were sterilised, excepting en he lacked time to think matters out. He clearly foresaw ch of the advance in abdominal surgery, in which it has been the ge and pleasure of Mr. Spencer Wells to assist.

n the concluding part of the oration the lecturer turned to ques-s of future progress, and spoke strongly in favour of the work of all ies intrusted with the practical advancement of medical science by bined research. The germ theory in general is one of the most ile fields for labour; through the labours of Davaine and Pasteur specificity of micro-organisms appear to have been irrefutably blished, their special appearances noted and figured so as to e recognition an easy matter; their spores reared, and no less thirty destructive diseases in man and animals traced to their ct influence. Whilst Jenner, a pupil of Hunter, introduced ination, Pasteur has discovered, almost yearly, some new vaccine ble of protecting by inoculation a man or an animal from cer-disorders of the most virulent type. It must be a cause of ersal congratulation, both to the profession and to humanity, that not one of the great subjects that formed part of the labours of Hunter have been neglected by his successors; certainly those mentioned by Mr. Wells have been taken up by contemporary surgeons and scientists with an energy that has brought about the most brilliant results; foremost among these are the advances in abdominal surgery, with which the lecturer's name is so intimately and so honourably associated.

CARDIAC THERAPEUTIC AGENTS.

Professor Germain Sée has prepared for the new edition of his important work, *Du Diagnostic et du Traitement des Maladies du Cœur*, an additional chapter on cardiac therapeutic agents and poisons in general, which gives an interesting summary and a classified view of recent researches on the subject, and states, in a clear way, the views of modern authorities on the physiological and therapeutic action of the drugs most useful in the treatment of heart-disease. This extract has been published in advance in the *Medical Gazette* of Paris. Professor Sée begins by pointing out that, as medicines in general have a predominant action on one or the other great systems of the animal organisation, cardiac drugs have, in particular, an elective action on such or such part of the apparatus of innervation which presides over the movement of the heart. This apparatus represents a very complex mechanism, duplicated in two systems which work side by side; a system of acceleration and a system of inhibition or arrest, this latter causing a slackening and arrest of the heart's action when excited. The different organs which constitute this apparatus extend from the heart to various parts of the nervous centres. In the substance of the cardiac muscle, we find independent centres in communication with nervous ramifications which proceed from the cardiac plexus formed by the terminations of the vagus and great sympathetic nerves. Through the medium of these two systems of nerves, the heart is connected with the cord and the medulla; as, moreover, it is beyond doubt that pyscho-motor centres exercise a considerable influence on the function of the heart, it is necessary to admit the existence of connections between the cardiac centres and the vasomotor centres of the medulla and cord, and certain corresponding centres situated in the cerebral cortex. Passing over the latter centres, concerning the localisation of which physiology at present can give no information, we see that the different factors of the apparatus of innervation of the heart, may be classified as follows; medullar centres; spinal centres; the great sympathetic nerve; the trunk of the vagus nerve, including accelerator and inhibitory fibres, and intracardiac terminal ramifications of the same nerve, and special intracardiac autochthonic centres, also both accelerator and inhibitory. How has success been reached in recognising with certainty the elective action which certain therapeutic or toxic substances exercise on one or the other parts of this apparatus of innervation? The method is essentially simple, and when closely examined we might, at first, wonder that it has not yet furnished us with more complete data. Experimental physiology had, by methodical analysis, determined the exact part which each of these factors play in the entire mechanism. This has been effected by a process of deduction, obtainable by observing the effects of functional suppression of one or the other part of the apparatus of innervation. The analysis of the disturbance of circulation brought about by the division of the medulla at its lower boundary, has instructed us as to the part played by the cardiac and vascular centres situated in this portion of the nervous system; and the same has been the case in respect to the division of the medulla at different levels, and the division of the great sympathetic and the pneumogastric, in numerous places. Observation and analysis of the phenomena manifested in the heart, and circulation under the influence of cardiovascular drugs and poisons, have aided in this line of research. This method must necessarily lead towards the desired result of

knowing the elective action of a drug or poison on each portion of the apparatus of innervation of the heart. Professor Sée takes, as an example, muscarin. Introduced into the animal system, this poison brings about arrest of the heart in systole. As to the explanation of this fact, many hypotheses may be framed; it may be attributed to paralysis of the accelerator system, represented by filaments of the great sympathetic, but the section of this nerve does not affect in any way the results of the experiment; or it may be explained by supposed excitation of the inhibitory filaments of the trunk of the pneumo-gastric, but the section of this nerve does not in any way prevent the arrest of the heart from being produced under the influence of muscarin. The very fact that the heart is arrested in systole does away with the hypothesis of direct paralysis of the cardiac muscle by muscarin. Moreover, mechanical excitation of the heart thus arrested in systole, renews its contractions. The share of the ramifications of the nerves of the heart and the intracardiac ganglia remain to be considered. A pharmacologist of great merit, M. Schmiedeberg, has shown, with admirable demonstrative precision, that muscarin produces the arrest of the heart in systole by exciting the intracardiac inhibitory centres.

This is the method, in its simplest terms. If it has not yet yielded the fruits which might have been expected from it, there are probably two special reasons which may serve to explain this: the first, which will for a long time help to check the progress of this study, lies in the complexity of the composition of these alkaloids, which represent, according to modern ideas, the active principles of the medicines which we use; most, at least, of those which are drawn from the vegetable kingdom. If we reflect a little on the discoveries made with regard to this subject during the last few years, we shall recognise the inherent difficulties which it involves. Aconitine was once believed to be a well defined body, an individuality both chemically and physiologically; at the present moment, we are in a stage of great perplexity and difficulty in respect to the number of aconitines, which differ from each other to a very considerable extent in the intensity of their poisonous effects. The same remarks apply to digitalin; and the chemists who are studying this question are apparently disposed to expect that from each of these alkaloids, which are now reckoned as well defined and almost elemental principles, we may shortly extract as many distinct active principles as have been already found in opium.

Two distinct alkaloids have already been extracted from pilocarpine, namely, true pilocarpin and jaborine, possessing absolutely dissimilar pharmacodynamic properties; whilst the raw pilocarpin of commerce resembles muscarin in its action, pilocarpin isolated from jaborine shows a remarkable analogy in its action to nicotin; jaborine, on the contrary, exercises on the heart effects similar to those produced by atropine.

The second reason why this study of the elective action of cardiac medicines on the different parts of the system of innervation of the heart proceeds with so much slowness is, that the localisation of the effects of the same agent varies with the doses and the duration of the experiment. Certain effects have been recognised by certain experimenters, and described when they were produced by very minute doses, and lasted but a few seconds, and these appear in tables of reference that profess to indicate the effects of the drug, without always indicating the exact condition, or the precise circumstances under which such effects were produced. Moreover, these primitive and specific effects of a drug on a certain part of the apparatus of the innervation of the heart, may be masked or interfered with by the energetic effects of the same agent on other systems. Thus a substance which excites the inhibitory filaments of the pneumogastric causes slackening of the heart's action; but this effect may be compensated by paralysis of the vaso-motor system, which tends to lower the intravascular pressure, with consecutive slackening of the heart.

The following table will indicate, at a glance, the principal facts already known in relation to the elective action of cardio-vascular drugs and poisons.

	Stimulation.	Paralysis.
Cardiac muscle	Digitalin.	The same in the second period of action.
	Iodine in small doses.	Emetin.
	Camphor	Salts of copper, barium and potash.
	Cafeine	Chloral in large doses.
		Scillaïne.
		Saponine in its last period of action.
Intra-cardiac muscular motor centres.		Iodine in large doses.
Intra-cardiac inhibitory centres.	Muscarin	Atropin.
		Fabarin.
		Spartine in large doses.
Intra-cardiac ramifications of the inhibitory filaments of the vagus nerve.	Nicotin	Pilocarpin, second phase of action.
	Pilocarpin	
	Calabar bean	
Trunk of the vagus nerve.	Aconitin	Spartin.
	Nepalin	Nepalin, second phase of action.
Accelerator filaments of the great sympathetic.	Apomorphin	Spartin.
Medullary inhibitory centres.	Digitalin	Chloral.
Vaso-motor centres ...	Bromide of potassium	Croton-chloral.
		Hydrocyanic acid.

THE LEICESTER GUARDIANS AND COMPULSORY VACCINATION.

The town of Leicester has long been notorious for the prominent part it has taken in the crusade against the Compulsory Vaccination Acts. Hitherto, however, the opposition to the law has been passive rather than active, and, while a large proportion of the inhabitants have declined to obey the law, the guardians have so far complied with the law as to prosecute the disobedient, although in a half-hearted manner, and under protest. At length, it would seem that the opposition has taken a more active form, and the guardians have refused to do what the law requires of them. In answer to a request of the Local Government Board, they have laid before the Board their reasons for declining to enforce the Acts. They declare that "they not only object to the enforcing of the payment of fines by distress, but they object to any proceedings whatever for enforcing vaccination." They "consider the Compulsory Vaccination Acts in themselves inconsistent and tyrannous, inasmuch as they do not provide for carrying out the vaccination of the child when the parent objects, but leave the child unvaccinated, and proceed to punish the parent, by fine or imprisonment, for exercising his parental right of protecting his child from that which he believes to be a dangerous and useless operation." They further express the belief that the only true solution of the difficulty lies in the repeal of the compulsory clauses of the Act. The guardians have thus come directly in conflict with the Local Government Board, and it is expected that the latter will have recourse to legal proceedings. The further unfolding of the course of events will be eagerly watched by all interested in this vital question.

The opponents of compulsory vaccination insist strongly on the violation of "freedom of conscience" and of "parental rights" supplied in the enforcement of the compulsory clauses of the Act. They forget, however, that the State has a stake in the welfare of the child as well as the parent, and that it has repeatedly affirmed its right to interfere between the parent and the child, if interference be necessary. The State has repeatedly declared that certain things shall be done for the child regardless of the opinion, or of the consent of the parent, when it has been clearly shown that what was to be done was for the benefit of the child. In the case of vaccination,

efore, which protects the child from the danger of a deadly loathsome disease, the State is quite consistent in having re-se to compulsion, even in face of the protest of the parent. But not only for the benefit of the individual child that vaccination nforced; vaccination is also enforced on the ground that it ely diminishes, for the community, the risk of epidemics of small- which affect not only those who will not comply with the law, also those who, for various reasons, are unable for a time to ply with it. It is not only the right—it is the duty of the e to protect the health of the community, and if it be con-ed that vaccination is necessary to that end, it ought surely to rce vaccination. On these grounds, therefore, the State is fully fied in using compulsion in regard to vaccination.

course, if vaccination were shown to be of no avail in diminish-he risks of small-pox, it would not be only folly, but gross in-ce on the part of the State to enforce its use. On this ground y antivaccinists ask for the repeal of the law; "we advocate," say, "the repeal of laws which are useless." They are not inced by the proofs over and over again adduced in favour accination—proofs which to ordinary minds amount prac-y to actual demonstration, and they persist in the face ese to affirm the uselessness of vaccination. They oppose with specious arguments, which collapse on examination like loon when it is pricked. One such argument is at present a favourite one; and, as it may be apt to deceive the casual ver, it may be well to glance at its nature. It is thus stated correspondent, in a recent issue of an evening contemporary: he case of small-pox no one can deny, and no well-informed al man ever attempts now to deny, that the bulk of our popu-who suffer from the disease are 'law-stamped' protected,'' which, of course, it is to be inferred that vaccination is use-The statement of fact here enunciated is undoubtedly true, is not the whole truth. A glance at the statistics of small-ospitals (which are usually declared by the antivaccinists to ooked," except in so far as they afford a basis for such specious ment) will show that most of the patients treated therein are is called "vaccinated," *i.e.*, show some evidence, however e, of having had vaccination performed on them. To complete atement, however, it is necessary to add that the bulk of the ation generally belong to the same class, viz., the "vaccinated," n inference can be drawn only on a comparison of these two It is, unfortunately, impossible to estimate correctly the pro-n of the population generally who come under this head; n the case of children, such an estimate can readily be made. omparison, too, in the case of children, will be all the better, owing the value of vaccination, since it is fully acknowledged accinists, that a primary vaccination retains its value only g childhood, and is lost, in greater or less measure, in adults, s renewed by revaccination. Confining our attention, then, to en of ten years and under, we may readily conclude, from the nation returns abstracted in the annual Public Health reports, in London, fully 90 per cent. are vaccinated. Our own obser-among the population of that age would lead us to suppose ercentage even higher, but we may take this figure as being accurate. On the other hand, hospital statistics show cases of small-pox at this age consist of about forty-er cent. vaccinated, and forty-eight, not vaccinated, while thers show no evidence; and thus, though they are pro-unvaccinated, we may leave them out of account. From figures, it follows that the liability to small-pox among the ated bears to the liability among the unvaccinated the pro-n of $\frac{4\cdot2}{9\cdot0}$ to $\frac{4\cdot8}{10}$, or of 1 to 10 nearly. In other words, if the tion at the age stated consisted of vaccinated and unvaccin-n equal proportions, other conditions remaining the same, ery 100 of the vaccinated contracting small-pox, there would 00 of the unvaccinated. Further, we learn from hospital statistics, that, at the age in question, the mortality per cent. among the vaccinated and the unvaccinated is about 3 and 55 respectively. Hence, among a population consisting of vaccinated and unvaccinated children in equal proportions, other conditions remaining as they are at present, for every 3 deaths from small-pox among the vaccinated there would be 550 among the unvaccinated. Here is a calculation we commend to the careful attention of the Leicester Guardians, and of all antivaccinists. It is a clear and necessary inference from the premises we have stated, namely: (1) the proportion of vaccinated and unvaccinated children among the population; (2) the proportion of vaccinated and unvaccinated children among small-pox cases admitted into hospital; and (3) the mortality among these latter. The first two premises are not only admitted to be true, speaking generally, but are vaunted by antivaccinists as proof of the uselessness of vaccination. The third premise may easily be tested in a small-pox hospital; and, since the antivaccinists are not prepared to trust the gentlemen who at present prepare the statistics of small-pox hospitals, we suggest that they should appoint two or more trustworthy delegates to check these statistics. We have no doubt that, if they desired honestly to determine the truth, the managers of the hospitals would readily make arrangements whereby it could be done. Another small-pox epidemic will, in all probability, be upon us within the next two years, and abundant opportunity will be had of carrying out our suggestion.

THE sick list at Cairo shows a continued steady but slow improvement. The total number of patients is 1,331, out of 13,613, and the sickness still appears mainly in the cavalry and artillery.

MR. W. J. EVELYN, of Wotton, Surrey, has contributed £1,000 towards the building fund of a hospital which it is proposed to erect in connection with (and in close proximity to) the Royal Kent Dispensary at Greenwich.

"THE Relations between Intemperance and Insanity" was the subject of an interesting and exhaustive paper read by Dr. Norman Kerr at a meeting of the American National Association for the Protection of the Insane and the Prevention of Insanity, held at Philadelphia on the 25th ultimo, and published in the last number of the *Church of England Temperance Chronicle*.

THE return of mortality, just published, shows the number of registered deaths in Cape Town and at the municipal hospital from small-pox, between August and December, to have been 1,144; but numbers of deaths are supposed to have taken place which were never registered.

WE understand that there has been an outbreak of scarlet fever at Balliol College, Oxford, and we are informed that one undergraduate, Mr. Campion, has succumbed to the disease. We learn that the advisability of sending down all the undergraduates has been under anxious consideration, but we believe that it has not, up to the present time, been thought necessary to take this step.

WE understand that Dr. Oliver Wendell Holmes (the "Autocrat at the Breakfast Table"), having resigned his professorship of anatomy at the Harvard University, is about to visit this country; he will certainly receive a most hearty welcome, not only from the profession which he has so long and well served, but from the world of letters, and his wider world of readers and admirers.

WE are requested to announce that the committee of the Army Medical Department "Memorial to the officers who fell in Afghanistan and South Africa" have decided that the memorial shall take

the form of a mural tablet, sculptured in white marble, and placed in the central hall of the Royal Victoria Hospital, Netley. The subject of the tablet, which represents medical officers and men of the Army Hospital Corps attending wounded on the field, has been designed, and will be executed, by Count Geichen.

THE INDIAN CONTINGENT.

It is stated, on good authority, that, of the Indian contingent engaged in the last campaign, not one man of all who were sent to hospital for other causes than wounds received in action, lost his life, excepting an elderly officer, who was suffering from an injury to the foot, caused by treading on a rusty nail.

HOSPITAL SATURDAY.

The financial results of the Hospital Saturday movement are growing steadily, if slowly, year by year. Last year the following sums were collected in the larger towns of England:—London, £8,174; Birmingham, £4,888; Liverpool, £2,300; Manchester, £1,726; Leeds, £1,493.

UNIVERSITY COLLEGE.

Mr. E. Albert Schäfer, F.R.S., Fullerian Professor of Physiology at the Royal Institution, has been appointed Jodrell Professor of Physiology at University College, in the vacancy occasioned by the resignation of Dr. J. Burdon Sanderson, LL.D., F.R.S., appointed Wayneflete Professor of Physiology in the University of Oxford. Mr. Schäfer has for a long time past assisted Dr. Sanderson at University College.

MUNIFICENT BEQUESTS TO HOSPITALS.

Mr. George Tierney, recently deceased, has bequeathed the following munificent bequests to the undermentioned hospitals, free of legacy duty. St. George's Hospital, Charing Cross Hospital, Westminster Hospital, Royal Seaman's Hospital, University College, Middlesex Hospital, and Hospital for Consumption, to each £5,000. The testator desires that his good friend, Dr. Quain, should receive and enjoy any rights or privileges attaching from the several hospitals to the above legacies.

THE CONVALESCENT CHILDREN'S HOSPITAL AT RHYL.

The Duke of Westminster presided at the annual meeting of the Alexandra Children's Hospital, at Rhyl, last week. The report showed that, during the year, 572 patients, of whom a large proportion came from the midland counties, had been admitted to the institution. Eleven ladies had entered the hospital for training as nurses, and during the recent war, one of the old nurses was selected to go to Egypt. Mrs. W. E. Gladstone and other ladies had, during the year, collected £100 each towards the purchase fund of additional buildings, and the working expenses amounted to £2,661.

MEDICAL STUDENTS' REGISTER.

We have received from the Registrar of the Medical Council a copy of the *Medical Students' Register* for 1883. Among the preliminary matter will be found statements of the examining bodies whose examinations are recognised by the Council; of the number of students registered during the past year as having passed these respective examinations; of the number registered during each year from the commencement of such registration in 1865; and of the number registered at the various places of medical study. By judicious spacing of the names, they stand out much more clearly throughout the *Register* than has been the case heretofore.

LONDON FEVER HOSPITAL.

The annual meeting of the governors of the London Fever Hospital, Islington, was held on February 9th, at the Freemason's Tavern, Great Queen Street; Dr. George Buchanan (Chief Medical Officer of the Local Government Board), presiding. The first business, after reading the minutes, was the election of two assistant-physicians, one office being vacant, and the other created to meet the increased demands of the hospital. There were several candidates, nearly all of whom were in the possession of high qualifications. The choice of the governors fell upon Dr. Barlow and Dr. Gulliver, who were thereupon appointed senior and junior assistant-physician respectively.

THE LATE ALFRED SWAINE TAYLOR, M.D., F.R.S.

The east window of the church of St. Stephen the Martyr, Avenue road, has lately been filled with stained glass, in memory of the above well-known medical and scientific man. The artist (Mr. W. G. Bailey) has treated the five lights with white perpendicular glass which well relieves the subjects. The Adoration of the Magi and the Shepherds fill the three centre lights, and the two remaining outer lights contain each two subjects, namely, the Annunciation the Child Jesus in the Temple, the Agony in the Garden, and the Three Maries at the Holy Sepulchre. In the tracery above the five lights are St. Stephen the Martyr, the patron of the Church, St. John the Baptist, patron of the district, and St. Paul the Apostle patron of the see of London. At the foot of the window is the legend: "To the Glory of God, and in memory of Alfred Swaine Taylor, M.D., F.R.S., and Caroline, his wife. This window is erected by their daughter and son-in-law, Edith and Frederic Methold, A.D. 1882."

THE PARIS MEDICAL NIGHT SERVICE.

Six hundred and fifty-eight doctors, one hundred and eighty-five midwives, are attached to this organisation. In 1876 (the first year) 3,616 visits were made; in 1877, 3,312 visits; in 1878, 3,571; in 1879, 5,282 visits; 1880, 6,341 visits; 1881, 6,521 visits; and in 1882 6,891 visits. This service has extended its sphere of work so considerably, that new regulations have been made with regard to the visits of doctors and midwives in confinement cases. When a doctor or midwife is called to attend a confinement case, a policeman (*gardien de la paix*) takes them to the house of the patient and gives them a paper to fill in, and returns to the nearest police station. The doctor or midwife calls the next day at the station, and presents the paper, which testifies whether the confinement has taken place or not. An order for twenty francs (seventeen shillings and sixpence) is given to the medical attendant if the event has occurred, and one for ten francs if it has not, being the fee for an ordinary visit. The medical men are earnestly requested to fill in in a legible hand writing the paper the policeman gives them.

SUBCUTANEOUS INJECTION OF ETHER.

M. Hayem, professor at the Paris Faculty of Medicine, in a communication recently made to the Academy of Medicine, on the utility of hypodermic injections of ether when death from hæmorrhage is imminent, asserts that injections of ether practised on a dog which had lost so much blood as to have tetanic convulsions, and to be on the point of death, were followed by no perceptible results. In a similar case, transfusion of blood containing all its constituent parts was followed by, as it were, a veritable resurrection. When a sufficient quantity of blood (one nineteenth of the weight of the body) is removed from the animal, to place it just on the boundary between imminent death and possible survival, the result of subcutaneous injection of ether is equally negative. In the same circumstances, not only is transfusion of blood successful, but even, in some cases, recovery ensues, when the blood still remaining in the organism of the animal is diluted with serum taken from another animal of the same species. M. Hayem is of opinion that these facts indicate that it is a mistake to affirm that transfusion is an useless operation, and that the stimulation produced by hypodermic injection of ether can be substituted for it. Stimulation by ether, he remarks, increases the force of the cardiac contractions, and quickens the heart-beats in a remarkable manner, but it does not increase blood-pressure, nor raise the temperature in the rectum.

MR. GLADSTONE.

HE prolongation of the Premier's stay at Cannes has, of course, ven rise to a variety of rumours, for the most part more or less ntradictory, as to the reasons of his not returning to town at the ening of the Parliamentary session. We can state, however, that e circumstances and the explanation are alike simple and satis- ctory. The Premier has considerably benefited and been much freshed by his holiday and rest in the south of France. He has covered the power of sleeping, and his general health is satis- ctory. Mr. Gladstone was desirous of returning to resume his rliamentary labours, and to take his place in the House of Com- ons, in which his absence creates so great a void; and had his edical adviser thought it desirable, he would have done so. Dr. drew Clark, when appealed to, however, with this view, arrived at e conclusion that, notwithstanding the benefit derived from the t already taken, it could not be considered that the illustrious and teran statesman had, in this short space of time, accumulated a fficient capital of health and strength to justify medical approval so early a return to the heavy labours of the State, in the absence urgent and imperative calls which would admit of no delay. To s opinion Mr. Gladstone has, at the instance of his nearest friends, erred; and he will probably not return to London in less than ut ten days' time.

INFECTION IN COLLEGES.

are glad to note the disposition once more to draw attention to absence of accommodation in the older universities for the per care of cases of infectious disease appearing in colleges. The stion is one deserving the urgent consideration of parents as well as he University authorities. Sanatoria, with efficient arrangements the isolation of zymotic disease, with which every large and well- ipped school is now provided, are unknown at the universities. en fever breaks out in a college, the authorities are wont to on thus: if the patient is to remain, the college must be sent n; if the college stays up, the patient must be removed. The ier alternative is put aside, from the fear of causing a panic, as a consequence, writes an able correspondent, "the patient is oved to a city infirmary, whether a biting north-east wind be ing at the time or no; and, if he dies, which has really occurred ome sad cases, his death, forsooth, is occasioned by 'natural es.'" The sanitary want here discussed is surely one which it to be promptly supplied. Most of the colleges of Oxford Cambridge possess ample space in their grounds and quadrangles he erection of small detached buildings as isolation hospitals, abundant funds for their immediate provision and efficient itenance.

MEDICAL STUDENTS.

number of medical students officially registered in Great Britain ng the year 1882 was, we find, 1,862; of these, 1,064 were registered ngland, 585 in Scotland, and 424 in Ireland. These numbers are derably less than those registered as in course of study during r of the three preceding years, the falling off being exclusively ngland and Ireland. 214 fewer students were registered this in England than last, and 116 fewer students in Ireland. There o falling off in Scotland. Looking back over the last decade, umbers seem to have pretty steadily increased from 1872 up to In 1872 the total number registered was 1,317 in the three ries, being 500 fewer than those registered for the year just l. The entries this year in England are smaller than they been for the last five years, while the entries for medical nts in Ireland and Scotland show a pretty continuous pro- ve increase throughout the decade. This must be attributed, lieve, chiefly to the deficient opportunities for English students iduating as M.D. The present policy of the University of n, in the absence of any other degree-conferring power in the metropolis or in any of the great cities, has a very depressing effect on the prosperity of the English medical schools; and even of the students registered in England, a considerable number migrate to Ireland or Scotland to obtain their University degrees.

PROVISION FOR CONVALESCENTS FROM SCARLET FEVER.

A MEETING in which Mr. Gladstone took part, and which excited much public interest, was last autumn convoked at the Premier's official residence, in support of Miss Wardell's proposed Convalescent Home for Scarlet Fever. We hear, with great pleasure, that a house has now been obtained. It is situated on Brockley Hill, in an isolated position, between Edgeware and Elstree, about ten miles from the Marble Arch. A circular will, it is announced, before long be issued, giving particulars respecting the admission of patients, and all other regulations of the home, which will probably be ready for the reception of inmates by the spring; but considerable additions and alterations require to be made to the house, in order to fit it for its special purpose. These additions, together with the cost of furnishing, and of buying a horse and conveyance for the patients, will require the immediate outlay of a considerable sum beyond the purchase-money. In order to carry on the work without incurring debt, further donations, and especially annual subscriptions, are required. Urgent need, therefore, exists for systematic annual support from the public. On the success or failure of this first attempt to provide a home for convalescents of a special kind, it is justly pointed out, may depend the extension of the experiment of providing similar homes for the different infectious diseases for all classes of the community, not only around the metropolis, but in connection with the chief centres of population in the United Kingdom; and without liberal support it will be impossible for the Committee of this Home to carry out the work efficiently, even on the present small scale. The house is at present capable of containing from thirty to forty patients; but it is most desirable that separate provision should, as soon as possible, be made for male, as well as female patients, and for such persons as may desire private accommodation on a higher scale of payment.

SMALL-POX IN SOUTH STAFFORDSHIRE.

VARIOLA is still seriously prevalent in the "black country". From the latest reports we gather the following details. In Darlaston, sixty-four new cases appeared in January, as compared with twenty-five in December; of these, six (four being unvaccinated) have died. The local sanitary authorities are acting with energy, and two isolation hospitals have been provided. At West Bromwich, seven deaths resulted from small-pox in January. The last report of the medical officer of health announced the existence of forty-five cases of variola in the borough. The town council are applying to the Local Government Board for permission to borrow £3,000, for erecting and fitting up a hospital for infectious disease, and they are about to open a temporary hospital in Bromford Lane at once. At Wolverhampton, the last weekly report of the master of the workhouse showed that there were twenty-five cases of small-pox in the infectious wards of the union infirmary, being an increase of six upon the previous week. The cases arose in Wolverhampton, Bilston, Willenhall, and Wednesfield. Present accommodation for isolation is taxed to the utmost. The Bilston commissioners are about to use some cottages as an isolation hospital. On the whole, the epidemic of small-pox in South Staffordshire, which has now existed in considerable proportions for several months, appears to be steadily spreading from several distinct and contiguous foci, although it has been repressed in some localities. The district involved is peculiar in presenting a widely spread and numerous urban population, which is divided into several boroughs, townships, parishes, and sanitary areas, which closely adjoin each other, but which are subject to different local authorities. These authorities, speaking generally, are acting with more or less vigour in reference to the epidemic, but

independently of each other. The whole mining and manufacturing district known as the "black country" is for sanitary purposes practically one. What seems to be needed is, that all the local authorities should unite in some really efficient action in reference to the common calamity. With house-to-house visitation, immediate reporting and isolation of cases as they arise, and revaccination, carried on throughout the whole of the infected area upon an adequate and comprehensive scale, and by a vigorous and united effort, there ought to be no difficulty in quickly putting an end to the epidemic.

QUININE IN THE PARIS HOSPITALS.

A POLITICO-INDUSTRIAL discussion has, the *Times* states, been raging on this subject during the last few days between the French, German, and Italian papers—a discussion which threatens to become positively serious. There is a chemical manufactory at Milan, which some time ago amalgamated with a German one. During the late typhoid epidemic in Paris, the Milan firm supplied a Paris house with considerable quantities of sulphate of quinine for the hospitals. It was suddenly perceived that this sulphate, which costs 450 francs a kilogramme, was adulterated with a substance costing only 150 francs. The adulterated article was refused, and the French newspapers denounced German and Italian manufacturers as fraudulent. This caused a great sensation in Italy and Germany. The manager of the Milanese factory hastened to Paris, and it was discovered that it was the Paris house that had substituted the spurious substance for the real sulphate of quinine—a fact which the head of the Paris house himself admitted in a letter to the manager of the Lombard factory. The latter has now commenced an action against the Paris house; but, though the French papers, especially the *Temps*, have acknowledged their mistake, the papers of Germany and Italy continue to manifest great irritation at an accusation which might have thrown discredit on their respective chemical products. The acknowledgment of the fault on the part of the French manufacturers, it is to be hoped, will put an end to a discussion which only tends to embitter the feelings between the three nations.

PORTABLE TESTS FOR ALBUMEN IN URINE.

AT the last meeting of the Clinical Society, Dr. Pavy exhibited the ferrocyanic test-pellets which he has devised for the detection of albumen in the urine, and which are portable, and remain unchanged when kept in a stoppered bottle. They form a sensitive test, and apparently detect minute quantities of albumen which nitric acid and heat fail to render appreciable. Dr. Oliver of Harrogate, at the same meeting, exhibited test-papers of various kinds, which can be carried in the pocket case, are almost unalterable by exposure, and which form more sensitive tests for albumen than either heat or nitric acid. Clinical physicians and practitioners generally who may desire to be armed with means which they can readily apply for the detection of albuminuria at the bedside of the patient, will be grateful to both the above gentlemen for the investigations which, with Dr. G. Johnson and others, they have recently carried on towards the elucidation of this point. The corrosive character of nitric acid, and the necessity of having a test-tube handy in order to apply heat, have rendered the two classical tests for albumen far from satisfactory. Both these two new sets of tests the pellets and papers, react in specimens of cold urine, and can, therefore, be used either in a wineglass or other receptacle of ordinary domestic use.

THE COTTAGE HOSPITAL MOVEMENT.

ON Saturday, a meeting of members of the medical profession and a number of ladies took place at the rooms of the Association for Promotion of Social Science, Adam Street, Adelphi, for the purpose of witnessing the presentation of a well merited testimonial to Mr. Albert Napper, M.R.C.S., in recognition of that gentleman's services as founder of the Cottage Hospital movement, which has proved so beneficial in alleviating the sufferings of the labouring classes in cases of sudden illness or accident throughout the country. Professor John Eric Erichsen presided, and, in addition to Mr. Albert Napper, was supported by Mr. Henry Burdett Dr. Stowers and Mr. Malcolm Morris (London), Mr. Butler (Guildford), Mr. Hallowes and Mr. Kelsey (of Redhill), Mr. Gravely (of Newick), and Dr. Adams (Croydon). The testimonial consisted of an address on vellum, signed by upwards of 150 members of the medical profession, a cheque for a small sum of money, and a handsome silver salver bearing the following inscription:—"Presented to Albert Napper, Esq., M.R.C.S.Eng., of Cranleigh, Surrey, by some of his professional brethren and friends of the Cottage Hospital Movement, in recognition of the services he has rendered to the profession and the public as the founder of the Cottage Hospital Movement. January 1883." Mr. Napper's services in this matter to the public have been conspicuous and important; it is sad to learn that so little public gratitude is felt for such services, that a very extended canvass has produced but a very scanty return, and that the sum collected from the public bears no relation to the just expectations of the organisers of the fund.

HEALTH OF TROOPS IN INDIA.

A MEETING of the Epidemiological Society was held last week in University College, under the presidency of Dr. G. Buchanan, at which a paper upon "The Sanitary State of the British Troops in Northern India" was read by Deputy Surgeon-General A. C. D Renzy, C.B. His principal contention was, that diseases such a cholera and enteric or typhoid fever, which in England have long since been recognised as mainly due to the pollution of water-supplie with sewage and allied matters, are in India due to similar cause In India, he said, the water-supply was taken from a thousan sources, many polluted in a high degree; and it was almost in possible to identify any one source of water with the prevalence disease, as in England; and so, also, there was no proper registr tion of death, everything tending to cause confusion in any inves gation. With few exceptions, the water-supply remained the sa as when the Royal Commission reported in 1862; and, as long that remained so, the health of the troops would be at the mercy any accident to convey such diseases as enteric fever and chol amongst them. In the discussion that followed, Dr. Dickson, R Surgeons-General Murray, Mainfold, Gordon, C.B., Sir Joseph Fayr and others took part; and, although there was some difference opinion as to the origin of disease, it was agreed that a good wat supply was of great importance. Dr. Buchanan, in closing the cussion, said they required to ascertain the specific cause of pol tion, as perhaps it existed where water was apparently good, wh water notoriously impure caused comparatively little harm.

THE HUNTERIAN ORATION.

ON Wednesday last, at 3 P.M., Mr. Spencer Wells delivered this orati in the Theatre of the Royal College of Surgeons. A part of this ture is published in our present number, as also are certain gene observations upon it, which will be found elsewhere. The audie was large and distinguished; Mr. Marshall, Vice-President of College, was in the chair. Most of the members of the Council the Examining Court and Board were present. Among those were present we may mention—Sir George Burrows, Sir Willi Gull, Sir James Paget, Sir Henry Thompson, Sir Joseph Fay Dr. Ackland, Dr. Paget, Professors Owen and Parker, a l number of Army Surgeons, including Surgeon-General L more, Director-General Crawford, Surgeon-General Mackinnon spector-General W. C. McLean, and Deputy Surgeon-General strong, as well as the distinguished comparative anatomist, Surg Major G. E. Dobson, well-known at the College of Surgeons fo investigations in the anatomy of the Chiroptera and Insecti

pursued to a great extent in its museum. There was also a large number of general practitioners from all parts of the country. Among the veterans was Mr. J. Moncrieff Arnott, who appeared, we are glad to say, to be enjoying excellent health. In the evening a dinner was given in the library of the college, Mr. Wells being in the chair, and many distinguished guests present.

PRIZES OF THE ROYAL ACADEMY OF MEDICINE OF MADRID.

Among others, prizes are open to all comers for the best essay on, 1. "The Etiological and Therapeutical importance of Parasitism in Pathology;" and 2. "What relation can be established between physiological incompatibility and the antagonism of medicaments?" Applications to the therapy of poisoning. For each of these will be a prize and accessit. The prize will consist of 3,000 *reales* (about 25 guineas), a gold medal, a special diploma, and the title of corresponding member. The "accessit" will receive a silver medal, and diploma and title of corresponding member. The essay must be clearly written in Latin or Spanish; it will be published by the Academy, the author receiving 200 copies. The essay obtaining the accessit or honourable mention, will be published if the Academy sees fit. The Alvarez Alcalá prize is offered for the following subjects:—1. "A Critical Examination of the different curative methods employed in the treatment of Pneumonia, demonstrating which is most in accord with what is known of the disease in its typical form, as well as in the complex form so frequently observed." 2. "The positive conquests which biology has achieved in the present century." For each of these there will also be a prize and an accessit. The prize will consist of 3,000 *reales*, diploma, and title of corresponding member; the accessit of a diploma and title. These essays may be written in Latin, French, or Spanish. The essays must be sent to the Secretary of the Academy, 13, Calle de Cedaceros, before May 1st, 1884, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing within the signature of the author.

BLACK SPONGES.

It has been thought that the abnormal colour sometimes presented by organic fluids in a pathological condition, also observed on bandages and different articles used in dressing, is due to their developing different fungi or microphytes. The same fact explains the singular phenomenon exhibited by toilette sponges, when their whole surface becomes black. M. Rapin, at a meeting of the Vaudois Medical Society, showed a specimen of these black sponges; which a lady had brought to him in great fear that it would give her a grave disease. M. Rapin calmed her fears by assuring her there was no such danger; but not knowing how to explain the change of colour in the sponge, he handed it over to M. Dufour, who made a microscopical examination of it. The result of his examination is published in the *Revue Médicale de la Suisse Romande*. The blackness is owing to the development of a small fungus in the chitinous fibres of the sponge, where it produces numerous black spores, which become agglomerated, and form, with other organic *débris*, a compact mass. This fungus determines a peculiar alteration of the chitinous fibres, which also become black. In botanical classification this fungus belongs to the genus *Torula*, but differs from all other species of this genus. M. Dufour proposes for it the name of *Torula nigricola*. The presence of this fungus in a single sponge suffices to infect all other sponges that are near it. It can be cured, as well as prevented, by use of the ordinary disinfectants, such as a concentrated solution of carbolic acid, or boiling water.

ST. MARY'S HOSPITAL.

We hear that the new out-patient buildings at this hospital are nearly finished. In all probability, they will be opened in May, when, by the light and air to be then afforded, some relief will at last be brought to the long-suffering out-patient staff, who for years have had to do their work in dismal and stifling dungeons. The new Stanford wing also grows apace; and as the work has been in no way impeded by frost, there is every prospect of the completion of this important addition to the hospital well within the specified time, that is, about the end of the present year. With an increase of seventy or eighty beds, additional accommodation for nurses, and its new out-patient department, St. Mary's ought to take a very prominent position amongst the hospitals of the metropolis; and it is sincerely to be hoped that funds will be forthcoming, by increased subscriptions in the wealthy district where it lies, to carry on its work. Additional beds, moreover, will demand a greater number than heretofore of clerks and dressers for the hospital work; and we are glad to learn that the staff and lecturers have resolved to take immediate steps for enlarging the school-buildings. Premises which were suitable thirty years ago are adequate no longer for the requirements of the medical education of to-day. The teaching of physiology alone wants twice the space which formerly sufficed, not to mention the needs of other departments. These defects are to be remedied at St. Mary's Hospital without delay, and with the serious intention of having the school-buildings finished by October next; and there is no reason why, with an energetic staff of lecturers and teachers, the entry of new students at St. Mary's should not be much larger than it has been during the past few years. With its advantageous position in the West End, with a large district to provide it with work, and with the terminus of a great railway within a few yards of it, St. Mary's should rank among the most successful and popular schools in London.

PROGRESS IN THE METHODS OF SMOKE ABATEMENT.

The results of methods of testing adopted by Professor Chandler Roberts, F.R.S., during the recent Smoke Abatement Exhibition at South Kensington, for the purpose of ascertaining the composition of the gases given off from stoves and grates, analysed in detail in a critical exposition and discussion of these last, and of the juror's reports, contained in the *Sanitary Record* for February 15th. The general results of the testings appears to be that the most complete combustion is obtained in open grates having a downward, or backward, or lateral draught, although this result is obtained at the cost of a considerable amount of heating power lost by the high temperature at which the gases escape. Taking the mean of results obtained from the grates tested, representing the most complete combustion in the open fireplace, it was found that for every 1,000 parts of carbon that are fully burnt—to CO_2—at least 35½ parts if bituminous fuel be used, and 38 if anthracite be consumed, are entirely wasted in the form of gas. This statement, however, represents only the best combustion; but if the mean for the whole of the grates be taken to represent (as comparatively speaking it would) the combustion in the class of open grates most generally used, it is found that for every 1,000 parts of carbon that are fully burnt, 105 are wasted in the form of gas, or even if the very worst cases be left out, the loss is still 8 per cent., and allowing 1 per cent. for that loss as visible smoke, the total waste of carbon amounts to fully 9 per cent. This fact far more than bears out the statement previously made by Professor Roberts, that at least three hundred tons of carbon were ejected into the atmosphere, and suspended above London every day, either in the free state or in combination with hydrogen, or in the half-burnt state of carbonic oxide. The results of the test show, however, that more than one of the open grates of recent invention so effectually consume the solid carbon as practically to give out no visible smoke. Some of these are simple and cheap in construction, offer no palpable difference of external form which would offend traditional prejudices, burn soft coal smokelessly, and are neither costly nor complicated. There is, therefore, good reason to hope that they will come into early and extensive use. The report is still more satisfactory in regard to kitcheners, close stoves for household purposes, and industrial furnaces. In all these three classes, tabulated tests and the jurors' reports show that the complete consumption of visible smoke may

be effected in every household, and in the prosecution of every known trade and industry, without difficulty or loss, and in most cases with considerable saving. Practical knowledge of the subject and the progress of invention have been so considerably advanced by the smoke abatement exhibitions in London and Manchester, and the work of the Institute, that the subject is now maturing for improved legislation, and is probably, at least, ripe for a Royal Commission.

THE BUSHEY HYDROTHERAPEUTIC ESTABLISHMENT.

IT is said that there are upwards of twenty of these, so-called, hydropathic, or "hydrotherapeutic" establishments in existence north of the Tweed, and a goodly number are to be found in the northern counties of England; while, in the south of England, in the neighbourhood of London especially, there are but few. An important addition to this small number was made on February 13th, when a "Hydrotherapeutic Establishment" was opened at Bushey Hall, near Watford in Hertfordshire. The hall was originally the residence of Mr. Marjoribanks, and was built about twelve years ago. It is in, what is commonly called, the Elizabethan style of architecture, and is well situated in the middle of a small but prettily wooded park of about 240 acres. The soil is light, with a subsoil of chalk, and the ground rises in a gentle acclivity from the river Colne; but, perhaps, the chief attraction about the site is that it is within a distance of half an hour by railway from London. The house is said to be well drained, though of this we had no opportunity of judging. It contains a large suite of very fine and beautifully decorated reception rooms, and has been so enlarged, as to be able to provide bedrooms for a hundred visitors. A well arranged series of baths are in direct communication with the main building; the only point in connection with them which requires notice from us, is the construction of the Turkish bath; it is large, well lighted, and provided with a capacious plunge bath. The hot air, after passing through the heating apparatus, is admitted into a hot room, which is at a somewhat higher level than the other chambers, and the apertures of outlet are in a double wall at the more more distant side of the coolest chamber. The constructor believes that, by this arrangement, the ventilation of the bath will be superior to that of other Turkish baths. There are no curtains in the bath, the several compartments being separated by glass screens. This is an extension of principle already applied at the baths in Jermyn Street, and in Paris. It is a very great advantage, by allowing more light to enter all the rooms; and, so far as we could judge, was effectual in regulating the temperature. Dr. Sack, the resident physician, who formerly held similar positions at Marienberg on the Rhine, and at St. Anne's Hill, near Cork, conducted the visitors over the establishment. At the luncheon which followed the inspection of the building, the chair was taken by Sir Andrew Lusk, Bart., M.P., who proposed success to the undertaking in a felicitous speech.

FELT TENTS FOR HOSPITAL PURPOSES.

WE have received descriptive drawings and specifications of these tents, invented by Major Doecker of the Danish army, which are strongly recommended by the inventor for military use, in preference to the ordinary canvas marquees and tents employed by troops in the field, and to the wooden huts of standing camps. They are alleged to possess superior advantages from a sanitary point of view, and to be more economical in cost. The felt is fixed to suitably formed timber frames, and these are connected by hinged joints in such a way that the whole tent can be quickly erected at any given locality, and as rapidly displaced for removal. The tents are rectangular in form, and each has a case, which serves for keeping it together during transport, and for a table and cupboard for the reception of articles when the tent is in use. The chief sanitary advantages attributed to the felt tents, are the equable temperature maintained in them under varying conditions of the external atmosphere, their dryness, and the disinfecting qualities of the material. The felt being a bad conductor of heat, the interior of the tent is relatively cool under the rays of a powerful sun, and relatively warm at night, or in cold seasons. The material is impermeable to wet, so that the ground within is preserved in a dry state during rain. Ventilation is easily provided for, and regulated according to circumstances. Another stated advantage is that no vermin are found to harbour in these tents. The Doecker tents have been under trial for some years past, by the military and medical authorities in Copenhagen, and the results are said to have been so satisfactory under all circumstances, that the Danish Government has now definitely settled to adopt it throughout Denmark for army purposes. A hospital for the reception of cases of contagious disease, made of these felt huts, has also been recently constructed for the town of Copenhagen. For such a purpose as this, the felt huts, judging from the description, would appear to be particularly well fitted. Each hut can be dismounted in about ten minutes, and the material then admits of being thoroughly aerated, or, if necessary, washed with any disinfecting solution. As soon as they are dry they can be remounted for use in the same, or any other, suitable locality. They have thus obvious advantages over wooden huts, which are not only very permeable, from the nature of the material of which they are composed, but are also so fixed together that it is a matter of difficulty to take them to pieces, without, at the same time, destroying their fitness for further use. The question of substituting felt tents for the canvas tents in use in the British service, as making any other important changes in the established articles of army equipment, is necessarily a serious one, as it entails, not merely considerations with regard to the articles themselves, but often affects various collateral subjects; as, for example, in the present case, the means of transport. Moreover, however well the felt tents may meet the wants of the Danish army, it by no means follows that they would answer the purposes of an army liable to be placed under such very different conditions of service as the widely distributed army of this country is. Three of the felt huts, one of them being designed for hospital purposes, are now being exhibited at Paris, from which place the description of them has been sent to us; and thus an opportunity is afforded, to those who may be interested in the subject, of making a thorough examination of them. Particulars in detail regarding them can be procured from the agents, Messieurs Puggard, at 51, Rue Jean-Jacques-Rousseau, Paris.

SMOKE ABATEMENT INSTITUTE.

A MEETING of the Smoke Abatement Institute was held on Monday at Grosvenor House, by permission of the Duke of Westminster, who was, however, absent from town, for the consideration more particularly of the injury done by the smoke nuisance at Westminster to the Abbey. The chair was taken by Mr. Ernest Hart, Chairman of Council. Among those present were: Lord Algernon Percy, M.P.; Sir Frederick Pollock; Professor Chandler Roberts, F.R.S.; Dr. Siemens, F.R.S.; Captain Douglas Galton, F.R.S.; Dr. Wyld, Saxon Snell; Mr. J. L. Whittle; Mr. T. W. Minton; and deputations from the Westminster Board of Works and from Lambeth. In opening the proceedings, Mr. Ernest Hart drew attention to the extensive destruction of the surface of Westminster Abbey, which, in some of its most important parts, was approaching a ruinous state. The mischief was so serious as to call for the interposition of the Government. The authorities in charge of the Abbey were fully alive to this, and were taking steps adequate to the gravity of the circumstances. At one of the meetings of this institution, Mr. Shaw Lefevre had stated that the cost of keeping in repair the surface of the Houses of Parliament was £2,500 annually. The extent of the evil was increased by the nuisance arising from the excessive emission of smoke in the Lambeth district, and from the refusal or omission of the magistrates to inflict the penalties imposed by the Smoke Nuisance (Metropolis) Acts of 1853 and 1858, which ex-

cluded potteries. When proceedings had been taken against the ·ners of such works and convictions obtained, magistrates had ıposed merely nominal penalties of 2s. 6d. or 10s., whereas, accord-g to the Acts, the minimum penalty was £2, the maximum being 5 for a first offence. Mr. Arnoux had explained the principles of nstruction of Minton's smokeless pottery oven or kiln, which was tensively used on the Continent and in Staffordshire, and which, the report of the Smoke Abatement Committee (1882) showed, ected a saving of 40 per cent. in the fuel used. It was suitable r all kinds of pottery work. Mr. Hearne said the Westminster ard of Works were fully sensible of the gravity of the nuisance ısed by the potteries in the neighbourhood, and had drawn up a morial on the subject, which was to be presented to the Home cretary. Mr. Ernest Hart said he was glad to learn from the last aker that public opinion in Westminster was with the Board of rks. Lord Algernon Percy, M.P., said that Mr. W. H. Smith, o was prevented from being present, would, as he himself uld, support a movement to abate the nuisance of smoke, ich was a public and not a merely local question. Sir F. lock supported the adoption of the memorial. Captain Douglas ton, having thanked the deputation from the Westminster Board Works for their attendance, remarked that it was only by the ion of the local authorities that the smoke nuisance in London ld be diminished. Dr. Siemens said there could be no doubt, not y that furnaces suitable either for pottery-firing, iron-puddling, or er manufacturing processes, could be constructed to prevent a sance from the smoke, but that such furnaces had been long in and with a substantial saving and benefit to the manufacturer. he close of the meeting, Mr. Hart stated that the deed of incor-ıtion had been signed by the Duke of Westminster, Duke of thumberland, Right Hon. Lyon Playfair, M.P., Sir Hussey Vivian, t., M.P., Sir F. Pollock, Bart., Lord Mount-Temple, and himself. volume of Juror's reports and testings of the late Smoke Abate-ıt Exhibition was laid upon the table.

SCOTLAND.

HE Senatus Academicus of the University of St. Andrew's have erred the honorary degree of LL.D. upon John Cleland, M.D., essor of Anatomy in Glasgow University.

URING the recent sittings of the Examiners for the diplomas of Royal Colleges of Physicians and Surgeons, Edinburgh, seven-gentlemen passed the first professional examination, and thirty-the final, and received the double qualification.

the last meeting of the Royal Scottish Society of Arts, Dr. les Cathcart, Lecturer on Anatomy, Surgeons' Hall, exhibited a ether-microtome, made to his own design. It is claimed for ıpparatus, that the freezing is rapidly and efficiently done.

the annual meeting in connection with the New Town Dis-ry, Dr. George W. Balfour presiding, the report by Dr. Cadell, f the medical officers, was submitted, and showed that during ast year 10,086 cases had been treated in the dispensary and at omes of applicants. The treasurer's report stated that the e from subscriptions and donations had amounted to £318, and here was at present a balance in hand of £23.

ABERDEEN MEDICAL BURSARIES.

own Council of Aberdeen have resolved that in the open com-n for their medical bursaries, students may in future take any of the following subjects, instead of all four, viz.: Botany, stry, Natural History, Physics.

MEASLES IN ORKNEY.

A SERIOUS epidemic of measles has broken out in the Island of Walls, Orkney, and the public schools have been closed in consequence. The disease, so far, is said to be of a mild type; but it has now appeared in a number of districts throughout Orkney.

SICK CHILDREN'S HOSPITAL, ABERDEEN.

FROM the report of the directors of this institution it appears that, during the past year 197 children have been under treatment in the wards, while 1,010 children attended the out-door department. Since this hospital was instituted in 1871, with 1 ward and 14 beds, its success and usefulness have steadily increased. In 1878 the number of beds was raised to 28; and again there are urgent demands for extension of the hospital to meet the wants of would-be little inmates.

AMBULANCE AND SCIENCE LECTURES IN ABERDEEN.

SURGEON-MAJOR FRASER continued his lectures to the Volunteers, and Professor Struthers gave the second lecture of his present winter course of evening lectures last week. Dr. Struthers dwelt on the mechanism of the hand and foot, comparing these organs with the corresponding parts in many animals, and especially the anthropoid apes. Numerous instances of "rudimentary structures" were mentioned, and their bearing on the theory of descent fully explained.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending February 3rd show that the death-rate in the eight principal towns, during the week, was 26.3 per 1,000 of estimated population. This rate is 5.2 above that for the corresponding week of last year, but 1.0 below that for the previous week of the present year. The lowest mortality was recorded in Edinburgh—viz., 19.2 per 1,000; and the highest in Greenock—viz., 32.0 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.9 per 1,000, or 0.1 below the rate for the previous week. Whooping-cough was the most fatal miasmatic disease, the mortality from it being greatest in Glasgow, Dundee, and Paisley. From acute diseases of the chest, 153 deaths were registered, or 23 less than in the previous week. The mean temperature was 36.5°, being 1.7° below that of the week immediately preceding, and 2.8 below that of the corresponding week of last year.

GLASGOW CITY PAROCHIAL ASYLUM.

THE report from the Commissioners in Lunacy on this asylum has just been made public, and is of a very satisfactory nature. It shows that great care and judgment continue to be manifested in the management of the patients, while the number of recoveries is high and the death-rate low. In the report of Dr. Robertson, the medical officer, we find the following very important statement: "The high proportion of cures clearly proved, that it was not essential to the successful treatment of insanity, that an asylum should be situated in the country. This establishment was near the centre of a great commercial city, and the amount of ground attached to it was extremely limited; besides which, it laboured under many structural disadvantages, yet, when the rate of recovery was contrasted with other asylums, over a period of several years, it was found to stand among the highest in the kingdom. It was quite right, however, that all ordinary asylums should be in the country, and have a large amount of land connected with them, on which the great mass of the male inmates could be employed."

THE HEALTH OF GLASGOW.

FROM the report of the medical officer of health for Glasgow, it appears that, during the fortnight ending February 3rd, there were 593 deaths registered, representing a death-rate of 30 per 1,000

living. Typhus fever is still prevalent in the various districts of the town; and, in connection with one group of these cases occurring in the southern quarter of the city, Dr. Russell has brought out some very striking and interesting facts. He shows that, in consequence of one case of typhus not having been reported, the fever had attacked eighteen persons, infecting five different houses; and he makes it clear that, of these cases, twelve might have been prevented had the precautions requisite been adopted, and had the corporation Reception House been taken advantage of when offered. He adds: "These cases illustrate well the sort of facts which pass from week to week under the official eye, and which gradually produce opinions in the official mind—opinions which, when exposed without the experience that begot them, or to persons ignorant of that experience, may appear unreasonable."

GLASGOW ASSOCIATION FOR RELIEF OF INCURABLES.

THE eighth annual meeting of the supporters of this Association was held on the 7th instant, and the statements made public in the report show very strongly the good work that is being accomplished, and the great necessity for it. The Association has devoted its energies, not only to caring for the in-door patients in the Broomhill Home, but has also taken steps to provide for the needs of some out-door patients who had friends to care for them, but who were in necessitous circumstances. These received monthly allowances in money, medical advice, and medical comforts. The report shows that there are at present in the home 62 patients, and 150 on the out-door list; while, since the Association was started, 153 patients have been admitted to the home, and 455 have had out-door relief. It is proposed to expend some of the funds realised at last year's bazaar, and increase the home by the erection of a new wing capable of accommodating about thirty-five additional patients. This will enable the Association to extend its sphere of usefulness very considerably, provided the public come generously forward and meet the increased expenditure.

TYPHOID FEVER IN DUMFRIES.

TYPHOID fever, which has been epidemic in Dumfries for some months past, is still prevalent there, and it is understood that there are at present twelve or fifteen cases in the town and county infirmary. Rumours, which seem to call for investigation, are afloat that the disease has been endemic in a large medical institution in the neighbourhood of the town for several years. As this institution receives patients of the affluent classes from all parts of the country, questions of very grave import would arise, should it turn out that admissions have gone on uninterruptedly, without any notice of the existence of typhoid fever in the establishment being sent to the relations or friends of invalids whom it was proposed to place under treatment there. The Dumfries epidemic of typhoid fever has not yet been traced to its source, nor does any systematic investigation as to its origin and propagation appear to have been made by a specially skilled sanitarian. It is stated that the drainage of a village flows directly into the small lake from which the water-supply of Dumfries is drawn, the water not being subjected to any process of filtration; and, if this be so, one easy inlet of typhoid fever on its community is sufficiently apparent. It is almost incredible that the inhabitants of an important and intelligent Scotch town should allow such an objectionable, and readily remediable state of matters to continue for a single day.

LEITH HOSPITAL.

FROM the report submitted to the contributors to the Leith hospital at their annual meeting, held this week, it appears that, during the year 1882, there have been 804 admissions, being 220 more than last year. In the dispensary department, the number treated exceeded those of last year by upwards of 500; and nearly 1,000 patients had also been treated at their own homes. The district nurse had attended 471 patients. An analysis of the report shows that, during the year there had been attended to at the hospital, at all hours of the night and day, 1,043 cases of cuts and bruises, 112 burns and sprains, and 107 fractures and dislocations. The deaths in the fever department were 1 in 9, in the general disease wards 1 in 17, in the casualty department 1 in 27, and out of 14 cases of submersion none In the zymotic ward there was an increase of 268, of which 17 were cases of typhus fever. There are good grounds for believing that, the epidemic of the last two years is gradually disappearing The financial statement submitted to the meeting showed that, th ordinary income amounted to £2,487, and the expenditure £2,58 leaving a deficit of £96. As the result of an application by th managers of this hospital to the Town Council of Leith for a sup plementary grant, the Public Health Committee of the latter bod have recommended that £150 should be voted. The Parochi Boards of Leith and the Dock Commission give between them £20 per annum. The total funds at the credit of the institution amou to £23,133.

IRELAND.

DEATH FROM HYDROPHOBIA.

A CHILD has just died at Cork from canine rabies, caused by a bi from one of the Barrymore harriers. Most of the pack of houn were destroyed when rabies appeared among them; but one d escaped, and bit six persons, including the deceased and the pari priest.

BELFAST HOSPITAL FOR SICK CHILDREN.

THE tenth annual meeting was held last week, the chair being oc pied by the Hon. R. J. O'Neill. During the year, 348 intern patie were admitted, of whom seven died; while 7,335 were attended at the extern department. Within the past two months, two n funds, the Memorial Convalescent Fund and the Convalescent Fu have been established, in order to give aid to those patients w when cured, require a change to country or seaside air. It is sa factory to learn that thirty-eight senior students are attending practice of the hospital during the present session. Dr. B. Sm one of the medical staff, having resigned, has been elected cons ing physician.

ENNISCORTHY UNION.

ONE of the guardians, with more energy than wisdom, has gi notice of a resolution, which will be considered this week, to red all salaries of officers of the union over £50 *per annum* by 25 cent. This will necessarily include the medical officers, and t have accordingly addressed a remonstrance against this unjust unwise proposal to deprive them of one-fourth of their sala They have shown that their salaries are not excessive, and that th duties have increased instead of having diminished. We bel the guardians cannot meddle with the salaries of their officers they have been appointed; and as the Local Government Board we trust, not sanction the proposed reduction, it will be found, sh the resolution pass, that the attempt on the part of the board be a failure.

SAMARITAN HOSPITAL, BELFAST.

THE sum of £1,000 bequeathed to this institution by the late George Benn, will, by arrangement with his trustees, bear int at 5 per cent. until his properties are realised, and the bequest manently invested. This money, with £50 previously invested, be a source of permanent income to the institution. Several beds are maintained by friends of the hospital, so that patients are without means are enabled to obtain treatment without charge whatever. The experience of the past year confirms

mmittee in their opinion that the system of partial payment by ients carried out in the hospital since the foundation, is a wise l in every way a salutary arrangement. A resolution to the effect t the best thanks of the subscribers be given to the medical offi- for his services, was adopted, and the proceedings shortly after minated.

HEALTH OF DUBLIN.

RING the quarter ending 31st December last, there were regis- ed in the Dublin registration district, 2,310 births, being equal to annual ratio of 1 in 37.7, or 26.5 in every 1,000; the ths amounted to 2,315, or 26 per 1,000, and omitting the ths (57) of persons admitted into public institutions from locali- outside the district, the rate was 25.9. Zymotic diseases caused deaths, or 58 under the number for the September quarter, and , or 43 per cent. under the average for the fourth quarter of the years, 1872-81. Of these, whooping-cough caused 50 deaths, inst 16 for the previous quarter; fever, 74, against 51; diarrhœa dysentery, 49, against 25; while only two deaths from measles 4 from scarlet fever were recorded. To phthisis, 256 deaths e ascribed: bronchitis, 428; pneumonia, 77; cancer, 42; and ercular meningitis, 28. Diseases of the circulatory system ed 132 deaths; diseases of the liver, 34; and of the urinary em, 27.

ULSTER HOSPITAL FOR CHILDREN.

ninth annual meeting was held last week; and from the report earn that 280 children were admitted to the wards during the nteen months ending 31st December last, while upwards of 9,000 treated in the extern department. The deaths numbered four, being from croup. The hospital is at present free from debt—a lt principally due to a bazaar held in aid of the funds of the ital, and which realised close on £500. During the past year, committee have established a department for the treatment of ses of women, partly to meet the requirements of the Royal ersity, who have recognised certificates from the hospital, and for the great want in Belfast of additional hospital and dis- ary accommodation for this class of disease. The medical staff been increased by the appointment of Dr. McFarland and Dr. Wheeler as visiting physicians, while Drs. Whitla and Dill will s consulting physicians, and Dr. J. Walton Browne as consulting on. The department for diseases of women will be under the of Drs. Esler and Spedding.

ONTANEOUS Cow-Pox.—Dr. José Re. de Argumosa (*Revista de cina y Chirurgia Prácticas*, July 7th, 1882), describes a case of aneous cow-pox, observed by him in the spring of the present year. rant called his attention to the cow, saying that she was uneasy milked, and that he had noticed some pimples on her udder papules were a little raised, whitish in colour, and surrounded a very slightly inflamed areola. When a crust was formed he ved it, and inoculated a heifer in fourteen places on the udder belly. On the fourteenth day there were six well-formed es. With the lymph from one of these the author then vacci- a boy, fourteen years of age. On the sixth day there was inflammation, and on the eighth umbilical papules appeared. llowing day they were more marked, and the boy complained adache. The axillary glands were swollen and very painful. esicles were of enormous size, surrounded by a large erysipe- areola, and contained a quantity of transparent lymph. The rature was 38.4° C. The symptoms increased alarmingly, and eleventh day the temperature rose to a maximum of 40.1° C. e symptoms, however, gradually subsided, and in a few days y was perfectly well. Seventy-seven persons were afterwards ated, and the observer summarises the result as follows: The of incubation was longer than is ordinarily the case: the s were larger and surrounded by a much wider areola, and the vas greater in intensity and duration. The cow in whom the was discovered had been separated from other animals for months, and as small-pox was prevalent in the neighbour- the time, the author believes that the disease was acquired an.—*New York Medical Record.*

COLLECTIVE INVESTIGATION OF DISEASE.

List of Returns received during the Month of January 1883.

ACUTE PNEUMONIA (23).

A. De W. Baker, Esq., Dawlish (1)
E. George Barnes, M.D., Eye (1)
John Robert Black, M.D., Greenock (3)
Owen Bowen, Esq., Liverpool (2)
S. H. Burton, M.B., F.R.C.S., Norwich (1)
P. Eade, M.D., Norwich (1)
W. Frew, M.B., Galston, N.B. (1)
S. Haynes, Esq., Bishops Stortford (1)
W. L. Hunter, M.D., Pudsey (1)
H. Lillies, Esq., Chudleigh (1)
W. J. Le Grand, Esq., Dublin (1)
P. W. Macdonald, M.B., Leeds (2)
D. Macphail, M.D., Whifflet, N.B. (3)
T. A. Sellar, M.B., Ballindallock, N.B. (1)
E. T. Wilson, M.B., F.R.C.P., Cheltenham (1)
J. F. Joseph, Esq., Warrington (1)
G. W. Joseph, Esq., Warrington (1)

CHOREA (21).

C. E. Abbott, Esq., Braintree (1)
T. Aikin, M.D., Inverness (1)
M. Davis, M.D., Brunswick Square, W.C. (1)
W. A. Elliston, M.D., Ipswich (1)
C. F. Hodson, Esq., Bishops Stortford (1)
J. S. Holden, M.D., Sudbury (2)
W. L. Hunter, M.D., Pudsey (1)
J. F. Joseph, Esq., Warrington (1)
W. T. King, M.D., Victoria Park Road, E. (1)
E. A. Laurent, M.B., Bedford (4)
T. B. Luscombe, Esq., Teddington (1)
D. Macphail, M.D., Whifflet, N.B. (3)
T. A. Sellar, M.B., Ballindallock, N.B. (1)
W. G. Walford, M.D., Finchley New Road, N.W. (1)
A. W. Wallace, M.D., Parsonstown (1)

ACUTE RHEUMATISM (26).

J. R. Black, M.D., Greenock (1)
Alex. Cameron, M.B., Ballindallock (1)
Joseph P. Doyle, Esq., Dublin (1)
W. Frew, M.B., Galston, N.B. (2)
T. Gunther, M.D., Hampton Wick (1)
T. H. Hills, Esq., Cambridge (3)
E. A. Laurent, M.B., Bedford (3)
D. M'Calman, M.D., Ballachulish, N.B. (3)
W. D. Macfarlane, Esq., Busby, Glasgow (1)
D. Macphail, M.D., Whifflett, N.B. (3)
J. McEwen, M.B., Helensburgh (1)
W. W. Miller, M.D., Eye (1)
M. R. O'Connor, M.D., Limerick (1)
W. G. Walford, M.D., Finchley New Road (1)
J. A. Watson, Esq., Chudleigh (1)
J. Woodman, M.D., Exeter (2)

DIPHTHERIA (15).

E. G. Barnes, M.D., Eye (4 sanitary cards)
Owen Bowen, Esq., Liverpool (1 case)
J. M. Bright, M.D., Forest Hill (1 case)
J. Cunningham, M.B., Campbeltown, N.B. (1 case; 1 sanitary)
G. W. Joseph, Esq., Warrington (2 cases)
H. Mallins, M.B., Watton (1 case)
B. G. Morison, M.B., Marquess Road, N. (1 case) (1 sanitary)
C. A. Patten, Esq., Ealing, W. (1 case; 1 sanitary)

SYPHILIS (4).

J. S. Bury, M.D. Manchester (1 inherited)
J. Farrant Fry, Esq. Swansea (1 inherited)
J. Rutherford Morison, M.B., Hartlepool (1 acquired)
J. L. W. Ward, Esq., Merthyr Tydvil (1 acquired)

Total returns received during month, 89.

The following Returns included in the above list were received from the Honorary Secretaries of Local Committees after January 10*th*, 1883, *too late to appear in list of last year's returns from Branches.*

EAST ANGLIAN BRANCH: SUFFOLK DISTRICT.
W. A. Elliston, M.D. (hon. sec.), 9 cards.

NORFOLK DISTRICT.
S. H. Burton, M.B., F.R.C.S. (hon. sec.), 6 cards.

GLASGOW AND WEST OF SCOTLAND BRANCH.
A. Napier, M.D. (hon. sec.), 21 cards.

NORTHERN COUNTIES OF SCOTLAND: EASTERN DISTRICT.
J. W. Norris Mackay (hon. sec.), 3 cards.

ERRATA.—In list of returns for Birmingham and Midland Counties Branch, *for* "T. Underhill, M.D., West Bromwich," *read* "A. S. Underhill, M.D., of Great Bridge." In list of replies to inquiry concerning phthisis, *for* "Spencer Sharman, M.D., Torquay," *read* "Spencer Thomson, M.D., Torquay."

The additional replies to the Phthisis inquiry which have been received since January 23rd, will be acknowledged with the other returns received by the committee during February. The present list, which was intended to appear in the JOURNAL of February 3rd, has been unavoidably postponed, owing to pressure on our space.

FOOT-WARMERS.—M. A., a French experimentalist, and discoverer of the system of heating with crystalline acetate of soda, has demonstrated the very slow cooling of foot-warmers filled with that substance, as compared with the ordinary warmers heated by hot water. Two leading French lines of railway have generally adopted M. Ancelin's improvements in heating carriages; and, in England, the London and North-Western Railway, which had last year 3,000 of the new warmers in service, has this year 6,000. Applications of the system have also been made in Italy, Spain, and Portugal, and the principle may be utilised in heaters for beds, dishes, poultices, muffs, feeding-bottles, tea-urns, etc. The inventor, in an article contributed to *La Nature*, points out that the operation of filling the warmers requires certain precautions to avoid supersaturation, which the acetate of soda is liable to undergo in a closed vessel. This phenomenon is also apt to occur from the readiness with which the soda-salt absorbs moisture from atmospheric air.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

BORDER COUNTIES BRANCH.—The spring meeting of this Branch will be held at the Central Hotel, Carlisle, on Thursday, February 22nd, at 6 P.M. Members intending to read papers or show specimens are requested to give notice to RODERICK MACLAREN, M.D., Carlisle, Honorary Secretary *pro tem.*; or to J. SMITH, M.D., Dumfries, Honorary Secretary.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North-Western Hotel, Stafford, on Thursday, February 22nd, at 3.30 P.M.—VINCENT JACKSON, General Secretary, Wolverhampton, January 30th, 1883.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—A special meeting of the Birmingham and Midland Counties Branch will be held on the 22nd of this month, to consider the desirability of founding a Medical Sick Benefit Society.—G. RICKARDS, Honorary Secretary.—February 11th, 1883.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of this District will be held at the Iron Room, Christ Church, Erith, on Friday, February 23rd, at 3 P.M., F. B. Jessett, Esq., F.R.C.S., in the chair. *Papers.*—Dr. Maynard: 1. Case of Gunshot Wound, with Remarks. 2. Case of Impaction of about Four Inches of the Stem of a Clay Pipe in Posterior Pharyngeal Region, with Remarks. F. B. Jessett, Esq.: 1. Case of Impermeable Stricture of the Urethra, with numerous Sinuses in the Perinæum, cured by Perinæal Section. 2. Abscess in Perinæum connected with old-standing Stricture, with Remarks. Dr. C. E. Hoar: Case of Pelvic Abscess. Dinner will take place at the Prince of Wales Hotel; charge, 6s., exclusive of wine. Members intending to dine are requested to inform F. B. Jessett, Esq., 16, Upper Wimpole Street, London, not later than February 20th.—A. H. B. Hallowes, Honorary Secretary, 11, King Street, Maidstone.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Deal on March 22nd, at 3 P.M., Dr. Davey of Walmer in the chair. A discussion on Acute Pneumonia (first card of Collective Investigation Committee) will be led by Mr. Raven, Dr. Parsons, and others. All published cards of the Collective Investigation Committee can be had on application to T. WHITEHEAD REID, Honorary District Secretary, 34, St. George's Place, Canterbury.—February 14th, 1883.

DUBLIN BRANCH.

THE second adjourned meeting of the Branch, for the discussion of the action to be taken by it on the subject of Medical Reform, was held on Tuesday, the 13th instant, in the College of Physicians. The debate, as we have before stated, arose on a portion of the report of the Council of the Branch, submitted at the annual meeting, which stated that they "could not advise the Branch to accede to the request of the Medical Reform Committee of the Parent Association to memorialise the Government to introduce a Medical Acts Amendment Bill based on the report of the Commissioners appointed to inquire into the granting of medical degrees, etc." On the first day, the adoption of the report was moved by the Rev. Dr. Haughton, and to that motion the following amendment was moved by Dr. Atthill.

"That the report be received and adopted, excepting the seventh paragraph (that relating to the subject in question), which, together with an annexed report of the Council upon the report of the Medical Acts Commission, be referred to the incoming Council for reconsideration, with a recommendation that the policy of the Parent Association in reference to medical reform shall, in principle, be supported by the Branch."

There was an attendance of over seventy members, including the President of the King and Queen's College of Physicians; the President of the Royal College of Surgeons; Dr. Collins, Governor of the Apothecaries' Hall; Sir R. W. Jackson, C.B.; Mr. Porter, Surgeon to the Queen; the Registrar-General, Dr. Grimshaw; Dr. George Johnston; Rev. Dr. Haughton, F.R.S.; Dr. Purser; Dr. Kidd; Dr. Edward Hamilton; Mr. Stokes; Dr. Atthill; Dr. Finny; Dr. Duffey, Honorary Secretary; Dr. Robert M'Donnell, F.R.S.; etc. The chair was taken by Dr. BANKS, President of the Branch. The debate was resumed by

Dr. STOKES, who said he was in favour of a direct representation of the medical profession on the General Medical Council; but he had always been of opinion that a multiplicity of portals of entrance to the profession was a positive advantage. In Germany, the number of licensing bodies was far in excess of what existed in Great Britain and Ireland, the standards of examination being very dissimilar, and this, he believed, was one of the sources of the high results there attained. He denied that a majority of the profession were in favour of the recommendations of the Commissioners. In sacrificing the colleges, they would sacrifice bodies which had hitherto guided and fostered medical science in a manner honourable to themselves. Dr. M'Donnell had said, better submit to the inevitable, that they would not get better terms hereafter. His answer was that he would rather see their colleges perish altogether in a noble struggle for independence and vitality, than drag on a miserable, maimed, mutilated, paralysed existence, speechless and powerless.

Dr. THORNLEY STOKER, in supporting the amendment, said there could be no comparison with the state of things in Germany, because the universities and medical bodies there had endowments that could not be hoped for here.

Dr. WILLIAM THOMSON said he was in favour of the principle of a State examination if it were rightly applied, and also of the direct representation of the profession on the Medical Council. But the proposition now was to substitute a general State Examination of a minimum character for particular high standards.

Dr. EDWARD HAMILTON said the simple issue before the meeting was, were they to ask the Government to bring in a Bill framed on the lines of the Royal Commission?

The President of the College of Surgeons, Dr. BARTON, said his objection to acting on the report of the Council was that it would be committing them to a policy which they could not now argue fairly or fully, from the want of the necessary detailed information. On the other hand, he did not wish to take a *non possumus* stance, and regarded medical reform. In modern times there was too great a tendency to hasty, rapid legislation. It would be better to go step by step. For many years the licensing bodies had been endeavouring to raise and had raised the medical education of the country, and in the face of that, to support a measure which would sweep away all the past, and re-establish things on a new basis, would be rash and unwise. He should be in favour of a thorough reconstruction of the General Medical Council.

Dr. FINNY opposed the amendment.

Dr. CORLEY said it appeared by a report of the Council of the College of Surgeons, of July, 1870, that they were then of opinion that "nothing was more calculated to degrade the position of the profession in the eyes of the public than the variety of standard of education in force." In 1870 there had been no less than twenty private and two Government medical Bills brought before Parliament. Of these, fourteen dealt with the subject of examination, and a conjoint board of some kind or other was the basis of every one of them. But no conjoint scheme would ever succeed that was not compulsory. But in reference to any Bill that should be re-

posed in accordance with the recommendation of the Commission he opinion of the colleges would be all powerful. He believed an mended Bill could be passed in the interest of the various licensng bodies, but if they passed an adverse vote now they could only nake themselves ridiculous.

Dr. J. W. MOORE said the corporation had possessed the power since 855 to form conjoint boards voluntarily. The Scotch corporations ormed conjoint boards, and everything went on well until it was found hat they were giving qualifications singly. The experiment of voluntary onjoint examinations had been tried and had failed. The State had een waiting for twenty-five years to see if the corporations would lo this work themselves. They had signally failed to do it; and herefore it was the duty of the State to interpose. The Branch was ot asked to pledge itself to details. They should try now to make he best terms they could, and watch any Bill that was brought in.

Dr. ASHE believed that under the proposed new *régime* the qualiication which the united Board of Examiners would fix on would be ery much higher than the lowest qualification now existing.

The Rev. Dr. HAUGHTON said that he believed the rock on which he Commissioners' report would split would be the proposal of the Divisional Board Examination. The mistake was that these boards ere not defined. The licensing bodies should have been compelled y Act of Parliament to come to a conjoint scheme themselves. But nstead of that, the Commissioners proposed that Universities, the Iedical Colleges, and the Apothecaries' Hall should be thrown into hat the lawyers call hotchpot, and left to fight it out for shares of anagement; while the authority to decide between them was the ost incompetent in the world for the purpose, namely, the House of ommons.

The PRESIDENT then put Dr. ATTHILL'S amendment, and declared to be carried.

On the amendment being put as an original resolution,

Dr. W. THOMSON moved by way of amendment:

"That this Branch declares its approval of a well-considered scheme conjoint examination in each division of the kingdom, and of e reconstruction of the Medical Council, including direct represenation of the profession."

The PRESIDENT of the College of Surgeons seconded the amendent, which was put and negatived.

The resolution of Dr. ATTHILL was then put, and carried.

Dr. KIDD said, as he protested against the line of policy endorsed y the resolution just passed, he had no course open to him but to sign his seat on the Council of the Branch.

The Rev. Dr. Haughton, Dr. Stokes, Dr. Finny, and Mr. Swanzy so resigned their seats on the Council.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

HE fifth ordinary meeting was held, at the Medical Institute, on ebruary 8th; Dr. DEWES in the chair. Forty-one members and sitors were present, including Dr. Bertonelli of Lima, and Dr. tton of Pittsburgh.

Cases and Specimens:

Dr. CARTER exhibited a case of Vulvo-vaginitis, in a child aged six ars, associated with a very large glandular swelling on each groin, hich began to form about two years ago. The discharge, slight in nount, was found, after suitable preparation, to contain bacterial ganisms.

Mr. BARTLEET exhibited a patient after Excision of the Knee, and e portions of the bone removed. The patient, a woman aged 35, as able to walk two months after the operation, which was perrmed for the relief of chronic disease in the synovial membrane and rtilages, and which had lasted eight years.

Mr. LAWSON TAIT showed Preparations of Tumours, which he had moved quite recently. The first was a cyst, which had contained s, and had caused the patient great pain for years. She had been der treatment for a long time in London, and had been sent to m from that town. The cyst was of unknown origin, seemed to ow from the pelvic fascia, and had no relation to broad ligament ovaries. The common iliac vessels were exposed in its removal. was universally encapsuled, and had no pedicle. The patient ade an easy recovery. The second preparation consisted in the bes of a case of double pyosalpinx. The left tube contained five nces of pus, and the right about half an ounce. The operation as extremely difficult, but the recovery of the patient was uninterpted. The third case had just been operated on that morning, and sented that rarest of all illustrations of pelvic pathology, an abss of the ovary. In Mr. Tait's experience, this was the third case. e operation for its removal was quite simple.

Mr. TAIT also showed a girl upon whom he had operated, ten months before, for chronic peritonitis of a tubercular kind. The girl presented, at the time of the operation, all the appearances of approaching death, but is now in perfectly robust health.

Dr. MALINS read a paper on Separation and Transplantation of Ovarian Cysts.

Mr. LAWSON TAIT read a paper (published at page 300) on a series of two hundred and eight consecutive cases of Abdominal Section, performed between November 1st, 1881, and December 31st, 1882.

CORRESPONDENCE.

PROPOSED MEDICAL BENEFIT SOCIETY.

SIR,—I have to thank you for your insertion of, and encouraging remarks on, my letter in your edition of February 3rd. I am glad to be able to inform your readers that the Council of the Birmingham and Midland Counties Branch has convened a special meeting for the 22nd of this month, to consider the advisability of founding a sick benefit society. This meeting will, I hope, add many adherents to your list.

I would suggest to all really interested in the scheme that they should endeavour to bring the subject before their respective Branches, in order that there may be free discussion as to its prospects of success, in the meanwhile sending in their names to you as soon as possible.—I am, sir, yours truly,

WILLIAM CLIBBORN, B.A., M.

97, Bradford Street, Birmingham.

SIR,—It is with great pleasure I see that a real step is now being made towards the formation of a Medical Benefit Society. Last summer, an unsuccessful attempt was made by some medical men in London to form such a society under the name of Medical Mutual Association, which was to have been both a benefit society and an agency, though, I think, the latter addition is unnecessary. The reason we failed was, because we could not form a good working provisional committee; but we came to the conclusion that the only way such a club could be formed was, by incorporating it under the Friendly Societies' Acts. Before any active steps could be taken, I think that at least four hundred members should pledge themselves to join; the more there are, the more chance of success. We made out that, for members joining between the ages of twenty-five and thirty-five, a two guinea annual subscription was sufficient to procure two guineas a week for six weeks, in case of illness or accident, and so on in proportion to the amount of the annual subscriptions. Of course, members would not be expected to declare themselves on the club, unless they were totally incapable of work; and even then, for no time less than a week. For those who join after the age of thirty-five, tables need to be drawn up, making the amount of annual premium larger, according to the age. The surplus at the end of the year could either be given in the form of a bonus triennially, or else could be put aside to form a benevolent fund. I shall be very happy to send the resolutions of the would-be Medical Mutual Association to any committee that may be formed, as, possibly, they may be of some use in the formation of the Medical Benefit Society.—I am, sir, yours faithfully,

J. W. H. DAVIE HARRIS, M.R.C.S., etc.

Prince Town, Devon.

SIR,—The scheme propounded by Dr. Clibborn is one admirable in every way, and the idea you have thrown out that it should be part of the Association, must commend itself to everyone. Dr. Clibborn had consulted me amongst others about this, and I had taken up the idea merely as a local matter. My advice was to have the proposed provident fund initiated by the Birmingham Medical Benevolent Society, and to reorganise this society, if possible, for the purpose. At present the Medical Benevolent Society is in a very unsatisfactory condition; for, whilst it is claimed as an insurance society, it is really nothing of the kind, and its charitable aids are not so large as they might be by 30 per cent. It is not a charity which is wanted, but a truly provident society; and if attached to the British Medical Association, it would be an assured success.

In the first place, the information on which the actuarial calculations would have to be based, could easily be obtained, either for insurance or sick fund. Stability of membership would be insured

as few medical men join the Association until they are more or less securely settled in life, and have already proved themselves possessed of fairly good physique, and there can be no doubt that a very low scale of payments would in this way be possible. If limited to members of the Association, the provident society would be an additional inducement for men to join it, and out of its 9,000 members a very large body of contributors to the provident fund might be at once obtained. A provisional committee of ten or twelve, and an actuary, could settle the basis of the society in a few weeks.—I am, etc.,

A BIRMINGHAM SURGEON.

SINCE last week, we have received letters of adhesion from the following gentlemen:

Mr. W. D. Muir, L.R.C.P., Glasgow; Mr. W. Harrison Coates, Nottingham; Mr. Wm. Fred. Brook, Hants; Mr. E. T. Burton, Birmingham; Mr. W. F. MacCarthy, M.B., Worcester; Mr. A. P. Fiddian, Cardiff; Mr. Francis Rawle, Hants; Mr. E. G. C. Snell, London; Mr. Nathaniel W. Allt, Wiltersham; Mr. James E. Adams, London; Mr. William Donovan, Leicester; Mr. W. J. Beatty, Stockton-on-Tees; Mr. S. B. Mason, Monmouthshire; Mr. T. H. Ravenhill, Birmingham; Mr. B. L. Tandy, Haverhill, Suffolk; Mr. G. O. Mackay, Spennymoor, Durham; Dr. George Elder, Nottingham; Dr. G. H. Barfoot, Birkenhead; Mr. Wm. Bartlett, Deal; Mr. G. T. Willan, Melton Mowbray; Dr. W. Rutherford, Ballinasloe; Dr. A. R. Graham, Holmwood, Weybridge; Eustace Firth, M.B., Norwich; Dr. Charles E. Oldman, Bletchingley; Dr. Thomas Savage, Birmingham; Dr. William Frazer, Bournemouth; Dr. H. F. Marshall, Birmingham; Dr. W. D. McGachen, Brickwall House; Mr. L. M. Griffiths, Clifton; Mr. A. Teevan, London; Dr. W. N. Moore, Brighton; Mr. W. K. Giddings, Calverley, near Leeds; Mr. W. H. Twort, Camberley.

*** The number of letters received indicates the deep interest felt in this scheme; which has provoked more correspondence (all thus far of an encouraging character) than any subject in our recollection. Before taking, however, even preliminary steps, a considerable number of names are desirable of members wishing to take part in such a benefit scheme, and we shall be glad to continue to receive names.—ED. B.M.J.

A NEW METHOD OF AFFORDING PERMANENT RELIEF TO INTRACTABLE CHRONIC CYSTITIS, AND TO CONFIRMED PROSTATIC RETENTION OF URINE.

SIR,—Mr. Teevan originally referred me to the Clinical *Transactions*, 1879, for the single case he has reported bearing on this subject, in order to prove that he had performed external urethrotomy "a long time ago," to relieve chronic prostatic retention, etc. I turn up this case, and find that he very properly calls it there "cystotomy", since he "incised the prostate and neck of the bladder". He cannot now alter either the name or the nature of this proceeding for any purpose whatever. Nevertheless, while desiring to apply the term external urethrotomy to his proceeding, he goes on to defend his incision of the prostate by intimating that, if the knife is not used, an equivalent "solution of continuity" may be caused by merely passing the finger through the prostatic urethra. This is not the case in the living subject, unless an exceptionally rigid prostate exists; although rupture usually occurs from the same act on the dead body. The living prostate is extremely dilatable to a finger of moderate size gently passed; much more so than is the female urethra, which, I think, always splits before the index is introduced, even after preliminary dilatation.

But neither Mr. Teevan nor I need dispute as to priority in opening the membranous urethra in any fashion. I have often referred to it as a common surgical procedure during the last two centuries for various purposes; but it has not been employed for the purpose of making exploration with the finger of the whole interior of the bladder in cases of obscure disease. I claim this to be a new application of an old procedure,* enabling us to remove tumours, small impacted calculi, and also to drain the bladder (when we have discovered by examination that it is the only thing left to do) without making further division of the tissues, as for all these purposes has heretofore been done.—I am, sir, yours obediently,

HENRY THOMPSON.

* Practically, the incision I make is less extended, even, than the simple urethrotomy referred to, the wound being filled by the finger; for it is easy to enlarge subsequently if necessary; but I have not had occasion to do so, even to remove a growth of considerable size.

MEDICAL REFORM.

SIR,—In your last issue, you publish an article under the above heading; but, curiously enough, instead of enlightening your readers upon reform questions, you follow the example of our Reform Committee, and boast vociferously and magnificently of the trust that may be placed in that Committee. You subsequently attack me personally, and individually, apparently with the disingenuous view of drawing the attention of your readers from the question I have raised in my circular letter to the profession. In this letter, I affirmed, and now emphatically reaffirm, that all the Bills of the Reform Committee have been blundering and treacherous, and that they have all proposed to throw open the practice of the profession to any person whomsoever, whether educated or not. I also stated in a postscript to this letter, and now restate the fact that, should a Bill based upon the Report of the Royal Commission be draughted by the Government and passed by Parliament, as urged by the Reform Committee, the practice of the profession amongst other disastrous consequences, would become absolutely free. With these facts, which are incontrovertible, glaring us in our faces, by what process of reasoning, may I ask you, do you think we are to be so hoodwinked as to place our confidence in your assertions that "the Reform Committee may safely be trusted not to neglect the just rights of the profession for which they have so long contended"? Do you really mean to tell the profession this, in face of the fact that the Reform Committee adopted the recommendation of the Royal Commission, conveyed to us in these words, viz., "We (the commission) consider it undesirable to attempt to prevent unregistered persons practising"? Answer as you please, of course, but I say that I have proved that the Reform Committee have betrayed their trust, and that, therefore, they are no longer to be trusted. Other multifarious evils, almost as great as free trade in medicine, would be inflicted upon the profession were the recommendations of the Royal Commission accepted by the profession; yet the Reform Committee, apparently not understanding a bit of what they are about, advocate this acceptance, and not only that, but worse still, they assured the Lord President that the profession had accepted them. Is this true? Have the profession accepted the proposal that free trade in medicine shall be adopted? If not, then I again say that the Reform Committee have betrayed their trust, and palmed off upon the Lord President an untruth for a truth.

To turn now to a question which appears to puzzle you very much indeed, and to be so strange to your understanding, as to induce you to describe it as "inexplicable," but which, in fact, is neither puzzling, nor strange, nor "inexplicable," but so very simple, that it may be grasped and solved by a child possessing the ordinary comprehension of a board school pupil not twelve years old. You say that the "terms of my circular letter," as contained in the quotation above, "are distinctly disclaimed by Dr. Jacob, which is inexplicable and needs explanation." The board school child above named, upon looking over the terms of the memorial presented to the Lord President by Dr. Jacob on behalf of the Irish Medical Association, should see at a glance that it included the very identical terms of my letter, and that it is thus demonstrated that both the Irish Medical Association and Dr. Jacob have been converted to my way of thinking. Moreover, as I hold written communications from some of the members of the Reform Committee agreeing with me in my view of free trade in medicine, let us hope that I shall make converts of the whole of that committee; and that they will have the manliness to avow their conversion.

If time enables me to do so, and as no one has yet attempted it, I will next week point out all that the Royal Commissioners propose to do for the profession; and I think I shall be able to show that the evils we now complain of will be perpetuated in an aggravated form, whilst fresh evils will be inflicted upon us, without conferring upon us, as a compensation, one single advantage we do not now possess. Until then, I will say only a few words upon a point which you say is only a "small matter", but to which I attach great importance indeed, not as it affects me individually, but as it affects the licentiates of the greatest medical corporation in existence; I mean the Royal College of Physicians of London. You sneeringly, and in your hired capacity as the editor of the BRITISH MEDICAL JOURNAL, and as the paid espouser of the impeached incompetent Reform Committee of the British Medical Association, say that "Mr. R. H. S. Carpenter is a licentiate of the London College of Physicians, and of the Apothecaries' Society;" which are two simple facts, that they could be very easily and satisfactorily ascertained, upon reference to the *Medical Register*, by the school

l before alluded to. But then you go further than this, and tly insult, through me, the whole body of Licentiates of that ge; and, indirectly, you brand the whole body of the Edin- h Licentiates and the Dublin Licentiates, who take the title Doctor," as impostors. In your ignorance of medical ers generally, as applied to the several colleges of phy- ns, you do not appear to know that, as regards the claim to itle of "Doctor," there is no distinction between the Fellows, Members, and the Licentiates thereof. You do not appear to that two of our greatest judges, in giving their judgment in peal case, decided, as had already been decided in the court v, that registration alone gave the right to the title, as a pre- f "Doctor"; and, not knowing this fact, it is not reasonable to ct of you that you should know that this judgment has never challenged, and that, therefore, it stands as undisputed law. o this point, as you have, injudiciously enough, thought fit to it, I shall return again, and will now only observe that I agree you entirely—and it is the only point upon which I do with you—that it is important that I should not be con- led with Dr. Alfred Carpenter of Croydon. I am Mr. R. H. S. nter of 130, Stockwell Road, London. I cannot see how we pothecaries, though we are both Licentiates of the Apothe- Society, and practise our profession precisely in the same nd with equal respectability as apothecaries, can be confounded ith the other. I have never heard of, what to me would have so very lamentable a mistake. The whole profession knows am not he, and I should feel myself personally affronted were e mistaken for another person.—I am, sir, your obedient t, R. H. S. CARPENTER, Apothecary, etc.
ruary, 1883.

ST. MARY'S HOSPITAL.

—A recent visit to this excellent hospital has caused me no stonishment. This feeling arises from observing that, by the on of the new wing now in course of erection, a corridor pavilion al, with many points in its favour, is being converted into the class of building for hospital purposes, viz., the irregular, con- rate, or heap of buildings model, of which the old Hotel-Dieu is, and the original county Infirmary at Lincoln, were types. as the pressure for beds may be, we counsel a reconsideration scheme even now, and suggest that the new wing should not nore than one storey in height; because, if the present inten- making it loftier than the old buildings be carried out, expe- proves that St. Mary's must, before long, become very un- . Let the new wing be of but one storey, and the risk of thiness will be reduced to a minimum. There is another nt reason why this course should be adopted, because it will he Committee with sufficient funds to carry out many neces- d urgently needed alterations in the existing bath-rooms and It would be interesting to know by whose advice this dan- y situated new wing was ordered to be erected on the present am, etc., HOSPES.

VE'S LECTURE ON THE ETIOLOGY OF TUMOURS.

—In the report of Mr. Eve's second lecture, which appeared JOURNAL of January 20th, Mr. Butlin's statistical tables are tly used, and reference is made to that gentleman's work on *a and Carcinoma*. On comparing the numbers quoted with iven there, I find they differ in almost every instance. For , Mr. Eve says: "In a table of sixty-three cases of central of bone collected by Mr. Butlin (*Sarcoma and Carcinoma*, 882), only two occurred before the age of sixteen, and one was in a child aged five years."

rning to the table in question, which is *not* on p. 110, but on *et seq.*, I find *eighty-one* cases there recorded; of these *four* l before the age of sixteen, *two* being under five years of

, Mr. Eve says: "Of seventy cases of cancer of the tongue l by Mr. Butlin (*op. cit.*, p. 158), only eleven occurred before f fifty; and, of fifty-seven cases of cancer of the œsophagus, t before fifty."

. 156 *et seq.*, I find a table of eighty cases of cancer of the hirty-nine of which occurred before the age of fifty; and, 5 *et seq.*, a table of fifty-nine cases of cancer of the œso- wenty-two of which occurred before the age of fifty.

s Mr. Eve will kindly inform us on what statistics his ts are based.—Sincerely yours, W. ROGER WILLIAMS.
ary 5th, 1883.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

THE annual meeting of the governors of this hospital took place on February 12th, at the London offices, 34, Craven Street, Strand, Frederick Charles Colman, Esq. (treasurer), presiding.

The Report of the Board of Management stated that, the receipts for the past year had amounted to £6,047 14s. 3d., and the expenditure to £7,749 8s. 11d., necessitating the sale of the invested property of the institution, consisting of £1,158 Consols. Notice had been received that the late Mr. Jones had bequeathed the residue of his estate to the hospital. The estate is being administered under the direction of the Chancery Division of the High Court of Justice, and the amount to be eventually received is expected to yield an income of about £2,000 a year. The board have resolved not to spend any portion of this legacy in building, as it will be needed for partly maintaining the present and proposed enlarged hospital. The hospital being unequal to the demands for accommodation, the board are desirous of receiving offers from the benevolent to build twelve additional houses, as they possess abundant land for the purpose. These houses will, like the others, if desired, bear the names of the benevolent donors, or of any relation or friend, "in memoriam." The fund for building and furnishing one of these houses had already been given by an anonymous friend. It was reported that H.R.H. the Duke of Albany, President of the hospital, had consented to take the chair at a public dinner, to be held on April 18th at Willis's Rooms. The medical report, read by the physician, Dr. Sinclair Coghill, F.R.C.P., showed there were a larger number of in-patients (633) under treatment in 1882 than in any previous year, the results being very satisfactory, and only 15 had died. The various officers were re-elected, and a vote of thanks to the chairman closed the proceedings.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL DEPARTMENT.—The following are the numbers of the marks gained by the surgeons on probation in the Medical Department of the British Army at the close of the recent Netley examination. (The order of position of these gentlemen is not affected by the marks which they have gained at this examination.) February 1883.

	Marks.		Marks.
*1. W. G. Macpherson	2951	9. J. R. Stuart	1868
2. R. J. Shaw Simpson	2897	10. Th. Ricketts-Morse	1974
3. F. W. Reid	2220	11. W. B. C. Deeble	2030
4. E. V. A. Phipps	2425	12. J. M. Prendergast	1488
5. V. E. Hunter	1820	13. R. P. Bond	2049
6. A. Baird	2130	14. G. T. H. Thomas	2045
7. T. O'H. Hamilton	2147	15. G. M. H. Colman	1793
8. D. Semple	2260		

* Gained the Montefiore Medal and prize of twenty guineas, together with a Prize in Pathology.

INDIAN MEDICAL SERVICE.—List of surgeons on probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley examinations. (The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows.) February 1883.

	Marks.		Marks.
*1. A. W. D. Leahy	5798	5. J. Crimmin	4637
†2. W. W. Webb	5420	6. R. E. S. Davis	4592
‡3. R. R. Weir	5418	7. H. K. Fuller	4563
4. W. H. Burke	4924	8. W. H. Neilson	4505

* Gained the Herbert Prize of twenty pounds, and the Montefiore Second Prize.
† Gained the Martin Memorial Gold Medal, and a Prize in Pathology.
‡ Gained the Parkes Memorial Bronze Medal.

A NEW PATTERN BELT AND POUCH FOR ARMY SURGEONS.

THE new belt and pouch which Surgeon-Major L. Couban, M.D., has devised, and which was mentioned at page 231 of the BRITISH MEDICAL JOURNAL for the 3rd instant has been made, and the specimen which we have seen seems to answer well its purpose. It is a little more weighty than the belt and pouch now worn, but the increased weight is much more than compensated for by the additional appliances which the surgeon would always have at hand. The pouch contains two or three bottles, carefully packed, in which essential medicines might be carried, tourniquets, and several bandages of a

new kind contrived by Dr. Corban, very easy of application, with a hypodermic needle and solution of morphia. In addition to the ordinary instruments there is a folding bullet forceps, of special construction, some bull-dog and arterial forceps, and an aneurysm needle. Whilst, in the inside of the belt, are three elastic catheters, and other useful articles. A surgeon armed with this pouch and belt could often extract a bullet at once, should it be near the surface, and avoid sending the wounded soldier to hospital with the bullet still *in situ* in the bandaged wound; he might inject morphia when necessary; arrest hæmorrhage with the tourniquets; tie arteries; apply antiseptic dressing with firm bandages which do not slip, and make use of the same bandages as splints for broken limbs; employ astringent injections; and use elastic catheters which might be retained in position in the case of bullet, or other wound of, or in the neighbourhood of, the bladder or urethra. With the surgeon's present small pocket-case, he can do very few of these things. Such a pouch and belt as Dr. Corban's would tend to make the surgeon, serving with troops in the field, independent of the accidents of a campaign, and of the greatest use in aiding the sick and wounded. It is to be hoped that the new pouch and belt, or some modification of it, may secure the attention of the military authorities. It is a departure in the right direction, and its further development, which might be looked for after practical use in a campaign, would doubtless add to the efficiency of our army surgeons.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE Council of the "Poor Law Medical Association," request that those gentlemen who have not yet replied to the circular forwarded to them by the chairman and secretary, in reference to taking office as local honorary secretaries, will do so at their earliest convenience, to enable the proposed organisation to be completed.

PRECEDENTS IN WATER ANALYSIS.

A CORRESPONDENT sends us a copy of some communications between a private resident and the Local Government Board, which seems to point to a defect in the Public Health Act worthy of notice in future legislation. The gentleman in question took a house, the sanitary arrangements of which proved to be faulty. Three cases of blood-poisoning occurred in the house, and, on the refusal of the landlord to undertake the needful improvements, the aid of the sanitary authority was invoked. Examination by the local health-officer showed the drains to be defective, and the water-supply to be suspicious. The drainage has been remedied, but the householder has been unable to learn from the sanitary authority whether the water-supply of the house is wholesome or not, though the authority has had the water analysed by the county analyst. An appeal to the Local Government Board has been followed by a dry official answer, that the giving or withholding of a copy of the result of the analysis is a matter for the discretion of the local authority. The latter contend, that to give such a copy would be to "create a dangerous precedent," though what possible harm would have resulted from the announcement does not appear. Certainly, if the authority cannot be compelled, under existing law, to acquaint the person most nearly interested with facts ascertained at the public expense, a strong argument is created for dealing with direct cases by new legislation.

GOVERNMENT MEDICAL REPORTS.

WE have repeatedly had to complain of the difficulty with which copies of the reports presented to the Local Government Board by their medical staff have been procurable by the outside world. An inspector takes a vast amount of trouble in tracing an epidemic of its origin. The Government go to the expense of printing, and often of illustrating, his report, which may be of the greatest general interest, and yet no copies of it can be obtained by workers in the same direction, except as a private and personal favour. This is obviously a great waste of strength, and we have, over and over again, recommended that, failing a general distribution to officers of health of such reports, facilities should at least be given to medical men who may desire to possess them by purchase. We are gratified to be able to announce that, for the future, copies of such reports of the medical inspectors as are of general interest, will be placed on sale at a moderate price at Messrs. Knight and Co., 90, Fleet Street, Shaw and Sons, Fetter Lane, Hadden, Best and Co., 227, Strand, and P. S. King, King Street, Westminster.

SAFEGUARDING OF THE MILK-SUPPLY.

THE absolute necessity of subjecting dairies and milk-shops t special supervision has been abundantly demonstrated; and M Mason, in his last report on Kingston-on-Hull, gives another instanc of the facility with which disease may be disseminated by thes places. A child had been ill with scarlatina three weeks before th nature of the disease became known to the sanitary authority; bu no precautions whatever had been taken against the contaminatio of the milk. Its sale was immediately stopped; but, on subs quent investigation, Mr. Mason discovered no fewer than five centr of scarlatina having each its origin from the dairy in question.

DR. LITTLEJOHN AND THE COMPULSORY NOTIFICATIO QUESTION.

SIR,—Dr. Littlejohn at last condescends to make a partial apolo for his attack on the medical profession of the cities of Dublin a Liverpool. It would have been well for his claim to be accredit with that character for truthfulness and courtesy which we suppo to belong to all professional men, if he had at once made this apolo and partial retractation, when appealed to to do so, in courtec terms, by Dr. Davidson, the Secretary of the Lancashire and Chesh Branch; it evidently required the very strong resolution adopted the Liverpool Medical Institution (published in your number of 20th ult.) to overcome his official *insouciance* and make him app ciate what is expected of members of our profession, at least this side of the Tweed.

I am sorry to trouble you with the now thrashed-out subject compulsory notification—an official scheme put forth in the tended interests of the public, but, in reality, in the interest of vate individuals; but, as Dr. Littlejohn has now narrowed the troversy into a personal attack on Dr. Fitzpatrick and myself must crave your indulgence for asking you to insert this letter, I may, through the medium of your Journal, give a truthful acco of what did take place at Worcester and Nottingham. Dr. Fitzpatrick is very well able to defend himself, but I may be allo to say, that I have a very distinct recollection that he did not u one single word of what was imputed to him; his arguments we that it was an insolent usurpation to expect medical men to do work of detectives, and that it was an act of baseness on the of medical men to hold out their hands for the bribe paid them betraying the confidence placed in them as members of an hon able profession.

For my part, I based my opposition to compulsion solely on tary grounds; I proved, from the evidence of medical officers health, that the objects aimed at could be, and were, better acc plished without compulsion; and never said a word about lo fees, or anything whatever that could have had the most re reference to such an argument. Dr. Littlejohn must have a defective memory (I should be sorry to impute to him wilful representation); but it does sometimes happen that, in the h public controversy, a rash statement is made unadvisedly, and wards repeated so often that the unlucky author actually be it at last.

So much for Worcester: as to Nottingham, I was the only pool representative of the profession there, and I remember well that such sentiments (as Dr. Littlejohn chooses to impu me) were very freely used by several speakers; but who were Dr. Littlejohn's friends—the advocates of compulsion—who characteristic cynicism, charged the profession with consp through selfish instincts, to scatter disease amongst the public statement that I used any such argument is a pure imaginat give it a flat contradiction, and repel with indignation the k conduct thereby imputed.

Dr. Littlejohn's way of furthering his views on notification little likely to make friends for his cause as the bad law of his Mr. Michael, Q.C., who had the boldness to say at Nottingha to decline to call in a medical man was a statutable offence remark was made in reference to the question of compul moval, a statement which I had not the opportunity of correc the time, being prevented by the ruling of the chairman, t amendment could be moved to the resolution before the Touching this question of removal, Dr. Littlejohn must ha much changed his views since the Nottingham meeting; t

as entirely in favour of removal, and boasted that if he could not der it, he could practically enforce it, by stationing a policeman at man's door.

Having had some agreeable social intercourse with Dr. Littlehn at Nottingham, during which he observed that "I hit hard," I e more regret being obliged to have this personal controversy with m, but hope that, in justice to his own position and character, he ill withdraw his unfounded statements, and acknowledge that I ave not hit him harder than he deserved.

We have recently had a parliamentary election here, in which the uestion of notification contributed more than a little to the defeat the candidate, who had made himself conspicuous by the arbiary manner in which he had tried to force the system on the city: e householders had begun to consider the question, and made emseves felt at the ballot-box.—Yours, etc.,

EWING WHITTLE, M.D., M.R.I.A.

Parliament Terrace, Liverpool, February 12th, 1883.

AN outbreak of typhoid fever has occurred at a place called Thirstin, the urban sanitary district of Honley, near Huddersfield. The alth-officer, in his report on the outbreak, absolves milk or water om any share in its causation, but regards with suspicion the drain- e of the place, which seems to be particularly faulty.

OBITUARY.

THOMAS WATKIN WILLIAMS, F.R.C.S., OF BIRMINGHAM.

E record with deep regret the death of Mr. Watkin Williams, which ok place at his residence in Birmingham, on Sunday, February th, after an illness of some months' duration. Born at Penllwyn, econshire, on March 4th, 1816, Mr. Williams pursued his profesnal studies at Guy's and St. Thomas's Hospitals; and was admitted icentiate of the Society of Apothecaries in 1839, and a member of e Royal College of Surgeons in the following year. In 1845, he nt to Birmingham, where he entered upon private practice, in rtnership with the late Mr. W. Watts. For many years, and to the d of his life, Mr. Watkin Williams was devoted to the welfare of e British Medical Association; in its growth he took a just pride, d he was always untiring in his efforts to further its progress. In e large and vigorous Branch which has its centre in Birmingham, was one of the most active and most esteemed leaders. He held e office of honorary treasurer for the long period of twenty-five ars, during which the Branch, from small beginnings, grew until it mbered nearly four hundred members. This satisfactory develop- nt was in no small degree due to Mr. Williams's diligent care. He naged the funds placed in his charge so well, that he always kept ood balance on the right side, which enabled his Branch, acting on his benevolent initiative, to contribute substantial donations furtherance of local professional objects. Twice pressed to take presidency, he modestly declined the honour, preferring to retain old and influential office. He retired from the treasurership in '9, when his professional brethren presented to him a handsome vice of plate. At a critical period in the history and development the Association, Mr. Williams held the post of general secretary. this office he was elected in 1863, resigning his appointment in '1, when the secretarial department of the Association was transred to London. During his secretariship, he applied himself with gleness of purpose to his work, and was always earnestly solicitous the welfare of the Association.

n Birmingham, Mr. Williams was one of the honorary surgeons the Orthopædic Hospital, and he was an active member of the al Hospital Saturday committee. As a member of the committee, took an earnest share in the development of the Birmingham dical Institute. In 1879, he filled the presidential chair of the mingham Medical Benevolent Society, and he was instrumental btaining a larger amount of donations to its funds than any of predecessors or successors.

Ir. Williams was present at the jubilee meeting of the Association Worcester last August, when he took a prominent part in the ceedings, and appeared in his usual health. About four months , he had a succession of convulsive seizures, which were followed paresis of the left arm and leg, and evidences of cerebral soften- Throughout his illness, he was assiduously attended by his nds Dr. Melson, Mr. Sampson Gamgee, and Mr. Harmar, with om Sir William Gull saw him in consultation.

In the death of Mr. Watkin Williams, the profession in Birmingham loses one of its best known figures, and the Association one of its oldest and most respected members and staunchest friends.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

ON February 6th, Mr. W. H. C. Newnham, M.A., kept the act for M.B. by reading a Thesis on "Empyema and its Treatment."

The regulations for proceeding to the degrees of Bachelor and Master of Surgery have just been fixed by grace of the Senate as follows:—

The candidate for the degree of Bachelor of Surgery must pass the examinations required for the degree of Bachelor of Medicine, and comply with the educational requirements for that degree, which include residence in the University during nine terms. He must attend the practice of a recognised hospital for two years, have acted as dresser or house-surgeon for six months, and have gone through a course of instruction in practical surgery. The subjects of the examination will be (1) Surgical Operations and the Application of Surgical Apparatus; (2) the Examination of Surgical Patients.

The candidate for the degree of Master of Surgery must have passed all the examinations required for the degree of Bachelor of Surgery two years. The subjects of the examinations will be (1) Pathology and the Principles and Practice of Surgery; (2) Clinical Surgery; (3) Surgical Anatomy and Surgical Operations; (4) A Surgical case and a topic relating to Surgery will be submitted in writing to the candidate, on one or both of which, at his option, he will be required to write, extempore, a short essay.

MEDICO-LEGAL NOTES AND QUERIES

THE Rev. J. H. Timins, vicar of West Malling, has been committed for trial for manslaughter, on the charge of having caused the death of a girl, aged 17 years, the daughter of a labourer, on December 14th last, by administering to her oil of almonds in error when carrying out her medical treatment. We have before commented on the case, and the examination before the magistrates presented no new features, except that the evidence was called of Dr. Bristowe, senior physician of St. Thomas's Hospital, to prove that Mr. Timmins was, between 1845 and 1849, a hard working student of the hospital school, and had acquired, he believed, sufficient medical knowledge at that time to have passed all the examinations necessary for diploma. The reverend gentleman was formally committed to take his trial at the Kent assizes, bail being accepted as before.

THE EXTENSIVE DIFFUSION OF SYPHILIS BY A MIDWIFE.

(From a Special Reporter.)

THIS remarkable case was tried at Leeds Assizes on Monday, before Mr. Justice Day. The Corporation of Sheffield undertook the prosecution, and have throughout acted with great energy and spirit, and are to be congratulated on having undertaken and successfully carried out this important prosecution. Had the Corporation of Sheffield not undertaken this task, under the advice of Dr. Hime, the terrible results of the reckless conduct of the prisoner must have gone on unpunished, and she would probably still be continuing to spread disease and misery around her. The sufferers are all of the artisan class, and could never have undertaken to prosecute their injurer at the assizes; and as for an action for pecuniary damages, there was no prospect of getting any such from a midwife.

Mr. Wills, Q.C., and Mr. Barker, barrister, instructed by the Town Clerk of Sheffield, prosecuted (Mr. Wills, however, did not appear); the prisoner was defended by Mr. Tyndall Atkinson, instructed by Mr. Binns, who is a member of the Health Committee of Sheffield.

The prisoner was charged with five separate counts. The first three were that, on a certain date, she "unlawfully and maliciously did inflict grievous bodily harm on A. B. C., against the form of the statute in such case made and provided, and against the peace of our Lady the Queen, her Crown, and dignity."

The fourth and fifth counts were to the effect that the prisoner

"Martha Scofield carried on the trade and business of a midwife," and that "whilst so carrying on her said trade and business as aforesaid, contracted and became infected with a certain contagious, infectious, and dangerous disease called syphilis, and that the said Martha Scofield, well knowing the premises, and that she had contracted, and was infected with the said disease as aforesaid, and that it would be dangerous for her to carry on her said trade and business whilst so infected with the said disease as aforesaid, and that she might, and probably would, infect with the said disease any woman whom she might deliver in the ordinary course and performance of her said trade and business, whilst she, the said Martha Scofield, was so suffering from the said disease as aforesaid, and that the life of any such woman might be thereby endangered, on the 29th day of August, in the year of our Lord 1882, unlawfully and injuriously did carry on and practise her said trade and business whilst so infected with the said disease as aforesaid, and in the course, practise, and performance thereof, did deliver a woman X, and did thereby infect the said X with the said disease, whereby the said X became sick and ill, and her life was and is endangered, to the great damage and injury of the said X, to the evil example of all others in the like case offending, and against the peace of our Lady the Queen, her Crown and dignity."

The fifth count was the same as the fourth, except that it had reference to another sufferer. This course was not repeated in the case of the third sufferer, an infant, because it was thought that as the charge was for an offence committed while the prisoner was acting as a midwife, it was not precisely in that capacity that she had infected the child.

The prosecution brought forward three cases of persons infected by the midwife, two of them being married women, and the third an infant. The husbands in both cases had become infected subsequent to their wives. These three cases are among forty-five of persons directly or indirectly infected through the instrumentality of the prisoner.

After the case for the prosecution had been stated, counsel for the defence took objection to the whole indictment. The last two counts, he argued, in effect charged the prisoner with being a public nuisance; this being so, her offence should have been shown to be against the public at large, and not, as charged, against particular individuals. Counsel also argued that as there was no direct evidence of malice on the part of the defendant, the first three counts of the indictment must fall to the ground. The judge was opposed to both these contentions. Malice, said his lordship, does not necessarily imply personal spite or ill-will; had it been charged that the defendant entertained such feelings against the injured parties, and that she intended to give them the disease, the offence would have been much more serious. It is malicious if a thing be done with knowledge of the probable bad consequences. In order more strongly to bring out the untenable nature of counsel's contention, his lordship assumed a case of administration of poison, in which serious, but not fatal results ensued. Would not this, he asked, be an offence against the individual, although his death did not ensue? And similarly would not the infliction of disease be clearly an offence against the individual, as well as against public. Although in cases of actual bodily harm, caused by violence, the injury is in one sense only done to an individual, yet it is regarded as a public wrong. So with the administration of poison, or of disease, as in this case. His lordship finally stated that he could see no possible reason for not allowing the facts to go to the jury; if he thought it necessary later on, he would take an opportunity of consulting his brother judge, or if needful, grant a case for argument before the Court of Crown Cases Reserved.

The prosecution called three married women and their husbands as witnesses, and several medical men. The first woman, a primipara, aged 23, was confined of a healthy child October 5th, 1882, stated that she had always been healthy up to the date of her confinement. On that date the prisoner came to attend her as a midwife, and she alone touched her throughout. Observing the witness looking at her finger, on which she had a leather finger-stall, prisoner said, "I've hurt it in a wringing-machine," and she took off the finger-stall, and exhibited the sore to the witness and a friend who was present. The witness got up on the tenth day, and felt sore and uncomfortable, and ultimately consulted the midwife about her condition. She examined her, and said she was "ulcerated," and gave her a lotion. The patient got gradually worse, and ultimately, on November 27th, called in a medical man, who stated that she had the three indurated chancres of the labia unhealed, with secondary rash, and he treated her for syphilis. The husband has had no symptoms of disease, and stated that, in consequence of the condition in which his wife had been since her confinement, he had never had any sexual connection with her up to the present.

The second case was that of a married woman, aged forty, who was confined of her ninth child on August 29th last, and was attended by the prisoner, who alone touched her at her confinement. Up to this time, witness had always been healthy, and her children also, and her husband. She found that she did not recover from this confinement as she had always done previously. Gradually becoming worse, she complained on one occasion to the prisoner, who offered her two shillings if she would go to a particular doctor. She ultimately went to a medical man, who told her she had "the bad disorder." At this time her husband was perfectly healthy; subsequently he had connection with her, and, in the usual course, he acquired syphilis.

The third case was that of an infant, born September 17th. The mother was a healthy young woman up to her last confinement, and neither she nor her husband had ever had venereal disease. She was attended by Mrs. Scofield as midwife, and she also looked after the child's navel after birth and at the end of a week. The navel never healed, but an ulcer developed at its site, which was diagnosed by a medical witness as a syphilitic chancre, and the the child subsequently showed symptoms of secondary syphilis. The several medical men were called by the prosecution who had attended the sufferers, and all gave evidence to the same effect, viz., that they were suffering from syphilitic symptoms, the character of which corresponded with inoculation at the date of confinement. The cross-examination of the witnesses was of a very perfunctory character, and was mainly directed to ascertaining whether the medical witnesses considered a glove-finger, worn by the prisoner, would be a protection to the patients. Dr. Hime was cross-examined at more length, and detailed some experiments he had made to test the efficacy of leather glove-fingers, as protectors; but the counsel for the defence rather made his case worse than better by his procedure; in fact, he went so far as to suggest that Dr. Hime must have had some doubt, or he would have made no experiments. To this Dr. Hime replied that his experiments were made to demonstrate what was a matter of belief, founded on good argument. If a pair of strong boots won't keep one's feet dry, we would not be justified in anticipating that a glove-finger would be safe in a midwifery case. Indeed, the defending counsel actually went to the length of suggesting that there was some professional pique on the part of the medical witnesses against a successful midwife. The judge remarked that this was a very unworthy suggestion of Mr. Tyndall Atkinson, and one for which there was not a shadow of a foundation; and he expressed his opinion that the experiments of Dr. Hime were most properly made, and were highly creditable to him. The defence did not deny the allegation that the midwife had caused syphilis to the sufferers, but contended that she had imperfect knowledge, and that there was no evidence of malice. Several witnesses were called as to the character of the prisoner, who spoke very favourably of her. A number of women with their babies, whose appearance in court caused some amusement as they filed in one after another, were called to state that they had been attended by Scofield, but had had no bad symptoms. As the judge very sensibly remarked, the case was not one of character at all; and there was no allegation that prisoner's character was not good, nor that every one she had attended did or must necessarily suffer.

His lordship delivered an impressive charge to the jury, dwelling on the fact that prisoner was an experienced person, and likely to know the gravity of her case; that she had actually told a medical man fifteen months ago, whom she went to consult, how she had contracted the disease; and that she had been repeatedly warned to give up her business entirely. As to the defence that she had attended numerous patients in 1882, his lordship said this in one way rather aggravated the position, showing utter disregard of repeated warnings. After complimenting the medical evidence for the prosecution (none was called for the defence), his lordship finally left to the jury the question of fact, as to the infection that was not denied by the defence. Did prisoner know what she was suffering from, and the reasonable consequences to be expected if she continued to attend women in labour?

After an hour and a quarter's deliberation, the jury brought in a verdict of Guilty on all counts, but with a strong recommendation to mercy, owing to the age of the defendant and the amount of ignorance she had displayed. Judgment was reserved till Thursday, when his lordship, addressing defendant, sentenced her to twelve months' hard labour.

We have pleasure in congratulating the Town Council of Sheffield i their most praiseworthy action in this matter, and their able edical officer of health for bringing the case to a successful issue. f course, in a case of this kind, the main burden of the work ould fall on the medical officer; but he has been ably seconded by e legal adviser of the corporation.

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. DOUBLE QUALIFICATION.—The following gentlemen passed their st professional examinations during the recent sittings of the examiners.

Richard Macartney, Ceylon; Samuel Wilbraham Griffith, Carnarvonshire; Thomas Anderson, Galashiels; Edward Bridges Townsend, Hampshire; Rowland Owen, Holyhead; John Williams, Anglesea; Alexander William Mackenzie, Linlithgow; Charles Edward Morris, Gloucestershire; Graham Philip Godfrey, Nottingham; Charles Reedy, Limerick; Robert Honohan Cogan, Donoughmore; Francis Augustus Homfray, Gainfore, Darlington; Frank Pritchard Mouth, Chester; George Shepley Page, Cephalonia; John Joseph Butler, Limerick; Samuel Burnside Boyd Keers, Ballymoney; Alfred Bourne, St. John's, Weardale.

The following gentlemen passed their final examination, and were mitted L.R.C.P.Edinburgh and L.R.C.S.Edinburgh.

John Gormley, County Roscommon; Alexander Millar Adams, County Londonderry; Challoner Clay, Wiltshire; George Clarke, Belfast; Ambrosio Feliciano Fernandes, Goa; John Adolph Albrecht, Pendleton; Glenville St. Clair Van Rooyen, Colombo; Robert James Foulis, Edinburgh; William Tweedie, Rathfriland; Joseph Dunlop, Conagher; Edward Harvey Bird Nickoll, Milton; Samuel Robert Rogers, Ontario; William Hector Macdonald, Toronto; James Unsworth Green, Worcestershire; Adam Richard Stacpoole, Australia; Walter Mount, Nackington; James Henry Curtis, Cork; Eliot William Welchman, Lichfield; Rowland Owen, Holyhead; David Robert Paul, Vizagpatam; Murdoch Mackenzie, Stornoway; Kenneth Joseph Campbell, Yorkshire; Robert Currie, Ballymena; James Smyth, County Limerick; Austin Concannon, County Galway; Frederick St. John Kemm, Wiltshire; William Samuel Irwin, Dublin; William John Harvey Fletcher, Staffordshire; James Alister, Lisburn; Robert Daniel Givin, Dervock; Herbert George Harold Clarkson, Yorkshire; William Simpson Flett, Cullen.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following ntlemen passed their final examination, and were admitted Licentes of the College on January 26th.

Frederick Lucius Nicholls, Eton; and Thomas O'Kelly, County Clare.

The following gentleman passed the first professional examination the Licence in Dental Surgery during the January examinations.

Adolphe Wetzel, Baden, Switzerland.

The following gentlemen passed their final examination, and were mitted L.D.S.

Frank Herbert Briggs, Leeds; and Francis Bromley, London.

UNIVERSITY OF DUBLIN.—At the Spring Commencements, held ording to custom on Shrove Tuesday, February 6th, in the Examination Hall of Trinity College, the following degrees in Medicine d Surgery were conferred.

Bachelors in Surgery.—Samuel Alfred Alcorn, John Armstrong, Eugene Cormack, Daniel Crowe, Joseph Patrick Finegan, Charles St. Stephen Richard Nason.

Bachelors in Medicine.—Samuel Alfred Alcorn, William Samuel Boles, Joseph Patrick Finegan, Charles Wolfe Hamilton.

Master in Surgery.—Charles St. Stephen Richard Nason.

Doctor in Medicine.—Charles St. Stephen Richard Nason.

Licentiate in Medicine.—Charles Joseph Fagan.

APOTHECARIES' HALL.—The following gentlemen passed their amination in the Science and Practice of Medicine, and received tificates to practise, on Thursday, February 8th, 1883.

Gilkes, Norton Gilbert, The Firs, Leominster.
Griffiths, Alfred Philip Henry, Hanover Gardens, Kennington.
Jenkins, Edward Johnstone, St. Bartholomew's Hospital.
Morris, William David Joseph, Cefnydre, Fishguard.

The following gentlemen also on the same day passed their Pri- ry Professional Examination.

Buck, Lewis Archer, King's College Hospital.
Stevens, Francis, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

OUGH OF BLACKPOOL.—Medical Officer of Health. Salary, £250 per annum. Applications by February 20th.

RLISLE DISPENSARY.—Assistant House-Surgeon. Salary, £100 per annum. Applications to Mr. John Ostell, Honorary Secretary, 14, Bank Street, Carlisle.

ARING CROSS HOSPITAL.—Medical Registrar. Applications by Feb- uary 19th.

NFANAGHY UNION, Crossroads Dispensary.—Medical Officer. Salary, £110 per annum. Election on March 7th.

FIRTH COLLEGE, Sheffield.—Professor of Chemistry. Salary, £150 per annum Applications to Ensor Drury, Registrar, by March 1st.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum. Applications by February 23rd.

MIDDLESEX COUNTY LUNATIC ASYLUM, Hanwell.—Assistant Medical Officer. Salary, £150 per annum. Applications to the Clerk of the Visitors by February 20th.

MORPETH DISPENSARY.—House-Surgeon. Salary, £120 per annum. Applications by March 1st.

RETFORD DISPENSARY.—Surgeon. Salary, £120 per annum. Applications to the Secretary, the Vicarage, East Retford, by March 3rd.

ROYAL CORNWALL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by March 1st.

ROYAL MEDICAL BENEVOLENT COLLEGE.—Morgan Annuitant. Applications by the end of February.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, Lower Seymour Street, Portman Square, W. Surgeon. Applications at once.

ST. MARK'S OPHTHALMIC HOSPITAL, Lincoln Place, Dublin.—Resident Surgeon. Salary, £52 10s. per annum. Applications to the Chairman of the Board of Governors of the Hospital, by February 17th.

UNIVERSITY COLLEGE.—Dental Surgeon and Lecturer on Dental Surgery. Applications by February 28th.

WEST LONDON HOSPITAL, Hammersmith.—Assistant Physician. Applications by February 27th.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho.—Resident Medical Officer. Salary, £100 per annum. Applications by February 17th.

MEDICAL APPOINTMENTS.

BARTLETT, E., M.R.C.S., appointed Honorary Surgeon-Dentist to the Western General Hospital.

BERRY, J. B., M.R.C.S., appointed Junior Resident Medical Officer to the Royal Free Hospital, *vice* C. L. H. Tripp, M.R.C.S., resigned.

BIRMINGHAM, H. J., L.K.Q.C.P.I., appointed Medical Officer for the Dispensary to the Castlebar Union, *vice* M. A. Lyden, L.R.C.P., resigned.

BLAKENEY, E. T., L.K.Q.C.P.I., appointed Medical Officer of Boyle No. 1 District, *vice* H. O'Farrell, M.D., deceased.

BOOTH, E. H., M.R.C.S., appointed Resident House-Surgeon to the Seamen's Hospital, Greenwich, *vice* W. Pearce, M.R.C.S., resigned.

BROWN, H. H., M.B., appointed Assistant House-Surgeon to the Cumberland Infirmary.

BURTON, John E., L.F.P.S.G., M.R.C.S., L.R.C.P., appointed Honorary Medical Officer to the Hospital for Women, Liverpool.

CARTER, T. E., M.B., appointed House-Surgeon to the Southport Infirmary and Local Dispensary, *vice* J. H. Greensill, L.R.C.P., resigned.

COCHRANE, E., M.B., appointed Medical Officer to the Ballinamear Dispensary.

COXWELL, C. F., M.B., appointed Medical Registrar to the London Hospital, *vice* H. S. Gabbett, M.D., resigned.

DAVIES, E. T., M.B., C.M., appointed Honorary Assistant Medical Officer to the Hospital for Women, Liverpool.

DAVIS, M., L.D.S., appointed Assistant Dental Surgeon to the National Dental Hospital.

DUNMERE, H. H., M.R.C.S., appointed Medical Officer and Public Vaccinator to the Ecclesall Bierlow Union, *vice* G. Booker, M.R.C.S., deceased.

DUNMERE, H. H., M.R.C.S., appointed Medical Officer of Health for the Rural Sanitary Authority to the Ecclesall Bierlow Union, *vice* G. Booker, M.R.C.S., deceased.

DYSON, H. J., M.R.C.S., appointed House-Surgeon for the Male Hospital and Out-patient Department to the London Lock Hospital, *vice* J. W. Field, M.R.C.S., resigned.

EDIS, J. B., M.R.C.S., L.R.C.P., appointed Honorary Assistant Medical Officer to the Hospital for Women, Liverpool.

FENWICK, E. H., F.R.C.S., appointed Surgical Registrar to the London Hospital, *vice* C. W. Mansell-Moullin, M.D., resigned.

GAYTON, F. C., M.B., appointed Senior Assistant Medical Officer to the Surrey County Lunatic Asylum, *vice* J. E. Barton, L.R.C.P.

GREENSIL, J. H., M.R.C.S., appointed House-Surgeon to the Bury Dispensary Hospital, *vice* C. McLaren, M.D., resigned.

GRIMSDALE, Thomas F., M.R.C.S., L.R.C.P.Ed., appointed Consulting Surgeon to the Hospital for Women, Liverpool.

HAMILL, R. J., M.D., appointed Out-door Medical Officer to the St. George's Union, Middlesex.

HEISCH, C., F.S.C., appointed Public Analyst to the Parish of St. John, Hampstead.

HOSKIN, T., L.R.C.P., appointed Medical Officer to the Hackney Union, *vice* C. H. Welsh, F.R.C.S., resigned.

HUDSON, E., M.R.C.S., appointed Junior House-Surgeon to the Newcastle-upon-Tyne Infirmary, *vice* W. G. Black, resigned.

KING, D. A., M.B., appointed Casualty Physician to St. Bartholomew's Hospital, *vice* P. Kidd, M.B., resigned

LANE, J. O., M.B., appointed House-Surgeon to the General Infirmary, Northampton, *vice* H. H. Tidswell, L.R.C.P.

LUPTON, Richard J., M.B., M.S.Aberdeen, M.R.C.S., L.R.C.P., appointed Honorary Medical Officer to the Hospital for Women, Liverpool.

MILLER, R., M.B., appointed Junior Assistant Medical Officer to the Towns Hospital and Asylum, Glasgow.

MOSELEY, Wm. A., M.D.Bruss., M.R.C.S.Eng., L.R.C.P.Edin., appointed Resident Surgeon to the Branch Dispensary of the Cheltenham General Hospital.

MOUILLOT, A., M.B., appointed Medical Officer to the Gorey Union Infirmary, and Consulting Sanitary Officer to Gorey District, *vice* J. B. Allen, L.R.C.S., deceased.

IMLACH, Francis, M.D.Edin., M.R.C.S., appointed Honorary Medical Officer to the Hospital for Women, Liverpool.

PHILLIPS, S., M.D., appointed Physician to the St. Mary's Hospital.

PLUNKETT-JOHNSTON, D. H., L.F.P.S.G., appointed Surgeon to the Bond of Brotherhood Sick Benefit Society, Somerset, *vice* A. Clarke, L.R.C.P., resigned.

PRATT, J. D., M.B., appointed House-Surgeon to the City of Dublin Hospital.

PRINGLE, J. J., C.M., appointed Medical Registrar to the Middlesex Hospital, *vice* J. W. Browne, M.B., resigned.

READ, H. G., L.D.S., appointed Assistant Dental Surgeon to the National Dental Hospital.

SCHÄFER, E. A., M.R.C.S., appointed Jodrell Professor of Physiology to the University College, *vice* J. B. Sanderson, M.D., resigned.

SHEDD, E., M.R.C.S., appointed Medical Officer and Public Vaccinator for Hatfield District to the Dunmow Union, *vice* C. G. Firman, M.R.C.S., resigned.

SMALE, Morton, M.R.C.S., L.D.S.Eng., appointed Second Dental Surgeon to the Westminster Hospital.

SMITH, A., L.D.S., appointed Dental Surgeon to the National Dental Hospital, *vice* G. Hammond, L.D.S., resigned.

SMITH, T. F. H., F.R.C.S., appointed Medical and Surgical Registrar, *vice* G. Weldon, M.B., resigned.

SMITH, W. A. W., M.R.C.S., appointed Assistant House-Surgeon to the General Infirmary, Northampton, *vice* J. O. Lane, M.B., resigned.

STEELE, C. E., M.R.C.S., appointed Honorary Assistant Medical Officer to the Hospital for Women, Liverpool.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

NORMAN.—On the 13th instant, at Havant, Hants, the wife of Alex. Stewart Norman, of a son.

DEATHS.

BUCHANAN.—At 98, St. George's Road, Glasgow, on the 9th instant, James Buchanan, M.D.

GILL.—On the 12th instant, at Bootham, York, Henry Clifford Gill, M.R.C.S., L.S.A., aged 36, Medical Superintendent of the York Lunatic Asylum.

WILLIAMS.—On February 11th, at Birmingham, T. Watkin Williams, F.R.C.S., Honorary Surgeon to the Birmingham Orthopædic Hospital, General Secretary of the British Medical Association from 1863 to 1871, aged 66 years.

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's last weekly return, that the death-rate has recently been equal to 29.0 in Bombay, and 37.5 in Madras. Small-pox caused 33 deaths in Bombay and 5 in Madras; "fevers" again showed the largest proportional fatality in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-one of the largest European cities, was 29.3, and no less than 7.0 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 41.7, and showed a decline from the excessive rates in previous weeks; the 743 deaths included 32 fatal cases of diphtheria, 28 of scarlet fever, and 17 of small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 27.7, and ranged from 17.5 in Christiania to 34.9 in Stockholm; 5 fatal cases of measles were recorded in the last-mentioned city. In Paris, the death-rate was equal to 26.6, and the deaths included 41 from typhoid fever, and 15 from small-pox. The 197 deaths in Brussels were equal to a rate of 25.1, and included 6 fatal cases of small-pox and 4 of measles. In Geneva, the rate of 22.3 showed a considerable increase upon the rates of recent weeks; one fatal case of small-pox was recorded. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.9, the rate being 30.0 in Amsterdam, and 32.0 in Rotterdam; 6 deaths from small-pox occurred in Rotterdam, and 7 from diphtheria in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.8, and ranged from 23.6 and 25.2 in Dresden and Berlin, to 33.6 in Prague and 35.9 in Trieste. Small-pox caused 4 deaths in Vienna and 3 in Buda-Pesth; diphtheria again showed a fatal prevalence in most of these German cities. The death-rate was equal to 26.7 in Turin, and 31.2 in Venice; 7 fatal cases of diphtheria occurred in Turin. In four of the largest American cities, the rate averaged 26.8; it was only 23.4 in Brooklyn, and ranged upwards to 38.3 in Baltimore. Small-pox caused 92 more deaths in Baltimore, showing a further increase upon recent weekly numbers, and 8 in Philadelphia. Typhoid fever caused 12 deaths in Philadelphia, and diphtheria was more or less fatally prevalent in each of these American cities.

THE accouchement of the Duchess of Albany is expected early in April, at Windsor Castle. The King and Queen of the Netherlands will come to England for the occasion, and have taken a wing at the Oatland's Park Hotel, Weybridge, as their residence.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department) 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Ski M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1. Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dent Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; E Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Den Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S. o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Lary W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopæ W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12 Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Thr Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Heath Strange show a subject of Elephantiasis. Mr. Ballance: A Case of Recto-ve Abscess: Colotomy. Mr. Pitts: A Case of Femoral Hernia, with Rup of all its Coverings.

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. S. West: Aneur of Arch of Aorta (two cases). Dr. Silcock; Aneurysm of Abdon Aorta. Mr. Lockwood: An Abnormality of the Bones and Muscles re the Shoulder-Joint. Mr. Sutton: Bone-Disease in Animals. Mr. Bow Femora curved from Osteitis Deformans and Chronic Inflammation. Barwell: Juvenile Osteo-malacia; Curved Tibia from Rachitis; H trophy, with Lengthening of the Tibia. Mr. Durham: Tumour of T (living specimen). Mr. J. Lawson: Recurrent Cartilaginous Tumou Head and Neck (recent specimen). Mr. Eve: Atrophy of Bone, Fracture. Mr. Lane: Fracture of Sternum, with Costo-chondral Dis tion. Dr. Hale White: A Peculiar Process from the Fibula.

FRIDAY.—Clinical Society of London, 8.30 P.M. Dr. Broadbent: On a Ca supposed Hydrophobia treated by Chloral, with Recovery. Dr. Fowler: On Two Cases of Pseudo-hypertrophic Paralysis in Adults. J. Godlee: On a Case of Fracture of the Radius and Dislocation For of the Ulna at the Wrist, in which the lower end of the latter Bon removed to effect Reduction. Dr. Pearson and Dr. Broadbent: On of Acute Necrosis of the Right Orbital Plate of the Frontal Bone, rise to Thrombosis in the Frontal End of the Longitudinal Sinus, Cavernous Sinus, and Ophthalmic Vein. Dr. Fowler will exhibit a C Occlusion of the Superior Vena Cava.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

APPEAL FOR THE ORPHAN CHILDREN OF THE LATE DR. H. GRIFFITHS.

SIR,—I beg to acknowledge with many thanks the receipt of the following additional sums sent to me since my letter of January 20th, in aid of the above-named object. I am happy to say my appeal has been liberally responded to, both at home and abroad. A little more, however, would enable me to purchase some shares for the permanent benefit of the children.

From Surgeon-Major E. A. H. Roe, Station Hospital, Allahabad, India, £5; Thomas Smith, Esq., F.R.C.S., London, £5; from Dr. J. Marion Sims, Paris, Dr. R. A. Caldwell, New York, £2 2s. each; From Surgeon F. Edward Barrow, A.M.D., Palace Hospital, Cairo, £1; from Richard B. Ruddock, Bristol, £1 1s.; from Henry K. Kane, Esq., M.D., Surrey, Dr. Burney, the Infirmary, Greenwich, Surgeon A. G. Delwedge, R.N., H.M.S. *Britannia*, £1 each; from H.A.L., J. Banks, Esq., M.D., Scotland, 5s. each. Any further sums sent to me, no matter how small, will be thankfully received and acknowledged.—I am, sir, yours, etc.

LAMBERT H. ORMSBY, M.D., F.R.C.S.

4, Merrion Square, West Dublin, February 8th, 1883.

MALIC ACID TOOTH-POWDER.

G. GEORGE.—True malic acid would not discolour the teeth, but, on the contrary, improve their appearance. It would do this, however, by dissolving away the surface of the enamel, and thus lead to their ultimate destruction, if the use of the malic acid were persevered in. The use of such an agent as a dentifrice is, therefore, to be avoided.

HOMES FOR IMBECILES.

SIR,—I beg to inclose a copy of the regulations for admission of patients into this institution, from which it will be seen that the Royal Albert Asylum receives, for education and industrial training, the idiotic or imbecile children of necessitous parents belonging to Lancashire, Yorkshire, Cheshire, Westmoreland, Cumberland, and Northumberland, either as "free cases" (elected by subscribers), or on the "reduced payment" of twenty-five guineas *per annum*. A limited number of pauper patients are also received from the same counties by arrangement with the guardians of their unions.

Special accommodation is provided for patients whose friends pay for them 50 guineas *per annum*, and upwards; and for the higher rates of payment, private rooms and exclusive attendance may be obtained. The "full payment" rate (not securing special privileges) is fifty guineas *per annum*, with ten guineas additional for clothing. No restriction as to residence in the northern counties exists with regard to patients admitted on full payment, or at the higher rates.

Regulations for admission, with the necessary forms, may be obtained on application to Mr. James Diggens, the secretary of the asylum; and any information of medical interest will be gladly rendered by yours faithfully,

G. E. SHUTTLEWORTH, M.D., Medical Superintendent.

Royal Albert Asylum, Lancaster, February 12th, 1883.

PATIENTS AT MOORFIELDS HOSPITAL.

SIR,—I beg to draw your attention to a slight inaccuracy in the paragraph on page 217 of this day's number of the BRITISH MEDICAL JOURNAL, referring to the Birmingham Eye Hospital, wherein it is stated that the average number of patients to each surgeon at Moorfields is 1,117. The facts are as follows: There are nine acting surgeons, and an annual attendance of 114,270 patients, of which 22,854 are new cases. This gives an average of 2,539 new cases to each surgeon, besides his in-patients. These figures might be of some importance in the matter at issue, but I quite think the present numbers are as great as can be profitably attended by a staff of nine surgeons.—I am, sir, yours, etc.,

JAMES E. ADAMS, Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

7, Finsbury Circus, E.C., February 3rd, 1883.

ELECTRICITY *v.* HANGING.

SIR,—In the BRITISH MEDICAL JOURNAL of January 20th, there appears an article entitled "Electricity *v.* Hanging", which, I think, calls for some remark.

The "long drop" was adopted as the most rapid method of execution by "hanging". It was a reaction against the "Calcraft system", whereby life was taken away by slow strangulation, the unhappy criminal often kicking out for minutes; the sensation may have been "pleasurable" to the chief actor, as Dr. Hammond avers, but it was horrifying to the spectators.

All the accounts which I have read describe death by the "long drop" as instantaneous; the writer of the article in question states that it "does not bring about instantaneous death, and causes sometimes, perhaps, prolonged and unnecessary suffering." I ask, What evidence has he of all this? Of the Wadsworth case I know nothing; but, in that of Myles Joyce, the fact of the rope catching on the man's hand proves nothing; it might have happened with the short drop quite as readily. There is no fixed length of drop; it depends on the criminal's weight. By all means, let us have electricity if practicable. But what can excel the "garrotte" for certainty and celerity? Perhaps Dr. Hammond would prefer the "bowstring", as being altogether more durable.—Yours obediently,

M.D., R.N.

PREVENTION OF SMOKE.

SIR,—My attention has just been called to the letter from Dr. Wallace which appears in your issue of the 10th instant; and, as it is not generally known, I shall be glad if you will permit me to state that the anthracite or hard coal, as used in America, is coming into gradual use in London for domestic purposes. It is true that it is not yet supplied in the different sizes Dr. Wallace names, because the demand does not yet warrant the laying down of expensive plant, which is required for breaking the coal. Anthracite coal is, however, being sold for household purposes in about egg size, and I find that it answers fairly well for both cooking-stoves, warming-stoves, and open fire-grates. Then, with regard to stoves, I have at this establishment several descriptions of the American cooking- and warming-stoves, made in America and imported; and there is one advantage in having these stoves from America, that they are made from the best hard grey iron, which stands the intense heat of anthracite coal much better than either English or Scotch castings. As a matter of public interest and general information, I shall be glad if you can find space for this letter.—I am, your obedient servant,

WILLIAM STOBBS.

Smoke Abatement and Sanitary Appliance Stores, Garfield Buildings, 150, Holborn, E.C., February 13th, 1883.

DR. HORACE DOBELL states that his name has, by some ridiculous mistake, and without any warrant whatever, been inserted in a homœopathic directory for 1883, among homœopathic practitioners at Bournemouth.

MEDICAL CHARGES TO THE CLERGY.

SIR,—As there is some misconception on the subject, will you kindly state in your next issue what is the rule in the profession with regard to charges for professional attendance upon the clergy, beneficed and unbeneficed, and their families?

2. Does the above rule apply to the vicar or rector of the parish of the medical attendant, or is any exemption usual in this case?—I am, sir, yours obediently,

IGNOTUS.

*** There is not, so far as we are aware, any special general rule, "with regard to Charges for Professional Attendance upon the Clergy, Beneficed and Unbeneficed, and their Families," other than the simple traditional one (a "true Samaritan" principle, alike applicable to other classes) by which the Faculty have long been self-guided, viz.: though fully and justly entitled to a commensurate remuneration for professional services, accordant to the patient's position in life, to make a greater or less reduction, according to the circumstances of the individual case, to such as may fairly be classed among the "poor clergy"—specially so called—in contradistinction to the well endowed and independent clergy: which latter should be charged as ordinary patients, in accordance with the principle laid down in the Medico-Chirurgical Tariffs (Classes II, III), issued by the late Shropshire Ethical Branch, whether or not the patient be "the Vicar or Rector of the Parish of the Medical Attendant, or one of the Family." In such latter case, no reduction should be made.

ERUPTIONS FOLLOWING INJECTIONS OF MORPHIA.

SIR,—I am attending a patient who requires nightly hypodermic injections of morphia, and has had them regularly every night for these last two months. The formula used has been the following: Morph. acet. gr. ij; acid acet. ℥i; aqua ʒi; twelve drops are used every night. The punctures, as a rule, do not show any signs of inflaming, either at the time or afterwards; but occasionally some have inflamed, and continued to be troublesome for several days, itching a good deal. During these last few days, seven or eight punctures on each arm have simultaneously inflamed. Of those on the right arm, the most recent puncture must at least be a fortnight old, and had not hitherto shown any signs of inflammation, while the oldest puncture must have been at least three weeks old. On the left arm, the punctures were all more recent. The general health has not varied during that time, the patient being weak and anæmic.

Can any of your correspondents explain the cause of this sudden eruption, and suggest how it is to be guarded against in future?—Yours faithfully,

L. B.

PRURITUS AFTER HERPES ZOSTER.

SIR,—In answer to your correspondent "Inquirens," in the JOURNAL of January 20th, I notice the absence of quinine in the list of internal remedies with which the patient has been treated. Last summer, I had under my care an almost exactly similar case, but minus the troublesome sequel—itching. My patient had a most intense inflammation of the eye, which threatened its total destruction. A most complete recovery, however, took place, and the chief remedies relied upon and administered were, iodide of potassium, quinine, and arsenic. Quinine is reputed to have a special action on the supra-orbital branch of the fifth nerve, which, in the particular instance, is the nerve affected. I would, therefore, first of all, suggest that the patient be given four grains of quinine a-day, in addition to any other medicine which his state of system may indicate. Secondly, I feel sure that "Inquirens" would be more than satisfied by the application of Trousseau's simple but novel method of using atropia endermically, by rubbing off the epidermis on the right temple, after subjecting the skin to the vapour of strong ammonia for two or three minutes, under an ordinary thimble, and then dressing the raw surface with a circular piece of lint dipped in a solution of atropia or morphia, and covered with a piece of oil-silk. This dressing should be renewed every morning for three or four days, care being taken to rub off the newly formed layer of epithelium before putting on each new dressing.

Perhaps, some future time, "Inquirens" will kindly favour the JOURNAL with the result of these suggestions.—I am, yours truly,

CHARLES R. WILLIAMS, M.D.

Ivanhoe Terrace, Ashby-de-la-Zouch, January 22nd, 1883.

SIR,—If I may be allowed to add my quota of information concerning the treatment of pruritus ani—a subject I see mentioned in this week's JOURNAL—I would remark that I have never known the accompanying lotion to fail, if applied frequently with a soft sponge after washing: ℞ Hydrag. bichlor gr. i; liq. plumbi ʒi; acid hydrocyanic (Scheele's) ℥ x. Aq. ad ℥i. I rather think it is the mercury which is the efficacious agent, but I have been so satisfied with the effect of this lotion, that I have not cared to be scientifically precise on the point.—I remain, your obedient servant,

THOMAS JAMES WOODHOUSE.

Ranelagh Lodge, Fulham, S.W., February 12th, 1883.

Medical Providence.

SIR,—The BRITISH MEDICAL JOURNAL frequently contains an appeal to the benevolence of the profession for some unfortunate widow or orphan. This ought not to be, as it can be prevented by a little foresight and economy on the part of our poorer brethren. The Society for the Relief of Widows and Orphans of Medical men, for the sum of two guineas *per annum*, or 9½d. per week, guarantees the sum of £80 *per annum* to a widow left destitute; also a donation at Christmas, and, in addition, an allowance for orphans. If the profession will not accept such easy terms for the protection from want of those they leave destitute, the sooner they study the natural history of the bee, and apply its habits and prudence to themselves, the better it will be for them. The man who, for 9½d. per week, can keep his widow from want, or the widow of a professional brother, in not paying it neglects a duty that it should be a pleasure to perform.—I am, sir, yours faithfully,

E. H. R.

ERRATA.—In the two articles headed respectively "Scarlet Fever and the Closing of Schools," and "Outbreaks of Zymotic Disease," which appeared in our last week's issue, Dr. Ballard's name was substituted in error for that of his colleague Dr. Parsons.

L. L. T.—There is a full account of the subject in Barnes's *Diseases of Women*.

Blushing.

SIR,—I have at present a patient, a gentleman, aged 21, who for the last four or five years has been subject to the above unpleasant habit. It is not so much in the presence of ladies, as when he suddenly meets any friend. He finds that, if he once blush in the presence of any one person, he is pretty sure to do so again, and the habit seems to be on the increase. He belongs to a healthy family, but occasionally suffers from dyspepsia. I should be glad of any suggestion as to treatment from any member who has had a similar case.—I am, yours faithfully,

M.R.C.S.

J. H. M.S. can obtain the publications of the Association for the Support and Defence of Medical Research from Mr. J. W. Kolckmann, 2, Langham Place, W.

Apprenticeship.

SIR,—Will you kindly direct me in the following matter, as to how I should proceed? I have the offer of an articled pupil; but, being only a surgeon (M.R.C.S.L., 1854), am I, with that single qualification, in a position to take an apprentice for a term of years? Would it require the apprentice, after he had finished with me, to have to serve with an apothecary as well, say six or twelve months? I am anxious to oblige the party, but I would not wish the youth to have to undergo more than the ordinary course of apprenticeship. May I ask you also what is the ordinary premium for a provincial surgeon to name?

I hope I am not trespassing upon you, but, being a member of the Association, I prefer to put my inquiry to you.—Yours faithfully,

North Shields, January 22nd, 1883. THOMAS J. TURNBULL.

*** Though holding only a surgical qualification, our correspondent is not debarred from taking an articled pupil, if the friends be disposed to come to terms with him; but it would be proper for such pupil to go through a course of pharmacy, not necessarily with an apothecary or pharmaceutist. A fair premium would be from £100 up to £300, according to time and conditions.

A DISSATISFIED FELLOW.—The charges seem to us very reasonable, and such as a judge would allow. There is no legal standard, but the Manchester scale is an accepted authority in the profession, and certainly does not err on the side of putting fees too highly. Our correspondent's claim is, we think, such as does not admit of any reasonable ground of objection; it is both equitable and moderate.

The Contagiousness of Phthisis.

SIR,—As a question bearing on the contagiousness of phthisis, may I ask whether dentists as a body suffer from this disease more than other people? because it appears to me that, if phthisis be contagious, they ought to be especially prone to it, inasmuch as they must be constantly taking in the breath of those suffering from the disease, and, moreover, in each of its separate forms and stages.—I am, sir, your obedient servant,

F. P. ATKINSON.

Kingston-on-Thames, February 8th, 1883.

Condensed Milk and Infants.

SIR,—*Apropos* of Dr. McLennan's communication on the above subject, about a fortnight ago, I saw an eminent oculist apply the needle in two cases (both babies) for capsular cataract. Four or five days after, one was doing well; in the other, suppuration had taken place, and the chances are very small that the eye does not go blind. The first was fed on correct diet; the second (sixteen months) had breast *plus* condensed milk. These two cases taught me two lessons: one, to inquire how every patient was fed, even if they looked fairly well nourished (as this child did before operation); secondly, always to advise parents not to give condensed milk as a dietary for their children, for this was undoubtedly the cause of failure in this poor baby.—Yours obediently,

EDWARD M. OWENS.

The Hydropathic Establishment, Leamington, February 8th, 1883.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. J. Wigmore, Twerton, Bath; G. R.; Mr. J. N. G. Biggs, London; Mr. J. Alexander Williams, London; Mr. John B. Lyth, Rotherham; Mr. Stephen H. Moore, London; Mrs. Lucretia Gregory, Newcastle-on-Tyne; Dr. Collie, London; Dr. J. Dreschfeld, Manchester; Dr. Culpin, London; Mr. A. Jasper Anderson, London; Dr. F. H. Spooner, London; Dr. A. W. Potter, London; Mr. A. W. Woodroffe, Peterborough; The Secretary of the Midland Medical Society; Mr. R. G. Salmond, London; Mr. F. Boynton Lee, West Riding; Mr. J. Birt, Stourbridge; Mr. William J. Stephens, Brighton; Mr. T. M. Stone, London; Dr. W. E. Hadden, Liverpool; Mr. R. W. Isbell, Hereford; Mr. J. M. Hopkins, Eccleshall; Mr. J. Bain Sincock, Bridgwater; Mr. J. Jones, Blackburn; Messrs. James Allen and Sons, London; Mr. N. A. Rogers, Haverfordwest; Mr. F. Wallace, London; Mr. W. W. Reeves, London; Dr. Charles Parsons, Dover; Mr. L. M. Griffiths, Clifton; Messrs. 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Ballard, London; Mr. H. F. Marshall, Birmingham; Mr. T. J. Prosser, Monmouth; Dr. W. Roger Williams, London; Dr. M. R. O'Connor, Limerick; The Secretary of the New York Medico-Legal Society; Mr. W. E. Hyde, Leominster; Dr. Borchardt, Manchester; Mr. T. Smailes, Horley; Dr. Sidney Coupland, London; Mr. Barlow, London; Mr. Robert Kirkland, Cheltenham; Dr. W. Frazer, Bournemouth; Dr. G. A. Hetherington, St. John, N.B.; Mr. H. Tracy-Peat, London; Dr. George Johnstone, Dublin; Mr. A. J. Brodie, Ambleside; Mr. G. T. Willan, Melton Mowbray; Dr. Thomas Savage, Birmingham; Dr. W. Rutherford, Ballinasloe; Dr. O. Bennett, Griqua Town, South Africa; Mr. H. Nouroji, Suez; Dr. G. E. Shuttleworth, Lancaster; Dr. Ewing Whittle, Liverpool; Dr. G. H. Barfoot, Birkenhead; Rev. J. Watkin Williams, Birmingham; Dr. Gaillard, New York; Dr. Rickards, Birmingham; Mr. S. W. North, York; Dr. George Wherry, Cambridge; The Registrar of the General Medical Council; Dr. Hime, Sheffield; Mr. H. 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THE HUNTERIAN ORATION,

Delivered February 14th, at the Royal College of Surgeons of England.

By T. SPENCER WELLS, F.R.C.S.,
President of the College.

II.

I MUST now obey the other direction in the trust deed, and endeavour to express something as to the "merits, in comparative anatomy, physiology and surgery," of John Hunter. The direction seems a happy one, for Hunter based his surgery upon physiology, and his physiology upon comparative anatomy. What can more strikingly illustrate this than his greatest improvement in practical surgery?—the abolition of amputation for popliteal aneurysm, and the practice of tying the artery in a sound part at a distance from the seat of disease. This has already saved thousands of human lives: and it has been well said that if Hunter had done nothing else, "on this account alone he would have a right to be classed among the principal benefactors of mankind."

One who, perhaps more than any other of our contemporaries, resembles Hunter in completing the union of thought with action, the wisdom of the philosopher with the skill of the surgeon—Sir James Paget—says: "It was really a splendid achievement; and its utility is not half told by counting the thousands of lives that it has saved. Its higher value is that it still abides as a great testimony of the power of the scientific mind in surgery. I think it has done more than any other of Hunter's works to make, not only surgeons, but surgery, scientific." And observe how comparative anatomy and physiology led to surgery—how thought and experiment led the way for action. It was probably without any idea of surgery that Hunter was first led to investigate the phenomena of the annual growth and shedding of the antlers of the stag or buck. But he did so, and tied the artery which supplies the growing antler and the soft covering called the "velvet," which conveys the vessels supplying the material of growth. Pulsation in the vessels in the velvet ceased, and the antler soon became colder. A week afterwards the vessels were again pulsating, the velvet was warm, and the antler growing. The buck was killed, the tied artery found to be obliterated, but the circulation was carried on by vessels above and below the ligature, ordinarily very small, but enlarged under the new conditions.

Now, I am well aware that some modern misanthropical zoophilists have said that Hunter had no right to make this experiment, that human morbid anatomy had taught him that when the current of blood ceased to flow into an aneurysmal sac, the blood clotted and was absorbed. But it is quite indisputable that Hunter was doubtful whether, after the supply of blood to a part had been cut off by obliterating the main arterial trunk, the circulation would be kept up by other vessels, or the part would die; and it is certain that his experiment on the deer removed his doubt, for, as Professor Owen tells us, that there was a coachman in St. George's Hospital with popliteal aneurysm, who had consented to amputation; but Hunter thought that if the anastomosing vessels in the man would carry on the circulation after the obliteration of the femoral artery, as they did in the antler of the buck after obliteration of the carotid, he could cure the aneurysm and save the limb. Professor Owen emphatically says that Hunter explained to his assistant and pupils the results which he believed would follow a repetition on the man of his experiment on the deer. And, just as he predicted, there was the same stopping of pulsation, the same cooling of the part from which the supply of blood was cut off, the same return of natural warmth, and in six weeks the man walked away cured. This account Professor Owen tells me was given to him by Mr. Clift.

In this and two subsequent cases artery and vein were both tied; but in his fourth case, Hunter tied the artery only, not the vein. This was in the year 1787. The patient was then 37 years old. He lived till he was over 86, and died in 1837. At his death, Mr. Wormald obtained the limb from his widow, and found the femoral vein pervious, the artery obliterated, the tortuous anastomosing vessels as you see them in this specimen which Mr. Wormald presented to our museum, and the aneurysm represented by the small calcareous body not larger than a filbert.

This association of surgery, physiology, and comparative anatomy is manifest in the leading idea or plan of Hunter's museum, which is to show each step from the most simple conditions in which life can be traced upwards to man himself. We are told that, observing that in the advanced stages of successful incubation eggs did not putrefy, he was first led "to recognise life as a power, and organisation as the mechanism by which life operates." Observing some snails drowning, and noticing the effects produced upon lizards if they were brought too early in winter out of their lurking-places, he ascertained some of the facts "which guide and encourage us in our attempts to restore suspended animation." Here we see the man who both observes and thinks. "For one person who can think," says Buckle, "there are at least a hundred who can observe; an accurate observer is no doubt rare, but an accurate thinker is far rarer." Can any one look up to this portrait of Hunter, by Reynolds, and not agree with Lavater, who, when he saw it, said, "This man thinks for himself?" Hunter used to say that "he delighted in thinking;" and the great artist who is said to have peculiarly excelled in painting the mind of his sitters, has caught Hunter in the attitude of meditation. In that absorbed and upward gaze "from earth to heaven," "as imagination bodies forth the forms of things unknown," we can trace the hoped-for explanation of some of the mysterious phenomena of nature by the application of some great leading principle, the elucidation of some physiological problem, the unravelling of some as yet unfolded revelation. Home and others, who knew Hunter, have said that this portrait gives a very faithful representation of his countenance, person, and manner. While painting the portrait, Reynolds induced Hunter to have a cast taken from his face. From this cast, which has been preserved in our museum, and is here before you, Flaxman's marble was sculptured. He and Chantrey studied both cast and portrait, for the College is fortunate in possessing two busts of our great master, as well as the full-length sitting figure in the museum by Weekes. And we have a second portrait, by Sir Nathaniel Holland, which was said by Mr Clift, and by Sir John Dorat, Hunter's last surviving pupil, to be better as a mere likeness than the idealised portrait by Reynolds. Perhaps Reynolds's portrait is more suggestive of the man who thought, and Flaxman's bust of the man who observed, experimented and acted.

Though Hunter loved to think, he followed Bacon in insisting on observation and experiment as the only foundation of true science. "If you check experiment, you stop discovery," is one of his aphorisms. And he once wrote to a friend, "I think your solution is just. But why think? Why not try the experiment? Repeat all the experiments as soon as you receive this, and they will give you the solution." Thus, in Hunter, we find the mind which investigates the laws of disease, and the hand which improves the art which cures disease; not only philosopher and pathologist, but surgeon—as rare a combination as that of a profound jurist and an eloquent advocate—an agricultural chemist and a farmer—an astronomer and a pilot. We have a combination of Faraday investigating the laws of electricity and magnetism, and Swan or Edison applying the knowledge in the electric lighting of towns.

It is unnecessary to repeat now, what Mr. Wormald proved in this place twenty-five years ago, that Hunter was well aware of the possibility of curing aneurysm by pressure on the artery, as well as by tying it—in this, as in so many other instances, anticipating recent improvements in practice supposed to be new. Just as we find that modern views of phlebitis and pyæmia had been advanced by Hunter; and Burdon Sanderson, in his lectures on inflammation, acknowledging that "we find ourselves once more coming back to the notions, which at one time were thought obsolete, of the great father and founder of physiological pathology;" so we may be certain that Hunter foresaw much of that progress in abdominal surgery in which it has been my own pride and pleasure to assist. In 1762, William Hunter distinctly suggested that it might be advisable to expose an ovarian cyst by a small incision—"tap the bag and draw it out." In 1785, John Hunter said, "I cannot see any reason why ..... we should not make an opening into the abdomen and extract the cyst itself. Why should not a woman suffer spaying without danger as well as other animals do?" The influence of Hunter's teaching upon John Bell, of Bell upon McDowell, and the history of ovariotomy since McDowell's first operation, is a theme which I have treated at length in this theatre and elsewhere; and however strongly tempted to enlarge upon it, and upon the more recent extensions of peritoneal surgery—the removal of uterine tumours, of the spleen, of one kidney, of hydatids, of gall-stones, of omental and mesenteric tumours, of fibro-plastic and fatty tumours of various origin from the abdomen, of the entire uterus, or of part of the uterus with the fœtus of an extra-uterine fœtation, of the pylorus, and of portions of diseased intestine—all operations which have been performed with increasing success; however tempted, I say,

I regret very much that I have not time to do more than point to the preparations on the table, which show how our younger hospital surgeons are joining in the most recent advances of abdominal surgery. Mr. Treves's specimens show how perfectly union between two portions of intestine may be effected after the removal of an intervening diseased portion, and the three large gall-stones removed from the gall-bladder of a woman in the Samaritan Hospital by Mr. Meredith are gratifying evidences of boldness and skill. Both Mr. Treves and Mr. Meredith, at my suggestion, were desirous of experimenting on some of the lower animals as to the best mode of uniting divided edges or surfaces of peritoneum. But the trouble and delay of the present licensing system has hitherto restricted their operations to men and women.

I wish I could say more of this, but I am compelled to devote the very few minutes allotted to me to a hasty sketch of what we hope may be gained in the not very distant future by combined association for the advancement of medicine, in its higher sense, by research.

And first let me say with how much pleasure I can state, that the Association lately founded under the auspices of all the leading men in our profession in the United Kingdom has already begun useful work. On the part of the Association, Mr. Watson Cheyne visited Dr. Koch at Berlin, and Professor Toussaint at Toulouse, and has since carried on investigations, the results of which enable him to explain their opposite statements with regard to the micro-organisms associated with tubercle. Mr. Cheyne has also made experiments with reference to the specific nature of tubercle, which tend to confirm the view of the specific nature of tubercle first promulgated by Villemin, and so strongly supported by Koch's observations. Mr. Cheyne's further observations lead him to the conclusion that the bacilli of tubercle multiply by preference in the epithelium of the alveoli of the lungs, and lead to inflammatory exudation in the walls of the alveoli. According to the number and rapidity of growth of the bacilli in the alveoli, we have the two conditions of fibroid phthisis or caseous pneumonia, which by many have been looked on as different processes. In this view is also explained the difference in the effects produced by these organisms in man and rodents. Rodents, when inoculated subcutaneously, always develop general acute tuberculosis. That disease is extremely rare in man when compared with the frequency of pulmonary tuberculosis, because in man the bacilli are not inoculated, but are received into the bronchial tubes by inhalation, and their entrance into the circulation is prevented in the first instance by the inflammatory changes which occur around the alveoli in which the bacilli grow. If man were inoculated as we inoculate rodents, all analogy would lead to the conclusion that acute tuberculosis would probably be developed. Mr. Cheyne is carrying on these researches, the animals experimented on being kept under exceptionally favourable hygienic conditions, and it is not too much to hope that they may lead to a successful mode of treating phthisis. However strongly tempted to say more on this immensely important subject, I must leave it for a future Hunterian Orator, and pass from tubercle and its bacilli to other diseases, more commonly classed as contagious or infective.

Of all the discoveries of modern times, perhaps the most important is that of the dependence of fermentation and putrefaction upon microscopic organisms; and of a number of communicable diseases upon specific microbes—a convenient word to include the micrococcus, the bacterium, the bacillus, the vibrio,—microzoa, or microphytes, whichever they may be.

At Cambridge, eighteen years ago, I attempted to show the relation between the work of Davaine and Pasteur, and the causes of excessive mortality after surgical operations. Allow me to read one sentence from my address in 1864, partly to allude to advances gained since that year, and partly to point out some lines of future research. I said: "Applying the knowledge for which we are indebted to Pasteur of the presence in the atmosphere of organic germs, which will grow, develop, and multiply, under favourable conditions, it is easy to understand that some germs find their most appropriate nutriment in the secretions from wounds, or in pus, and that they so modify it as to convert it into a poison when absorbed—or that the germs, after development, multiplication, and death, may form a putrid infecting matter—or that they may enter the blood and develop themselves, effecting in the process deadly changes in the circulating fluid."

In the history of this discovery, we find Davaine discovering bacteria in the blood of animals suffering from charbon. Then, having studied Pasteur's researches on butyric fermentation, Davaine found that he could propagate a fatal disease, not only by a purulent virus, but by a drop of infected blood. It was left for Pasteur to separate and identify the microbe, to propagate it through successive generations, and to arrive at a general law that a whole series of contagious diseases could be produced artificially, and that the microbe which was the cause of each disease could be so modified by successive cultivation, some with, some without access of oxygen, as to be rendered almost inert—nay, more, even to protect the recipient for a time from a second invasion, and secure immunity to the offspring of infected mothers.

I must not go back to the history of vaccination as a protective against small-pox, nor remind you that Jenner was a pupil of John Hunter, nor refer to many of the letters which passed between them; but I may notice a resolution of the Council of this College, carried sixty years ago: "not to inoculate small-pox, but to pursue, and to the utmost of our power promote, the practice of vaccination." We persevere in this course. We require every candidate for our diploma to produce proof of practical knowledge of vaccination. We support the law which protects the many from the danger to which a few ignorant opponents of compulsory vaccination would expose the whole population. And as we glory in the life-saving work of our countryman, Jenner, so we welcome the teaching of the illustrious Frenchman, Pasteur, and his extension of the protective influence of vaccination to other diseases—every year adding to the list of new vaccines which protect man and animals against virulent diseases.

When I first thought of the subjects for this oration, I had a very exaggerated idea of what it might be possible to do in sixty minutes. I hoped that (in addition to what I must say of our deceased brethren, and of John Hunter himself), of recent additions to our museum, and of the new pathological catalogue, I might be able to indulge in a review of the progress of modern surgery, and perhaps compare the present state of medical practice in London with that in Hunter's time, or even to take a hasty review of the progress of the nation since his death, and refer to the rapid increase of population and wealth, the discovery of steam, the influence of railroads and steamships, the use of gas, of the electric telegraph, the spread of education, the effects of newspapers and cheap literature, of reforms in our laws, improvements in our habits, and many other things which tend to make a people wiser, happier, and better. I even thought it might be possible to sketch very rapidly the share which the medical art, in its larger and wider sense—not only as curing, but as preventing disease—has had in assisting national progress, and to prove that neither medicine or surgery has lagged behind the general advance. I hoped I might be able to prove beyond dispute that, since active sanitary work has been undertaken in this country death-rates have fallen very greatly; and fallen most in those places—the great towns—where sanitation has been most active.

I was very anxious to show how the knowledge gained by the statistical work begun by Dr. Farr, and since carried on by Dr. Ogle at the General Register Office, had led to sanitary legislation; and how sanitary work has been followed by a lower general death-rate and smaller mortality in single forms of disease, as in typhoid fever as well as after wounds, injuries, and surgical operations. I wished also to show how statistics lead to the saving of life by throwing light on the natural history of disease, on the prevalence of various zymotic diseases at different seasons, and on the indisputable proof that small-pox has declined considerably with the extended use of vaccination; that it is false to attribute that decline to general sanitation, exclusive of vaccination; and, what is a more novel or less generally known fact, that we have statistical proof that the preservative effects of vaccination wear out more rapidly and surely than the preservative effects of small-pox itself. I imagined, also, that I might be able to sketch what the nation might gain if State medicine were really administered by a well-organised department of the Government; if politicians of both parties could be roused from their indifference to social or domestic legislation, and give some small share of their attention to the health-interests of the people—to their food, drink, occupations, house accommodation, care of infants, prevention of infective diseases, local sanitary administration, and many details of sanitary reform—such as a permission or encouragement of cremation, as a substitute for the present mode of burying the dead.

My intentions, sir, may have been good, but their fulfilment is impossible; and, in conclusion, I can only refer to the prospect which expands before us as we are shown that more than thirty destructive diseases—including tubercle and typhoid fever, ague and yellow fever, scarlatina, diphtheria, erysipelas, syphilis, and septic æmia in man; in the lower animals, splenic fever, fowl-cholera, cattle plague, glanders, hydrophobia—all depend upon specific microbes. In many of these thirty diseases, the specific microb has been identified beyond dispute. In some, the process of attenua

e culture has transformed a poisonous virus into a protective vac-
e. In others, we may confidently hope that the same happy
ult will soon be reached; and, as we have already acquired the
owledge of certain specifics, it is not illogical to infer that if we
n in one instance command the good results we see with mercury,
another with sulphur, and in a third with quinine, we may before
ng obtain such a knowledge of the various microbes which are the
use of communicable diseases, as may teach us how to destroy
ese organisms, or to arrest or mitigate their morbid influence, and
check, if not stamp out, some of the diseases which are now our
ost formidable difficulties. We may, then, congratulate mankind
at the science of our own time has conferred, not only upon man,
t on the whole animal kingdom, benefits equalling any which it owes
the lucky empiricism of past ages, or to the philosophic genius and
rvellous industry of John Hunter. And we, his followers, may
encouraged by the conviction that we so cultivate our science
d our art (devoted as they are to the public good) as to justify us
keeping our old motto,

"QUÆ PROSUNT OMNIBUS ARTES."

THE GULSTONIAN LECTURES,

ON

THE STERILITY OF WOMEN,

livered at the Royal College of Physicians, February 16th, 1883

BY J. MATTHEWS DUNCAN, M.D., LL.D., etc.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

LECTURE I: PART I.—ITS NATURE AND AMOUNT.

ERILITY is generally considered to imply the condition of a man who, under ordinary favourable circumstances for reproduction, does not bring forth a living child. But the term is used with any other meanings, and I shall not make a definition, because I ve not the right or the power to enforce adherence to it, and because, meantime, it is indispensable to have the word for various es; and, with the use of appropriate qualifying words, ambiguity ay be avoided. Fecundity is a condition unique in gynæcology in is respect, namely, that it requires the combined matter and forces two duly developed individuals to produce it. Sterility, therere, may depend on error in one or in other, or in both. The sterility man as compared with that of woman is a simple matter. It pends on failure to produce semen; the production of semen more less incomplete or imperfect; or of morbid semen, that is, semen nveying disease; or on failure to deposit semen properly. With a ew to investigation, semen can be subjected to chemical and microopical analysis; the depositing organ can be examined, and the onditions of the deposition can be ascertained. In women, the cordinate substances and functions are hidden and much more comlex, and in her there are great organs and functions which have in ne male no equivalent representative. In the present lectures, the terility of man is not a subject for consideration, but one point n it cannot be passed over without some discussion, viz., its numerial amount. Much of our knowledge of the sterility of women conists in numerical statements with regard to amount under various ircumstances, chiefly in marriages; and all such statements have a ertain positive value for the physician, and still more for the olitical economist. But it is plain that, when inquiring into the mount of sterility due, not to unions or marriages, but to women, ve must exclude what is due to the male. Some good notion of he amount of this latter sterility is, therefore, indispensable. Several investigators have attempted the solution of the question in ecent times; but I refer only to the new work of Gross on *Male Sterility*. "It is not at all uncommon," he says, "for physicians to ssume that a man who is potent and able to ejaculate is capable f procreating. As a result of the omission to examine the emitted luid, and carefully to explore the male organs, little is known of the elative frequency of sterility in the two sexes; and gynæcologists, vith the exception of those mentioned below, do not appear to have nade any contributions to the solution of this important subject. have been able (he continues) to collect 192 cases in which an examination of both husband and wife demonstrated that the former was in fault in 33, or 17 per cent? Of this number, Manningham records 1 in 30; Pajot 7 in 80; Moudot 1 in 10; Kehrer 14 in 40; Courty 1 in 10; Noeggerath 8 in 14; and I have myself found that the male was deficient in 1 example in 8. The cause of sterility was: azoaspermism, that is, want of spermatozoa, 31; aspermatism, that is, the absence of semen entirely, 2. These facts show that the husband is at fault, according to Gross, in about one case out of every six." The matter is, however, still in a very insecure state, as may be shown by the statement of facts and considerations which must have important bearings on the question; but which, so far as I know, have been entirely neglected. Thus, it is assumed, by the examination of the male and the female, that we can decide whether one or the other, or both, are at fault. Now, no doubt, impediments, or complete barriers to reproductiveness, may be found in individuals of either sex; but, in the great majority of cases of sterility, no impediment or barrier can be discovered by the most careful and minute investigation. This is verified by comparative observations in animals and in plants, wherein such inquiries can be carried to a completeness not attainable in the case of men and women. It is held that the man is not at fault if he duly ejaculates microscopically perfect semen; but this is certainly not a warranted conclusion, as facts in human and comparative physiology, to be hereafter stated in these lectures, will show. In making the estimates of male sterility, no account is taken of the fact that the faulty condition of the man's semen may be only temporary. It is forgotten that sterility may be due to faults in the semen, even though conception has taken place and pregnancy has been established, the fœtus fading and dying prematurely from some inscrutable causes, or being monstrous, or perishing from disease implanted by the male. It is forgotten that both parents may be simultaneously at fault, and this with or without discoverable cause—generally without discoverable cause. Speaking of the sterility induced by domestication and that of hybridity, Darwin remarks that, in both, the sterility occurs in various degrees, and in both, the male element is most likely to be affected, but sometimes the female more than the male. In another place, speaking of the liability of plants to be affected in their fertility by slightly changed conditions, he says it is the more remarkable as the pollen, when once in process of formation, is not easily injured. The plant, he adds, may be transplanted, or a branch with flowers and buds may be cut off and placed in hot water, and the pollen will be matured. Pollen, once mature, may be kept for weeks and months. The female organs are more sensitive, for Gärtner found that dicotyledonous plants, when carefully removed, so that they did not in the least flag, could seldom be fertilised; this occurred even with potted plants, if the roots had grown out of the hole at the bottom.

Whatever may be the causes of sterility in women, there is an universal profound belief, which no investigations have shaken, that in the human species the paramount source of sterility is in the female. I know of no scientific statement worthy of confidence as to the comparative influence of the two sexes. The data of Gross, which I have quoted, contributing as they do towards the settlement of this question, are of importance and value in themselves, though very far from substantiating the conclusion as to the amount of male sterility which he enunciates. Of the sterility of women in whom, from gross and well-known causes, conception is impossible, these lectures take no account. Among such are cases of absence of the uterus and imperforate vagina—conditions so rare that, in the present state of our knowledge, they do not affect statements as to women generally.

In describing sterility, it is common to qualify it as absolute or as relative. No author on human sterility uses the term, without qualification, as including relative sterility; but, when used without qualification, it includes at least absolute sterility. Absolute sterility, sometimes called congenital, including all cases where there is no child, no miscarriage, no abortion, however early, comprises two sets: first, those where there is no conception; and, secondly, those where the impregnated ovum disappears in the tube or in the uterus without leading to what is recognisable as an early abortion. Some cases of women aborting every month are well known. There is discharge of a highly developed decidua every four weeks, and there may be no trace of an ovum in it; and this monthly discharge is arrested by suspension of cohabitation. But there may be many abortions earlier than this without these conditions, and of such nothing is known. They are classed along with those cases of absolute sterility where it is supposed that no conception takes place. In cases where there is no conception, there may be no possibility of conception, from failure of the ovary to prepare

and mature an ovum. These varieties of absolute sterility are well illustrated and easily made out in the history of animals, and still more of plants. Sterility, when absolute, implies a failure to produce a viable child, while there may be evidence of conception—that is, of the commencement of the production of the embryo. A woman may be sterile because the ovum perishes *in utero*, or becomes unnaturally developed, as in myxoma of the chorion and some monsters, and this premature death and unnatural production may be owing to ovuline imperfections derived from the male or the female. A woman may be sterile because the womb does not afford to the ovum due accommodation or nourishment, or neither; or because the womb ejects it prematurely from its cavity, and these unnatural conditions may arise from local or constitutional causes. In absolute sterility, and in sterility not absolute, there is no production of a viable child; no addition is made to the population, and all such sterility is sometimes, by economists, considered absolute; for, indeed, in the point of view of population it is so, but to me it appears desirable to restrict the term "absolute sterility" to those cases where there is no evidence even of conception. "Sterility" indicates a larger group, including that of absolute sterility, and all those other cases where no addition is made to the population.

There is another great department of sterility no less important than the kinds just mentioned, where a woman may produce one, or even several living children, but in number not according to her condition, and age, and length of married life. This is called relative or acquired sterility. The gardener may have a plant producing not a single flower, absolutely sterile; or producing flowers and setting seeds, but bringing none to maturity, or if to maturity not to perfection; a sterile plant which cannot continue its species. But he may also have a plant which produces flowers and matures perfect fruit, but in such small number as not to save it from the charge of sterility; and this is relative sterility. In woman this is often seen in cases of production of a single child; an only-child sterility, if such a seeming contradiction in terms can be permitted. A woman may be relatively sterile, from producing, according to her age, only a small number of children with ordinary intervals between the successive births, or from the number being rendered small by the extraordinary delay and loss of time between the successive births, or in other ways. All kinds of sterility may be congenital or acquired; it is therefore undesirable to use these terms as indicative of conditions. For instance, an absolutely sterile woman—one who never conceives—may be so not merely from congenital causes, but also from disease acquired in advanced life. Or, again, a relatively sterile woman may be so not from an acquired cause, but from conditions which, in her, were congenital.

The amount of sterility in women, including the relative kind, is found by counting the number of productive and unproductive marriages of women within the reproductive age—say, generally, from fifteen to forty-five. Lever, giving no numerical details, says, five per cent. of married women are wholly unprolific. West found the proportion of sterile marriages, among his patients at St. Bartholomew's, to be one in every eight. Hedin, a Swedish minister, noticed in his parish of eight hundred souls, that one barren woman was not met with for every ten fertile women. Frank and Burdach roughly state that one marriage in five is unproductive, but they give no data. Simpson made an inquiry into the sterility of married women in Grangemouth and Bathgate. Of 210 marriages in Grangemouth, 183 had offspring, and 27 none; about one marriage in ten was without issue. Of the 27 unproductive marriages, all the subjects had lived in wedlock five years, and the female had been married before the age of forty-five. Of 402 marriages in Bathgate, 365 had offspring, and 37 none; one in eleven being unproductive. There were at the same time living in the village 122 wives and widows, and of these 102 were mothers, and 20 not mothers; or about one in six had no family. In all, there were 467 wives and widows; 410 had offspring, and 57 none; or about one marriage in eight was unproductive. Of these last 57, six had not been five years married, and other six were above forty-five when married. Subtracting these 12, we have 455 marriages, 410 being productive and 45 unproductive; or one in ten without issue. Simpson found that, among 495 marriages of British peers that lasted five years or more, the husband being under fifty-seven, 81 were unproductive; or one in six. Ansell found that, among 1,919 marriages of spinsters in the upper classes, the average age being twenty-five, and not counting as childless those who had merely still-born children, there were 152 without issue; or eight per cent. —nearly one in twelve. In this collection, all the parents survived the child-bearing age; and he considered that there was no further chance of child-bearing if the female was over forty-eight, and had had no child for two years; or if over forty-seven, and had had no child for three years; or if under forty, and had had no child for ten years.

I have taken the registers of Edinburgh and Glasgow for 1855, and have ascertained the number of first living children in that year. With this I compare the number of marriages in that year. It is evident that the number of first children only should be counted, for they indicate all the wives who are not sterile. If one living child is born to a marriage, that marriage is not sterile. Further, it is evident that, although the first births in 1855 were not all pertaining to women married in that year, it may be assumed that, if the marriages are nearly the same in number for a few contiguous years, any of the first births in one year will give pretty accurately the fertility in contiguous years. From this fertility, sterility can be computed. In 1855, there were, in Edinburgh and Glasgow, 4,447 and 3,722 first living children, leaving 725 marriages sterile, or one in six. But in these figures are included 75 marriages which did not take place until after the women had passed the age of forty-four. This will damage the physiological value of the statement, as these 75 could not be expected to be fecund. Of women between the ages of fifteen and forty-four, there were married 4,372. Among women of the same age, 3,710 had first living children; 662 marriages were sterile, or one in six; in other words, 15 per cent. of all the marriages between fifteen and forty-four were sterile. This statement from Edinburgh and Glasgow has to be corrected for the dead-born; these not being counted. We have thus good statements of sterility, which do not differ much from one another; in St. Bartholomew's, one in eight; at Grangemouth, one in ten; at Bathgate, one in ten: among British peers, one in 6¼; Ansell gives one in twelve among the upper classes; in Edinburgh and Glasgow, one in seven, excluding those who have borne dead children. The highest estimate (omitting the peers) is the last, and it is probably the only one in which living children are used to the exclusion of dead as the index of fecundity. Were dead children included, there would be a great reduction: at least 4 per cent. The lowest estimate of sterility is that of Ansell, where a woman having a still-born child is held as fertile, and the women are amongst the best in the community, those living in easy circumstances, and making use of the protection of life-assurance. Were it otherwise, the estimate of sterility would, no doubt, be higher. We have thus estimates of sterility varying from one in seven to one in twelve; and considerable confidence may be had in the statement that about one in ten is the true amount.

I know of no estimate of those who are absolutely sterile, that is who do not conceive, or who if they do conceive, give birth not even to an abortion. But they are a large number in the better classes; for within the last five years there have consulted me mostly on account of sterility, 504 absolutely sterile women married between the ages of fifteen and forty-five, and of these 337 were more than three years married. Though this shows a large number of cases in existence, it gives no amount of estimated frequency among the married. The following table gives a classification of these 504 married and absolutely sterile women according to age at marriage, and number of years married.

TABLE I.—*Case-book Table of Sterility.*

Age at marriage.	Years married.							Totals.
	Und. 3.	4 to 8	9 to 13.	14 to 18.	19 to 23.	24 to 28.	29	
15–19	12	19	15	4	7	2	1	60
20–24	70	66	37	24	13	9	—	219
25–29	47	51	20	8	8	—	—	134
30–34	26	20	8	4	1	—	—	59
35–39	6	13	4	—	—	—	—	23
40–45	6	3	—	—	—	—	—	9
Totals ...	167	172	84	40	29	11	1	504

The economist makes many estimates, such as the deficiency of offspring in actual marriages, or the deficiency of actual births below what they might have been if all the women in the population had been married at the most favourable time for child-bearing. The solution of these and similar questions is an object of greater interest to statesmen than to physicians; they demand for their solution much calculation, and need not be entered on here. The degree or amount of relative sterility in average individuals varies, of course, according to the age of marriage, and it is not to be estimated by the deficiency below what is possible in child-bearing, but below the average amount of fertility in marriages at the various ages, or below what is not excessive—what can be done without injury to the average mother's health. The average individual woman must be

d and considered, for individuals vary extremely. It is not a observation, and I have one before me, where the easy birth of ngle child exhausted the fecundity of a healthy woman twenty- years of age at the time of the birth, and completely ruined her eral health during the remaining child-bearing period of life. ; woman was examined by many physicians, and all concurred in ing no cause of weakness and inability but child-bearing. On other hand, Ansell records the case of a woman married at nty-one, who in twenty-seven years gave birth to twenty-five dren who all reached adult age, and the mother died of old age ighty-eight.

nly-child fertility, or one-child relative sterility, occurs in two ns—as exhaustion of the fertile energies, leaving the general ily health vigorous, or as exhaustion of both sexual power general constitutional strength. It is a relative sterility ch is familiar to the public from its frequency and its import- e in social respects. In 1,767 fertile marriages of women of the of twenty-five years, allowing ample time for the exhibition of ndity, Ansell found 131 cases of one-child relative sterility; or in every thirteen fertile marriages. The amount of this relative ility may be approximated by comparing it with the average ility of the same women in Ansell's table, which was nearly six; in other words, the relative sterility of these 131 only-child nen was 655 children. Instead of having 131 children, they ld have had 786, if they had even reached the average fertility their 1636 sisters; and they would have had still more if they l reached a normal fertility instead of this average fertility; aning by normal fertility, what they might have had without ury to health, judging them by other women.

DIET AT SEA.—The following instructions to superintendents e just been issued by the Marine Department of the Board of de: "Dietary Scales. The attention of the Board of Trade ing been drawn to the increase of scurvy on board British ships ce 1873, a report on the whole subject—'Sea Scurvy, Food Scales, tiscorbutics'—has been recently prepared and forwarded to the al Marine Boards for their observations. The conclusions arrived in this report were as follows: 1. That scurvy has been on the rease in British ships since 1873. 2. That limejuice, of itself, l not prevent scurvy, and that too much reliance is placed on it, the neglect of varied food scales. 3. That limejuice, in connec- n with fresh or preserved meat and vegetables, may prevent urvy. 4. That the dietary scale of ships should, therefore, in- de a fair proportion of fresh and preserved meats, as distin- ished from salted meats. 5. That more fresh vegetables should carried, notably raw potatoes. No satisfactory reason is given y fresh potatoes cannot be carried on board British ships. The egation that they will not keep good on board ship, is clearly proved everywhere else. 6. That it is not at present desirable to sert a statutory scale of diet in the articles of agreement with ws serving on long voyages, though it may possibly be necessary reafter, unless the shipowners themselves move in the matter. e replies received from the local Marine Boards have confirmed ese views, especially as regards the articles of diet referred to erein, and superintendents are therefore requesfed to take every portunity of urging upon owners of vessels sailing on long voyages e necessity of supplying their crews with fresh potatoes, molasses, c., and a larger supply of fresh or preserved meats, in lieu of lt beef and pork.—T. H. Farrer, secretary; Thomas Gray, assistant cretary."

VACCINATION INQUIRY.—The preliminary committee meeting was ld in the Council Room, Exeter Hall, Strand, on Thursday, the th instant; Dr. C. R. Drysdale in the chair. Mr. Makuna stated at the object of the inquiry was to collect all available information the subject, collate it, discuss it in conference meetings, and blish it in the *Transactions*. About three hundred and fifty mem- rs of the profession had answered to the questions in the circular, cluding eighty public vaccinators and medical officers of health, d several original investigators, as MM. Pasteur, Chauveau, Braid- od, Romanes, Klein, Fleming, Wydd, and others. There are enty-five gentlemen who have, up to this time, consented to act the committee: Dr. C. R. Drysdale, R. W. Batten, W. J. Collins, . Easby, J. Greene, E. Gwynn, D. L. Haynes, W. K. Millicaa, R. ale, A. Ransome, C. Renver, H. Tomkins. J. Tripe, C. F. Wil- ughby, G. Wyld, G. E. Yarrow, E. Haughton, P. M. Braidwood, C. aby-Smith, A. Cresswell Rich, T. E. P. Prydeaux, B. Maclehose ncan, Bernard O'Connor, G. Cordment, Charles E. Steele, and M. Makuna.

AN ADDRESS
ON RENAL INADEQUACY.

Delivered before the Metropolitan Counties Branch (Hackney District), February 15th, 1883.

BY ANDREW CLARK, M.D., LL.D.,
Physician and Lecturer on Clinical Medicine, London Hospital; President of the Clinical Society.

GENTLEMEN,—After much, and indeed grave consideration, I have come to the conclusion that age is not to be gauged by years, but by feelings. I think that, so long as a man retains his receptivity, his power of adjusting himself to the ever varying environments of life, and his capacity to see, in the new things which the development of the ages brings before him, goodness, he may be saved from being brought within the category of "old" men. Now, I do not know that I have retained my receptivity, and I do not know that I quite adjust myself to all the varying environments of my life; but I do know that I retain, and have a very lively sense of the good things that the age is presenting to us; and on that account, if on no other, I will ask you to exempt me from being called old. I am struck particularly with the young men of this time. Looking back, I am afraid to say, but must say, thirty years, I notice a marked distinction between the young men of those days and the young men of these days—whether they be in consulting practice or in general practice. I notice, or I think I notice, a greater zeal, a greater industry, a greater frankness, a greater readiness to confess and remedy errors, a greater care in the expression of opinion; and, I think also, a less consideration of their own personality in their work. I admire the young men of the present time very much. But there are one or two things that I do not admire in them—that I quarrel with them for. I will only mention one thing to-night; it will be enough for to-night, and it will be the key-note of the subject which I am approaching. Most of the young men of the time declare that there is no such thing as functional disease, and that is one of my quarrels with them: for I think that all disease, in its primitive condition, is essentially functional. I think that, what people call structural or organic disease, is but an event in the history of disease; and that, long before the structural change appears, there has been going on, for we know not how long, changes in the physical condition, changes in the physical action or interaction of forces, various conditions in short, most powerful in relation to the actual state of living affairs, though invisible to the naked eye. I think that disease expresses itself in three different ways. First, we have disease expressing itself by what we call mere alteration of function, in which state, by no means at our command at the present time, can we discover the smallest change in the structure: and that is what I call functional disease. In the second place, disease expresses itself in visible changes of structure, which are temporary only, and not permanent. For instance, take hay-fever. I believe myself that hay-fever is preceded by molecular and chemical disturbances; and that, at a certain stage of these, there arises suddenly a swelling of the mucous membrane of the nose, together with the production of a viscid irritating secretion, which gives rise to sneezing and the other phenomena with which we are all familiar. And, lastly, there is a third aspect of disease, in which, with the preliminary physical or chemical changes, or both, with the transitory structural changes, there comes at last a permanent change: as, for example, cancer or tubercle. Take, for a moment, the case of cancer of the stomach. Years before cancer of the stomach appears, you will find in some of those people, that they are subject to pain or other distress. Somewhat later in the day, they are subject to recurring attacks of catarrh of the stomach, as it is called—states of the stomach in which the mucous membrane swells up, producing viscid irritating secretions, giving rise to what we call forms of indigestion; and then, after treatment, or independent of treatment, it subsides. This will go on for years, and by-and-by growth riots over development, and at last a permanent structural change appears, and we have what we call the third aspect of the way in which disease manifests itself. There is the first stage, and it is the first stage to-night to which I wish to allude, in which we have symptoms of disease without any visible alteration of structure discernible by any means at our command.

Every man present, I am sure knows as well as I do multitudes

of people who are constantly suffering from ailing health, and whose ailing health cannot be referred satisfactorily to any definite cause. The progress of knowledge is greatly enlightening our ignorance about these multitudes of people. It is telling us that some of these people owe their troubles to heredity, to the father who has "eaten sour grapes, and set his children's teeth on edge," to a capricious, weak, and irritable nervous system, to violations, petty but continuous, of simple physiological laws, and so on. But there are numbers of this multitude of ailing people whose illnesses cannot be accounted for by any one of these causes to which I have alluded. Upon this multitude I would venture to make a little inroad, and I say that one considerable part of that multitude owes its ill health to deficient excretion.

We all know the importance to the solidarity and health of the economy of an adequate production and discharge of sweat. We know equally the importance to the economy of the adequate production and regular discharge of fæces. I am confident, with respect of this latter part of the question, that numbers of young women owe their anæmias, their chloroses, their defects of health of various sorts, and often of long duration, to the inadequate discharge from the body of fæces; and I now well understand that which one of our great fathers in medicine is reported to have said, speaking of the treatment of anæmia, that, if he had only two remedies to deal with anæmia in young women—purgatives and iron—he would prefer to rely for success on his purgatives. Well, the same thing may be said about defective excretion from the kidney. The kidney, as we all know, has a very important function to discharge, and the well-being of the economy seems, in a very peculiar and definite way, to depend upon the adequate discharge of the kidney's offices. We know that what is called Bright's disease is not, as a rule, a structural alteration in the kidney which brings about at last a fatal issue, but it is interference with the function of the organ, interference with the eliminative function of the organ; it is not simply the letting out of albumen, for similar amounts of albumen and greater amounts of albumen in other affections can be discharged from the body without serious detriment to its well being; it is interference with its excretory function; it is the retention in the blood of matters which ought to be cast off from the blood, and which, not being cast off from the blood, remain in it and poison it. There are cases which, in some measure, I venture to separate off entirely from Bright's disease, in which the kidney, without any sensible alteration of structure that our modern means of investigation will enable us to determine, cannot produce a healthy urine. Such kidneys produce a urine which, assuming the quantity to be a quantity of health, is low in density, and is deficient in solid constituents, principally the constituent of urea and its congeners. I will exclude uric acid. I have spoken on this subject once before, and, on that occasion, I committed an error. I said that the main feature of a kidney in this state was, that it could not secrete urine with a proper amount of urea and uric acid; but I find that many of these kidneys, of which I shall speak more precisely in a moment, do not have a deficiency of uric acid; I have learned that since. They have all, however, a deficiency of urea. There is a certain state of the kidney, I repeat, in which, without any alteration of structure that the eye can detect, it can, nevertheless, not produce a perfectly healthy urine. It is an urine low in density and deficient in solid constituent, principally in urea and its congeners. I call this state renal inadequacy.

You may say, "It seems scarcely wise to introduce a name like that, when probably it is nothing less than an early stage of Bright's disease. Why bring in another name?" I will not say that it is not an early stage of Bright's disease; I do not know. I think it need not necessarily be; but I shall assume that it is, perhaps, a very early stage of Bright's disease. I nevertheless think it of practical value—and we who are here to-night are practical men—to recognise by a distinct name a state which may remain as it is during the whole period of life, which is nevertheless capable of removal, and which, if unnoticed, may lead to serious injury to the patient.

Let me explain. The people who have this renal inadequacy are characterised by three things particularly. First and foremost, they are characterised by a curious inability properly to repair damages done to them either by accident or by disease. I have no doubt you, as well as I, have often been puzzled to know why, in particular cases, they could not repair a common accident; or why, in a disease such as pneumonia, the exuded stuff was not melted and speedily swept away; why a man who had met with some trifling accident in the wrist or shoulder remained suffering from it. Then, they not only repair damages of this kind slowly, but they are peculiarly vulnerable. They are a people, as a rule, who are alwa catching cold, and who, when they catch cold, come within t category of the first characteristic—namely, that they do not g rid of the cold. They are the people who, without apparent reaso and without other existing disease, get pneumonias, pleurisie pericarditis, and the like. Then, thirdly—and, I think, almost t most important thing to be noticed about these cases—you ca never be sure of the result of the performance of an ordinary su gical operation upon them. It is this class of people, as I had t opportunity a few years ago, in London, of discovering, that die fro a simple operation by hæmorrhage. It is this class of people wh have an abscess opened and immediately become what is calle pyæmic. It is this class of people who, without being able explain it, attracted the notice of that distinguished surgeon S James Paget. Some years ago he said, "Whenever I find a man ill-health, without definite cause for the ill-health, I feel sure th my chances of success in operating upon him are diminished by least one-half." Subsequently he found out, and recently expresse the opinion to me which I had expressed upon a patient of his, th it was due to the low density of the water. The story is this. was summoned to see a man who was about to undergo a surgic operation, and I was asked the question, "Is this man a suitab person for a surgical operation?" I required, before pronouncin judgment, that I should have the complete urine of two days ke and sent to me. I examined it. The urine was under the quanti —under forty ounces; the density was 1008, or thereabouts; the was no albumen; there were no casts; but the urea was 1.2. replied, that it would be at the peril of his life if any operatio were performed upon him. They were not satisfied—at least, t surgeon was not—with this expression of opinion. Sir James Pag was called in, and he gave the same judgment. Meeting him afte wards in consultation, he asked me the question, "Why did yo object to an operation being performed upon the patient?" I sai "On account of the state of the urine;" and he said, "I objecte also on the same ground." That shows that from different quarte this question of renal inadequacy has presented itself to the su geon's mind as well as to the physician's. This, then, is what mean by renal inadequacy. I refer to those people who hav kidneys which, though not materially altered, or at least not altere in any way that we can determine by physical investigation, are y incapable of producing a sufficiently healthy urine (like an imperfe skin, that is incapable of producing sweat); I mean an urine suffi ciently rich in the ordinary matters of waste which it is the bus ness of the kidney to discharge from the body.

Now, how are you to know these cases? How are you to discov them? Here, I am bound to say, that I know of no distinctiv symptoms whereby, in the early stage of renal inadequacy, you ca discover these cases with certainty. The patients are ailing peopl I began by saying that there were before all of us, in our daily lif multitudes of ailing people, the explanation of whose cases wa hidden from us, and I said that I wanted to make an inroad on tha multitude, and pull out from it a number of these renal inadequac cases. Now I have to confess that, in the early stage, I know of n symptom whereby you can with certainty detect these cases. Th only thing I can say is this: When you get hold of a patient who ill, suffering sometimes from dyspepsia, or nervousness, having hea aches or complaining of *malaise* and weakness, who cannot slee well, who cannot do his work very well, examine his urine, and you find that the urine is low in density, you had better proceed little further, and be very precise, and get the urine of twenty-four hour and if you find that it is under fifty ounces in quantity, that it has not specific gravity of 1010, and that the urea in it is deficient in amou —under 2 per cent.—then, whether there be albumen in the urine not (I am not now speaking of albuminous urine), whether there any casts or not, whether there be granular *débris* deposited or no you may know with certainty that the kidney is not doing its dut Well, it may not be, although these kidneys are not doing the duty, that the defect is the cause of the patient's ill-health. Ho are you to ascertain that? You can sometimes, not always (alwa does not happen to honest men), ascertain it in this way. If y give a patient a liberal diet he gets worse; and what is t strangest thing I know about these cases is that, if you give a p tient a very liberal diet, namely, food and wine, the specific gravi of the urine, instead of increasing, as you would expect, diminish in density. Furthermore, you may discover that the renal troub is the cause of their symptoms if you notice in them—and you can n tice it very often—that a diminution in the bulk of the urine is alwa attended by an aggravation of their sufferings. And there is o other way, which is the other surprising thing about these cases, th

f you diminish the quantity of food, if you make the patients careul about their ingoings and careful about their outgoings, you will ee at once a great improvement. I have, for example, a case in my ind's eye, which I saw with two or three doctors some time ago. he patient was a man who was extremely distressed, short of reath, with palpitations, headaches, and great distress of body in arious ways; he had a weak heart also. The doctors who had seen im said that he wanted keeping up. Being a rich man, he was ept up, and he was no better for the keeping up. He had meat nd wine in plenty, but he got weaker and weaker. He was then ut upon a starving plan—that means, upon a physiological plan, pon a plan which would give him just enough good food for the aintenance of the body and no superfluity, with enough water to orm an abundant vehicle for the chemical operations which are necessary, not only for the formation of waste matters, but for carrying them off. He was put upon an old woman's diet, three meals day; tea and toast for breakfast, a midday dinner, with a little nimal food, and tea and toast for tea—a John Abernethyan diet. n a very short time the urine, which had gone down to 1004, began o rise; instead of getting lower and lower in density with the iminished diet, it got higher and higher, and the patient got better nd better—not quite well, but pretty well. These circumstances ith reference to the state of the urine, the diminution of the urea, he fact that the increase of food makes the patient worse, and that, ithin certain limits, the diminution of foods makes him better, ith attentions to the secretions—these circumstances put together ill soon enable you, I think, with sufficient accuracy to determine hat is the sort of case that you are dealing with; and I venture to ink that the knowledge which you will acquire as you go on will e sufficiently useful to you to justify me in having presumed to ccupy your time for a few moments to-night. You will know one r two things about these patients which, for their safety and their ell-being, it is well to know. You will know that these people annot be operated upon with the ordinary chances of success. You ill know that if they take cold you must treat the cold in them as serious thing. You will know that if they are ill, that if they ave a headache or pneumonia, you will be able to warn the paent's friends (and foresight is an important thing in medicine) at they may not recover immediately from the effects of the isease—nay, more, that the unabsorbed pneumonic products may emain to be centres and sources of future mischief. These are imortant points.

I have said that you cannot distinctly recognise these cases by ny definite symptoms, but as the cases progress, if they be not ell managed, that is if the management be not adjusted to the fact at they are chimneys being choked, and that you cannot keep a aring fire on, if these cases go on they develop symptoms which re exceedingly characteristic of this state of renal inadequacy, and ey develop symptoms curiously enough, which make the case at st resemble most closely a class of cases which Dr. Ord has rawn attention to, and has termed myxœdema, and a class of ses which my friend Dr. B. has for five or six years been llecting for me. Cases of renal inadequacy after a certain me assume characteristics so like myxœdema, and so like ose other cases to which I have referred that they can scarcely be istinguished. They get puffy, they get pink and white, their skin egins to get dry and glossy, and by-and-by wrinkly, and ceases to weat; their face gets puffed up and swollen, without being actually dematous. Their articulation becomes slow and almost painfully eliberate; the hair begins to fall, then the pinkish or pinkish-blue pect appears upon the face, and they sometimes stagger a little in eir gait. When you see these cases you know at once that they re either the so-called cases of myxœdema, or they are the cases in hich in an advanced degree you will find extreme renal inadequacy, e urine being sometimes as low as 1004, without any albumen, ithout any casts, and defective in the main solid constituents of ine—urea and its congeners. And though I cannot prove to you at there is no ordinary Bright's disease in such cases, I can, as happens, mention to you one case—not in a very advanced degree, admit—in which I had the opportunity of examining the kidney of person with renal inadequacy who died from another cause; from ver. There was no evidence in the kidney capable of being recogsed by any ordinary pathological anatomist of the existence of stinct structural lesion. Although, then, we cannot in the early age recognise these cases, we may, I think, in the later stages do . Now, what is the prognosis in these cases? Suppose you meet ith one of these cases, and you have determined in one way or the her—either in the ways I have rudely set forth to you, or in other ays that you will discover for yourselves—that you are dealing with a case of renal inadequacy; what is to be the future? What are you to say to the friends (for this power of prognosis is very important in our dealings with society) about the future of such a case? Well, judging from my own experience, I would say that if you can get the patient under complete control, if you can place him under proper physiological conditions, if you can regulate his food, his work, his exercise, and if you can make him sufficiently careful about exposure, I think, although you may not heal the kidney, for the kidney will continue to be inadequate, you may indefinitely prolong the life. At the same time it must be remembered that on account of this renal inadequacy, which so far as I know, we cannot remove—at least I cannot remove it—you must be prepared to tell the friends that the life is a perilous one, that the patient is liable to peril from slight surgical operations, liable to inflammations, and that when he has inflammations they will be difficult to repair. Again, if the patient falls into an accident it may beget untoward complications, and if the disease goes on, and he is not careful, he will be liable to hæmorrhages.

The first case of the kind (and the word hæmorrhage recalls it to my mind) in which I clearly recognised the idea of renal inadequacy, occurred in the person of the celebrated mathematician Archibald Smith, to whose observations we owe it that we can steer an iron ship. He came to me fifteen or sixteen years ago in ailing health; and, adopting the vernacular of the time, and not thinking so carefully then as circumstances force me to think now, I said, "It is overwork." Now I am not so ready to speak of overwork as a cause of disease. I am heretic enough to say that work kills nobody; it is bad management and worry, not work. Archibald Smith was a very interesting man; I paid close attention to his case, and became intimate with him, so that I had an abundant opportunity of watching him. I began at last to notice what curiously pale urine he had. I thought, "This is because he drinks too much liquid;" but I found that, though he did drink a good deal of liquid, he could not discharge more than the normal amount by the kidney, which is another circumstance about these cases which I did not mention. He was a great drinker of water, but he could not for the life of him discharge more than fifty ounces by the kidneys. I was struck with this, and I watched the state of urine more and more, and I found that it was always a pale urine, of a density varying from 1010 to 1002 or 1003, never containing albumen, never containing casts, never containing any amount of *débris* which might be broken up casts—nothing to indicate that there was renal disease in the ordinary sense of the word; but I noticed as he went on that, as his general health failed more and more, the urine became habitually lower and lower, until at last he died suddenly of hæmorrhage; and a *post mortem* examination by Mr. Patten of Putney revealed no ordinary evidence (I am bound to say there was no microscopical examination) of renal disease. It seemed, as far as I could make it out, to be a case wherein, without any obvious disease of the arteries, without any such obvious change as Sir William Gull and Dr. Sutton have described, the vessels gave way, and the patient died from hæmorrhage. You can say with regard to these cases, in the way of prognosis, that, if care be taken, if compensation be made for the defective kidney, then probably they may go on indefinitely, that is, they may reach the full term of life allotted to man.

If, then, that be the prognosis, how is one to manage a case of this kind? Well, I think the first thing to recognise in chronic disease is that, perhaps in seven out of ten ordinary cases of disease that come before us, it is not we who are the curers of disease, it is nature. I think that sometimes we are the curers in spite of nature; but in the majority of instances, it is the organism which resists the advance of disease, and it repairs the damages which the disease has done; and our chief object in the treatment of every chronic affection is to place the organism in the conditions most favourable to the development of the highest health of which the organism in those conditions may be capable; for in that highest physiological condition I assume that it will exercise and continue to exercise the greatest resisting power and the greatest repairing power. That means, then, that you are to put the patient under close obedience to the laws of health. In doing this, you will probably be open to the reproach that, in dealing with chronic cases, your rules of diet and your rules of management are very much the same. You may be scoffed and jeered at. But, after all, the physiological laws of the organs are much the same for most men; and, although it is true that the law of the individual very often traverses a little the law of the race, yet, in the main broad points of management, the physiological laws for every organism are so nearly alike as to necessitate a certain sameness in the management of organisms. I apprehend the first rule is to place your patient under physiological con-

ditions which you know by your experience and your training to contribute most to the development of health. In the second place comes in the something which traverses these laws; and that something is the defect in the organism. It is not enough to say to a man with renal inadequacy exactly what you would say to a man who had no recognisable defect in his organism. You would say to him, "Eat and drink, and take exercise, be warmly clothed, have sufficient sleep, do your appointed work, and have no fear." It would not do to say that quite to a man with renal inadequacy. So that, although the first rule to be laid for the individual with regard to the physiological laws which subserve the health remains, it must be plus those modifications which the defect in the organism requires. You would not mind a man pursuing an active course of vigorous life eating a pound of meat a day; but if you allowed a man with renal inadequacy to eat a pound of meat a day, it would certainly kill him. So that the second rule about these cases is that, whilst laying down the simple physiological laws of simplicity and regularity of diet, you will modify these laws so far as the kidney is concerned, because you know that it is the business of the kidney to throw out chiefly azotised waste, and you will be careful to supply the organism with no more of such azotised matter than is needful for the maintenance of its integrity. We all supply to ourselves a good deal more than is necessary for the integrity of our organs; and fortunately in health the margin of oscillation is so wide that we need not be over-scrupulous; but, in a case of this kind, the whole future for evil or for good will depend upon whether we fully recognise that law of modification which the defect of the organism requires.

What, then, would be the general rule for such cases as I have described? In the first place I should say to myself—"I must take care that I do not give to this patient more azotised food than is necessary for the maintenance of the integrity of the organism; in the next place, I must take care that I get all the supplementary, complementary, excretory organs to do fully their appointed work, that they may, if possible, take some share of the defective work of the kidney upon their shoulders." Then I should take care also to give no agent in my dietary which would be calculated to check, or seriously to check excretions; I should furthermore take care in dealing with my patient, that, as he is very vulnerable and very liable to inflammations brought on by chills, or by wet, or by what people call over exertion, to caution him about these points. And further, as these tissues are vulnerable from all sides, I should recommend him not to take violent exercise. Taking these principles, and applying them in detail, my advice in the case of a man who came before me, say forty-five years of age, would be something like this. I should ask him—"Now, you have a defect in your body, and you must take care not to make that defect greater, but do all you can to remedy it, and this is what you will do. When you get up in the morning sponge yourself with warm water and use a little soap; do it quickly that you may not get a chill, have a good rubbing afterwards, so as to make the skin act as well as it can act." Then I should tell him to clothe warmly, not over-warmly so as to weaken the skin, but sufficiently warmly to protect him from the vicissitudes of such a climate as this. Then I should say to him—"You will have three meals a day, and these meals must be something after this fashion, for as your chimney is choked, you must not put too many coals on the fire. You will take for your breakfast bread and butter—plenty of butter if you like it, and an egg, if not nervous a cup of tea, which has not stood too long, or if very nervous a cup of cocoa; then you will dine in the middle of the day." If he were a very intellectual patient I should get him to take white meat; but if he were a stupid patient, and most patients are stupid, I should say—"Take a little meat, not more than half a pound by any means, with plenty of potatoes or other vegetables, and you may have some pudding." With regard to drink, I should give him as little alcohol as I found the intellectual strength or wisdom of the man would bear. If he were a very wise man I should say—"You will do best to take none;" but if he were not a very wise man I should strengthen him in his foolishness by giving him a glass of claret and water. Then I should say—"You can have one more meal in the evening, about six or seven o'clock, and you will take for it just what you do for your breakfast—bread and butter, and perhaps an egg—or a tiny bit of fish or the wing of a chicken, with a cup of tea, or if sleepless or nervous a cup of cocoa." And I should allow him to take about a claret glass full of water on waking in the morning, and the same on going to bed at night. Now this seems to be a very reasonable diet, but I will confess to you that I have lost many a patient by prescribing it. When people have looked at that dietary, which sometimes I have written down, they have been amazed at it. I have in my mind's eye a great man who had sprung from the people and made himself wealthy by his own exertions, but who, not being a man of culture or intellectual tendencies generally, wanted to have his heart's desire in the reward of success. He looked at my dietary, and said to me—"Good heavens, sir! is this the reward of success in life? What is to become of me?" Nevertheless, I think it a sufficiently liberal dietary for any organism which is at all crippled, and I am not prepared to say that it is not a sufficiently liberal dietary for any man who leads a sedentary life, and wishes to make the best of his brains and his strength.

I have detained you very long, and I will not detain you many minutes more. I will just say, in looking over these cases, which I think form a considerable percentage of ailing people—I do not know how many, because my experience is not large enough to say—I believe it is in our power to do an immense deal of good for them if we are firm in asserting what we know to be correct, and if we can gain the confidence of the patient so that he will follow what we suggest. I am sure that in our dealing with these cases many valuable lives might be preserved if we had the courage to face the accusation, of being, as I am, a starving doctor.

CLINICAL LECTURES ON DISEASES OF THE NERVOUS SYSTEM.

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On a Case of Peripheral Disease of the Facial and Hypoglossal Nerves on both sides, the Symptoms simulating Bulbar Paralysis. Polyuria and Polydipsia: Return of Cancerous Growths to the Base of the Skull, and various parts of the Body, after Excision of the Mamma.

Antecedent History.—A. S., aged 54, married, cook. The patient stated when she was first examined, that she had been in good health, and had not suffered from syphilis or other diseases, till the year 1869. She then discovered a tumour in her right breast, which was removed by Mr. Marshall, of University College Hospital. Microscopical examination of the morbid lesion demonstrated it to be scirrhous cancer. After this, the patient contiuued well for some years; but, in 1872, it was noticed that hardness appeared in the cicatrix of the above-mentioned operation. This slowly increased during two and a half years, finally developing into a tumour, which was again removed by the same surgeon. This also was found to be of a cancerous nature. Subsequently to this, the general health remained good till about two years ago, when the patient suffered from general weakness, *malaise*, and other indefinite symptoms. These continued to increase till about six months ago, when she began to experience constant thirst and to pass large quantities of urine. Shortly after this, it was observed that the tongue was shrivelled and protruded to one side and that her speech was altered. These symptoms have continued since.

Condition on Examination.—The patient is found to be a pale, sallow, delicate-looking woman. She complains of languor and general weakness. She also suffers from noises in the ears. Otherwise, there are no definite complaints. The intelligence is normal, although the patient is nervous and emotional, which she accounts for by living in constant dread of a brutal husband. The motions of the eyeballs and pupils are normal, the sight is unaffected, and the ophthalmoscopic appearances of the fundus of the eye are healthy. At rest, the face is straight, the motions of its lower parts are especially very limited, and the features are smooth and expressionless. The actions of the lips are particularly deficient; the patient cannot whistle or spit; she has difficulty in opening the mouth, showing the teeth, etc., and the lower lip hangs down so that the saliva constantly trickles down the chin. The articulation is somewhat indistinct and mumbling, but not to a great extent. The sensibility of the skin of the face is normal. The tongue, when protruded, is much twisted to the left side; its movements are very slow and imperfect, and it can with difficulty be pushed beyond the teeth; it is small, as a whole, and the left side is distinctly more atrophied than the right, it being much shrivelled and puckered. Its sensibility is normal. The patient is partially deaf with the right ear, from which occasionally there is a purulent discharge. Taste and smell are normal. There is no difficulty in swallowing. The func

of the other cranial nerves are healthy. There is no actual sis of the limbs, but great muscular weakness and languor is plained of. The entire body is thin, but there is no special hy of any of the muscles. In the right mammary region, there healthy linear cicatrix, about three inches long, and the breast at side is absent. The patient complains of constant thirst; while under observation, passed from eighty-five to one hundred thirty-five ounces of urine in the twenty-four hours, the specific ity of which was 1004, containing no trace of sugar or albumen. functions and organs of the body are otherwise normal. Electl examination shows that, when faradism and galvanism are apl to the facial nerve trunks on both sides, there is great diminuof response—very strong currents being required to produce ular contractions. The same ensues when the faradic stimulus plied directly to the facial muscles; but to galvanism, these red with vigour—the action being prolonged, and the anodal re contraction equalling the cathodal closure contraction A = CCC). When faradism is applied to the left side of the ue, there is no response even to its strongest powers; but, the same to the right, there is slight reaction. Galvanism e former induces increased contractions, as compared to healthy les and to the other side, the anodal closure contraction exceedhe cathodal closure contraction (ACC > CCC). To the latter, esponses appear normal. The reaction of the other nerves and les of the body is as in health. (July 1882.)

ogress of the Case.—The patient remained under observation bout two months in the Westminster Hospital, under the care . Sturges, before she died. Her condition in no way essentially ged. She gradually became weaker and more feeble; was conly confined to bed; finally, was very drowsy and apathetic, ted her food, and slowly sank without exhibiting any new toms.

st Mortem Examination, eighteen hours after death. — The is much emaciated. There is no trace of disease in the rix over the right mammary region. There is slight purulent arge from the right ear. The cranial bones are soft and ile, and in the inner aspect have a worm-eaten appearance, h extends over the base of the skull. The dura mater is adnt to the bone, is much thickened, and covered with numerous e, flat, projecting patches the size of millet-seeds, which subseut microscopic examination showed to be of cancerous structure. various parts of the brain itself are normal, except that at the temporo-sphenoidal region, adjacent to the petrous portion of emporal bone, there is a portion of the grey matter softened, t the size of a sixpence, evidently connected with the neighng osseous disease. Scattered over the base of the skull are erous patches of degenerated bone, varying in size from a pea shilling. These masses are soft and friable, and irregularly disd. On careful examination, it is found that these morbid pross more particulary involve the internal auditory meatus and yloid foramen on both sides, and apparently press on both the l and hypoglossal nerves. The central aspects of these nerves ealthy in appearance; but the distal ends of the hypoglossals o the naked eye, distinctly atrophied, especially on the left The tongue is small and shrivelled; on the left side, it is wasted, and the muscular substance is pale and yellow in ur. The pons, medulla, and other cranial nerves are, to all arances, normal; and the remainder of the brain is healthy, pt that a fibrinous clot occupies the right lateral sinus. Throughoth pleuræ and lungs are scattered various secondary growths, ne same appearance as those found in the dura mater. Some of ibs are soft and friable, and in the same condition as the bones e skull. In the substance of the liver are numerous growths ng in size from a pea to a marble. The spleen and pancreas ormal. Attached to the uterus is a tumour about the size of a egg. The other organs of the body are healthy.

J. Byrom Bramwell of Edinburgh was good enough to make a logical examination of the different tissues in this case, and ollowing is abstracted from his notes. "I find no essential n in the medulla. All the cells of both sides are fatty (but s not unusual), and there are some amyloid bodies in the grey er of the floor of the fourth ventricle; but the nuclei of the glossals are practically healthy, and so are the nerve-strands eding from them. I have not yet cut across the hypoglossal s themselves, but the naked-eye examination was quite conclu- The tongue shows well-marked atrophy—a simple and not atrophy—apparently of the muscular fibres, and the degenerafof some of the transversely divided nerve-bundles is well seen me of the sections." Microscopical examination also determined that all the abnormal processes, whether in bone or tissues, were of a cancerous nature.

Commentary.—This case presents features of interest from both a pathological and clinical point of view. I propose to direct special attention to, 1, the cancerous condition; 2, the polyuria and polydipsia; and 3, the peripheral nerve-lesions.

The Cancerous Condition.—It is sufficient to state that this case affords an illustrative instance of the recurrence of cancer, both locally and generally, after surgical operation. In 1869, the breast was removed, and microscopic examination at the time demonstrated the tumour to be of true scirrhous nature. In 1872, the disease reappeared in the cicatrix left by the operation, and this was in 1875 again excised. In 1882, the patient died, and cancerous growths were found in various parts of the body, while the tissues in the neighbourhood of the former disease were healthy.

The Polyuria and Polydipsia.—The *post mortem* appearances in this case, as in so many others, throw little light on the morbid anatomy of polyuria. That injury to nervous structures may induce this disease, as well as glycosuria, is well established; and that there is a close connection between these two affections appears probable, as usually both occur in the same patient, and the one may be transformed into the other. The physiological researches of Claude Bernard demonstrated that injury to the fourth ventricle, at the central space between the origins of the auditory and pneumogastric nerves, caused glycosuria; and Dr. Pavy found that experiments on the sympathetic ganglia were followed by the same condition. Bernard also ascertained that irritation of the fourth ventricle at a point a little higher up than the one already mentioned, induced polyuria alone, without the presence of sugar in the urine, and stimulation of another spot close by was followed by albuminuria. Although it has been proved that irritation of these points in the fourth ventricle causes these effects, there is no evidence that disease of these localities need be present when polyuria or glycosuria exists; on the contrary, we find that in most of the examinations made in cases of such disease, this portion of the brain has been found in a healthy condition. Injuries of other parts of the encephalon have been seen to be followed by the same symptoms. Fischer collected twenty cases in which polyuria and glycosuria resulted from blows on the head, and instances have been recorded of the same following diseases of the brain, and even after strong mental emotions. I believe that polyuria is by no means an uncommon symptom of cerebral lesions of various kinds and in different localities, and these in no way directly connected with the fourth ventricle. In a case of polyuria of long standing, which was under my observation, the patient died from the effects of a surgical operation. He had never, during life, shown any symptoms of cerebral disease, but after death a tumour, the size of a pigeon's egg, was found in the brain, and situated in the right temporo-sphenoidal region. In another instance of a gentleman with polyuria, who died from abdominal disease, there was found an abscess in the parietal lobe. In two other cases where facial paralysis, glycosuria, polyuria and albuminuria existed, I discovered disease of the cortex of the brain after death, the base and fourth ventricle being apparently normal. Finally, in the case before us, this last situation was healthy, and other parts of the encephalon diseased. Besides these five cases, in which an opportunity was afforded of seeing the *post mortem* appearances, I have met with many other instances of polyuria accompanying lesion of the brain, in which there was no reason to suppose that the medulla was in any way directly implicated. Although the pathology of this affection is as yet very obscure, these facts would seem to indicate that if physiology teaches us that the fourth ventricle of the brain in some way exerts an influence over the production of polyuria and glycosuria, and that its irritation or destruction interferes with that process, it is not necessary that this locality itself be directly affected, and that morbid conditions elsewhere in the cerebrum may, by reflex action or otherwise, so modify its function as to induce pathological effects. What special portions of the encephalon require to be involved, or whether disease at any part of its structure may have the same result, we do not know; but from both pathological observation and clinical experience, it would seem that various lesions in different parts of the brain, none of them directly implicating the fourth ventricle itself, may lead to the symptoms under consideration. Thus, assuming the cells in the fourth ventricle, to be the originators of this polyuric function, and these in turn capable of being influenced by reflex action, pressure, or otherwise from numerous sources, it is obvious that various lesions, both within and without the brain, may be the cause of the disease. This theory seems to be borne out by the fact that the centre in question

is usually found healthy, and that polyuria is associated with many forms of cerebral abnormality situated in different localities.

The Peripheral Nerve-Lesions.—When this patient came under observation, the lower parts of the face were found expressionless, and with impaired motion; the lower lip hung down, saliva trickled from the mouth, the lips were inactive, the food collected in the mouth, the tongue was sluggish in its movements, and was much atrophied, and the speech was hesitating and mumbling. In short, the case presented all the features of typical glosso-labial paralysis. The patient had visited various hospitals, and her disease had invariably been diagnosed as bulbar paralysis, to which there can be no question it presented the strongest resemblance. On applying electrical tests, however, reactions were obtained which were not anticipated. In bulbar paralysis, the nerve-trunks and their terminations remain healthy throughout the entire progress of the disease, or, at least, till its very latest stages, and the muscular fibres remain normal for a considerable period, after which they slowly undergo degenerative change. Hence the faradic current, when applied to the nerve-trunks or to the muscles, induces normal reactions; and galvanism, acting on the former, is followed by the same, but, on the latter, indicates both quantitative and qualitative alterations. In the case before us, which was a comparatively recent one, totally different reactions were discovered. The trunks of both facial nerves, if not absolutely insensitive to both currents, were greatly diminished in excitability. Faradism to the facial muscles caused little or no contraction, whereas galvanism induced vigorous action with the polar reactions reversed. Faradism, again, to the muscles of the tongue was followed by no response, while galvanism was succeeded by increased action, and inverted polar reactions. Such phenomena are evidences of neuro-muscular paralysis, and not those we are accustomed to meet with as a result of central disease, in which, as above stated, the nerve-trunks and their extremities remain healthy throughout. During the life of the patient, there might have been some hesitation in making a positive diagnosis, as, in spite of the physical demonstration just described, it seemed most improbable that both hypoglossal and both facial nerves should be degenerated, leaving the other cranial nerves and functions of the brain intact. Such, however, the *post mortem* examination showed to be the case, as extensive disease of the base of the skull, not sufficiently pronounced to cause gross pressure elsewhere, involved the foramina through which the above nerves passed, evidently pressing on their structure, as evidenced by their peripheral degeneration, and their healthy proximal extremities.

The patient, on interrogation, said that she experienced slight numbness of the face and difficulty in mastication, but no definite objective signs of this could be determined. It is, however, not improbable that, although the trunks of both fifth nerves appeared healthy, they also may have been slightly involved in the disease. The portio dura, on one side, was evidently implicated, accounting for the deafness during life, which may also be explained by the conditions found after death.

This case is a striking example of the great importance of electro-diagnosis in the investigation of obscure paralyses. Without its aid, this patient would certainly have been considered to be suffering from bulbar paralysis; whereas, by its assistance, we were enabled to diagnose, in the face of great improbabilities, the existence of peripheral, and not of central, disease.

A GLARING illustration of the great amount of ignorance prevailing among mothers, in respect to the proper feeding of infants, is shown in a case which recently came before Mr. George Collier, the evidence of which showed that a child, aged eleven months, being fretful from birth, the mother had given it anything to eat which it fancied. The result was that it had breaking out on its body and convulsions; and, ultimately, it had a fit, and it also seemed to have had two falls before Christmas. Having another fit, a doctor was sent for; but, before a bath could be got ready, it died of convulsions, certainly set up by improper feeding. The coroner, wisely dilating upon the crass ignorance of mothers, as shown repeatedly before him, and the gross stupidity of giving a child of tender years meat and other food which its digestive organs found it wholly unable to assimilate, said that mothers in this matter, and many others, would never grow wiser until the duties of maternity became part of the curriculum of the public schools. The jury said they hoped the case would carry its moral to other mothers, and returned a verdict in accordance with the medical evidence.

REMARKS ON THE DEATH-RATE OF ANÆSTHESI WITH AN ACCOUNT OF SIX FATAL CASES.

By W. ROGER WILLIAMS, F.R.C.S.,
Surgical Registrar to the Middlesex Hospital.

DURING the last few years, an impression has arisen in the profe sion, and has been communicated to the general public, that t induction of anæsthesia is a much more dangerous proceeding tha was formerly believed. The numerous fatal cases lately record in the journals have proved, in the clearest manner possible, th this impression is only too well founded on fact.

My own experience, which there is no reason to regard as singula leads me to believe that the real dangers of this proceeding are sti very greatly underestimated. The majority of fatal cases are hush up; only a few find their way to the journals. Six deaths from th cause, none of which have been made public, have come under n immediate notice during ten years of hospital work.

On an average, I have, probably, witnessed the induction of anæ thesia about four times a week, during the whole of this period—s estimate over, rather than under, the mark. Hence, the mortality these cases may be roughly stated at 1 in 350 inhalations. But should be remembered that this does not represent the whole of t danger, for, in a still larger proportion of cases, alarming symptor supervened, and fatal results were only narrowly avoided. As far I can judge, the number of times that chloroform and ether we severally administered was about equal. Five deaths resulted fro the use of the former agent, and one from that of the latter. the former category, I have included three fatal cases, due to t use of a mixture of two parts of chloroform with three parts ether; because, as an anæsthetic agent, the action of this mixtu precisely resembles that of chloroform.

Calculated on this basis, then, the death-rate for chloroform wou be 1 in 208 inhalations; and that for ether, 1 in 1,050—the lowe estimate possible. Although the total number of cases on whi this statement is based is not so large as, under the circumstance might be desired, especially as regards ether, I think, nevertheles it may be accepted as conveying a more correct idea of the dange actually involved, than any of the statistics usually quoted.

In the JOURNAL of December 30th, 1882, the death-rate for chlor form is given as 1 in 2,873 inhalations, and that for ether as 1 23,204—a ridiculously low estimate. Perhaps some of your reade will be able to explain these remarkable discrepancies, and to deci which statement most nearly approximates the truth. I ought to a that my field of observation has been a wide one, not confined to o institution or one method, but comprising several metropolitan and p vincial hospitals; hence I think it may fairly claim to be typical the kind of practice it represents.

I now propose to give a short account of each of these cases, a then to conclude with a few additional remarks.

CASE I.—This patient was a stout, well-built, florid man, aged rather above the usual height. He was in a robust state of heal at the time of the fatality; and he had previously been of moderate temperate habits. He was sent from the out-patient departme to the operation-theatre, to have a small piece of dead bone remov from the end of the stump of his right forearm. The limb h been amputated a little below the elbow-joint, about a year pre ously, for a bad crush involving the hand, wrist, etc.; and ana thesia had then been induced without any trouble, by the gas-an ether method, with Clover's apparatus.

For an operation of such a trifling nature, gas alone was deem sufficient, and he was nearly under its influence, when it was fou that the supply in the reservoir was exhausted. Chloroform w now sent for; and, during the delay thus involved, the patie completely recovered consciousness, and said he thought he had be for a ride in the train. About a drachm of chloroform having be poured without measurement on to a piece of folded lint, the a ministration was effected by holding this rather closely over t patient's mouth and nose. To prevent the dissipation of the risi vapour, a large towel was thrown over the patient's face, as well over the administrator's hand. By this means, after a well-mark stage of muscular excitement, sufficient anæsthesia was induced *less than three minutes.* Immediately after the first incision, it w noticed that the patient had stopped breathing; that the face w livid; and that the pulse had ceased to beat. The face then rapi became pallid; but subsequently resumed much of its duskine These symptoms supervened suddenly, without stertor or any oth

ning. Artificial respiration, laryngotomy, etc., failed to revive i.

t the necropsy, twenty hours after death, there was but slight gr mortis. The head, face, and dorsal part of the trunk were of urplish colour. The parietes of the chest and abdomen were ily laden with a thick layer of fat; the omentum was in a lar condition. The heart was rather large; its consistence oy, and its valvular apparatus healthy. Externally, it was laden fat; and, on section, the muscular substance appeared to have ergone slight fatty changes. Its right side and the large venous ks were gorged with dark semicoagulated blood. Its left side somewhat contracted, and nearly empty. The lungs were con- ed, but otherwise healthy. The kidneys were rather large; r capsules separated readily; they were congested, and pre- ed slight fatty changes. There was subarachnoid effusion over vertex of the brain; and the lateral ventricles were full of clear w-coloured fluid. The other organs and the soft parts of the y generally were congested.

ASE II.—A woman, aged 43, the subject of orthopnœa, due neurysm of the aortic arch of some standing. A firm pulsating our, of the size of the large end of an egg, presented in the dle line above the top of the sternum. She had great difficulty reathing; and marked œdema of the left side of the face. She decidedly syphilitic. After undergoing treatment by rest in low diet, and iodide of potassium for a month, without any im- ement taking place, it was decided to ligature the left common tid artery. When she appeared in the operation-theatre for this pose, she was in a very weak state; an attempt to place her in recumbent position brought on a severe attack of dyspnœa. She ared she never could endure this position, and that it would kill Being propped up by some pillows, however, she was persuaded decline somewhat; and chloroform was then administered on lint, n the preceding case. She inhaled it quietly for a few minutes; h she turned pale; ceased breathing; became cyanotic, and died. h happened before the operation had been commenced. Such edies as artificial respiration, inflation, and laryngotomy were rted to; but in vain.

t the necropsy, twenty-four hours after death, a remarkable com- lation of disease was revealed. The face, neck, and fingers were purplish colour, and rigor mortis was present. The superficial is of the neck were enormously swollen, and full of dark blood. deep veins of this part were similarly affected; but the left rnal jugular was shrunken and almost empty. A sacculated urysm, of pyriform shape, measuring three inches in its long meter, was found springing by its base from the transverse part he aortic arch, with which it communicated by a round orifice of size of a florin. It passed upwards, between the innominate ich was dilated) and the left common carotid arteries, to the a at the top of the sternum, where its apex had been detected ing life. The wall of this aneurysm was very thin in front, where dhered to the back of the first piece of the sternum, having com- ssed and completely obliterated the left innominate vein at this . Elsewhere it was thick, and adherent to the abundant deposit aminated fibrin, which occupied nearly two-thirds of its interior. ind, it touched the trachea, which was slightly flattened at the nt of contact, but not to such an extent as to interfere with its ency. The adjacent nerves and other important structures had tained no damage from the aneurysm. The right side of the rt was distended with dark semicoagulated blood; the left side s flaccid and empty. The auriculo-ventricular valves were beaded h old calcareous and atheromatous nodules; the aortic valves, in ition to being similarly affected, were hypertrophied and dilated. organ was large and hypertrophied, especially the left ventricle. muscular substance appeared to be healthy. On both sides, the gs were firmly bound to the chest-walls, throughout their whole nt, by old adhesions. They were large, emphysematous, and nsely congested. On section, abundant muco-purulent matter ded from the divided bronchi. The brain was much congested; there was excess of serous fluid in the lateral ventricles. The er organs presented no noteworthy changes.

ASE III.—I will now relate the case of a woman, aged 55, who s admitted with a strangulated femoral hernia and stercoraceous' iting. The symptoms of strangulation were of fifty hours ation. She was brought into the operation-theatre in an ex- nely weak and exhausted state. Anæsthesia was induced by ous oxide gas and then it was kept up by ether, Clover's apparatus ng employed. She was very quiet from the commencement of process; and there was no muscular excitement. Sufficient esthesia was thus induced in four minutes. Gentle taxis was then applied to the rupture. After the first few manipulations, the patient suddenly became pale: she vomited grumous stercoraceous matter; the pulse ceased; the breathing became weak, and she soon died. In this case, after other remedies had been tried, a weak solution of sal volatile was injected into the right median basilic vein; but without producing any obvious effect.

The necropsy took place twenty-eight hours after death; when rigor mortis was well marked. The trachea and larger bronchi contained some of the stercoraceous vomit; but none of it could be traced into the smaller divisions of the air passages. The lungs were slightly congested, but otherwise remarkably healthy. The heart was flabby and dilated, its walls thin, but not otherwise diseased. The right side contained dark fluid blood, and the large veins were rather full; the left side was flaccid and almost empty. The valvular apparatus was normal. The aortic arch presented numerous patches of atheroma. The peritoneum was injected, especially in the vicinity of the damaged gut, where there was an effusion of recent lymph. The stomach contained much grumous fluid, and a large quantity of partially digested food, among which large pieces of cabbage and potato could easily be distinguished. The kidneys, liver, and spleen were normal. The uterus presented several small fibroid growths. The strangled gut comprised about four inches of the lower part of the ileum. It was of a dark purple colour, but not much thickened, and still retained its glistening appearance. There was no rupture of its walls. The brain was not examined.

CASE IV.—This patient was a woman, 52 years old. She had a round-celled sarcoma of the left upper jaw, the size of a small apple, which was of nine months' growth. She was pale, thin, sallow and weak. It was proposed to excise the left upper jaw bone, and the growth with it. The anæsthetic agent used was the mixture of chloroform and ether. It was given in a leather inhaler, perforated at the top with small holes, and containing a sponge inside. The patient's head and shoulders were first propped up with pillows, etc. After the anæsthetic had been inhaled for a few minutes, and before she was well under its influence, the operation was commenced. She struggled, and seemed to feel the pain. Owing to the nature of the subsequent proceedings, but little of it could have been inhaled afterwards. As the bone was being wrenched away with the lion forceps, she suddenly ceased struggling and became pale. The removal was quickly completed, and artificial respiration was resorted to. The throat was examined for a foreign body, but none could be found. As considerable bleeding occurred it was frequently mopped out with sponges on holders. She never showed the slightest sign of revival.

At the necropsy, twenty-six hours after death, there was well-marked rigor mortis; and the head, neck, and upper part of the trunk were congested. The trachea and bronchi contained a little semicoagulated blood, loosely adherent to their walls; and blood could be traced, at some parts, even into the smaller bronchi. The lungs were healthy, except that their bases were congested behind. For such a thin woman, there was an unusually large amount of fat about the outside of the heart. To the naked eye, its muscular substance appeared healthy. The left ventricle was nearly empty; the right moderately full. In other respects, the heart was normal. The liver contained some hydatid cysts. The other organs presented no noteworthy changes.

CASE V.—As in the three preceding cases, this patient was a woman. Her age was fifty-three years, and she had suffered from cancer of the womb for the last eighteen months. Three weeks ago, subacute symptoms of intestinal obstruction came on, owing, as was believed, to adhesions between the gut and the womb. During the week preceding the present crisis, she had no action of the bowels; fæculent vomiting was frequent; and she was unable to retain any food. Enemata, etc., gave no relief; therefore, it was decided to open the colon in the left loin. She was a large, pale, emaciated, and feeble person. The anæsthetic employed, and the mode of its administration, were precisely the same as in the last case. She died suddenly before the process was complete, and before the operation had been commenced.

At the necropsy, twenty-four hours after death, muscular rigidity was fairly marked. The heart was quite free from disease. The right ventricle contained a gelatinous clot, and the left auricle some fluid blood. Some of the fæculent vomit was contained in the air-passages, and could be traced into the smaller bronchi in the upper and middle lobes of the right lung; the base of the left lung was deeply congested behind. The œsophagus was full of this fæculent material. The parietes of the abdomen were enormously distended, owing, as it proved on dividing them, to the fulness of the intestines. There were signs of comparatively recent general peritonitis. The

omentum was adherent to the fundus of the uterus, and tightly stretched over the distended intestines. This distension was chiefly limited to the small intestines, which were full of fluid fæculent matter; the cause of it was an obstruction of the bowel, at about six inches above the ileo-cæcal valve, where it was adherent to the uterus, only a very small passage still remaining open. A second obstruction, effectually preventing the passage of solid fæcal matter, existed in the sigmoid flexure of the colon, which was also adherent to the uterus. The transverse colon was distended with flatus. With the exception of the fundus, almost the whole of the uterus had been destroyed by cancerous ulceration; and its place was occupied by a sloughing cavity, communicating with the vagina. The right kidney weighed only two and a quarter ounces; it was small and sacculated; very little of its secreting structure remained, and its ureter was dilated. The left kidney was normal; and so were the other organs examined.

CASE VI.—The last case I have to relate is that of a farm-labourer, aged 44, who had cancer of the right side of the tongue, encroaching somewhat on the soft palate. The disease had invaded the glands of the neck, especially those of the right side; and it was of nine months' duration. It had previously been excised, and subsequently destroyed by the galvano-cautery—only to return again, however. On account of the advanced nature of the disease and the impossibility of completely extirpating it, further operative treatment was not advised; but, subsequently, at the patient's urgent request, it was decided to remove the tongue and as much of the disease as could be got at. His general health was fairly good, though he was somewhat emaciated. Having been propped up, in the position usual for such operations, the mixture of chloroform and ether was administered, exactly as in the two preceding cases. Only partial anæsthesia was induced, with a view of obviating the ill effect of anticipated hæmorrhage. A gag was then introduced into the mouth, and the right cheek was slit freely open. The wire loop of the *écraseur* was next passed round the base of the tongue, behind curved-handled needles previously introduced. As soon as the *écraseur* was tightened up, the patient became pale, and ceased breathing. A few hasty turns of the screw sufficed to complete the removal of the tongue. The throat was mopped out with sponges, and examined for a foreign body, but none could be detected. Artificial respiration, tracheotomy, and galvanism were resorted to; but the patient could not be revived.

At the necropsy on the following day, rigor mortis was present, and the integuments were pallid. The lungs were firmly bound to the chest-walls by old adhesions. They were emphysematous and congested at their bases, but crepitant throughout. The trachea and larger bronchi contained some blood and mucus; and blood could be traced into the smaller bronchi, especially in the lower lobes. The right side of the heart contained a large quantity of dark semi-clotted blood, and the left side contained some fluid blood. The right ventricle was dilated; the left contracted. The valvular apparatus and the muscular substance were normal in every respect. The kidneys were large and congested, but otherwise healthy. There was nothing abnormal about the other organs examined.

I have observed that those who administer anæsthetics too often, do so without any fixed principles to guide them. This is lamentable, because, as many of these cases show, the fundamental laws of the anæsthetic art cannot be disregarded without entailing a deplorable sacrifice of life. I will here endeavour to state, in the briefest manner possible, what I consider to be the most important practical inferences to be drawn from them.

With regard to chloroform, then, subject to the attainment of the object in view, too much air cannot be given during its administration; and with regard to ether, too little air cannot be given during its administration. From this it follows, that a long time is required to induce anæsthesia by chloroform; but to produce the same result with ether, a short time is sufficient. Now, by a long time, I mean about a quarter of an hour, and by a short time, about five minutes.

Surgeons are not unfrequently to blame in this respect. How often one has heard it said to the chloroformist—"Be as quick as you can; I want to begin the operation in *five minutes*." In my opinion, this is equivalent to saying—"Kill at least 1 per cent. of my patients." Those inhalers are the best which most readily facilitate the fulfilment of these requirements. For giving chloroform, one with a wire framework, having a diaphragm of flannel, or some similar material, stretched over the top of it, on which to evaporate the anæsthetic, but open at the sides, would be very good; but a piece of lint, or the corner of a towel, properly used, would do as well. A graduated drop-bottle is necessary in any case, as only a small quantity of chloroform should poured on at a time, and this requires to be frequently renewe For the administration of ether, Ormsby's inhaler seems to me t best; it was designed to fulfil the requirements just mentioned, and have found it answer admirably.

There is only one other point I will now mention, and that is the i portance of watching the respirations during the process. To do properly, of course the epigastrium must be uncovered. It is much greater value than feeling the pulse, since, when the lat stops, there, as a rule, is an end of the patient. Mr. Lister has ve ably insisted on this. However, I have found it generally neglect at King's College Hospital.

ON THE OXYTOCIC ACTION OF QUININE, AND METHOD OF PREVENTING IT; WITH CASES.

BY NEIL MACLEOD, M.D.Edin., Shanghai.

DOES quinine excite contractions in the human pregnant uteru Schröder, in his last edition of his *Lehrbuch der Geburtshülfe* Auflage, Bonn, 1882, S. 484), regards this action of quinine "problematic," and cites a number of authorities in support of t view. This question is of great interest to medical men resid in malarious districts, who are frequently called upon to treat n ralgia and fever of malarial origin in pregnant women, and h been answered in the affirmative by French, Italian, and more p ticularly German and Indian medical men; and in the negat chiefly by American physicians, who maintain that abortion af quinine given in malarial poisoning, is the result of the latter.

There are some difficulties which stand in the way of settling t question, but these may be set aside. Fever itself is known to mulate the pregnant uterus to contraction so effectually, at times, to cause abortion, but the fallacy which this involves may avoided by observing the effect of repeated doses of the drug, a was enabled to do in some of the cases recorded below. Cases neuralgia are free from this objection.

In the later months of pregnancy, when the uterus is above pelvic brim, pains can be easily ascertained by palpation to be companied or not by uterine contraction; but in the early mont it is practically impossible to ascertain the existence of these c tractions; and the subjective pains cannot be accepted as suffici evidence of uterine action, even in pluriparæ, unless accompan by blood discharge from the uterus. On the other hand, it is qu possible that many examples of this effect of quinine have b overlooked; as where "pains" have been present, but have not b severe; have been unaccompanied by blood discharge, or not follow by miscarriage or abortion; moreover, it is not unlikely that use of opiates, in neuralgic cases, has interfered with the obser tion of the ecbolic effect of the drug, a conjunction of remedies w illustrated in Cases II, III, and IV, recorded below.

The ordinary use of opiates in threatening miscarriage, sugges to me their administration before that of quinine in such ca and the result was so encouraging in Case II, that I have, sin then, used opium, morphia, and chlorodyne for this purpose, several cases, and have now no hesitation in prescribing large do of quinine to pregnant women suffering from malarial fever neuralgia, or to reduce high temperature in other conditions. It said that, in India, large doses of quinine are generally avoided these cases, from fear of uterine disturbance (*Berliner Klinis. Wochenschrift*, September 11th, 1882, S. 563), and, on inquiry find that a similar practice is generally prevalent amongst colleagues in China. Hausmann (*Ibid.* S. 564) records a w marked example of uterine contraction following the use of quin in a case two months advanced in pregnancy, and expresses accordance with the views of Hehle and Cochran, that the subje most likely to be affected in this way are delicate, nervous wom wasted by a chronic ailment, and with a history of miscarria Hausmann concludes his paper with the remark, "since even a la dose (fifteen and twenty grains) only excited fleeting contracti of the uterus in my case, in spite of well marked predisposit a therapeutic dose (which, however, he does not define), may be companied by excitation, or increase, of pains in still wea persons, or by miscarriage with a very large dose." I regard fift grains as an ordinary "therapeutic" dose in malarial fever, such dose having frequently to be followed by a still larger one to arr the disease.

CASE I is only interesting as being probably predisposed to t effect of quinine. A thin, delicate, nervous primipara, at the co

ncement of the ninth month, for a week before she was seen by
ıedical man, had suffered from fever which turned out to be re-
:tent. On each of the evenings of October 26th and 27th, 1880,
: took fifteen grains of quinine by prescription. I saw her, for
: first time, on the 28th, when the first stage of labour was going
she having spent an uneasy night, and the membranes having
)tured between five and six A.M. The labour finished in the even-
;. Here the temperature had been raised for a week without ex-
ing pains, which, however, followed the administration of quinine.
this case there was no history of chronic ailment or miscarriage.
Before detailing the next case I may state that, up to this point,
gree with Schröder in his view that quinine was but a "problem-
c" oxytocic.

CASE II is of a much more interesting character; a pluripara,
:d 29, having never miscarried, very thin, with a history of old
nal (bone) disease, and loss of power in the limbs, the latter
ng permanent. She had just recovered from a severe nasal
arrh and facial neuralgia—the description of the latter suggesting
ghtning pains." I examined for, and found the patellar reflex
ll marked in both limbs. Sight was defective, and there was
ımencing optic atrophy. Six grains of quinine were given for
ıralgia, about the middle of January, 1881, and were followed by
rine pains and contractions, so marked, that I was afraid to give
more that day, as I had intended doing. After these pains had
sed, I, however, tried three grains, but with a similar result. I
n injected morphia subcutaneously, and kept her under its in-
:nce for two or three days, when the neuralgia ceased. She was
:ed on January 30th with quotidian ague, when I ordered one-
in doses of quinine every hour; but after the third dose the
rine pains set in, and I stopped the medicine. On the 31st, six
es, each twenty grains of soda salicylate, were given, without
apparent effect on the fever. On February 1st, ten grains of
nine were given after a quarter of a grain of morphia by the skin,
also forty grains of salicylate of soda by the rectum. No pains
owed, but the temperature rose from 98° in the morning to 103°
he evening. On February 2nd, morphia was again injected sub-
aneously, and followed by sixteen grains of quinine. February
, morphia and twenty grains of quinine. February 4th, 9 A.M.,
rphia and twenty grains of quinine, followed at 4 P.M. by ten
ins, and at 7 P.M. by other ten grains of quinine. From February
no pains were observed or felt, and the fever, absent on the 5th
l 6th, returned slightly (101.7°), on the evening of the 7th,
:n twelve grains of quinine were taken without morphia, were
owed by uterine action, which continued all throngh the 8th.
s patient gave birth to twins at full term in April.

'ASE III.—A delicate pluripara, aged 36, three and a-half months
gnant, having threatened miscarriage in the second month, was
:ed with intermittent fever on May 5th, 1881, and on that day
r doses of salicylate of soda, each twenty grains, were given,
hout any effect on the fever. On the evening of the 6th, the tempera-
e being 103°, at 8 P.M., twenty-five minims chlorodyne; and at 9 P.M.,
:en grains of quinine were given. On the 7th, the temperature,
m 99° in the morning, rose to 101.2° in the evening, and no pains
ing been felt, at 8.30 P.M. sixteen grains of quinine were taken
hout chlorodyne. On the 8th, at 1.30 A.M., pains and bearing-
vn came on, and ceased on taking twenty-five minims of chloro-
ıe. She left for Nankin on May 13th, and returned to Shanghai
August 29th, much reduced from chronic diarrhœa, being
rally "skin and bone," and nearly seven months advanced in
gnancy. I saw her on board ship at 4 P.M., with a temperature
.05° and pulse 120. Fifteen grains of quinine were at once ad-
ıistered, and as she had had a starch and opium enema before I saw
, no other opiate was given. At midnight, the temperature being
°, twelve grains more of quinine were taken. On the 30th, the
:ning temperature was 98.4°, and the stools being dysenteric, the
ge bowel was washed out with large enemata of a saturated solu-
ı of boracic acid in water, and the opiate enema continued. On
evening of the 31st the temperature again rose to 104°, and
:en grains of quinine were given. There was no rise of tempera-
: after the 31st, and no uterine disturbance manifested itself at
time. A child was born at full term. This case was a most
ious one, and, without opium, I would scarcely have ventured to
: twenty-seven grains of quinine in eight hours. The patient
not a nervous one.

ASE IV.—A primipara, aged 23, delicate, very thin, with a highly
vous temperament, with a history of "fits" before her arrival in
na, six and a half months pregnant, was first seen on March 3rd,
2, at the end of the first week of what turned out to be enteric
:r. Fifteen grains of quinine on the 3rd were followed by slight rhythmic pains in the abdomen, not ascertained, however, by palpation, to be uterine. On the 5th, twenty-two and a half grains of quinine, followed in an hour by twenty-five grains of chloral hydrate and thirty grains of bromide of potash, were given, and no pains were complained of or observed. On the 7th, twenty-two grains of quinine were followed by uterine pains, which continued on the 8th, and were accompanied by fœtal movements. Two doses of chlorodyne (each twenty-five minims), were followed by cessation of these pains. The interval between the two doses of chlorodyne is, unfortunately, not recorded. On the 9th, twenty-five grains of quinine, after twenty-five minims of chlorodyne, were given in the evening, and slight pains were felt during the night. On the morning of the 10th, twenty-five grains of quinine were given, and no pains are entered in my notes for that day; but on the following one, I observe that chlorodyne was given (there being one hard motion), and the expression "no pains" follows. This patient gave birth to a full-time child.

Other cases I have observed and treated in the same fashion; but as they were either under observation for only a short period, or as the evidence afforded by them was negative, no record was kept. A fifth case, one of enteric fever in a highly nervous pluripara, at the end of the second month of pregnancy, affords evidence, on the whole, supporting the view set forth in this paper; but, unfortunately, as pregnancy was not even suspected, and although abdominal pains are recorded as following quinine without an opiate, my attention not being specially directed towards the uterus, no attempt was made to localise them. One point suggested by the case, is the possibility of chloral hydrate (given with bromide of potash), being another antagonist to the ecbolic action of quinine. This patient is now in the fifth month of pregnancy.

Having remarked that the disagreeable feeling about the head, and the singing in the ears, were much less prominent after a dose of quinine preceded by an opiate, I now frequently order a dose of chlorodyne shortly before a large dose of quinine, in cases where no uterine disturbance is in question. I may add, that I have, on several occasions, observed the menstrual discharge increased, or come on before its time, after the administration of a large dose of quinine.

DEATHS FROM ANÆSTHETICS, 1882.

By ERNEST H. JACOB, M.A., M.D., Leeds.

In a list given in the early part of last year, I called attention to the rapidity with which deaths from chloroform were occurring, and several of those in the subjoined lists were then recorded. In reviewing the tables given below, it will be seen that, as usually happens, the greater number of deaths from chloroform occurred when the anæsthetic was given for trivial operations, such as amputation of fingers, reducing dislocated shoulders, etc., while in three cases the organs were noted as being perfectly healthy. Nos. 8 and 20, however, should hardly be considered as due entirely to the anæsthetic, as in the first the trachea was greatly obstructed by a large tumour, and tracheotomy, which could alone have relieved the spasm of the glottis, was impracticable; and in the second, the trachea and larynx were much bruised and contained blood. Turning to the deaths which occurred under ether, in the first, the patient was apparently suffocated by pus in the air passages, derived from an empyema. In the second, the patient was affected with cardiac disease, as well as severe blood poisoning, and death seems to have occurred rather as the effect of exhaustion after an operation of nearly an hour and a half than as the result of the anæsthetic. No. 3 seems to be one of the rare cases in which death under ether occurs from syncope instead of asphyxia, and it is worthy of note that here the kidneys were diseased. With regard to the last case, I will give some rather fuller details, to which I am indebted to the courtesy of my friend, Mr. Jefferson, the house-surgeon to the York Hospital.

The patient was a man, aged fifty-three, who walked (with support) into the hospital, suffering from a crush of his right hand, a compound fracture of the forearm, a simple fracture of the humerus and a fracture of the third rib, all on the right side. He had been caught by a driving wheel and jammed between it and the ceiling. His chest was examined, and as his breathing appeared easy, ether was given. He took the anæsthetic badly, breathing very feebly, and struggling, and it was nearly twenty minutes before he was ready for operation. The forearm was then amputated, and when the operation was nearly completed, the breathing suddenly ceased. After artificial respiration for about fifteen minutes, he began to breathe, and a feeble femoral pulse could be felt, but this soon ceased,

1882.—Deaths from Chloroform.

No.	Place.	Sex.	Age.	Operation.	Mode of Dying.	P.M. and Remarks.
1	Sussex County Hospital.	M.	27 years.	Setting compound-fractured leg.	Syncope.	"Heart in advanced fatty degeneration."
2	Children's Hospital, Manchester.	M.	9 ,,	Opening abscess.	Syncope.	No *p.m.* "Died a few minutes after the operation was finished."
3	Royal Free Hospital.	M.	54 ,,	Dislocated shoulder.	Syncope.	...
4	Malvern Wells.	M.	51 ,,	Dislocated shoulder.	Syncope.	*P.m.* "Might have died at any minute."
5	Broughton Ferry.	M.	...	Operation for sympathetic ophthalmia.	Syncope.	"Organs healthy."
6	Gloucester Infirmary.	M.	23 ,,	Enucleation of eye.	Syncope.	"Organs healthy."
7	Surgical Home, Fitzroy Sq.	M.	27 ,,	Lumbar abscess.	...	"Heart healthy."
8	Carlisle Infirmary.	M.	9 ,,	Inserting seton in thyroid.	Asphyxia.	Trachea partly obstructed by large tumour. Death from spasm of glottis. Tracheotomy impossible.
9	Guy'sHospital.	F.	...	Fracture of leg(setting).	Syncope.	"Fatty heart."
10	Rotunda, Dublin.	F.	34 ,,	Ovariotomy.	Syncope.	"Heart and Respiration failed 4 minutes after commencement. Organs healthy, except that tumour pressed on diaphragm."
11	Canterbury Hospital.	M.	49 ,,	Necrosis of toe.	Syncope.	"Partly recovered during operation, and sat up. Pulse stopped." No *p.m.*
12	St. Bartholomew's Hospital.	M.	...	Cancer of lip.	Syncope.	During period of excitement. *P.m.* Heart large, degeneration of coronary arteries.
13	St. Mary Abbotts' Infirmary, Kensingsington.	M.	35 ,,	Fistula *in ano*.	Syncope.	Pulse stopped during period of muscular rigidity.
14	Bradford Infirmary.	M.	14 ,,	Dislocated elbow.	Syncope.	Ten minutes after cessation of administration. No *p.m.*
15	St. Peter's Hospital.	M.	40 ,,	Stricture of urethra.	Asphyxia.	"Ceased to breathe, and died in a few minutes." *P.m.* "Fatty heart."
16	Guy's Hospital.	M.	36 ,,	Amputation of thumb.	Syncope.	"Pulse failed." *P.m.* "Fatty heart."
17	University College Hospital.	M.	33 ,,	Cancer of tongue.	...	"Turned blue and pulse ceased. Kidneys and liver diseased, heart very slightly so."
18	London Hospital.	M.	58 ,,	Cancer of tongue.	...	Pulse stopped during struggling; lividity. No *p.m.*
19	Glasgow Infirmary.	...	...	Amputation of toes.	...	...
20	St. Bartholomew's.	M.	32 ,,	Fracture of jaw.	Asphyxia.	Trachea and larynx; much bruised, and contained blood.
21	Middlesex Hospital.	M.	44 ,,	Cancer of larynx.	...	...
22	Carlisle Infirmary.	F.	17 months.	Passive motion of knee joint.	Asphyxia.	Bronchi almost occluded with viscid mucus.
23	Sunderland Infirmary.	M.	49 years.	Necrosis of finger.	Syncope.	"Heart distinctly fatty."

and the man was dead. At the necropsy, all the organs were found to be healthy, except that the right kidney contained a cyst, and there was a "small black mass" inside the pericardium at the root of the aorta. At the same time, the man could hardly have sustained the accident he did, without a somewhat severe shock to his central nervous system, and he could hardly be said to be in a perfect healthy condition, though his organs showed no gross disease. I this respect, the deaths under ether contrast strongly with many those due to chloroform. One death occurred from a mixture chloroform and ether. None are recorded from methyle dichloride, or ethydene.

II. Deaths from Ether.

No.	Place.	Sex and age.	Operation.	P.M. and Remarks.
1	Guy's Hospital.	Male.	Empyema.	Asphyxia, from pus in air passages
2	Reported by "M.B., M.S."	F., 50	Polypus uteri.	"Patient was suffering from blood-poiso ing. Breathing ceased after 1 hr. 25 min operation, 5 mins. after ether was disco tinued. There was a mitral murmur. (inversion, a gush of blood came fro patient's mouth."
3	Birmingham Women's Hospital.	F., 45	Uterine tumour.	Patient very feeble Pulse failed, then r piration, 5 mins. before operation. *P.* Heart weighed 4 ozs. Kidneys rath granular.
4	York Hospital.	M. 53,	Amputation, forearm.	Asphyxia—*vide supra*.

Death from Chloroform and Ether.

	Middlesex Hospital.	F., 53	Colotomy	Began to vomit. Suddenly appeared to choking,—ceased to breathe.

CASE OF CANCER OF PANCREAS, ACCOMPANIED I PHLEGMASIA DOLENS.

By LEONARD CANE, M.D. and B.S.Lond.

The following case presents many points of interest. The patie the Rev. A. M., aged 59, and married, had always enjoyed fir rate health until lately, when he suffered from indigestion a flatulence.

On July 16th, 1881, he consulted me for the first time, compla ing of discomfort after eating, flatulence, etc. The tongue w thickly coated with a white fur. His friends had noticed that had not been looking so well for some months, but he had not co plained of anything. A few days after this, he complained of p in the right calf; and, on examination, I found slight swelling the leg, and tenderness, especially along the inner side of the and ankle. The superficial veins appeared full. The leg was b daged, and relief was derived from this. There was much sleeple ness, and chloral was given to procure sleep.

On July 29th, the other leg became affected in a similar way, a it was now found that the saphenous vein on the right leg w plugged. It was hard, painful, and very tender.

As both legs were now affected, and there was no obvious cause the phlegmasia dolens, a thorough examination was made. There w no history of syphilis, of rheumatism, or of any previous disease. T back was examined, but nothing wrong was found. The abdom was thoroughly examined; no sign of any tumour was detect Bearing in mind Trousseau's statement, that phlegmasia dolens w frequently associated with cancerous cachexia, a careful investi tion was made. There had been no hæmatemesis, vomiting, The heart and lungs were sound; the bowels constipated, but re lar; the urine normal.

On August 15th, I saw the patient, in consultation with Dr. T. Walker. We agreed that there was phlegmasia of both limbs, t there was no appreciable tumour to be found in the abdomen, a no apparent cause for the plugging of the veins. He was orde to continue antigout remedies, and to have both legs enveloped flannel bandages. Strict injunctions were given that he sho keep quiet in bed, and be moved as gently as possible, for fear dislodging a clot.

Both legs and thighs continued to swell. The saphenous ve felt firm, like cords, and were very tender, and there were patc of capillary congestion on the thighs and hips; but, beyond t there were no special symptoms. The tongue remained very coat The pulse was regular. The temperature averaged about 99°, a never exceeded 100°; this was on one evening, when the whole of t thigh part of the left saphenous vein became rather sudde occluded.

A mixture containing iodide of potassium and citrate of iron w

given, but without any apparent improvement. The thighs and were painted over the saphenous veins with iodine.

rom September 13th to September 26th, he was attended by Dr. lker, during my absence from home. He had slightly improved; legs were less swollen, the hardness of the veins had diminished, in the upper part, the veins had become pervious. There was h less pain, but still sufficient to require small doses of morphia rocure sleep.

arly in October, it was noticed that he had slight difficulty in aking. This was first discovered by his ineffectual attempts to out the word "Pocklington." He gradually became aphasic. could understand perfectly what was said, but could not get out words correctly. When given a pencil, he could write, but not ll correctly. A few days after this, it was noticed that he could unbutton his clothes so well as before with his right hand, and t he had some difficulty in picking up small things. There was siderable loss of power in the grasp of the right hand, and the it side of the face was slightly paralysed. The superficial veins the hips, in the hypochondriac and hypogastric regions, became nful, then hard and tender, and then gradually lost their tender- s, but retaining their hardness for some time longer, before be- ing again pervious. This occurred in one vein after the other two or three months. The saphenous veins cleared at one time, the œdema lessened; but a recurrence of the plugging took ce on several occasions. The femoral veins were obstructed at time. It was now observed that he was less intelligent, and t he could not bear to be read to, etc. He perfectly understood that was going on, and could with some difficulty make himself lerstood.

n November 21st, I saw him, in consultation with Dr. Paley. A rough examination was made, and diligent search for any abdo- nal tumour, but none could be found. A microscopic examina- n of the blood was made, without any other result than the dis- ery that there was a marked increase in the number of white puscles. The patient at this time had a fairly good colour, not ill a cachectic hue.

'rom this time, the hemiplegia became complete. There was alysis of the right side of the face, the right arm, and the right . The veins became pervious in the legs; and, when kept con- uously in bed, the œdema disappeared. Occasionally, vomiting urred after taking meals, but this was by no means a constant mptom. There was frequently hiccough.

n December 18th, after a prolonged examination (greatly favoured the emaciation, which had steadily progressed), I discovered, ut an inch below the umbilicus, and on the left side of the ne, a flat irregular mass, hard, not tender, as the patient did not w any signs of pain when it was touched. It was not movable, l was apparently adherent to the spine.

'rom this date, the patient gradually became more and more ex- sted. He passed his motions and urine in bed; and had fre- ntly hiccough for hours together, with occasional sickness. He s conscious up to the day before his death, recognising people, not apparently able to make any mental effort. He died on nuary 15th, 1882.

n January 16th, a *post mortem* examination was made; Dr. Kirk- od and Dr. W. E. Paley assisting me. The heart and lungs were althy. There was no peritonitis. General engorgement of the veins the omentum was present. The liver was adherent to the diaphragm r the whole of its upper surface. The stomach was healthy. The een was somewhat enlarged; on the surface, near the upper end, re some thickened patches of organised lymph. The kidneys and rarenal capsules were normal. Below the stomach, there was an gular mass, taking the place of the pancreas and extending down- rds about four inches. It was closely adherent to the spinal umn. On dissecting it away, and removing with it the duodenum l part of the aorta, vena cava, and their branches, the mass was nd to consist of a cancerous growth, which had taken the place the pancreas, leaving only a portion of the pancreas in an appa- tly normal condition. A number of cancerous glands joined into mass surrounded the aorta and vena cava, and extended as far one inch beyond the bifurcation of the aorta. On slitting up the a cava, it was found to be empty. There was no sign of inflam- tion except in the right iliac vein, which was obliterated by in- matory adhesion. The aorta appeared to be quite healthy. The d was not opened. In the veins examined, the blood was fluid, l no clots were found.

EMARKS.—This case illustrates remarkably, I think, the state- nts of Trousseau on Phlegmasia Alba Dolens (*Clinical Lectures*, . v). He states: "I have long been struck with the frequency with which cancerous patients are affected with painful œdema on the superior and inferior extremities, whether one or the other was the seat of cancer. This frequent concurrence of phlegmasia alba dolens with an appreciable cancerous tumour, led me to the inquiry whether a relationship of cause and effect did not exist between the two, and whether the phlegmasia was not the consequence of the cancerous cachexia. I have, since that period, had an opportunity of observing other cases of painful œdema, in which, at the necropsy, I have found visceral cancer, but in which, during life, there was no appreciable cancerous tumour, and in which there existed a cachexia referable neither to the tubercular diathesis, the puerperal state, nor chlorosis. I have thus been led to the conclusion that, when there is a cachectic state not attributable to the tuberculous diathesis, nor to the puerperal state, there is most probably a cancerous tumour in some organ." Further on, he states of a patient diagnosed to have leucocythæmia, "Perhaps; but he has phlegmasia alba dolens, and consequently deep-seated, concealed cancer."

In another case of annular cancer of the pylorus, without special vomiting, the same symptoms led to the diagnosis of cancer; and he states that, "in other cases in which the absence of any appreciable tumour made me hesitate as to the nature of a disease of the stomach, my doubts were removed, and I knew the disease to be cancerous, when phlegmasia alba dolens appeared in one of the limbs."

OBSTETRIC MEMORANDA.

CASE OF EXTRA-UTERINE GESTATION: TUBAL RUPTURE AND RECOVERY.

THE following case is interesting, in connection with that reported by Dr. Habgood, in the JOURNAL of February 10th.

Mrs. B., aged 30, with five children living (youngest, eight months), was suddenly taken ill under the following circumstances. On July 15th she was as well as usual, but walked some distance in the afternoon, and was a little fatigued in consequence. About half-past eight in the evening, she was stooping over some linen just sent back from the laundry, when she was seized with severe pain in the back and stomach, and thought that something had gone wrong or given way in her abdomen. Mrs. B. hastened to bed, and the rest temporarily relieved her. On my arrival at half-past nine, the pains had again increased to an alarming degree, and symptoms of collapse became evident. The pains were now of an acute lancinating character, causing the patient to cry out in agony. They continued through the night in paroxysms, and were for the most part abdominal, but extended also occasionally to the thorax and shoulders, etc. The patient described a sensation of something moving or being swayed about internally (apparently the cause of the pain), and she frequently and emphatically stated that she felt the object, as it were, "pitching about" within her. She asserted that it gave her the idea of the feet and legs of a child; and, on placing my hand on the abdomen, I once distinctly felt something corresponding to this impression. Between the pains, and at intervals, the patient had four or more severe fainting fits. About 11 o'clock, and again an hour later, there were two actions of the bowels, the fæces presenting no peculiarities. Retching fits also occurred, and once or twice there was vomit. The extremities became cold; the pulse weak, intermittent, and fluttering; and the patient became anxious, and had a presentiment of death.

The treatment was directed to sustain the bodily temperature by brandy, etc., and to relieve the pain by opiates, which were administered in full doses. Warm fomentations were also applied externally; but, notwithstanding my perseverance in these measures, the pains, etc., continued, and matters seemed going from bad to worse.

In the early morning, I obtained the service of two colleagues, one of whom had a long midwifery experience. After a long consultation, the views I had formed of the case were accepted, and it was agreed that little further could be done for Mrs. B., beyond supporting her with any nourishment she could take. Fortunately, about midday, the morphia at last began to have effect, and the pains gradually to abate. The temperature, which had been up to 102°, began to fall, and the pulse slowly to improve. The patient was sustained entirely by the suction of ice, Brand's essence of beef, and champagne.

Mrs. B. now quickly rallied. The next night was favourable; all pain subsided; the abdominal tenderness lessened; and the bladder was relieved, without difficulty, of non-albuminous urine. Extreme drowsiness prevailed for the next forty-eight hours—the effect of

previous opiates—and the patient was only disturbed to administer the beef-essence and champagne. From this date, the improvement was rapid. All unfavourable symptoms had more or less passed away by July 20th. The tenderness was trifling, the temperature lowered, the pulse improved, and the patient tranquil and cheerful. The bowels were freely relieved by the aid of castor-oil. The appetite soon improved, and the normal diet was gradually resumed. The result was complete convalescence.

Such is a brief outline of a unique and interesting case. There is room, indeed, for a difference of opinion as to its character; but, after fairly considering the symptoms in their numerous bearings, etc., we concluded that it was a case of extra-uterine gestation (probably of the tubal variety). My impression is, that embryonic development had advanced to about the sixth week or second month, when the sudden bursting of the Fallopian tube precipitated the urgent symptoms which immediately ensued. The lady had previously menstruated irregularly, and herself believed that some exceptional circumstances prevailed. The symptoms could not be attributed to simple peritonitis or enteritis. The illness was too sudden and causeless, the pains too acute, and the collapse too profound. The abdominal tenderness also was insufficient, and the temperature not high enough, to account for these maladies; nor was the pulse indicative of them. The theory of colic or spasm is equally out of the question. The sceptic may inquire, what became of the embryo. To this I reply, is it impossible that nature may have repaired the lesions, and that the accidental intruder was eventually removed by absorption?

HENRY J. KENDRICK VINES, F.R.C.P.Edin., etc.,
Littlehampton.

NEPHRITIS OF PREGNANCY AFFECTING VISION.

I THINK the following case interesting, the attack coming on late in pregnancy. Mrs. T., about ten days before Christmas, while going about her household work, noticed that everything appeared misty, and that this defect in vision gradually increased up to the time of her accouchement on the 14th ult. She was first seen on December 27th, 1882, when her urine was examined, and found highly albuminous; she was, therefore, treated with a steel mixture, and improved greatly in health. Unfortunately, at that time, her eyes were not examined ophthalmoscopically.

I was sent for at 6.30 in the morning of the 14th ult., and found her nearly blind, and in labour. Owing to inertia of the uterus, and her increasing irritability, I delivered her with instruments at noon. After the expulsion of the placenta, by pressure, she was seized with convulsions. On regaining consciousness, towards evening, she was totally blind.

The after-treatment was simply prophylactic, until the cessation of the lochial discharge, when she was treated with iodide of potassium, which, however, she was unable to take, owing to its producing iodism; she was, therefore, put on the steel mixture again. Since her accouchement, she has gradually regained her sight, so that now she is able to distinguish the figures on a watch-dial.

On January 22nd, her urine contained only a trace of albumen, which had quite disappeared by the 28th. I examined her eyes by the ophthalmoscope on February 2nd, and found some slight amount of retinitis present in both eyes, the discs appearing pale and hazy. The eyes are being kept under the influence of atropine, and I think the prognosis as to future vision decidedly favourable. FRANK SALTER, L.R.C.P., L.R.C.S.Edin.

Knottingley, February 5th.

THERAPEUTIC MEMORANDA.

SULPHUROUS ACID IN SCARLATINA.

THREE years and a half ago, I had about thirty cases of scarlet fever among the children of the soldiers quartered at Kingston, Surrey. All the cases were treated with diluted sulphurous acid internally. Externally, they were sponged over daily with warm water; as the feverish symptoms and rash declined, their bodies were rubbed over with sulphur ointment, to prevent the scurf particles from flying about the room, as well as to destroy their vitality. I forget, at present, who is the author of this latter suggestion. Sulphur was also burned frequently during the day, under the bed and in different parts of the room. All the cases did well. Two or three cases of dropsy occurred, from carelessness in letting the children play about in draughts too soon.

I have treated many cases of scarlet fever, during thirty years, in various ways; but no series of cases ever did so well, or gave less cause for anxiety, than these. C. M. JESSOP, M.R.C.P.

Preston, February 13th, 1883.

CLINICAL MEMORANDA.

VACCINATION: HOW IT IS SOMETIMES CONDEMNED.

I THINK the following case may be of interest to some of the members of the Association, showing how vaccination may be condemned from a cause that has nothing to do with it, and how totally unreliable the is evidence of an ignorant mother.

W. J. H. F., aged 9 months, the son of my coachman, was vaccinated by me in four places with very pure lymph, taken from a healthy child. The vesicles rose well, and, when I inspected the arm, it showed every appearance of a successful vaccination. The vesicles were distinct, having an elevated edge and depressed centre and the intervening skin was not inflamed. They went through their regular course, and were converted into hard and round scabs about the second week. About the third week, it came to my ears that the child was breaking out in "scabs all over," and that "the arm was greatly inflamed, and had broken out afresh," which the mother thought to be due to vaccination, although she did not like to name it to me. I at once told my coachman to send his wife and child to me. When she undressed him, I found he was suffering from a well-defined case of chicken-pox, and I at once gave a clinical lecture to my pupil upon varicella.

Now if this had been the child of someone living many miles off, and I had never seen it after the inspection, the mother would very likely have maintained, that it was due to vaccination, and would have told her friends how her child came out in scabs all over after vaccination. Peradventure, had it died through the mother not calling in medical aid, the coroner and his jury, might have dispensed with medical aid also, and agreed that the child died through the effects of vaccination, whereas it would have died from varicella. Such a case would have been more evidence for the anti-vaccinators; I should have, of course, been stigmatised as a careless vaccinator. In this case, I could easily trace the source of the infection. My stable-boy's brothers and sisters all had chicken-pox at the time, and he constantly nursed W. J. H. F. The place where the mother used to go to obtain the milk, with her child in her arms, was full of infection, as the children in the house were lying ill of it.

REMARKS.—It was singular to observe how the varicella vesicles clustered round the weak part of the arm, near the remains of the vaccine vesicles. It tends to prove that varicella has no connection with vaccine, as the child had both at the same time.

THOMAS DUTTON, M.D., M.B., M.R.C.P.

Sidlesham, February 10th, 1883.

A CONVENIENT AND DELICATE METHOD OF TESTING FOR ALBUMEN.—Dr. A. W. Abbott, of Minneapolis, sends to the *New York Medical Record* the following description of an easy and delicate method of testing albumen. "Pour a few drops of urine gently down the inside of a glass vessel containing acidulated water at the boiling point. If albumen be present, a more or less dense cloud will form, just at the dividing line between the fluid tested and the clear water above. As the contrast in opacity is between the clear water and the milky albuminous cloud, the test is very delicate, one twentieth of one per cent. of albumen making a very perceptible clouding. It has all the advantages of the ordinary heat and acid test and Heller's nitric acid test. It is even better than the latter in a cloudy fluid, as in urine with urates in excess, because the clear water above makes a perfect medium in which to detect the faintest cloud, while the layer of coagulated albumen in Heller's test may be entirely obscured by the opacities in the fluid itself. If no test tube or nitric acid is at hand, pour boiling water into a common tumbler, let it stand a moment to insure the heating of the bottom of the tumbler, empty, refill, acidulate with vinegar, and proceed as before. While this is a modification of the heat and acid test, it has the advantage of being applicable under all possible circumstances whether special apparatus is at hand or not. It is as convenient and accurate in the farmhouse as in the laboratory"

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS. February 8th, 1883.

neurysm of the Innominate Artery.—Mr. SAVORY said that he l been consulted by Dr. Andrew with regard to the case of a n suffering from thoracic aneurysm; and that, before coming to definite conclusion as to treatment, he desired to have the nion of his colleagues.—Dr. ANDREW said that the patient, whom submitted for examination to his surgical colleagues, had been nitted under his care on January 23rd, on account of a large sating tumour on the right side of the chest. The patient was a avigator," but could not give any history of injury to the chest. stated that he was 34 years old; that he had had a chancre when years of age, and had suffered from rheumatic fever five years ore admission, and again in the following year; but that, with se exceptions, his health had been good until his present illness an about two years ago. Beneath the right clavicle, and thrust- forward its sternal end, was a large pulsating tumour; no rmur could be heard over the tumour, but the heart-sounds were re loudly audible over it than over the heart itself, and the ond sound of the heart was very loud; this was a valuable sign dilatation of the vessel over which it was heard. There was ne dulness on percussion under the manubrium sterni, but other- se the percussion-note over the chest was not altered. No pulsa- n could be detected in the right carotid artery, and the radial lse on the right side was weak. The veins in the right side of neck were distended, the trachea was displaced to the left, and re was some difficulty in swallowing. When admitted, the patient d had some bronchitis with rusty sputum, but from this he had covered, and now presented no other diseased condition beyond e aneurysm, which lay very high, and was no doubt due to disease the innominate artery. Dr. Andrew desired to know whether rgery could do anything for the man.—Mr. SAVORY said that the se was interesting for several reasons. First, there was the estion of diagnosis. There could be no doubt that the aneurysm volved the innominate artery, and, from the region of the swell- g, its extent and free pulsation, probably the greater part of its cumference; but a still more important point was, whether the h of the aorta was not also involved; in very many cases of in- minate aneurysm, it eventually appeared that the aorta was in- lved. Secondly, there was the obliteration of the carotid pulse, ile the radial pulse persisted, and as to the cause of which it uld be easy to speculate. And, thirdly, there was the question treatment: Ought the operation of distal ligature to be under- ken? Distal ligature of the subclavian and carotid, simultane- sly, had been performed a considerable number of times, but, cording to Mr. Holmes, who had carefully studied the statistics, t with results which held out much promise of future success. ie alternative operation was ligature of the carotid only, an eration which the same authority seemed inclined to recommend. doubt, this operation was quite feasible in this case, but it rdly appeared desirable to undertake it, since the carotid pulse is already in abeyance. Any good effect that might possibly be tained in such cases by suddenly stopping one large stream rough the aneurysm, would not be obtained in this case. It was cessary, too, to remember that the operation itself was by no means void of danger to life, and, laying that consideration aside, had t even the negative advantage of doing no harm where it did good. It might make matters worse than before by throwing ck a powerful current into the aneurysm, and so producing pid enlargement of the tumour. This had been noticed to occur several cases immediately after ligature of the carotid. On the iole, therefore, he feared that surgery could offer little hope of nefiting this patient.—Mr. WILLETT fully agreed in the re- arks made with regard to the diagnosis by Mr. Savory, and re- rded the operation of simultaneous ligature of the carotid and bclavian arteries as a *dernier ressort*, only to be undertaken when ery other means had failed. Before undertaking it, in this case, would certainly advise trial to be made of the treatment by a rigidly limited dietary, and absolute rest. If any surgical interference were attempted, he would advise the introduction of horsehair or some other substance into the aneurysm to determine coagulation.—Mr. LANGTON thought that the arch of the aorta was most probably involved, to some extent, in the aneurysm. For the reason given by Mr. Savory, it would be useless to ligature the carotid. Absolute rest in bed, and a very limited dietary, was the line of treatment that held out the best hope. After all possible benefit attainable by these means had been realised, it might be well to try to determine coagulation in the sac, either by the introduction of some such material as horsehair, or by electrolysis.—Mr. MORRANT BAKER observed that the cessation of pulsation in the carotid might be due either to its obstruction by a clot, or by pressure on it by some overlying part of the aneurysm. That this latter event sometimes occurred was very well shown in one of the recorded cases, where ligature of the subclavian was immediately followed by renewed pulsation in the carotid. Another objection to ligaturing the subclavian was that, in those cases where it had been ligatured in the third part of its course, there was good evidence that the current through it was as great as before.—Mr. HARRISON CRIPPS suggested that the treatment by a limited dietary and absolute rest, might be advantageously supplemented by pressure on the carotid artery. The absence of pulsation in the artery did not prove that it was occluded; the capacity of the aneurysm might be large enough to damp off all pulsation in the vessels beyond it, without stopping the flow of blood through them. In one case with which he was acquainted, and where the diagnosis had been confirmed by very high authority, absolute rest in bed, combined with digital pressure on the distal arteries, had been followed by amelioration of all the symptoms, and the patient was still alive seven or eight years after he had come under treatment.

FEBRUARY 15TH, 1883.

Deformity of the Thigh gradually Developed after an Injury.—A girl, aged 17, was shown by Mr. THOMAS SMITH. Eighteen months earlier she had a fall, which seemed to have caused some considerable amount of injury, since, though she was told at the hospital to which she applied that her thigh was not broken, she had to keep her bed for two months. Since that time the shape and position of the femur (on the right side) had gradually altered, resulting, finally, in extreme deformity, the bone being bent outwards at about the junction of the upper and middle thirds. The distortion of the limb was very marked, and she was unable to walk without assistance. Mr. Smith thought that, at the seat of the deformity, some movement could be obtained between the upper and lower parts of the bone. What was the nature of the union between the two ends of the bone? It was certainly not an ordinary ununited fracture, for the amount of movement permitted was very slight. He thought that the limb ought to be brought straight, and, in order to do this, he would be prepared, if external force failed, to divide the bond of union, whatever its nature, whether osseous or not.—Mr. SAVORY thought that the whole conduct of the case turned on the nature of the uniting material. He would first advise the trial of extension and forcible straightening under chloroform; if these measures failed, he agreed that it would be proper to cut through the union.—Mr. WILLETT could not satisfy himself that there was any movement between the two parts of the femur. If force, applied externally, failed to bring the limb straight, he would advise osteotomy.—Mr. LANGTON thought he could detect some movement. The patient stated that she had been in this hospital about six months earlier; it was evident, therefore, that some very material change in the condition of her limb must have occurred since that time.—Mr. MORRANT BAKER observed that the history was so remarkable, that he imagined there must be something more than a mere fracture. In a very interesting case which he had seen a short time before, the first symptom of necrosis of the bone had been a spontaneous fracture; and this case resembled the former one in some symptoms, especially in the pain, which was caused by deep pressure. With regard to treatment, he agreed with Mr. Smith.—Mr. HOWARD MARSH did not think that a satisfactory opinion could be formed, unless the patient was examined under chloroform. If the deformity were due to fracture, it was an unusual kind to occur from fracture in that situation. He thought Mr. Baker's suggestion ought to be taken into consideration.—Mr. WALSHAM said that he could not detect any movement between the upper and lower portions of the femur with any certainty. It was very possible that there was some disease of the bone. If the limb could not be brought straight by external force, the best treatment would be to perform osteotomy.

NORTH STAFFORDSHIRE INFIRMARY.

CASE OF LIGATURE OF THE VERTEBRAL ARTERIES FOR EPILEPSY.

By Mr. W. Dunnett Spanton, F.R.C.S.Ed.

Robert W. J., aged 11 years, a spare intelligent boy, was admitted on March 13th, 1882. His mother was a nervous excitable Welsh-woman; but no history of epilepsy in the family could be obtained. The boy had had fits from early childhood, dating from the time of dentition; and, with occasional intervals of at most three months, they had continued to increase in frequency, and just before admission reached seven or more in a day. The attacks were of true epileptic character, always succeeded by drowsiness and mental confusion. During the fortnight he was kept under observation before operation, the fits varied in number from seven to one a day.

On April 1st, the patient being under the influence of chloroform, the left vertebral artery was ligatured in the suboccipital triangle, between the atlas and the axis. An incision, two inches long, was made along the posterior border of the sterno-mastoid, commencing about half an inch above the mastoid process; a second incision, an inch long, was made from the upper fourth of the first, obliquely backwards in the splenius muscle, and then the rectus capitis posticus major muscles were divided, and the dissection was carefully carried down until the vertebral artery could be seen and felt, where it turned round the transverse process of the axis; a branch of the occipital was wounded and tied; an aneurysm needle was passed under the vertebral from without inwards; and the artery was tied with a chromic catgut ligature. A horsehair drain and three silkworm gut sutures were inserted, and eucalyptus gauze dressings were applied. On the two days following, the patient had two fits. From that time, he was free from them, recovered rapidly from the operation, and was apparently quite well, with the wound healed, from April 18th until May 8th, when he was allowed to go home, affording his friends the opportunity of stuffing him with sweets and cheese. The result was that the fits returned, and he had twenty-five in the following nine days.

Mr. Spanton then decided to ligature the right vertebral artery; and, on May 17th, operated, under chloroform, in the manner advised by Dr. Alexander. The artery was found in its normal position, behind the common carotid, and was ligatured without difficulty, chromic catgut being used, under the carbolic spray. There was no bleeding worthy of notice. A horsehair drain was inserted, the wound closed with silkworm sutures, and a carbolic dressing applied. The pupils remained equal throughout. The temperature in the evening was 98.2° Fahr. He passed a restless night, and complained of pain at the epigastrium. He had four fits; in the first three, the eyes rolled towards the right; in the last, to the left side. The pulse was 120, and the temperature 101.6°.

May 19th. He was restless and uneasy, and had four fits. The wound had a reddish blush around it; it was dressed with eucalyptus oil. He was ordered calomel and scammony and a mixture containing bromide of potassium.

May 20th. Epigastric pain was still complained of, and he had two fits. The wound, when dressed, was looking quiet. The temperature was 102° in the morning, and in the evening 104°.

May 21st. He had only one fit, but complained of pain in the right side of the abdomen. The wound was looking well. The temperature, which at an early hour was 104°, sank at 9 A.M. to 98.4°; and at 4 P.M. rose to 107.4°. He was then very restless, with acute pain in the penis, but no priapism. Respiration was hurried and superficial. He was ordered cold sponging, and four grains of quinine every half-hour. He was sick after the second powder, and only had four in all. The temperature at 5 P.M. had fallen to 103.6°; at 8.30 P.M., he had a fit, remaining very quiet and drowsy afterwards; the temperature falling at 10 P.M. to 98°.

May 22nd. He had a very good night, and the temperature was 101°. At 9.30 A.M., bright blood, to the amount of more than three ounces, flowed from the wound; the dressings were removed, and the hæmorrhage then ceased. A sponge, soaked in iced carbolic water, was bandaged tightly over, and there was no recurrence of bleeding.

May 23rd. He had slept well, looked better, and had had no fit. The temperature at 10 A.M. was 99°.

May 24th. The wound was looking clean and healthy, and he had had no fit. The boy progressed fairly well from this time up to June 6th, when signs of pneumonia at both apices, but especially the right, appeared. The sputa were mixed with blood. Over the upper lobe of the right lung there was dulness on percussion, and coarse crepitation was heard. He complained of pain over this region, and in the right arm. The wound was almost closed, and the tissues were indurated around. A saline expectorant mixture was ordered.

June 7th. He slept fairly. At 7 A.M., he coughed up about an ounce of bright blood; and three hours later hæmoptysis to the extent of five or six ounces occurred. Gallic acid, ice, etc., were ordered; but it was quite clear that weakness was rapidly increasing.

June 8th. Restlessness, increased rapidity of respiration, dry tongue, and drowsiness, betokened a fatal termination; and he died in the evening. There had been no fit since May 21st.

The *post mortem* examination was made by the house-surgeon on June 9th. The neck and chest only were examined. On reopening the wound in the right subclavian triangle, a fibrinous clot about the size of a large nutmeg was observed; and, on removing this and exposing the vertebral artery, a minute orifice was seen above the point of ligature, against which was lying a hard knot of catgut; its edge appeared to have eroded the artery. All the surrounding tissues were soft, friable, and matted together. Below the clot and passing under the clavicle, was a more recent coagulum, pushing downwards and forwards the apex of the right lung. The first and second ribs were bare and rough at the posterior part of the thorax. At one point, this coagulum was found to communicate with the apex of the lung, the whole of the upper lobe of which was soft and friable, and universally adherent to the parietal pleura. The upper portion of the vertebral artery was patent; the artery below the point of ligature was quite impervious, and incorporated with the fibrinous mass already described. The subclavian and other arteries were intact, and normal.

Remarks by Mr. W. Dunnett Spanton.—Dr. Alexander, of Liverpool, first called attention to the fact that ligature of one or both of the vertebral arteries had a more or less curative influence upon epilepsy. I do not now propose to enter upon the question of the causes of epilepsy, nor the theories which have been propounded as to the proper mode of proceeding to cure it. These are so numerous and so varied, that it would occupy a considerable space even to enumerate them. It will be sufficient for my present purpose to assume that there are numerous instances of true epilepsy to be met with, which probably depend on some altered relation between the blood and nerve-supply of that portion of the brain or medulla from which that, so-called, nerve-storm proceeds, which culminates in an epileptic attack. In these cases, it is reasonable to believe that a modification of the blood-supply may have such a direct influence on the vascularity of a portion of the brain, as to arrest, more or less permanently, that disturbed nervous condition which produces a fit. What the exact change is which is so induced is a matter for careful investigation. The cases which are recorded by Dr. Alexander attest the fact that, after the ligature of one or both vertebrals, patients who had numerous epileptic fits previously had ceased to have any; and, in one instance, a young woman, who had 289 attacks during the year, and 124 during the month preceding the operation on the right vertebral artery, had not a single fit up to the time of the report of the case two months afterwards. The smallest number of fits recorded in this case before operation was six in one month. In face of such facts, it seems to me that it has become our duty to give a fair trial to any measure which holds out any hope of successfully overcoming such a dire and prevalent affection.

Presentation.—Dr. Pullin of Sidmouth has been presented by some of his friends with a very handsome microscope and a purse of 100 guineas, and Mrs. Pullin with a silver tea-urn and a silver and glass casket, as a token of esteem and confidence.

Atropia in Morphia-Poisoning.—Dr. E. Stuver, in the *Philadelphia Medical News*, reports the case of a woman who took nearly eleven grains of morphia, which had been very injudiciously left for her by her attending physician. When Dr. Stuver was called to attend her, she was profoundly narcotised, pulse 100. He at once gave her one-thirty-fifth of a grain of atropia in solution. For a period of fifteen to twenty minutes, her symptoms grew gradually worse, her breathing becoming very laboured and shallow, and her pulse about 150. From this time forward, the symptoms gradually abated. An hour after the first injection, it became necessary to administer a second dose of atropia. Recovery was prompt. The following day, the patient had a dull heavy frontal and vertical headache, and some nausea. There were no motor nor sensory disturbances, except slight numbness in the knees. Her pupils were slightly enlarged.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 20TH, 1883.

J. WHITAKER HULKE, F.R.S., F.R.C.S., President, in the Chair.

Report of the Morbid Growth Committee on Dr. Hadden's Specimen of Disseminated Sarcoma.—The report, which was signed by Mr. utlin and Dr. Goodhart, agreed with the general conclusions rrived at by Dr. Hadden; but the Committee had had great diffiulty in coming to a definite determination as to the nature of the umours; acting upon a suggestion that they might possibly be of arasitic origin, the specimens had been submitted to Dr. Cobbold, ho said that, in the kidney they much resembled psorospermial acs, but had characters which differed from any already described; o positive opinion on this point had been formed, and there were ppearances, especially in the heart, which tended to confirm the iew taken by Dr. Hadden that the disease was really a sarcoma; ossibly these appearances were due to an independent disease, coxisting with a parasitic infection.

Two Cases of Aneurysm of the Arch of the Aorta.—Dr. SAMUEL EST who showed these specimens, said that the aneurysmal sac, in ie first case, had ruptured in a very unusual direction; the physical gns of aneurysm during the life of the patient, who was a managed 38, ere notmarked, but there was a double cardiac murmur. At the ecropsy a sacculated aneurysm of the aorta was found, which communiated by a small aperture with the pulmonary artery. The second speciien was an aneurysm from the middle part of the arch of the aorta; eath occurred from embolism of the aorta. The patient was a bourer, aged 37, who presented physical signs obscurely pointing thoracic aneurysm. He died suddenly after an attack of dyspnœa. t the necropsy, a sacculated aneurysm of the arch of the aorta was ound extending upwards between the two carotids; lying at the outh of the aneurysm, and obstructing the aorta was a large minated clot, five inches long, which, from its form and size, had idently become dislodged from the left ventricle. Clots in the art in cases of slow death from exhausting diseases were, in Dr. est's experience, of frequent occurrence.

Aneurysm of the Abdominal Aorta.—This specimen, which was own by Dr. A. Q. SILCOCK, was an instance of diffuse aneurysm of ie abdominal aorta. Nothing in the history allowed the period at hich the sac ruptured to be determined. At the necropsy, all the bdominal organs were found to be displaced forwards by a large ass of blood-clot, for the most part laminated, and evidently posited weeks or months earlier. This effusion extended upards as high as the body of the tenth dorsal, and as low as the interrtebral cartilage between the third and fourth lumbar vertebræ; had evidently started from a sacculated aneurysm springing from e aorta opposite the superior mesenteric artery; the bodies of the st dorsal and first and second lumbar vertebræ were eroded, and e dura mater exposed. The effusion in its downward course had panded the sheath of both psoas muscles, and on the left side had ached so low as to give rise to a fluctuating tumour beneath Pourt's ligament in the position of an ordinary psoas abscess. Dr. lcock referred to two other somewhat similar cases recorded in the *ansactions* of the Society; the closest resemblance was borne by ie in vol. xix, where the blood, which followed the course of the oas muscles, gave rise to a pulsating tumour in the upper third of e thigh; in this case, Sir William Fergusson ligatured the femoral tery.—Dr. WILKS inquired what were the precise characters of the *uit* in the case of rupture into the pulmonary artery? Dr. Addin and Dr. Fagge had met with similar cases; and in both of ese the murmur was diastolic; and the latter had said that if the rmur had been heard at the apex he would have called it prestolic.—Dr. FREDERICK TAYLOR said that some years ago he had owed a case where the condition of the aperture clearly pointed to e rupture having occurred long before death. Recently, he had d another case where the sac of an aortic aneurysm had ruptured o the pulmonary artery; in this case, there was a systolic murmur the base, and a slight diastolic murmur, which soon became less rked. The systolic murmur was very localised at the base, and diagnosis of aneurysm was made; but there were no symptoms raise a suspicion that the pulmonary artery was in any way inved. At the necropsy, it was found that there was an aneurysm mediately above the aortic valves, and that this opened by a small erture into the pulmonary artery. On the inner surface of that ery, just opposite the aperture in it, was a patch of arteritis, on nich there were vegetations. This seemed clearly to show that the rupture must have occurred some considerable time before death and, as the patient had been under close observation for two months, it seemed probable that it had occurred earlier than that. —Dr. WEST said that it appeared probable that the rupture in his case had occurred at least ten weeks before death. The diagnosis of aortic aneurysm was made. There was a loud double murmur, loudest on the left side, and propagated towards the left side of the sternum; the murmur commenced with the latter part of diastole, and extended through the whole of systole, so that it seemed to have the same character as in Dr. Fagge's case.

Tumour of the Thigh.—A living patient, a little boy aged 9, who had an enormous tumour of the left thigh, was shown by Mr. ARTHUR DURHAM. About April, 1882, a swelling was first noticed after a blow. He was admitted into Guy's Hospital in September, 1882, and the tumour then measured twenty-one inches in circumference; since then the increase had been very considerable. It was probably a large rapidly growing osteo-sarcoma, starting, he thought, from the bone itself. If the opportunity occurred, he proposed to submit the tumour to a thorough examination.

Recurrent Cartilaginous Tumour.—Mr. GEORGE LAWSON exhibited a recurrent cartilaginous tumour of the head and neck. The patient had had the growth removed eleven times; five times by the late Sir William Fergusson, and six times by Mr. Lawson. She first came under Mr. Lawson's care in December 1877, and he then removed a large cartilaginous tumour, which nearly filled the mouth, together with a large portion of the lower maxilla. The operation was reported in the *Lancet* (June 8th, 1878). Since that date there had been five operations for extensive recurrences of the disease, and on each occasion masses of cartilage, similar to those exhibited, were removed. The recurrences had been in the neck, and in the temporo-maxillary region, extending towards the base of the skull from the glenoid fossa of the temporal bone; and in the cheek between the mucous membrane and the external integument. At each operation the tumour was found to be composed of large isolated masses of cartilage, varying in size from that of the closed fist to a small nut, packed tightly together, and each portion enclosed in a distinct capsule, from which it could, with a little difficulty, be enucleated. The growth appeared to spring from the outer surface of the periosteum. Dr. Thin, who had examined the tumour removed on the first occasion, had reported that the microscopical structure was somewhat unusual, and had referred it to the class described by Cornil and Ranvier under the name, "chondrôme hyaline globulée." The specimen exhibited was removed on February 10th, and the patient was stated to be rapidly progressing towards recovery.—Mr. BARWELL said that in tumours of the jaw it was advisable to remove the whole of the bone on the affected side.—Mr. BUTLIN observed that the microscopical structure was evidently somewhat difficult to understand; but from the naked eye appearances, he would judge it to be a chondo-sarcoma, or, as he preferred to say, a chondrifying sarcoma. Tumours growing as this one did, from the outer surface of the periosteum—parosteal tumours, as Virchow called them—were much less malignant than those which grew from its inner surface. He had recently twice operated on a case of parosteal tumour, where the interval before recurrence was six months.—Mr. EVE said that in cartilaginous tumours of the testicle, it was easy to see that the cartilaginous masses were surrounded by sarcoma tissue, and to trace the transformation of the latter into the former.

Abnormality of the Bones and Muscles round the Shoulder-joint. —Mr. LOCKWOOD showed the humerus and scapula from a dissecting room subject. The humerus presented an outgrowth to which the infraspinatus (and the teres, partially) were attached. He thought the deformity was possibly due to an injury which had caused a fracture and displacement of the great tuberosity of the humerus.

Bone Disease in Animals.—A series of preparations illustrating various forms of chronic disease of the bones, in the lower animals, was shown by Mr. SUTTON. 1. The first specimens were from a lizard, which had died two years after its admission to the gardens of the Zoological Society; the costal arches were not only distorted at the junction of the ribs and cartilages, but also by a swelling of the shafts of the ribs; in these animals there are no epiphyses, the growth of the long bones being provided for by a layer of ossifying tissue immediately beneath the articular cartilage, and in the bones shown on this occasion there was a layer of abnormal spongy tissue in the situation described; the compact tissue of the shafts of the long bones was very thin, and the medulla contained a large quantity of oily material; the skull bones were very unnaturally soft, being of the consistency of leather. Attached to the humeri

and to the hyoid bone there were numerous peculiar cartilaginous growths. 2. Specimens from a bird (*Rhea*, one of the *Struthionidæ*), showing a great alteration in the shafts of the long bones, which were reduced to mere shells of soft bone, including cavities containing oily material; the skull also was remarkably soft, and at the epiphysis of each metacarpal bone was a cartilaginous tumour. 3. Specimens of the bones of four monkeys; the first monkey had, during life, been supposed to be paralysed; the ribs were deformed but there was no beading, the ileum and the scapula were extremely deformed by muscular action; the long bones were softened, and curved at their lower ends, the cancellous tissue in that situation being exceedingly soft, and its trabeculæ, as well as the medulla, filled with fat; on the skull were osteophytes. In the second monkey the long bones presented the same condition, but the skull in the anterior and posterior fossæ was in a condition of extreme cranio-tabes. In the third monkey there was an extreme degree of osteoporosis of the skull, but no deformity visible during life, and no disease of other bones. In the fourth monkey there was slight lateral curvature, and a deformity of the radius and ulna, which Mr. Sutton ascribed to osteitis deformans. From his observations on animals, he concluded that the various conditions to which the terms rickets osteomalacia and osteitis deformans were applied, all owned a common cause, namely, chronic inflammation. Where periosteal deposit was irregular, osteophytes resulted, where it was excessive osteitis deformans; osteoporosis carried to an excessive degree, resulted in osteomalacia, and epiphysial growth, where excessive, produced rachitis.

Curvature of the Femur.—Mr. BOWLBY showed two cases of curvature of the femur; in the first case, the distortion of the femur, which was bowed forward, was the result, he thought, of inflammation following on long continued suppuration produced by an injury; the deformity had appeared early in life. The bone was uniformly curved, and its surface roughened by irregular subperiosteal deposit; the compact tissue of the shaft was thin, and immediately above the condyles was a quantity of soft mortar-like material, and the whole of the medullary cavity was also occupied by a similar substance; this was probably the caseous remnant of old inflammatory material. The curving of the femur, which, as Sir James Paget had pointed out, did not usually occur in chronic inflammatory changes, was due, no doubt, to the absence of any sclerosing osteitis. In the second case, the curvature of the femur had been gradually produced during the last ten years of the patient's life, and had rendered the right limb two and a half inches shorter than the left. The patient, who was a cabman, aged 64, died from an injury to the head. The bone was bent outwards and forwards in one uniform curve; the shaft was six and a quarter inches in circumference (*i.e.*, two and a half inches greater than normal), and rough on the surface from the presence of flattened, nodular, osseous growths. Some parts of the head and neck of the bone presented changes like those seen in rheumatoid arthritis. The compact tissue of the shaft was thickened, and new bone, in some places hard, and in others cancellous, encroached on the medullary canal. This case was, he thought, a very typical example of osteitis deformans, though it was the first instance yet described where the femur only was affected.

Three Cases of Bone-disease in Childhood leading to Deformity.—Three living specimens were shown by Mr. BARWELL. The first patient was a boy, aged 8 years; one tibia was thickened, an inch longer than the other, and bent forwards; this was due, he thought, to hyperplasia of the bone, and was not rachitic. The second patient was a girl, aged 4½ years, who was extremely ricketty; both tibiæ were much bent forward, and were not equal in length; this condition Mr. Barwell also attributed to hyperplasia. Both cases, he contended, showed that the deformity in rickets was not due merely to the weight of the body acting on softened bones, but was produced by a hyperplastic malady which affected by preference certain parts of particular bones. The third patient was a young man, aged 22; he was born healthy and well formed, but, at five years of age, he suffered from a fever, after which his bones became soft and bent; he presented double genu valgum, curving of the tibia, unlike that seen in rickets, and such great curving of the left radius, that the distance, in a straight line from the head of the bone to the styloid process, was only three-fourths of the length of the bone. This case was, he thought, certainly not a case of rickets, but an instance of a disease, inflammatory in its nature, for which there was as yet no name.—The PRESIDENT said that the specimens shown by the last three speakers raised a subject of great interest, but one which it was too large to hope to discuss at so late a stage of the meeting. He regretted that this was the case, as the series of specimens brought forward by Mr. Sutton was most important. He would merely remark, with reference to that series, that all the animals had lived under unnatural circumstances as to food, exercise, and surroundings, which all tended to produce a condition of perverted nutrition.—Mr. R. W. PARKER agreed that the animals from which these specimens were taken had probably been exposed just to those influences which were known to predispose to bone-disease in young subjects. Roloff had recorded a series of experiments, which were intended to illustrate the identity of osteomalacia and rickets, and to show how the disease could be produced in its most typical manifestations, without other damage to the animals, by simply feeding them on a diet deficient in lime salts. It would have been very interesting if Mr. Sutton could have traced any such cause in his cases; for they seemed to be cases of true osteomalacia, both in their naked eye and in their microscopical appearances. He could not accept Mr. Sutton's views on their clinical analogies and relations. In the first place, it remained to be proved whether, under normal circumstances, there existed beneath the periosteum any new growth, which could become an osteophyte under condition of irregular growth; he had seen many specimens of osteophyte, from which the periosteum could be peeled off easily without showing any trace of inflammation. Again, if osteoporosis were an antecedent condition of osteomalacia, the latter disease should be much more common than it actually was. Osteoporosis was frequently seen in the *post mortem* room, especially in the skull bones of young subjects; but osteomalacia was a rare disease, even in adults, and hardly existed in children. Finally, as regards epiphysial overgrowth, he deprecated the idea of calling that rickets; for rickets was a much more general disease, neither always nor chiefly associated with manifest bone-disease at all.—Mr. TREVES questioned whether the classification suggested by Mr. Sutton would be found practically useful. The skull of the third monkey showed a condition commonly seen after malnutrition during the period of growth, while it could not be demonstrated to be in any way connected with inflammation.—Mr. EVE said that all the specimens shown by Mr. Sutton were from young animals whereas some of the diseases—for instance, osteomalacia—were diseases of later life; with regard to Mr. Barwell's theory, he would remark that, in rickets, the formation of bone did not occur only on the side towards which the bone was curved; it was also seen on the concave side.—Mr. SUTTON said that the question whether or not any given condition of bone was due to inflammation or no, could only be determined by examination of recent specimens. He had based his opinion, that the diseases in the bones he had exhibited were all inflammatory, chiefly on two points, namely, that the vascularity was extremely increased, and that the periosteum was intimately adherent to the bone. He used the term osteomalacia in describing some of the specimens, because the microscopical appearances corresponded with those seen in adult osteomalacia.

Card Specimen.—Dr. CARRINGTON showed a specimen of double aneurysm of the aorta; one sac originated from the front of the first part of the arch, and had formed a pulsating tumour beneath the second rib; the second sac arose near the end of the arch, was much larger, and had been the cause of death by direct pressure on the trachea.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 15TH, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Discussion on the Report of the Committee appointed for the purpose of inquiring into the Mortality referable to Alcohol (*vide* BRITISH MEDICAL JOURNAL, January 20th, 1883).—Dr. MORTON, in opening the discussion, remarked that the largeness of the number of cases the committee were able to collect was a matter of congratulation in two respects; firstly, as evidencing the interest of the profession in the inquiry instituted by the Society; and, secondly, in sufficing to eliminate, as nothing but large numbers could have done, some sources of error to which this, and all inquiries of a statistical nature are notoriously exposed. He thought the figure eventually arrived at, viz., 14 per cent., was to be thoroughly relied upon as representing, at least for the metropolis, the proportion of deaths in the causation of which alcohol played some part. In Table B, and the sections based upon it, it is to be remarked that the causes of death set down are the certified causes; and it should be borne in mind that certificates, which, under the present system, are open to the inspection of sorrowing relatives, and perhaps critical insurance offices, do not always express the whole mind of the certifier. As the immense preponderance of deaths from diseases of the liver, and other allied organs, it is to be remarked how very small the mortal-

from these causes would be, apart from the results of alcohol and of residence in tropical climates. Explaining the smaller mortality amongst the alcoholic from chronic pulmonary disorders, the speaker pointed out that the heavy demands of these exceedingly common diseases, could not be satisfied after alcohol had exacted its tax in the shape of liver-, kidney-, and brain-diseases, which engrossed 50, 20, and 85 respectively, out of the whole total of 397 in Class C. The later age of phthisis might be accounted for by that distinct form which had been described by Dr. Richardson as occurring among hard drinkers.—Dr. CLEVELAND thought the report remarkable by the absence of any deductions, and asked the *cui bono* of it; there was no question as to the harm done by alcohol, but the report told them nothing they did not know before.—Dr. NORMAN KERR remarked that the figures of the report, if applied to the United Kingdom, would make up a total not far short of 50,000 deaths due to intemperance, or 5,000 more than the computation he had made some years since, which had met with much adverse criticism. One benefit resulting from the report would be, that the attention of medical men would be more drawn to the effect of alcoholic excess on the death-rate of their patients in the future, than it had been in the past. The committee, he thought, were well advised in not being too positive in their deductions; it was very difficult to arrive at the truth, both from the personal idiosyncrasy of the observers, and the inherent difficulty of the subject. Death-certificate counterfoils were no very reliable bases, but he suggested that the Collective Investigation Committee of the British Medical Association should ask 500 or 1,000 medical men in different parts of the country to record simultaneously, for a period of twelve months, the causes of all the deaths occurring in their practices, by which means an accurate approximation might be made of the number of deaths annually caused by personal excess in alcohol.—Dr. B. W. RICHARDSON remarked that deaths from alcohol were seldom or never recorded as such, on death certificates, from feelings of delicacy to the friends. As to the paucity of deaths from phthisis amongst drunkards, he agreed with Dr. Morton's explanation, and pointed out that phthisis and alcohol asserted their influence at different times, deaths from the former cause taking place earlier in life, and mostly before alcohol could have exerted its baneful influence; alcohol could certainly exercise no action preventive of phthisis. He could not understand the lessened mortality from heart-disease, and thought there was a want of accuracy in the definition; he had found nothing so common amongst the intemperate as cardiac disease, not so much valvular as structural in nature.—Dr. FITZPATRICK believed that the net scientific value of the report was *nil*; the inquiry was tainted in its origin by its party character, and he looked upon it as a manœuvre on the part of certain persons to "*exploiter*" the Harveian Society in the interests of the temperance propaganda. Having quoted a passage from Mr. M. Arnold's speech on "Lucidity," to the effect that "There is no other country in which so much nonsense is as firmly believed as in England," he urged the Society not to add to the existing capital of nonsense by affirming, on scientific authority, that the moderate use of wine, beer, and spirits is unwholesome.—Mr. ASTES said, that were not deaths from abdominal diseases amongst drunkards much increased, an advocate of the liquor traffic might have suggested that adults, and particularly those who would avoid death from thoracic diseases, should take alcohol without stint. In table 3 of the report, the percentage of the mortality amongst drunkards from various diseases was compared with that of the entire population of London from the same diseases. As the entire population comprised abstainers, temperate persons and drunkards, the difference for and against the latter would be accentuated if their deaths were contrasted with those of the temperate and abstainers only. This would give the former a still lessened percentage from thoracic diseases, and a still more striking increase of deaths from abdominal diseases. Further, all persons of Class C, Table 3, were not necessarily greater drunkards than those of Class B; nor, possibly, were all of Class C habitual drunkards. A first debauch might, as in accidents, cause death, classed as entirely due to alcohol. These tables told only part of the tale of the effects of alcohol; in order to cover the whole inquiry, one must consult the general practitioner, the surgeon, the physician, the physiologist, and last, though not least, the relieving officer of the poor, since alcohol costs money, incapacitates breadwinners, and in other ways brings poverty in its train.—Mr. BURRIDGE said, the report would be considered of great value by the actuarial profession, which, for the moment, he had the honour to represent. The report threw additional light on the mortality arising from irregular habits. This was a source of much trouble to insurance offices, and it was necessary to impose a very heavy extra premium, or to decline altogether cases, where a suspicion as to habits existed. He pointed out that the mortality amongst publicans was far higher than among members of any other trade, the percentage of deaths amongst them being very similar to those of Classes B and C in this report, combined. Experience of those offices which had insured a large number of abstainers, showed that among them the actual claims were only 70 per cent. of those expected; among the non-abstainers 99 per cent. of expected claims. He concluded by hoping the Harveian Society would extend their useful labours.—Mr. STEWART, who acted as chairman of the committee, said that one good he hoped would result from the report was a more accurate use of terms in filling up death certificates; he had been much struck with the looseness of phraseology adopted by medical men. Another good was that the profession would watch more closely the effects of alcohol on their patients, and treat them accordingly.—Dr. FRANCIS considered that a similar investigation in India would produce valuable results. Persons came home from that country attributing their ill-health to its climate; but the real cause of it was that they did not adapt themselves to the climate, but, by the use of stimulants, taxed their livers to an extent which would be injurious at home, but which, in the tropics, was disastrous; for, owing to the diminished capacity of the lungs for eliminating carbon, that duty fell upon the liver, which, under ordinary circumstances was hardly equal to the strain.—The PRESIDENT explained the reduced number of deaths due to diseases of the heart, kidneys, and lungs, by the fact that the disease of the liver was the most prominent symptom at the time of death, and in the tables of the report, only the principal cause of death could be recorded. As to the smaller proportion of deaths from alcohol amongst women, he suggested that a large number of women were secret drinkers; and managed to keep their secret so well, that even the medical man failed to find it out.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, FEBRUARY 5TH, 1883.

JOSEPH WALKER, M.D., President, in the Chair.

Inaugural Address.—Dr. WALKER, the newly elected President, took his seat for the first time, and delivered his address, in which he reviewed the present state and future prospects of the Society, and suggested certain changes with the view of rendering the meetings more attractive to the general body of the profession.

Electric Lamps.—Mr. NATHANIEL STEVENSON showed an electric lamp for illuminating the cavity of the mouth, which had been made for him by the Swan Electric Light Company; the strength of the current, generated by a bichromate battery of four cells, was regulated by a very ingeniously devised rheostat of his own invention.—Mr. BOYD WALLIS also exhibited a lamp of similar design and purpose, but the light was produced by the incandescence of a carbon filament *in vacuo*, instead of by the heating of platinum wire. In the latter case, if too strong a current were used, the platinum would melt, and the lamp was thus rendered useless; hence the necessity for the ingenious but complicated rheostat described by Mr. Stevenson. The carbon filament was practically indestructible, so that an excess of strength in the current was immaterial. Mr. Wallis then showed a double induction electric motor, of American manufacture, which, with a six-celled bichromate battery, would move a dental engine or lathe at any speed required.

Dental Caries.—Mr. HENRY SEWILL opened a discussion on the question: "Do the incontrovertible facts which we now possess as to its etiology and pathology fully account for the phenomena of dental caries?" He thought there could be no doubt that this question should be answered affirmatively. He thought it had been satisfactorily proved that caries was essentially a disintegration of tissue, due to the action of external causes. The fact that caries occurred in dead teeth and in artificial teeth made of ivory, was of itself sufficient to show that the disease was not of constitutional or even of local inflammatory origin. The chief agent in this disintegration was certainly acid derived from the decomposition of food, from deranged secretions, acid mucus, etc. The predisposing causes were whatever rendered the enamel and dentine more easily acted upon by acids, as fissures and malformations of the enamel, soft, badly formed dentine, crowding and irregularity of the teeth, which favoured the lodgment of decomposing *débris*, and interfered with proper cleanliness; and anything which favoured the formation of acid within the mouth, as a bad state of the secretions, chronic

dyspepsia, etc. Mr. Sewill then reviewed the authorities on the subject, showing that Tomes, Wedl, Leber and Rottenstein, Magitôt, and others, were all of opinion that caries was the result of ordinary physical causes acting from without.—Mr. COLEMAN replied that, if acid was the sole cause of caries, the result would be a more general action upon the teeth than was commonly met with. He had tested the state of the mouth in some hundreds of cases of acute caries, but could not detect any unusual acidity. The statement that caries in living and in dead teeth was identical, had been denied by some observers. Dr. Frank Abbott asserted that he had found distinct evidence of inflammatory change in carious dentine, and it appeared to be a fact that the changes found in carious cementum were identical with those found in bone during the progress of undoubted inflammation. He thought, also, that the appearance of caries in previously sound teeth, which not unfrequently occurred after severe illness, pointed to the influence of a constitutional, and not merely a local, cause.

OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING, WEDNESDAY, FEBRUARY 7TH, 1883.

Dr. MATTHEWS DUNCAN, President, in the Chair.

Perimetric Abscess.—Mr. GRIFFITH showed a specimen of retro-uterine perimetric abscess due to the opening into Douglas's pouch of a number of rectal fistulæ—a cause of these abscesses he believed not previously described.

Epithelioma of Cervix removed during Pregnancy without causing Abortion.—An account of this case by Dr. GODSON was read. The patient, aged 35, had suffered for twelve months from yellow or watery fœtid discharge, latterly from hæmorrhage and occasional pain. Till then she had been healthy. The cervix was enlarged and ulcerated, the uterus mobile. The cervix was removed by the écraseur four days after the cessation of hæmorrhage, believed by the patient to be menstrual. No bad symptoms followed. Nine days after the operation, a sound was passed into the uterus, and four days after this, a fœtus of about eight weeks' development was expelled. The author remarked that he believed the abortion was due to the use of the sound, and not to the operation. He advocated the removal of cancerous growths, if possible, at any stage of pregnancy. His case supported the view that cancer favoured the occurrence of pregnancy, the patient not having been pregnant for six years previously. He remarked on the patient's previous good health; the late onset of pain; and the importance of not pulling down the cervix when using the écraseur.—Dr. ROUTH remarked on the advantages of early removal of the disease during pregnancy, when possible.—Dr. PLAYFAIR thought cancer of the cervix more prone to occur in women in whom that part was previously unhealthy. When pregnancy occurred in a cancerous uterus, the cancer often grew with extreme rapidity. He thought the use of the écraseur to amputate a cancerous cervix was the worst way of doing it: by this the superficial part only was shaved off, and the diseased base left. The best operation was that of Marion Sims, which he (Dr. Playfair) had done repeatedly, with very satisfactory results.—Dr. HERMAN thought that if cancer of the cervix favoured conception, cases of the complication of cancer with pregnancy would be much commoner than they were. The galvanic écraseur not only cut through the cervix, but burnt the tissues on each side for some little distance from the line of division. Where the wire tended to slip it was his practice to cut with scissors a shallow groove for it to lie in.—Dr. ROGERS mentioned a case in which removal of a cancerous cervix was followed by abortion. He thought that in this operation, Douglas's pouch might be opened, notwithstanding every precaution.—Dr. EDIS remarked on the practical importance of the early diagnosis of uterine cancer. Where there was doubt, a second opinion ought to be at once procured.

The business of the annual meeting was then proceeded with. The list of officers nominated by the council was accepted by the society; and the President delivered an address, an abstract of which will be found in the last issue of the JOURNAL, p. 297.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, JANUARY 19TH, 1883,

WILLIAM MOORE, M.D., President, in the Chair.

Living Specimens.—Mr. A. H. BENSON exhibited a case of hachancre on the upper eyelid; and Dr. J. MAGEE FINNY a case vesiculo-tubercular disease of the skin, of eighteen years' standing

Specimens Exhibited by Card.—Dr. A. W. FOOT exhibited drawing of facial chromidrosis; Dr. H. KENNEDY, urinary calculus; Dr. C. I. NIXON, aneurysm of the arch of the aorta, obliterating the arteria innominata; Dr. H. C. TWEEDY, heart, showing vegetations on the mitral and aortic valves; and Dr. F. J. B. QUINLAN, (1) bacillus of tubercle in sputum, and (2) bacillus of tubercle in lung-tissue.

Empyema: with Notes on Antiseptic Fluids and Drainage-Tubes.—Dr. RICHARD A. HAYES read a paper on a case of empyema, treated by the radical method, with notes on some antiseptic fluids employed. After some observations, pointing out especially the great danger of producing general anæsthesia in cases of intended operation on large fluid effusions in the thoracic cavities, he mentioned the particulars of the case. A man, aged 22, was the subject of right empyema, of eighteen months' standing, with severe hectic and wasting. On his admission to Steevens's Hospital, the pus was thrice removed by aspiration, and the cavity washed out with carbolic solution, without effecting a cure. An intercostal incision was then made, and a large cannula introduced, the pus draining away into pads of oakum placed over the opening, and the cavity being washed out daily with antiseptic solution by means of an elastic catheter. The case progressed favourably, with the exception of a few complicating circumstances: and the patient was ultimately discharged, and went to the country, a sinus only remaining unhealed. During the treatment of the case, the following washes were used: One per cent. oil of eucalyptus: two grains to an ounce, or less than one-half per cent., of carbolic acid; two per cent. boracic acid; and one per cent. salicylic acid. A careful record of the morning and evening temperatures having been kept, the results obtained from the use of the different antiseptics were as follows: Oil of eucalyptus (one per cent.), morning temperature 98.8° Fahr., evening temperature 100.4° Fahr.; salicylic acid (one per cent.), morning temperature 98.3° Fahr., evening temperature 99.5° Fahr.; boracic acid (two per cent.), morning temperature 98.2° Fahr., evening temperature 99.4 Fahr.; carbolic acid (one-half per cent.), morning temperature 97.8° Fahr., evening temperature 98.7° Fahr. The foregoing temperatures were averages, the periods of observation being carefully selected so as to be free from complicating influences, which might affect the fever curve. During the whole of the later stages of the case, carbolic acid wash was used, and the temperatures were uniformly identical with the result of observations in the early stages. The results, therefore, showed a marked advantage as regards the hectic obtained by the use of an exceedingly dilute solution of carbolic acid. That the carbolic acid had this distinct effect, was proved by a trial irrigation of pure water, an even temperature of 100° Fahr. following its use.—Dr. PURSER described a case of left empyema. The patient was a ship's steward, aged 30. The disease was at first latent; but, after nine months, he was admitted into hospital, when he was tapped, and subsequently a drainage-tube was inserted. His condition continued satisfactory for some months, when severe fever supervened, at first of a hectic character, but soon becoming continuous. Death ensued about three weeks from the commencement of the febrile symptoms. The compressed lung was found to contain air, and to have maintained its vesicular structure unimpaired. The cavity of the left pleura was much diminished. There were three wedge-shaped embolic patches in the spleen, which were softened and purulent. There were no other evidences of pyæmia. Dr. Purser directed attention to (1) the prolonged latency of the disease and to the slight distress, notwithstanding the compression of the lung, and the displacement of the heart, which beat in the right axilla; (2) the advantages and disadvantages of different kinds of drainage-tubes, in facilitating discharge and preventing putrefaction; (3) the aseptic fever, in the sense of Volkmann and Genzmer from which the patient suffered at intervals, as contrasted with the septic fever from which he died; and (4) the apparently slight injury done to the lung by the prolonged compression from the effusion.—Dr. BENNETT called attention to the risk of injecting the pleural cavity at an early stage, when fever and dyspnœa were present. He advocated a local anæsthetic and the use of the spray in the radical treatment of empyema.—Dr. FINNY corroborated Dr. Purser's statement, as to the entire absence of fœtidity of the discharge during the time the patient was under his care, as well as at the *post mortem* examination. Three weeks before death—the initial period of the fever—much pain was complained of in the left hypochondrium, and marked the occurrence of the embolic infarctions of the spleen. Fœtidity of the pus was not induced by the use of simple rubber tube, unprotected by any antiseptic; and it was a question for consideration, if a period did not arise, in the course of such cases, when antiseptics might with safety be dispensed with.—Dr. C. NIXON advocated tapping in cases of empyema, instead of at once employing the radical treatment. He detailed a case in which

the latter operation was performed without the spray; and, as the fluid next day became fœtid, he washed out the cavity, with good results.—Dr. W. G. SMITH disputed Dr. Hayes's conclusions as to the advisability of washing out the pleura with antiseptics, basing his opinion on the ground that the periods of trial by Dr. Hayes were too short, and that fluctuations of temperature in cases of empyema were common.—Mr. EDWARD HAMILTON corroborated Dr. Hayes's view on the advantage of washing out the pleura with carbolic lotion, and referred to the vicarious expectorations of pus in cases of empyema, as advocated by the late Dr. Greene.—Dr. HAYES, in reply, said he was fully cognisant of the danger of using injections; but that the object he had in view was, to bring about a healthy condition of the pus-secreting pleura, and that the lowering of the temperature in his case was directly due to the use of carbolic acid.—Dr. PURSER considered that the only circumstance which justified washing out the pleura was, where the discharge was fœtid and continued fœtid for some time.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

JANUARY 11TH, 1883.

B. WALKER, M.R.C.S., President, in the Chair.

Excision of Wrist.—The PATHOLOGICAL COMMITTEE presented its report on the specimen exhibited by Mr. Favell, at the meeting on December 7th (*vide* BRITISH MEDICAL JOURNAL, December 30th, 1882). Amputation had been performed in the lower part of the forearm, in a case in which excision of the wrist had some time previously been done. The report described the dissection of the specimen, which revealed caries of the metacarpal bones of the index and middle fingers, and of the lower end of the radius. The flexor tendons of the wrist were somewhat matted to the surrounding structures, whilst the extensor tendons, some of which had evidently sloughed away, were still more firmly fixed.

Intussusception.—Dr. SINCLAIR WHITE related the particulars of this case. The patient, a boy, aged 5, was admitted into the Public Hospital, on December 14th last, with not severe scalds of the buttocks and thighs. There was also slight bronchitis. There was no collapse, and the child was comfortable through the night, and next day until 5.30 p.m., when vomiting and purging commenced. This continued, and he became collapsed, and died at 7.30 the same evening. The necropsy showed an intussusception of the small intestine, at the junction of the jejunum and ileum, two inches long. There were no inflammatory signs around it, and a full sized catheter could be passed through the invagniated portion. Dr. White suggested as queries: Was the intussusception the cause or the result of the vomiting? or was it produced about the time of death?

Sarcoma of Femur.—Mr. R. J. PYE-SMITH showed a knee, etc., which he had amputated the day before on account of a tumour about the internal condyle. A. H., a lad aged 19, had had slight pain in the right knee for three or four months, and for six weeks the inner side of the knee had been enlarging. He had kept at work as a moulder, which involved his kneeling constantly, till he came to the Sheffield Public Hospital and Dispensary three days ago. There was then a firm smooth tumour as large as a fist, growing apparently from the inner condyle; it was slightly tender, but not red, and it did not pulsate; the inguinal glands were not enlarged. On admission, an exploratory incision was made, and some small pieces of a soft tumour, mixed with bone, were removed for examination. They consisted of variously shaped large cells, without any well-defined arrangement. The limb was amputated next day in the middle of the thigh. On making a section of the tumour, together with the femur, the lower end of the shaft was found to be slightly enlarged and infiltrated with a soft pale material, which invaded to a small extent the epiphysis also. The inner wall of the bone was replaced by a blood-stained growth nearly as large as an adult fist, made up of a loose bony framework containing small nodules of soft brain-like tissue; it was not encapsuled. It seemed evidently a malignant growth, corresponding with cases formerly described as encephaloid, but classed as sarcomatous by more modern authorities. The specimen was referred to the Pathological Committee for examination, and a discussion followed, in which the President, Dr. White, Dr. Martin, and Dr. Dyson, took part.

Case of Pericarditis with Effusion.—In bringing forward this case, Dr. MARTIN referred to the insidious onset of the disease, and said that it had only been preceded by rheumatic shoulder pains, so trivial as to escape the patient's attention. There was no further personal history of rheumatism, or, indeed, family history. The patient, aged 29, formerly a wine and spirit merchant, was a well-nourished and well-developed man; he had taken freely of alcoholic drinks. Dr. Martin had first been consulted on January 5th of this year. The patient had just changed houses, in consequence of the dampness of the one he had left. For some time he had experienced cough and dyspnœa, and, for ten days before the date mentioned, he had not been able to lie down, and had suffered from sleeplessness. Now, the heart's dulness was found greatly enlarged, being 5½ inches vertical by 6 inches horizontal. There was no displacement of the point of impulse. A double friction-murmur was heard at the heart's apex, and well round into the axilla; there was no elevation of temperature. The treatment adopted consisted in the application of a blister, and the administration of digitalis, with the iodide and bicarbonate of potass. Recovery was rapid. On January 11th the dulness over the heart had receded to 3 inches on the vertical, and 4½ inches in the horizontal direction; friction sounds were diminished. Dr. Martin laid special stress on the point, that there might be inflammatory affections of the great serous membranes, which must be regarded as local manifestations of the gouty or rheumatic dyscrasia, and not as idiopathic diseases.—An interesting discussion took place connected with the points raised, and as to the benefit to be derived from the use of blisters, in which the President, Drs. Law, Dyson, Gwynne, and Davy, and Mr. Pye-Smith joined.

MIDLAND MEDICAL SOCIETY.

ORDINARY MEETING, WEDNESDAY, JANUARY 24TH, 1883.

E. MALINS, M.D., President, in the Chair.

Primary Lateral Sclerosis of the Spinal Cord.—Dr. SUCKLING exhibited a man suffering from primary lateral sclerosis of the spinal cord. Thirteen years previously, he had had an attack of paraplegia, from which he completely and readily recovered, and subsequently remained perfectly free from any symptoms of spinal affection for ten years. Two years ago, he first noticed a weakness and trembling in his limbs, which had constantly increased ever since. At the present time, sensation was intact. There was great exaggeration of knee tendon-reflex, and marked ankle-clonus. The optic discs were normal. There was a history of previous syphilis.

Dislocation of Lens.—Mr. EALES showed three cases in which the lens had been dislocated, in each case inwards and somewhat upwards, as the result of blows on the eye. In the first case, a little boy aged 4 years, the lens still retained its transparency intact, though nearly five months had elapsed since the injury. The pupil, moreover, remained completely dilated, and would not contract even under the application of eserine drops (four grains to one ounce). Myopia and astigmatism, due apparently to the shifting of the lens, were present. In the second case, a man aged 30, the lens was quite opaque, in addition to being dislocated. There was also a rupture of the sclerotic coat just behind and parallel to the corneo-sclerotic junction, the iris being incarcerated in the wound. The eye was blind, and T=—2. In the third case, a man aged 83, the lens had been opaque and dislocated for thirty years. In spite of the age of the patient and the long time since the injury, the lens, and also its capsule, had been removed successfully.

Ovarian Cysts.—Mr. MALINS showed two ovarian cysts which he had removed a few days previously. One was a simple one, from a girl aged 16, weighing, with its contained fluid, 8 lbs., remarkable for the rapidity of its growth, which extended over only three months. The other was of a dark colour, and its walls were considerably thickened, and showed signs of much inflammatory action; while the pedicle had become completely severed, in consequence of rotation of the tumour causing strangulation.

Operative Treatment in Cases of Intestinal Obstruction.—Mr. BENNETT MAY read a paper on this subject, in which he laid stress upon the difficulty and importance of making an accurate diagnosis in this condition, and alluded to the various operations between which a surgeon may be called upon to choose in his attempts to relieve this condition, which he arranged in the following order as regards subsequent mortality, in an increasing ratio: 1. Colotomy in the loin; 2. Enterotomy, by a small incision in the right groin, through which the first distended and presenting coil of intestine was secured and made the site of an artificial anus, without exploration; 3. Inguinal colotomy, by opening the sigmoid flexure in the left groin; 4. Laparotomy, by median section, the cavity being explored, the cause of obstruction removed, and the wound closed again; or laparo-enterotomy, if completed by opening the small intestine. He thought the reasons why enterotomy gave such a much lower death-rate than laparotomy or laparo-enterotomy were, first, because the conditions for which it was typically applicable were themselves less acute and lethal; secondly, the injury inflicted by the

operation was far less; while, thirdly, it was undertaken earlier; and he regarded it as a compromise between colotomy, which in some cases was the better operation, and laparotomy, and one which many surgeons invariably adopted in all cases where the indications to open the colon were not clear and distinct. There were, however, cases in which laparotomy was the only suitable operation; and in many of them it was wise to open the small intestine as near the lower end of the ileum as possible, and stitch it to the median wound, thus performing laparo-enterotomy, and not to trust entirely to the removal of the apparent cause of obstruction. In many such cases, the artificial anus after a while closed, the fæces passing by the natural passage. In impacted gall-stone, the results had been uniformly bad; and in this condition, if slight force failed to dislodge the calculus, he would perform laparo-enterotomy. If there were great local pain, or tumour, he would not confine himself to the median section, but would open the abdomen near the apparent seat of trouble. In chronic obstruction, if due to obstruction in the small intestine from various causes, such as tumour, etc., and in many cases of obstruction in the large intestine, where the cause could not be localised, he regarded enterotomy as the best operation. Mr. Bennett May alluded to the difficulty of exploring in these cases, in consequence of the great distension of the intestines generally present. Mr. May concluded with a short history of four consecutive cases, attended with great difficulty in diagnosis, on which he had operated in his private practice during the latter half of 1882. In three of these, he explored the abdomen by the median section, finding in one strangulation by a diverticulum, in another stricture of the large intestine, while the third had a small ventral hernia. In the fourth case, he performed colotomy.

REVIEWS AND NOTICES.

REAL ENCYCLOPÄDIE DER GESAMMTEN HEILKUNDE: TABES DORSALIS. By Professor E. LEYDEN, Berlin. Vienna, Urban and Schwarzenberg, 1883.

THE editor and publishers of this important work have succeeded in obtaining a staff representing a great number of the very best names. No better authority on tabes dorsalis than Professor Leyden could have been found to contribute a treatise on this disease.

So long as twenty years back Leyden's able monograph on locomotor ataxy brought light and clearness into the pathological anatomy and clinical symptomatology of this subject. He succeeded in founding, on a careful clinical analysis of this troublesome and trying disease, the elements of pathological and physiological comprehensive and trusty diagnosis. Professor Leyden, looking back on a large experience of more than twenty years, confirms anew the whole, or most, of his former leading points of view, while at the same time he incorporates the progressive additions by which our knowledge of this disease has since been completed. The present monograph is extremely able. In the art of explaining and demonstrating a case, Leyden is highly skilled.

The interest of the monograph is increased by the fact that not only is tabes dorsalis discussed, but also a number of other phenomena pertaining to the pathology of the spine. The article begins with "Definition and Characters." Leyden defines tabes dorsalis as "a chronic disease of usually progressive development, showing in due course a special disturbance of muscular action, ataxy, caused by degeneration of the posterior columns of the cord." In the matter of nomenclature, Leyden prefers the title of "Tabes dorsalis" to all others, such as "Rückenmarkschwindsucht, Rückenmarksdarre" (atrophy of spinal marrow), "Sclerosis of the posterior root-zones," "Grey degeneration of the posterior column," etc.

The second chapter treats of the principal circumstances of the history of this disease. He describes the most recent symptomatological requisitions, the knowledge of numerous complications, such as atrophy, gastric and bronchial crises, etc.; and especially the symptoms of tendon-reflex discovered by Westphal, and of unquestionable moment in diagnosis. The latest discussions on the therapeutical value of nerve-stretching, in relation to locomotor ataxy, are also considered, besides the etiological association of tabes and syphilis, which made so much noise in the world, but as to which Leyden has already entertained the most profound scepticism.

The following chapter gives a detailed description of the pathological anatomy, assisted by several very good plates.

The symptoms of the sensory and of the motor sphere are closely considered; attention is drawn to the relations of ataxy to anæsthesia, which form the base of his own theory of the disease. Among the reflex symptoms, the reflex action of tendons is taken into account, and a description is given of the symptoms of the organs of sense—of the brain, the sphincter, the sexual system, and the viscera. The author himself has observed two cases of crises of the heart with attacks of angina and irregularity of pulse, besides the other better known "crises," gastric, laryngeal, and nephritic.

The names of the different stages in the typical course of the disease, which Leyden first proposed, and which are largely accepted since, are still preserved. He recognises three stages: the neuralgic or rheumatoid, the ataxic, and the paraplegic stage. Each of them may last a short time, or it may last many years. There is still living, for instance, a woman whom the author, twenty years ago, pronounced to be in the paraplegic state. As to the issue, perfect cure he considers quite out of question, whatever may be said to the contrary; for not a single case, he alleges, is known in which a favourable issue can be positively affirmed.

Among forms diverging from typical examples, the hereditary ataxy of Friedreich is named first. This variety appears even in young children, but it differs so widely from typical ataxy that Leyden cannot persuade himself to consider it a disease of the same kind. He shares the opinion of Kahler and Pick, who see in the hereditary ataxy "a complex disease of the system." Féré, in the *Centralblatt für Nervenheilkunde, etc.*, 1883, No. 1, takes much the same view.

In treating diagnosis, etiology, and therapeutics, Professor Leyden describes, among the causal events, catching cold, inheritance, and wounds. Contrary to the assertions of Erb, Gowers, Buzzard, and Fournier, the author rejects syphilis as a cause of locomotor ataxy.

The therapeutical part of the subjects received an extensive and critical treatment. Every remedy, old and new, from iodide of potassium and nitrate of silver, up to the "darling child of our time," "massage," and "nerve-vibration," recommended by Mortimer Granville, are discussed, but with the verdict that not one of all these has proved efficacious. On one, the practice of nerve-stretching, strong condemnation is pronounced. In favour of electrotherapeutics, the author has also but very little to say; but he is of opinion that a careful mode of life, and the moderate use of thermal waters and hydrotherapeutical treatment may turn out to be of some benefit.

In respect to the theory of disease, and in support of his original views, Leyden maintains "the necessity of normal sensibility for the normal co-ordination of movements, a smaller or greater loss of sensibility being the cause of the disturbance of co-ordination, of ataxy." This "sensorial theory" has of late years gained many followers in Germany and France (Kuchle, Arenfeld, Landry, Vulpian, Kahler, Pick, and others); while others, Friedreich and Erb, do not agree with it, and have formed a theory of their own, based on the hypothesis of the "co-ordinating tissues" (motor ataxy), which Kussmaul and others accept as overthrowing Leyden's views. In this volume, Professor Leyden puts forth all his strength; and it well deserves study.

NOTES ON BOOKS.

The Fifty-Third Annual Report of the General Hospital and Dispensary for Sick Children, Pendlebury, and Gartside Street, Manchester, 1882.—*Abstracts of some of the Medical and Surgical Cases treated at the General Hospital for Sick Children, Pendlebury, Manchester, during the year* 1881.—The Hospital for Sick Children at Pendlebury, a short distance from the city of Manchester, contains 140 beds, and has in direct connection with it a dispensary, attended by the same medical officers, and established in the midst of the city. The chief burden of the report from the dispensary is the large part played by improper alimentation in the causation of infantile disease; the practice of putting out infants to nurse during the day, while the mother goes to work, prevails to a very large extent in Manchester—not only, it is said, among widows and other women compelled themselves to support their families, but also in cases where the husband is in full work. Proposals are on foot to establish day nurseries, and it is hoped that regulations can be drawn up and enforced which will prevent them being abused by the latter class. The number of cases of infantile diarrhœa was less in 1881 than in 1880, but the rate of mortality seems to have been greater—12.9 per cent., as against 10 per cent. A large number of cases of bronchitis, and other diseases of the respiratory tract, were treated; and we see from a coloured chart, which is well designed to catch the eye of the general public, that the greatest number of admissions were

ıde in the last quarter of the year, the maximum being reached in ·vember. Another coloured chart deals with the cases of scarlet ·er, measles, and whooping-cough, under treatment. In the case the two former diseases, there has been a considerable diminun on the rate for 1880; but, with regard to whooping-cough, the se has been different. At the beginning of the year, the disease s not prevalent, but month by month the cases became more merous, and reached their maximum in October; altogether, 400 aths were attributed to it in Manchester and Salford during 1881. t the present time," the report adds, "not a single bed in any hospital this district is set apart for the isolation and treatment of this dis·e." The volume of "abstracts" consists of two tables with appen·es. The tables deal with the medical and surgical cases respecely, and show the number of patients suffering from each disease. ey serve also as indexes to the abstracts of cases given in the pendices. It will thus be seen that the plan of the volume is the ne as that adopted in the Reports of University College Hospital, ·ently noticed in our columns. The interest and usefulness these abstracts it would be difficult to exaggerate, and if ? yearly publication of such a volume as this now before us persevered in, a mass of material will very soon be accumulated, ich no future writer on the diseases of childhood can afford to ·lect. The paragraphs dealing with scarlet fever may be taken as ıof of this statement; the relation of scarlet fever to rheumatism ı little understood subject, of great importance in its bearing on ? etiology of chorea especially; and we find here a case of well rked scarlet fever where, on the fifth day, the wrists became ollen and tender, and where a "well-marked systolic mitral *it*" subsequently developed; again, in two fatal cases, tracheoıy was performed, in one case for very definite laryngitis. We y here remark that, so far as we have been able to make out, all : cases in which tracheotomy was performed ended fatally. We uld suggest that it would be well in future reports to tabulate ly all the cases of tracheotomy. One very interesting case of ıatic abscess, in a boy aged fourteen, who had never been out of gland, would seem to deserve a fuller report, perhaps in the umns of one of the medical periodicals. Indeed, there are many ıer cases which catch our eye in turning over these pages which ;gest the same remark. This seems to us to be one of the possible advantages attending the publication of volumes such as this one. ? history of the cases are given, necessarily, in as compressed a m as possible, and but a small audience can be hoped for; but we st confess to a fear that much valuable material, that might erwise have obtained the wide circulation afforded by a periodical, y be buried for years, and so practically lost to the busy practiıer. A full table of all the cases of chorea in the hospital is an ful addition to the abstracts, and we hope that other hospitals l furnish us with similar tables. From it we learn, that a little ·r a third of the cases occurred in boys; that a history of rheutism, even to a slight extent, was obtained in only one-sixth of : cases; that a cardiac murmur (systolic, at apex, except in one e, where it was presystolic) was heard in just half the cases; l that death resulted in one case from a very acute attack of ıercular meningitis. The abstracts, in the surgical appendix, of : cases of pyæmia, strike us as the most interesting part of that ıort, and illustrate the share of acute periostitis in the etiology of æmia. Altogether, this volume reflects great credit upon all ıse engaged in its preparation.

REPORTS AND ANALYSES
AND
ESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

RIMMEL'S AROMATIC OZONIZER.

IS is an extremely clean, agreeable, and elegant powder, consistof particles of pine, cedar, and other coniferous woods, imgnated with eucalyptus oil and other volatile aromatic oils. An ·mination of the air of a room in which some of Rimmel's preation had been exposed, has demonstrated the presence of ozone ıerated by it. This powder may therefore claim to take its place an aerial disinfectant as well as a deodoriser, and its peculiar anly and agreeable character recommends it for general use. It nanufactured by Eugene Rimmel, 96, Strand, who informs us t he will be happy to send samples gratuitously, for trial, to any spital, or to any medical man, wishing to test it.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 24th, 1883.

DR. ANDREW CLARK'S ADDRESS TO THE CLINICAL SOCIETY.

A GOOD many things in Dr. Clark's very able and eloquent Address are unusually worthy of thoughtful attention. It was only to be expected that a physician, whose name is associated with a scientific preference for regimen and diet, should have something to say on this subject, corroborative of his well-known general views. We were, therefore, more or less prepared for an account, like that of the case of the ironmaster, detailed in the Address, where the patient was being persistently damaged, and his malady aggravated, by the well-intentioned but wrong steps taken by his friends to "keep him up" by continuous feeding. The food and wine, taken every two hours; the iron, quinine, and strychnia, three times a day, with the free drinking of milk and potash-water at all times to quench the thirst, were evidently doing harm; and, after a few days of abstemious diet, the patient began to recover. The theory that guides such practice is not, of course, new. The principles of it are to be found in the moderation recommended by the ancient philosophers, and particularly by the stoics, many of whom lived, by means of it, to very advanced life. A minority of physicians, some of them the most eminent of their class, have also recommended it. Three hundred and fifty years ago, Cornaro, not himself a physician, but by the advice of his physicians, who told him that he would die speedily, and, as the phrase then was, get his humours into such a corrupt state that they would ferment on the slightest provocation, reduced his diet to twelve ounces of solid food and fourteen ounces of wine daily. On this regimen, he subsisted from about the age of forty, when he commenced it, till he quietly expired when over one hundred years of age, having, in the meanwhile, recovered his health as far as his previous irregularities made it possible for him to do so. Everyone has heard of the small quantities of food which were consumed by the miller of Billericay, and by the Honourable Mrs. Watkins, who lived to one hundred and ten years of age. In our own time, Bantingism has familiarised us afresh, in a popular manner, with the relation subsisting between spareness or corpulency, and the food consumed; while, in *Lothair*, the high dignitary of the church, who has attained advanced life, and evidently means to live longer, is made to dine on a biscuit and a glass of water. We have, in our mind, a typical case, such as others must have seen from time to time, a case of persistent vomiting in an emaciated lady, associated with an enlargement in the region of the stomach, which was diagnosed as a tumour by a very distinguished surgeon, where the *post mortem* examination revealed a stomach much distended, and containing over two gallons of grumous fluid, which had lain there evidently for a very long time. If, instead of continually ingesting small quantities of fluid food, beef-tea, or milk every half-hour, which was the treatment adopted in the case, that stomach had been emptied by the pump, and by the judicious use of peptonised rectal feeding, and some time had been

allowed it to recover from the paralysis of over-distension, there can be no reasonable doubt that the patient would have recovered from her attack—if, indeed, she might not have been living now. As Dr. Clark says, such cases are common enough; though, unfortunately, the tendency to gratify appetite—new in every generation, yet ever the same—leads each succeeding throng of men to refuse the teaching of their predecessors; and to insist on learning, from experiment on their own frames, the truth they might have recognised so much more easily.

Cases of this class, however, and the treatment proper to them, though to some extent associated with the lecturer, and though, therefore, they naturally are referred to in the Address, are far from forming the main subject of it. Dr. Clark's aim might, perhaps, be most clearly and concisely defined as an attempt to induce medical men to study the relations subsisting between what he calls the static (or anatomical) and the dynamic (or physiologico-pathological) elements in disease. Disease, he says—and the statement is striking—is not the structural change, it is not the static condition; but it is one of, perhaps, many other effects of physiological forces acting under unphysiological conditions; it is, in short, the dynamic condition. From this standpoint, disease assumes a somewhat new character, and "may consist of mere changes in the relations of parts; of rearrangements of atomic groupings; of recurring cycles of vicious chemical substitutions and exchanges," etc. These ideas, if mostly suggested, as they evidently are, by facts which arise in the study of chemistry, carry us much further than any mere questions of chemical isomerism, and raise philosophical and even spiritual questions in their ultimate analysis. It may be all very well for the progress of science, and even an absolute necessity for scientific exploration, that the positive assumption should be made at the outset, that change of function depends upon change of structure: that dynamics follow statics; but, philosophically, the question is undoubtedly a reserved one, and, when it is finally solved (if it ever will be solved), it will probably be settled in the very opposite sense, namely, that change of function determines change of structure; that dynamics govern and precede statics. Meanwhile, the problem of the physician is a simpler one. As physician, he need not enter upon the province of either the philosopher or the theologian, albeit that in his inner nature he may be both; but, confining himself simply to the admitted fact that changes of function and of structure are invariably associated, he may inquire into the statics of certain dynamic puzzles, into relation with which his experience brings him. And, in point of fact, as we take it, this is the practical issue which Dr. Clark suggests that the philosophical discussion underlying the problem should take. There is a large group, he says, of affections that come under the notice of the medical man, "which is unconnected, except causally, with sensible structural alterations of the tissues and organs." To these, too little attention, at least literary attention, has been given, since every practical physician is compelled, by the repeated facts of his daily experience, to attend to them, to theorise upon them, and to treat them. Some of these are indicated in the Address. There is the morning depression that often precedes melancholia; there is the temporary hemiplegia with aphasia, that occasionally occurs in women, and even in men, otherwise strong and healthy; there is the dry barking cough of puberty, associated with defects of will, and influenced by emotional states; there are the various forms of renal inadequacy; and the presence, lastly, of temporary albuminuria among young men undergoing the strain of a competitive examination. There might have been added the large number of ill-understood affections grouped together under the convenient, but certainly quite unscientific, name of hysteria. In reference to all of these, there is, of course, an underlying question, whether there may not be coexistent physical changes not yet detected by our means of investigation, but which better means of inquiry, or more careful use of the means we possess, might discover for us. Is it always certain, for instance, in the region of obscure nervous affections like those indicated by Dr. Clark, that we have had, or are likely to have, the opportunity of investigating the structure of the parts involved, so as to declare definitely that there are no changes in them? Most of the conditions referred to end in recovery. We cannot, therefore, see the nervous tissues or the kidneys in question; and we are unable, consequently, to say whether any and what changes take place in them. Besides, changes may occur which, like the diseases themselves, are of a temporary character, passing off soon, and leaving no trace behind them, or at least no sensible trace, If a *post mortem* examination do not reveal traces of a pneumonia occurring, say thirty years before, and terminating in complete resolution, shall we be justified in assuming that no such disease ever occurred? Or, in normal physiology, who expects to find, from examination of the tissues, marks of dilatation or contraction of vessels, which yet we know to occur? But how unwarrantable would it be to say, therefore, that no such changes occurred! Similarly, may we not be going beyond the evidence if we assume too readily that there are no changes in obscure or functional nervous disorders, because we have not found any? That is one reason for caution. But there is still another; viz., the question whether our inquiries, so far as they have gone, have taken the proper direction. Is it quite certain that our inquiry into nervous changes has investigated the sympathetic system as much as it should have done? Has the comparative anatomy and physiology of the sympathetic nerve, its development in the individual and in organic life, been so sufficiently studied that we are certain when we say no structural changes accompany certain functional abnormalities? We merely point out these lines of inquiry, not supposing for a moment that Dr. Clark has overlooked them, but with the purpose of drawing attention to questions with which the physician may occupy himself even before he reaches the philosophical ones underlying his art, to which such able reference is made in the Address. We wish we had more space for reference to other subjects referred to, as the legitimate position of experiment, and the place of clinical medicine. Those of our readers who have studied this Address will agree with us in thinking that it has stimulated inquiry; and if any have not, they will, we hope, be induced to do so.

FALLACIES OF ANALYSIS OF WATER.

We are glad to find the annual Blue Book of the Medical Officer of the Local Government Board resuming once more its old character. Under Mr. Simon's reign, a masterly exposition of the chief lessons taught by the inquiries made by his department during the year might be confidently looked for. But of late, owing, doubtless, to the changes of constitution of the department, the annual report of the Medical Officer has degenerated into a mere introductory preface to a series of reports of sometimes indifferent interest. No such criticism can properly be applied to Dr. Buchanan's report for 1881, just published as a Parliamentary Paper, which has a very special value of its own, apart altogether from the appended reports of his associated investigators. No small part of its interest will be regarded as lying in the inquiry concerning the evidences which chemistry can give as to the presence of pollutions purposely made in water, which has for some time been prosecuted by Dr. Cory and Dr. Dupré. The results announced are certain to be actively canvassed in the chemical world, some of whose tenets are well nigh annihilated by the inquiry. The subject has, however, not only a strong chemical interest, but an intimate bearing on the public health, and will, therefore, be studied with curiosity by many who have hitherto been content to rely without question on the inferences drawn by chemists from the constituents of waters subjected to analysis by them.

We have before drawn attention to the tendency on the part of sanitary authorities and their advisers, to estimate unduly the value

quantitative chemical analyses, as demonstrating the wholesome-ss of drinking-waters. Some authorities have even regarded evidence this sort as setting aside presumption of the pollution that had sen from considerations of dangerous situation of wells and reser-irs. The refined methods of water-analysis that are now in use e capable of detecting very minute quantities of organic impurity large volumes of water. They enable a total amount to be ted; and from some of them, moreover, inferences can be drawn to the proportion of such impurity that is of animal origin. w, as Dr. Buchanan well points out, there is nothing in the nature things that constitutes a grain, or a fraction of a grain, of organic tter, vegetable or animal, into an indication of wholesomeness or wholesomeness, because it occurs in a gallon of water. Among mal impurities of an offensive kind, one differs very much from ther in its power to give a morbific quality to water; but h impurity is especially to be avoided if any part of it can e been derived from the bodies of persons suffering from com-nicable disease. We do not know how small a quantity material that has been in relation with such disease may, en it gains admission to a healthy body, suffice to pro-e a like disease in that body. There is no reason for be-ing that the quantity of disease-producing material in a water, he likelihood of the water possessing harmful qualities, is pro-tionate to the total organic matter or to the total animal matter sent in the water; though, into water that can be recognised by chemist as foul with organic matter, there has doubtless been ater opportunity for the entrance of the material of disease.

Having regard to the existing state of knowledge on the subject, was felt by Dr. Buchanan that the nature of the evidence de-ible from chemical analysis of water needed to be studied afresh; accordingly a series of samples were prepared by the inten-ial addition of various polluting matters in known quantity to ain known waters, these samples, with specimens of the original ers, being subjected to chemical examination. The details of e analyses are published in the volume, but the deductions vable from them will have more general interest. Among the esses ordinarily made use of for examining the organic matters ent in drinking-water, a certain inferior value is assigned to the chhammer permanganate test for oxidizable matters, and a ilar value to the more delicate "Wanklyn" process for albuminoid monia, which is capable of showing much respecting the relative rees of pollution in samples contaminated with the same kind of erial. But Dr. Cory distinctly gives preference to the combus-processes—those, namely, which aim at determining the amounts arbon and of nitrogen present in the organic substances of water. erimenting with materials (albumen and urea) of which the position was known, Dr. Cory found those processes to indicate, a considerable degree of accuracy, the true amounts that he added to his samples of water, and to show the ratio between elementary carbon and nitrogen with a close approach to the h.

any of the observations had reference to experimental con-ination of waters with the stools of enteric fever patients. re is a peculiar practical interest in these observations, owing he well-known special faculty of typhoid fever to spread by ns of drinking-water. It has been found that, in the customary ods of chemical examination, there is nothing to distinguish ition by the stools of patients having enteric fever from any r excremental pollution. Indeed, generally, the report gives no cation that chemistry can tell whether a healthy or a diseased has been the source of any foulness observed in water. From the ic health point of view, it will be sufficient to consider Dr. 's results as they concern the process which is most popularly ed for the recognition of animal impurity—the amount of albu-oid ammonia yielded by the water. Applying this process to a r that had been purposely polluted with enteric fever stool in the proportion of a grain to a gallon, analysis by Dr. Dupré showed a resulting increment of albuminoid ammonia (on an average of experiments) amounting to one-thousandth of a grain (.001) in the gallon, or fourteen-thousandths (.014) of a part per million parts.

With a view to a crucial experiment as to the value of the albuminoid ammonia process in determining the safety of water for drinking purposes, a particular sample of water, purposely contaminated with the filtrate from 3.5 grains of fever stool to the gallon, was submitted, along with a specimen of the water not thus contaminated, to Mr. Wanklyn, the chemist by whom the process in question has been developed. Mr. Wanklyn reported that the unpolluted sample contained .08 part of albuminoid ammonia per million parts of the water, and that the polluted sample contained 0.10 part. The increase resulting from the pollution proved, therefore, to be .020 part per million for the 3.5 grains, or .0057 part per million for each grain of the contaminated stool added to the grain of water something less than in the average of filtrates.

In the fifth edition of Mr. Wanklyn's work on *Water Analysis* (p. 68), it is stated that "drinking-water falls into three classes, according to the degree of organic purity;" and class 1 comprises "water of extraordinary organic purity, yielding from 0.00 up to 0.05 part of albuminoid ammonia per million....Water of this class cannot be objected to organically." Yet the pollution of a gallon of water by all the soluble and finer particulate matter from 3.5 grains of typhoid stool is represented in Mr. Wanklyn's own hands by no greater increment than 0.02 parts of albuminoid ammonia per million of water. It seems obvious, therefore, that the doctrines which have been formulated from the amount of albuminoid ammonia present in an otherwise unknown water are unsound, and not to be relied upon. Mr. Ernest Hart pointed out at the Sanitary Congress of the Society of Arts, and again at the Amsterdam Congress, and Dr. Buchanan now again remarks, that the Caterham epidemic showed how dangerous and potent for harm may be even a small quantity of polluting material distributed over an enormous volume of water. During the fortnight in which water from the polluted well was being drunk, 1,861,000 gallons of water were pumped from the well; and Dr Buchanan makes the ingenious calculation that, if the water had for the whole fortnight contained one grain of excremental matter per gallon, this would have meant that nineteen pounds of excrement had been added to each day's supply of water. Of course, the man who polluted the well did not void any such quantity, nor is it likely that every gallon received the same amount of contaminating matter; but the calculation shows that one grain of enteric fever stool in the gallon of water, means a very large amount of polluting matter present in the water. Dr. Dupré's analyses show that this befoulment, when expressed by the chemist in terms of albuminoid ammonia, represents, as stated above, .014 part per million parts of water. Polluting material, potent for harm, may, then, be present in a water "yielding from .00 up to .05 part of albuminoid ammonia per million" without removing it from the rank of waters of "extraordinary organic purity;" and it can hardly be properly predicated, in the case of an unknown water showing from .05 to .10 part of albuminoid ammonia, that it is "safe organically."

The lesson that appears to be taught by Dr. Cory's inquiries is, that whilst we must ever be on the watch for the indications that chemistry affords of contaminating matters gaining access to waters, we must (at any rate till other methods of recognition are discovered) go beyond the laboratory for evidence of any drinking-water being free from dangerous organic pollution. Unless the chemist be well acquainted with the origin and liabilities of the water he is examining, he is not justified in speaking of the water as "safe" or "wholesome," if it contain any trace whatever of organic matter; hardly, indeed, even if it contain absolutely none of such matters appreciable by his very delicate methods. "The chemist can, in brief, tell us of impurity and hazard, but not of purity and safety."

CONVALLARIA MAJALIS IN HEART-DISEASE.

THE common lily of the valley *(Convallaria majalis)* has recently been introduced as a diuretic and remedy for certain forms of heart disease. It has hitherto been more generally valued for its poetical associations, and its delicate beauty and its fragrance, than for its medicinal properties, but even in ancient times it was used as a curative agent, and was employed in the treatment of wounds, bruises, worms, intermittent fever, and epilepsy. By Culpepper it was regarded as a sovereign remedy for "a weak memory," and he tells us that the spirit of the flowers distilled in wine will restore lost speech. He adds that, "it is exceeding good in apoplexy," and that it comforteth the heart and vital spirit. Gerarde recommends that the flowers should be placed in a glass, and put in an ant-hill, when after a month a liquor will exude, "which being outwardly applied, helps the gout." It is well known that from time immemorial the peasants of Eastern Europe have regarded the lily of the valley as a certain remedy for dropsy. In 1880, two Russian physicians, Troitzky and Bogojavlensky, investigated its action, and published several cases showing its value in the treatment of various forms of cardiac disease. These statements were for the most part confirmed by Professor Botkin of St. Petersburg. Still more recently, the subject has been systematically studied by Professor Germain Sée at the Hotel Dieu Paris, and the results of his experiments and observations are given in the *Bulletin Général de Thérapeutique*, July 30th, 1882.

The active principle of convallaria has long been known. In 1858, Walz succeeded in isolating two glucosides, which he named "convallarin" and "convallamarin." Their chemical properties were investigated by Tanret and others, whilst Marmé published a paper on their physiological action. It was found that convallarin possesses purgative properties only, whilst convallamarin is a heart poison allied to digitalin, helleborin and the upas principles. Stanislas Martin is supposed to have discovered in the fresh flowers an alkaloid, which he named "maialine," but other investigators have failed to detect it in the leaves, stem, or root. The preparations commonly employed are the aqueous extract of the leaves, the aqueous extract of the flowers, and the extract of the whole plant. A watery infusion of the leaves and flowers is sometimes recommended, but to obtain the full therapeutic effect it is better to use an extract of the whole plant. A reliable preparation is made by Parke, Davis and Co., of Detroit.

A drop of the extract of the flowers, injected under the skin or applied topically to the frog's heart, arrests it in systole, in much the same way as digitalis, upas antiar, erythrophleum, and some other remedies. In the case of a dog, four drops of this extract, injected into a vein, caused death in ten minutes by arresting the heart's action. It appears that the heart is first slowed, and the respirations are quickened; then the heart's action becomes irregular, and the pulsations are weak and very rapid; the blood-pressure is first increased, and is then lowered; the respirations become slower and slower; the heart ceases to beat; the pressure falls to zero, and the respiratory movements cease. The excito-motor power of the nerves is unaffected, and the excitability of the pneumogastric is weakened, although not abolished.

Professor Sée has published details of twenty cases, in which the effects of convallaria were carefully noted. Five were cases of mitral insufficiency, characterised by want of rhythm, œdema of the lower extremities, dyspnœa, and other symptoms. The extract was given in doses of from half a gramme to a gramme daily, and in each case the benefit was most marked; the heart's action became stronger and more regular, the breathing improved, and there was a notable increase in the amount of urine passed. The sixth case was one of mitral constriction, which was immediately benefited, there being a speedy improvement in the pulse, with increase of urine and decrease of the œdema. Several cases of aortic insufficiency were relieved of the more distressing symptoms.

Dr. Sée considers that convallaria majalis constitutes one of our most important cardiac remedies. It produces on the heart, blood vessels, and respiratory organs, effects constant and constantly favourable; to wit, slowing of the beatings of the heart, with often a restoration of the normal rhythm; and, on the other hand augmentation of the energy of the heart and of the blood-pressure. Dr. E. P. Hurd has published a remarkable case of Corrigan's disease in which the fluid extract prepared by Parke, Davis, and Co., proved most beneficial, given in five drop doses every four hours.

The therapeutical indications for the employment of convallaria are beginning to be generally recognised. It is useful in palpitation resulting from exhaustion of the pneumogastrics; in simple cardiac arythmia, with or without hypertrophy, and with or without valvular lesion; and in mitral constriction, with absence of compensation in the left auricle and right ventricle. It may be given with advantage in mitral insufficiency, especially when there is pulmonary congestion with resulting dyspnœa. In Corrigan's disease, the peripheral arterial pulsations disappear, and respiration becomes markedly restored. In dilatation of the heart, with or without hypertrophy, convallaria is decidedly indicated. In cardiac dyspnœa, it is inferior to morphia or iodide of potassium; but, in some forms of asthma, it is said to be useful.

Convallaria exerts no deleterious effects, and may be given with perfect safety. Dr. D'Ary says: "With me, it has long since taken the place of digitalis; and in cases of organic heart-disease, when, in the latter stages, the symptoms are becoming urgent, and the patient anxiously begs for relief, the physician will appreciate a remedy that will relieve signally and promptly, without the dread of overdose and cumulative action." At the present moment, convallaria is difficult to obtain; but in a few months there will be an ample supply.

THE Balfour Memorial Fund now amounts to about £4,130, in addition to the £4,000 contributed by Mr. Balfour's relatives and Dr. Foster.

WE are informed that there has been no case of death from scarlet fever at Balliol College, Oxford; that there have been no fresh cases for ten days, and that those graduates who were ill are doing well. The gentleman who died belonged to another College.

TWENTY persons have been attacked by trichinosis at Malaga several of the cases terminating fatally. The disease is stated to have been communicated by some American hams, of which the sufferers had partaken.

THE Right Hon. Sir Michael Hicks-Beach, Bart., M.P., has consented to preside at the annual festival in aid of the funds of the Hospital for Sick Children, Great Ormond Street, to be held at Willis's Rooms on Wednesday, April 11th.

THE *American Medical Weekly*, edited and published by E. Gaillard, A.M., M.D., LL.D., has been greatly enlarged and improved. Under the able management of its well known editor, it is now regarded as one of the leading medical periodicals of America.

IN the analysis of the series at the commencement of Mr. Lawson Tait's paper on Abdominal Section, in the last number of the JOURNAL, the second line should have read, "Incomplete operations cases 8, deaths 4, mortality 50 per cent." The percentage of mortality does not refer to the first line, "exploratory incisions," since there were no deaths in that series.

THE Medical Officer of Health reports to a meeting of the Maidstone Local Board that the death-rate for the borough was 36.

ch he describes as a most deplorable state of things, being the iest death-rate he has ever had to report. The incidence of the hs is chiefly among children under the age of five years.

R. HOPWOOD intends to move a resolution on the 27th instant, lemning the Contagious Diseases Acts, but we believe that the ernment will defend the Acts on the ground that the Select mittee reported in their favour last session.

has, we believe, been decided by the Government to introduce Parliament, at as early a date as possible, a Bill which has been ted for the purpose of amending the Medical Acts, on the basis he recommendations of the Royal Commission which last year rted on the subject. The Bill will be under the charge of Mr. della.

THE CORMACK FUND.

CH. CORMACK begs the numerous kind friends who subscribed e testimonial fund in memory of his father, the late Sir John Cormack, to accept, through these columns, the most grateful ks of his sisters and of himself for the handsome sum contributed ie London as well as to the Paris fund.

BACILLI IN THE SPUTUM OF PHTHISIS.

'FEIFFER (*Berlin. Klin. Wochenschr.*, Jan. 15th) has instituted rches into the characters and regularity of appearance of bacilli e expectoration of consumptive patients. He finds that in pro- on to the mildness or severity of the affection is the abundance arseness of the bacilli in the sputum. A suspected expectora- requires to be examined for several days in succession, under powers of the microscope, before a conclusion can be arrived at. kaline solution is used to dissolve the sputa, while the bacilli etected by gentianette or Bismarck brown dyes.

MR. GLADSTONE.

ate has yet been fixed for Mr. Gladstone's return from Cannes, lugh, in all probability, it will take place before the end of next . In reference to the political comments which continue to be on this subject, it seems right to add that Mr. Gladstone's stay nnes has only been prolonged on the urgent pressure of his cal adviser. Dr. Andrew Clark felt that, in a man of the age ast intellectual activity of this illustrious statesman, for whom impossible to secure rest so long as he was in England, an iate period of repose in a favourable climate at a distant place, as Cannes, was the best means of quickly restoring the physical r required for his heavy labours in the State.

AMPUTATION AT THE HIP-JOINT.

'URNEAUX JORDAN writes, in reference to the discussion on Mr. r's case: "The Clinical Society, at its last meeting, did me the r to give much of its time to the discussion of a method of am- ng at the hip which I have devised. The personal element is un- tant; the mode of executing the largest operation on the body is portant. The operation I have described differs in momentous ulars from the Continental methods, which it is said to resemble. e head of the bone be disengaged first, and the vessels be d last, at right angles, and low down in the thigh, the ques- f hæmorrhage is shorn of all anxiety. The operation has, a brief period, almost supplanted the rough and ready flap d with its vast cut surfaces. It has saved many lives in ate cases, where competent and impartial surgeons have held o other treatment was possible. When the operation is said edious, its steps have not been well considered. When it is d on the ground of a few moments of time, there is some- wanting in the surgical conscience."

FINANCES OF THE LONDON HOSPITAL.

A MEETING of the governors of the London Hospital was held on February 13th, to take into consideration the financial position of the charity, and the formation of another Maintenance Fund for the next five years. Mr. Buxton, Chairman of the House Committee, presided; and he stated that the last fund had been the means of bringing into the hospital a sum of £75,000. The annual expenditure of the institution now reached £47,000, and it was necessary that £25,000 towards that sum should be guaranteed every year. The hospital had of late been fortunate in legacies and donations. Upon the motion of the chairman, a resolution was carried to the effect that the Lord Mayor be requested to grant the use of the Mansion House for holding a meeting therein to advocate the claims of the charity.

HUNTERIAN SOCIETY.

AT the annual general meeting of this Society, held on the 14th instant, the following gentlemen were elected officers for the ensuing year. *President:* Walter Rivington, M.S. *Vice-Presidents:* Waren Tay, Esq.; M. Brownfield, Esq.; *A. L. Galabin, M.D.; *R. Clement Lucas, B.S. *Treasurer:* H. I. Fotherby, M.D. *Librarian:* P. L. Burchell, M.B. *Orator:* *George Roper, M.D. *Secretaries:* G. E. Herman, M.B.; *Charters J. Symonds, M.S. *Council:* *F. M. Corner, Esq.; E. Dukes, Esq.; *T. R. Fendick, Esq.; E. G. Gilbert, Esq.; *J. Hughlings Jackson, M.D., F.R.S.; W. Talbot King, M.D.; Stephen Mackenzie, M.D.; H. Port, M.D.; *J. McCarthy, M.B.; G. J. B. Stevens, Esq.; *W. C. Toulmin, Esq.; *F. C. Turner, M.D. (Those whose names are marked by an asterisk did not hold the same office during the past session.)

FEMALE LABOUR IN THE BLACK COUNTRY.

FOR some time past, local inquirers have been investigating the subject of the employment of female labour in the nail, chain, and nut and bolt industries of the manufacturing districts of South Staffordshire and East Worcestershire, known as the "Black Country." The work is extremely laborious; the hours of toil are long and unlimited, and the labour is largely performed by married women and young girls, who work at their own homes, and who are outside the restrictions of ordinary factory legislation. Local members of Parliament are being moved to support a Bill, which Mr. Broadhurst, M.P., will shortly introduce into the House of Commons, to prevent young females under fourteen years from being employed, under any circumstances, in the chain, nut, bolt, or heavy nail trades.

NON-MERCURIAL TREATMENT OF SYPHILIS.

DR. J. E. GUNTZ, of Vienna, has recently used bichromate of potash as a substitute for mercury, in the treatment of syphilis, and has reported excellent results in the *Wiener Med. Wochenschrift*. The best preparation of the salt was a solution in water saturated with carbonic acid, in the proportion of 0.3 part of bichromate, to 600 parts of water. Larger or more concentrated doses caused vomiting. The most brilliant results were in cases of hard sore, when the preparation was given expressly with the intention of preventing secondary symptoms. In seventy-one cases of chancre, the sore was not treated with caustics, but the solution of bichromate of potash alone given to the patient; forty-seven out of these were saved from secondary symptoms. In fourteen similar cases the sore was cauterised as well; all the patients, excepting two, remained free from constitutional syphilis.

THE MEDICAL AND DENTAL REGISTERS.

WE have received copies of this year's *Medical* and *Dental Registers*. These registers are published much earlier than heretofore, and in them will be found noteworthy improvements on previous editions. In the first place, the whole work has been subjected to laborious and careful revision, for the purpose of securing, so far as possible

accuracy of entries, and at the same time obtaining a greater elegance of typographical arrangement by spacing the names better over the page. The several "Medical Acts" up to the present date are arranged and indexed at the beginning of the *Medical Register*; and, on pages 68 and 69, there are tables showing the exact numbers of persons registered in the general register and the respective local registers for England, Scotland, and Ireland. Similar data with respect to dentists are furnished in the introductory matter to the *Dentists' Register*—on page 24, for example, and elsewhere. In making known the publication of these volumes, we are glad to call attention to improvements that have been made in the present edition of both of them, by the very able, intelligent, and zealous registrar, Mr. Miller.

DEATH FROM OPIUM-POISONING.

AN important inquest was brought to a conclusion on the 8th instant at Stowmarket. A woman, aged 82, was seen by Dr. Groome, who found her in a dying condition, with symptoms of opium-poisoning. After her death, there being no sufficient appearances to account for death, the viscera, and a bottle of "Martin's Pectoral Balsam," a so-called "safe" remedy for all kinds of bronchial affections, were submitted to Dr. Stevenson for analysis. It was known that the woman had taken two doses of the above proprietary (not patent) medicine shortly before her death. This gentleman ascertained that the balsam was an opiate, and that, according to his analyses, the deceased had taken one grain of opium in the two and a half drachms of the medicine which she had taken. Even this dose might be fatal to an aged woman suffering from incipient bronchopneumonia. Mr. Martin, the chemist, who sold this "safe" medicine without any poison-label or caution as to its poisonous nature, gave evidence that it contained one-half per cent. of opium. The jury returned a verdict of "Accidental death from opium-poisoning," with a rider, stating that no one was to blame. This case well illustrates the inoperative nature of the present law as to the sale of poisons. The jury's attention was not directed to the possible or probable illegal nature of the sale of the medicine; and the police, we are informed, have no intention of taking proceedings to test the legality of the sale of the opiate.

PORRO'S OPERATION.

THIS operation was performed, for the second time, by Professor Porro, on December 7th, in the Obstetrical Institute of Milan, and is reported in an Italian journal. The patient, thirty-seven years of age, had been pregnant once before, and had been safely delivered, with the aid of craniotomy. The pelvic narrowing was of the third degree. She was admitted in the eighth month, and was obliged to keep her bed from the pain she suffered, owing to the increasing pressure of the enlarging uterus. She was very weak and anæmic, and the bowels were obstinately constipated. It was determined to allow her to go her full time, December 9th being fixed for the operation. On the 7th, however, the waters broke and labour began. Notwithstanding the unfavourable state of the patient, and the loaded bowels, Professor Porro determined to operate, which he did most ably, using the spray and all antiseptic precautions. The patient died on the fourth day. The necropsy revealed, as the cause of death, strangulation of the intestine, from adhesions of the visceral and parietal peritoneum at the margins of the wound, and from a band of exudation tightly inclosing the intestine in a loop. There were fatty degeneration of the heart, and fatty infiltration of liver and kidneys. The wound interiorly was perfectly united, the uterine stump being fixed to the inferior angle. The colon was loaded with hard fæces. There was no trace of pus or of encysted liquid in the abdominal cavity. Death was caused, not by any imperfection in the operation, but by a purely fortuitous accident: the abnormal adhesion of the intestinal loop to the abdominal wound. The morphia and sedatives, which had been freely given, might have helped to cause this by paralysing the co tractile activity of the muscular tunic of the intestines. The pre sure of the intestinal gas and the loaded state of the rectum mu have helped to keep the bowel pressed against the healing woun Professor Porro has ordered some thin lamels of catgut, which intends to use in analogous cases, to prevent immediate contact the visceral and parietal peritoneum.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR FLOWER will commence his annual course of nine le tures in the theatre of the Royal College of Surgeons on Mond the 26th instant, on the Anatomy of the Horse and its Allies, and which the following is a syllabus:—Lecture I, Monday, Febru 26th. Position of the Horse in the Animal Kingdom. Classificati of the Mammalia. The *Ungulata* or Hoofed Mammals. Generalis forms, mostly extinct. Characters of the two principal survivi groups—the *Perissodactyla* and *Artiodactyla*.—Lecture II, Wedn day, February 28th. The Perissodactyle or "Odd-toed" Ungulat Characters of the existing species of *Tapiridæ*, *Rhinocerotidæ*, a *Equidæ*.—Lecture III, Friday, March 2nd. Extinct species of Pe sodactyles. Generalised forms. Forms closely related, or wh lead up to existing forms. Forms which have become speciali without leaving descendants or representatives.—Lecture IV, M day, March 5th. Anatomical characters of the Horse in further tail, and as compared (*a*) with the generalised Mammalian type, with the allied forms of Ungulates, and (*c*) with Man. The Skelet —Lecture V, Wednesday, March 7th. The Dentition.—Lecture Friday, March 9th. The Muscles. Structure of the limbs, especi of the feet.—Lecture VII, Monday, March 12th. The Brain Organs of the Senses.—Lecture VIII, Wednesday, March 14th. Respiratory, Circulatory, Digestive Systems, etc.—Lecture IX, day, March 16th. Recapitulation and Conclusion.

OSSEOUS DEFORMITIES IN THE LOWER ANIMALS.

AT the last meeting of the Pathological Society, Mr. Sutton hibited a highly interesting series of deformed, diseased, and torted bones which he had obtained from animals dying in gardens of the Zoological Society. The animals which furni the specimens were a lizard, a cursorial bird, and four monkeys; according to the theory advanced by the exhibitor, the specim illustrated diseased conditions, common also to man, that is to osteomalacia, osteoporosis, cranio-tabes, and osteitis deformans. referring all these bone changes to various phases of chronic inf mation, and by including rickets also in this classification Mr. Sutton appeared to challenge criticism, and there were, no do many members of the Society present who could have cast rich light on the subject. Unfortunately, however, the reading of the paper on bone diseases, and the exhibition of specimens, was ceded by a good deal of other business, so that the President was obliged to deprecate prolonged discussion; consequently no atte was made to appraise the true value of the facts and theories p forward by Mr. Sutton and Mr. Barwell. The subject is well w of the best thought and time of the Society, which would con great benefit, not only on pathology, but on practical medici it could reduce the classification and nomenclature of bone disse leading to deformity, to some sort of order.

A CONTRA-INDICATION FOR PILOCARPINE IN BRIGHT'S DISE

PROFESSOR SOUSA MARTINS (*A Medicina Contemp.*, Lisbon, Ja 7th), thinks that pilocarpine ought never to be given in Br disease without previously determining whether the sudorip glands are still functionally active. This may be done by giv vapour-bath; if the skin respond by diaphoresis, pilocarpine m given with advantage, but if no perspiration shows itself, pi pine may do harm. In long continued anasarca from Bright's di the nutrition of the skin suffers, and the sudoriparous glan

ined of blood and cease to act. In a boy of eighteen with arca, pulmonary œdema, scanty urine loaded with albumen, with no cardiac complication, two centigrammes of hydrate of pilocarpine were given hypodermically; central symptoms ved themselves soon after the injection, and the boy died coma- the same evening. The cause was subarachnoid effusion, suffit to cause fatal coma by compression. Professor Sousa Martins ibuted the effusion to the action of the pilocarpine, which, as it d not escape by any of the usual channels of elimination, by horesis, salivation, diarrhœa, or by increasing the flow from kidneys, expended its energies on the pia mater and arachnoid, ing thus a fatal effusion.

REINSCH'S TEST.

J. MACALLAN, F.I.C., Chemical Demonstrator to the Royal Col of Surgeons, Dublin, in a paper read before the Society of Public lysts on February 14th, 1883, published in the *Analyst*, says:— testing for arsenic by Reinsch's method, there is serious source ror which seems to have been overlooked; at least, I can find eference to it in any of the standard works on the subject. I le to the deposition of free sulphur, together with cupric sul- e, on the copper, and its sublimation when heated. In ex- ning decomposing organic substances, sulphur is frequently sited, owing to the decomposition of free sulphuretted hydro- ; so much so, sometimes, as to take fire and burn with a blue e when a lighted taper is applied to the copper. When heated tube, the sulphur forms a sublimate having a general appear- and behaviour similar to that of arsenious oxide, in small ntity, being white, and resubliming unaltered. It is mentioned ome works that sulphur, cautiously sublimed, condenses in nbic octahedrons, but I have not found it deposit in that form. er the microscope, it is seen to consist of globules. When, how- , these are so small as to render their outlines indistinct, they mble closely the crystals of arsenious oxide in transparency, re and aggregation. When doubt exists, the safest course might o procure as much of the sublimate as possible, boil down a nd time with dilute acid and copper, and examine any sublimate ined microscopically and with the usual confirmatory tests.

LAST YEAR.

EDWARD MAWLEY has taken the trouble to make a very com- e analysis of the weather of 1882, as observed in the neighbour- d of London, and compared in all respects with that of an average ; and taking 1882 as a whole, it may be concisely described as ng been a warm, dull, and somewhat dry year, with an extremely ly and singularly humid atmosphere and low barometric pressure. mean barometric pressure at Greenwich was .021 inches below average of the previous forty-one years, and lower than in any since 1878, or for four years. The mean temperature of the t Greenwich was 0.3° above the average of the previous forty- years, and higher than in any year since 1878, or for four years; mean temperature of the soil at three feet being 0.2° above the age of the past thirty-five years. In respect to humidity, the n amount of humidity was 1 per cent. in excess of the previous y years; and with two exceptions (1879 and 1880), greater than ny year during the last twenty years. The mean daily velocity he wind exceeded by 46 miles the average of the previous thirty- years, and was, with one exception (1877), greater than in any of the same period. The total rainfall at Addiscombe was inch below the Croydon average of the previous twenty-two s. Rain fell on 188 days, to the total depth of 26.337 inches; v fell on 8 days, the greatest depth on the ground being 2½ inches December 7th. The mean daily duration of sunshine at Green- was 8 minutes above the average of the previous five years. total number of deaths in London was 2,999 below the average he previous ten years; those referred to zymotic diseases were 516 below, and those to diseases of the respiratory organs 461 below, the respective averages in the same decade.

NOISE AS A NUISANCE.

ALTHOUGH noise is an agent which largely disturbs the peace of mankind, which not unfrequently excites and determines disease, and which often seriously prejudices the satisfactory progress of the sick, it is a form of annoyance and danger to health and life which it is difficult to move the law to condemn as a nuisance. Last week, three members of the Blue Ribbon Army were summoned to the Clerkenwell Police Court by a Mr. Broad for making noises near his house. The complainant said he was a pharmaceutical chemist, and on the 4th of this month his wife was confined. The Blue Ribbon Army were in the habit of marching from their head-quarters, shouting and singing, and playing cymbals, a big drum, and triangles. On the 4th instant, he wrote to the head-quarters of the "army," requesting them to desist from playing and singing near his house. He could hear the band a quarter of a mile from his residence; and as they passed his house, he asked them all to desist on account of the illness of his wife, but they refused. Within half an hour, they came back, playing, singing, and shouting more loudly than before; while the rabble that followed the "band" sang or shouted blasphemous words to popular tunes. Medical evidence was adduced to show that the complainant's wife was suffering dangerously from the beating of the drums and the other noises mentioned. The police magistrate dismissed the summons, on the ground that the defendants did not technically come within the meaning of the Act for the regulation of street musicians and singers.

THE LONDON HOSPITAL MEDICAL SCHOOL.

WE understand that a proposal to erect a building to contain about eighty sets of residential rooms, a dining hall, smoking room, and committee rooms, for the use of the students at the London Hospital, is under very serious consideration. The plans have been prepared, and are now awaiting approval. The money necessary to carry through the undertaking is, we are informed, to be raised, on the principle of limited liability, among the friends and the medical staff of the hospital. The scheme seems to be in every way worthy of praise, and ought to be a great boon to the students. Nothing, we believe, will more tend to raise the tone of student-life than the multiplication of such residences. At the present time, with the exception of the College at St. Bartholomew's Hospital, and University Hall in connection with University College, both absurdly inadequate to the calls made upon them, there are no residences provided for medical students in London, who, on first coming up to town, are thrown on their own resources to drive such bargains with the lodging-house harpies as their inexperience may allow. Were every medical school provided with a well-planned building, where the sanitary arrangements were good, and the rents and other charges moderate, students would eagerly occupy all the rooms, to the advantage of their health, their morals, and their social position and to the certain cultivation of more studious habits.

THE METROPOLITAN ASYLUMS BOARD HOSPITALS.

THE suggestion was lately made to the managers of the Metropolitan Asylums District, that the various infectious hospitals under their control should be distinguished "by the points of the compass or by the postal districts," rather than by the name of the parish or union in which they are locally situated; and it has accordingly been resolved by the managers, with the approval of the Local Government Board, that the several infectious hospitals be, for the future, designated as follows: Homerton Hospitals as the Eastern District Hospitals, Hampstead Hospital as the North-Western District Hospital, Fulham Hospital as the Western District Hospital, Stockwell Hospitals as the South-Western District Hospitals, Deptford Hospital

as the South-Eastern District Hospital. An attempt is also being made by the Asylums Board to commence the much needed reform in the ambulance service of the metropolis. Power was, indeed, conferred on the Board by Section 16 of the Poor-Law Act, 1879, to provide ambulances for the conveyance of the infectious sick to their hospitals, and the managers exercised this power by establishing an ambulance station near London Fields, which, however, they have been compelled to abandon by proceedings at law. The Royal Commission on Small-pox Hospitals, in their "Practical Recommendations," strongly urged the desirability of placing the ambulance service of the metropolis under the charge of the Board, and the managers have now taken measures to give effect to the recommendation. It is proposed to establish an ambulance station at each of the hospitals, and a report by the Board's architect, with plans for a station at the "Western District Hospital," was submitted to the managers by the committee of that hospital at a recent meeting. The plans having been approved have been forwarded to the Local Government Board for their sanction. It is intended to provide stabling for fifteen horses, coach-house for twelve ambulances, with all necessary accommodation for drivers, nurses, etc., on a site 220 feet by 76 feet, and at an approximate cost of about £4,550.

STATISTICS OF INDUSTRIAL DWELLINGS.

THE eighteenth annual report of the trustees of the Peabody Donation Fund has been issued. The net gain of the year 1882, from rents and interest, was £24,162 14s. 9d. The sum given and bequeathed by Mr. Peabody was, in 1862, £150,000; in 1866, £100,000; in 1868, £100,000; and in 1873, £150,000—making a total of £500,000, to which has been added money received for rent and interest, £304,610 19s. 6d., making the total fund on the 31st of December last, £804,610 19s. 6d. The trustees have borrowed from the Public Works Loan Commissioners £265,000, of which amount they have paid off £9,833 6s. 8d., leaving a balance of £255,166 13s. 4d. due to the Commissioners. The expenditure on land and buildings, to the end of the year, amounted to £970,500 14s. 1d. Since the last report, the trustees have opened thirteen blocks of buildings at Great Wild Street, containing 808 rooms, and fifteen blocks at Old Pye Street, Westminster, containing 861 rooms, all of which are now occupied. Thirty-three blocks are now in course of erection at Whitecross Street, of which six will be tenanted within the next few weeks. The thirty-three blocks on this site will contain 1,885 rooms, which, it is hoped, will be occupied during the year. Up to the end of the year, the trustees had provided for the artisan and labouring poor of London 7,829 rooms, exclusive of bath-rooms, laundries, and wash-houses. These rooms comprise 3,533 separate dwellings, occupied by 14,604 persons. The average weekly earnings of the head of each family, in residence at the close of the year, was £1 3s. 6¼d. The average rent of each dwelling was 4s. 7d. per week, and of each room 2s. 1d. The rents in all cases include the free use of water, laundries, sculleries, and bath-rooms. The birth-rate for the year in the buildings reached 45.04 per 1,000, which is 10.74 per 1,000 above that of all London for the same period. The death-rate was 18.42 per 1,000, which is 2.98 per 1,000 less than London. The infant mortality was 137.41 in each 1,000 births, or 13.59 per 1,000 below that of London.

FRESH MUTTON FROM NEW ZEALAND.

IT is good news that fresh mutton, of good quality and in good condition, brought from New Zealand, can be bought in Smithfield Market. Commenting on the arrival of 5,838 carcases of sheep in the metropolis last week by the steamship *Sorrento*, from New Zealand, the *Daily News* says:—"The arrival of the *Sorrento* is deserving just now of special mention, because she brings the largest quantity of meat yet received by one ship from New Zealand, because it is of exceptionally prime quality, and because it is in most perfect condition. Many of our readers are probably aware that the sheep which produce the finest wool are not worth much mutton, and 'the trade' will not have forgotten the adverse criticisms passed upon a consignment of New South Wales merino which weighed not more than 50 lb. per bony carcase. The 5,8. carcases, just brought from New Zealand, are crossbreds, wi the exception of about 600 pure Southdowns. It is all three-ye old mutton, and the weight per carcase is the excellent average 73 lbs. The mutton, as it came out of the ship's hold, dry, har frozen, clean, composed of proper proportions of fat and lean, a with the bloom still fresh upon the red skin, looked magnifice Hung at Smithfield, it resembled, at a few paces distant, the prim meat in the market, and some carcases were bought even by We end tradesmen, who have hitherto treated all frozen meat with c tempt. The New Zealand shippers deserve credit for the manner which they put the meat on board. The defective cargoes of t past have been due chiefly to stupid handling during the prepa tory processes. In the present instance the Refrigerating Compa near Dunedin, conveyed their cargo to Port Chalmers, in the prec condition in which it should be transferred to the freezing chamb of the ship, using air-tight railway trucks for the short journey eight or nine miles. New Zealand, it may be stated, is takin leading position in this business, and a regular monthly line is p jected. Each sheep is, as usual, wrapped in white calico or canv The freezing machinery on board the *Sorrento* was supplied Hicles, Hargreaves, and Co., of Bolton, and with the exception o few days in the tropics, when a duplicate was used, one eng proved sufficient to keep the chambers down to 15 degrees Fa The dry-air system was used. By it the air is pumped in as dry can be, and any moisture which remains, is deposited in the sh of snow before entering the chamber, and the snow-box, which n contain perhaps twelve bucketsful per diem in tropical latitudes, swept out every twenty-four hours. The spacious refrigerat chambers are insulated by walls twelve inches thick, more t half the thickness being charcoal. The freezing, in the case of *Sorrento*, was so perfect, that the cargo reached the Thames a soli frozen block, and the carcases came out, for the most part, with a sign of frost upon them."

POISONING BY A HERBALIST.

ANOTHER illustration of the danger of resorting to unskilled unlicensed practitioners of the healing art, writes the *Birmingh Post*, was recently furnished at the Hanley Police Court, in wh a herbalist and his assistant were convicted of selling a poisono herb without properly labelling the wrapper, as required by Pharmacy Act. Many old-fashioned people entertain the idea t by avoiding the medicinal drugs of the chemist's shop, and resor to herbs for the treatment of their occasional ailments, they ar all events, safe from the worst dangers of careless or unskilful s pensing; but it will be evident, from the case we report, that modern herbalist's shop is quite as full of perilous stuff as tha Romeo's accommodating apothecary. It seems that, on the 25t last month, a Mrs. Bratt, residing in Hanley, called at the sho a local herbalist, and inquired as to the efficacy of burdock purifying the blood. Under the advice of the assistant, she ag to purchase three sorts of herb, of which burdock was one, and told to mix and make a decoction of them, and take a wineglas three times a day. The herbs were handed to her wrapped up piece of paper, and there was no label of any kind on the wra In obedience to the vendor's instructions, she took a wineglassf the decoction the same evening, and gave her daughter two t spoonfuls, but the medicine had anything but the effect anticip and desired. It produced great pain and giddiness, followe by fever and delirium, accompanied by a scarlet rash. Happily h daughter, who had taken but a small quantity of the poison a sufficient strength left to go for medical assistance, or her mo in all probability, would have died. The medical attendant h

as called in soon recognised the symptoms of vegetable poisoning, nd, his diagnosis being confirmed by that of another expert, he dopted from the outset a vigorous treatment, including the administration of morphia, brandy, and emetics, supplemented by galanic shocks for the production of artificial respiration; and, under is treatment, Mrs. Bratt and her daughter ultimately recovered. n examination of the herbs from which the decoction had been ade revealed the fact that they were not burdock at all, but bellaonna, which is of course a virulent poison. On this evidence, the ench had no hesitation in convicting the herbalist of having broken ie law by selling poison without labelling it as such; and he was ned £5 and costs. He may think himself lucky, in all the circumstances, to have escaped with a pecuniary penalty, for it was idently on the cards that he might have had to answer to a charge manslaughter. The case will not have been altogether profitless, owever, if it should have the effect of opening the eyes of the pub to the danger of resorting to unskilled and unlicensed dispensers, ho do not hesitate to combine medical advice with the sale of their erilous "simples."

RESPONSIBILITY FOR BOILER-EXPLOSIONS.

LTHOUGH protective legislation is one of the distinctive notes of e age, some recent decisions in the law courts have strikingly own the difficulty of fixing responsibility for loss of life arising om the most preventible of "accidents" in workshops and facries, and have exhibited how perilously far it is possible to carry gligence which kills before the law regards it as homicide. Late perience has demonstrated that chimneys, long known to be ulty, may fall and crush fifty factory hands to death, and that ilers long known to leak may burst and kill several workmen, thout anyone being found to be criminally responsible for such viously avoidable disasters. The case of Henry Mosedale, who as tried for manslaughter last week at Warwick Assizes, and quitted, affords another illustration of the legal difficulty of bring- home culpability in the case of death arising from boiler explo- ns. The prisoner, who had been committed for manslaughter by coroner's jury, was chief engineer of some tube works in Birming- m. In October last, one of the steam-boilers under his charge rst, and killed three men. It was shown that it was the prisoner's ty to examine this particular boiler, and it was proved that the iler had been examined by experts, and condemned by them as ing in a dangerous condition, and that Mosedale knew of this. On ptember 25th last, the faulty boiler was found to leak, and the fire as blown out, and the leak examined by the prisoner's deputy. The isoner and one of the deceased men then adopted the childish exdient of putting "sharps" into the boiler to stop the leakage, hich appears to have been considerable. Notwithstanding the rning he had received by the leakage, and his knowledge that the iler had been pronounced by competent examiners to be "unsafe work," the engineer allowed the damaged boiler to be used for a rtnight longer, when it burst. When the case had proceeded to is point in the evidence for the prosecution, the judge, Lord Jus- e Cotton, interposed, and expressed his conclusion that the pri- ner had not been guilty of criminal negligence, and that he had ly shown "an error of judgment," adding that a man is not riminally liable because he is a fool." In reply to the arguments the counsel for the prosecution, the learned judge further inti- ated that, as it had not been proved to be the duty of the prisoner examine the boiler personally, he might lawfully do so by his puty; that his deputy, a foreman at the works, had examined the iler; that as the prisoner had only acted upon the foreman's ad- e, he had not been guilty of negligence in the eyes of the law, d that a verdict of "not guilty" must be returned. Lord Justice tton's decision cannot be disputed, as it is the duty of a judge to pound existing law in reference to the case before him. It is conquently now established by unequivocal precedent that an engineer, specifically charged with the superintendence of a boiler, may act, or fail to act, as Mosedale is described to have done, and yet be held free from criminal responsibility for a sacrifice of human life arising from the bursting of the boiler under his care, and which bursting, is admittedly the consequence of his own indiscretion. In spite of formal reports by experts that a boiler is unsound and dangerous, it is permissible still to continue working it on the mere opinion of a workman; and, when it explodes and kills three men, a judge declares that the law holds no one to blame, but recognises only "an error of judgment." Boiler-inspection and scientific reports thereon, which some have been wont to regard as safeguards, evidently afford no guarantee for the prevention of death from boiler-bursting. In the face of this decision, it will henceforth be difficult to find a case of the kind in which culpability can be fixed upon any one in charge of the boilers of steam-engines.

PRESCRIBING CHEMISTS.

MANY unfortunate cases have lately shown once more the public danger which arises from unskilled persons undertaking the treatment of the sick and suffering. Although repeated judgments in the law-courts have made it clear that druggists may be punished when they act as doctors, and so infringe the Apothecaries' Act, dispensing chemists are still practically permitted to prescribe remedies without hindrance; their widespread usurpation of the legitimate and exclusive functions of the licensed medical practitioner has been suffered so long, that many members of the trade seem to regard their prescribing assumptions as a right. This imagined right not a few publicly claim and defend, and some do not scruple to advertise themselves in the newspapers as the proprietors of "prescribing businesses." Prevalent as is prescribing by chemists in London, the dangerous custom is probably relatively much more in vogue in the provinces, where there are few druggists who are not in the habit of prescribing medicines for the treatment of what they profess to regard as "simple" cases of disease. In most small towns there are usually to be found one or two venerable members of the trade, who are credited with a ripe experience in the mysteries of medicine, and who are held in high repute by the more ignorant country people of the district, from whose pockets they extract a rich harvest on market days by prescribing and supplying nostrums for the cure and comfort of the sick. That fruitful field of disastrous mistakes, the disorders of children, is usually held by the rural folk to fall especially within the scope and skill of the druggist. Nor do chemists limit their assumptions to the science and practice of physic. They do not scruple to invade the domain of our surgical brethren. Not only are teeth drawn, but abscesses are opened, ulcers are dressed, ears are syringed, bandages are applied, supposed herniæ are explored, and trusses are chosen and fitted on, and uterine displacements are discussed, and pessaries and other mechanical "supports" are selected and recommended for their cure. Perhaps the truest remedy for these baneful anomalies is not to be sought so much in prohibitive and restrictive legislation as in the cultivation of an intelligence throughout the community which shall better distinguish between spurious and authorised practisers of the healing art, which shall better recognise the danger of dallying with the earlier manifestations of ill health, and which shall better appreciate that the diagnosis and treatment of disease can only be safely undertaken by persons of far different education and mental training from those who have fitted themselves only for the compounding and sale of medicines.

GROCERS' LICENCES.

WE see, with some regret, that under the guise of promoting the interests of temperance and the public welfare, the publican interest is again stirring actively to cut off the means provided by the legislature after mature consideration of the subject in 1861, and on the recommendation of a Select Committee of the House of Commons, or

lessening the monopoly which the publicans at that time enjoyed, of selling spirits and wine in small quantities. When the commercial treaty with France was completed, of which the object was to promote the consumption of light wines in this country, and to introduce their use as rivals to the strong spirituous liquors and highly alcoholic wines, which at that time constituted the staple consumption in this country, it was found to be necessary to facilitate their sale elsewhere than at the bars of public-houses, and to provide some means by which the sale of single bottles of wine or of spirits could be made accessible, so that the public should not be driven, as hitherto, to the public-house bar. Hence arose the system of granting licences to all other traders to sell wines and spirits in single bottles for home consumption. This system of off-licences was chiefly utilised by grocers, but it was, and is, open to every trader. It is, of course, extremely obnoxious to the publican's interest, the value of whose monopoly it diminished, and from whose establishments it diverted an immense number of persons whom previously they were enabled by this means to attract to their bars; and hence this system has, from time to time, been assailed, sometimes openly, and at other times under various insidious pretences. When the House of Lords appointed its famous Select Committee on Intemperance, which included the Duke of Westminster, the Earl of Kimberley, the Bishop of Peterborough, Lord Hartismere, Lord Penrhyn, Lord Aberdare, and Lord Cottesloe, the attack on the grocers' licences was set forth very vigorously and very completely, and a great body of evidence was taken on the subject. Those who had so extensive a trade interest in promoting the publican monopoly had been skilful enough to avail themselves of help coming from their direct enemies. They managed to convince a number of the sincere advocates of true temperance, and among them some of the most influential, that grocers' licences led to secret drinking; and evidence to that effect was tendered before the House of Lords. The question was then very thoroughly sifted, and the Committee were furnished with minute particulars from the Church Temperance Society, and from other sources, of all the evidence that could be obtained under this head. The subject is discussed with great ability and in detail in the report of the Select Committee of the House of Lords on intemperance, printed and presented to the House on March 17th 1879, and the conclusion at which they arrived was "that no evidence had been given which satisfied them that the retail of wine under this system had increased intemperance; and, on the contrary, they were rather of opinion that the operation of these Acts, besides affording much convenience to the public, had had a beneficial effect in encouraging the use of light wines instead of stronger beverages." It is not, however, to be expected that interests so important would be satisfied without renewing the attack; and, of course, the form in which it is most likely to attain some measure of success, is that in which it assumes a solicitude for the interests of temperance, and avails itself of the assistance of the advocates of temperance. Mr. Lewis Fry, one of the ablest and most sincere of temperance leaders, has introduced a measure into the House of Commons this session of which the avowed object is to restrain and lessen the number of grocers' licences, and, in fact, to afford a machinery which would, in many districts, facilitate their partial or complete suppression. Of the good intentions of Mr. Fry, and of the many philanthropic persons who have been led to take views which would support his action, no doubt can be entertained; on the other hand, there appears to us to be as little doubt that any such legislation is altogether in a false direction, and would tend directly to increase the evils which it aims at remedying. Its immediate effect would be once more to compel those persons who wanted to buy small quantities of spirits for their home consumption to go to the publican, and thus, while increasing his profits, to lessen the inducements to temperance, afforded by home influences. No one has yet gone so far in the interest of any set of opinions as to suggest that a person who wishes to provide himself either with wines or spirits, or who wishes to drink them, should by direct legislation be prevented from doing so at his own time and in his own home. This being conceded it is clear that the true interests of temperance lie in measures which increase the power of those home influences, and which lessen the temptation for drinking at public bars. It is from this point of view—and because we believe that, to increase the monopoly of the publicans, and to enlarge their profits and their power is not in the temperance interest, and that it is directly conducive to an improved state of opinion as to habits of drinking that domestic influences should be strengthened, and that the facilities which at present exist in that direction should not be lessened—that we hold that Mr. Fry's proposed Bill would be contrary to public welfare and policy. The interest thus attacked is relatively, a small one; the number of publicans' licences is, we believe, somewhere about 92,000, the number of grocers' and wine merchants' licences about 6,000; and those who desire to lessen the inducements to drink would do better to endeavour to restrict the temptations to bar-drinking, offered by the enormous leverage of the monopoly enjoyed by these 92,000 licenced publicans, than to attack to their advantage, the small proportion of traders who are at present licensed to sell wines and spirits for home consumption. It may earnestly be hoped that Mr. Fry and his supporters will reconsider their point of view; and, instead of acting as the undesigned supporters of those who desire to strengthen the publicans' monopoly will do all in their power to break it down. We are satisfied that a system, which allows all traders to sell single bottles of wine or spirits, with the strict provision that none should be consumed on the premises, is that system which is most conducive to the public welfare; and it would be a source of great regret if anything were done to injure or weaken it, so far as it is now developed.

SCOTLAND.

We are glad to learn that Dr. Keiller, who lately resigned his position as Lecturer on Midwifery in the Surgeons' Hall, Edinburgh, owing to failing health, has sufficiently recovered to be able to resume practice.

The epidemic of measles which broke out in Walls, Orkney, is spreading with alarming rapidity among the islands. As yet there have not been many fatal cases, the disease being of a mild type.

We understand that an independent association has been formed among the students of the University of Edinburgh, who have fixed upon His Royal Highness the Duke of Albany, as their candidate at the ensuing rectorial election.

The medical library of the late Sir Robert Christison, including 334 works, was sold by auction this week. The principal lots sold were British and foreign journals relating to medicine and science, dating back to the beginning of the century.

At a meeting of the Heriot Hospital governors, held on the 14th instant, the House Committee submitted their report, which showed that the health of the boys in the hospital had been less satisfactory during the past month, than for any similar period during the last two years. There were three cases of scarlet fever under treatment.

Some time ago a cottage hospital was proposed for the town of Hawick. With characteristic generosity the Duke of Buccleuch has come forward and offered to its promoters a free site, and in addition has promised a yearly subscription of £10 towards the funds of the institution.

THE funds of the Sick Children's Hospital, Edinburgh, have quite tely been augmented by the sum of five pounds, as the result of challenge thrown down by Lord Elcho during his successful con- st for the county of Haddington, to any *littérateur* who could give .e author of the line "Proteus rising from the sea," which had been ioted by his opponent, Mr. Finlay, Q.C.

AT a meeting of the Kirkcaldy Town Council, held last week, a tter was read from Mr. Ferguson, of Raith, offering one hundred ineas towards the erection of a hospital for the burgh. It is to be ped that this offer will be accepted, and that the Hospital Com- ittee of the Council will shortly set about the building of a needed ructure in a town of so much importance as Kirkcaldy.

AN epidemic of typhoid fever has broken out in the famous village Bannockburn, near Stirling, and several cases have proved fatal. ie county authorities had no official intimation of the epidemic, t, on inquiry, it was found that a woman who kept a dairy had o members of her family ill with the fever, and that most of the rsons affected had been supplied with milk from this contami- ted source. The dairy has since been closed by the authorities.

OF late considerable attention has been paid to the state of the meteries in the city of Edinburgh. As the result of an inquiry stituted by the Town Council, the medical officer of health, Dr. tlejohn, has recommended that the interment of the dead should no longer left to private companies, but should be dealt th by the authorities. The convener of the Health Com- ttee pointed out the danger of superficial burying, and hoped that, the General Police Bill about to be introduced by the Lord Advo- e, power should be given to the local authority to investigate tters like this.

AYR NEW HOSPITAL.

E Ayr New Hospital was opened on the 13th instant by Mr. mpbell, M.P., in presence of a large number of the country gentry l the inhabitants of the town. The building, which is a hand- ne and spacious one, has cost nearly £12,000. Mr. Charles C. tt, M.B. and C.M.Edin., has been appointed house-surgeon.

HEALTH OF DUMFRIES.

FERRING to a paragraph forwarded to us for publication, and ich appeared last week, Dr. Thompson Mott for Dumfries writes us that at the time this paragraph appeared "the infectious eases wards of the Dumfries and Galloway Royal Infirmary, ere all the cases of fever were treated, did not contain one single ient; no cases existed in the town then, nor have any appeared ce, and the Dumfries epidemic had been traced to its source, l that source is not the water-supply of the town; moreover, the ter-supply is subjected to filtration.

GLASGOW UNIVERSITY.

as now, we understand, been definitely arranged that Mr. John ght will visit Glasgow next month, and deliver his university rial address on March 21st. Should the progress made with interior fittings and decorations of the Bute Hall permit of its g used for the occasion, additional interest will be given to the nt; and we are sure that all the students, whatever may be their tical views, will join in a hearty and suitable welcome to one he most brilliant orators of the present day.

PERTHSHIRE MEDICAL ASSOCIATION.

Perthshire Medical Association have, with regard to the notifi- on of infectious diseases, come to the conclusion that it is in- bent on the medical officer to notify. This decision is in striking contrast with that arrived at by the profession in Glasgow, where an uncompromising hostility has been manifested towards the proposal, ever since it appeared in the Draft Police Bill. As yet, only three members of the profession in Glasgow have expressed their opinions in favour of compulsory dual notification, but doubtless there are others who are of the same way of thinking.

THE GLASGOW ROYAL INFIRMARY.

THE relations between the staff and managers of the Glasgow Royal Infirmary are strained. Of late, the staff has had to submit to a good deal of unwarrantable interference on the part of the managers, who now propose to reduce their honorarium to £50, and make the appointment of physician and surgeon for one year. The object of this last move is obvious. It is to be hoped that the staff is comprised of men of fearless independence. After the "chloroform" episode, anything may be expected from the directors.

MORTALITY AT GREENOCK.

No fewer than 40 deaths, or 25.8 per cent. of the whole mortality of Greenock during the month of December last, occurred from diseases of the respiratory organs, pulmonary consumption alone causing, in addition, 14 deaths, or 9 per cent. of the whole. This result was mainly due to the severe weather then prevalent, and illustrates what has been long known, that nothing exercises a more injurious effect on the health of a community than the onset and continuance of extreme cold. The general death-rate of Greenock for December was equivalent to an annual death-rate of 28.6 per 1,000, against rates of 20.3, 22.5, and 24.4 for the corresponding periods of the three previous years.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending February 10th show that the death-rate in the eight principal towns during the week, was 28.8 per 1,000 of estimated population. This rate is 4.1 above that for the corresponding week of last year, and 2.5 above that for the previous week of the present year. The lowest mortality was recorded in Perth, viz., 25.5 per 1,000; and the highest in Paisley, viz., 30.8 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.5 per 1,000, or 0.4 below the rate for the previous week. Whooping-cough continues to be the most fatal epidemic, the mortality therefrom being greatest in Glasgow and Dundee. From acute diseases of the chest, 164 deaths were registered, or 11 more than in the previous week. The mean temperature was 40.6°, being 4.1° above that of the week immediately preceding, but 2.1° below that of the corresponding week of last year.

GLASGOW TRAINING HOME FOR NURSES.

THE ninth annual report of this institution has been issued, and shows a very satisfactory state of matters. The staff of nurses at present numbers thirty-six, and of these twenty-eight are fully qualified to go out and wait upon patients at their private residences, while eight are still under training. During the year, 250 cases of sickness were nursed in private families; and the fees for nurses' services reached the very handsome total of £1,605, which was £314 over the previous year. This is a very good proof of the estimation in which the nurses of the institution are held by the public and the medical profession. In connection with the Home are public and private wards into which patients are admitted on payment; and these have been generally well occupied, although the number of patients was somewhat fewer than in the previous year. Altogether, 156 patients were admitted, of whom 102 underwent operations of more or less severity. After longer or shorter periods of treatment, 112 of the patients left cured of their ailments, 23 were relieved or improved, and 5 died. The total expenditure for the year was £2,414, and the income £2,579, leaving a balance

in hand of £165. To meet the growing demand for trained nurses, and for increased accommodation for private patients, it has been decided to enlarge the institution, and very suitable adjoining premises have been secured by the directors for that object; so that there seems every prospect of the Home adding to its sphere of usefulness in the coming year.

IRELAND.

CORK NORTH INFIRMARY.

THE trustees, last week, unanimously elected Dr. Cotter senior assistant-surgeon to the infirmary, with the supervision of four beds in the hospital. Dr. C. Yelverton Pearson was at the same meeting unanimously appointed to be a second assistant-surgeon.

DEATH OF DR. MARTIN, OF BLACKWATERTOWN.

DR. MARTIN died at his residence, in the county Armagh, last week, and during a long life held several important appointments. It is stated that he was the favourite pupil of Sir Astley Cooper. Dr. Martin graduated in Glasgow, and was the author of various literary contributions, including *On a Method of Treating Burns and Scalds without Suppuration; On Anomalous Tumours; On Hæmorrhage from Leech Bites; On the Potato Disease*, etc.

COMPLIMENTARY ADDRESS TO DR. DANIEL ALLEN CHARLES.

AT a special meeting of the Bellaghy (co. Derry) Dispensary Committee recently held, an address, beautifully illuminated by Messrs. Ward and Co., and signed by Lieutenant-Colonel Bruce, J.P., D.L., and Mr. J. Hill, J.P., was presented to Dr. Charles, who finds it necessary to retire from his appointment owing to the illness of his wife. The address spoke in complimentary terms of his zeal and attention to the poor under his care.

FEVER IN KILDARE.

SEVERAL cases of fever have recently occurred in the town, and it is probable that many more will take place in consequence of the want of ordinary sanitary precautions. For example, a man named Darcy recently died of fever, and a "wake" was held in the infected house. Further, two cases of fever took place in persons residing in a lodging house, and yet the proprietor continued to take in lodgers as usual. Instructions have been given to Dr. Falkiner, consulting sanitary officer of the union, to proceed to Kildare, and make a report of the state of the district to the guardians.

THE DUBLIN BRANCH.

A COMMUNICATION was sent to the members of the Dublin Branch on the day of the recent annual meeting to the effect that "in consequence of the circular recently issued by the Medical Alliance Association—which was referred to at the meeting on Tuesday—and which abuses the 'incapable and culpable Reform Committee of the British Medical Association,' and accuses it of 'treachery to the profession,' Dr. Jacob and Mr. Chapman stood up at the meeting, and, having denied that they had any knowledge of the circular, stated that they had, in consequence of its issue, resigned their places as President and Vice-President respectively of the Alliance Association."

HEALTH OF BELFAST.

DURING the past month the average death-rate from all causes was 31.6 per 1,000, of which diseases of the lungs showed a rate of 15.6, and from zymotic affections five. Regarding the subject of death-rates, Dr. Browne, Medical Superintendent Officer of Health, remarks that a weekly or even monthly return is of comparatively little value as an index of the public health in any locality, and inferences relative to the likely annual mortality drawn from such limited information are quite fallacious, as the Registrar's returns for the entire year are required to arrive at correct conclusions. For instance, in one week of 1882, the death-rate registered in Belfast was so low as 16, and on another as high as 42, hence any surmises from either of these data relative to a probable annual rate, would be most deceptive.

ENNISCORTHY LUNATIC ASYLUM.

DR. EDMUNDSON, resident medical superintendent, in his annual report recently issued, states that during the year 57 cases were admitted, making a total of 363 patients under treatment in 1882. Thirty-two were discharged, and 16 were removed by death. The milk supplied, one of the most important articles of diet in a public institution, on several occasions was found to be below the standard, and question arose as to whether the abstraction of cream was an adulteration? The matter was brought under the notice of the central authorities, when it was found that Clauses 6 and 9 of the Act regulating the Sale of Food, 1875, provide that the seller who, without notice, abstracts from an article any part of it so as to affect injuriously its quality, shall be liable to a penalty of £20. The inspectors of lunatic asylums in Ireland, Drs. Nugent and Hatchell report most favourably as to the manner in which the asylum is managed by Dr. Edmundson, and to the regularity, neatness, and thorough ventilation which exist.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE fortieth annual meeting was held last week, Dr. T. H. Purdon the permanent President, taking the chair. It was urged that the students of the Belfast Royal Hospital should be spoken to by the medical staff, but one of the members present could not see the use of asking men on the staff who did not contribute anything themselves to speak to the students. The President and four other gentlemen were unanimously appointed as a deputation to represent the Branch in Dublin at the annual meeting of the parent Society to be held in the Royal College of Surgeons in June next. The following office-bearers were elected for the ensuing year: *President* Dr. T. H. Purdon, sen. *Honorary Secretary:* Dr. Wilberforce Arnold, J.P. *Honorary Treasurer:* Dr. Browne, R.N., J.P. *Committee:* Dr. Wilberforce Arnold, Dr. Browne, Dr. Drennan, Dr. Cuming, Dr. Ferguson, Dr. Murney, J.P., Dr. Moore, Dr. McCleery, Dr. J. T. W. Smith, Dr. Ross, Dr. McGee, Dr. Brice Smyth, Dr. Alderman Whitaker, Dr. Harkin, J.P., Dr. Spedding, Dr. McKeown, Dr. Wales, sen., Dr. Hawthorne, Dr. Jamison, Dr. Gray, Dr. Ross of Ballymena, Dr. Musgrave, J.P., Dr. R. McClelland, J.P., Dr. Stuart, and Dr. McDonnell.

PUBLIC MORTUARIES.—At a meeting of the Paddington Vestry, the Rev. Walter Abbott in the chair, a report of the Sanitary and Public Health Committee was received on the subject of a public mortuary for the parish. The report stated that, having viewed the mortuary and coroner's room for the districts of Clerkenwell, Islington, St. Giles's, and the City of London, the committee were strongly of opinion that the present dead-house is inadequate for the purposes required; and they recommended that on the site of the present building, or elsewhere in the disused churchyard, a proper building be erected for the reception of infectious and non-infectious cases, a room for *post mortem* examinations, with coroner's court, waiting-rooms, and lavatory accommodation, at an estimated cost of £1,200. The report was approved and adopted.

ST. THOMAS'S HOSPITAL.—A drinking fountain has been erected through the agency of the Metropolitan Drinking Fountain Association, at St. Thomas's Hospital, in memory of the late Mr. Hamilton Hay Hill (son of the late J. D. H. Hill, Esq., of Gressenhall, Norfolk), of Her Majesty's Exchequer and Audit Department, by some of his friends in that office, and as a mark of their regard for him. It has been placed close to the Thames Embankment, at the west end of the hospital, of which Mr. Hill was a governor, and where he was accustomed to visit the patients, and died on April 22nd last, aged 38.

COMMUNICABILITY OF PHTHISIS.

A BRIEF abstract of some interesting observations made by Dr. E. . Janeway, of New York, on the possible contagion of phthisis, and ublished in the *Archives of Medicine*, will be read with interest at ıe present time.

His first observation is to the effect that dogs, coming into con-ant contact with anyone suffering from phthisis, not unfrequently cquire a fatal pulmonary affection. A young man, 23 years of age, ho was suffering from phthisis, and who had lost his mother of ıe same disease, on one occasion, when visiting Dr. Janeway, rought a pet dog with him, which he noticed to be troubled with a ough. On inquiry, the patient stated that this was the third dog e had owned since his illness, two having already died after an lness attended with cough and vomiting; they were all quite well hen he first had them. He was in the habit of taking his dog to ed with him, where it slept nestled in his arms, its face and nose ırned towards his. The first dog was a black and tan terrier; the ext a King Charles's spaniel; and the third a Scotch terrier. The st dog survived his master, though troubled with a cough and aving lost flesh and strength. The further history of the third dog not known.

Dr. Janeway next calls attention to the following cases.

1. A young married woman died of phthisis. Her father was ill ith phthisis in the same house prior to her illness. Her husband ed of phthisis, supposed to have arisen from taking cold at her ıneral.

2. In a family with no inherited tendency to phthisis, a daughter eveloped hysterical phenomena, and was admitted into a ward in . Luke's Hospital where there were phthisical patients; she was ıen stout and plump. Within a few months, she presented all the sym-oms and signs of advanced phthisis. About the same time phthisis peared in the mother, and later on in a brother, and all died of is malady within a few weeks of one another.

3. A gentleman died of phthisis after two years' illness (February 82). His sister and her husband occupied his room after his ath. The brother-in-law began to ail five weeks afterwards, and May 1882, was the subject of acute phthisis.

The remaining groups Dr. Janeway has noted "within the last ree months."

4. A girl, in whose family there was no phthisical taint, nursed r lover, who died of consumption in his fatal illness. She began cough before he died, and subsequently fell a victim to the me disease. Her sister, who had been much with her during r illness, soon became affected with a cough.

5. In a family in which there was no hereditary taint on either le, a young man, sixteen years of age, died, four years ago, of thisis; a sister, aged twenty-two, who had been much with her other, after the lapse of a year, showed evidences of the disease, d died two years ago. The mother then became ill, and she died August 1882. One of the three surviving daughters has had re-ated hæmoptysis, and shows the evidences of phthisis at the apex one lung; and another sister has just been found to have com-ncing disease in the right apex. These two sisters were much th their mother while ill. The physician who will not see the ssibility of communication in a series of cases like this, in the face, , of the recently demonstrated infective property of tubercle, ıst possess a mind hermetically sealed to the reception of new cts, and be in danger of falling into that state in which, as was ll observed by Sir William Gull, he mistakes the dictates of preju-e for the teachings of experience.

Dr. Janeway mentions briefly one or two more cases which have ently come under his notice: a young woman who fell ill of hisis shortly before her mother's death from that disease; another o showed first evidences of consumption just at the time of her band's death from that malady; and a young man who had en a victim to phthisis, who had been in close attendance on his e, who had died, after an illness of two years, of the same dis-e.

I add these cases," Dr. Janeway concludes, "to those which e been published by others, hoping that they may draw atten-n to this matter, which is one of great importance. I know that ny people can be exposed for long periods of time without injury. the question is, Does phthisis spread by the reception of tuber-ır poison (bacillus?) by those favourably disposed to it, who uld otherwise have escaped? In the wards which I visit at Belle-Hospital are subordinates and attendants who have been there years, notwithstanding that numerous phthisical patients have lived and died there. This, however, proves nothing more than that those persons have not taken the disease. As an illustration of the want of weight which should be accorded to these negative facts, I will use the following illustration. Some soldiers go through a campaign without injury, whilst others are killed. One might say that bullets, etc., will not kill, because these soldiers escape. Moreover, the disease is slow in its progress, and it is only after a considerable time has elapsed that one can trace the connection; and, when several members of a family have died in succession, this is explained on the basis of an hereditary taint." And he adds some very pertinent instances of the very varying susceptibility, even to a poison like that of typhus, which have occurred within his own experience.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. FRANCIS FOWKE, *General Secretary*.

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Deal on March 22nd, at 3 P.M., Dr. Davey of Walmer in the chair. A discussion on Acute Pneumonia (first card of Collective Investigation Committee) will be led by Mr. Raven, Dr. Parsons, and others. All published cards of the Collective Investigation Committee can be had on application to T. WHITEHEAD REID, Honorary District Secretary, 34, St. George's Place, Canterbury.—February 14th, 1883.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the County Infirmary, Armagh, on Thursday, March 15th, at 12.30 P.M.—ALEX. DEMPSEY, M.D., Honorary Secretary, Clifton Street, Belfast.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 14th, at 3.30 P.M. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. The following papers have been promised. 1. Dr. Godson: Retroversion of the Gravid Uterus. 2. Mr. Butlin: Pathology and Treatment of Nasal Polypi. Gentlemen desirous of making any contribution to the meeting should communicate with one of the Honorary Secretaries, G. B. COLLET, 5, The Steyne, Worthing, or T. JENNER VERRALL, 95, Western Road, Brighton.—February 21st, 1883.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of the above will be held on Thursday, March 8th, at the Queen's Hotel, Upper Norwood, S.E., at 4 P.M.; William Soper, Esq., of Clapham, in the chair. The following papers, etc., have been promised. Dr. A. Sangster: Observations upon Dermato-Syphilis, with Points in Diagnosis. Dr. J. H. Galton: Some Cases of Hernia. J. Sidney Turner, Esq.: Notes on Tracheotomy. Dr. C. M. Miller:

Medical Reform. All members of the South-Eastern Branch are entitled to attend, and to introduce professional friends. Dinner will be served at 6 P.M. precisely; charge 7s., exclusive of wine.—J. HERBERT STOWERS, M.D., Honorary Secretary, 23, Finsbury Circus, E.C.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held at the Griffin Hotel, Kingston-on-Thames, on Thursday, March 15th, at six o'clock. Members willing to bring forward any subject, are requested to communicate with the Honorary Secretary —EDWD. L. FENN, M.D.

BATH AND BRISTOL BRANCH.—The fourth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, March 8th, at 7.30; J. K. Spender, M.D., President. The following communications are expected. 1. A Case of Removal of Encysted Osteoma of Neck: F. K. Green. 2. Anæsthetics: J. G. Douglas Kerr, M.B. 3. A Case of Removal of Angioma of Tongue: H. W. Freeman. 4. Periodic Squint in the Adult: F. Richardson Cross, M.B.—R. J. H. SCOTT, E. MARKHAM SKERRITT, M.D., Honorary Secretaries. —Bath, February 1883.

CORRESPONDENCE.

THE PROPOSED MEDICAL BENEFIT SOCIETY.

SIR,—May I share in the discussion of this subject? I have studied the figures connected with sickness a good deal, and have received much information from the actuaries, secretaries, and accountants of various assurance companies and benefit societies, and others who know practically the difficulties of working such schemes. As the information they gave me is not generally known, perhaps it will interest all who are discussing the subject in your columns.

One and all of them speak doubtfully of the whole matter. The practical difficulties are great, and the circumstances of most benefit societies are not as flourishing as outside persons think. I have spoken to an actuary who is, probably, the greatest living authority on the statistics of disease, about the medical benefit society, and the verdict was not altogether hopeful; and it must be borne in mind that the experiment has already been tried and failed. As I calculated the charges for the Medical Mutual Association, referred to by Mr. Davie Harris, I must explain that that society was to derive income from other sources than the subscriptions of its members, and that the premiums of a benefit society dealing solely with sickness would have to be much higher. Moreover, in that society, it was proposed to levy an "age charge" from the older men, which increased in proportion as the risk increased; but I am assured this system is unpopular, and that everyone seems to prefer a system, such that the premium or subscription remains the same so long as they continue members of the society. This system has its dangers. As I will show further on, the amount of sickness each man should expect increases enormously as he grows older, and a considerable proportion of the sums paid by young men ought to be laid aside to accumulate, to meet the extra demands of later years. Very many societies have had to use all their income for present wants. They last fifteen or twenty years, and then comes a time when they must either increase their subscriptions or decrease their benefits. In either case, a great wrong has been inflicted on the men who joined when young.

Moreover, the rate of interest that can safely be earned by these reserves is steadily decreasing. Year by year, money is getting cheaper. At this moment, Consols only bring £2 18s. 6d. per cent. At 3 per cent., the *annual cost of sickness*, exclusive of *all working expenses*, as calculated from the tables appended to Mr. F. G. P. Neison's report on the condition of the Ancient Order of Foresters for the quinquennium 1871-75, is such, that to secure three guineas a week (the cost of a *locum tenens*) during sickness would require, at the age of twenty-five, an annual payment of £5 8s. 3½d.; at thirty, £6 4s. 1¼d.; at forty, £8 9s. 1¾d.; at forty-five, £10 1s. 10¼d.; at fifty, £12 5s. 11½d. Add only 20 per cent. for working expenses, and the members will have to make the following yearly contributions to secure three guineas a week, ceasing when they reach the age of seventy; viz., at twenty-five, £6 10s.; at thirty, £7 9s.; at thirty-five, £8 12s. 10d.; at forty, £10 3s.; at forty-five, £12 2s. 4d.; and at fifty, £14 15s. 2d. Are members prepared to pay such amounts?

The next difficulty is much more serious. Sick-rates vary much more than death-rates; and the fewer the number of members, the more serious is the importance of each variation. Of the 15,000 medical men in England, probably 5,000 would be ineligible. the remaining 10,000, it would be sanguine to expect more 3,000 to join any association, however influentially supported. What are these numbers, compared to the 100,000 in the Hearts of Oak, or the 300,000 in the Order of Foresters? And yet over periods of years, and in these hundreds of thousands of members, I find the following fluctuations.

AGE	25	30	35	40
Maximum weeks sickness *per annum* per member	1.021	1.159	1.295	1.588
Minimum weeks sickness *per annum* per member	.757	.796	.877	1.086

Probably the rates in each year, or in each lodge or district, vary much more widely.

Again, the amount of protracted sickness varies immensely. I am informed that, in one quinquennium, one of our largest friendly societies found its "protracted sickness" to be more than 100 per cent. in excess of its calculations. Such a result in a society of 5,000 members would probably prove fatal. The following is the percentage of protracted illness experienced by the A. O. F. in the quinquennium 1871-75, as given by Mr. Neison.

AGE	25	30	35	40	45	50	55	60	65	70
Illness exceeding 6 months in duration...	4.96	5.87	6.83	7.59	8.19	9.29	10.43	11.50	12.19	12.8
12 months ,, ...	2.42	3.43	4.46	5.39	5 83	6.75	8.68	10.14	12.43	14.4
2 years ,, ...	2.26	4.91	7.46	9.88	12.93	16.96	22.95	27.52	33.82	39.8

Thus, at the age of 70, about 67 per cent. of all the illness paid fo was experienced by members whose illnesses exceeded six months i duration. If these cases be excluded, half the value of a sick-clu is lost; if they be included, they give an additional element c danger to a small society. A few extra cases of protracted illness i the early years of such a society's existence would soon swallow u the reserve. What proportion of the subscriptions of younger men bers ought to be kept as reserve is shown by the following tabl exhibiting the rate of increase in the annual amount of illness th may be expected by each man as he grows older. The figures a extracted from various tables in Mr. Neison's report before r ferred to.

AGES.....	25	30	35	40	45	50	55	60	65	70	7
Weeks of sickness *per annum* per member	.985	.971	1.150	1.373	1.707	2.265	3.210	5.059	10.012	16.529	25.

From less than a week's illness *per annum* at the age of 25, the r rises to about half the year at the age of 75! A society compos mainly of young men may last twenty or thirty years, and yet dying slowly all the time. It will be hard on men who have paid all those years, to find, just when they sorely need its help, that t society is on the verge of ruin.

Another point of great practical difficulty is, how to prevent fa or unduly prolonged claims. The duration of illness among th sick, up to the age of 35, is about four weeks. If each sick m remained on the list only three days longer than he was absolut obliged, the cost of sickness would exceed the estimate by more th 10 per cent. The existing benefit societies keep down this "le age," so to speak, by requiring members who are well to visit th who are sick; but, if a country doctor were required to go ten twenty miles twice a week to visit a neighbouring sick member would add considerably to the cost of his assurance. And yet every other country doctor in the kingdom joined such a society this rule were enforced, the average distance that each mem would have to travel to visit his nearest fellow-member would p bably exceed six miles, involving a twelve mile journey. What s stitute is proposed?

In conclusion, I feel sure that the medical profession by itself is too small a basis for safety. I understand that the clergy are tryi to establish something similar: why not combine the two pro sions in one undertaking? The union would not overcome all t difficulties I have pointed out. Nor, as there are only 22,000 cle in England, would the two professions together afford a basis a comparable to the friendly societies I have referred to; but it w at least be a step in the right direction. Any way, the subject o such importance, that it ought to be very fully discussed before step is taken. I hope that the gravity of the question will be to justify the length of this letter —I am, sir, yours faithfully,

E. PAGET THURSTAN, M.D., B.A.Cant.

Tunbridge Wells, February 17th, 1883.

SIR,—Kindly add my name to the list of those who desire to see he formation of a Medical Friendly Society. I feel compelled, owever, to protest against the adoption of the suggestion of "A Birmingham Surgeon." In the first place, the society should not be erely local, since no one town could support such a scheme by tself. The experience of the "Hearts of Oak Society" shows us hat it is only by having a large number of members controlled rom one central office, and by doing away entirely with local gencies, that the working expenses can be kept down sufficiently o ensure a decent rate of sick pay, combined with financial tability, Secondly, it would be bad policy to amalgamate the pro-osed society with the existing Medical Benevolent Society, for the imple reason that the latter is not an insurance society, but only a charity." The members are guaranteed nothing, but only promised hat, in case of worthy destitution, they, or their surviving repre-entatives, shall be the recipients of an annuity, the amount of hich will depend on the degree of destitution and the state of the ociety's funds.

The aims of the two societies will thus be seen to be totally dis-inct from each other; and since to amalgamate them would surely esult in the extinction of one—and that one the Medical Benevo-ent—it would be bad policy on our part to do so, and thereby estroy what is doing such service to many a poor widow.

Let the new society be simply a sick club; let its rules be based pon sound actuarial principles, and then give us the privilege of elonging to it in addition to, and not instead of, the already exist-ng one. Apologising for the length of this letter,—I remain, sir, ours faithfully, W. G. CRESWELL, L.R.C.P.Ed.

Saltley, February 19th, 1883.

SIR,—I am very glad to see that some steps are being taken to orm a provident society for medical men, and I feel sure that, once tarted, it would be a permanent success and a great boon. The uggestion that it be organised in connection with the British Medical Association and its numerous Branches is, to my mind, most aluable, and one that, if carried out, would almost insure success. We are, as a rule, a most improvident class; although we are daily rought face to face with persons who have already done for years hat we are now attempting to do. We see men, whose earnings ary from fifteen shillings to thirty shillings per week, in the receipt f a sum from twelve to eighteen shillings per week in illness, and it s strange if we cannot, with our proportionately larger incomes, do s much.

It is a difficult question to settle upon the rates of payment ecessary to insure against sickness, but doubtless this could readily e fixed by an actuary. Based upon the rates fixed by the Odd Fellows I have drawn up the following scale of payments, which is robably higher than would be found necessary.

Age.	To insure £1 per week in sickness.			To insure £2 per week in sickness.		
	s.	d.		s.	d.	
25	9	0	per quarter	18	0	per quarter
30	10	6	,,	21	0	,,
35	12	0	,,	24	0	,,
40	13	6	,,	27	0	,,
45	15	0	,,	30	0	,,

It would probably be well to make a rule that no benefit could be ceived till one had actually been a member for six months; and so that the above amounts should, in the case of chronic incapacity r work, be paid only for the first twelve months; after that time .if only should be received. It might be well to have another class higher rates, for those desirous of insuring £3 per week. All ese details, however, might be left to a committee, representing e practitioners throughout the country. I would suggest that a rcular be sent round with each copy of a certain issue of the BRITISH MEDICAL JOURNAL, and that answers be invited to the llowing or some similar question, "Are you willing to join a edical Provident Society to insure against sickness?" By this eans the feeling of the profession would be ascertained, and an proximate idea gained of the number of probable members.

I may mention that the formation of a similar provident society is w being discussed by the Society of Schoolmasters.—I am, sir, urs faithfully, R. L. BATTERBURY, M.D.

Berkhamsted, Herts, February 21st, 1883.

SIR,—I am delighted to see that Dr. Ravenhill's proposal to es-blish a medical provident society has been taken up so heartily the profession at large. It is an institution, the want of which s long been felt, and I am quite sure that, when set afoot on a satisfactory basis, it will prove a success in every way. Will you kindly add my name to the list?—I remain, sir, yours truly,

WILLIAM A. ROSS, L.R.C.P.

The Square, Alderney, Channel Islands, February 18th, 1883.

SIR,—I consider this matter one of the most important that has been undertaken in connection with the Association since I have been a member of it. It has my very cordial support, and I promise to co-operate, to the fullest extent in my power, with those who are seeking to make the movement a success.—Your obedient servant,

GEO. ARTHUR BROWN.

Tredegar, Monmouth, February 17th, 1883.

P.S.—Pray keep the matter before the Association. It must succeed, and what a blessing it will be.

FURTHER letters of adhesion have been received from the following gentlemen:

Mr. Valentine Stone, Laurencekirk, Kincardineshire; Mr. Arthur H. Boys, Pill, near Bristol; Mr. J. W. Measures, Long Sutton, Lincoln; Mr. Thomas Clark, Dunster, Somerset; Mr. Edwin G. Bull, Birmingham; Mr. P. L. Booth, Barrow-in-Furness, Lancashire; Mr. Ernest D. Bower, Gloucester; Mr. Alexander Drummond, Birmingham; Mr. William Partington, Tunstall, Staffordshire; Mr. John E. Kenyon, Bradford; Dr. Angus Millican, Hull; Dr. Henry Tomkins, Manchester; Mr. C. E. Abbott, Braintree, Essex; Mr. W. H. Torbock, Polruan, Fowey, Cornwall; Dr. P. A. Young, Portobello, Midlothian; Mr. J. Raffles Harmar, Birmingham; Mr. Samuel J. J. Kirby, Grays, Essex; Mr. S. W. Coombs, Lowesmoor Villa, Worcester; Mr. Walter Hunter, Nottingham; Mr. Joseph Ward, Sparbrook, Birmingham; Mr. Hy. Harris Muggeridge, Ashford, Kent; Mr. H. A. Allbutt, Leeds; Mr. C. E. Lay, Yoxford, Suffolk; Mr. Joseph Farrar, Morecambe, Lancaster; Mr. T. Cassan, Gainsborough; Mr. A. T. Wear, Newcastle-on-Tyne; Dr. Samuel Barker, Brighton; Mr. Thomas C. Clarke, Pewsey, Wilts; Mr. J. F. Fry, Swansea; Mr. Arthur Kempe, Exeter; Mr. J. Mackey, Berwick-on-Tweed; Dr. Simpson, Leith; Dr. Grahams, Edinburgh; Mr. Alex. Morton, Crosshill, Glasgow; Mr. R. G. Coombe, Burnham, Essex; Mr. G. Dale, Grosmont, Hereford; Mr. C. E. Shelley, Hertford; and Mr. C. Clark, Burman, Belford, Northumberland.

*** The list is rapidly gaining in numbers; but several hundred adhesions should, we think, be enrolled as a preliminary to practical action, and we shall be glad to continue to receive names.

MR. STEELE'S CASE OF EXTRA-UTERINE FŒTATION.

SIR,—It was with great reluctance I formed one of a triangular duel, and I do not wish to prolong it. I am quite ready to do full justice to the courtesy shown by Mr. Steele in sending me full reports and drawing of the case in point; and had I had any idea that he considered Dr. Moon's letter (which I did not see till after the patient's death) as having influenced his treatment, I would have written to him privately a letter similar to the one I sent to this JOURNAL, which, unfortunately, was delayed in the press. But when Mr. Steele quoted me as initiating with Dr. Moon the line of inaction which Mr. Lawson Tait was pleased to call a "do-nothing system," I felt called on to explain what Dr. Moon's letter did not clearly express, that inaction was enforced by reason of the removal of the patient to Liverpool, but which was left, doubtless, to be explained by the facts; at least, with regard to myself, the question was, Can the patient be removed? I think that few will read Dr. Moon's letter other than explaining the diagnosis of the case, leaving the future treatment to the progress of the case. At any rate, while believing Mr. Steele the best judge of the treatment of the case whilst under his care, for myself, I only accept the responsibility for the time it was under mine.—I am, etc.,

J. BRAXTON HICKS.

THE VERBASCUM THAPSUS.

SIR,—In your interesting note (JOURNAL, Feb. 10th, p. 268) upon the mullein plant, you accidentally overlook a very important therapeutical action, viz., its weight-increasing (and, as it appears to me, distinctively curative) effect in pretubercular or early phthisical cases. Of this I will, with your kind permission, give a very striking instance, which has occurred since the publication of my paper.

Helen S., aged 20, single, a governess, residing at 78, Great Dorset Street, suffered eighteen months ago from pneumonia, confined to the left lung. From this she recovered, but it left the lung rather delicate. Throughout the raw wet and inclement weather of the latter part of last year, she caught cold after cold. She suffered

from constant cough, and the catamenia became scanty and irregular. She lost flesh; became very weak; and at last, being unable to pursue her profession, was admitted into St. Vincent's Hospital. She was distinctly in a very early stage of pulmonary consumption, and had slight dulness at the apex of the left lung with roughened vesicular murmur, and prolonged inspiration and expiration. She had trifling night-sweats. She was put upon an ounce of mullein leaf, boiled in a pint of milk, strained, and slightly sweetened. She took this dose twice a day; and, as usual, after a few times came quite to like it. She got no other treatment. I annex her weekly weighings, which were done very carefully, and always under the same conditions as to clothing, etc.: January 22nd, 110 lbs.; January 29th, 114 lbs; February 5th, 115 lbs. 8 ozs.; this day (a special weighing), 116 lbs. Her strength and appearance are restored; the cough is gone; and the night-sweats, which were too trifling to require any treatment, disappeared when she began to improve. The catamenia returned on the 2nd instant, and lasted for a day and a half, instead of a few hours as previously. She is still in St. Vincent's Hospital; but I regard her cure as certain.

In advanced cases of phthisis mullein is, as you truly say, merely a palliative; but it is a very powerful one. The appetite of the advanced phthisical sufferer is often so delicate, as to render it difficult to support life; and any little remnant of appetite is too often destroyed by the drugs which we have to administer for the relief of cough, dyspnœa, diarrhœa, or night-sweats. We can control the three former by the milk decoction of mullein, and the latter by hypodermic injection of atropia sulphate; and thus, by treating the case dietetically, leave the stomach free for nourishment only. I say dietetically, for the mullein decoction is so grateful and soothing that it comes to be regarded more as food than as physic. One other point has been made out since my paper. Some advanced cases find so much milk decoction heavy; but this difficulty is completely overcome by peptonising the milk with Benger's pancreatic fluid, and adding a pinch of sodium bicarbonate. The mullein decoction made with peptonised milk digests at once, and the slight bitterness of the peptone is completely covered by the flavour of the mullein. This is a decided improvement; and, in advanced cases, a necessity. —I am, sir, very truly yours, F. J. B. QUINLAN.

29, Fitzwilliam Street, L., Dublin, February 10th, 1883.

THE COLLEGES OF PHYSICIANS AND SURGEONS AS CLUBS.

SIR,—Your correspondent, "Surgeon-Major, A.M.D." might have added that the addition of a commons-room to college is not only an academic custom, it is also a professional custom; witness the sister profession of the Bar.—I am, yours faithfully, CANTAB.

FUNGOID POISONING.

SIR,—Kindly afford space for another letter on the case of fungoid poisoning which has been noted in the JOURNALS of November 25th, December 2nd, and January 20th.

Being (in conjunction with Dr. John Sherburn) responsible for the second *post mortem* examination made on the body in question, by order of the Home Secretary, I am afraid that a wrong impression will be conveyed to the profession if Mr. Jackson's statements of January 20th are not refuted.

Before passing on to the part which individually I am the most interested in, viz., the question whether or not the child did die of strangulation, I wish to offer a few remarks about the material found in the stomach, and stated by Mr. Jackson to be mushrooms.

The child was one year and eight months old, was very small for its age, and could not walk or even stand without assistance. It died on about September 21st, and when found, twelve miles from its home in Hull, it was quite naked, and wrapped up in a newspaper. If the child did die from eating mushrooms, why all the secrecy and the numerous subterfuges resorted to by the mother, in accounting for the disappearance of the child?

Mr. Jackson states that the mushroom was the ordinary *Agaricus campestris*, which is not, I believe, poisonous, although "gastro-intestinal catarrh, of a severe character, may result from the ingestion of a large quantity of ill-cooked, indigestible fungus tissue" (Quain's *Dictionary of Medicine*). In this case, however, so sudden was the death, that the stomach had not even had time to expel its contents, nor yet had any fungus passed into the intestines. Thus no vomiting, no diarrhœa were observed. Careful examination and analysis by Dr. Thomas Stevenson, official analyst, failed to discover any traces of fungi, although I was able to send him an appreciable quantity (of the same material that Mr. Jackson describes as fungus), which we found in the lower end of the œsophagus. Although Dr Stevenson failed to find any traces of fungi, even the spores, still he was able to distinguish (in the stomach, intestines, and material removed from the œsophagus) currants, apples, and meat.

Passing on now to the second *post mortem* examination, our report to the Treasury, where it bears upon the points in dispute, was as follows.

"The chest and abdomen had evidently been previously opened, and were sewn up. There was no obstruction in the throat, mouth, or windpipe. The edges of the tongue were slightly indented, and the extreme margin, for the breadth of one-eighth of an inch, was darker in colour than the remaining substance.

"*Neck.*—On the front part of the neck we noticed a white line passing immediately under the chin, from one angle of the jaw to the other, which appeared to us to be due to the flexion of the chin upon the neck; but, an inch below this, and on a level with the upper part of the trachea, we observed, in a line passing horizontally backwards, some indistinct patches of skin, of a different and rather lighter colour than that immediately above and below. At the back of the neck, to the right side of it, and on a level with the patches just described, were two bruises, the larger of which was the size of a sixpence, and the other about half that size. On incising them, extravasated blood was noticed in a varying depth of one-eighth to one-fourth of an inch. They were one inch distant from each other.

"The finger nails were dark blue in colour.

"*Brain.*—The vessels on the surface of the brain were engorged but the brain itself was in a fluid state of decomposition.

"*Thorax.*—Although this cavity had previously been opened, yet the viscera therein were *in situ*, and had not even been incised.

"*Lungs.*—A considerable amount of emphysema was noticed at the posterior roots of the lungs, especially the left; the emphysema being chiefly situated on the inferior borders. The lungs were healthy in structure, but much congested. The mucous membrane of the bronchi and trachea was injected, and its surface was covered with blood-stained mucus.

"*Heart.*—The right cavities were distended with dark blood, while the left were nearly empty. The clot of blood occupying the right side extended through the pulmonary artery, and was traced up into the smaller divisions of the artery in the substance of the lung. There were no extravasations in the chest, neither was there any pulmonary apoplexy."

From the examination, we were of opinion that the body was that of a female child, between the ages of eighteen months and two years, and that the appearances noted were not incompatible with death from sudden obstruction to the respiration. At the same time, we added that, owing to the state of decomposition, and to the fact of a previous *post mortem* examination having been performed, we were necessarily placed under great disadvantages in making our investigation.

It will be noticed that, in several particulars, our report does not agree with that of Mr. Jackson; as, for instance, the condition of the lungs, heart, etc. Mr. Jackson states that there was no emphysema, but, when we made the second *post mortem* examination, the lungs and heart had not been previously removed from the chest, nor even incised; therefore, the first *post mortem* examination must, as regards them, have been of a very superficial character. Moreover, although the eyes, mouth, etc., were much altered, and in part destroyed by maggots, still such was not the condition of the lungs and other viscera; the lungs especially were in a perfect state of preservation and the emphysema was not that of decomposition.

The characters of the mark on the neck were, owing to decomposition, not sufficiently clear to enable us to lay much stress upon them; but, taken altogether, we are, as stated above, of opinion that the child died from sudden obstruction to the respiration.

The condition of the stomach we left to the consideration of Dr. Stevenson; but, it must be remembered, that the child died during the process of active digestion, which would partly account for the condition of the mucous membrane, as described by Mr. Jackson; and also that, in "death from strangulation, the stomach is often as much congested as to resemble the effects of irritant poisoning" (Woodman and Tidy's *Forensic Medicine*, page 941.) What the material in the stomach was, I cannot say; may it not have been some semi-digested food, of some sort or other? Anyhow, the condition of the child's stomach was not sufficient to cause its sudden death.

As a climax, I may add that, after the trial, the woman remarked to the chief constable: "That she was so much obliged to Mr. Ja-

on for his evidence: mushrooms! the bairn never had any mush-ooms."—I am, etc.,

HENRY THOMPSON,
Assistant-Surgeon Hull Infirmary; Surgeon to the Hull Police.

16, Albion Street, Hull, January 31st.

MEDICAL REFORM.

SIR,—If my namesake Mr. R. H. S. Carpenter is not better acquainted with other matters concerning which he tries to enlighten is brethren, than he is with myself and my mode of practice, he will roefully mislead those who follow him. Mr. Carpenter says: "We oth practice our profession precisely in the same way, and with qual respectability as apothecaries." Mr. R. H. S. Carpenter is elcome to think so if he pleases, but as I have given up pharmacy and eneral practice for a long time past, and now being a Member of he Royal College of Physicians, am precluded from acting as an pothecary, I am compelled to ask him to be more careful in his tatements in future than he was in his last letter. There is one ifference between us, which will be manifest to your readers.—elieve me, faithfully yours,

ALFRED CARPENTER, M.D.Lond., M.R.C.P.Lond.

Croydon, February 21st, 1883.

SIR,—In your last issue—probably by a misprint by your printer -I am made to speak of Mr. Alfred Carpenter, the apothecary, of roydon, as "Dr." Alfred Carpenter. I did not do so, but addressed im merely as "Mr." Alfred Carpenter; and I confined my descrip-on of myself to Mr. R. H. S. Carpenter, the apothecary, of Stock-ell. Moreover, I did not say, as your printer has made me to say, at I should feel affronted were the profession to mistake e for another person; but I did say, and still say, that I, as the ockwell apothecary, would feel myself affronted were I mistaken r the Croydon apothecary. I wrote, and am now writing, of Mr. lfred Carpenter and myself as practising honestly and legally, in rtue of our apothecaries' licences, as *bonâ fide* apothecaries; and y next communication to you will discuss the mode of our practice der the respective designations of Dr. Alfred Carpenter, of the niversity of London, and Dr. R. H. S. Carpenter, of the Royal Colge of Physicians of London; and I shall show that the advantages in actice, both legally and morally, belong to my licence, and not to his niversity degree. Until then, I subscribe myself, sir, under the tle of which I am very proud indeed to be possessed, your obedient rvant,

R. H. S. CARPENTER, Apothecary.

February 20th, 1883.

FINANCIAL CRISIS AT THE LONDON HOSPITALS.

SIR,—I, in common with, I am sure, many of my medical brethren, m fully endorse the remarks made by Dr. Fairlie Clarke in the OURNAL of February 10th, under the above heading. That the ondon hospitals as at present managed, or rather mismanaged, are ercising an enormous influence for evil in affording gratuitous lief to many persons well able to pay the small fees of a general actitioner, few will be able to dispute. Why, I ask, should this ate of affairs be allowed to persist? Surely, some system of pervision, or at least some attempt at such, could be organised d put in force. At present, everyone who can obtain a letter (and ten without even this recommendation) is admitted, to the detri-ent of the struggling practitioners of the neighbourhood. But is, sir, I venture to affirm, is not the only or worst evil at present essing upon us; I allude to a system, rapidly growing among the aders of our profession, of giving advice and prescriptions gra-itously at their own houses on certain days, or even on any days, en no fee is forthcoming. Such ways (the object of which is anifest), I take to be beneath the dignity of our profession; but at such exists, I am only too well aware from sad personal experi-ce; and I cannot say that, even when the consultant ascertains at the patient has been under the treatment of a general practi-ner, he is at all anxious to send the patient back, but prescribes r the patient, he takes no fee, but injures his brother.

Is there, I ask, any other association of men, engaged in any pur-it whatever, who so persistently cut each other's and their own roats in the way that we do? No one has a greater appreciation the noble work hospitals may be made to do, when the mode of lief is properly applied, than I have; but I fail to see why the me-al profession, any more than the legal, should be expected by e public to pauperise itself both in the matter of brain and pocket; t that this spirit should be encouraged chiefly by the profession itself is the most astounding part of the matter, even when the question of personal aggrandisement and advancement is taken into consideration.—Yours faithfully,

JAS. MCDONAGH.

February 13th, 1883.

MR. EVE'S LECTURES ON THE PATHOLOGY OF TUMOURS.

DEAR SIR,—In reply to Mr. Roger Williams's letter, which appeared in this JOURNAL of the 17th instant, I beg to state that the statistics referred to were taken from Mr. Butlin's tables, as published, with abstracts of his Erasmus Wilson Lectures, in the BRITISH MEDICAL JOURNAL. Mr. Butlin's book *(Sarcomata and Carcinomata)* had not then appeared. I subsequently referred to the book in my MS as more accessible than the abstracts, not knowing that the tables had been added to before publication. To this extension of the tables, the discrepancy pointed out by Mr. Williams is chiefly due.

My references to the tables of sarcomata of bones (BRITISH MEDICAL JOURNAL, vol. ii, 1880, page 11) are correct; as are also the numbers taken from the tables of Cancer of the Tongue and Œsophagus (BRITISH MEDICAL JOURNAL, vol. i, 1881, page 556); but, in the latter instance, I inadvertently erred in putting the cases at a decade too late. I had arranged the cases in columns for each decade; and, in referring to my note a little time afterwards, took those cases placed under the number 40, as if they occurred in the fifth decade, whereas I ought also to have included with them those placed under 50, which really were of the fifth decade. This mistake does not materially affect the argument; and the point is also clearly proved by the statistics quoted from Von Winiwarter.

I feel flattered that my lectures have found so attentive a reader as Mr. Roger Williams, and take the opportunity of publicly correcting the error.—I am, sir, yours truly,

FREDERIC S. EVE.

Royal College of Surgeons of England,
Lincoln's Inn Fields, W.C., February 19th, 1883.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

THE following are among the notices on the paper of the House of Commons.

Cruelty to Animals Acts Amendment Bill—"to amend the Acts against Cruelty to Animals," presented, and read the first time; to be read a second time upon Wednesday, March 7th, and to be printed. [Bill 13.]

Vivisection Abolition Bill—"for the Abolition of Vivisection," presented by Mr. Reid, Sir Eardley Wilmot, Mr. Samuel Morley, and Mr. Firth, and read the first time; to be read a second time upon Wednesday, April 4th, and to be printed. [Bill 46.]

Mr. Arthur Balfour: On second reading of Vivisection Abolition Bill, to move, That, while due provision should be made for preventing the infliction of unnecessary pain on animals, it is inexpedient so to limit scientific investigation as to hinder discoveries which must result in a great diminution of human suffering. [Monday, February 19th.]

Private Lunatic Asylums (Ireland) Bill.—Mr. William Corbet: To alter and amend the law relating to Private Lunatic Asylums in Ireland, and to make other and more suitable provision for paying patients.

Infectious Diseases Notification Bill.—Mr. Hastings: To provide for the better Notification of Infectious Diseases.

February 19th.

Lead-Poisoning.—Mr. BURT asked the Secretary of State for the Home Department whether a further report on lead-poisoning had recently been presented to him by Mr. Redgrave, Inspector of Factories; and, if so, whether he would lay it upon the table of the House.—Sir W. HARCOURT said that this report was in the printer's hands, and would be ready, he hoped, very soon.

HOSPITAL SATURDAY FUND.—According to the report of Messrs. Pannell, Cartwright and Co., honorary auditors of this fund, just issued, the entire collection for last year was £8,690, or £516 more than the total of 1881. There was an available balance in hand of £7,517, an increase of £336 over the available balance of 1881.

A SERIOUS epidemic of measles having broken out at Oban, Shettlestone, near Glasgow, the public schools have been closed, as has already been done at Walls, Orkney.

HOSPITAL AND DISPENSARY MANAGEMENT.

BATTERSEA PROVIDENT DISPENSARY.

THE report of the Battersea Dispensary for 1882 is now before us; and we are glad to notice the steady progress made by this institution, as shown by the increased amount of members' payments, and by the following table of the numbers of permanent members, etc., for the last three years.

	1880.	1881.	1882.
Number of members entered in books...	6,160	8,639	9,084
Number calculated as permanent.....	3,780	6,054	7,030
Cases of illness reported at Dispensary	3,821	5,240	5,345
Doctor's visits at patients' homes.....	6,652	14,580	14,941
Attendances by members at Dispensary	8,104	13,400	14,500

This does not include a large number of cases kindly attended to by the medical officers at their own surgeries during the past year.

There is a satisfactory increase in the amount paid by members, being £1,104 against £953 in the previous year. The confinement fees amount to £128 against £114 in 1881.

The importance of employing a collector to call each week for members' payments has been again proved. This method must tend to increase the amount paid, and to retain many members on the books who, from various reasons, would be unable to attend punctually each week at the Dispensary to make their payments.

The balance divisible amongst the doctors is not so large this year; but this is caused by unusually heavy expenses for alterations and additions, which were found to be absolutely necessary, owing to the increased number of members attending at the Dispensary. The cost of the alterations amounts to £170, reducing the balance from £705 to £535.

It was a reasonable cause of complaint by the members that, on some days of the week, the waiting-room was crowded almost to suffocation, while some patients had to remain for a time in the street. The room in which the doctors saw the patients was only separated by a wooden partition from this waiting-room, and the laying down of the tramway had made it intolerably noisy. Patients, after seeing the doctors, had to push through the crowded waiting-room to get to the dispenser's counter. By the present alteration, the wooden partition has been removed, and a waiting-room is available which seats about eighty persons. A doctor's room has been provided further from the street, and the patients, after seeing their medical adviser, can get their medicine and leave the Dispensary without returning to the waiting-room.

The committee felt that the cost of this permanent improvement might fairly be spread over two years, and therefore they have arranged that half the expenditure should be refunded to the medical officers from the first quarter of 1883. There will, therefore, be a further amount of £85 to divide at Easter in the same proportions as for the last year.

THE DEVONSHIRE HOSPITAL, BUXTON.

THE report of this institution for 1882 gives a gratifying view of the development of the Buxton Bath Charity. The increased usefulness of the hospital, in consequence of the extension which has lately been carried out, is necessarily the leading feature in the report. During the year, 1,856 in-patients were admitted. This is a larger number than has ever been received in any one year, since the foundation of the hospital, by 254 patients. It is also worthy of notice, that 234 of these additional patients were sent to Buxton by the governors of the Cotton Districts Convalescent Fund, showing the broader basis which has been given to the usefulness of the hospital; and, as the cost of these patients does not fall upon the ordinary income, they add in no degree to the expenditure of the institution. The number of out-patients admitted during the year was 243.

The resident medical officer has tabulated, from the case-books, the work of the hospital during the year; and the tables show that, of the 1,856 cases received as in-patients, 1,340 were cases of rheumatism, 17 cases of specific rheumatism, 138 case of rheumatic gout, 139 cases of sciatica, 23 cases of gout, 19 cases of lead-poisoning, and only 180 (or less than one-tenth of the whole) were cases of disease other than of rheumatic or gouty character.

It had been matter of regret, during the earlier years of the existence of the hospital, that no report seemed to be obtainable as to the final result of the treatment; and during the last nine years a form, printed on a postal card, has been given to every in-patient on leaving the hospital, to be filled up and returned six weeks after discharge. During the nine years, 10,415 of these cards have been received, and 7,528 are reported as improved, 2,839 as no better, and 48 as having died. During 1882, 1,656 of these postal cards have been received, and 1,171 are self-reported six weeks after having left the hospital as improved, 481 as no better, and four are reported as having died. The long duration, the chronic character, and the severity of a very large number of these cases, must be borne in mind, in estimating the value of this record. It may perhaps be imperfect at the best, and the inferences from it may be more or less uncertain. Any remaining lameness would influence the report of the patient, or any other salient interference with health, notwithstanding any amount of general improvement in most particulars. Moreover, the number of the deaths thus recorded, within so few weeks after leaving the hospital, is sufficient index to the grave nature of many of these cases. But, taking all the circumstances into consideration, the nature of the principal ailment—namely, rheumatism—its probable chronic condition, and the failure of previous treatment, it must be held that the results thus reported are satisfactory beyond any reasonable expectation.

The final details of the hospital extension may now be said to be virtually completed. The baths for the use of the patients have been doubled in number. A much-needed drinking-well, for the exclusive use of the patients, has been completed—the water having been conveyed from the public drinking-well in pipes so carefully enclosed and protected, that neither temperature nor gases are affected in any degree.

THE TAUNTON SANITARY HOSPITAL.

THE report which Dr. Alford has prepared on the works of the Taunton Sanitary Hospital, during 1881-2, indicates very clearly the immense value of a district being provided with ready means for isolating and treating cases of infectious disease. During the period the report covers, the district was visited with severe outbreaks of diphtheria, and scarlet fever. Of a total of 76 cases admitted, 19 were suffering from the former, and 49 from the latter disease. A striking feature, noted by Dr. Alford, is the improvement in the social condition of the persons treated; for while during the first year of working nearly 75 per cent. of the cases were paupers, the past year has seen a marked change, the majority of the patients being of a superior class. A large number of domestic servants were admitted, and the hospital seems of particular value as affording a means of isolation in this class of cases, instead of their being sent home, probably to a cottage in the country full of children, and creating a fresh focus of infection. During the year, ten deaths happened in the building, six being from scarlet fever, three from diphtheria, and one from enteric fever. The average stay of each patient was three weeks, and the average cost, £5 per head. Indeed as regards expenditure, the hospital seems to compare favourably with similar institutions of its kind.

VACCINATION STATISTICS AT THE NEWCASTLE HOSPITAL.

IN his last report, on Newcastle-on-Tyne, Mr. Armstrong has bee at some pains to present a record of the cases of small-pox treate at the hospital during the prevalence of the disease. These record are of peculiar value as indicating the influence of vaccination i local epidemics.

The total number of persons admitted were seventy-two, fifte of whom were unvaccinated; of these, six had the disease in th confluent form, and three died. In two, there was doubt as to vacc nation; each of these had the semi-confluent form, and both r covered. In three, vaccination was reported to have been perform in youth, but no cicatrix was perceptible; two of these died fro confluent small-pox, the other recovered after the semi-confluc form of the disease. Fifty-two cases occurred in vaccinated person of these, five had the confluent form, and two died; six had t semi-confluent form, and all recovered; and forty-two had the d crete form of the disease, and all recovered. Several of the lat were so slightly affected that, but for the occurrence of other ca in their families, their cases might have been overlooked. In so instances the eruption was limited to four or five pimples, and in patient there was only one. Summarising these statistics it appe that in the known unvaccinated cases of small-pox treated, 40 cent. suffered from the confluent form of the disease, of which half died. In the known vaccinated cases, the proportion of c fluent cases was below 10 per cent., and the deaths below 1 p cent. of the whole.

MILITARY AND NAVAL MEDICAL SERVICES.

THE "AMALGAMATION" OF THE INDIAN MEDICAL SERVICE WITH THE ARMY MEDICAL DEPARTMENT.

SIR,—Much uneasiness and dismay have been occasioned by the announcement in your "Retrospect" leader, that the vexed and ill-fostered question of the "amalgamation" of the Indian Medical Service with the Army Medical Department is again about to come on the *tapis*. This really is a very unwelcome Christmas card, and only tends to unsettle the minds of men. The necessity for this measure is not at all clear. On the other hand, so far as the Indian service is concerned, it can hardly be expected to do any good. The civil and military arrangements of it are very good, and any change can only be expected to be for the worse. Leaving, we would respectfully urge, quite out of all consideration the universal discontent and heartburnings which it cannot but provoke, and the falling off in the quality and number of future candidates, it will inevitably do more harm than good; so far, at least, as the real interests of the people of India, the native army, and efficiency are concerned. It will all end in a complete disorganisation, should it ever come to pass, as it has been forewarned by your leader writer and your contemporaries. The paltry saving, which even is very doubtful, will prove to be a sorry and sad compensation for the substantial sacrifices and loss. There has been no "separation" of the military from the civil portion of the Indian Medical Service, any more than what there was before; men can now, as before, be transferred from the one to the other, and *vice versâ;* the only difference being that, instead of both being under a head belonging to this service as before, the military portion, or those holding regimental or other military appointments, are under the military surgeon-general, who belongs to the British service; while those holding civil appointments are under the civil surgeon-general, who belongs to the Indian service.

Under the circumstances, it is to be hoped that the BRITISH MEDICAL JOURNAL will continue, as it has done hitherto, to discountenance any such scheme, especially one which would effect the annihilation of the good old and time-honoured

INDIAN MEDICAL SERVICE.

EXAMINATIONS FOR THE MEDICAL DEPARTMENTS OF THE ERVICES.—These examinations have commenced; there are sixty-ix candidates for the Army Medical Department, where fifteen acancies have been announced; twenty-two candidates for the five acancies in the Indian Medical Department; and twenty-four candidates for the twelve vacancies in the Navy.

AN exchange of duties has been effected between Surgeon-General . Gilborne and Deputy Surgeon-General G. Auchinleck, of the Army ledical Department. The latter officer will now take up his duties s Principal Medical Officer of Her Majesty's British troops in the ombay Presidency, The appointment and promotion as Surgeon-eneral will date from the 6th instant.

DEPUTY Surgeon-General J. A. Hanbury, M.D., K.C.B., late Prin-pal Medical Officer to the Egyptian Expeditionary Force, and pre-iously on the staff of our Army in Afghanistan, has been appointed rincipal Medical Officer to the Home and Woolwich Districts.

THE age clause in the retirement warrant which has removed Sur-eon-General J. S. Furlong from the Active List, will affect two other nior officers in the Army Medical Department during the present ear—Surgeon-General J. E. Clutterbuck, M.D., Principal Medical fficer at Malta, attaining his sixtieth birthday on June 1st, and Sur-eon-General J. A. Woolfryes, M.D., C.B., C.M.G., Principal Medical fficer at Portsmouth, on June 14th.

DEPUTY Surgeon-General J. Ekin, C.B., A.M.D., has been appointed succeed Surgeon-General J. Sinclair, as principal medical officer the Aldershot Division. Dr. Ekin was recently created a Com-nion of the Bath for his services during the late campaign in gypt. Previous to his services in Egypt, Dr. Ekin was with the th King's Own Regiment at the siege and fall of Sebastopol in 55 (medal with clasp and Turkish medal). Dr. Sinclair has been ansferred to Ireland, succeeding Surgeon-Major Furlong. M.D., aced on the Retired List from February 6th. Another important ppointment in the Army Medical Department has also just been ade: Surgeon-Major T. R. Lewis having been selected to succeed rgeon-Major J. P. Boileau as assistant professor of pathology at e Army Medical School at Netley,

THE Spanish *Academia Médico-Chirurgica Espanola* offers two izes for medical essays. 1. Two hundred and fifty pesetas and e title of "Scio de la Academia," for the best treatise in answer to e question, "Can the lung disease be considered as contagious?" The Senor Morales prize of seven hundred and fifty pesetas, and e fellowship of the Academy, for the best "Critical judgment upon e formation and general treatment of hernia." The essays must written either in Spanish, Portugese, French, or Latin.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE GATESHEAD UNION WORKHOUSE.

OUR contemporary, the *Newcastle Daily Chronicle*, in its issue of the 31st ultimo, reports the proceedings of the Board of Guardians of the Gateshead Union, which are suggestive of a rather unhealthy condition of things in the workhouse of that union. It would appear that a Mr. Garbutt, a member of the board, had written a letter with regard to the sleeping accommodation of infants, from which it appeared that there were only twelve beds for thirty infants, and that the children were laid four in a bed, two at the top and two at the bottom. The chairman, in commenting on the indiscretion of his colleague, stated that according to the requirements of the Local Government Board that number of beds was sufficient for twenty-one adults, and if that were so, they were ample for thirty-one children. Then a complaint had been made with regard to the hearse and horse, which the chairman observed had cost £100. Evidently in no way discouraged by the criticism of the chairman, Mr. Garbutt returned to the charge, and observed: "That he still considered that four children were too many to occupy one bed, as they were apt to be restless at night." (Not an unlikely occurrence.) "With regard to the mixing of the healthy paupers with those suffering from itch, he would like to hear the statements of the master of the workhouse on the matter." The master was then called in, and explained that the hospital for paupers having the itch being full, he had to put some of them into a room in the workhouse, "but there they were isolated from the other paupers." Mr. Stainthorpe, one of the guardians, in proceeding to cross-examine the master on this statement, was interrupted by the uproar which immediately set in. Ultimately, after a scene of indescribable confusion, it was decided that the question of the best way to deal with the itch patients without taking them into the workhouse, should be referred to the workhouse committee. We would ask what can be the value of Local Government Board inspection, when it becomes necessary for an individual member of the board to call attention in the public press to a condition of things which should have been discovered and stopped at the ordinary visit of the inspector of the district.

ALLEGED DEATH FROM VACCINATION AT DERBY.

IN consequence of local information of the occurrence of a death which was alleged to have been caused by vaccination at Derby, Dr. F. W. Barry was directed by the Local Government Board, on November 17th, to institute an inquiry. He accordingly proceeded to Derby, and obtained from Mr. Legge, the public vaccinator of the district in which the case had occurred, his vaccination register, containing the particulars of the case in question. Dr. Barry also took possession of the lancet with which he was in the habit of performing his public vaccinations, and a needle with which he opened the vesicles on the eighth day.

The case to which attention was drawn was that of a child named Edith Chalkley, of Darley, who was vaccinated by Mr. Legge on September 13th, inspected on September 20th, and who died on November 13th, the cause of death being certified by Mr. A. O. Francis as from "abscesses (two months), exhaustion."

The following is a brief history of the case, as obtained from the mother. The child, who was then three months of age, was taken to the vaccination station in Lodge Lane, Derby, on September 13th, and was there vaccinated by Mr. Legge on the left arm in three places. The vaccination went on all right in two places, but the third did not seem to come forward properly. The child was again taken to the station on the following Wednesday (September 20th) for inspection, and Mr. Legge then opened the places with a needle, and took matter (lymph) from two of the places (vesicles). He did not ask any questions or examine the child's person prior to taking the matter. There was at the time little or no redness about the place where the child was vaccinated, but two days afterwards (September 22nd) a rash (red pimples and wheals) came out over its body, and the left arm inflamed from the elbow to the wrist, and became hard and painful. During the same week, a lump began to form in the left armpit, which gradually increased to the size of a duck's egg, and eventually burst, discharging a quantity of matter. On September 29th, abscesses began to form on both sides of the neck, and these eventually broke and discharged. About the begin-

ning of October, she noticed the inflammation spreading across the back to the right arm. This was succeeded by a swelling under the right armpit, and at the right elbow; and by the end of the first week of that month (October), the latter swelling broke, and continued to discharge matter until October 30th, when a piece of gristle was expelled. The abscess under the right armpit also broke, and the child died from exhaustion on November 13th, exactly two months from the date of vaccination. At the time of her death, lumps, which were apparently abscesses in process of formation, also existed in the back and groins. The vaccination places had in the meantime dried up. Mrs. Chalkley further stated, that both she and her husband had always enjoyed good health; she had two other children, one of whom had died soon after its premature birth at eight months, the other was still living, had been successfully vaccinated, and was to all appearance a healthy child. The deceased was treated from the commencement of her illness by Mr. A. O. Francis, at his dispensary in Derby. Mr. Francis was unfortunately not able to give Dr. Barry very much additional information, as, owing to the fact of its being a dispensary case, he had not kept an account of the visits or treatment. He stated that he treated the child for abscesses in the axilla, neck, and right elbow; that, so far as his memory served him, there was no erysipelas when the child was first brought to him, but that he did not make a full and particular examination. He did not consider that the child was suffering from syphilis; he did not see it after November 6th. The child was clean and well cared for. The house where the child lived was in a fair sanitary condition, no drain inlets being apparently situated in it, whilst the privy was at a considerable distance from the house.

The symptoms were apparently those one would expect to find in a case of septic infection, resulting either from an inoculation with active septic material, or with the infective products of inflammation. Taking this hypothesis, the question next arose as to whether, either at the time of vaccination or of inspection, there was any possibility of the transmission or inoculation of such septic material; and to ascertain this, Dr. Barry first inquired into the history of all the children who had been at the station on September 13th and 20th —these being the days on which Edith Chalkley attended. This, of course, included such cases as had been vaccinated on the 6th, they having attended for inspection on the 13th, and some of them naturally having acted as vaccinfiers to the children then operated upon. Secondly, Dr. Barry examined minutely into all the circumstances connected with the performance of the operation itself by the public vaccinator, to ascertain whether the untoward results might be traced to any careless or accidental inoculation with septic matter.

The total number of children into whose history Dr. Barry found it necessary to inquire was thirty. Of these, seven were vaccinated on the 6th, thirteen on the 13th, and ten on the 20th.

Of these thirty cases, in twenty-five the results of the vaccination were found to be perfectly normal, and, that of these, one subsequently died of a disease unconnected with vaccination (marasmus). Of the remaining five, the operation was unsuccessful in one case, two had removed out of the district and could not be traced; one was the case, with regard to which this inquiry was directed; and the last suffered from erysipelas, which, from the history of the case, was doubtless due to direct contagion from a previous idiopathic case of that disease.

Mr. William Legge was appointed public vaccinator for the north district of the Derby Union on the 24th August 1882. He does not hold a certificate of proficiency in vaccination, such certificate not being requisite in the case of practitioners registered before 1st January 1860, and Mr. Legge was registered on 1st January 1859. In accordance with his contract, he attends at the Wesleyan schoolroom in Lodge Lane every Wednesday from 2 to 3 P.M. Dr. Barry had an opportunity of personally inspecting his mode of work on November 22nd, which struck him as peculiar, and which he describes as follows:—

The instruments ordinarily used by Mr. Legge for the transfer of lymph from child to child, consist of *(a)* an ordinary lancet; *(b)* a needle fixed in a handle; *(c)* capillary tubes; *(d)* small squares of glass. Having selected a vaccinifer, he opens the vesicles with the needle, and then collects the lymph in capillary tubes. These are placed on the table unsealed, and as each child comes up for vaccination, the contents of one of the tubes is blown on to one of the small squares of glass, the lymph is taken from the glass square by means of the lancet, and the vaccination is then performed by scratching the child's arm with the charged lancet. Mr. Legge stated that he used the capillary tubes over and over again, although not knowingly at the same sitting, and he says that he always submits them to a careful cleansing with water before using them a second time.

On the date of Dr. Barry's inspection, the vesicles were opened with a lancet, as he had forwarded the needle to London for examination. Mr. Legge further stated that up to the beginning of November, he was in the habit of blowing the contents of the tubes directly on to the lancet with which he operated, without the intervention of the square of glass. If all the lymph so collected be not required, the tubes are sealed up and reserved, either for future use at the station, or for transmission to other practitioners. Dr. Barry obtained some of the tubes which had been charged on November 8th, which he reserved for future examination. He also took possession of such capillary tubes as were used for taking lymph, before, however, they had been submitted to any cleansing process.

The course of procedure above described, even if it were carried out with the greatest possible care, and with the most scrupulous attention to the cleanliness of each unit of the complicated apparatus used, undoubtedly affords peculiar facilities for the contamination of the lymph by foreign matter, and without having, in Dr. Barry's opinion, any advantage over the ordinary method. The lancet and needle ordinarily used, and the above mentioned charged and uncharged capillary tubes, were submitted to Mr. Farn of the National Vaccine Establishment for examination on November 23rd, and on 24th he reported as follows:—"The lancet is found to be without a point, rusty and dirty; the vesicle opener also rusty and dirty. The five tubes which profess to be uncharged (and concerning which the statement is made that they, or some of them, have been used for taking lymph, but have not been since cleansed) are found to be empty and clean, with the exception of one, which contains some albuminous matter coating its interior. Along with them was a charged tube, of which the ends had been melted, but not sealed, and from which the greater part of the contents had escaped, dirtying the exterior of the empty tubes. Two tubes, marked as charged from 317, contained each a small quantity of opaque lymph one also a little blood; they were sealed. Two tubes, marked as charged from 318, contained each a small quantity of opaque lymph slightly bloody, and were not sealed. Another tube containing lymph, of which the source was not recorded, contained a small quantity of opaque lymph, and was not sealed."

Dr. Barry justly remarks here that, if the instruments were habitually in the condition described above, the possibilities of the inoculation of septic matter at both the periods of vaccination and of opening the vesicles are endless, and that the repeated use of the same capillary tubes is also a most dangerous practice, as it is extremely doubtful whether it is possible to cleanse such tubes effectually after they have been once used. Dr. Barry pointed out the non observance, by the public vaccinator, of the instructions with regard to the examination of both vaccinifers and vaccinees, and to this observation he adds that Mr. Legge disobeys the instructions laid down for public vaccinators by a habit that he has of vaccinating children who are suffering from eczema, in the hope of curing the eczema.

On the date of Dr. Barry's visit to the station, five children appeared for inspection and about seven or eight for vaccination. As however, the vesicles, in three of the five cases, were surrounded with a slight areola, he suggested that those children should not be used as vaccinifers, and that Mr. Legge should obtain a fresh stock of lymph from the National Vaccine Establishment. He also directed Mr. Legge, in future, to carry out strictly the instructions of the Board dated July 29th, 1871, and also to vaccinate direct from arm to arm.

Dr. Barry submits to the Local Government Board in his report the following summary of the principal facts noted respecting the child Edith Chalkley, and the conclusions arrived at by him from the inquiry. 1. From the history of the case of the child Edith Chalkley, there is a strong probability that she suffered from septic disease. 2. The disease was probably communicated to her at or about the period of inspection. 3. It is quite certain that the lymph furnished by Watts did not convey any septic infection, and that there is nothing to suggest that other lymph in use at the time conveyed any such infection. 4. Mr. Legge's method of transferring lymph by the needless intervention of tubes and glasses, the use of dirty instruments, his practice of using the same capillary tube again and again, and his habit of storing lymph in unsealed tubes, afford numerous opportunities for the introduction of septic matter into vaccinifers, and into children presented for vaccination. There is no direct evidence of the way in which septic infection was communicated to the child Chalkley, but there can be very little doubt that it was inoculated into that particular child from some

rty appliance used by Mr. Legge. 5. The public vaccinator has ndered himself liable to grave censure for the erroneous entries in s register, and for his manifold disobediences to the Board's instruc- ons of July 29th, 1871.

*** We published, in our issue of February 10th, p. 283, Mr. egge's protest and rebutter on this report.

EVER AND SMALL-POX HOSPITALS: THE METROPOLITAN ASYLUMS.

IE usual fortnightly meeting of the managers was held on Satur- y at the offices, Spring Gardens; Mr. Galsworthy in the chair. ie Chairman said that, in company with the Vice-Chairman, he d had an interview with the President of the Local Government oard, and one of the results of the interview had been a letter nich had been read. This letter fully embodied all the points nich had been discussed with Sir Charles Dilke, who had been le to grasp immediately the points they had brought under his tice; and what was still more satisfactory, not only had he asped them, but he had also shown every disposition to take tion. The letter in question was as follows.

"Sir,—I am directed by the Local Government Board to acknow- lge the receipt of your letter of the 22nd ult., inclosing copy of a rrespondence which has taken place between the Prime Minister d the managers of the Metropolitan Asylums District with refer- ce to report of the Royal Commissioners appointed to inquire re- ecting fever and small-pox hospitals. The Board have since had e opportunity of conferring with you and Sir Edmund Currie on e subject of the difficulties with which the managers had to con- nd in performing the duties imposed upon them; and, under the cumstances, it will probably not be considered necessary for the putation from the General Purposes Committee to wait upon the ard, as was proposed. The Board fully realise the importance of e question of the provision of additional hospital accommodation small-pox patients in the metropolis, and the many difficulties ich the managers had to meet; and they have given the subject ir careful consideration in connection with the report of the spitals Commission. Although it would appear that such an epi- nic of small-pox as occurred in London in the year 1881 is usually llowed by two or three years in which the mortality from that disease omparatively small, the Board have no doubt that, with the view providing for probable requirements during the present year, it ssential that a considerable addition should be made to the hos- al accommodation which is now available. The fact that, during present session, a Bill has been promised for the extension of nicipal government to the metropolitan area should not, in the nion of the Board, interfere with the managers taking action providing such additional accommodation. There is not, so as the Board are aware, any intention to alter by that Bill the stitution of the board of managers; and, even if any change e determined upon, a prolonged interval would elapse before the asure could have practical effect. In the opinion of the Board, only question affecting the managers, which may probably e in connection with the Bill, will be whether the cure and nagement of patients of the non-pauper class should not be rly shown to devolve on the sanitary authority rather than upon Asylums Board. With regard to the hospital accommodation to rovided, it has been suggested to the Board that one or more ting hospitals, in addition to the 'Atlas,' might be established on Thames, some fifteen miles or more below London Bridge, where less acute cases of small-pox might be received, and that pro- ly land, at no great distance from the hospital ships, could be ured (without compulsory powers of purchase) for the erection of dings to which convalescent patients could be transferred. Such rrangement would appear to be in accordance with the views of the al Commissioners, and so far as regards patients of the classes re- d to, would probably allow of accommodation being provided with- the delay and difficulty which might attend the obtaining of sites nospitals in the metropolis or its immediate neighbourhood. The essful working of any such scheme must, however, to a large nt, depend upon the nature of the arrangements which were e for the transit of the patients from the different parts of the opolis to the floating hospitals. A steamer, with adequate ap- ces for the immediate treatment of the sick, would, as the Board been given to understand, be provided by the managers for the eyance of the patients down the river. In connection with this agement, suitable places on the banks of the Thames for the fer of the patients from the ambulances to the steamer must be d. The Board are not aware how far the managers will be able to secure such embarking places by voluntary arrangement; but if it should be considered necessary that compulsory powers of purchase should be obtained for securing premises for this purpose, the Board would be prepared to consider the question of proposing legislation which would provide for such powers being conferred on the managers. The Board will not fail to give their best attention to the other matters referred to by yourself and Sir Edmund Currie, and they direct me to assure the managers of their desire to assist them as far as practicable in meeting the difficulties with which they have to contend, and in securing the additional hospital accommodation, which appears to the Board to be essential to the satisfactory discharge of the responsible duties with which the managers are intrusted.—I am, sir, etc., C. N. DALTON, Assistant-Secretary."

The Chairman moved that the letter be referred to the General Purposes Committee. The board would see it was a very different letter from the kind they had been in the habit of receiving during late years.—Agreed to.

The usual fortnightly return of the fever patients in the several hospitals of the board showed that the number at present under treatment was 408, or a decrease of 45. The return of small-pox patients showed that the number remaining under treatment was 99, or an increase of two upon the total for the past fortnight.

OFFICIAL REGISTRATION OF BIRTHS, DEATHS AND DISEASE IN CANADA.

A CONFERENCE was recently held between the Federal ministers, more intimately affected by the question, and some of the leading sanitarians of the Dominion, at which it was urged that the Government should organise and sustain an uniform system of vital statistics for the Dominion. It was suggested that, as immediate action was necessary, the Federal Government should at once initiate a system of vital statistics, when organised local Boards of Health are established, so that the statistical information may be utilised by these bodies. The establishment was recommended of a central bureau of statistics, and if found to be within the province of the Government, a comprehensive system of health-returns. The ministers present professed themselves in complete accord with the deputation as to the views which they expressed, and promised to give the subject their most careful consideration. Meanwhile, it has been resolved to found a sanitary association for the whole Dominion, with the object of promoting, by its influence, the best principles of sanitary science and education. The Provisional Committee of this Committee has already been nominated, and there is undoubtedly very useful work before it.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

SIR,—I am much surprised at Dr. Littlejohn's letter in Saturday's JOURNAL, where, instead of making a full *amende honorable* for his imputations against the medical men of Liverpool, as reported in the *Glasgow Herald*, he attempts to justify his conduct by attributing to me remarks which I never uttered, either directly or inferentially. I have always denounced, and ever shall, the Compulsory Notification of Diseases Act, no matter what the rate of fee paid. The remarks I did make at Worcester, following those of Dr. Littlejohn and Mr. Hastings, M.P., were: that I then warned the associates from being led away by the very able and eloquent appeal of Dr. Littlejohn in favour of the Notification of Diseases Act, although, according to his showing, it worked so well and harmoniously in Edinburgh: "so heartily was it accepted in Edinburgh, that several of the leading medical men drove in their broughams to his office and collected their own fees." I then reiterated, that it was not a question of fees, but one of principle, whether we were to be turned into private detectives or not; and, to those of my brethren who might be ignorant of the fact, and to whom fees might be an inducement, I added that the Act, as carried out in Edinburgh, and that attempted to be introduced by the honourable gentleman (Mr. Hastings), were quite different—in the former case 2s. 6d. being allowed for every case reported in any house, whereas by the latter only one fee would be paid for any number occurring in the same house within a month. I will leave your readers to judge whether any such construction as that attempted to be put by Dr. Littlejohn can be honestly placed on these remarks.—Yours faithfully,

W. HOWARD FITZ-PATRICK, M.D.

P.S.—Dr. Littlejohn has named me in such good company as Drs. Whittle and Jacob, that I feel sure these gentlemen will fully justify their statements in the transaction. W. H. F.-P.

Stoneycroft, near Liverpool, February 13th, 1883.

ALL WORK AND NO PAY.

SIR,—Our friend the *Globe* has something to say in favour of the parish doctor, and when a respectable journal calls attention to the harshness of treatment and inadequacy of pay which a certain class of our professional brethren are content to receive, or bound to accept, it behoves the profession itself to do something. In so doing, it might be possible also to ameliorate the condition of the poor. Abuse at one time is showered on the "wretched doctor," at another on the "inhumane overseer;" whereas the greediness of the age is solely at fault. Poverty, real or apparent, is either a crime or a misfortune, and, regarded from this twofold point of view, our present laws seem hardly adequate to encounter it. One's daily experience, either from observation or reading, is, that scamps, tramps, and vagrants of every degree, whom I would designate "criminal poor," are really making a very good thing of it, while the "unfortunates" included in the second category, are dying from starvation, mental or physical agony, or some form of wretchedness. Our Poor-law administration does not deal effectually with the latter class. Our common law, apparently, is unequal to getting rid of the former. No man, perhaps, knows so much of the real poor as the parish doctor, and few men possess his opportunity of seeing and knowing how advantageously money could, and should, be expended to the amelioration of the pauper's lot, and the true economy of the parish and the country. He is not, however, intrusted with any such responsibilities. He is the menial of the meanest body, generally, of all our public functionaries. Is it too much to hope that the day is not far distant when the parish doctor's functions will be blended with those of the Sanitary Officer and Charity Commissioner, and that he will not only be a well remunerated, but a thoroughly independent and responsible Government official?

I am, etc., R. I. M. O.

APPOINTMENT OF MEDICAL OFFICERS OF HEALTH.

SIR,—Would you kindly tell me in your next issue if there is any rule or order of the Local Government Board which prevents a medical officer of a district holding therewith the post of medical officer of health for "a borough" which is part of the district?—Yours faithfully,

ENQUIRER.

*** There is no order bearing on the point, nor is it easy to see how such a prohibition could be defended. Indeed, it would seem on every ground desirable that a health-officer, acting over an area of which the borough is the centre, should act for the borough also. Through the jealousy of local authorities, this is very frequently not the case; but, looking to the interdependence of town and country as regards importation and exportation of disease, it may be laid down as a general axiom that, wherever possible, the health-officer for a town ought also to be health-officer for the district surrounding it.

WE regret to learn that, in consequence of ill-health, Dr. C. O. Baylis, medical officer for the combined sanitary district of West Kent, has been compelled to resign his appointment. At a conference of the various authorities of the district it was decided to send a resolution to Dr. Baylis on behalf of the meeting, expressive of satisfaction with the admirable manner in which he had discharged his important duties, and sincere regret that ill-health had compelled him to resign his appointment.

It was also decided that in the opinion of the meeting it was desirable that a medical officer should be appointed for the area for which Dr. Baylis had hitherto acted; that in the opinion of the conference it was desirable that the medical officer should reside at Sevenoaks, that the salary of the medical officer should be £800 per annum, leaving it discretionary for the Bromley Urban Authority to join the combination.

MEDICO-LEGAL NOTES AND QUERIES.

DALTON *v.* THE GUARDIANS OF ST. MARY ABBOTT'S, KENSINGTON.

THIS was an action brought to obtain an injunction to restrain the defendants from using an iron hospital in Mary Place, Walmer Road, Notting Hill, for the treatment of small-pox patients. In the immediate neighbourhood of the building erected for this purpose by the defendants in April 1881, are a number of laundries and lodging-houses, and also a Board school attended by 400 or 500 children, and therefore, as the plaintiff alleged, the danger of infection would be unusually great. He had obtained an *interim* injunction as soon as possible to prevent the building from being used for the reception of those suffering from small-pox or other infectious diseases; that injunction, to which he claimed to be entitled, on the ground that any such use of the hospital as that proposed by the defendants would be a nuisance, he now sought to have made absolute. As a matter of fact, the hospital was not at present intended to be used for small-pox patients, and it was only built in contemplation of the possibility in 1881 of an outbreak which happily did not take place in the parish. As a result of negotiations for an amicable settlement of the case, the guardians undertook that the hospital should not be opened unless under pressure of a great emergency, and then not until every other measure had been exhausted, and the sanction of the Local Government Board had been obtained, such sanction not to be asked for by them without notice to the other side.

Sir Hardinge Giffard, Q.C., Mr. Crump, and Mr. Moulton, appeared for the plaintiff; Mr. Morgan Howard, Q.C., and Mr. A. Glen were for the defendants.

The fact of the arrangement having been stated,

Mr. Justice Field said that he was very glad to know the parties had come to terms. The question was one with which it would otherwise have been very difficult to deal. Probably the matter could hardly be settled satisfactorily without legislation, and his lordship hoped that there might soon be some legislation on the subject.

CERTIFICATES OF DEATH.

SIR,—I have just given a certificate of cause of death in the following case. may add, that the advertising gentlemen named therein are to be found i the columns of the so-named Christian papers, alongside Mr. Silverton, who you recently noticed; testimonials from ministers (Rev. C. H. Spurgeon amongst others) being, apparently, to hand with all of them. Silverton, b ing recommended as having been one of Spurgeon's pupils (his advertisemer once appeared as E. J. Silverton, B.M., which of course stands for Bapti minister); Congreve as superintendent of a Sunday school; and the follo ing extract from the *Christian World* Baptist news column, speaks for itsel —"We have been requested to insert the following announcement," which really an advertisement: "After completing a ministry of fifteen years' du tion, the Rev. J. Alexander Brown, M.R.C.S., has resigned the pastorate the Baptist church, Drummond Road, South Bermondsey, and will termina his stated labours there on the first Lord's-day in March. To prevent misa prehensions amongst any of his friends, he desires it to be mentioned that has no intention of relinquishing the work of preaching, though for a ti he requires relief from the responsibilities of a pastorate. He will, meantim be glad to serve any of the churches in the metropolis, or its suburbs, as occasional supply."

A. B., seeing the wonderful cures advertised by Congreve, when assisted his son-in-law, J. A. Brown, M.R.C.S., L.S.A., visits the firm and continues be prescribed for afterwards for three months, when the friends, seeing end near, ask one of the firm to come and see her, but they are too busy t five miles to see a patient they saw three months ago, and have been treat ever since; and advise a local doctor to be called in, at the same time comf ing friends by saying, "should anything happen, they would give a modi certificate." I am called in, patient lives forty-eight hours; having seen three times I certify cause of death. Will the Medical Council look after th modified certificates?—I am, yours truly,

Stamford Hill, N. MILLICE CULPIN, L.R.C.P., L.R.C.S.E

*** The Medical Council has no power to interfere with the issue or acc ance of the "modified certificates" referred to in the above letter, which not in any way medical or legal documents, and do not even pretend t such evidence of the cause of death as is required to be furnished to the regis where the deceased person has been attended, during his last illness, by a q fied practitioner. They are simply statements of opinion which may or not, at the discretion of the registrar, prevent the case being referred t coroner. Even if grossly irregular, the appeal would lie, not to the Me Council, but to the Registrar-General. We refer elsewhere to the un fessional conduct of Mr. Brown, in associating himself with Congreve professed "curer" of consumption, and as one of the advertising fraterni

OBITUARY.

ALEXANDER PAULL, M.R.C.S.ENG., L.S.A., TRURO.

ON January 18th, wanting eight days of his seventieth year, at Truro, Alexander Paull, M.R.C.S. and L.S.A. He was bor Camborne, trained at the Helston Grammar School, and appren to Mr. W. H. Bullmore, then in general practice at Truro. He st at University College, London, and at Paris and Heidelberg. practitioner, he commenced single-handed at Truro, but, a few a afterwards, became a partner of the late Mr. H. Andrew, wh the untimely death of Mr. Kirkness of that town, remained th representative of a leading general practice. This practice M Andrew and Paull worked in admirable concord. A few years when both were in declining health, they admitted Mr. King the firm. Then Mr. Paull, having lost his old partner, and h firmities increasing, about four years ago virtually retired practice.

He was of a literary turn, and accomplished in his voc though he has not contributed to medical literature. He wa ready with his help, as in undertaking the local secretaryship New Sydenham Society, or the British Medical Association.

He was prominent in local musical societies; and in archa he was so efficient, that he was complimented by having creat him the honorary office of local secretary to the Royal Institu Cornwall. In that capacity, he found his labours publicly ac ledged by sundry antiquarian societies that have visited Co He had made numerous rubbings of ancient monuments, ec tical and others, with his own hands; and for the loan of thes

is comments thereon, has received the hearty acknowledgments of everal authors of repute. These were from various parts, for he ndulged in travel yearly for a holiday.

He was a devoted son of the Church of England, and for many ears in medical charge of the "Truro Diocesan Training College or Mistresses." Since his retirement, he omitted, as far as his trength would permit, no occasion of attending her services.

He was noteworthy for the warm friendship he contracted in arious places from his earliest days, and for his hospitality. He as endeared to his patients in every station and sect, and was of a very enial nature.

HENRY CLIFFORD GILL, M.R.C.S.

R. GILL, born in 1846, entered as a medical student at University ollege in 1863, after having passed the matriculation examination the London University. He distinguished himself during his colge career by obtaining the gold medal in the class of medicine, nd after holding the appointment of house physician at University ollege Hospital, he became a clinical assistant at the Brompton Conmption Hospital. Accident rather than inclination led him into e branch of the profession he subsequently pursued, and after six onths' study at Bethlem Hospital, he went to the asylum at Notngham; from whence, in 1869, he passed to the North Riding sylum at York, as assistant superintendent, remaining there until 74, when he succeeded to the sole charge of the York Lunatic Hosal, Bootham, within the walls of which he succumbed on Mony, the 12th instant, to an attack of pleuro-pneumonia. In the urse of his brief career, he shaped his conduct by an unflinching nse of duty, and spared no pains in carrying out his work. No ght share of success of the jubilee meeting of the British Associaon at York was due to his energy and intelligence as secretary of e Museum Committee, in the discharge of which office he had uch responsible labour in acquiring and arranging the interesting hibits which went far to make the meeting memorable. His path cessarily restricted the circle of his professional acquaintance, t as a member of the Medico-Psychological Society, he regularly tended its meetings, and also took an active share in the proceedings the York Medical Society, the members of which ancient body noured him by electing him their President last year. Several of s papers read before them deserved much wider audience. By his w intimate friends, Mr. Gill was regarded with feelings of more an ordinary admiration, for he possessed an intellect of no common der. The most divers forms of scientific inquiry successively racted him, and he did not cease until he had mastered, at least, ir principles. Those who knew him well will miss a good friend, m whom much was to be learned, and many a germ for future ought obtained.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their amination in the Science and Practice of Medicine, and received rtificates to practise, on Thursday, February 15th, 1883.

Buck, Lewis Archer, Newman's Row, Lincoln's Inn Fields.
Doyne, Robert Walter, Clifton Gardens, Maida Vale.
O'Connor, John Kane, Wellgate, Rotherham.
Williams, John Henry Hywell, Dew Street, Haverfordwest.

The following gentleman also on the same day passed the Pri- ry Professional Examination.

Nutting, Philip Henry, London Hospital.

UNIVERSITY OF DUBLIN.—At the Hilary Term Examinations, Diploma in State Medicine was granted to—

Stuart Davis, M.B., B.Ch.; William H. Burke, M.B., B.Ch.

For the Degree of Bachelor in Surgery (B.Ch.), the successful ndidates passed in the following order of merit, viz.:

amuel A. Alcorn, John Armstrong, Eugene Cormack, James Gloster, Daniel Crowe, Charles St. S. R. Nason.

For the Degree of Bachelor of Medicine (M.B.), the candidates re arranged in order of merit as follow:

harles W. Hamilton, Samuel A. Alcorn, William S. Boles.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At usual monthly Examinations for the Licences of the College, d on Monday, Tuesday, Wednesday, and Thursday, February 5th, , 7th, and 8th, the following candidates were successful:

For the Licences to practise Medicine and Midwifery: Thomas Joseph Croke, Hull; Charles Andrew Daly, Charleville, co. Cork; Thomas Lane, Leinster Road, Rathmines, Dublin.

For the Licence to practise Medicine only: William Thomas Beattie, Doogary, Omagh; Thomas Purdue McCloghry, Riverstown, co. Sligo; George Douglas Macintosh, 10, Ash Grove, Harrogate; Charles Edward Strickland, Kidsgrove, North Staffordshire.

For the Licence to practise Midwifery only: Samuel Dunlop Henderson, M.D., M.Ch., Roy. Univ. Irel., Kilrea, co. Derry; James Henry, M.D., M.Ch., Roy. Univ. Irel., Monaghan; Lowry D. Morell, M.D., M.Ch., Q.U.I., Ballybay, co. Monaghan.

MEDICAL VACANCIES.

ANTRIM UNION, Connor Dispensary.—Medical Officer. Salary, £95 per annum and fees. Election on the 27th instant.

CAMBRIDGE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Principal Medical Officer. Salary, £175 per annum. Applications to Mr. W. P. Littlechild, 5, Queen's Lane, Cambridge, by March 23rd.

CARLISLE DISPENSARY.—Assistant House-Surgeon. Salary, £100 per annum. Applications to Mr. John Ostell, Honorary Secretary, 14, Bank Street, Carlisle.

CHIPPING NORTON UNION.—District Medical Officer. Salary, £65 per annum. Applications by March 5th.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Cheetham, Manchester.—Honorary Surgeon. Applications by March 6th.

DONEGAL UNION, Laghey Dispensary.—Medical Officer. Salary, £120 per annum and fees. Election on March 1st.

DUNFANAGHY UNION, Crossroads Dispensary.—Medical Officer. Salary, £110 per annum. Election on March 7th.

FIRTH COLLEGE, Sheffield.—Professor of Chemistry. Salary, £150 per annum. Applications to Ensor Drury, Registrar, by March 1st.

GREAT NORTHERN HOSPITAL, Caledonian Road.—Junior Resident Medical Officer. Applications by March 10th.

HAMLET OF MILE-END OLD TOWN.—Assistant Medical Officer and Dispenser. Salary, £100 per annum. Applications by February 27th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by March 3rd.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum. Applications by March 6th.

KENT AND CANTERBURY HOSPITAL.—House Surgeon. Salary £80 per annum. Application by March 23rd.

MORPETH DISPENSARY.—House-Surgeon. Salary, £120 per annum. Applications by March 1st.

RETFORD DISPENSARY.—Surgeon. Salary, £120 per annum. Applications to the Secretary, the Vicarage, East Retford, by March 3rd.

ROYAL CORNWALL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by March 1st.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—House Physician. Salary, £80 per annum. Applications by March 8th.

ROYAL MEDICAL BENEVOLENT COLLEGE.—Morgan Annuitant. Applications by the end of February.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, Lower Seymour Street, Portman Square, W.—Surgeon. Applications at once.

STEYNING UNION.—Medical Officer for No. 1A District, comprising the parishes of Preston and Patcham, near Brighton. Salary, £50 per annum. Applications by March 6th.

UNIVERSITY COLLEGE.—Dental Surgeon and Lecturer on Dental Surgery. Applications by February 28th.

WEST LONDON HOSPITAL, Hammersmith.—Assistant Physician. Applications by February 27th.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Resident Clinical Assistant. Applications to Dr. Herbert Major, the Medical Superintendent.

WONFORD HOUSE HOSPITAL FOR THE INSANE, Exeter.—Assistant Medical Officer. Salary, £100 per annum. Applications by the 24th instant.

YORK FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Assistant Medical Officer. Salary, first year, £150; second, £160: third, £170. Applications to J. Brown, Park Street, Groves, York.

MEDICAL APPOINTMENTS.

BARLOW, T., M.D., appointed Assistant-Physician to the London Fever Hospital *vice* G. C. Henderson, M.D., resigned.

BENNETT, Storer, F.R.C.S. (Exam.), L.R.C.P.Lond., L.D.S., appointed Dental Surgeon to the Middlesex Hospital, *vice* J. Smith Turner, M.R.C.S., L.D.S., resigned.

BIRCH, De Burgh, M.D., appointed Resident Medical Officer to the Newcastle-on-Tyne Dispensary, *vice* W. Strang, M.B., resigned.

BOND, C. J., F.R.C.S., appointed House-Surgeon to the Leicester Infirmary and Fever House, *vice* H. N. Everard, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

ROSSER.—On the 11th, at 1, Wellesley Villas, Croydon, the wife of Walter Rosser, M.D., of a son (stillborn).

DEATHS.

FRY.—At Florence, on the 15th instant, after a short illness, Mary, the beloved wife of J. O. Cunningham Fry, M.D., I.M.D., Surgeon-General with the Supreme Government of India.

ROSSER.—On the 13th, at 1, Wellesley Villas, Croydon, Elizabeth Sarah, the wife of Walter Rosser, M.D.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

SATURDAY.—The Medical Union Society, 8 P.M. Dr. Forbes Winslow will introduce a discussion on the Plea of Insanity in Criminal Cases.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Fisher will show a case of Dupuytren's Contraction of the Fingers in a Woman. Dr. Day will record a case of Ascites in a Child; Tapping: Recovery. Dr. Robert Lee: On the Diffusion of Antiseptics and Medicinal Agents in the Atmosphere.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. W. H. Neale: Notes on Some Points in the Etiology of Scurvy. Dr. W. Hale White: A Case of Scurvy, with Dilatation of the Heart and Retinal Hæmorrhages. Mr. Johnson Smith will show specimens of Hæmorrhage in Muscles of Fatal Cases of Scurvy.

WEDNESDAY.—Hunterian Society, 8 P.M. Address by the President (W. Rivington, Esq., M.S.) Dr. Pye-Smith: Mistakes in Diagnosis, illustrated by Cases.

THURSDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Annual meeting: Report, President's Address, etc.—Harveian Society of London 8.30 P.M. Mr. E. Owen: The Simple Treatment of Congenital Talipes. Dr. Percy Boulton: The Treatment of *Post Partum* Hæmorrhage

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE VACCINATED AND UNVACCINATED.

SIR,—I am pleased to be able to thank you for your frank confession, that the statements in the columns of the *Echo* are undoubtedly true as regards the protected being the bulk of the small-pox hospital patients. As regards your concluding remarks, I have for years advocated an appeal, in the case of the hospital "unvaccinated," from the record of the hospital to the vaccination officer's returns. Now and then it occurs that we are able to make the appeal: it was done in Leeds in 1869; and we have found that persons who have had small-pox and been treated in small-pox hospitals, and the recorded as unvaccinated, have been recorded in the books of the vaccination officer as "successfully vaccinated." The knowledge of this fact induces a very natural reluctance on our part to accept all who "show no marks" as unvaccinated. It can only be the very bad cases which cover up vaccination-marks with the eruption of the fever; and it is just these cases which in many report we find returned as unvaccinated. Let me instance one. The 18[illegible] Metropolitan Report, p. 6, Table No. 3, gives a column "With no marks, [illegible] 1,016, and percentage of deaths 35.9." This death-rate proves them to be cases of a very severe type; and it cannot be doubted that many of them, if not all, are grouped as unvaccinated in the 3,634 unvaccinated cases. Now, let us pore over the hospital records ever so carefully, and we can get no possible light upon these cases. There they are, because of the absence of marks "unvaccinated;" and no amount of examination will make them otherwise. But if you will refer to the vaccination officer's returns, which show the success or failure of vaccination, or the absence of it, you get accurate and scientific data upon which to build conclusions; and we only discredit the classification of hospital returns in this sense. We maintain that the vaccinator is the correct judge of success; and, to decide the vaccination or non-vaccination of a patient who is ill with an eruptive disorder of the worst kind as regards the surface of the body, we maintain, is not only unscientific, but almost impossible.

Before I conclude, I would like to point out that so many as 90 per cent. of the births have never yet been vaccinated in this country (London is low in the country); and I much question if it would be possible to get so large a proportion done. You have been taking the Local Government Board's summary instead of the actual figures. Take, for instance, 1878, Local Government Board Report, 1880-81: "Births 891,743, successfully vaccinated 760,[illegible] which gives 85.33 per cent. In the summary, the "dead unvaccinated," [illegible] actually are used to make up the percentage to more than 90.

But, in conclusion, when all were unvaccinated, in the eighteenth century, hospitals recovered about 72 per cent. of the patients. You do no more now notwithstanding the fact that 75 per cent. of your patients are recorded as vaccinated. Do you kill more unvaccinated? You cannot think so. The treatment is better in every sense; the hospitals are better; the doctors more humane. Then, the only other conclusion justly to be drawn, *in the absence of positive knowledge*, is, that you have unvaccinated in the reports who should be vaccinated, and who would be but for the eruption.—Yours truly,

Darlington, February 19th, 1883. ALEX. WHEELER.

*** In the statistics we made use of (those of the Asylums Board Hospitals) the "unvaccinated" are those who not only present no marks, but are admitted to be unvaccinated by the patients themselves, or by their parents or guardians. The "doubtfully vaccinated" are those who present no marks, and who are said to have undergone the operation of vaccination, or regarding whose vaccination no information can be obtained; these are *not* included among the "unvaccinated." The statistics are so carefully prepared, that it is almost impossible for a case to be returned as unvaccinated which is actually vaccinated. The presence or absence of marks can generally be readily determined, even in the worst kinds of the disease; the only difficulty occurs occasionally in severe cases when the disease is far advanced; but such difficulty is met with in so small a percentage of cases, as to have little appreciable effect on the total figures; when it does occur, the case is classed among the "doubtful," and not among the "unvaccinated." The groups "vaccinated" and "unvaccinated" are thus clearly defined; the group called "doubtful" are probably all "unvaccinated," since the real criterion of a previous attack of vaccinia is the presence of marks, but, to prevent error, they are considered separately. But, even were the "doubtful" to be thrown in with the "vaccinated," there would still remain to be explained an immense difference between the vaccinated and the unvaccinated mortality. The figures referred to the percentage proportion of London children of 10 and under belong to the vaccinated class. We believe it to be very nearly correct to [illegible] granting it to be even as low as 80, the broad result will remain unchanged. As regards the mortality, the great point is, that the rate among the "vaccinated" is immensely less than the rate among the "unvaccinated;" and, as we have pointed out, there is very positive evidence that neither group includes any cases rightfully belonging to the other.

Dr. A. H. Jacob of Dublin.

,—I have read with very much pleasure in your issue of January 20th, the tter of "Medicus in Rure," suggesting that some mark of thanks is due to and ught to be conferred on Dr. Jacob by the Poor-law medical officers of Ireland r his untiring zeal in their behalf. As one who has had unlimited means r the past ten years of observing the indefatigable labour of Dr. Jacob to romote any project originated for the welfare of the profession, it often ccurred to me that not only the Poor-law medical officers of Ireland, but ery member of the medical profession ought to feel an obligation to Dr. . H. Jacob, for there is not in Ireland a man better qualified to represent, or ie who has done more for, the medical profession at large. It is, therefore, ot only the duty of the Poor-law medical officers of Ireland, but it is a ity incumbent on every medical practitioner in the United Kingdom to xpress, in a substantial form, the debt of gratitude due to such a man, who is given so much of his valuable time and undoubted energy in so self-sacri- ing a manner.

Although not a member of the medical profession, or in any way connected ith Dr. Jacob, who is totally ignorant of my thus writing, I shall gladly for- ard you a guinea for the fund on your notifying your willingness to receive ch.—Yours, etc.,

An Admirer.

Trichina Spiralis.

—In the report of the meeting of the Natural History Society of Glasgow your issue of January 20th, it is stated that Dr. Freeland Fergus exhibited some icroscopic preparations of the *Trichina spiralis* from the human subject, th reference to which it is said that "the specimens were of interest, as it the first time that this parasite has been found in a human subject in Glas- w." This, however, is very far from being the case. During the period as Demonstrator of Anatomy in Glasgow University, under Professor Allen omson, in the winter session 1859-60, two subjects were dissected in the atomical rooms, the muscles of which were extensively infiltrated with the *richina spiralis*. These were demonstrated to the class at the time, and I ve still in my possession some microscopic slides prepared from one of the dies above referred to, which was otherwise remarkable for its magnificent uscular development. This correction is unimportant in itself; but I have doubt many old students of the anatomical class of 1859-60, in the iversity, will remember the interest these demonstrations of the *Trichina ralis* then excited.—I am, etc.,

Ventnor, January 23rd, 1883. J. Sinclair Coghill, M.D., F.R.C.S.

Jno. H. McGuinness, L.R.C.P. and S.I., Hillside House, Ebbw Vale, Mon- outh wishes for any information with regard to medical appointments in merara and at the Cape.

Abolishing a Fever.

—According to the British Medical Journal of February 10th, I am dited with having "abolished" enteric fever among British troops in the dras Presidency; and, as a proof that this demolition is not complete, a ical case of ordinary typhoid in an old Indian resident, treated in the civil spital at Madras, is quoted. In other words, against my official report, ich refers only to British soldiers and their families, the case is adduced of n old Indian resident," and, therefore, not a soldier. The case itself is not ppropriately detailed in the *Dublin Medical Journal*. Will you allow me to , what is it exactly that is meant by the several terms "enteric fever" and yphoid fever"? At page 240 of my second official report, I wrote as follows. f by the term enteric be indicated intestinal ulceration in a case of endemic er, be its type continued or periodic, then, I say, Yes—such cases have oc- red; but if specific fever, from filth in air, earth, or water, then, I say, ; in this command, not in a single instance." But my remarks refer to the sses already stated, and to them only. In summarising conclusions ived at from official documents submitted to me, the following occurs at ges 201 and 202 of the report quoted: "That the particular form or ms of fever among British troops in Southern India, to which of late years terms enteric and typhoid have been, in a specific sense, applied, and to the gin of which a pythogenic source has on theoretical grounds been assigned, are, reality, none other than endemic and climatorial fevers, with a particular plication or condition superadded; that whereas, in former days, the neral fever was looked upon as the more important phenomenon, the par- lar local complication as the less important, the custom has, of late years, wn up of so far reversing these points, as to apply to a particular case of demic non-specific fever, and in a specific sense, a term indicative on the hand of a particular morbid complication, on the other of a severe con- on." Is it so or not?—I am, etc., C. A. Gordon, Surgeon-General.

5, Westbourne Square, February 1883.

Capsicum as an External Application.

Drummond Macdonald, in the Journal for February 10th, mentions the of capsicum and oil as an external application in lumbago, etc. That this o novelty in treatment, will be found on reference to the *Handbook of The- utics* of Ringer. In this district of Yorkshire, it is a common thing for matic patients to tell you that they have rubbed their joints with cayenne oil, before sending for medical assistance; and I may state that I am in habit of prescribing capsicum as follows: ℞ Tr. capsic. ℥j; ol. oliv. ad ℥vj. The liniment to be rubbed in frequently. This application is of especial e in cases of lumbago and in strains of the muscles of the back.—I am,

J. A. Erskine Stuart, L.R.C.S.E.

ealey, Batley, February 13th, 1883.

Flatulence.

I have had under care for some time a patient whose great trouble is a ling of wind, which comes on in attacks more or less severe when he almost beside himself. I can find nothing to relieve it in any way; any will, therefore, be very acceptable to, yours very truly, Felix.

The Medical Students' Primer.

place is this?—This is the Pathological Society. How does one know it e Pathological Society?—You know it by the specimens and the smells. t does that gentleman say?—He says he has made a *post mortem*. All the lemen make *post mortems*. They would rather make a *post mortem* than a party.—What is that on a plate?—That is a tumour. It is a very large our. It weighs one hundred and twelve pounds. The patient weighed ty-eight pounds. Was that tumour removed from the patient?—No, the nt was removed from the tumour. Did they save the patient?—No, but saved the tumour. What is this in the bottle?—It is a tape-worm. It is g tape-worm. It is three-quarters of a mile long. Is that much for a worm?—It is indeed much for the tape-worm, but not much for the ological Society.—*New York Med. Record.*

Condensed Milk for Infants.

Sir,—It is to be hoped that the letters which have recently appeared in the Journal on the subject of condensed milk as a food for infants, are not to be taken as samples of the method of "collective investigation." One of your correspondents has "seen it used in only two cases," and yet rushes into print with words of the strongest condemnation. Even as to these two cases, no details are given as to the strength of the milk thus prepared. Another correspondent relates that two babies were operated on for cataract. One did well, the other badly. The former had been fed "on correct diet," the latter (sixteen months old) on breast-milk and condensed milk. *Post hoc propter hoc*; therefore, the condensed milk was to blame. No other details are mentioned, no note of the absence of symptoms of rickets or congenital syphilis, no suspicion of the poverty of the breast-milk. Condensed milk is, in my experience, of great value when properly used, in the treatment of the dyspepsia of infants. But without entering into a controversy as to its merits or demerits, I wish to show the fallacy of single observations by narrating a case which occurred lately. Two tiny infants, twins, born prematurely at seven months, were brought to my out-patient room at the Hospital for Sick Children when they were three weeks old. Each of them weighed three pounds and three-quarters. Both showed some signs of congenital syphilis. More unpromising subjects for artificial feeding could not well be imagined. One of them was put to the breast, the other fed on Swiss milk. The former died, the latter survived. I know that it lived for ten months, and I have not heard of it since. If an observer has but a single fact to record, let him record it if he will. But if so, it must be with minute accuracy and attention to details, or the accumulation of observations becomes only the multiplying of errors. And, above all, let him beware of building a theory on the basis of his single fact.—I am, Sir, yours truly, David B. Lees, M.D., F.R.C.P.

2, Thurloe Houses, S.W., February 20th, 1883.

Sir,—Allow me to say a few words in reply to Mr. E. M. Owen's communication upon the above subject, in which he attributes capsular cataract to the use of condensed milk. The assertion is as startling as, to my mind, unfounded. My own children owe their lives to the preparation, and have escaped the deadly peril of cataract or such like terrors, and are, indeed, in a well nourished condition.

Both in infirmary and private practice, I have found condensed milk exceed one's expectations, and save life where cow's milk has been worse than starvation-diet. If Mr. Owen attributes cataract in children to excess of sugar, then most infants should suffer from it from their earliest butter and sugar days.

Excess of sugar probably tends to flatulence, but this evil has been corrected lately by the Condensed Milk Company. After the third month, most infants require small quantities of semisolid nourishment besides milk. Where properly managed, I never saw an infant waste upon condensed milk, but *au contraire;* and my experience amongst babes has been considerable. My confidence, therefore, cannot be shaken by any theory where the practice is satisfactory, and to my mind it appears most unfair to condemn any article of diet without tangible reasons for so doing.—Yours faithfully,

Crow Tree House, Sheffield. Edward J. Adams.

Sir,—I must beg to differ from your correspondent Dr. McLennan, in your Journal of February 3rd, with regard to the value of condensed milk in the feeding of infants. For many years past, I have seen it used frequently with the best results, when ordinary cow's milk has been persistently rejected by the little patient's stomach. The results have been so good that I almost always recommend my patients to commence with it. The Anglo-Swiss brand I order, as it keeps well, and does not seem to vary in composition. Of course, there are children who tax your utmost ingenuity to find something that will stay down. The ordinary plan of recommending milk from one cow generally answers, but I have known two cows side by side, one of which gave thirty quarts of milk a day ten morning, noon, and night; the other gave eight quarts four morning and evening. The eight quarts of the one contained over one-third more butter than the thirty quarts of the other. Woe betide the child which got the thinner milk with equal parts or one-third of water added to it, as generally recommended for a commencement for infants. The medical attendant should ascertain the quality of the milk before he speaks as to the quantity of water to be added. In Ceylon, where English mothers very rarely are able to suckle their own offspring, on account of the nature of the climate, we had sometimes great difficulty in rearing the children. Goat's milk we frequently found answer best. In some cases, nothing but ordinary bread, dried in the oven, and then boiled and beaten with water to the consistence of milk, and sweetened, would stay on the stomach. In all cases, the old-fashioned cooked flour had to be kept in readiness, that is, flour which had been tied in a cloth and boiled three or four hours, then dried, and grated into the food when necessary. Mellin's, Liebig's, Neave's, and other foods, I have seen tried with good effects; but I have obtained the most uniformly good results from the natural foods.—Yours faithfully,

Prestwich, February 6th, 1883. A. Hirst, M.R.C.P.Ed.

Spermatorrhœa.

Sir,—I have a case of spermatorrhœa. The patient is a teacher, 24 years of age, 5 feet 8½ inches high, weighs 160 lbs., and appears in good health generally. He is strictly teetotal. He practised self-pollution from puberty till about four years ago; since when he has had nocturnal discharges, also discharges after stools, and a milky discharge after urinating. I have examined the discharges and the urine, and find spermatozoa in large numbers. The testicles and penis considerably smaller than normal; there is a lack of erectile power, and a slight feeling of discomfort in the back of the head; yet he looks robust, and has very little to complain of except the dull feeling in the head, and the general condition of the genitals as described above. I have exhausted about all my knowledge and patience, and have seen very little improvement. I will be very thankful for any light on the subject, and hope some member will favour me.—Yours, Adrift.

St. John, N.B., Canada, January 14th, 1883.

Forcible Removal of the Uterus.

In answer to a correspondent who writes to us for certain details concerning this case, we are able to inform him that it is published in the *Provincial Medical and Surgical Journal*, 1845, p. 168, and that the surgeon's name was Mr. Gaches, L.S.A., of Costessey. The necropsy was performed, at the coroner's order, by Mr. W. Bransby Francis, of Norwich, assisted by Mr. J. G. Crosse. The uterus, the lower part of the small intestines, and the greater part of the large intestines were absent; thirteen inches of the large intestine, evidently the descending colon and rectum, remained.

Cigarettes and Pipes.

Sir,—Possibly it may be my own stupidity, which prevents my quite seeing off-hand the drift of the perplexities into which "An old Smoker" and Mr. Shuter in the British Medical Journal of February 10th, 1883, would like to drag your readers; if so, perhaps someone will kindly enlighten my darkness. By my calculations, neither of those gentlemen would, in earnest argument, wish to deny that there are idiosyncracies with which smoking agrees, while there are others in which the use of tobacco is not indicated, just as there must be smoking individuals to whom a pipe is far more of a luxury than is a cigarette, and *vice versâ*. Yet further, there may be times and seasons when one or other may agree with a person; yet, at other times, be more prejudicial than advantageous. If, again, a person is so educated or so much the slave of habit as to be unable to distinguish between what agrees with him and what does not, or when he should use smoke, and when leave it alone, why he may as well join the four flies mentioned in the *Gazette Médicale de l'Algérie*: "Three poisoned themselves with adulterated articles of food, and the fourth, in despair, settled upon a fly-paper, which, much to his astonishment, being adulterated too, only caused him to become more refreshed and vigorous than ever."—Yours, etc.,

Abdominal Tumour.

Sir,—Your issue of the 3rd instant contains a letter under this heading, signed "M.R.C.S.," inquiring why a cigarette is more injurious than a pipe or cigar. If he will examine his pulse before and after smoking a cigarette, and before and after a pipe, he will probably be able to answer this question himself. Cigarette-smoke is usually so mild that, without intentional inhaling, it enters the bronchial tubes, and thus, by ordinary respiration, reaches the air-cells, coming into almost immediate contact with the blood, and rapidly increasing the heart's action, either by direct stimulation, or by influencing the vagus as a cardiac inhibitory nerve. In the case of the pipe, this does not occur; the acridity of the smoke effectually closes the glottis against it.

I have made observations on these points on soldiers, and find that, on an average, while a pipe will not increase the pulse more than in the proportion of from about sixty to seventy beats, a cigarette may bring it up from sixty to ninety. I do not mean this is so in each individual case, but this is the average from experiments I have made. It is the rapidity of the influence of the cigarette, I take it, which is injurious to cardiac integrity, as an inhaled cigarette may make the difference of the pulse above mentioned in five minutes, while any increase from a pipe is gradual. Different brands of cigars of course vary in action on the glottis.—Yours faithfully,

Cork, February 6th, 1883. John Martin, Surgeon A.M.D.

P.S.—These observations must be made on persons fasting.

Sir,—I do not see any sound reason for the statement that it is more injurious to smoke cigarettes than pipes, for, with the former, the nicotine is absorbed in the bibulous paper of which the coat of the cigarette is composed, and is then burned and destroyed; whereas, in a pipe, there is no escape for it, and the pipe gradually becomes saturated.

If cigarettes be so detrimental, how is it that Spaniards and Frenchmen can smoke them all day long without visible harm? as many as twenty or twenty-five being sometimes consumed in the course of a day. No one can smoke several pipes in the same time without injurious effects.—I am, etc.,

D. P. B.

The Double Qualification, Edinburgh.

Sir,—In the British Medical Journal of February 17th, there is a list giving the names of men who passed; we are not told how many were "spun". On looking over the list, one must notice that a great many of the men come from Ireland, especially from about Belfast. Seventeen men pass the first examination; of these, four are Irish. Thirty-two men pass the second examination; of these, twelve are Irish. It should be observed that more Irishmen go in for the second or final examination than for the first. I think the reason of this is, that men who have passed the first half of the examination for the Queen's M.D. Ireland, having failed to obtain its M.D., run over to Edinburgh and pay for the double qualification.

I need not mention the opinion held by the London medical men of the double qualification; suffice it to say, that when applying in London for a medical appointment (when I had only the double qualification), I was laughed at, and told, "Why, any fellow who can afford to run up to Edinburgh can get the double."

I do not wish to run down this diploma, for I hold that men who have studied diligently at Edinburgh for their four years, and who take the double qualification, are fair practical men. But I do object to this perpetual rushing of plucked students from almost all the quarters of the globe to Edinburgh, there gaining a qualification immediately, after having failed a few days previously at their own college or university. Surely, if a corporation has to keep itself afloat by such a system, it would be far better to sell their diplomas to any buyer, instead of going through the farce of an examination. We run down and jeer at some of our American brethren, for sending a diploma to any fellow who, with stamps enclosed, has written for it; but should we not look to ourselves, taking the beam out of our own eye, instead of telling our neighbours to take the mote out of their's.—I remain, yours, etc.,

M.D., M.R.C.S.

Club Practice.

Sir,—I shall feel much obliged if some of your readers who are connected with well-to-do clubs, will state what their arrangements are as to the limit of distance at which club patients are to be attended.—Yours faithfully,

Inquirens.

Treatment of Bilharzia Hæmatobia.

Sir,—Will any of your readers oblige me by giving a treatment for "Bilharzia hæmatobia?" I have tried confectio terebinthinæ—one teaspoonful twice a-day—without any effect. I would also like to know whether this disease can be produced by other causes besides impure drinking-water.—I am, etc.,

H. N.

Po-ho-yo.

Sir,—Can any of your readers tell me the composition of this, said to be a Japanese remedy for neuralgia? It seems to consist of camphor, peppermint, etc., etc., and occasionally relieves facial neuralgia when rubbed on the skin.—I am, etc.,

L. C.

The Doctor's Carriage.

Sir,—I am very anxious to obtain information on the following. Keeping my own carriage, but wishing to arrange with a liveryman as to horse and man, what plan would be the best to adopt? Answers from gentlemen having experience would much oblige, yours faithfully,

A Member.

Homes for Imbeciles.

Sir,—Will you kindly permit me to supply an accidental omission in my communication on the above subject in the Journal of February 17th, by adding Durham to the list of counties from which election and reduced payment cases are received into the Royal Albert Asylum?—Yours faithfully,

G. E. Shuttleworth, M.D., Medical Superintendent.

Royal Albert Asylum, Lancaster, February 17th, 1883.

Epigram by Sir William Browne.

Sir,—Let me give you the correct version of the lines attributed to Sir William Browne, M.D., in your issue of February 10th. The Tory epigram was—

"The King, observing with judicious eyes
The state of both his universities,
To Oxford sent a troop of horse; and why?
That learned body wanted loyalty.
To Cambridge books he sent, as well discerning
How much that loyal body wanted learning!"

The Whig reply was—

"The King to Oxford sent a troop of horse,
For Tories own no argument but force;
On t'other hand, to Cambridge books he sent,
For Whigs allow no force but argument."

—Believe me, yours truly,

S. Grose.

Melksham, Wilts, February 13th, 1883.

Sir,—Does Dr. Campbell know Dr. Trapp's epigram, to which Sir Thom: Browne's lines were the rejoinder?

"Our royal master saw with heedful eyes
The wants of both our universities.
Troops he to Oxford sent, as knowing why
That learned body wanted loyalty;
But books to Cambridge gave, as well discerning
How that right loyal body wanted learning."—J.D.

Vaccination in Eczema.

Sir,—Some time ago, there was a correspondence in the Journal as to t advisability of vaccination in cases of severe eczema capitis. I am now atte ing a family, several members of which suffer from eczema. One little b immediately after vaccination, showed the eruption on the arm gradua extending until the head and face were covered, the three punctures rema ing raw and weeping for about twelve months or more. All, however, gra ally disappeared under arsenic. As the parents blamed "bad matter" as cause, I thought it better to postpone vaccinating the baby, now nine mon old, to prove that the cause was constitutional; and, at the third month, eczema appeared on this little one's face. Arsenic was given for a few wee until the eruption disappeared. Now I find it has returned worse than e the whole head and face being swelled and raw, with droplets of serum ooz from the whole surface. My impression is, that the correspondence to wh I allude showed that vaccination in such cases is not only harmless, but o curative. I shall be obliged if you will kindly enlighten me, or ask y readers to do so.

I have been very much pleased with the local application of the chrysoph acid ointment, with phosphorised cod-liver oil internally, in psoriasis gutt but shall be glad if any member would inform me of means by which stains of the acid can be removed from linen.—Believe me, yours truly,

Rusholme, January 30th, 1883. J. Milner Helme, M.

*** Our correspondent will find the subject of vaccination in eczema cussed in the second volume of the British Medical Journal for 1880, p 414, 497, 534, 648, 690, 730, and 838.

Herpes.—Our correspondent having accepted office on the terms mentione his letter, *i.e.*, from Whitsunday in 1882 to Whitsunday, 1883, has no rem against the parochial board, but must vacate his office if called on so t From what we know of Scotch parochial appointments, our correspon will not sustain any severe pecuniary loss by the determination of his offi

Eruption Following the Subcutaneous Injection of Morphia.

In answer to "L. B.," I can speak with great authority, having used mor subcutaneously now for twenty years in my own person in every known m As long as he continues the use of a solution with the most minute quanti excess of acid, he will have these eruptions and suppuration occurring without an excess of acid the proportion of acetate of morphia clog needle and deposits the salt. Let him try the neutral tartrate suppl Messrs. Smith, Duke Street, Edinburgh, and he will have no troubl dissolves readily in distilled water with very slight heat, even that o hand. I have used it for three years, during which time I never have purating point, and one needle will last as long as six when I use the ac though of the finest calibre, a very important point.

J. .

Sir,—In reply to "L. B.'s" question on the subject of inflamed punctures hypodermic injection of morphia, I can furnish the following fact fro sonal experience, viz., that several times punctures became sore after time had elapsed, and that the only condition common to all occasion that, in each instance, the injection had been given from a solution long kept. I therefore arrived at the conclusion that some fungus or organism had been developed in the water. It never followed the us fresh solution.—I am, etc.,

Hypno

The Radical Cure of Varicocele.

Sir,—During the past six or seven months, I have read several communic in the Journal with reference to the operation for radical cure of vari In all of these, stress is laid on the freedom from danger to life in the now at our disposal for curing this ailment. Everyone must admit the of these assertions.

It seems to me, however, that this very obvious point is not the on requiring consideration in undertaking this operation; and none of th munications, as far as I can recollect, touch on the bearing of the op on the generative powers and virility of the patients concerned. That appears to be ignored as unworthy of consideration, though certainly quiring elucidation and grave consideration.

If any readers of the Journal would publish their experience of the of the operation in this direction, I for one would gladly add to my st knowledge on the subject.—I am, etc..

Inqui

OF THE UNIVERSITY OF ILLINOIS

The Prevalence of Syphilis.

R,—In the British Medical Journal of January 27th, Mr. Bernard, of Liverpool, gives a table of cases of venereal diseases in connection with the Liverpool Seamen's Dispensary, stating "that it would be interesting to know, just now, whether syphilis is on the increase, or at a standstill, or declining, in towns unprotected by the Contagious Diseases Acts." Take the towns protected (?) by the Contagious Diseases Acts, in the first place, Blue Book; 1881, Q. 1,800: "But I understand you to say that there was more syphilis amongst the women?"—Inspector General Lawson answers "Yes." Q. 1,804: "A man runs more danger of catching true syphilis in the subjected stations, than in the unsubjected stations?"—Inspector General Lawson answers, "To the extent of 36 against 33." And in answer to Q. 1,803, the same high authority answers: "Yes; that in 100 cases you have 36 cases of primary syphilis at the subjected stations, instead of 33 at the unsubjected stations." Increase of secondaries to primaries in the stations under the Acts.—Q. 1,817, "Increase in the subjected districts, 18.6." Q. 1,818: "In the unsubjected districts it is only 11?"—Inspector General Lawson answers, "That is so." Now, after reading this evidence, I should like some one to say who the parties are, who are protected by the Contagious Diseases Acts? Clearly it is not the soldier, and still less is it the prostitute. Let the reader turn to the Minority Report of the Select Committee, and he will see then an account of the enormous and continuous increase of disease among registered prostitutes. I am of opinion that the sooner the Acts are repealed, or the soldiers removed from the so-called protected districts, the better will it be for the soldiers. Now for a city which has nothing to do with Contagious Diseases Acts, Glasgow. In the year 1869 there were 624 patients treated in our Lock Hospital. In 1870 the Police Act was enforced, the brothels were broken up, as far as the law would permit, and their inmates dispersed, and with the result that at once the number of patients began to decline, until in 1881 the admissions were only 349.

Next take the Magdalen Institution and Homes. In 1860 the number of admissions was only 46, in 1871 they amounted to 114, and the number continued to increase in direct ratio to the vigour of the administration, reaching 244 in 1880. "They find their calling is so hard and unprofitable now, that they are glad to take refuge in the Institution." When females apply for admission to the Magdalen, they are examined, and if found to be diseased, they are desired to go to the Lock Hospital, and to return when well. In 1872 the number found to be diseased and sent to the Lock, amounted to 34.7 per cent.; whilst in 1880, the percentage of diseased had fallen to 18.03; showing a diminution of nearly 50 per cent. of diseased, while the number of admissions had more than doubled.

Let any candid reader compare the results obtained by the Contagious Diseases Acts, whereby prostitution is licensed, with those obtained by a Police Act which leads to the suppression of brothels, and say which is the more likely to diminish syphilis. A. Patterson, M.D.

Glasgow, January 30th, 1883.

Tricycles.

,—Some time ago, while the correspondence respecting the introduction of he tricycle into medical practice was going on in your columns, I wrote, ating my opinion that, although this machine was, at no distant future, estined to become the "horse" of the country doctor, it had not arrived at at state of perfection to entitle it to such a position.

Since then, I have been anxiously expecting the appearance of a "machine" hich would answer such requirement. Having, however, notwithstanding ie several great improvements which have resulted from the competition of arious manufactures, hitherto been disappointed, I have set about devising a icycle myself, which shall meet all the requirements of the medical man, id have succeeded, I believe, in producing a machine so closely assimilating ith the bicycle, as to render it scarcely heavier, quite as easily propelled, and , a price within the means of all. This has been effected by the addition of new "central action," which removes all outside framing, as also the double ank axle, substituting the bicycle spine and pedals; still retaining the low at, which is indispensable for medical practice.

I have submitted my plans to the first makers in the kingdom, the "Coventry oyal National Company," who are so well satisfied with the soundness and asibility of them, that they have undertaken the manufacture of these achines (the "Doctor"), so that any of my professional brethren who may el disposed to adopt this system of locomotion, have now an opportunity of taining a really efficient "cyclopede" at the lowest possible price.

I shall be happy to afford any further information, and remain, etc.,

Vaughan Lodge, Malvern Wells. J. P. Oates, M.R.C.S., L.A.C.

Water contaminated with Lead.

—In answer to Professor Wigner's letter, my remarks only refer to the ater we have at Keighley. Mr. Rimmington, F.C.S., borough analyst of adford, found, by experiment, that I was correct. Dr. Cameron, Medical ficer of Health for Huddersfield, informs me that both charcoal and spongy n will filter the lead out of the Huddersfield water. I may say that I have amined for lead hundreds of specimens of water, and every kind of charcoal d carbon filter that I could come across, and I have always found that they moved all the lead from the water.—I am, your obedient servant,

Arthur Roberts, Medical Officer of Health.

Keighley, February 10th, 1883.

Catholic Retreats for Drunkards.

—Would you, or any of your readers, kindly let me know if there are any reats in England, under Catholic management, for the treatment of habitual unkards? Some member might possibly know of such houses in France or the Continent. I shall be much obliged to anyone who will furnish some rticulars as to admission, pension, etc., I am, sir, yours faithfully, M.D.

February 9th, 1883.

Save me from my Friends.

following advertisement has appeared twice in the *Hampshire Telegraph*. pies have been forwarded to us. It is a pity that Dr. Maybury cannot train the gushing gratitude of his patient, which certainly places him in undesirable position before the public and the profession. Such eulogies, h in their source and place, cannot but be injurious to the unfortunate ject of this ill judged and valueless testimony.

"A patient under the care of Dr. Lysander Maybury, 15, Commercial Road, ndport, for three years, with cancer, guttural, wishes to make known the nderful cure he has made of the case, under God's blessing. Anyone suffing from the same disease will find in him a clever, kind, and attentive ctor. The patient returns him her grateful thanks."

Medicine and Pharmacy.

Sir,—In reference to the above, some advise that druggists should do all the dispensing, and medical men all the prescribing; others, that the latter should do both, and that druggists should be prohibited from prescribing. Why should a medical man be prevented from making up his own medicines? As "A General Practitioner" says in the number of the British Medical Journal for January 13th, "after seeing a case, in some instances, he comes home and considers what is best to give, and, looking round his stock of drugs, becomes inspired." I think this true; and he is apt to omit some drug, in giving a prescription at the patient's house, which afterwards he may think would have suited better.

We are examined in pharmacy, and authorised to dispense our own drugs, and are as competent to do so, as druggists, or ought to be. How, in small towns, are we to know what is being given to our patients by druggists making up our prescriptions, when now we can find the said druggists making errors? For example, I obtained some liquor hydrargyri perchloridi of the druggist here, which would give no reaction at all with iodide of potassium; and, on taking it back, he stated that "he had made it with undistilled water, and that the chloride of ammonium had precipitated the chalk in the water; and that he always decanted off the clear fluid after the precipitate had settled to the bottom."

If the chloride had acted so on the chalk, it had in this case also precipitated the mercury. This was not so, however, as the precipitate gave no reaction. How would the patient have fared for whom I prescribed it, who was suffering from syphilitic rheumatism with secondary rash? It would be better if druggists would make their drugs properly, and leave medical men to prescribe and dispense to cases they alone know will be benefited by the same.—I am, sir, yours truly, Dispensing Practitioner.

Sir,—My personal experience is that (except with those practising as pure physicians or surgeons), as a rule, prescribing practice is a mistake. A vast number of patients dislike it, because they have two bills to pay; therefore they will, in preference, go to him who supplies his own medicines, and the prescribing man finds this a losing business. Placing prescriptions in the hands of druggists discloses the nature of our work, gives an idea of the patient's case, and so affords opportunity for meddlesome inquiry, or gossiping remark, or for some one to suggest to our patient other means of cure, or other advice; each of which several things I have known to happen, and that with apparently most respectable druggists. The repetition or continuance of prescribed medicines without the medical man's sanction is quite common, in spite of all care to prevent it.

Of course, there are exceptional practitioners who find it best, or prefer, to prescribe only. And again, there are cases and patients for whom it is most advisable to prescribe rather than dispense, for one reason or other. But all these are exceptions, respecting which we must use our own discretion and judgment; never forgetting, not only what is due to ourselves, but also what is due to our brethren in the profession. If it were the custom to prescribe and not dispense, what would village doctors do? An invidious line of demarcation would arise between them and town doctors; whereas we want unity, not separation; we ought all to stand together.

If we were strictly confined to supplying medicines to our own clients, I see nothing more derogatory in it than for a solicitor to supply stamps, parchment, etc.; but I do advocate that the supplying of medicines be absolutely restricted to our own patients; that medical men refuse to dispense the prescriptions of others; that, whenever possible, common drugs, like castor-oil, Epsom salts, cod-liver oil, and the like, which we tell the patient verbally to take, be not supplied; and, especially, that the charges should invariably be for visits, attendance, and advice, and never for medicines.

When this discussion is finished, I trust that you, sir, will make your remarks upon it, as a sort of summing up, or verdict, in a short leading article; whereby some result to the profession will arise from the letters that have been written.—I am, sir, yours faithfully, A Provincial Surgeon.

Medical Advertising.

Sir,—Inclosed is a handbill, copies of which have been left from door to door in this place.—Yours truly, J. S. Blackwood.

Shankhouse, Cramlington, Northumberland, February 19th, 1883.

"James and John Trotter (partners), physicians and surgeons, will attend at Shankhouse weekly, and oftener if required. Surgery, 53, Shankhouse Row (Mr. Frank Tunney's). Dr. Trotter's assistant will attend and prescribe medicines daily. Residence, Mr. Frank Tunney's, 53, Shankhouse Row, where all messages will be attended to. Hours for dispensing medicines, 2 P.M. and 7 P.M. P.S.—Dr. Trotter's collectors will call at the houses of those who desire to enter his club, on the pay Saturdays, for the fortnightly subscriptions. Bedlington, 16th February 1883."

Discharges of Pus which are not Gonorrhœal.

Sir,—*Apropos* of Dr. Tom Robinson's paper in your last issue, such a case as he there mentions has recently fallen under my care. A married man came, just after his wife's second confinement, complaining of very frequent micturition, much urethral discharge and much pain, loss of sleep owing to the frequent calls to urinate, the left inguinal glands swollen and tender. The glans penis was much swollen, red, and tender, and a copious discharge came from this part. He assured me that he had had no connection with any woman but his wife, and I have every reason to believe him; but, having connection at about the seventh month, the discharge and scalding had commenced; and, having recently had a blow on the penis, matters had become aggravated. The wife admitted the discharge, and the baby had "ophthalmia neonatorum." Does gonorrhœa depend on any specific morbid material, or will any acrid vaginal discharge produce symptoms which cannot be distinguished from the complaint ordinarily termed gonorrhœa? Balanitis may occur with contracted prepuce without sexual intercourse at all. Might not the Collective Investigation Committee take up this subject in connection with their inquiry about syphilis?—I am, etc., M. G. Biggs.

93, Northcote Road, Wandsworth Common, S.W., February 2nd, 1883.

Cramp.

Sir,—A lady, aged about 64, has suffered frequently for years from cramp in both legs, which is so severe that she has to get out of bed nearly every night and rub them until she gets relief. She has also occasionally had an attack when out walking. Can any member suggest some remedy that she might always keep at hand, as she has tried many medicines without a favourable result? I inclose my card, and am, sir, yours faithfully, Query.

Palmar Psoriasis.

Sir,—In answer to "A Member," in the British Medical Journal, January 20th, 1883, I wish to say that, in all long standing cases of so-called "palmar psoriasis," not syphilitic, the treatment, to be successful, must consist in scrubbing the diseased surfaces with a broad soft nail-brush, dipped in a solution of green soap and alcohol (sapo. vir. ℥ss.; eau de Cologne ℥jss). This may be repeated when the hardened skin, the newly formed scales or vesicles, may seem to require it. Sometimes it should be done every day; at other times, but once or twice a week. In eczema rimosum, the fissures, as well as any vesicles that may appear, should be touched lightly with carbolic acid. The hands are to be kept as carefully as possible from moisture, pressure, and dust. It is well to keep them smeared with vaseline, and protected, when in use, by wearing kid gloves.

In the meantime, the bowels may be regulated with quarter-grain doses of podophyllin; and, when indicated, small doses of colchicum, or antimony, or iron, or arsenic, or acetate of potash, etc., may be given. Arsenic, however, is not usually tolerated in chronic cases of this kind. But, whatever may be the treatment selected, it should be continued patiently till the cure is complete. I have had an unusual number of such cases to treat, some of ten and twenty years' standing, with contraction of the hands and destruction of the nails, in which this line of treatment has proved successful.—I am, etc.,

Henry Comdell Juler, M.D., etc.

Cincinnati, Ohio, U. S., February 7th, 1883.

A. L. D.—We are distinctly of opinion that it is not justifiable.

An Indian Remedy for Rheumatism.

In the *Brighouse News*, the following is recommended as a new mode of treating rheumatic fever. "Fill a long bath with hot water (keeping the boiler supplied, for replenishing, as the bath cools) so as to cover the person to the throat, the head lying gently back and leaving only the face out of the water. Put in half a pound of mustard and a good pint basin full of salt. Lay the patient carefully in the bath, covering over the head and forehead (all but nose and mouth) with blanket or warm cloth, feeding at intervals with gruel, for twenty minutes. Have towels hot by the fire, and a blanket thoroughly hot. Rub dry with the hot towels, wrap in the blanket, lay in the bed, packing with blankets, etc., tightly, every part of the body, and putting a bottle of hot water to the feet. Let the patient be perspiring for two hours, feeding with gruel as when in the bath. Then unwrap, wash all over with a large basin full of tepid lathered water, previously prepared. Rub dry and put on clean warmed linen, give any food that is preferred. In the bath, the pain leaves the patient rapidly, and continues to leave until the whole person is free, movement restored, appetite, health, and strength, and the patient, after one day of care to avoid cold, is at work the day but one after the bath, cured even when the case has been extreme, and of months' duration.

It is said that this mode of treatment is largely adopted in India. Although it is not likely that it would check the progress of acute rheumatism, it might prove of value in the subacute and chronic forms.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Insanity; its Causes, Prevention, and Treatment. By William Harris, M.D., F.R.C.S.Ed., M.R.C.P. and L.S.A.Lond. London: Wyman and Sons, Great Queen Street. 1882.

Clinical Lectures on the Diseases of Women Delivered in St. Bartholomew's Hospital. By J. Matthews Duncan, M.D., L.L.D., F.R.S.E. Second Edition, much enlarged, with Appendices. London: J. and A. Churchill. 1883.

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THE GULSTONIAN LECTURES,

ON

THE STERILITY OF WOMEN,

Delivered at the Royal College of Physicians, February 16th, 1883.

By J. MATTHEWS DUNCAN, M.D., LL.D., etc.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

Lecture I: Part II.—Nature and Amount.

There are several tests of relative sterility secondary to that implied in the frequent question, "How many did she bear?" These subsidiary tests are based on the ascertained course of natural fertility, and on deviations from this course of relative sterility. The inquiry that may be made by these tests implies a knowledge of how many children a woman will naturally bear, or is likely to bear, and the natural order of births. They are as follows: 1. When, after marriage, did she begin her career of child-bearing? 2. How rapidly did the children follow one another, or what was the interval between successive births? 3. When did child-bearing cease, or what was her age at the birth of the last child? 4. How long was the child-bearing period of life, and what was the interval between the beginning of the first pregnancy and the last? In studying population, these subsidiary matters are little regarded, for the statesman has a direct interest only in the mutually related questions, How many are born? How many might have been born? What is the health of those born? The answers to these inquiries give him the actual relative circumstances of the population, and in the case of a population that includes absolute sterility. He may only regard the increase or diminution of the sterility of the people as indicating the health of the progeny so far as it relates to fertility, and thus control that fact by raising or lowering the age of marriage. On the other hand, the physician, having the care of the health of individuals, and not of the people, has his chief interest in these subsidiary matters, which the statesman may not utterly neglect, but may leave to the care of the medical philosopher.

The importance of the question, How soon after marriage does a woman bear her first child? is evident, and it will be found to be more a test of sterility than it appears at first sight to be. Whitehead, in his observation of 541 married women of the average age of twenty-two years, makes the average interval to be eleven and a half months. Sadler says that married families do not become fruitful on an average, during the first year, but a great number of cases which he says he has collected with a view of determining this point, give three-fourths as producing the first child in an average of one year after marriage. From the Edinburgh and Glasgow registers of 1855, I was able to make out this point in 3,722 cases (Table II).

Table II.

Showing the Interval between Marriage and the birth of a First Child.

Years married.	No. of births.
Less.	608
1	2,390
2	437
3	133
4	61
5	32
6	27
7	12
8	5
9	5
10	1
11	3
12	4
13	2
14	—
15	1
16	—
17	—
18	1
Total	3,722

Table III. (*from Ansell.*)

Showing the Interval between Marriage and the Birth of First Children.

Year after marriage.	No. of first children.
1	3,159
2	2,163
3	421
4	137
5	69
6	26
7	21
8	11
9	7
10	7
11	5
12	4
13	3
14	2
Total ...	6,035

But in these extracts from the registers there are two sources of error, which prevent the exact comparing of the results with Ansell's table, for twins are excluded, being placed in the column of secundiparæ and, still more important, the large number of mothers whose children are still-born is excluded. Twins affect especially young, immature, quickly breeding mothers; their omission from the primary births, therefore, will delay the estimated time, and a similar delay will result from the omission of women having dead children; for such women, when they bear a first living child, will appear in the primiparous column with an overestimated and erroneous retardation of primiparity. The Edinburgh and Glasgow table gives the mean interval of seventeen months between marriage and the birth of a living child. It shows that fecundity is not demonstrated by a living child in the majority of cases until a year of married life is past. Nearly two-thirds of the whole begin with families in the course of the second year. It also shows that there is no ground of presumption of sterility until the fourth year of married life is entered upon; for, while of those three years married and less than four, 133 bore a first living child, there were only 154 who did so in all the subsequent years taken together. Of the whole 3,722 women, only about one twenty-fourth began bearing children after four years elapsed. Ansell's table includes first still-born children; he has corrected it for twins, and he gives the data in 6,000 cases. It is, therefore, better than the preceding and any others that I know with regard to this point. (Table III.) Ansell's table gives a mean interval of nearly sixteen months between marriage and the birth of a child. The majority of the women in Ansell's table bore first children before the first year of married life had passed, nearly seven-eighths before the expiry of two years. It also shows that there is no good presumption of sterility until the fourth year of married life has been entered upon. Of those three years married, and less than four, 421 bore a first child, and only 292 did so in all the subsequent years taken together. Of the whole 6,000 women, only about $\frac{1}{21}$ part began bearing children after three years, and only $\frac{1}{39}$ after the fourth year. It may, therefore, be held that married women delaying the commencement of fertility beyond six months are already exhibiting a degree of relative sterility; and this conclusion is quite in keeping with the rest of our knowledge upon the subject.

The second question proposed is, how rapidly do the children in a family follow one another? or, what is the interval between the births of successive children? Authors on population used to hold that breeding women never exceeded in rate of prolificness a child every two years; but this, like many other of the observations on which theories have been founded, has been proved to be false. With our present knowledge, we can assert that women who breed, do so at an average rate of a child every eighteen months.

Table IV is compiled from the Edinburgh and Glasgow registers.

Table IV.—*Showing the Average Duration of Marriage at Birth of each Successive Child, and the Average Interval between the Births of the Successive Children.*

Number of children.	Number of mothers.	Duration of marriage in months.	Average interval between successive births.
1	3,722	17	—
2	2,893	38	19.0
3	2,534	64	21.3
4	1,982	90	22.5
5	1,543	115	23.0
6	1,221	137	22.8
7	848	162	23.1
8	641	181	22.6
9	425	203	22.5
10	222	225	22.5
11	152	235	21.4
12	61	246	20.5
13	34	263	20.2
14	11	281	20.1
15	6	280	18.7
16	2	336	21.0
17	2	252	14.8
18	1	252	14.0
19	1	204	10.7
	Average		19.9

This table makes the average interval twenty months, but this requires several corrections. This table, like the next made up from Ansell, is not correctly described as giving the average interval between the births, but the average interval between marriage and the birth of a child. Ansell's table does not require correction for twins or dead children, and its value may be judged by the statement, indefinite though it be, that it is based on more than 25,000

observations in the upper classes. The average interval, as calculated from these, is eighteen months between births of the successive children. Ansell's table may be studied further, with a view to a statement of the average interval of those who have not excessive families, but the natural, or normal number; for those mothers who have shown excessive fertility, either by a high number of births, or by excessively rapid births, so long as child-bearing continued, are mixed up in each successive row of figures with those that are normal, or nearly so. Looking at the rows of figures of families from four to ten, showing intervals of from twenty to twenty-one months, we are safe in stating the average interval as above twenty months, and, probably, under two years. It may, therefore, be held that the married woman who, during child-bearing life, does not have a child every twenty months, is exhibiting relative sterility.

The third question is, when did child-bearing cease, or what was the age at the birth of the last child? Now, it is a rule to confuse the child-bearing period of life with the period during which women menstruate. This is a great mistake. It is only a part of this that is, in married life, occupied by child-bearing, except in rare cases, not one of which has ever come under my observation. When a woman begins child-bearing, she generally, under favourable circumstances, continues a career of fertility steadily till the last child is born. The registers tell us when women actually begin to have children, and I have already made use of such information; but we have no data nearly sufficient to decide what is the average age of commencing fertility. We have the average commencement connected with marriages, not the average age of commencing fertility as considered apart from marriage; we may, however, be sure from what we do know, that it is not the age of puberty, that it is not the age of commencing menstruation, that it is not the age of commencing nubility, at which procreation is commenced with the greatest advantage to mother or progeny. It is evidence of good conduct in the race, that we cannot get sufficient data, there being very few unions permitted in early life. Most of our women are, fortunately, married within the limits of nubility. Nevertheless, it is desirable that we should find out what is the mean age of commencing child-bearing, that is, supposing that all were subjected to the conditions from the earliest period: of this, however, we have no information. Regarding the time of cessation of child-bearing, we have exact information. It shows well the distinction that must be made between the cessation of menstruation and the cessation of procreation. Menstruation ceases at from 45 to 50 years of age; child-bearing ceases at an average age of 38. This cessation arises from no imperfection or decay of organs, but it may be due to that, nevertheless. It is highly probable that its main cause is the cessation of functional vigour and activity, for it is delayed in women who have begun their fertlity late in life. On the subject of the cessation of child-bearing, our best information is again derived from Ansell, whose calculations are based on 4,800 observations, restricted to those in which both the father and mother survived the child-bearing age alike—a point which was determined in accordance with the scale I have already given. The chief governing rule is not to suppose a woman under 44 years of age to have borne her last child until she has been ten years barren—making it quite safe. The quinquenniad from 39 to 43 was that in which the largest number ceased to bear; 38 is the mean age of mothers, married at a mean age of 25, at the date of the birth of the last child. The productive period begins earlier, and it is protracted to a later age in cases where the children are numerous than where they are few. This protraction is shown by the following table.

TABLE VI *(from Ansell).—Showing the Mean Age of Mothers at the Birth of their last Child in Families of different numbers.*

Number in family.	Mean age of mothers.
1	31.08
2 or 3	34.21
4 or 5	37.04
6 or 7	39.21
8 or 9	40.61
10, 11, or 12	41.74
13, 14, or 15	42.83
16 or more	44.32

Women have, in their career, with a view to our present subject, many stages in life. There is the age of puberty, or of commencing menstruation; and this is to be distinguished from the age of commencing child-bearing, regarding which we have no data. But the age of commencing child-bearing, though it may be identical with that of commencing menstruation in individual cases, is certainly not nearly so in the mass of women, being fortunately considerably delayed. Then, after the age of commencing child-bearing, comes the age of nubility, the age at which a woman can enter married life with the best chance of having a healthy and not excessive family. After the age of nubility comes the age of cessation of child-bearing, which is 38 for women married at 25. Women may bear children after this age, or after the cessation of menstruation altogether, but such cases are exceptional. The last stage in the career is generally the cessation of menstruation at the age of from 45 to 50. There is a mean age of puberty; a mean age of possible commencing procreation; a still further advanced mean age of commencing procreation; a still further advanced mean age of nubility or fitness for procreation; a still further advanced mean age of cessation of procreation; and, lastly, there is a mean age of cessation of menstruation, and of possible procreation. Most of these stages of woman's life have their analogues in females among the lower animals, and some of them in the life of plants.

Writing regarding the age of cessation of child-bearing, White-head makes the following pertinent remarks: "The mean age of the individuals recorded in the preceding table, at the time of the last delivery, 1,586, gives an average of 41 years. The average age of the same individuals at the time of the last menstruation is 4 years, so that a period of nearly six years is indicated during which although the menstrual function continued to be more or less efficiently discharged, aptitude for procreation did not exist. The were all placed under favourable circumstances for the continuance of child-bearing so far as regarded their matrimonial position. A like period of uterine quiescence is observed before child-bearing begins."

To the question, how long does child-bearing continue? it is easy to give some answer; for if the average age at the commencement of child-bearing is 26 years, and the mean age at termination is 38 years, the average duration of the child-bearing period is 12 years. The proof of fertility will be the number of pregnancies multiplied by 9 months, added to the intervals multiplied by 9 months.

It will vary from one-child sterility, with 9 months of the child-bearing period of life, to ten-child fertility, with a child-bearing period of life of 171 months, or about 14 years. In the case of twenty-child fertility, the period of child-bearing is very much less than 30 years; because women of this great and excessive prolificness hurry their children into the world, and get through the high number. From Ansell's statement of 4,899 married women whose ages at the birth of their last children were known, both parents surviving the child-bearing age of the mother, I have constructed Table VII to show, as near as the figures will give it, the

TABLE VII *(from Ansell).—Showing the Average Age at Cessation of Child-bearing in Families of different numbers, and the Time occupied in Child-bearing, estimated at the rate of eighteen months for each child, in families of less than ten children: the mean age of mothers at commencement of child-bearing being twenty-six years, and the parents both surviving the child-bearing age of the mother according to the scale of Ansell* (p. 50).

Number of family.	Number of cases.	Mean age of mothers.	Time occupied in child-bearing.
1	244	30 years and 6 months	1 year and 6 months
2	401	32 ,, 11 ,,	3 years ,, — ,,
3	425	34 ,, 5 ,,	4 ,, ,, 6 ,,
4	485	35 ,, 10 ,,	6 ,, ,, — ,,
5	565	36 ,, 11 ,,	7 ,, ,, 6 ,,
6	494	38 ,, — ,,	9 ,, ,, — ,,
7	490	39 ,, — ,,	10 ,, ,, 6 ,,
8	467	39 ,, 8 ,,	12 ,, ,, — ,,
9	387	40 ,, 6 ,,	13 ,, ,, 6 ,,
10	312	40 ,, 10 ,,	14 ,, ,, 10 ,,
11	239	41 ,, 1 ,,	15 ,, ,, 1 ,,
12	170	41 ,, 7 ,,	15 ,, ,, 7 ,,
13	115	42 ,, 5 ,,	16 ,, ,, 5 ,,
14	43	41 ,, 10 ,,	15 ,, ,, 10 ,,
15	34	42 ,, 8 ,,	16 ,, ,, 8 ,,
16	10	43 ,, 6 ,,	17 ,, ,, 6 ,,
17	10	43 ,, 5 ,,	17 ,, ,, 5 ,,
18	6	44 ,, 7 ,,	18 ,, ,, 7 ,,
19	1	45 ,, — ,,	19 ,, ,, — ,,
20	1	45 ,, — ,,	19 ,, ,, — ,,

whole length of child-bearing life. The commencement of child-bearing at 26 years of age, is in all cases assumed; because it re was the mean age in Ansell's collection. This table affords fur valuable information as to the duration of child-bearing in fam which reach the normal limit of about 10, and we see that it is al 15 years. A woman, then, may be regarded as relatively st who, married within the years of nubility, that is, from 20 to ceases to have children within 15 years from the birth of her child.

Now, let us try to answer the comprehensive question: How many children does a woman bear? On the answer to this depends the settlement of the amount of sterility. It cannot be satisfactorily answered directly, on account of the paucity of data; but such answer as I shall give, is corroborated by the various subsidiary answers which I have just furnished. I shall not enter on subjects (important politically) such as the number in actual families, the number of marriages, etc., because, these are foreign to our present inquiry. In the district of St. George's-in-the-East, the Statistical Society of London found among the poorer classes 80 mothers (this is the only table I know) who had been married at ages varying from 15 to 19, and who had lived in wedlock at least 31 years of the child-bearing period of life. These 80 fertile wives had borne on an average 9.12 children. Considering the undoubted existence of individual sources of error all tending to diminish the average amount, we may safely say that using the data of St. George's-in-the-East, that 10 is about the average fertility of marriages lasting during the whole child-bearing period of life. The average age of marriages in England is 25, and consequently the production should be less than 10 if a woman were living in fertile wedlock from 25 to the end of the child-bearing period of life—not all the child-bearing period of life. The actual fertility of these marriages in England if only nine in ten wives have living children, is, according to Farr, 5.2; but with a view of contrasting the data in St. George's-in-the-East with Ansell, these figures require correction, for the condition of living in wedlock till the end of the child-bearing period is omitted. If that condition were not omitted, there would, of course, be a large increase of fertility of wives in England. Ansell's collection includes 1,767 spinsters married to bachelors at the mean age of 25, and living in fruitful wedlock till the end of the child-bearing period, as calculated by a scale already given, and the production was 5.7, a figure which I regard as indicating less fertility than that of Englishwomen generally. The fertile wives of England, without the condition of persistency in married life to the end of the child-bearing period, bore 5.2 children. Ansell's mothers in the upper classes married at the mean age of 25, living in wedlock till the end of the child-bearing period, bore six children. The fertile wives of St. George's-in-the-East, living in wedlock to the end of the child-bearing period, bore above nine children. Each of these statements is some corroboration of the others; and keeping in view some further evidence, they seem to justify us in holding that a healthy woman living in wedlock during all the child-bearing period in life under the most favourable circumstances, should have a family of ten. Women under such circumstances bearing fewer than ten are relatively sterile. Further evidence to the same effect is got by referring to the data derived from the registers of Edinburgh and Glasgow. There I found among the fertile wives married at various ages a fertility of between seven and eight. Now, as many women are married some years after the best period for commencing child-bearing, we may, by making allowance for such delay, raise the number from between seven and eight to ten, the number indicated by the St. George's-in-the-East table.

There are many women who bear families above ten, and it is desirable to devote to them special consideration. Such families are, on the whole, abnormal or excessive. I have spoken of the occasional calamitous character of only-child fertility; but there is a mass of evidence tending to show that a family in the average female rising above ten begins to be excessive, and is increasingly so as the figure increases. It may seem paradoxical to bring the consideration of excessive families into a lecture on sterility; but in the next lecture the paradoxical character of this will disappear.

The bearing of a first child is well known to be dangerous and often fatal to the mother. After this, she comes into the period of child-bearing, which is the safest, and which continues while she has a natural or ordinary degree of fertility. The danger of primiparity is, for a fertile woman, inevitable; but the special danger of multiparity is only when the family is excessive, and this danger is good evidence of excessiveness. At the same time, the danger has been demonstrated to arise with the increasing elderness of the mother.

Our next table is Table VIII. This table does not give the actual mortality, but only such as may be compared with one another with a view to making out the peril attending confinements of different numbers.

In the sequel, I shall give further evidence as to the excessiveness of families above ten. This is based, not on danger to mothers only, but on the nature of the production; that is, the occurrence of twins, of weakly children, and of idiots.

TABLE VIII.—*Showing a Comparative Percentage of Deaths in Successive Labours.*

Number of pregnancy.	Number of mothers.	Number of deaths.	Percentage.	Or 1 in
1	3722	254	6.82	15
2	2893	60	2.07	48
3	2534	64	2.52	39
4	1982	39	1.97	51
5	1543	31	2.01	49
6	1221	28	2.29	43
7	848	16	1.88	53
8	641	15	2.34	42
9	425	13	3.06	32
10	222	9	4.05	24
11	152	5	3.28	30
12	61	1	1.64	61
13	34	4	11.77	8
14	11	—	—	—
15	6	1	16.66	6

LECTURES
ON
THE COMPARATIVE PHYSIOLOGY OF MENSTRUATION.

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GENTLEMEN,—The comparative method of study is, before all, the most trustworthy help towards the attainment of accurate knowledge, since, by its aid, a just appreciation of the relative value of facts may best be acquired. Accordingly, it merits employment whenever available, furnishing an efficient corrective of erroneous or disproportionate conceptions. It is valuable, also, inasmuch as it may afford clues to, or enlighten us respecting, important correlations; while its influence, in checking and balancing our views and conclusions, is uniformly beneficial. Acquaintance with the value of this method has led me to regard certain departments of medicine by its light, and among them the function of menstruation, in the elucidation of which it contributes important and suggestive information.

The illumination thrown by the comparative method upon certain biological problems ancillary to medicine is great; and the fervent, if not sanguine, hope is excited, that not only may similar enlightenment be vouchsafed in respect of recondite pathological problems, but that, through the pursuit of this instructive method, medicine, considered in its entirety one of the noblest studies, may, in process of time, be established upon foundations whence it may rise to a position not inferior to that accorded to other sciences.

The impression has long and widely prevailed, that the menstrual function is an attribute peculiar to the human female. Whether this be erroneous or not, will appear when inquiry is made into the manner in which the periodical activity of the reproductive organs is displayed or exercised in the females of the lower animals. Making due allowance for generic peculiarities, this function will be found to agree with others of the animal economy, in displaying harmonious subordination to the law of evolution. Inquired into on this basis, and in accordance with the comparative method, the evolution of œstro-menstruation is discovered to be orderly; and to correspond broadly with the evolution, anatomical and physiological, of the generative system of animals. In harmony with the universal result of biological research, the primitive indications of the function will be found to be but feebly marked. Gradually and progressively, however, the manifestations become more and more distinct, until, ultimately, the highest stage is attained in the human species. Thus traced step by step, it will be found that, from feeble and obscure beginnings in the lower creatures, the function emerges and develops until, in the highest mammals, it is unmistakably pronounced. It will also appear that, after its establishment at puberty—an epoch marking the assumption of the capacity for reproduction, and usually arriving only towards the time when the rate of growth is diminishing—its equilibrium is liable to fluctuation, and even dis-

turbance, owing to the extreme sensitiveness of the reproductive system to vicissitudes of the environment, as Darwin and others have conclusively shown. It may be hoped that the laws governing this instability of equilibration will also be fully discovered, and, in process of time, admit of formulation, so as to render them amenable to remedial modification. Pursued and investigated on such a basis, there is a prospect that the physiology of the function may be brought within the domain of science, and cease to be a wonderment and mystery. It may also be hoped that the discovery of the physiological laws governing it will furnish, not only a foundation for the establishment of a sound and intelligent system of therapeutics, for correcting aberrations and remedying deviations, but also a more reliable basis than at present exists for pathological knowledge. Mr. Herbert Spencer well says (*Data of Ethics*, page 277): "Pathological science depends for its advances on previous advances made by physiological science. The very conception of disordered action implies a preconception of well-ordered action. Before it can be decided that the heart is beating faster or slower than it should, its healthy rate of beating must be learnt; before the pulse can be recognised as too weak or too strong, its proper strength must be known; and so on throughout. Even the rudest and most empirical ideas of diseases presuppose ideas of the healthy states, from which they are deviations; and obviously the diagnosis of diseases can become scientific only as fast as there arises scientific knowledge of organic actions that are undiseased." The gain accruing from accurate physiological knowledge may thus be great, and ever growing.

So conspicuous a manifestation of sexual aptitude as a menstrual flux, whether sanguineous or not, is hardly to be looked for in the females of classes below the mammalian, with which the study of the evolution of the catamenial function might appropriately commence, for "in the classes of birds, fishes, and oviparous reptiles, there is no uterus" (Laycock). But there are generative canals, out of which, in the process of evolution, the uterus arises, just as does the bladder out of the renal excretory canals; being developed by the aggregation of muscular fibres, and differentiation of epithelial elements at certain parts (like the stomach, with its powerful muscular and glandular apparatus, in the higher mammals, or the gizzard in the fowl); and it may be useful to trace their evolution, for, even in certain non-mammalian creatures, the excitement attending the active exercise of the reproductive function is occasionally displayed by increased vascularity and pigmentation of certain structures, particularly about the genital orifices, which exhibit a kind of efflorescence at the periods of sexual excitement. For instance, according to Pouchet, "Guersant says that, at the epoch of the oviposit (in fishes), the orifice of their sexual apparatus swells, and is clothed with a red tint. Savants who, like Spangenberg, are occupied in studying the genital organs of birds, have recognised that they experience also at the time of the oviposit a manifest excitement." I am informed that the genitals of the parrot and pigeon tribes show this excitement. In other creatures, *e.g.*, amphibia, the orifices of the generative canals opening into the cloaca are generally increased in size at the breeding season. Reptiles also show increase in cutaneous secretions, especially of the odorous variety, in association with sexual activity. Laycock observes: "Many tortoises smell of musk, which probably proceeds from follicles connected with the cloaca. Several lizards, among others the iguana, have a row of small follicles with round orifices at the inner side of the thigh, which secrete, especially at the coupling season, an odorous fatty liquid;" and Mr. Darwin (*Descent of Man*, p. 352) says: "During the breeding season, the anal scent-glands of snakes are in active function, and so it is with the same glands in lizards." As we ascend in the scale of creation, we shall find that the genital apertures of the higher creatures present analogous phenomena, culminating in the highest even in an issue of blood.

Attention may here be directed, *en passant*, to the general relations of pigmentation to reproduction, which are striking, and, as Mr. Darwin has shown, are in birds remarkable. He says (*Descent of Man*, p. 229): "Many birds acquire bright colours and other decorations in the breeding season alone;" and (p. 496) "certain ornamental appendages become enlarged, turgid, and brightly coloured during the act of courtship." Even in insects, sexual pigmentation is often highly conspicuous; and Mr. Darwin (*Ibid.*, p. 265) says: "The sedentary annelids become duller-coloured, according to M. Quatrefages, after the period of reproduction; and this, I presume, may be attributed to their less vigorous condition at that time." We may, therefore, derive instruction from the observation of the suggestive phenomena accompanying the active exercise of the reproductive functions, even in the lowest creatures.

Before the difference of sexes arises, both sexual elements (sperm and germ) exist, and are carried in the body of a single individual, though, curiously enough, the congress of two separate individuals is in some cases necessary for fertilisation, *e.g.*, in creatures which are not stationary.

Gegenbaur (*Elem. Comp. Anat.*, p. 54) says: "All those animals which unite in themselves both kinds of reproductive organs are known as Hermaphrodites. A separation of sexes is apparently foreshadowed in various forms, by the alternating activity of the organs, at one time the egg-forming, and at another time the sperm-forming, organ exercising its function. Hermaphroditism is the precursor of sexual differentiation.....A separation of the sexes affects the whole of the organism, for it produces a series of changes in each sex, which affect organs that had primitively little to do with the sexual function;" and Darwin remarks, "It has now been ascertained that, at a very early embryonic period, both sexes possess true male and female glands."

Before generative ducts arise, the generative products escape from the bodies of the lowest creatures by a cœlomic orifice, and occasionally, even in this primitive stage, some excitement is displayed around the aperture; but, in the stage immediately above, when ducts begin to appear, imperfect though they be, we find that there is a remarkable constancy in the relation they bear to the renal excretory canals; that, in fact, the generative products, having no proper canals of their own, make use of those of the renal system, and these often display pigmentation at their orifices.

According to Gegenbaur (*Elem. Comp. Anat.*, p. 609), "The germ-glands are developed from the structures known as genital ridges. Sometimes more and sometimes less of this ridge is converted into the ovary or testis." These genital ridges are found in the abdominal cavity, the epithelial investment of which "retains its primitive character along a tract which corresponds to the rudiment of the primitive kidney longer than it does in other regions; and this epithelial layer may be distinguished as the germinal epithelium."

In the lowest forms, there are no generative canals. "Both sets of generative products are passed into the cœlom, whence they reach the exterior by the abdominal pore.....In the Salmonidæ, the eggs are passed into the abdominal cavity, and are evacuated through the abdominal pore." Again (p. 53): "In their simplest condition, the products of the reproductive glands merely break away from the spot where they are formed, and pass into the digestive sac, or into the body-cavity, or even directly to the exterior. Gradually, however, ducts, which are often very complicated in character, are added on; it is probable that these ducts are not primitively connected with the germinal glands. Where these ducts can be seen to have any relation to other organs, these appear to be excretory organs, and have been altered so as to correspond to this function. It becomes a great question whether the excretory ducts of the reproductive matter are not in all cases excretory organs."

When, having passed beyond the primitive ductless stage, inquiry is made into the origin of the excretory ducts of the reproductive glands, we find that they are furnished by the primitive renal excretory apparatus (archinephron), the organs which eliminate the nitrogenous excreta from the body—organs distinctly derived from dermal glands (Gegenbaur, p. 46). The primary archinephric duct divides into two parts, so that there come to be two canals. "One commences at the anterior abdominal orifice of the primary duct and has no further relations to the kidney. This is the Müllerian duct." (*Ibid.*, p. 604.) Müller's ducts become, in females, efferent or oviducts, portions of which are ultimately differentiated into uteri. (The other archinephric duct becomes the efferent duct of the kidney, or ureter.)

And the late Mr. Balfour, in his admirable work on *Embryology*, shows how closely related the excretory and generative ducts are in the vertebrata.

The basis for the generative and urinary ducts is formed by the segmental duct, which is the duct of the pronephros. These, he says, "are the most primitive parts of the vertebrate excretory system." The meso-nephros, or Wolffian body, is formed of glandular canals, which open into the body-cavity of the embryo. The segmental duct becomes, in many forms, divided longitudinally into two parts: one with segmental tubes, forming the Wolffian or mesonephric duct, the other the Müllerian duct.

The intimate relations thus indicated primitively between the urinary and generative organs foreshadow a connection which persists even in the highest mammalia, a point remarked by Aristotle.

In the Amphibia, the Müllerian ducts form oviducts, opening separately into the cloaca. "It is generally increased in size at the breeding season; this results in its being thrown into a num

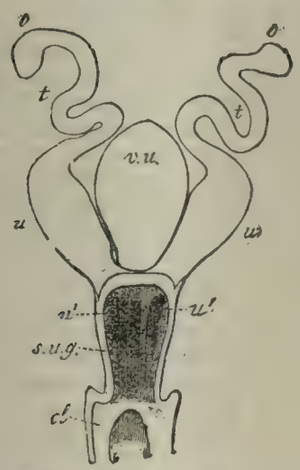
of coils. In the oviparous species (Salamandra), the terminal portion performs the function of a uterus" (Gegenbaur, p. 612). A similar but more advanced condition obtains in the Sauropsida, the oviducts being large coiled canals, with mucous membrane set in longitudinal folds, which are most marked in the lower portion. This latter portion secretes the shell, the anterior part the albumen.

We find, then, that even in certain low forms, as in some of the foregoing, the orifices of the genital canals are apt to display pigmentary or vascular efflorescence at the breeding times. The stimulating influence of activity in the initiatory acts of reproduction upon pigmentation generally is remarkable and conspicuous throughout nearly the whole of the animal and vegetable world. The exquisite beauty of flowers is sexual, and in close alliance therewith is their perfume, often equally attractive.

The brilliant hues of many birds, fishes, etc., owe their existence to a sexual origin; and, as already remarked, the orifices whence the germinal product escapes are in some of the latter highly pigmented.

It is, however, with the Mammalia that our study of the comparative physiology of menstruation properly begins. They, as a class, are elevated above the other portions of the animal world by the endowment of a higher organisation in many respects, and particularly by the possession of organs conferring upon them their distinctive appellation; organs which we shall find to exist in correlation with certain developments of other portions of the reproductive system, as well as of the general system.

Gegenbaur (p. 615) remarks: "In the Mammalia the generative apparatus undergoes great metamorphoses, owing to the further development of various portions of the efferent ducts and the formation of a number of accessory organs. In the female apparatus, these are largely correlated with the relations that obtain between the embryo and the maternal organism. As this is least marked in the Monotremata, they undergo the least amount of modification, and have therefore direct relations to the lowest divisions of the Vertebrata, and especially to the Sauropsida. The oviducts (Fig. 350) open



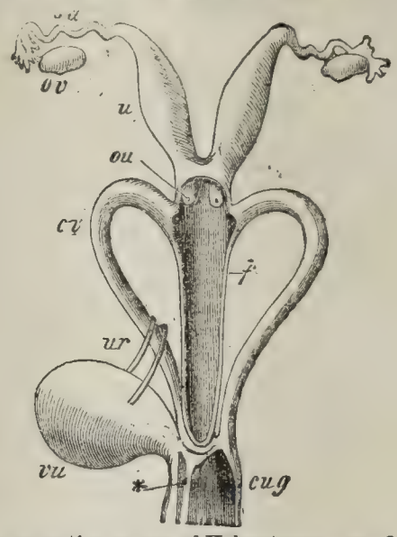
"Fig. 350.—Female generative organs of Ornithorhynchus. *o*. End of the oviduct and ovary. *t*. Oviduct. *u*. Uterus. *u'*. Point at which the orifice of the uterus projects upwards, close below the opening of the ureter. *vu*. Urinary bladder. *sug*. Sinus urogenitalis. *cl*. Cloaca."

separately into a sinus urogenitalis, which communicates with the cloaca *(cl)*. The lower end of the oviduct, which is distinguished by the greater thickness of its muscular wall, forms an uterus *(u)*; but this merely corresponds to the structures which likewise function as an uterus in many Anamnia and Sauropsida."

With regard to the Monotremata, the lowest members of the mammalian series, but little information is available respecting the phenomena observable at their periods of sexual excitement. The class is now neither numerous nor widely distributed, and opportunities for inquiry have not been at my command.

Pouchet remarks of them: "Many of the lowest mammalia are ovoviviparous (*Ornithorhynchus paradoxus*, Blum.; *Echidna hystrix*, Cuv.), or produce only simple embryos *(Didelphys)*; whilst all the others present the characters of most marked viviparity." They resemble birds in possessing a common cloaca, into which the generative, renal, and intestinal canals open. They have no vaginæ, and the uteri are rudimentary, affording no provision for the sustained growth and nourishment of the fœtus, which, like that of marsupials, is soon cast out.

In Marsupials (such as the kangaroo), the evolution of the sexual system is somewhat more advanced, there being now vaginæ, which, however, open into the sinus urogenitalis. The upper portion of each efferent duct forms an oviduct, while the next and thicker-walled portion forms an uterus. Gegenbaur says: "Each of the two uteri opens by a papilliform process into a portion, which from the exterior appears to be common to them both, and which is formed by the union of the two Müllerian ducts. A curved vagina is given off from this on each side (Didelphys), or the commencement of the tube is replaced by a cæcal sac which is pushed out backwards, and is usually, though not always, divided internally by a median partition; from this sac, the distinct 'vaginal canals' pass in a curved direction to the uro-genital sinus (Halmaturus)."



"Fig. 351.—Female generative organs of Halmaturus. *ov*. Ovary. *od*. Oviduct. *u*. Uterus. *cv*. Vaginal canals. *cug*. Sinus urogenitalis. *vu*. Urinary bladder. *ur*. Ureter. * Opening of the bladder."

My inquiries into the manifestations of sexual aptitude exhibited by the females of Marsupials, like the kangaroo, tend, so far as they go, to support the hypothetical conclusion to which my researches had already led me, namely, that in accordance with their lowly position as mammals having inferiorly evoluted sexual organs, they would display comparatively slight and inconspicuous local evidences of the rut or "heat."

Kangaroos are known to breed in this country; and, although certain gestative phenomena are still shrouded in obscurity—*e.g.*, the mode of transference of the immature embryo to the marsupial sac, which, according to Owen, occurs in Macropus Major about thirty-eight days after impregnation—yet the times of "heat" have been recognised, and copulation witnessed, but only lately has any œstrual discharge been remarked. It must be remembered that in these creatures one orifice serves for the exit of fæces, urine, and generative products (in Marsupialia "there is even a common sphincter for the anus and urogenital orifice," Gegenbaur, p. 622), and that this, when closed, conceals in the cloaca the several corresponding apertures opening thereinto. Probably, therefore, whatever exudation attends the epochs of sexual excitement, if any there be, is hidden in the cloaca, unless, indeed, it should chance to be abundant, and that is not anticipated; neither, likewise, is it to be expected that a flux would partake of a distinctly sanguineous character, unless in so feeble and insignificant a degree as to be scarcely recognisable.

The most one appears warranted in expecting in these and allied lowly mammalia, is a mucous flux, perhaps feebly stained, with some increased odorousness, which, as in the higher mammals, is highly attractive and exciting to the males.

I have gratefully to acknowledge my indebtedness for information respecting the kangaroos at the Zoological Gardens to Mr. Bartlett, the able superintendent, who informs me that the Society's kangaroos display sexual excitement in September (which, he believes, corresponds in the southern hemisphere to our springtime), and also in our spring month of April, the returning warmth of the season apparently stimulating them.

Until recently, neither Mr. Bartlett nor the keeper of the kangaroos had remarked any exudation or discharge from the cloacal orifice of the females at the time of "heat"; but, since attention has been directed to this point at my request, the keeper informs me that he has observed a "mattery slimy" discharge, slightly tinged with a reddish colour, at these times. He also informed me that, lately, prolonged copulation in a young female kangaroo, which had never bred, caused hæmorrhage necessitating separation

from the male. When impregnation has occurred, a close watch has been kept upon the females, in the hope of discovering the mode of transference of the embryo from the generative passages to the marsupium, but, hitherto, unsuccessfully. Mr. Bartlett tells me that something resembling blood and mucus has been seen to be conveyed by the female in her fore-paws from the cloaca to the marsupium, in which it was supposed the embryo might be entangled; and the keeper says that they sometimes find "hollow fleshy things" in the pens (fœtal envelopes?); but I understand that no conclusive observations have yet been made. The issue of blood in question, small though it be, at what in these creatures is equivalent to the parturient act, suggests obvious analogies.

Above these grades, whose sexual systems and mode of reproduction are peculiar (*aplacentalia*), we come to a multitude of mammals of various kinds (*placentalia*) concerning some of which observation has taught us many interesting facts, though these are still too few to satisfy legitimate desire for information.

In all creatures there are periods of "heat" or sexual excitement, when both males and females are apt for procreation. These periods are marked by systemic excitement, and by local phenomena of a more or less conspicuous character. Among the mammalia, the times of heat display a seasonal periodicity; that is to say, they recur annually, biennially, quarterly, or at more frequent intervals, according as the conditions of existence or environments are favourable, or the reverse, and, apparently in some degree, according to the size of the creature, being, for example, rare in the elephant. Yet in every creature seasonal periodicity, at longer or shorter intervals, is observed, and, as Darwin and Laycock have shown, this periodicity always partakes of an hebdomadal character. It is always some greater or lesser multiple of a weekly period.

In the lower animals in a wild or feral state, the aptitude for procreation is seasonal, recurring mostly at times when food and warmth are plentiful. Under normal circumstances, the earliest longing for sexual congress is promptly gratified; in the female, conception ensues, gestation proceeds on its appointed course, and until the genesial cycle has been completed by parturition, the "rut" or "heat," with its attendant desire for copulation, does not ordinarily recur. But, impregnation failing from any cause (*e.g.*, absence of the male at the appropriate season of sexual appetite), we may inquire, Do the symptoms of heat persist indefinitely? and, if not, What period elapses before they are again exhibited? Observation of wild animals, both in a state of nature and during captivity (when the latter does not interfere with reproduction), and, still better, of domesticated animals, shows that, after a definite period of quiescence, œstruation, or the "rut," invariably recurs at epochs which strictly conform to some multiple of weeks. In highly bred and well cared-for domesticated animals, œstruation would probably be renewed periodically until arrested by conception; for it is well known that domestication enormously enhances the capacity for reproduction, and renders that sustained which, under other conditions of environment, subsides until it is renewed by the seasonal awakening. It is probable that, in the wild state, in the absence of the male, the "heat" or stimulus to sexual desire would, after a few periodical manifestations, die away, grow cold, and subside; remaining in abeyance until the return of the season with which it is primitively allied. This long rhythmed periodicity may be termed "seasonal," since it appears to be primarily allied with or dependent upon seasonal changes, as has been abundantly demonstrated by Darwin, Herbert Spencer, Laycock, and others. This seasonal periodicity of "heat" accounts for a corresponding periodicity in delivery, for, as is well known, many wild females bring forth their young at mild and favourable seasons, as spring, and not at inclement or unfructuous times. This is generally so in our domesticated animals when art does not interfere with their natural instincts; and, in truth, this primitive seasonal condition of the exercise of the generative function underlies the process of reproduction, even in the highest creatures. A trace of this seasonal influence is certainly still conspicuous in the greater tendency manifested by the human female to conceive at certain annual epochs; and it seems probable that this seasonal influence underlies the genesial function in all creatures, and is a relic and trace of a primitive or primordial condition governing reproduction.

We shall see that not only does woman most frequently begin her menstrual life in the summer months, but she brings forth her offspring more frequently in the spring than in other seasons, just as the lower animals do. Many years ago, I concluded that every woman had a law peculiar to herself, which governed the times of her bringing forth (and conceiving); that, in truth, she was more prone to bring forth at certain epochs than at others; and subsequent researches have not only abundantly confirmed this surmise, but established the accuracy of the forecast. The evidence is given in other lectures.

The influence of civilisation and domestication in expanding the reproductive powers is conspicuous. And yet the generative system as Mr. Darwin has ably and conclusively shown, is highly sensitive to changes in the environment of the individual. Seemingly the higher mental endowment of advanced human beings carries with it not only an augmented capacity for the reproduction of their own species, but also bestows a like advantage upon the creatures showing amenability to man's sway by flourishing under his dominion. Not alone does the human race increase, but man's flocks and herds multiply prodigiously. Would that proportional care were observed in the breeding and propagation of the human species, as, *e.g.*, is taken in that of animals of merely commercial value!

The influence of domestication upon the fertility of animals amenable thereto is most instructive. The total productiveness of most of them is enormously increased thereby. The continuous and regular supply of food, the artificial warmth, selection, care, and culture bestowed upon them, greatly enhance their productiveness. Puberty not only arrives earlier, but a sustained power of reproduction is acquired; more offspring can be bred, and these again breed earlier. The manifestations of "heat", therefore, instead of being confined to seasonal appearances, are much more frequently renewed, resembling, be it noted, those of women; and where celibacy is imposed upon the female, as it is for commercial purposes in the case of cows, for example, by segregation from the male, the periods of heat may be observed to recur with remarkable regularity—in cows usually every three weeks. Domesticity, then, increases the fertility of domesticable creatures; while seclusion from the male, either for economic purposes or through captivity, permits the repeated exhibition in the female of the phenomena of the rut or heat, whatever they may be.

Prolonged civilisation has done for women what domestication has done for the lower animals; it has augmented their power of reproduction, made them more prolific, and rendered more frequent the manifestations of that aptitude, hence the sustained repetition of œstro-menstruation. Darwin (*Descent of Man*, p. 45), has remarked that savages appear to be less prolific than civilised people. Bischoff has truly said:—"If women menstruated only once or twice in a year, it would long since have been remarked that such was the only time when conception was possible; menstruation would long ago have been recognised as perfectly analogous to 'the heat' in animals, even though the most essential element of it, the maturation of ova, had not been discovered." He also says:—"The ova form, and become mature, and are extruded from the maternal organism usually at fixed periods, having regularly recurring intervals." This is the period of "heat" in animals and "menstruation" in human females. The analogies existing between menstruation in women and œstruation in the lower animals, may be shown. In both, there is special aptitude for conception at or near these times, though women are more highly endowed, inasmuch as they may conceive at epochs somewhat remote from their "period." The lower females will rarely permit intercourse except at the periods of heat, which in ruminants, at any rate, are of brief duration; indeed, the males seldom attempt it during the intervals. This is unlike the practice of human beings. In both, it has been shown that germ-cells are then ready for impregnation; though here again woman enjoys the advantage implied above, in that ovules may be produced at times other than those of the "heat," that, however, being admittedly the usual and ordinary epoch for their ripening and dehiscence. Propinquity to the male, without access to him, is known to hasten ovulation in birds; and in the human female repeated sexual indulgence may stimulate the rupture, if no more, of Graafian follicles. One should not lose sight, however, of the superior evolution of the sexual system in the higher creatures, for this may not be without influence upon the process. It can hardly be maintained that sustained ovulation is the exclusive appanage of the higher mammals, but there can be little doubt that the organic superiority of the highest enables them to co-ordinate more readily the advantages their endowments and environments may chance to afford: their sexual superiority is correlated with their mental, as with their general organic superiority.

Bischoff says:—"In them (animals) the period of 'heat' either occurs so seldom, once or twice a year, or, when repeated more frequently, as in the cow, the sheep, the pig, etc., it is so interfered with by ordinary circumstances, such as our economical arrangements and the like, that the animals are either immediately impreg-

ıated, or the recurrence of maturation of ova is obstructed and ıtopped by the secretion of milk. That analogy, otherwise so strikng, with one of our commonest domestic animals, the cow, should ıave remained for the most part unnoticed, is no doubt to be attriıuted to some of the above circumstances."

To the question, should it be asked: Why do not the females of he lower animals menstruate with the persistent regularity with vhich the human female menstruates? the reply may be made hat, under like advantages of food, warmth, and similar advantageıus environments, they do so to a very large extent; but that, ıwing to their more constant exposure to conception, the catamenial unction is liable to be suppressed by its natural successor, pregıancy. The regular periodical "horsing" of mares is often observed, especially when they are fairly well fed and not overworked; while ows, bitches, and other domesticated animals exhibit regularly reıewed signs of sexual aptitude. If it be asked: Do these signs esemble the sanguineous catamenial discharges of women? the eply is unequivocally affirmative; it is supported by reflection, and s confirmed by observation.

My researches have led me to certain conclusions, one of which, undamentally important, may here be thus tentatively formulated. 'he sanguineous character of the œstro-menstrual flux bears generlly some relation to the degree of evolution of the sexual system in ıammalia. Ordinarily it appears to be proportional with the evelopment of the generative organs, and to be subordinate to their volution; the chief evidence of evolution consisting in the lateral ıtegration or fusion of the generative canals (Müller's ducts) acompanied by aggregation of the ovarian elements. But it should ever be forgotten that intimately correlated therewith are other volutionary facts, *e.g.*, the higher organisation of the nervous, ascular, and glandular systems, upon the special activity or evelopment of which variation may depend.

Accordingly, in the highest mammals, man and the quadrumana, herein the uterus is a compact organ,* (in the former, traces of ıe primitive duplicity being but feebly indicated) we find the ıtamenial flux to consist of almost pure blood. Even in the human ecies there are individual, often considerable, variations in the ınguineousness of the flux, in part obviously dependent upon the ondition of the blood—some women having only a feebly stained, r even a colourless flow, constituting the "menstruatio alba" of old ıthors.

In certain of the higher monkeys, in consonance with the law of volution already propounded, the catamenial flux is perfectly sanuineous, and recurs with regularity every three or four weeks. In ows it is also decidedly, though probably less intensely, sanguineous, ıd recurs with strict regularity every three weeks. Of the accuracy this observation, as it applies to highly bred cattle, I am assured y a most competent and able observer, Mr. Simpson of Wray Park, eigate, at whose model farm is a large herd of beautiful Alderney Jersey cattle of his own breeding; and Mr. Simpson has not only r upwards of fifteen years been a breeder on a large scale (having herd varying between 70 and 100 animals), but he brings cultivated owers of observation to bear upon the phenomena presented, having his earlier years studied medicine.

More or less sanguineous (sanguineo-mucous) catamenial fluxes ıve also been observed to recur periodically in mares, asses, ewes, ws, bitches, cats, and so on. Wild animals kept in captivity often stain injury in their capacity for reproduction, but not always; and ıen they do manifest sexual aptitude, it has been observed to obey e law of periodicity (hebdomadal) already adduced. I am inebted to Mr. Bartlett, the able superintendent of the Zoological ardens, for valuable information on this point. For instance, the ppopotamus, which has borne three young ones in the Gardens, hibits monthly sexual excitement; the vulvar orifice swelling and eeping. Whether blood escapes is not certainly known, as the eatures frequent the water much at these times, copulation taking ace in the water. Elephants, both male and female, become much cited during the breeding season; while some animals, at other nes wild, become tame and quiet.

Observation shows that generally the discharge becomes less and s sanguineous as we go lower in the scale of organisation, so at, in the lowest creatures, we see only a mucous exudation, perps but slightly, if at all, tinged with blood. In all presenting a lvar aperture, there is swelling with turgescence of the genital fice; but the exhalation of blood appears to be mostly, if not tirely, in relation with and subordination to the evolution of the sexual organs, so that, in the lowest forms, it may be represented merely by an odorous mucous flux. Probably undiscovered exceptions to this law exist. It is believed that their discovery would not invalidate the general truth of the law propounded; they would merely illustrate what is well known in biological inquiries, that variations and divergencies for adaptive purposes, are not uncommon in correlation with certain conditions of environment—nutritional, climatic or other. Pouchet recognised some such relation as is indicated above, but he seems to have thought that it also bore relation to the size of mammals; and he regarded a copious intestiniform uterus, with its extensive mucous membrane, as accommodating a larger volume of blood than the thicker small uterus of woman and the Simiæ was capable of doing. He says:—"The quantity of blood emitted by the animal is absolutely related to the structure of its uterus, but the afflux of the fluid towards the genital organ is always proportionate to the size of mammals. The species in which the genital apparatus approaches more that of woman, and which, as in monkeys, have a small and coriaceous uterus, are manifestly regular, and show an abundant external flow of blood. We have seen that the assertions of Buffon, Cuvier, Burdach, G. Sainte-Hilaire, Rengger, Ehrenberg, Raciborski, and Isidore Sainte-Hilaire, leave no doubt in this respect;" and again, "Thus, then, menstruation in the sow is a demonstrated fact. As in human species, there is an emission of blood; but if this is not abundant, it is because this fluid is found in great part poured out in the immense extent of the internal generative apparatus."

The generalisation I have independently worked out, and now venture to propound, differs from Pouchet's, in that I regard the relation of the catamenial function, in respect of its sanguineousness, to the generative organs as being, in the main, one of subordination to the extent of their evolution, not merely to the accidents of shape of the uterus or size of the creature. Aberrations in, exceptions to, or divergencies from the law, may in time be discovered, or may declare themselves in the course of inquiry; and the explanation of exceptions, apparent or real, may be found in, or be ascribable to, such causes as difference in the plasticity or adaptability of animals to their environment; in the tendency of some species to organic degradation, or to other factors as yet unknown; but with the allowances scientific caution would prescribe, it is believed that the general accuracy of the evolutionary law, now provisionally advanced, will become established as observations are extended. Seeing the extreme difficulty of instituting adequate personal inquiry into the phenomena as they are presented in all animals, by one individual, it is to be hoped that all who enjoy exceptional opportunities for observation, will be so good as to make and record them, so that, in process of time, an accurate record of facts may be garnered.

With ample material furnishing reliable data, further conclusions may become warrantable, and correlations be discovered that are now unsuspected. For example, the flux may be found to bear some relation to the evolutionary or hæmoglobin value of the red cells. Probably diet influences it also; and, possibly, it may bear some relation to the number of ova, for in the multiparous carnivora the manifestations of heat, including the flux, are more sustained than in the uniparous ruminant.

In illustration of my position, the following passage and woodcuts, borrowed from Gegenbaur, may be usefully quoted.* (Fig. 352.)

"Two completely separated uteri open into a vagina in many Rodentia (Lepus, Sciurus, Hydrochœrus, etc.), and in Orycteropus (Fig. 352, A). In other Rodentia, the two uteri are only united for

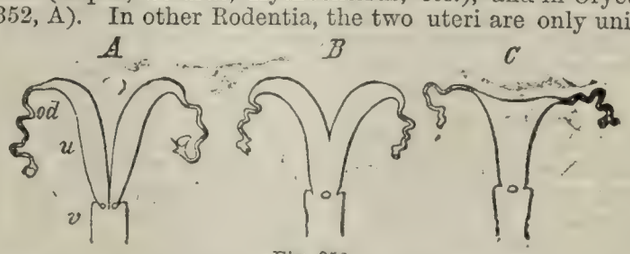


Fig. 352.

a short distance into a common opening into the vagina (*e.g.* Cavia, Cœlogenys, Mus). This leads to the arrangements seen in the uterus of the Insectivora, Carnivora, Cetacea, and Ungulata, where a single uterus is continued into two separate cornua (B), which are continued into the oviducts. When the common portion of the uterus is elongated, the cornua are shortened; this is the case in the Chiroptera and Prosimiæ; in the Simiæ, as in Man, there is a single

Gegenbaur says (*Elem. Comp. Anat.*, p. 616): "In the Simiæ, as in Man, ıre is a single uterus, which receives an oviduct on each side."

* I have to thank Messrs. Macmillan and Mr. Ray Lankester for permission to use these illustrations.

uterus (C), which receives an oviduct on either side. The cornua of the uterus, and the common uterus itself, vary very greatly in length; so, too, does the vagina, the mucous membrane of which may be variously modified. In many Rodents (Lagostomus), a certain portion retains its original double nature. Its opening into the urogenital sinus is sometimes distinguished by a temporary fold of mucous membrane, which is known as the hymen. This has been observed in the Ruminantia, Carnivora, etc.; but it is in the Simiæ only that it has the same relations as in man. The primitive Müllerian duct, which only served for the passage of the generative products, is, therefore, differentiated into three parts, owing to the great physiological changes that happen to it; and of these parts the first, or Fallopian tube, alone retains its primitive relations.

"The ovaries, which are generally small, vary greatly according to the relation that obtains between the follicles and the stroma of the ovary. In a large number of mammals they are racemose in form. They seldom retain their primitive position, and generally travel towards the pelvic basin, or, with their oviducts, are completely enclosed in it. They are always in close relation to the oviduct, or, rather, to its infundibular cœlomic mouth, for a process of the margin of the ostium extends to the ovary. The mesenteric folds (ligamenta uteri lata), which support the ovaries and oviducts, not unfrequently unite with the pouch that encloses the ovary to form the mouth of the oviduct (as in the carnivora)."

ABSTRACT OF AN ADDRESS

ON

THE INFLUENCE OF THE SYSTEM OF FREE AND PROVIDENT DISPENSARIES AND HOSPITALS UPON THE GENERAL PRACTITIONER OF MEDICINE.

Delivered at the Harveian Society.

By W. HICKMAN, M.B., President of the Society.

After a few introductory remarks respecting the value of the Society to its members, Dr. Hickman discussed the position and prospects of the general practitioner of medicine—the advantages and difficulties, the aids and hindrances, which attended his career. His difficulties often began at his first case, which might be one that he perhaps had not watched in hospital—measles or scarlatina, for example. The school work of anatomy, physiology, botany, etc., might be done anywhere, but should be tested by thorough and practical examination. Hospital and practical work, and actual medical study, could then be entered upon without distraction. The four years now allotted to the student were far too short, and might be supplemented by a year's actual practice under supervision, as an assistant, or dispensary medical officer, before he could obtain the full licence to practise. This would advantageously take the place of the old apprenticeship system, in which, probably, as much was acquired that it was necessary to unlearn as to retain. The education of the student being at the present day under the control of hospital physicians, surgeons, and specialists, its tendency was to produce hospital men and specialists, rather than good general practitioners. Escaped from his text-books and examinations, the practitioner had various means of increasing and extending his knowledge of the ever-advancing science and practice of medicine, amongst the chief of which was the literature of his subject, in which assuredly was no lack of material. But as "in the making of books there was no end," and the mass of medical literature yearly poured forth was far more than any one man could digest, it became necessary to make a selection; and those books would best repay perusal which were written from, not for, practice. But, if reading made a full man, and practice a ready man, pathology made an exact man. The practitioner should consequently take every opportunity that offered itself of making *post mortem* examinations. Necropsies should be the rule, instead of the exception, for more was to be gained therefrom in private than in hospital practice, as the examination might throw light on the history and symptoms of a lifetime. Many cases, too, occurred in private, of which very few were seen in hospital practice, and these presented a vast field for pathological research. Further, if cremation was to be adopted, mortisection must in every case precede it, in order that the cause of death might be established; whilst a general adoption of necropsy in every case of death would bring to light many instances of neglect and foul play which now passed unsuspected, or, better still, would tend to prevent them, by the wholesome fear of detection which the system itself would engender.

A more frequent resort to mortisection also would deprive vivisection of much of its *raison d'être*, a result which none would desire more than the members of the medical profession. One of the chief obstacles to the adoption of mortisection was the prejudice of the public, which must be educated until its prejudices disappeared. The public must be taught by every means to understand the usefulness and necessity of *post mortem* examinations, which should be made legal and compulsory in all public and charitable institutions; and they might be made to see how it would tend to their immediate advantage, in making practitioners more careful and more accurate in their diagnoses.

If the necropsies were made by independent men—men who made pathology their study and business—the public would have some test of the knowledge and capabilities of their advisers, by the corroboration or disproof of their opinions afforded by the *post mortem* examination. Much good might be done to combat the popular prejudice by men in the higher walks of the profession more often asking for *post mortem* examinations, and insisting on their utility and importance; much, also, by the public advocacy of them by such societies as the lately formed association for the promotion of medical research. Young practitioners, as a rule, asked for and obtained necropsies, but, after awhile, from a variety of reasons, their energy became blunted. This would not be the case if, at each hospital, there were pathological officers, who should be allowed and expected to make *post mortem* examinations for any practitioner in their neighbourhood, who, as he liked, might or might not be present, but who should receive an official report of the necropsy. A second copy of the report should also be kept amongst the records of the hospital, and a third might be given if asked for, to the nearest relative of the deceased.

The next requisite for the general practitioner was practice, or patients, through attendance upon whom he gradually enlarged his experience; for even the man who had filled important hospital offices, upon commencing home practice of any kind, found many factors to be taken into account which he had disregarded in the wards, where they formed part of the usual routine of the hospital, and were almost independent of and unknown to him. This experience he could best obtain in an assistantship, which should be compulsory on all men before the conferring of the diploma. As things at present stood, dispensary appointments and qualified assistantships were scarce, and men anxious for work were easily satisfied with small emoluments, or even none, as the poorest class would at least furnish instructive cases. Patients were to be seen everywhere, flocking in overwhelming numbers in and out of hospitals, dispensaries and homes of all kinds, so that in London, every year, one million of the inhabitants (about every fourth person) received gratuitous medical advice. This, to the would-be practitioner, was a great hindrance as regarded his early attainment of experience, and was to his great injury in respect of present livelihood, or prospects of future competency. Stimulated by the necessity of subsistence and laudable desire for work, such an one was possibly led into paths of doubtful professional propriety Here might possibly be found some excuse for the advice gratis system, the self-supporting dispensary, the special hospital, and the various fresh and extended forms of this hydra-headed monster, gratuitous medical attendance, which were springing up every day. It was acknowledged by all authorities, lay and medical, to be a great and growing evil, injurious both to the public and the profession, which must be faced and fought.

Energetic reformers had, of late years, taken the matter in hand, and a consensus of opinion seemed to have been arrived at, that the only cure was the establishment of provident dispensaries in sufficient numbers in every district. These had accordingly been vastly multiplied during the last few years, societies and companies having even been formed for their introduction and development And with what results? Were there now fewer general or special hospitals? Did fewer patients now than formerly obtain gratuitous advice and attendance? The advocates of provident dispensaries wrote regretfully of the general difficulty of making them self supporting, the aid of charity being almost constantly necessary to keep them going, though they told of the success of some few. And what was this success? Sir Charles Trevelyan (than whom there was no better friend or well wisher to the profession or to the artisan held up before us the example of Northampton, Derby, and Manchester. "At Northampton," he said, "the members of the pro-

dent dispensary entitled to attendance were 17,849—more than one-third of the population of the town." He appended a note that "this number was the more remarkable, as there was another large medical institute in the town supported by the Odd Fellows and other working-men's clubs." These numbers were further exclusive of those already ministered to by the previously existing hospitals, and other charitable institutions, and by the Poor-law. "The payments made by these 17,849 members amounted to £2,218; the attendances on patients at the dispensary were 5,903; at the medical officers' houses, 15,062; and the visits paid to patients at their own homes, 29,804. The payments to the medical officers for the year were £1,696." In other words, each member paid to the medical officers something under two shillings per annum; in return for which he was entitled—not as an act of charity, but as a right—to medical attendance, at his own home for twelve months; and the medical officers received for each attendance upon a patient, the munificent sum of eightpence. "At the Derby Provident Dispensary there were 5,696 members, who paid £997, and voted £497 to the medical officers." That was, they paid one shilling and eightpence per annum each to the medical officers for the same privileges. "At Manchester, seven such dispensaries had been established, with 13,759 members, who subscribed £2,881, and paid £1,492 to their medical men"—again an average of about two shillings per member. If this was all the benefit the medical profession was to obtain from provident dispensaries, it might surely as well do without them, especially as they seemed really to take away the best of the artisan class, who would otherwise pay very fair fees, whilst leaving much where they were the improvident class forming the bulk of hospital and dispensary patients. The payment received by the profession from the artisan classes had rather diminished than increased, in consequence of the extension of provident dispensaries, whilst the amount of gratuitous medical attendance had increased rather than diminished.

As to the cause of this gigantic and growing evil, which threatened to pauperise the profession in its lower branches, and to denude it of its dignity in all, Dr. Hickman believed it lay entirely with the medical profession itself. The public did not require nor demand gratuitous medical services. The philanthropic founders and supporters of the old hospitals made liberal provision for the remuneration of the medical staffs, whom they attracted by a liberal pay and dignified position. It never entered their heads that the doctors, more than the butcher or baker, should give services for nothing. The medical profession itself, which thrust its gratuitous services on an almost unwilling public, was really responsible for the present state of things. The large and increasing number of hospitals and dispensaries was not an evidence of the intense interest taken by the profession in the poor, nor was the large amount of time and labour gratuitously devoted to their service simply an index to the disinterested philanthropy of medical men. The object of this interest and these services was not the benefit of the poor, nor of the profession, but the particular benefit of the individual, who looked forward to be amply repaid in the future, by increased experience, enhanced reputation, and the legitimate advertisement of himself, which was almost the only opening to high-class practice and high-class fees.

The large majority of new hospitals, dispensaries, and other medical charities originated within the last fifty years, had been founded by medical men, with a view to their own advancement, utterly regardless of the injury done to their medical brethren, and reckless of the injurious consequences to the poor themselves of indiscriminate charitable relief. There would seem to be little difference between the man who started a free or a shilling dispensary, and scattered handbills with his name and qualifications all over its neighbourhood, and the man who established a special hospital, with a grand committee of his influential and sympathising friends, and sent out far and wide prospectuses and begging letters, advertising his name and specialty amongst the paying classes whom it was his real design to reach. Without going into the question of the best method of administration of medical relief to the sick poor, Dr. Hickman remarked that the hospital and the hospital system of to-day not only injured the general practitioner in his struggle for a livelihood, but actually hindered him in his attempt to gain experience and knowledge. Nor had they any counteracting influence in providing him with the means of instruction; there was no place, no room for the outside practitioner within the walls of the hospital. Whether at his own hospital or some other one in the fresh district in which he became located, he felt himself *de trop* and in the way; and was elbowed aside by students, dressers, clerks, and house surgeons; nor could he wander round the wards without feeling himself to be under an obligation, and losing valuable hours. At present there was an enormous waste of material and power going on at all hospitals. Rare diseases were daily demonstrated to students who knew nothing of ordinary diseases; the ripest professional minds were employed in drumming the same elementary knowledge into series after series of apathetic youths, many of whom would never even present themselves for a diploma. Would not the physicians and surgeons be more usefully and honourably employed in unfolding their rich stores of experience, and the mature results of their study and thought before an appreciative audience of earnest fellow-workers, brother practitioners?

In America this want had been felt, and had led to the institution of "Post-graduate colleges," in which the practitioner might apply the defects of his pre-examination period. We required no new colleges nor new hospitals for this purpose; if existing institutions were fully utilised, students might be more effectually taught, and actual practitioners find means and opportunities for maintaining and increasing their own efficiency and usefulness. The task of lecturing to, and teaching, the students, might be assigned to the junior members of the staff only; whilst the senior officers of the hospital should lecture and demonstrate to medical practitioners only. The hospital should be the centre of medical knowledge for its district, where the practitioner could daily see, and practise, the use of the latest instrumental or other aids, see the last introduced drugs or chemicals; where he could always find some rare or important case, and witness the details and effects of new or revised methods of treatment; assist at carefully conducted *post mortem* examinations, and increase his acquaintance with pathology and pathological processes. Every hospital should have its library and reading-room, where the practitioners could always meet, and seek for counsel or instruction. The general practitioner might also have a share in the hospital work, and take his part in the training of the coming generation of medical men. Nor should he be debarred from the advantages obtainable from public practice and teaching. At present the choice of candidates for junior posts at most hospitals was limited, for various reasons, to men of a certain income, very few of whom only were ready to step into any vacancy; whilst if a moderate salary were attached to each appointment, and some of the present restrictions as to practice removed, at least twenty men, equally as good as the present candidates, would probably try for each appointment. Physicians were formerly general practitioners of medicine, teaching and practising equally every branch of the healing art. Harvey did not disdain, nor feel it a degradation, to take up the knife or practise midwifery. The project of a conjoint board of the two Colleges of Physicians and Surgeons, if carried out, would result in one great national college of medicine, the members of which, the general practitioners, would be worthy descendants of Hippocrates and Galen, Linacre, Sydenham, and Harvey.

THE LONDON WATER-SUPPLY.

By PERCY F. FRANKLAND, Ph.D., B.Sc., F.C.S.

The interest which the British public has for the past fifty years felt in the water-supply of its metropolis, has not yet died out. That this is the case is sufficiently manifest, from the frequent reference which is made to the subject in the columns of the daily papers, as well as in other periodicals. Considering the vast amount of literature that already exists upon this topic, and the numerous commissions that have been appointed to throw the strongest light upon this subject, with which the health of millions is intimately bound up, it is melancholy, but not surprising, to observe the ignorance which yet prevails among the general public concerning so vital a matter. The careful perusal of blue-books and evidence is only possible to the few, and the examination of these by the light of a scientific education only to a still smaller number, so that it is not surprising that, in spite of so much information collected by commissioners and experts, but little accurate knowledge should have found its way among the general public. The inhabitants of London are, however, daily becoming more anxious to know something definite about the quality of the water which they are compelled to consume, as they are becoming weary of the conflicting evidence upon the subject given by men of reputation.

Under these circumstances, it would appear that a discussion of the present condition of the evidence bearing upon this subject might not be unacceptable to the members of the medical profession, as well as to the public generally. In the present article, I shal endeavour therefore, to clearly set forth, first, the scope of chemica

analysis in detecting the pollution of water; and, secondly, to present a concise statement of what is known concerning the water with which the metropolis is supplied.

The chemical analysis of water is attended with a number of difficulties of various kinds. The determination of the mineral ingredients can be effected with accuracy by ordinary methods involving no particular difficulty. The determination of the total quantity of organic matter, on the other hand, present in water, cannot be accomplished by any known process, the accurate estimation of organic elements being limited to that of carbon and nitrogen. A knowledge of the proportion of these organic elements is, however, in many respects of greater importance than a mere acquaintance with the absolute amount of organic matter present in the water; for, from the ratio which the organic carbon bears to the organic nitrogen, it is possible to form an opinion concerning the origin of the organic matter in question.

In vegetable matter, the proportion of nitrogen to carbon is much less than in animal matter; and, since nearly the whole of the organic matter in water is derived either from vegetable or animal sources, it is possible, by determining the ratio of organic nitrogen to organic carbon, to identify the organic matter with one or both of these two sources. Several causes, however, conspire to render this identification a matter of greater difficulty than it would at first sight appear to be. Among these influences, the most important is that of oxidation, to which water is exposed, either when its surface is open to the air, or still more when percolating through porous strata, in the interstices of which the atmospheric oxygen exerts an infinitely greater oxidising power than under ordinary circumstances. Now the effect of oxidation is precisely opposite in the case of the two kinds of organic matter found in water, for, with vegetable matter, it tends to reduce the proportion of carbon to nitrogen, whilst with animal matter it tends to reduce the proportion of nitrogen to carbon; thus in each case obscuring the testimony borne by the ratio of these two elements one to the other. It is at this point that the determination of the nitrogenous inorganic ingredients of water is of importance in throwing light upon the source of organic matter, for, whereas animal matter, on oxidation, yields nitrites and nitrates, vegetable matter under the same circumstances yields little or none of these materials. The other mineral nitrogenous ingredient of water is ammonia, which is almost exclusively derived from the decomposition of animal matter when exposed to the influence opposite to that above mentioned, viz., reduction. Thus, if water be found, on analysis, to contain considerable quantities of one or more of the mineral compounds—ammonia, nitrates, and nitrites, into which animal organic matter is resolved during its oxidation or decomposition, the inference may naturally be drawn that the organic matter actually present in such water has been derived from animal sources. This inference, however, must not be regarded as final in respect of the wholesomeness of the water; it is only provisional, for, although the presence of these mineral nitrogenous ingredients prove beyond all doubt that the water has been at some previous time polluted with animal organic matter, yet the time at which such combination took place may have been so remote, and the influences to which the water has been subjected since that time may have been of such a character, that the whole of the original organic matter may have been converted into these harmless mineral ingredients. It is only by an investigation into the source of the water that a final conclusion, in such a case, can be arrived at. Now this is the cause of very frequent misunderstanding on the part of the public in interpreting the results of chemical analysis; without a thorough knowledge of the source of a water, it is frequently impossible for a chemist, from analysis only, to decide whether the water be suitable or not for consumption.

Again, the public have the greatest difficulty in understanding the difference between present and previous pollution with animal organic matter. A water may, as we have seen above, contain but a mere trace of organic matter, and yet bear evidence, through the presence of nitrates, nitrites, and ammonia, of having been previously contaminated with animal matter to a considerable extent. In such cases, it is only by a knowledge of the source of the water that the chemist can pronounce a final opinion as to its probable wholesomeness. If such a water be obtained from a deep-seated spring, and be known to have passed through a great depth of porous rock, such as chalk, oolite, or sandstone, then there is every probability that the animal organic substances, which are liable to communicate disease, have been removed from the water; and that the latter is of excellent quality for drinking. On the other hand, water containing a considerable quantity of organic matter, with a large ratio of organic nitrogen to carbon, can always, even without acquaintance with the source of the water, be unhesitatingly pronounced unfit for drinking, especially if, in addition to the organic matter actually present in the water, there is also the evidence of the mineral products of decomposition and oxidation of nitrogenous organic matter previously present in the water.

We thus see that chemical analysis is able to detect the presence of organic matter in water, and, as a general rule, to decide whether this organic matter is chiefly of animal or chiefly of vegetable origin. Analysis is further able, in a vast number of cases, to discover whether water has, at any previous period of its history, been contaminated with such animal matters; whilst it is only by an investigation of its source that it is possible to decide whether such previous pollution may be safely passed over and disregarded; whether, in fact, this pollution belongs to a bygone period, and has ceased to be of any present interest.

It cannot be emphatically enough stated that chemical analysis *cannot* determine whether the animal matter or sewage in water is actually dangerous to health. Nor is the microscope as yet able to fill this blank left by chemical analysis. The living and moving organisms, the presence of which the microscope so frequently reveals in water polluted with organic matter, especially that of animal origin, are not recognisable as the organisms which are believed to communicate disease; but, inasmuch as the latter are supposed to be very closely allied to, and as small as, if not even smaller than, those visible through the microscope, the presence of the visible organisms shows that the water has certainly undergone no process which would remove the noxious organisms, should they have been once present.

Having now defined the powers of chemical and microscopical analysis in discovering the pollution of water, let us turn our attention to the rivers Thames and Lea, and the water which is abstracted from them for the supply of London. The whole of the inner circle of London, excepting a comparatively small district in the south-east, is supplied from these two rivers by seven companies. The Chelsea, West Middlesex, and Grand Junction Companies distribute Thames water on the north, whilst the Southwark and Lambeth Companies distribute water from the same source to the districts south of the river. Water drawn chiefly from the Lea is supplied by the New River and East London Companies to other districts north of the Thames.

The intake of the water-companies drawing from the Thames is situate a short distance above Teddington Lock, and thus guarded from admixture with the tidal water below the lock, which frequently carries up with it the metropolitan sewage which is discharged into the river at Barking and Crossness. But, although the water abstracted from the Thames by the companies thus enjoy perfect immunity from contamination with the sewage from London it is obviously very differently situated with regard to the sewage of the population, estimated at upwards of 600,000, draining into the river above Teddington. That the river at the intake of the companies has received this drainage, in some cases more or less clarified or purified, can neither be denied nor doubted; and the subject of dispute can only be as to whether or not the noxious ingredients of sewage are removed during the flow of the river before passing into the reservoirs of the companies. On the one hand, it is asserted that the organic matter contained in the sewage and other polluting liquids is rapidly oxidised during the flow of the river into which such liquids are discharged, and that, if sewage be mixed with twenty times its volume of river water, the organic matter which it contains will be oxidised, and utterly destroyed whilst the river is flowing "a dozen miles or so;" whilst, on the other hand, it is urged, and experimental facts are quoted to demonstrate it, that there is no river in England long enough to effect the complete oxidation of the organic matter of sewage with which the river had once become polluted. Chemical analysis certainly shows that the Thames water at the intake of the companies contains a very considerable proportion of organic matter, and that part of the organic matter is derived from animal sources. This fact cannot be surprising to those who are familiar with the behaviour of organic substances generally in the presence of atmospheric oxygen. Again it is urged by the defenders of the Thames water that the vitality of those organised matters occasionally present in sewage, and which are capable of inducing zymotic disease, is rapidly destroyed on the dilution of the sewage with water. On what grounds this argument can be maintained, it is difficult to discover, inasmuch as the whole tendency of recent research upon the nature of these low organisms goes to prove the extreme tenacity of life which they possess. It is inconceivable that forms of life, such as bacteria which are supposed to be closely allied to the organisms in que

n, should preserve their vitality in atmospheres of carbonic oxide, anogen, and even sulphurous acid, and yet be rapidly destroyed by ere contact with water. The investigations of Professor Pumpelly, rried out in America, under the auspices of the National Board of alth, and which have not received the attention in this country ich they deserve, conclusively show that even the process of fil- tion to which the companies subject the river-water before dis- bution is quite insufficient to remove the morbific matter it may any time contain.

Moreover, there does not appear to be any prospect of a material provement in the condition of the Upper Thames, as a source of ter-supply: for, although its outward appearance has been greatly nefited by the various systems of sewage-treatment introduced, it only as regards the coarser portion of the suspended matter that y diminution in quantity has taken place. Indeed, the official reports on the London water-supply, which are monthly made to the cal Government Board, show that, far from there being any im- ovement as to organic matter in the Thames water supplied to ndon, in the year 1880 the quantity, which had gradually been in- easing during the preceding years, actually exceeded that of any evious year since these reports have been made. The average nount, from year to year, of organic matter in the Thames ter supplied to London, is exhibited in the following table, taken m the last report published by the Local Government Board. In is table, the mean proportion of organic impurity in the Thames ter, delivered in 1868, is taken as 1,000, and that found in the sub- quent years is represented by proportional numbers:

Year.	Proportion of organic impurity present in Thames water as delivered in London.
1868	1,000
1869	1,016
1870	795
1871	928
1872	1,243
1873	917
1874	933
1875	1,030
1876	903
1877	907
1878	1,056
1879	1,175
1880	1,263
1881	1,007

ıistable clearly and irresistibly attests the general deterioration which ıs taken place in the average quality of the Thames water delivered London. It must further be borne in mind that this deteriora- on has gone on in spite of both greater storage capacity and much ıproved filtration on the part of the companies. What is here ated of the Thames applies equally, but in a less degree, to the ater of the Lea.

Since this, then, is the condition of the water which the companies ıve the monopoly to purvey, too much caution cannot be exercised accepting the wholly unofficial reports which are now made in the terests of the water companies, and which are calculated to allay ıe just cause of dissatisfaction excited by the official and impartial ımination made by the Local Government Board in the interests the public.

It should not be forgotten that even when their supplies were rawn from the grossly polluted lower Thames, the water companies ere able to procure from scientific experts reports of the perfect whole- meness and unimpeachable purity of their water. Thus, reporting the Southwark Company upon the quality of Thames water be- veen Teddington and Chelsea, three chemists pronounced the water be "as perfectly harmless as any spring water of the purest kind sed in common life; indeed, there is probably not a spring, with the ception of Malvern and one or two more, which is so pure as the hames water." Again, at a more recent date, the Thames water Battersea, then in close proximity to the sewer outfall, was de- ribed as "good, wholesome, and proper, free from any noxious apregnation of animal matter, and well adapted to dietetic, mestic, and manufacturing uses."

Until the year 1852 the inhabitants of London were content, or ther compelled, to drink the water of the Thames drawn from the ver opposite Hungerford Market, and all legislation intended to ter the then existing state of things was strenuously opposed by ıe water companies. The consternation caused by the terrible idemic of cholera in 1849, so aroused public opinion, that an altera- on of the source of supply was insisted upon. It is to be hoped ıat the public will not require an equally severe lesson before they ısist that the Thames and the Lea shall be altogether abandoned r the purpose of furnishing water to London, and that the day may not be far distant when the whole of the metropolis shall enjoy a supply of water as pure as that which is now given to a limited portion of the south-eastern district only.

PULSE-BREATH AND PULSATILE RESPIRATION.

By JAMES FINLAYSON, M.D.,
Physician to the Glasgow Western Infirmary; Lecturer on Clinical Medicine, etc.

A PATIENT, recently under my care, presented this curious phenomenon—the pulsations of her heart could be heard proceeding from her mouth; and they were audible in this way, not only when she breathed, but also when she held her breath. There was no difficulty in hearing the pulsation at some little distance from her, if she simply held her mouth open.

The girl was under treatment for several months in the Western Infirmary. When admitted, she was affected with pleurisy of the left side, with considerable exudation. From the first there was some suspicion of the coexistence of phthisical disease; the case was complicated by pregnancy, and premature labour supervened. This was followed by albuminuria and other serious sequelæ; from these, however, she recovered. The state of the lung remained unsatisfactory, and the symptoms pointed to an advance of the phthisical disease presumed to exist; but as her state had improved considerably, it was thought proper to try her for a week or two at one of the convalescent homes, before the summer had passed. While there, or possibly on her way from the station, pneumothorax seems to have occurred. She became much worse, and was readmitted to my ward as soon as possible. On examining the chest, on her readmission, percussion on the left side gave a duller sound than on the right, but it was less dull than formerly. Under the left clavicle the "cracked-pot" sound could be educed. All over the left back amphoric sounds were heard. The breath sounds had an amphoric ring, and at times little tinkles were heard. Not only so, but the heart's sounds were also transmitted with an amphoric quality, and mingled as they were with the amphoric expiratory murmur, a very curious mixture of sounds was produced. By getting the patient to hold her breath, however, the identity of the heart's sounds could easily be verified. It is worthy of note that the amphoric ring of the cardiac sounds could be heard, not only on the affected side, but also over certain portions of the lower part of the right back, with great distinctness. On practising succussion, the splashing of fluid could be heard quite plainly in certain positions of her body. The expectoration, which had been always rather scanty during her first residence, had gradually increased, and on her readmission it was very abundant, amounting to as much as 10 to 15 ozs. in the twenty-four hours. There was no history of any sudden expectoration, as if a collection of matter had burst into a bronchus. She had noticed, however, that for a fortnight before readmission she had frequently brought up a quantity of thin pus, when from any cause, as in dressing herself, she might have occasion to stoop. On testing the truth of this statement it was found that if she stooped, as in touching the floor with her finger, a quantity of thin pus ran out of her mouth, without effort; during the act of coughing or vomiting, in certain positions at least, the same thing happened. The expectorated matter, as preserved in her spittoon, was found to consist in part of this thin matter, but a much larger portion consisted of separate tenacious sputa such as are commonly seen in advanced cases of phthisis, and a microscopical examination of these revealed abundant fragments of lung tissue.

The diagnosis arrived at was limited pyopneumothorax in the lower part of the left side, with a considerable intrapulmonary cavity at the left apex. This was verified by the *post mortem* examination. The left pleural cavity contained much pus, the surfaces being covered with festoons of shaggy lymph, and the pleura itself was much thickened. The lung was forced to the upper and back part of the chest, where it was firmly adherent. The tissue was much compressed; throughout the lung, yellow masses of deposit were found, and at the apex there was an irregular cavity of some size, with smooth shining walls, and, at one part, a deep pit, in such close proximity to the pleural cavity, as to warrant the supposition that this was the place of rupture; a large quantity of lymph covered this portion, and no actual perforation could be found anywhere. The heart was separated from the pleural cavity only by the pericardium, and a coating of lymph on the pleural aspect, so that each pulsation of the heart must have been communicated to the air or fluid in the pleural sac. The heart itself was normal; the

other lung presented pleuritic adhesions, and a few yellow masses of deposit.

The striking feature in this case, was the transmission of the cardiac pulsations through the patient's mouth. They seemed to be carried out, as it were, with the breath, and there was little doubt that the expired air might have been seen pulsating if the state of the atmosphere had been such as to render the breath distinctly visible. Some rough experiments were made in this direction, but they failed in securing the object in view. The ear of the observer did not require to be very near the girl's mouth to hear the pulsations; they were quite audible at a distance of two or three feet. Probably, indeed, with perfect quietness, they could have been heard further off, but no test was applied as to this. Very careful observations were made to ascertain if the pulsations were audible when the patient suspended her respiration. Of course, in her breathless state, she could only do so for a very short period; but the pulsations were always audible, under such circumstances, with great distinctness.

This curious pulse-breath, or pulsatile respiration, proceeding in jerks from the mouth, has been carefully recordedby Dr. Thorburn of Manchester, and Dr. Radclyffe Hall of Torquay.* Although observed under other circumstances also, many of the cases where it was most marked appear to have been those associated with large cavities in the lungs, or with pneumothorax.

As an isolated phenomenon, this curious auscultatory sign is interesting, no doubt, but its chief importance appears on considering the other facts with which it is associated, and on which it seems to depend. Something closely allied to it appears to be found in various states not deviating far from normal conditions, according to Thorburn's observations; and Friedreich alleges that, in the stillness of night, he can hear in himself three or four short whiffing murmurs during each expiration.† The presence of large cavities, whether due to pneumothorax or to pulmonary excavation, may easily tend to exaggerate such sounds and render them plain; in the case here detailed, the amphoric ring of the heart's sounds was heard, not only on the affected side, but it even extended across to the other. In the healthy subject, the pulsations of the heart, as transmitted to the air in the cavity of the mouth, seem to be quite capable of being rendered visible by means of suitable applications of Marey's recording apparatus. The results of such experiments are stated shortly by M. Cuffer, in his papers on Exocardial Murmurs; and the influence of change of position, so potent in the case of such murmurs, was found to influence the tracings of the cardiac pulsations obtained in this way.‡ These papers seem to have been written under the influence of M. Potain's teaching.

About the same time, there appeared a more detailed description of the same or similar experiments by M. Paul Regnard; his experiments were undertaken for the purpose of throwing light on the causation of certain exocardial murmurs; and his paper contains various tracings of the heart's pulsation obtained from the mouth of the observer while the respiration was suspended; the influence of the sitting and recumbent postures on the amplitude and shape of the tracing is likewise illustrated.§

But if the pulsations of the heart are thus impressed on the air within the lung, giving rise to such tracings even in healthy subjects, and if these may be magnified and resonated by the presence of air-filled cavities, as in the case of our patient, or transformed into blowing exocardial sounds during certain phases of the respiratory movements, it seems quite probable that other auscultatory variations may be due to the same cause.

Dr. Thorburn, in describing his murmur, referred to it as being due "to the expiratory murmur and the end of the inspiratory murmur itself, *saccadée* or jerked by some undue impulse."‖ It has been supposed by some, indeed, that jerky breathing, or *respiration saccadée*, is due to this cause, and for many years this has been regarded by Potain as the common cause of this variety of respiratory murmur.* This view was brought under my notice by my colleague Dr. McVail a few years ago, who had arrived at this explanation of jerky breathing entirely from his own observations; and since then I have devoted some attention to this point. I feel quite satisfied that a certain number of the cases of jerky breathing are due to the cardiac impulse; but in nearly all the cases where I was satisfied of this origin, the peculiarity was audible in the vicinity of the heart, or at least in the left lung; and a large number of cases, especially when involving the right lung, seemed to me to have no relationship to the cardiac rhythm. A difficulty in adopting this explanation is the common limitation of the jerky quality of the breathing to the inspiratory act; while it would seem, from our preceding considerations, that expiration is quite as likely to carry a cardiac impulse. Recently, I had a patient in my wards presenting evidence of incipient phthisis, in whom the *respiration saccadée*, audible under the left clavicle, seemed clearly of cardiac origin; and in his case, the jerking character was imparted to the expiratory as well as the inspiratory murmur. I am quite satisfied that this explanation is available for a certain number of the cases of this form of respiration, when it occurs on the left side.

* Dr. J. Thorburn, On a Peculiar Auscultatory Phenomenon (BRITISH MEDICAL JOURNAL, June 18th, 1859). Pulsatile Respiration (BRITISH MEDICAL JOURNAL, September 20th, 1862). On Vaso-Respiratory Physical Signs (*Manchester Medical and Surgical Reports*, vol. i, 1870). Dr. C. Radclyffe Hall, On Pulse-Breath. (*Medico-Chirurgical Transactions*, vol. xxvii. London. 1862).

† Friedreich: Krankheiten des Herzens (*Handbuch der Speciellen Pathologie und Therapie*, Bd. 15, Abth. 2, s. 94).

‡ Cuffer: Modifications des Souffles Extracardiaques; Mécanisme et Physiologie Pathologique des Modifications des Souffles Extracardiaques (*Progrès Médical*, 1877, p. 563).

§ Regnard (P.): De l'Influence des Battements du Cœur sur le Poumon; Recherches Expérimentales sur la Cause des Souffles Extracardiaques (*Revue Mensuelle*, Mai 1877).

‖ Thorburn (J.) (BRITISH MEDICAL JOURNAL, June 18th, 1859, p. 484).

NOTE ON THE RELATIVE LIABILITY TO ENTERIC FEVER AT DIFFERENT AGES.

BY D. MANSON FRASER, M.A., M.D., F.S.S.

IN the discussion as to the true character of the contagion of enteric fever—whether it is or is not contagious in the same sense as typhus and scarlet fever are acknowledged to be—a valuable element of evidence turns on the fact that liability to attack of the disease varies at different ages. It is important, therefore, to have some reliable estimate of the relative liability to attack at different ages. In his classical work on the continued fevers of this country, the late Dr. Murchison gives the percentage of cases at different ages among a large total of admissions into the London Fever Hospital; and, in the annual report for 1880 of the Homerton Fever Hospital, there is a diagram constructed by the writer, showing similar percentages among the admissions (3,523) into the fever hospitals at Islington, Stockwell, and Homerton, during the decennium 1871-80. Both these calculations, however, are imperfect. They show only that, out of so many cases admitted, certain percentages occur at certain ages, and they ignore the fact that the numbers of persons living at these ages differ considerably. In other words, they are absolute rather than relative, and they fail to show accurately the comparative liability to the fever at different periods of life. It is true, indeed, that the inaccuracy is slight, and does not invalidate the reasoning based on the calculations; but, for purposes of scientific reasoning, the calculations should be such as to give the most accurate representation of the facts that the data will permit. I have, therefore, made an endeavour to correct the imperfection alluded to, and to construct a diagram which shall show more correctly the relative liability at the different ages. The result is the graphic curve given below. The data on which it has been based are (1) the number at different ages per cent. of the total number at all ages of cases of enteric fever admitted into the three great fever hospitals of London during the ten years 1871-80; and (2) the number of persons living at different ages per cent. of the total living at all ages in London in 1871. The first series is that on which the imperfect curve in the Homerton Fever Hospital Report is based. The second series has been deduced from the actual numbers as enumerated in the census of 1871 (*vide* Report of Registrar-General). The numbers for the census of 1881 were not available, so that it was impossible to take the average percentages for the ten years 1871-80; but those of 1871 differ only slightly, in al

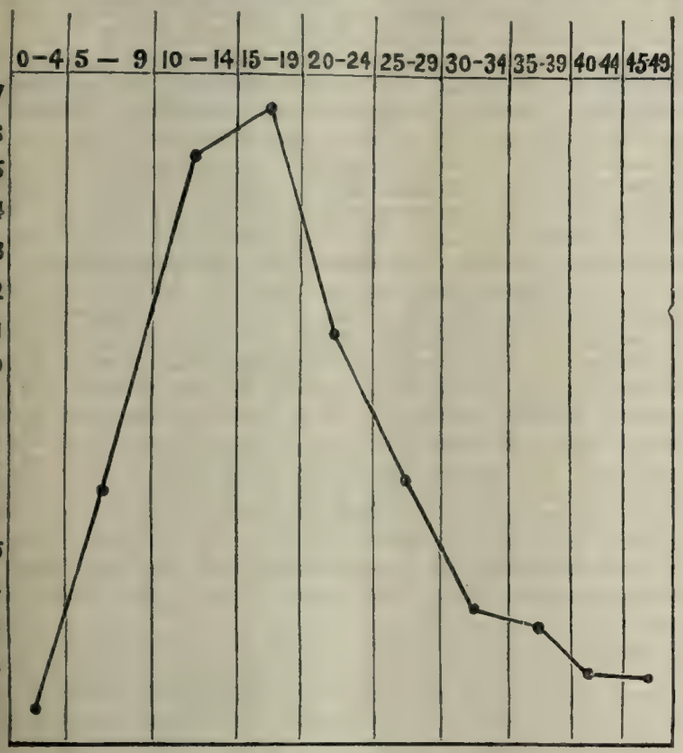
AGES.....	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49
1. Persons living per cent. of total population of London, 1871.....	12.95	10.74	9.52	9.44	9.88	9.12	7.84	6.53	5.92	4.72
2. Percentage admissions...	2.04	11.24	23.44	24.92	16.97	9.76	4.42	3.12	1.73	1.36
3. Percentage admissions (Murchison)	.98	9.44	18.16	26.86	19.69	10.15	5.36	3.40	2.9	1.0*

* Potain: Du Bruit Respiratoire Saccadée, et des Souffles Extracardiaque (*Revue Mensuelle*, 1877).

robability, from the average percentages for the ten years; to so nall an extent, probably, as to have little appreciable effect on the urve. The two series of percentages are as follows; the series given y Dr. Murchison being added for comparison.

The next step was to combine series 1 and 2. By taking the atios of the percentage admissions to the percentage living at each eriod of life, the relative liability at each age was obtained, so far s the data go. The ratio for the age 0-4 was then taken as the nit, and to that standard all the other ratios have been reduced. his enabled the comparison to be distinotly made, and the curve epresents thus the liability of each age compared with the liability t the age 0-4.

urve representing the liability to attack from enteric fever, at different ages under 50, *referred to the liability at age* 0-4 *as unity.*



It is necessary to point out that the curve represents the relative iability as deduced from the cases admitted into hospital, and that, herefore, it may not correspond throughout to a curve based on all he cases occurring among the total population. So far, indeed, as he first part of the curve is concerned—that for the ages 0-4 and -9—there is considerable reason to believe that it does not. It is robable that the admissions under the age of 10 are much fewer, ompared to the number of actual cases, than the admissions over hat age. In very young children, the disease is much more diffi- ult of diagnosis than in youths and adults, and even when it is liagnosed they are not so readily sent to hospital. As regards the dmissions over 10, it is probable that, compared with the actual umber of cases, they are pretty nearly the same at the different ges. While, therefore, the first part of the curve does not give the ctual relative liability, it is tolerably certain that the latter part of t does. For the liability at the different ages over 10, the curve nay be taken to represent, with a fair amount of accuracy, what the iability actually is over the whole number of cases, whether admitted into hospital or treated at home. Fortunately, this latter art is just that which is of importance as bearing on the question f contagion. It shows very clearly that the liability to attack from lisease diminishes very rapidly after the age of 20; that is to say, hat after the age of 20 there are comparatively few susceptible to he disease—probably because there are comparatively few over that ge who have not already suffered from the fever.

CONDENSED MILK. — Dr. Voelcker says that none of five amples of condensed milk analysed by him, were produced from whole new, but from more or less skimmed milk. Really good conlensed milk, as a matter of fact, is nearly always made from skimmilk, or from a milk poor in cream. Condensed milk is not a perfect substitute for new milk, either chemically or physiologically. At he best, most kinds of good condensed milk are milk syrups, consisting of condensed skim-milk and sugar.

AN ABNORMAL PROCESS GROWING FROM THE TRAGUS IN A NEW-BORN CHILD.

By FRANCIS OGSTON, JUN., M.D.,
Assistant-Professor of Medical Jurisprudence in the University of Aberdeen.

A FEW months ago, my attention was called by the mother of a child, ten days old, to the fact that there was something wrong with its left ear.

On examining it, I found a finger-like prolongation of the tragus, which measured three-sixteenths of an inch in length, and about one-eighth of an inch in diameter at its base, tapering slightly towards the apex. It was covered with normal skin, and, to the touch, appeared to consist of skin and fatty or cellular tissue, without any cartilaginous basis.

The mother was distressed at the disfigurement it caused, and begged me to remove it, if possible; this was done by surrounding it, as near the base as possible, with a double loop of ligature silk. It fell off, without hæmorrhage, in a day or two, leaving a minute cicatrix, which shortly after was barely perceptible.

As it had shrivelled up very much, and fell off during the night, and was lost among the blankets, I was unable to obtain it for microscopic examination, and can say nothing with certainty of its structure. It had no appearance of nævoid tissue, but was apparently composed solely of dermoid structures—an embryonic prolongation of the tragus.

PSORIASIS OF THE NAILS.

By HERBERT A. SMITH, M.R.C.S.Eng., L.R.C.P., L.S.A.,
Late House-Surgeon Middlesex Hospital.

A CONDITION frequently met, and but little dwelt upon by authors, is psoriasis of the nails, occurring in patients in the humbler walks of life, and affecting in general the toe nails, as a result of irritation following on taint, or uncleanliness and pressure when the nails are not trimmed—treatment is uncalled for in the absence of inflammatory action. It is in patients of gentle birth, moving in good society, of the female sex, and when the thumb and finger nails are affected, the extremities of which assist in performing delicate and complicated co-ordinated acts of manipulation in which the sense of touch is peculiarly concerned, that treatment is in demand. The causes of this condition may be brought under three classes—1, syphilitic; 2, parasitic (Hilton Fagge); and, 3, atrophic, with which last I shall alone deal.

M. M., a lady of gentle birth, who had never suffered from any nervous or nutritive lesion antedating the present, came under my care for atrophic psoriasis of the thumb-nail. The interest of the case centres in its history and treatment. Five months after receiving intelligence of the death of her husband—an Indian officer killed in action while marching through the Peiwar Kotal Pass in the Cabul-Kandahar campaign—she noticed inflammatory swelling at the end of the right thumb. It commenced with first accelerated then diminished sensation (common and special), soreness, vesicular eruption, and, lastly, shedding of the skin of the distal half of the palmar surface of the second phalanx of the thumb. After the cuticle healed, the nail became affected, the matrix was tender to touch, the nail assumed a series of ridges, was exceedingly brittle, separated in places from the skin, and greatly hypertrophied and "heaped up." The initial irritation over, the history of its growth repeated itself in the oyster-shell-like appearance of the nail, and as such, fully grown, it came under treatment. This consisted in primarily paring off, by fine dissection, the whole of the nail as far as the lunule was visible; secondly, in destroying the subjacent redundant tissue (cause of ridges) by strong carbolic acid (painless); and, thirdly, in the internal administration of arsenic and iron, and local alteratives as, ℞ Ung. picis liquidæ, ung. hydrarg. ammonio-chlor., pp. æq.; liq. potassæ arsenitis q.s. This was continued with one temporary intermission for two months, all irregular layers of skin being rubbed off, and the advancing edge dressed nightly with the ointment. Thus far the nail, in growing again two-thirds, has kept, and promises keeping pace, *pari passu* with the adherent flesh; the ridges and lamination have disappeared, and, saving a slight wavy irregularity, an evenly grown, well shaped, and useful appendage is promised. The treatment has been assisted by the use of a gutta-percha splint modelled from the other thumb-nail and padded with lint (its web protected by oil-skin), since the growth beyond the visible lunule—the dry bed of the nail being moistened occasionally with glycerine. The pressure afforded has prevented subjacent granulations, and "trained up the nail in the way it should grow."

The cause of this condition I consider to be nutritive disturbance of the trophic and peripheral ends of the digital branch of the radial nerve supplying the seat of lesion, induced by shock; the defective innervation being expressed by inflammatory action, and by the vesicular eruption of the skin and matrix of the nail, the hyperplasia following on this being the cause of the subjacent ridges and lamination during the continuance of the morbid action, by tilting the under surface of the nail, the growth of which continued irregular throughout such action.

SURGICAL MEMORANDA.

THE TREATMENT OF SPINAL CURVATURE BY THE PERFORATED FELT JACKET.

A CASE at present under treatment, illustrates some of the advantages to be derived from the use of these jackets, combined with muscular exercise. The patient, a female child, aged 11, came under my care in August 1882, suffering from considerable excurvation in the dorsal region, for which she was wearing, at the time, a steel spinal support with arm-crutches, by which her shoulders were being pushed almost up to her ears. Some years previously, her parents had consulted a distinguished authority about her, and had been advised to keep her in bed for three years. Not liking to consent to do this, they had taken her to a special hospital, where she had very properly been refused treatment on account of her parents' social position,. The surgeon to whom she was then taken advised a plaster-of-Paris jacket, which, however had not been applied. A surgical mechanician then applied a support similar to the one I saw her wearing, and which appeared to me to be doing more harm than good. She had, besides, cost a small fortune for surgical appliances, such as a special couch to rest on with a table in front, a specially constructed perambulator, etc. Her history, I found, was not good, for she had had an abscess in the right thigh, of the size of a child's head, from which three pints of pus had been evacuated, and which had continued to discharge for over a year. Her mother thought that the back had been getting worse for some months before I saw her, and felt inclined, of her own accord, to discontinue the arm-crutches. A perforated felt jacket was made for me by Mr. Rorke of North Street, Fitzroy Square, and instructions were given that she should exercise with the trapeze several times a day for a quarter of an hour at a time. Already in five months a decided improvement has taken place. The prominence in the back has diminished in size and elevation by half an inch, the shoulders are no longer pushed up to the ears, and the whole body has grown. The child can move her limbs with the greatest freedom, and much prefers the jacket to any instrument she has worn. Thus, in a most unpromising case, no resort to the surgical instrument maker is required beyond the first manufacture of the jacket, which can be softened and reapplied by the surgeon as often as necessary, and which is taken off by the mother once a fortnight for purposes of cleanliness, while necessary exercise is not interfered with. I notice that in a recent pamphlet by Mr. Noble Smith, felt jackets are spoken slightingly of, and their porosity in particular is declared to be "a myth." However true this may be of the material originally used for these jackets, it is, I believe, a mistake in regard to the perforated felt, in which the pores are good sized holes perfectly visible to the naked eye. For efficiency, lightness, and cheapness, these jackets leave, I venture to think, little to be desired.

H. NELSON HARDY, F.R.C.S.Ed.

NEW TREATMENT FOR FRACTURED CLAVICLE.

FOR the past three years, I have used a plaster-of-Paris splint in the treatment of fractured clavicle. The splint extends from below the spine of the scapula behind, to nearly the nipple-line in front, having a concave border on its inner side for the neck, and outside slightly overlapping the acromion process, thus covering the entire shoulders. I make it by sewing the edges of two layers of flannel, which on the patient cover the area described, then slitting the outer layer from the acromion process directly inwards; thus forming two pouches, one behind, the other in front, into which the semi-fluid plaster-of-Paris can be poured. I now place the arm in whatever position the fragments best lie, pour in the plaster, and manipulate it until it is an inch thick all over. I then tie the four elastic strings which are attached to the angles of the splint, two and two tightly together under their corresponding armpits; and, while the plaster is still setting, I bandage the hand across the chest, as in the ordinary manner for treating fractured clavicle, rolling the bandage repeatedly over the splint. Thus a cast of the unbroken bone is made. The weight of the splint prevents either fragment from rising over the level of the other, so obviating deformity. By this splint I have saved an amount of trouble, one bandaging only being necessary, and I have got union in which there was not the slightest deformity. The splint acts best for fractures of the outer half of the clavicle.

Limerick Union Hospital. M. R. O'CONNOR, M.D., M.Ch.

SUCCESSFUL CASE OF LARYNGO-TRACHEOTOMY IN ACUTE LARYNGITIS.

ON Tuesday, January 2nd, 1883, about 9.30 P.M., I was asked to see J. S., a child aged one year and nine months. On arrival, I found the little fellow in bed struggling for breath with all the symptoms of acute laryngitis, accompanied by œdema of the lungs. The parents informed me that he had been suffering from cold, cough and sore-throat for several days, and the difficulty of breathing had been gradually becoming worse since early morning. Seeing it was too late to do any good by ordinary treatment, and that the child would undoubtedly die asphyxiated if not speedily relieved, I at once suggested tracheotomy as being his only chance. With the parents' consent, and the assistance of a neighbouring practitioner, I had him placed on a table, and proceeded to operate. The child having become insensible, it was not necessary to give an anæsthetic. The operation was performed in the usual way, the only difficulty being the profuse bleeding from the enlarged cervical veins, which I endeavoured to stop by the application of cold sponge; but, as there was no time to be lost, I immediately opened the trachea, etc., and by holding him up by the feet, sucking the blood from the windpipe, using artificial respiration, and applying hot-water flannels, he rallied. He was then placed in bed; a bronchitis kettle was obtained, and the temperature of the room kept at 70°. The remainder of the treatment consisted in the administration of a mixture, containing four grain doses of bromide of potassium, every three hours; and after the removal of the tube, on January 8th, the use of a weak solution of Condy's fluid, until the 18th, when the child was practically well. On January 28th, he was running about as usual.

My object in publishing this report, is to encourage others to act promptly in similar cases when the chances of success appear to be small; this being my third successful operation within three years, in each of which it was thought hopeless to make the effort.

1, Home Road, Battersea, S.W. R. H. A. HUNTER, M.R.C.S.

THERAPEUTIC MEMORANDA.

CONDENSED MILK AS A FOOD FOR INFANTS.

MUCH has been justly urged against the use of condensed milk as a food for infants, on the ground that it contains from 40 to 50 per cent. of cane-sugar; and thus, when water has been added, there will either be too small a proportion of nitrogenous material to support tissue-growth, or the mixture will contain too much cane-sugar to be digestible. It is also alleged that, when condensed milk has been successfully substituted for fresh cow's milk in the curdy vomiting or diarrhœa of infants, it owes its success, not to the superior digestibility of its casein, but to its dilution with water being carried to a greater extent than in the fresh milk previously used, forming a veritable *eau sucrée*. Be this as it may, we have now a form of condensed milk—the "First Swiss Brand"—free from the objection of added cane-sugar. The contents of a tin which I have recently examined contained about 40 per cent. of solids, the fat, milk-sugar, casein, and salts being present in normal proportion. If this condensed milk be diluted with water in the proportion of 1 in 3, a rich milk will be obtained, and, in the proportion of 1 in 4, a somewhat thin milk will result. After several trials, I found that if a "heaped up" teaspoonful of this condensed milk be added to an ounce of water, a milk will result containing 10 to 12 per cent. of solids; and, on standing, yield from 9 to 10 per cent. of cream. Thus, then, if a teaspoon be made to take up as much of the condensed milk as it will hold, and this be added to two, three, or four tablespoonfuls of warm barley water, to be used according to the age or digestive powers of the infant, we shall have a food which, at least, is a good substitute for fresh cow's milk, and will probably be found to agree at times when the latter does not. We shall also have the opportunity of settling the vexed question, whether the casein present in condensed milk is more digestible than in fresh cow's

milk; and we shall have a food infinitely to be preferred to the numerous starchy "infant foods" at present advertised.

One caution must be added: the tin was opened on Friday, and bacteria were noted in its contents for the first time on the following Monday. Another matter must not either be forgotten: when the condensed milk was mixed with water, and allowed to stand, numerous fine grains of white matter settled to the bottom, which microscopically consisted of fine acicular crystals of calcic phosphate (?) This would seem to indicate that some of the lime-salts are precipitated in the process of condensation, and are not readily redissolved on adding the necessary water to reform the milk.

HENRY ASHBY, M.D., Manchester.

THE SALICYLATES AND HÆMORRHAGES IN ENTERIC FEVER.

IN the JOURNAL for February 17th appears a communication from Dr. Fergusson, of Perth, suggesting that the use of the salicylates in enteric fever is attended with increased liability to intestinal hæmorrhages, and asking that other observers should record their experience on this point. Having used this agent for the reduction of the temperature in typhoid fever very extensively during the past four years, I am in a position to state, from my own observations, that such is not the case here. I am constantly in the habit of prescribing ten to twenty grains every two hours whenever the temperature remains continuously at 103° or thereabouts, and have for some time been struck with the fact that the intestinal irritation, as shown by diarrhœa, is actually lessened. This point is alluded to in a paper on the subject, published by me in 1881, where a detailed account of the results obtained in forty-six cases of a severe character will be found. Since that time, I have treated a much larger number in the same manner, which I hope shortly to publish as a continuation of the former series.

HENRY TOMKINS, M.D., B.Sc., Manchester.

CLINICAL MEMORANDA.

DISSEMINATED SCLEROSIS AT AN UNUSUAL AGE.

MRS. G., aged 75, began to show symptoms of disseminated sclerosis about six years ago. She attributed the onset to exhaustion, consequent on nursing her husband through a long and troublesome illness. The first thing that attracted her attention was double vision. Looking out of the window one night, she imagined she saw two lights in the street lamp. Then she began to be troubled with attacks of giddiness, and at times she thought she heard strange voices. A short time after this, tremor began to develop itself in the upper extremities, particularly the left. While walking, she used to stumble at the least obstacle. This gradually became worse; and, for the last nine months, she has been unable to go out of doors. At present, she presents typical symptoms of this disease. Her look is most vague and stolid; there is no expression at all. During a visit, at some trivial thing or another she may begin to laugh in the most ridiculous manner; a few moments afterwards, she is bathed in tears. When the arms are at rest, there is no tremor; but, on asking her to shake hands, or put a cup to her lips, rhythmical tremors ensue. On attempting to rise from a chair and walk, she first beseeches those who are present to be perfectly still. She then grasps the sides of the chair, and, after many attempts, tremor continuing all the while, she manages to get into a semi-erect posture. The feet are held apart, and one, then the other, slowly dragged along the ground, as if the soles were glued to the floor. After a few steps executed in this laborious manner, she would fall, if not supported. Although she answers questions quite intelligently, she speaks in a drawling fashion, and seems to feel tired in a short time, and incapable of speaking further. The tongue is not wrinkled on the surface. The muscles of the legs are not at all wasted, and feel fairly firm, although paresis has set in. Diplopia has now given place to amblyopia. The origin of the left auditory nerve seems to be affected, as she is almost deaf on that side. There is no ankle-clonus; indicating that, as yet, the axis-cylinders in the antero-lateral columns are capable of transmitting the volitional impulses from the highest centres which control the spinal reflexes. She has perfect control over the bladder and rectum.

REMARKS.—The case appeared to me worth recording on account of the age of the patient. Charcot gives forty years as the ultimate limit of life for patients affected with this disease, as it rarely makes its appearance after thirty. The symptoms are those of a typical case of cerebro-spinal sclerosis, with the exception of nystagmus, which as yet I have not observed. Besides the ocular troubles and the ineffectual attempts at progression, the absence of tremor when at rest distinguishes it from paralysis agitans. There has been no history of lightning-pains, and neither tendon-reflex nor cutaneous sensibility is abolished. There is no fixed pain in the head, nor vomiting.

ROBERT KIRKLAND, M.B., Cheltenham.

IDIOPATHIC ERYSIPELAS IN AN INFANT.

A CASE somewhat similar to that recorded by Mr. Strugnell in the JOURNAL for February 3rd occurred in my practice last year. On June 7th, I attended the wife of a farmer in her first confinement. The labour was very tedious, the lady being thirty-five years of age: and I had eventually to deliver with the forceps. The child was a male, healthy-looking and well developed, and what slight marks the instruments left on the head had disappeared by the following day. On June 25th, I was sent for to see the baby, who was suffering from indigestion and disordered bowels. I prescribed a few grey powders with soda, which relieved him for the time. On July 8th, I was again asked to visit the child, as he had become very restless, and cried a great deal, as if in pain. I found some puffiness in the left submaxillary region, with slight redness of the skin. The bowels were rather costive, and the stomach irritable, nutriment being frequently, but not invariably, rejected. He had been fed almost exclusively on the breast, the mother having an abundant supply of milk. By the next day (July 9th), the redness had become deeper, and had spread itself over the left cheek, the eyelids becoming gradually swollen so as to close the eye. On the 10th, the whole of the left side of the head and neck had become affected, and the right submaxillary region showed signs of participating in the disease. The redness and œdema spread rapidly over the right side of the face and head, while the disease receded from the left side, so that by the evening of the 12th the right side of the head and neck was completely involved, the left having to a considerable extent regained its normal appearance. The inflammatory blush invaded, but not to any marked degree, the upper part of the chest and arms. On the evening of the 13th, the left side of the face once more became affected, and the little sufferer sank from exhaustion on the 14th. The pupils acted alike throughout the illness, and there was no strabismus. Internal remedies seemed to afford little relief; but the external application of warm lead lotion on lint covered with gutta-percha tissue appeared to give ease. I may mention that the father of the child died six weeks after his son's decease, from tubercular phthisis of nearly four years' duration. The mother, a half-cousin of her husband, belonged to a consumptive family, but seemed to be quite sound herself.

J. J. JOHNSTONE, M.B., Colmonell.

NERVOUS INFLUENCE.

IT will be remembered that, during the illness of the late M. Gambetta, Professor Charcot insisted on cheerfulness being maintained in all the surroundings of his illustrious patient, on the theory of the influence which impressions conveyed from without had, through the nervous system, upon the general health. Two illustrations strongly bearing out the truth of this theory have lately come under my notice. The first was the case of a lady of highly nervous organisation, in whose house the soil-pipe had become damaged, necessitating its removal and a new one being put in its place. This, of course, had the effect of closing all the water-closets in the house for a period of twenty-four hours or more. Accordingly, the lady became greatly agitated as to what was to be done during this time; and when the time came, she had a very severe attack of diarrhœa.

The other case was as follows. A young lady went out hunting, fell into a wet ditch, and, on her way home, while still in her wet habit, had lunch with a friend, and then rode some miles. The consequence was, she got a severe chill, which brought on an attack of jaundice. Her sister, a young lady of highly nervous constitution, was shocked at seeing her yellow colour, and the next day went to bed, saying she was going to have an attack of jaundice; and, after she had been a fortnight in bed, during which time I could find nothing much the matter with her, the urine became tinged with bile, the motions clay-coloured, the skin yellow, and she went through a regular attack of nervous jaundice. The young lady's mother is now quite convinced that jaundice is catching, which no argument of mine can alter; "for," says she, "my daughter was feverish, and was yellow; therefore she had yellow fever, which everybody knows is catching." After this, of course, there was no more to be said.

CHAS. F. HUTCHINSON, M.D., Scarborough.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

LONDON HOSPITAL.

CASES OF INTRACRANIAL DISEASE INVOLVING THE MEDULLA OBLONGATA.

(Under the care of Dr. STEPHEN MACKENZIE.)

[For the notes of the following cases we are indebted to Mr. A. G. ANDREWS, House-Physician.]

CASE I. *Syphilitic Disease of, or near, the Medulla, causing Paralysis of the Soft Palate, Tongue, and Vocal Cord, and of the Trapezius and Sterno-Mastoid, all on the same side.*—F. M., aged 27, was admitted from the Out-Patient Department, where he had attended for pain in the head, on September 27th, 1882. He had been a labourer in the docks (wool warehouse) for twelve years. Up to the age of 20, he lived temperately, and had no illnesses of importance; since then he had "knocked about" a good deal. Six years before admission he contracted syphilis, for which he was treated with pills and inunction of the thighs. Two years after this (according to his own statement) secondary symptoms first appeared, principally sore throat, for which he was treated at this hospital. Since then he had never had good health, had always been liable, off and on, to sore-throat and bad headaches, and had occasionally been obliged to lie up at home. For the last nine months he had suffered from severe headache in the frontal and occipital regions, sore-throat, and huskiness. He had lost flesh for the month preceding admission. He was a weakly anæmic-looking man; he held his head stiffly, leaning to the right side. He felt very weak, had no appetite, slept badly, and had vomited frequently. No organic disease was detected in the heart or lungs.

Reflexes.—Knee-jerk was present and equal on both sides; there was no ankle-clonus. The plantar reflex was present on the right side, absent on the left; all the other superficial reflexes were absent; but the reflexes of the triceps and biceps were present and equal.

Tongue.—The tongue on the left side was soft, wasted, non-resistant, and wrinkled up, there being apparently scarcely any muscular tissue. This atrophic change was definitely limited to the left side of the median raphé. The sense of taste was not impaired on the atrophied side of the tongue; he could readily distinguish acids, sweets, and bitters.

Muscles.—When stripped, a marked difference was noticed on the two sides of the neck, owing to diminution of the prominence of the left trapezial fold, and there was considerably less resistance in the sterno-mastoid and upper trapezial folds of the left side, than of the right. The bodies of the muscles were flaccid and wasted, and responded in no degree to the strongest faradic current. The sternal origin of the left sterno-mastoid seemed entirely absent.

Palate and Larynx.—There was a swelling on the left side of the soft palate, involving the tonsil, displacing the uvula to the right, and filling up the left arch. The interior of the larynx was seen with difficulty; the epiglottis was partially destroyed, and, when viewed in the ordinary way, the right vocal cord only was perceived, but by management the left was brought into view. On phonation, the right vocal cord reached to the middle line, but the left did not move. There was distinctly some loss of movement of the left half of the soft palate, but the condition was rendered somewhat complex by the presence of considerable cicatricial tissue, the result of old ulceration.

Eyes.—The pupil measured 5 mm. on the right side, and 3 mm. on the left. Both acted to light, and during accommodation. The excursions of the globes were good. He could read No. 2 (Nettleship) with each eye. Both discs showed signs compatible with a past neuritis; the choroidal edge was somewhat ill-defined; the vessels were slightly tortuous, and their sheaths thickened. At the upper and inner margin of the right disc was seen a thin white streak, apparently cutting off the edge of the disc, and obstructing the vessels in their course, the portion of vessel lost corresponding to the width of the streak. This was most probably congenital, and had no relation to the previous papillitis. In the same situation in the left disc was a small white tuft—a very slight degree of "opaque nerve-fibres."

October 20th. He still complained of constant headache, and vomited occasionally. There was no facial paralysis, and no implication of the fifth nerve. It was noticed on this day for the first time that, in addition to the contraction of the left pupil (3 mm.) present on admission, there was narrowing of the left palpebral fissure, and recession of the globe. When the patient looked up, there was a wider band of sclerotic visible between the corneal margin and the lower lid in the right, than in the left eye; showing that this condition was due, not to a falling of the upper lid, but to an uprising of the lower. The recession of the globe was verified by standing behind the patient when seated in a chair, and noticing the relative prominence of the two corneæ. Atropine was put into the left eye, to negative the presence of iritic adhesions; the pupil dilated readily and evenly. On careful testing, it seemed that hearing was somewhat impaired on the left side; he could hear plainly but not so readily as on the right side. His hands and feet were generally covered with a profuse perspiration, but no sweating of the face was observed.

November 17th.—No alteration had occurred in the condition previously noted. The larynx was better seen than usual on this day and the immobility of the left vocal cord was quite certain. The right arch of the palate was much narrower than the left, and the uvula was tilted very markedly to the right on vocalisation. The tongue deviated but very little to the left when protruded, but the left side seemed very flabby and motionless. When in the mouth, the tongue pointed to the right.

January 15th, 1883. The patient's condition remained the same. He still suffered from severe headache, which was not in any degree localised, and was only relieved by the subcutaneous injection of morphia. The urine, which was examined frequently, contained neither albumen nor sugar.

REMARKS BY DR. STEPHEN MACKENZIE.—This case is one of great interest. The occurrence of associated paralysis of the soft palate, tongue, and vocal cord, on the same side, points to a localised lesion at the point from which the nervous supply to those parts originates, and not to a haphazard implication of several cranial nerves. Dr. Hughlings Jackson, in the *London Hospital Reports* Vol. 1, 1864, and subsequent volumes, and elsewhere, has especially studied these cases, recording some with necropsies which support clinically the anatomical researches of the late Dr. Lockhart Clarke, to which he calls attention. Dr. Broadbent, last year, showed at the Medical Society of London a case of the kind, and subsequently detailed the results of a *post mortem* examination. Dr. Lockhart Clarke demonstrated that the internal branch of the spinal accessory nerve has a double origin; one from its own special nucleus, continuous behind the central canal of the medulla oblongata with that of the pneumogastric; the other from the proper nucleus of the hypoglossal nerve in front of the canal, whilst some of the fibres of the hypoglossus appear to take their origin from the spinal accessory nucleus. He showed, also, that in the cod there is no separate hypoglossal nerve, but that the tongue is supplied by the pneumogastric, which has at its origin, however, a special (or hypoglossal) nucleus occupying exactly the same position as the hypoglossal nucleus of the higher animal. It is, from these considerations, clear, that a very limited and localised lesion of the conjoined nuclei or roots of the spinal accessory and hypoglossal nerves will explain the paralysis of the soft palate and larynx (spinal accessory) and one half of the tongue (hypoglossal) on the same side. The marked atrophy of the paralysed half of the tongue is another indication of the lesion involving the nucleus or root of the affected nerve. The deformity of the soft palate and larynx, resulting from previous syphilitic ulceration, renders the condition of these parts less demonstrable than it would otherwise be. The paralysis, wasting, and electrical reaction of the left trapezius and sterno-mastoid show, however, that the external branch of the spinal accessory is involved in the lesion, and hence it is almost certain that the roots of the implicated nerves are affected by syphilitic disease. The absence of any paralyses of motion, or sensation in the face or limbs, is opposed to any extensive disease of the medulla. It is assumed that the paralysis of the soft palate is due to disease of the spinal accessory, and not to lesion of the facial nerve, which is usually accredited with innervating this part; an inference which is justified by the same association of paralysis in similar cases. In cases like the one we are considering, we have, as pointed out by Drs. Hughlings Jackson and Lockhart Clarke, an interesting example of closely associated nerve supply to parts so intimately associated in function, as deglutition, articulation, and phonation.

Another interesting feature of the case is the condition of the left eye. The myosis and recession of the globe point to a paralytic affection of the oculo-pupillary branches of the left cervical sympathet

which are probably involved by the same lesion as that affecting the external branches of the spinal accessory arising from the cervical cord.

The intense and persistent headache, and occasional vomiting, probably indicate some active disease, against which, so far, active antisyphilitic treatment has proved powerless.

CASE II. *Tumour at Base of Brain: Paralysis of both Divisions of the Right Seventh and of the Right Sixth and Fifth and Third Nerves: Paralysis of the Left Third, Sixth, and Eighth Nerves: Temporary Paralysis of the Soft Palate and Vocal Cord.*—This patient was transferred to Dr. Stephen Mackenzie by Mr. Mark Hovell, under whose care he came for deafness. R. D., aged 16, had small-pox when two years of age, and since then, or shortly afterwards, he had had a discharge from the right ear—never, he said, offensive. He had had no other illness. Five months before admission, he fell out of a swing-boat upon his head. He did not lose consciousness, and thought nothing of it till two months afterwards, when he was seized with severe pain in the head, and became suddenly deaf in the right ear. This was followed by giddiness and frequent vomiting; and he said that about this time the right side of the face became blank. He was obliged to give up his employment—that of steward's boy on a river steamboat—on account of giddiness.

When admitted, on June 24th, 1882, there was severe vertical headache, and frequent vomiting. He was in a listless dreamy state, and lay constantly on his right side, supporting his head with his hand. There were complete paralysis of the right side of the face, and total deafness on the same side. The right membrana tympani was ruptured anteriorly. The soft palate acted equally well on both sides. There was no affection of the fifth nerve. *Eyes.*—The right pupil measured 5½ mm. (it was under the influence of atropine); the left, 2½ mm. Both acted to light and during accommodation, but the left better than the right. He read No. 2 Nettleship) with the left, and No. 7 with the right eye (atropised). The optic discs were healthy. There was paresis of the right internal and external recti, with diplopia, together with oscillation of the globe round the horizontal axis if looking up, round the vertical axis if looking out or in. There was epiphora of the right eye. His gait was distinctly reeling, especially to the right; there was also vertigo, objects appearing to roll from before backwards. The knee-jerk was exaggerated on each side, especially on the left. Ankle-clonus was not present.

June 24th. It was noticed this morning that the left eye did not look inwards well.

June 29th. Though the muscles of the right side of the face appeared to be completely paralysed, they reacted well to faradism, though not quite so well as those on the left side.

July 6th. Some impairment of the motor division of the fifth nerve on the right side was noted. The temporal and masseter muscles did not act so well as those on the opposite side. He complained of numbness in the left foot and the fingers of the left hand, and appeared to drag the left foot,

August 11th. Some impairment of the outward movement of the left eye was noted. There was complete loss of the inward and outward movements of the right eye.

September 3rd. Sensibility seemed to be returning in the left hand.

October 10th. Since admission, he had suffered a good deal from headache and vomiting; for the last few days these had increased, and the patient had not cared to get up. The discs had been examined regularly, and no changes found; but on this day signs of commencing neuritis were observed in the left eye. The right disc was healthy.

October 13th. Slight signs of commencing neuritis were observed in the right eye, and the neuritis of the left eye was increased in degree. He could read No. 2 (Nettleship) with each eye.

November 8th. Some loss of upward movement of the left eye was noted.

November 12th. Food and drink came back through the nose. The uvula was a little congested, and the right palatine arch was narrower than the left. The vocal cords were congested; the power of abduction of the left cord was almost entirely lost.

November 13th. There was marked neuritis in the left eye; slight on the right; vision of each = No. 2 (Nettleship).

November 21st. The congestion of the throat had subsided, and it was clearly seen that the right palatine arch was narrowed and heightened, and this was very much increased on vocalisation (paralysis of the left half of the soft palate). The left vocal cord was immobile, resting midway between adduction and abduction, and not moving on vocalisation or forced inspiration.

December 30th. All traces of exudation in the right eye had disappeared, but there was some slight tortuosity of the veins. Exudation was subsiding in the left eye also, but the disc was still hyperæmic.

January 2nd, 1883. There was very little difference between the two palatine arches, but the right was a little higher than the left. The left vocal cord now moved with both inspiration and phonation, and the cords met in the middle line.

January 17th. The patient still complained of headache. The ocular conditions remained the same. For the last six weeks there had been no regurgitation of food through the nose. The numbness in the left foot had disappeared. The knee-jerks remained the same as on admission, and ankle-clonus was not present. The urine was tested frequently, and no albumen nor sugar was found.

REMARKS BY DR. STEPHEN MACKENZIE.—This case presents numerous points of interest, especially in connection with the preceding case. It presented some difficulty in diagnosis at first; the paralysis of the seventh nerve—portio dura and mollis—in connection with old ear-trouble on this side, suggested some disease of the petrous bone, lighted up by the fall on the head. The implication of the right third and sixth nerves, however, showed that the disease was not confined to the bone. The temperature was carefully watched, but did not rise, and no rigor occurred. The subsequent, and successive, implication of the left third and right fifth nerves, the numbness of the left side of the body, and paresis of the left leg, paralysis of the left sixth nerve, and paresis of the left eighth nerve, showed some progressive lesion at the base of the brain involving the nerves in connection with the pons Varolii and medulla oblongata, and compressing one or other of these basal ganglia. The cephalalgia and vomiting rendered it pretty certain that there was a tumour, a diagnosis that was confirmed by the appearance of the papillitis. It would appear probable that a tumour, gliomatous or tubercular, commenced at the lower end of the right side of the pons, extended forwards to the upper end of the same side, and across to the other side of the pons and medulla. The temporary character of some of the paralyses is probably due to recession of the growth or of accompanying inflammation, whilst it advanced in other directions. The temporary paralysis of the left half of the soft palate and the vocal cord is interesting in connection with Case I. It will be observed that the tongue, in this case, escapes, rendering it probable that the root or trunk of the spinal accessory, and not its nucleus, is the part involved. The external branches of this nerve are not affected as in the last. It will be observed, too, that the soft palate has been paralysed on the left side, where there has been no facial paralysis, whilst on the right side, where there is complete facial paralysis, there is no paralysis of the soft palate, giving farther evidence that the palate is innervated by the spinal accessory. The advent of the optic neuritis would not have been detected but for the almost daily examinations made by Mr. Andrews, supplemented by less frequent examinations by myself. There had been nothing, it will be observed, to call attention to it, there not having been any defect of sight. The predominance of the neuritis on the left side is probably due to the tumour beginning, or being most active, on the right side of the brain; for, when uniocular neuritis occurs, it is nearly always on the opposite side to the lesion, when this is local.

CASE III. *Tumour involving the Medulla Oblongata: Paresis of Lips, Tongue, and Soft Palate: Partial Left Hemiplegia, with Temporary Right Hemiplegia.*—This patient was seen in consultation with Dr. Vickers, with whose concurrence he was advised to come into the hospital. Eighteen months before admission, he was made to laugh by some children whilst drinking. The fluid "went the wrong way," and nearly choked him. Immediately after this, he noticed that his mouth was drawn down slightly on the left side, and since then his articulation had become increasingly indistinct. He followed his occupation—that of a master mariner—till four months before admission, when he noticed his left side becoming weak. A fortnight previously, his right arm and leg were paralysed for two days. He had no loss of consciousness with the onset of either of these attacks. Since the second paralytic seizure, his articulation had been gradually becoming more defective, and the power in the left half of the body more feeble. Some months ago, liquids once or twice came back through the nose, but not latterly. He had suffered from headache, but had not vomited. He had latterly become very irritable and emotional.

On admission, June 24th, 1882, he was constantly laughing without cause. When spoken to, he burst out into a violent fit of laughter, which he was quite unable to restrain. This had been the case for eighteen months. He could just walk alone, but there was decided dragging of the left leg. His left arm also was weaker than the right.

There was no impairment of sensation. The knee-jerk was greater on the left than on the right side; but ankle-clonus was more easily obtained on the right side. All superficial reflexes, except the plantar, were absent.

One of the most marked features of the case, and the one of which he complained most bitterly, was the great indistinctness of articulation. It was difficult to understand what he said. He knew what he wanted to say, and did say it without mistake of words, but with such a husky, thick, and muffled voice, and such defective articulation, that it was almost impossible to understand him. It was found that, although he pronounced once, words necessitating the use of the soft palate, tongue, and lips, when these words, such as "head," "egg," were repeated several times successively, he failed to articulate distinctly, and "rub" became "rum," showing that there was some paresis of the lips, tongue, and soft palate. The latter acted well on inspiration and phonation, and there was no deviation of the uvula. He could protrude his tongue without difficulty, but it was slightly deflected to the left. It appeared small, and there were some longitudinal wrinkles. He could usually swallow well, but sometimes had choking attacks, and food had occasionally returned through the nose. The two sides of the face were symmetrical; but, on account of his emotional condition, there was some difficulty in correctly estimating the movements of the face. When he was told to look at the ceiling, the forehead wrinkled transversely, and equally on the two sides. He seemed unable to frown at all. When told to close his eyes, he did so on the right side, but not on the left; but, when his attention had been diverted, he had been noticed to use the left orbicularis oris well. There was no epiphora. He could sniff with both nostrils, and the elevators of the angles of the mouth acted well. The orbicularis oris scarcely seemed to act at all. He could not whistle or blow out his cheeks, and food was constantly collecting between his cheeks and gums. He was also troubled by constant dribbling of saliva from the mouth. There was no obvious muscular atrophy.

Eyes.—The movements of the globes were normal. The pupils were equal, measuring 4 mm. in diameter. They acted well to light and accommodation. He read No. 8 (Nettleship) with each eye. There was double papillitis. He had occasional vertical headache. There was no vomiting, and no affection of the fifth nerve. Laryngoscopic examination showed that the abduction and adduction of the vocal cords were natural. Hearing was good on both sides. Taste was natural. He appreciated heat and cold. There was no incontinence of urine or of fæces.

On December 31st, he was more able to help himself, and could walk down the ward without assistance. The knee-jerks were both exaggerated; and ankle-clonus was present, but was much more readily obtainable on the left than on the right side. He had much more power on the right than on the left side of the body, and complained of weakness and stiffness in the latter. Saliva still dribbled, but he had no difficulty in eating. Food collected between the cheeks and the gums, but none returned through the nose. There was no facial paralysis, and no implication of the fifth nerve. The soft palate moved well. Articulation was still indistinct, but he could be more readily understood, and he was not quite so emotional. He had no headache nor vomiting. The papillitis was subsiding, with consecutive atrophy. No sugar nor albumen was found in the urine, which was tested frequently.

Remarks by Dr. Stephen Mackenzie.—In this case there is evidently a lesion of the medulla oblongata, involving the pyramidal tract and some of the nerve-roots arising from this part. The symptoms resemble, in some respects, the labio-glossal paralysis of Duchenne; but the double papillitis and headache indicate that the affection of the part is due to some neoplastic formation. Moreover, the implication of the motor fibres to the limbs, and the progress of the case, differ from what is seen in ordinary chronic progressive bulbar paralysis. Probably there is a glioma, or some other slowly growing tumour, pressing upon the medulla.

The Hounslow Case.—At a recent meeting of the Brentford Board of Guardians, a memorial was read, signed by twenty-two of the poor of Hounslow, Isleworth, and Heston, setting forth that they would rather die than be attended by Dr. Whitmarsh, the medical officer. After a discussion, it was unanimously agreed that a communication should be sent to Dr. Whitmarsh, asking him to resign the post of medical officer, owing to the prejudice existing against him in the neighbourhood.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 27th.

John Marshall, F.R.C.S., F.R.S., President, in the Chair.

Notes on some Points in the Etiology of Scurvy. By W. H. Neale, M.B., B.Sc., F.R.G.S.—The object of the paper was to discuss the etiology of scurvy, and to consider whether the experience of the late *Eira* Arctic Expedition could throw any light on the question as to how scurvy may best be prevented during an Arctic winter. The recognised predisposing causes of scurvy were, bad hygienic conditions, long confinement, want of exercise, monotony, anxiety, and exposure to cold and fatigue, to which might be added, in the opinion of the author, the use of an inferior quality of meat whether preserved or not. The exciting causes were the insufficient supply of fresh, or of good preserved, vegetables, and, in default of vegetables, the want of lime-juice. Anæmia was one of the first symptoms of scurvy; and it was not difficult to account for its production if it were remembered that the life led by a body of men shut up in a ship for at least six months, must lead to a deterioration of the quality of the blood. Though every attempt was made during the last Government expedition to provide for good ventilation, the general opinion was that the results were not satisfactory. With regard to the action of an inefficient quantity of vegetable food, statistics were very contradictory. The author proceeded to compare the dietary of the two most recent English expeditions to the Arctic regions. In the expedition under Sir George Nares, the hygienic conditions, though not entirely satisfactory, were so good that the outbreak of scurvy could not be attributed to any defect in them, and compared favourably with those under which the crew of the *Eira* passed their winter. With regard to diet and ventilation however, there were distinct differences in the two cases. From a consideration of the dietary, it was evident that the absence of scurvy in the *Eira* expedition could not be ascribed to the employment of a larger total weight of food, and in particular not to the use of a larger quantity of vegetable food, nor to lime-juice, which was not used for a whole year. No case of scurvy occurred among the crew of the *Eira*. But the diet of the two expeditions differed widely in the kind of meat used; in the Government expedition, the crew lived almost entirely on preserved meats, while the crew of the *Eira* lived exclusively on fresh meat from animals killed on the spot. All flesh obtained in the Arctic regions could be kept in a state, though frozen, chemically like that in which it was when the animal was killed, and must, therefore, supply to the body those ingredients which were known to be diminished in scurvy, far more readily and abundantly than could preserved meats. The importance of using the blood as well as the flesh was much insisted on; blood obtained from the jugular vein immediately after death became frozen solid before any acid fermentation took place; and in it existed all the components of healthy blood, some of which were deficient in scurvy. The author made the following suggestions with regard to the conduct of future Arctic expeditions. 1. The crews should spend the winter in huts rather than on board-ship. 2. The albuminoid food should be abundant, and consist as much as possible of the flesh of recently killed animals. 3. The meat should be cooked in the form of stews or hashes, to which the blood of the animal should should be added. 4. Preserved vegetables should be mixed with every meal to aid the digestion of the meat, but not because they possess in themselves any special, exclusive, antiscorbutic properties. 5. Lime-juice may be dispensed with if fresh meat can be obtained.

A Case of Scurvy with Dilatation of the Heart and Retinal Hæmorrhages. By W. Hale White, M.D.—Out of about twenty cases which were examined at the Dreadnought Hospital, only one presented retinal hæmorrhages, and that fell under the author's care. The patient was admitted on November 13th, 1882. He had left Calcutta four and a half months ago, and whilst there had had dysentery. On admission, he was very sallow and evidently a severe case; there were swelling of the gums, and the usual bruise-like swellings about the body. The apex-beat was in the fifth space, one inch outside the nipple-line, the area of cardiac dulness was increased; there was in the third left intercostal space a loud systolic murmur; the first sound at the apex was muffled, and arterial murmurs were present in the neck. The pulse was weak and almost thready. In the right eye were two large hæmorrhages, one above and one below the disc; they were striated at the margin,

white in the centre. The blood showed only 40.5 per cent. of the normal number of red corpuscles, and only 20 per cent. of the normal quantity of hæmoglobin. The patient remained in the hospital a fortnight, and was treated with lime-juice and put on full diet. He steadily improved; the retinal hæmorrhages became less distinct; the red corpuscles increased to 63 per cent. of normal, and the hæmoglobin to 35 per cent. The basic systolic murmur disappeared, but the apex-beat remained in the same position. It was pointed out that this case presented the following points of interest. Firstly, the influence of the previous dysentery in making the attack of scurvy severe, which severity was evidenced by the marked blood changes; secondly, the presence of retinal hæmorrhages, a very unusual occurrence as compared with other anæmic diseases, and which was to be explained by the fact that scurvy, as seen nowadays, was not severe enough to produce retinal hæmorrhages; and thirdly, the dilatation of the heart. It was shown that this was the only recorded example of this condition in scurvy, and that, considering the close alliance of this disease to other anæmic diseases, in which it was known that the heart was fatty, it was presumed that here also this was the cause of the dilatation.—The PRESIDENT observed that great interest must attach to Mr. Neale's paper from his challenging, to some extent, the old idea that lime-juice was the one cure for scurvy, probably as containing the best combination of the organic acids with potash. It was a question on which he should like to invite the opinion of the chemists as to the exact condition of the blood; the absence of the red corpuscles was well determined, but much addition was needed to our knowledge of the saline constituents. On the question of diet, he invited especial discussion of the quantity of food necessary, the salts desirable, the value of fresh meat and of blood.—Dr. COLAN, from his own experience, was of opinion that the actual essential and proximate cause of scurvy is a deprivation of something that is contained more or less abundantly in certain fresh succulent vegetables, including fruits, which is probably an organic vegetable acid, free or combined with a base forming a salt. This deprivation leads to a state of malnutrition, or depraved condition of the blood, which suffers defect in quality or quantity, or both, constituting the disease called scurvy, in which complaint an immense quantity of serous fluid is thrown out into the pleural cavities and the pericardium; and a sanguineous fluid into the intestine, the subcutaneous areolar tissue, the aponeurotic sheaths of tendons, and under the skin, probably by an increased tendency to exosmosis. The lungs themselves may become dotted with blood, or filled with thinner fluid. Dr. Colan's heaviest cases in the Arctic Expedition were those of hydro-thorax, and hydro-pericardium, accompanied by effusion into the gums, and about the hamstring muscles; the pressure of fluid on the heart causing the alarming tendency to syncope that was so prevalent. It may be that, as Dr. Aitken states, the blood is altered by the addition to it of some ingredient or ingredients, or by the absence of such, that ought to exist in it. The deficient ingredient may be one of the ordinary constituents of the blood, or of some principle or element entering into their composition; it is clear that, when certain articles of food are given, the blood in scurvy rapidly regains its healthy state, and the disease disappears, though it takes a long time, in bad cases, for the effused fluid to be absorbed, and the broken strength regained. The severity of scurvy may be increased, its duration prolonged, the recovery from it rendered more tedious, and its accession hastened by great cold (running down as low as 105° below freezing), great and prolonged darkness (during 142 days, the sun never appeared over the horizon), moisture, foul air, and monotony of diet and routine, as well as by depression of spirits, and a salt diet, and last, but not least, great physical exertion, such as the sledging parties underwent in the Polar sea. The great prophylactic as well as the great cure for scurvy is, Dr. Colan believed, a sufficient supply of fresh vegetables, as recently gathered as possible, and which contain citric, malic, and tartaric acids, either free or in a salt. Such vegetables are the potato (a first-rate antiscorbutic), onion, cabbages, cauliflower, brocoli, agave Americana (cactus), wild artichokes, parsnips, carrots, turnips, lettuce, kale, dandelion, scurvy-grass, sorrel, and sauerkraut. Any of the cruciferæ are good. Amongst fruits, many of the genus citrus are good; as also are grapes. It is probable that the organic vegetable acids in these are decomposed easily, and form carbonates in the system. It may be that the salts of vegetables supply some constituent materials to the fibrine, red particles, or albumen. In the absence of fresh vegetables, the expressed juice of the lime—citrus limetta or acida—is the best substitute; Dr. Colan found it of the greatest possible use in the Arctic regions. That used in the north was made at Montserrat, in the West Indies, and was fortified, to prevent fermentation, with 10 per cent. of spirit; and gave, when analysed, 27 grains of citric acid to the ounce in the fortified, and 32 grains before fortifying; specific gravity 1053, fortified. Professor De Chaumont found an average of 392 grains in the fortified juice. Dr. Colan ventured to say that, on sledging expeditions, the lime-juice might be carried in some skin or capsule, each capsule containing about eight ounces for eight men daily; and this, whether it were frozen or fluid, might be mixed with the warm pemmican at dinner. Dr. Colan did not recommend that concentrated lime-juice in lozenges should be taken to the Arctic regions till a trial of them has been made of them at home. Sledging in the extreme north is too much a matter of life and death to begin experiment in. As succus taraxaci, succus scoparii, and succus conii, and all the salts of mineral springs on the continent and elsewhere, are best with their natural water of combination, so it may be with lime-juice. Dr. Colan found the citrate of iron and quinine useful in convalescent scurvy patients, owing, perhaps, to some catalytic power in promoting the assimilation of the nutritive part of the food. In case of there being no lime-juice at hand, vinegar, and the citrates, tartrates, and acetates of the alkalies might be given. Preserved vegetables and fruits are, though very inferior, substituted for fresh vegetable food. Still they are very useful. Dr. Colan had a good allowance of them on board ship, and no doubt they did good. Still, there is something lost in the art of preserving (boiling, or pickling, or drying), which we want in scurvy, and after a long time it is doubtful if they would keep off the appearance of the complaint. Their organic principles are not as readily assimilable after they are dried and kept for some time. Dr. A. Marroin, in his *Medical History of the French Fleet*, for 1861, says, "Preserved vegetables retard the outbreak of scurvy, they slacken its course without stopping it altogether, when it has thrown its roots too deeply into the economy." Although well supplied with preserved vegetables, there were at one time 1,000 cases of scurvy in six ships, in Katcha Roads. Some of these ships were sent down the Bosphorus, and were supplied with salads and fruits, and the change effected was almost instantaneous. Beer and wine possess antiscorbutic qualities. Dr. Colan found them useful with sick men. Ardent spirits are more hurtful than good, in scurvy. Dr. Colan thought that fresh meat (raw meat in particular) has some power as an antiscorbutic. The skin of the narwhal and the flesh of the walrus, are believed to have this property. Dr. Kane found the latter useful. When Dr. Colan was able to give his scurvy cases in the summer some musk ox, geese, ptarmigan, and duck, it appeared to do them good, though they may have acted by simply strengthening the system. There may be something in meat recently killed which is antiscorbutic, but which it loses in a short time if kept. Perhaps the lactic acid undergoes fermentation. The Esquimaux eat a deal of blubber which is said to be antiscorbutic, but they suffer from scurvy, and we gave them a quantity of lime-juice at Egedesminde. The American Indians protect themselves against scurvy by putting up for the winter dried plums, buffalo-berries, and chokeberries. Meat ought to be given in large quantity. The American pemmican contains raisins and currants; and one sweet pemmican had currants in it. Milk is supposed to have antiscorbutic properties; It will be found useful when preserved. Instances have been given of men getting scurvy while subsisting on vegetables; but it may be those vegetables had not the antiscorbutic acids or salts, or had not enough of them; and we must know whether the vegetables were eaten fresh or not. It is to be hoped the time is not far off when men will cease to talk of the treatment of scurvy, as well as of typhus and typhoid fevers, finding that preventive measures will be sufficient to prevent their appearance. In these days of quick passages, all steamers ought to carry enough fresh vegetables for all on board, and it would be well to cause all sailing vessels or steamers making long voyages to call in at all available ports for a supply of the same. After the last day's issue of fresh vegetables, lime-juice of the best quality should be issued to all on board, at the rate of an ounce a day, in sweetened water; and, if the voyage were very prolonged, this ought to be increased. If scurvy appeared, as much as six ounces of the juice a day should be given. Persons have got scurvy while taking lime-juice; but many cases are complicated with low inflammations of the lungs, liver, spleen, and muscles, which lime-juice does not benefit. In the far-off Arctic regions, where men, and those the strongest, are exposed to great hardships while living under the most exceptional circumstances possible to meet with, scurvy will always be likely to occur. It would be well if, in addition to limejuice, vegetables, as nearly as possible preserved in the state they were gathered, could be sent, such as raw potatoes preserved in mo-

lasses, or pitted in earth, as in Ireland, the earth being made use of in the valleys in the summer under glass to grow mustard and cress, and perhaps turnips (or their tops). Sheep might in a large number be taken to the edge of the ice, and there slaughtered and preserved in ice for future use.—Dr. DONNETT admitted that he could not speak with equal experience of scurvy, for the cases he had seen were all on land; he had never seen one on a ship to which he belonged. Scurvy was a disease which was to be traced to the absence of a protective element furnished by vegetables, fresh meat, and fish; but in which cold, exertion, or mental depression played little or no part. There was no scurvy, for example, in the retreat from Moscow in 1812 It was not confined to one race, the Lascars, Esquimaux, and Chinese all suffered from it. The debt of gratitude due to those who introduced lime-juice in 1795, he felt only comparable to what was owed to those who introduced vaccination. The amount of scurvy which still existed in our merchant service demanded more stringent inspection of the food on board.—Dr. RAE gave a very vivid account of some of his experiences in the four winters he had spent in Arctic regions. His experience dated from 1834, and had taught him that neither cold, nor fatigue, nor the absence of lime-juice and all vegetables, need cause scurvy. In his first expedition, the crews had eaten venison and ptarmigan; but they had had no lime-juice and no vegetables beyond a little flour. They had had hard work, for they had travelled 1,400 miles, and for about 500 miles had had each to carry 50 lbs. on their backs, and yet had got on at the rate of twenty miles a day, which was twice the pace of some subsequent parties. They had been exceedingly hungry, and had eaten all the bones of their birds, up to the beak and the claws. Still, they had been fortunate in finding sufficient game to live upon, and in being trained from boyhood to kill it. On another expedition, however, when they had not had fresh food, nor any vegetables, and only one little jar of lime-juice, scurvy had done them terrible damage; and their rapid recovery in the spring, when they could get cranberries and wild vetch to eat, was a very striking proof of the value of vegetables.—Sir WILLIAM SMART confessed that, although as a naval officer he had had to study the literature of scurvy, yet he had himself seen very few cases except in the Crimea. There were certainly instances of winters which had been passed in the Arctic regions entirely without vegetables, in which no scurvy had appeared; and he was inclined to think fresh animal food as important an antiscorbutic as vegetables. In the case of the *Investigator*, where scurvy appeared in the second year in Arctic climates, he thought the men's despondency at their long imprisonment had something to do with it. The persistent attempt to keep the air warm, and the resulting damp and foulness of atmosphere, he was convinced, was a strong predisposing cause in the cases of the *Alert* and *Discovery*; and the experience of Ross, who had no fires allowed, and had escaped with no scurvy, was worth noting. Mr. Neale's paper seemed to him of great interest, and likely to lead to a reconsideration of some of the traditions of Arctic life.—Dr. DE CHAUMONT spoke from an experience gained chiefly in the Crimea, and from a few cases he had met with since in the army. He thought the present discussion had certainly shown the value of fresh meat; and he illustrated it by his experience in the Crimea, where, in 1856, after the fighting was over, and his regiment were left for fourteen days very unnecessarily on salt meat only, in order to finish up certain stores which were in hand, symptoms of scurvy began to shew themselves very quickly, for the soldiers were reduced to a state in which the balance of health was very delicately poised. In the case of the Government expedition, he pointed out that the scurvy broke out on the sledging parties, and that the victualling of these was arranged by Sir George Nares, with the insufficient allowance of only two ounces of dried potatoes per man daily, and without any other antiscorbutic whatever. Their work was extremely heavy, and equal to 500 foot-tons *per diem*, 300 foot-tons being a full allowance. Of the pemmican they had with them, they could not eat their full allowance for nausea; and it was not to be wondered at that they broke down. He did not consider that fresh meat by itself was a sufficient prophylactic. Its value was derived probably from the lactic acid it contained; but that was a very small percentage of the meat, and large quantities had to be eaten to get sufficient lactic acid, as was evidenced by the enormous meals of the meat-eating natives. He placed his chief reliance on vegetables, and remarked how often it might be seen in ordinary conditions of life that persistent refusal of vegetables brought on scorbutic symptoms; though, of course, it would be going much too far to say that scorbutic conditions always brought on scurvy.—Sir JOSEPH FAYRER related his experience in the siege of Lucknow, where, after they had been five months shut up under all sorts of miasmatic conditions, vegetables were so eagerly sought after, that a small cruciferous plant which grew on the walls sold for its weight in silver, and many men lost their lives in attempting to get it. The disease from which they were suffering most was scurvy, and that was an instance of the natural craving for a vegetable diet in the disease. At the same time, vegetables were not sufficient prophylactics, for the natives of India, though eating all vegetables, still got scurvy.—Dr. BARNES, having been physician to the *Dreadnought*, and also having spent a year on a merchant ship, had had some experience in the matter. He thought that, if fresh meat were cooked, it would not keep away scurvy. When it was raw, it had almost the same powers as milk; but it needed to be supplemented with vegetables. No government which sent out an expedition without lime-juice could escape a criminal responsibility. In the merchant service, scurvy was a disease of the forecastle, and not of the cabin; and he spoke very strongly of the necessity of making the owners and captains of ships liable to heavy fines or imprisonment if they neglected their duty to the crew.—Dr. RAE pointed out that, in the last records obtained of Franklin's expedition, eight officers had died to fifteen men, so that the officers seemed to have borne their full share of danger and hardship.—Dr. BARNES explained that any remarks he had made applied only to the merchant service.—Dr. BUZZARD rose to ask a few questions of Mr. Neale, and learnt from him that Captain Leigh Smith himself did not have scurvy; that he was not able to take the same food as his men, but fed chiefly on soup thickened with blood; and that the average allowance of vegetables amounted to half a pound a-day on the *Eira* expedition.—Dr. REGINALD THOMPSON gave it as the result of his experience of three months on the prairies that, when meat only was available, a great deal must be eaten, and much exercise taken. He was in the habit, during those months, of eating 8 lbs. of meat a-day, with hard exercise, and felt in excellent health.—Mr. NEALE replied very briefly to various criticisms. Dr. Colan he had understood to say that citric, tartaric, and other vegetable acids were efficient preventives; but he thought that was hardly compatible with the cases that had occurred among the crews of the *Alert* and *Discovery* before they started on their sledging, and very soon afterwards. As to the value of fresh meat, he imagined it probable that it was greater in the Arctic regions than elsewhere, because it was possible to eat it before it had undergone changes which occurred very quickly in warmer climates. The crew that served on the *Eira*, he reminded the meeting, was got together too late in the season to be in any sense a picked crew, as it had been sometimes assumed; they were rather less capable, in fact, than the average whalers.—The PRESIDENT thanked the visitors for their contributions to the discussion, and expressed a hope that any future expedition might be a more scientific experiment than the past had been; for it was only too plain that much was needed before an accurate and thorough knowledge of scurvy would be attained.

Pathological specimens were exhibited of the subperiosteal hæmorrhages found in scurvy, and of conditions of the subcutaneous hæmorrhages; and tables were placed on the walls showing the diminution of scurvy since the Merchant Shipping Act; and the amount of scurvy in the British as compared with the foreign merchant service.

MR. JAMES CALLENDER, M.B., Dunscore, Dumfriesshire, has just been presented with a horse by some of his friends and patients, as a token of their appreciation of his work in the district during the last six years.

THE salary of Mr. Edward J. H. Booth, as medical officer for the No. 5 or Beckenham district of the Bromley Union, has been increased by the guardians, with the sanction of the board above, from £35 to £50 per annum.

BEQUESTS AND DONATIONS.—Mrs. Price of Deptford bequeathed £1,300 to the Royal Kent Dispensary.—Mr. William John Evelyn of Wootton, as a proof of his interest in the Royal Kent Dispensary, of which his father was a vice-president, has intimated that he will add £1,000 to the £2,000 so liberally promised by Mr. Rock and his sister, towards making up £5,000 for the proposed new infirmary, in memory of the late Canon Miller.—The Rev. Charles Bannatyne of Aldham Rectory, Colchester, bequeathed £100 to the Essex and Colchester Hospital, and £100 to the Essex Hall Asylum for Idiots.—The Dental Hospital of London has received £90, the proceeds of a performance by the Romany Amateur Dramatic Club.—Messrs. Crosse and Blackwell have given fifty guineas (additional) to the Middlesex Hospital.—The Mercers' Company have given fifty guineas to the Surgical Aid Society.

CLINICAL SOCIETY OF LONDON.

IDAY, FEBRUARY 23RD, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

Cases of supposed Hydrophobia Treated by Chloral, one of which recovered.—Dr. BROADBENT read reports of these cases. CASE I.—The patient, a boy aged 12 or 13, was admitted into St. Mary's Hospital on February 25th, 1876, suffering from violent convulsive attacks, which had been going on for two days. The paroxysms were ushered in by a loud deep breath, and there was first momentary rigid extension of the body, followed by rapid rotatory movements of the head with loud laryngeal sounds, which lasted two or three minutes, after which the boy moaned and complained of pain in the head. These attacks were at once brought on by an attempt to drink, by the sight or sound of falling water, by the contact of a cold object or pressure on the heart, or by light thrown into the eye in attempts at ophthalmoscopic examination. In the intervals, the boy was conscious and fairly clear in intellect, his countenance was pale and anxious, the skin clammy, temperature normal, pulse 108, small, weak, and hesitating; respiration, sighing. There were frequent extensive jerks of the body and limbs. The idea of hydrophobia had occurred to his parents, but the only dog the boy was known to have played with was alive and well. The boy himself spoke only of the same animal, until directly asked if he had ever played with a strange dog, when he said he and some companions had found and shut up a strange dog, and that it had bitten him on one hand, but he had forgotten which. There was found, however, on the fleshy part between the thumb and finger of the right hand, a small scar surrounded by an extensive induration like that of a chancre. After a trial of nitrate of amyl with no good effect, chloral twenty grains, brandy, one ounce, and beef-jelly two ounces, were given by the bowel every three hours. The boy slept, had only slight occasional spasms, and was soon able to drink milk. On February 28th he was apparently well, and the chloral was suspended; but on the evening of the 29th he had a violent relapse, which continued on March 1st. Chloral was again given till March 11th, when he had been up and running about the wards for several days. He remained in the hospital till April 2nd, and was kept under observation for some time longer. When he was taken to the hospital chapel the first notes of the organ threw him into a state of uncontrollable excitement, with violent throwing about of the arms, and he could not, for a time, bear the sound of barrel organs. The case was submitted to the Society exactly as it was written out, six years before, from the notes of Mr. Jackson Garrett, at that time resident medical officer. If the boy had died there would have been no doubt as to the disease being hydrophobia. The symptoms, while not corresponding in all particulars to those seen in some fatal cases, were extremely similar, and the induration round the bite was corroborative evidence. The circumstances excluded emotional excitement as a cause of spurious hydrophobia, and there was nothing in the boy's previous history or character to suggest that he was a likely subject for hystero-epileptic simulation of the disease. Chloral was given partly because it seemed best adapted, from its physiological effect, to relieve the spasms, partly in the hope that it might rob death, from such a disease, of part of its horror. CASE II.—A healthy girl, aged 13, a month after being bitten by a strange cat, complained of nausea, sickness, and loss of power in the arms, and next day, after feverishness and thirst, became excited and unmanageable, and was brought to the hospital at 10 P.M., July 31st, 1881. She was excited and delirious, but could answer questions; asked for water, but could only take it out of a spoon; after hesitation and with evident effort, it was swallowed with difficulty, and provoked spasm of the pharynx and neck. Chloral and bromide of potassium were given in beef-tea by the rectum. During the night the child became rapidly worse, more delirious and excited, with hawking up of viscid mucus, and complete inability to swallow. She died exhausted less than seventy-two hours after admission. At the *post mortem* examination, there was some congestion of the brain and upper part of the spinal cord, especially in the floor of the fourth ventricle, and sections of the cerebral cortex, and all other parts showed congestion of vessels and a few punctiform extravasations into the perivascular spaces, but no cellular infiltration. *Cases of Pseudo-Hydrophobia: Death.*—CASE III.—A man, aged 26, who had gone through much excitement and anxiety, which had led to more or less alcoholic excess, five years after being bitten by a dog, was suddenly seized with choking while drinking spirits after having given evidence in a court of law; apparently some of the liquid got into the larynx. He was seized with fear that he was going mad. After three days' excitement and sleeplessness he was brought to St. Mary's Hospital on October 25th, 1876, about 10 A.M., in a wild and anxious condition, dreading the approach of liquids, and, in any attempt to swallow, seized with spasms of the pharynx and neck and gasping for breath. He swallowed solids. He could be quieted by firmness, but soon relapsed. Among his complaints one was that he was in a fog and could not breathe, another that he was going to be murdered. He hawked and spat, and pulled at his throat. During the evening, after removal to an isolated ward, he was quieter, and could drink liquids. In the night he slept at times, at others was noisy, and he tried to strangle himself, and to get out of the window. On the morning of the 26th, he was calmer; through the day his condition varied, but at 4 P.M., he was rational and tranquil, and eating bread and milk. Soon after this, the visit of his wife and child brought on a paroxysm of greater and more violent excitement. In the evening he was put under chloroform, and could then both breathe and swallow. The excitement, however, returned, and was followed by exhaustion, and he died about 10.45 P.M. At the *post mortem* examination, fifteen hours afterwards, the *rigor mortis* was very great. All the internal organs, but especially the lungs and kidneys, were congested. The membranes, cortex, and white substance of the brain, pons, and medulla were greatly congested, as was also the spinal cord. There were no embolisms. CASE IV.—The patient, a boy, aged 13½, was admitted January 18th, 1883. He had been bitten by a puppy, three months old, five months previously, on the finger; the wound was cauterised within five minutes, and twice subsequently; the dog was confined, and a week later killed, because it was then thought to be going mad. The boy read all the accounts of cases of hydrophobia he could find, and constantly talked about it. On January 15th he had pain in his back, but up to the 17th had only symptoms of a bad cold. On January 18th he could not swallow liquids or suck an orange; spasms were induced by the attempt. There was an excessive flow of saliva and foaming at the mouth. He started up at times saying he could not breathe, and was excited. On admission the prominent symptom was emotional excitement. He would not allow liquid to be brought near him. The abdomen was retracted and hard. Face flushed and wild. Pulse frequent. Temperature 107°. An enema of gruel and castor-oil was ordered, and after this an enema of beef-jelly, brandy (half an ounce), and chloral (twenty grains), every three hours. Three hours later, he asked for and tried to drink milk. It was with much difficulty that he got the spout of the feeding-cup to his mouth, and when he did so the fluid provoked a most violent spasm of the neck and arms, and great respiratory distress. He afterwards, however, sucked an acid drop, and swallowed the saliva. Respiration, irregular and jerky, 36. Much moaning and whining. Pain and tenderness at epigastrium. The gruel and castor-oil did not return, and the beef-tea and chloral had to be given upon it at 7 o'clock. During the evening and night the patient became more and more excited and violent, starting up, clutching his throat with both hands, beating his head against the wall, screaming, and saying he was choking. The respiration was rapid, catching, and oppressed; the pulse extremely frequent; perspiration pouring off the face; at times convulsive paroxysms of neck and arms. At 11 P.M., after a second enema of chloral, brandy, and beef-tea, he was so violent that restraint by bandages was necessary. At 2.45 twenty grains of chloral were given hypodermically, and the patient slept three hours. At 10 A.M. of the 19th he was quiet, listless, and drowsy, but contact of the hand, or turning down the bedclothes, caused a long deep inspiration. He complained of no pain. Respiration more even; pulse 130, small and weak; temperature 107°. At 11 A.M. the urine had to be withdrawn by a catheter. The amount was sixteen ounces; the specific gravity 1,030: it contained no albumen or sugar, but urates were thrown down on cooling. After this the spasms were slight and unfrequent, but the exhaustion increased. There was much foaming at the mouth. The temperature remained at about the same point. Sordes formed on the teeth. The patient died at 10.25 A.M. on the 20th, about forty-three hours after admission. The administration of chloral was suspended when the spasms ceased, beef-tea and brandy only being given. On *post mortem* examination three hours after death the *rigor mortis* was extremely pronounced. The cerebral meninges, cortex, and white centres were extremely congested. Puncta cruenta were more numerous and large. The membranes over the pons and bulb were milky, and specially congested There was no excess of serum in the ventricle. Nothing noteworthy was found in the chest or abdomen, except two living round worms, in the small intestine just above the valve. The author added that he was convinced the last two cases were not true hydrophobia; that of the

man obviously was not. These spurious cases seem to warrant the assumption that the higher nervous centres might so influence the lower as to create reflex spasms apparently characteristic of hydrophobia. This also afforded an explanation of the connection between the symptoms and appearances—that is, of the relation borne by the dynamic changes which preceded the structural wreck revealed on *post mortem* examination. In answer to the President, Dr. Broadbent stated that the urine of the first patient, the boy who recovered, was frequently examined, and was always found to be normal, containing no albumen, nor sugar.—Dr. DUCKWORTH thought Dr. Broadbent was to be congratulated on the result of his first case; the symptoms of which had exactly resembled those of hydrophobia. He himself recollected a case in which life was prolonged by the administration of chloral, given by the rectum, so that it seemed for a time as if the case were likely to end in recovery, though the patient eventually died. He thought chloral was strongly indicated by the symptoms of hydrophobia, and that it should be given by the rectum with nutrient enemata. If the patient with true hydrophobia were gently blown upon, it was likely to elicit all the spasmodic symptoms of the disease, as did also the noise of water, or attempts to swallow it; thus one might distinguish between these cases and those of malingerers. He thought one might still be hopeful in the treatment of hydrophobia by drugs, if only they enabled one to gain time. Hydrophobia seemed to resemble in some of its symptoms the effects of snake-bite, from which recoveries ensued if the patients could be tided over a certain time.—Mr. PICK felt that he could not assent to the opinion that Dr. Broadbent's first case was certainly one of hydrophobia. There were usually premonitory symptoms, of which one was an aching pain about the wound; but this the boy could not have had, for he pointed first to the wrong hand when asked to show the site of the bite. Then, secondly, there was a preceding period of *malaise*, which had not existed here; whilst, thirdly, between the attacks of spasm there were symptoms of mental terror, which were not present in Dr. Broadbent's case. Some symptoms pointed to its being an instance of hydrophobia; but Mr. Pick could not go so far as to say it undoubtedly was such.—Dr. WHIPHAM had seen cases in the lower animals in which there was no spasm of the muscles of the neck. The first case was that of a sow; she had the premonitory symptoms—the biting of straws and people, but no spasm. The second case was that of a dog, which tried to drink water, but had a distaste for it, and had no spasm. The third case was also that of a dog; the animal looked at the bread-and-milk offered to it, and could not eat it, but had no spasm. There was, in fact, absence of spasm in all these cases when water was offered to them.—Dr. EWART said that two cases of supposed spurious hydrophobia occurring in the practice of the same physician was a curious fact, as the disease was so rare. He thought two points about them were especially remarkable. First, if the virus were communicable, it should be called rabies in man as in the dog. What was false hydrophobia, since every single symptom existed here which was found in the true disease? Proof was lacking that the virus in all cases produced serous infiltration of the nerve-centres. If these were cases of spurious hydrophobia, the spasmodic affection of certain centres nevertheless led to the death of the patient. A test given for the distinction of true hydrophobia from spurious hydrophobia—that the former was incurable, the latter curable—was a method of diagnosis unworthy of scientific medicine, and unphilosophical to a degree. The dog which had communicated the disease to a man to whom it had proved fatal, had been known to recover; so that the tendency of the disease in the dog and man would appear not to be identical.—Dr. LONGHURST inquired what quantity of chloral altogether was given in the case of the boy that recovered.—The PRESIDENT inquired why the first case was said to be one of true hydrophobia, whilst the last two cases were called spurious hydrophobia. The influence which the higher nervous centres exercised over the lower was an element of the case. At the age of thirteen, there was a great exercise of irregular nervous influence.—Dr. MAHOMED asked if it was not incumbent on anyone who had doubtful cases of this kind to inoculate one of the lower animals therefrom, and watch the result; that the diagnosis might thus receive aid. Was the state of the law such, however, as to permit this physiological experiment to be made?—The PRESIDENT thought that certainly the law of the land was now so shaped that, if anyone desirous of making the experiment were to make application for permission to do so, he would be refused.—Dr. DUCKWORTH said that Dr. Lauder Brunton had made such experiments, inoculating dogs with the saliva of hydrophobic patients, the result of which was *nil* on the dog.—Dr. BROADBENT said that, in the case which recovered, the wound was tender. In one of the spurious cases, the bite had been given five years before, and the man had been living a very abnormal life for a long time. In the other cases, the dog had remained well for some time after giving the bite. In the first case, he (Dr. Broadbent) could trace no other chain of circumstances which could lead to the excitability of the boy. He was leading a quiet normal life when his illness began. His wound had the appearance of a hard chancre. The last boy had 220 grains of chloral altogether before he died. He did not know how much of the drug the boy that recovered had taken.

Two Cases of Pseudo-Hypertrophic Paralysis in Adults.—Dr. J. K. FOWLER exhibited two cases of pseudo-hypertrophic paralysis in adults of the same family, and read notes of their cases. CASE I.—H. F., aged 44, a blacksmith's striker, married, ten children. A careful examination of the family history, and especially of the collaterals of the parents, showed that no instances of the disease had occurred amongst them for at least three generations. The patient had had three attacks of acute rheumatism. When a young man, he was remarkably strong. The first symptom of the disease, a peculiar swaggering gait, was noticed at the age of twenty-eight. This was followed, six years later, by a considerable loss of strength and weight. At the age of thirty-six, he began to experience a sense of fatigue in the legs on over exertion, and a difficulty in mounting a flight of steps. He frequently fell down whilst at work, and, when on the ground, had much difficulty in rising again. He continued at work until 1879, when he was admitted into the Middlesex Hospital under Dr. Cayley, and his calves then presented considerable enlargement, whilst the biceps and pectoral muscles were wasted. The patient was a healthy and cheerful looking man of medium height. Intelligence was normal, and there was no affection of special or tactile sensibility. The sterno-costal portions of the pectorals, the biceps, rhomboidei, serrati, latissimi, and erectores spinæ were wasted. The triceps, the muscles forming the thenar and hypothenar eminences, the dorsal interossei, and the external vasti and calf muscles were much and firm. There was no marked talipes equinus; the enlarged muscles generally were weak; the head and shoulders were thrown backwards. There was well marked lordesis of the spine, disappearing on sitting down, the latter movement being accomplished with difficulty. When placed on his back, he was unable to turn over or to resume the erect position. His attempts to do so were characteristic of the affection as seen in children. The patient had kept records of the circumference of his right arm and calf from the age of eighteen; these, compared with the present measurements, showed a diminution of four inches and a half in the girth of the former, and two inches in that of the latter. The electrical reactions, ascertained by Dr. Hughes Bennett, were normal with faradism to the nerve trunks and to most of the muscles; the responses from the affected muscles were much diminished. Galvanism to the nerve trunks gave normal reactions, and also to most of the muscles, but with increased A.C.C. To the affected muscles the contractions were much diminished in quantity and altered in quality the A.C.C. = C.C.C. The knee-jerk was absent. The temperature of the skin over the atrophied muscles was about 1° higher than over the enlarged muscles. Iron, quinine, strychnine, and cod-liver oil had been given without much benefit resulting. Improvement had been observed with arsenic and faradism. CASE II.—Henry F., aged 30, brother of the first patient, followed a similar occupation. In this patient the disease was in a much earlier stage; nearly all movements could be performed without difficulty, but muscular power was weak. At the age of twenty-seven, he was noticed to have a difficulty in ascending a flight of steps, using the banisters to pull himself up. At the same time the arms and legs began to waste. The patient was a slightly built man, intelligent, and free from any obvious disorder. The sterno-costal portion of the pectorals, the latissimi, serrati, rhomboidei, teres, and biceps muscles were wasted; the triceps, infraspinati, external vasti, and muscles of the calf were enlarged and hard. This patient had also kept records of the girth of his right arm over the contracted biceps and also of his calves, from the age of twenty-one; a comparison of these measurements with those taken recently showed a diminution. This patient had not been under medical treatment. The opinion was expressed that these were cases of the same affection seen not unfrequently in children, and first named by Duchenne pseudo-hypertrophic paralysis. Reference was made to similar cases of this disease as it appears in adults recorded by other observers. It was thought that these were the first cases recorded in which the disease had appeared at adult age in members of the same family.—Dr. BROADBENT said the cases were very interesting, and were recorded with most praiseworthy accuracy. He had come

ıe opinion that the hypertrophy was an incident of age, ı support of which he had alluded to two sisters in whom the isease came on between eighteen and twenty, and in whom the ypertrophy was much less than in children. This was also to be ound in Dr. Fowler's cases. He had seen a case coming on in a an about fifty. The disease was that of pseudo-hypertrophic aralysis in all its features except that there was scarcely any ypertrophy. Dr. Ross had described a similar case. He, therefore, ıought the disease common in children prevailed also in later life, ıt that the hypertrophy was an accident of the active growth of ıildhood, while later the atrophy existed, but was not marked by ay hypertrophy in those of less active general nutrition.—Dr. REEN said that the case he had recorded was twenty-two years d, and the disease followed an injury; the hypertrophy there was ery considerable. He thought it was a question whether the wast- ıg was not due to atrophy of the muscle tissue itself, which varied ı different cases.—Dr. EWART mentioned that he recently saw a ıse in which he was in doubt as to the diagnosis, because the ıtient was a woman aged thirty-five, and there was no evidence of arked hypertrophy in any of the muscles; all the other symptoms ere characteristic. He asked Dr. Fowler whether he had met with ıe records of the disease in any other adult females.—Dr. CLARKE ıought it was important to call attention to the diseases of anato- ical units and systems of organs of which this affection was a good ample.—Dr. FOWLER, in reply, stated that the disease was trans- itted to males through females. The enlargement was chiefly due) the deposit of fat in the muscles. There was propressive atrophy receding the hypertrophy.

Before the meeting Mr. Parker showed a child with congenital dis- cation of the hip joints; and a case of obscure lympathic affection f the arm in a boy.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, JANUARY 5TH, 1883.

G. M. HUMPHRY, M.D., F.R.S., President, in the Chair.

Report on the Communicability of Phthisis.—On the suggestion of ıe President, inquiry had been made by post-cards of all the mem- ers of the Society as to this question; and Mr. SHEILD read a short nalysis of the replies to the following questions, already received: Have you known any instances of phthisis being communicated om one person to another?" If none such cases had been ob- erved, the answer was merely "No". In the event of instances of ıe kind having come under observation, the names of the persons oncerned, and their relationship, the dates of their disease and the esult, and the hereditary predisposition, were to be noted by the bserver. To sixty inquiries, but thirty-eight replies were forth- oming, and thirty-four of these were in the negative. The reader rew some conclusions from the negative and affirmative replies, specially pointing out the importance of keeping short notes of ases, and of not trusting to memory alone for past circumstances. In the whole, the experience of the medical men in the neighbour- ood went to prove that cases of communicability were not by any ıeans common, but the question could only be answered satisfac- orily by long, patient, laborious, and trustworthy observation.—Dr. 'AGET remarked that he had no certain experiences to record. He eferred to the old view that a general impurity of the air was pro- luctive of phthisis, and quoted Dr. Guy's report on the effect of ad air on printers. Dr. Guy investigated the conditions under vhich 320 printers worked, and divided them into three categories, iz.: (1) those who had less than 500 cubic feet of air to work in, 2) those who had more than 600, and (3) those who had less than 00 and more than 500. He found that, of the first class, 12½ per ent. had hæmoptysis and bronchitis; and, in the second, 4 per cent. ad hæmoptysis, and 2 per cent. bronchitis, and he concluded that mpurity of the air was more concerned as a cause than infection. —Dr. ARMISTEAD observed that there had been a great decrease of hthisis since cottages had been kept in a more healthy condition, nd sanitary matters attended to, in the district under his supervi- ion, embracing unions with a total population of 80,000. In the lecenniad of 1851 to 1860, the total number of deaths from phthisis had been 2,328, or 14.5 per cent. of all deaths; while from 1861-70, the total was 1,989, and the percentage 12.7; and from 1871-80, the otal fell to 1,461, being 10.2 per cent. The decrease in deaths from phthisis alone had reduced the average death-rate of the district 1 per 1,000 *per annum*.—Mr. LAURENCE HUMPHRY referred to the statistics of the Brompton Consumption Hospital for thirty-six years, with regard to the resident officials, compiled by Dr. C. T. Williams,* and to the statistics of the Hospital for Diseases of the Chest, Victoria Park; he thought that, if there were evidence of phthisis being an infectious disease, it would appear in the greatest degree in consumption hospitals. He did not think that the quoted statistics warranted the conclusion that phthisis was infectious in the ordinary sense of the term.—Dr. LATHAM expressed an opinion antagonistic to the theory of infection; and said, if the theory were correct, there ought to be more cases in support of it.

Thrombosis of Abdominal Aorta and Cœliac Axis.—Mr. MARMADUKE SHEILD showed a specimen of thrombosis of thess parts. It was taken from the body of a woman aged 36. She was admitted into Addenbrooke's Hospital on November 1st, 1882, suffering from well marked gangrene of the right foot and leg; the left foot was also in a state of incipient gangrene. No pulse could be felt below the bifurcation of the aorta on either side, and the gangrene tended to the dry variety. The heart-sounds were normal, but irregular; the pulse weak, quick, and intermittent. A distinct *bruit* was to be heard just above the umbilicus, but there was no evidence of aneurysmal dilatation. At the age of 17, she had had rheumatic fever, and ever since had suffered severely from "rheumatic" pains. Her last confinement was nearly five months ago; she got over it well, and was soon up and about. There was no history of syphilis; this was ascertained with some care. She had been in bed for fourteen days prior to admission with severe "crampy" pains in the body and legs, when, suddenly waking up one morning (October 29th), she found both her legs and feet quite numb, and extremely painful. This marked the onset of the gangrene, which extended until her admission on Novnmber 1st. She remained in the hospital six days, and died of asthenia, the gangrene having progressed on both sides. The arch of the aorta, the cardiac valves, and the endocardium, seemed to the touch and eye quite normal. On the thoracic aorta was a raised wheal-like patch of disease, about the size of a large bean. It felt fibrous, and in some parts distinctly calcareous; and adherent to it was a pinkish-coloured, stratified, tongue-shaped, fibrinous clot. The cœliac axis was firmly blocked by a stratified fibrinous adherent clot, which could be traced into the divisions of the main trunk, and projected some little way into the calibre of the aorta itself. The aortic tube at the origin of the cœliac axis, and also above and below that point, presented other patches of a fibro-calcareous nature. These were very superficial, implicating the epithelioid lining itself. Both common iliacs and their bifurcations were blocked with a firm *ante mortem* clot, similar in character to that in the cœliac axis, only perhaps of more recent date. The clot projected up the aortic tube, and quite blocked the lower part of it. The vessels of the brain were healthy; the spleen was the seat of some old embolic mischief, as evidenced by the white wedge-shaped patches at its surface. The other viscera showed nothing noteworthy. The principal point of interest in the case was the peculiar condition of the aorta. The patches of disease differed from atheroma in their superficial nature; they occurred in a young subject, and the aortic arch, the part usually most affected by the atheromatous process, was here free from disease. Evidently, however, the lining membrane of the artery over the diseased parts had become abnormal, and the blood, which must have had a preternatural tendency to coagulate, had deposited a fibrinous clot upon it. Probably this was the starting-point of embolic processes, which led to the blocking of the cœliac axis, the great iliacs, and, finally, of the aorta itself. The slight visceral disturbance which followed the occlusion of the trunk of the cœliac axis was worthy of note. Although cases of complete blocking of the aorta were recorded, both in the *Transactions of the Pathological Society*, and also by the late Sir James Simpson, yet in no case was the origin of the clots referred to a condition of things like the present. The starting-point of the mischief in most of the related cases was a diseased cardiac valve, or aortic arch, the seat of rheumatic or puerperal inflammation.—Professor HUMPHRY remarked on the rarity of the case, and pointed out that, while atheroma affected the elastic coat of the artery, in this case the calcareous deposit was in the inner coat.

ULSTER MEDICAL SOCIETY.

JANUARY 23RD, 1883.

WM. A. MCKEOWN, M.D., President, in the Chair.

Infantile Diarrhœa.—Dr. HARKIN read a paper on infantile diarrhœa. He gave statistics of the high death-rate from this disease. In one decade in England and Wales, of 4,000,000 deaths registered, 2,000,000 were of children under five years of age, and of

* These statistics will be found, with full details by Dr. C. T. Williams, in the JOURNAL, vol. ii, 1882 p. 618.

these latter a very large percentage was due to diarrhœa. The mortality from infantile diarrhœa was every year on the increase, especially among children under one year of age. He attributed the great prevalence of diarrhœa to the milk-feeding of infants, and the high mortality to the persistence in this diet during the attack. Overcrowding, bad ventilation, heated atmospheres, inattention to cleanliness, defective sewerage, and impure water, all contributed to the production of the disease; but, in hand-fed children, the quality of the milk and the manner of giving it were the chief agents. Milk was usually given too much diluted, and the quantity was excessive. The essential element of treatment was to cut off the supply of milk, even in the case of infants at the breast. Dr. Harkin substituted a diet of beef-tea, arrowroot, to which a little port-wine was added, and Swiss condensed milk. He applied mustard over the abdomen, and in severe cases he put a blister over the liver, because he believed there was always hepatic congestion. Absolute rest of body should also be insisted upon. He generally prescribed dilute sulphuric acid, combined with opium, if there were much griping. With this treatment, he had a very low mortality from infantile diarrhœa.

Sympathetic Ophthalmia.—The PRESIDENT showed two patients suffering from sympathetic ophthalmia. The first was a boy aged 14. His left eye was injured by a piece of metal in May 1882. On the first appearance of sympathetic ophthalmia, removal of the injured eyeball was recommended; but was not performed until the opposite eye became affected with acute irido-choroiditis. Dr. McKeown always found removal of an injured or diseased eyeball, in cases of acute sympathetic ophthalmia, to have a good effect. When the disease was not very acute, the operation was of less service. The treatment adopted was exclusion of light, and the use of atropine and general tonic treatment, with exercise in the open air. The field of vision was now good, and the patient could read the smallest type. The second case was also a boy, aged 10, in whom sympathetic ophthalmia was set up by prolapse of the iris, the result of an ulcer at the sclerotic margin of the cornea. There was no history of syphilis or scrofula, and there was not a single symptom of sympathetic ophthalmia absent. The patient was improving.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, JANUARY, 25TH, 1883.

B. WALKER, M.R.C.S.Eng., President, in the Chair.

Injury to the Knee, with Rupture of Both Crucial Ligaments.—Mr. R. J. PYE-SMITH related the particulars of this case. G. D., a cabman, aged 53, was admitted into the Sheffield Public Hospital and Dispensary on December 25th, 1882, having twisted his right knee in falling from his cab. There was considerable lateral mobility of the joint, and it contained fluid. Pressure was applied by means of an elastic bandage over cotton-wool, and the swelling subsided, leaving extensive ecchymosis. Pneumonia soon developed at the right apex, and was fatal on the eighth day after the injury. At the necropsy, the internal lateral and crucial ligaments were found to be completely ruptured, the latter close to their femoral attachments. The central part of the cartilage of the patella was crushed into fibres, so as to present a plush-like appearance. The joint contained a few small clots of blood. There was no dislocation of the joint, nor injury to the popliteal vessels. The upper lobe of the right lung was in a state of red and grey hepatisation.

Malignant Polypus of Uterus.—Mr. G. S. TAYLOR related this case. The patient, aged 64, had been under treatment for nine years for attacks of profuse uterine hæmorrhage, which lasted for a few days or few weeks. She died three days after the last attack. She menstruated at eleven, married early, and had three children; the last forty years ago. There was always a great loss at the menstrual periods, and no climacteric cessation. No pain was felt, and the discharge between the hæmorrhages was never offensive, and mostly watery. Attempts to explore the uterus brought on excessive bleeding. After death, the uterus was found to be 5½ inches long; the outer surface was smooth, presenting several cushioned projections; the os was soft and patulous. The cavity was almost entirely occupied by a mass somewhat like placenta, and showing large vessels attached at the fundus. The uterine walls were considerably thickened from infiltration. Both ovaries were firm white masses, each of the size of a pigeon's egg. Under the microscope, sections of the uterine growth and the ovaries exhibited the character of medullary carcinoma.

The Nature of Fever-Poison.—Dr. MARTIN read a paper on this subject. Having reviewed some of the theories as to the nature of the infective matter, he expressed the opinion that the phenomen of fever were not produced by the mere presence of germs, bu that they were due to the presence of toxic product dependent upo the existence, growth, and waste of different species of germs in th systems of the patients. The product might be an excretion, o possibly, a secretion. What its chemical nature might be, he di not profess to know. Dr. Martin said that, after his paper ha been written, he had ascertained that Pettenkofer had foreshadowe this view in connection with the subject of cholera.—In the di cussion that followed, the President, Mr. Snell, Dr. Whitelegge, an Mr. Pye-Smith took part, and Dr. Martin replied.

THURSDAY, FEBRUARY 8TH, 1883.

Tumour of Femur.—The Pathological Committee presented its r port on Mr. Pye-Smith's specimen of tumour of the femur, exhibited the meeting on January 11th. The opinion expressed was, that th growth was sarcomatous; it consisted mainly of cells, varying good deal in shape and size, but, in most parts, correspondi pretty much with those of a "large round-celled sarcoma," togeth with a well marked stroma of homogeneous structure surroundi most of the individnal cells.

Silver Plate with Two Artificial Teeth passed by the Rectum.—M WALKER related the particulars of this case. A woman, aged 4 applied at the Rotherham Hospital on July 22nd, stating she h swallowed her false teeth, and that they were sticking in her thro On examination with the fingers, they could not be felt. July 26th, the plate and teeth attached were passed through t anus. The plate measured across about seven-eighths of an inch, a on each side was a fine hook by which it was secured to the oth teeth.

Extensive Scarring of an Infant's Face from Injuries at Birth. Mr. SNELL exhibited photographs, and gave particulars of this ca The child had been brought to him at the General Infirmary l summer, when it was about three or four months old. There w ectropion of both upper eyelids, especially the left, which expose good deal of conjunctiva. In addition to this, the forehead w seamed almost all over with cicatrix, which also ran over t nose, the point of the latter being puckered. On the l cheek was a large semicircular scar running from the n to the mouth; but the right cheek was the most affected, a the right apinna seemed in great measure destroyed and tied do by the surrounding cicatrix. The surface of the head was a scarred. The only explanation was that given to Mr. Snell by t medical man who, called in at the confinement, had arrived la and found a midwife industriously rubbing with a towel the f and head of the baby.

Mediastinal Tumour.—Dr. DYSON showed the morbid specim from a case of mediastinal tumour. A woman, aged 32, mother five children, had been under his care in the Sheffield Public H pital. She stated she had been ill nine months, and attributed to hurrying along the streets with a heavy child on her right a The tumour occupied the mediastinum, and had invaded the wh of the right lung, the left being unaffected. The superior vena c and right phrenic nerve were completely surrounded; the form being only slightly patent. The new growth had also invaded t auricles, and, proceeding down the right side of the pericardium, l exerted considerable pressure on the inferior vena cava. This plained the œdema of the lower extremities, and the immense tension and enlargement of the superficial veins on the abdom The growth had the appearance of a lympho-sarcoma. Growths a similar nature were found in the substance and on the surface both kidneys, in the right ovary, and in one or two places subcuta ously. On the surface of the kidneys and in the right ovary, t growths were caseating and converted into greenish purulent flu The whole period of illness barely lasted a year.

Lead-Palsy.—Dr. PORTER read a paper in which, after referring the prevalence of lead-poisoning in Sheffield, owing to the use o "lead-cushion" in file-cutting, the "lead-bath" in file-hardeni and the "lead-coated wheel," or "lap" in penknife-finishing, quoted from some statistics he had taken among the patients s fering from this disease at the Sheffield General Infirmary, where found that 25 out of 30 cases occurred among file-cutters. He dr attention to the fact that, in this trade, the advent of sympto was generally delayed; thus, in 16 cases, the average time betwe the first exposure to the poison and the first appearance of sy toms, was 14 years; in 8 more, the actual time was not noted; a in 1 case only did they appear directly after exposure. But though their appearance might be delayed for years, or they mi be altogether absent, the usual indications of general ill hea

which preceded them were very seldom wanting. In the 30 cases before referred to, colic had occurred in 27, some loss of muscular power or paralysis in 18, and eclampsia in 2. The characteristic blue line was present in 20; and of the other 10 cases, 6 had not been working in lead for some time, and in 3 more the fact of its presence or absence was not noted. He believed that, when lead-palsy was the only symptom of lead disease, it occurred usually only after long continued exposure to the poison. In 3 cases which came under his observation, one was after 18 years, another after 22 years, and the third after 30 years of file-cutting. Referring to the pathology of lead-poisoning, Dr. Porter alluded to various experiments and researches, and stated that it was still a disputed point whether paralysis was due to anterior poliomyelitis, or affection of the ganglia of the anterior cornua of the cord, or whether it was the result of a general peripheral neuritis, independent of spinal lesion. In conclusion, he insisted on the importance of preventive measures being adopted among those who were unavoidably exposed to the action of lead.—The President, Dr. Law, and Dr. Dyson took part in the ensuing discussion.

YORK MEDICAL SOCIETY.

JANUARY 13TH, 1883.

W. H. JALLAND, F.R.C.S., President, in the Chair.

Tracheotomy in Croup.—Mr. SPENCER read notes of a case of croup, in which tracheotomy was performed. The child did well for three days, but soon afterwards died of bronchopneumonia.

The Uses of Plaster-of-Paris in Surgery.—After drawing attention to a few practical points in the preparation of plaster splints, Mr. JEFFERSON said that the plaster splint was to be preferred to the blue, starch, and others, in the treatment of fractures, because it dried and set quickly, thus securing immobility within a few minutes. His splint was invaluable in fractures of the lower extremities, and in all compound fractures. Ununited fracture of the humerus was probably best treated by the same splint, carried from the hand to the axilla, the arm being kept extended. In simple fractures of the lower extremity, whether attended with much, little, or no swelling, the plaster splint could always be applied at once. In fracture of the femur, where the hip must be included, some difficulty would be experienced in applying the splint, unless something resembling the crane of an hospital bed existed, by which the patient could raise himself. When all swelling had subsided, the splint should be lined with a thick layer of cotton-wool, reapplied and fixed by an ordinary roller. The method of cutting a window in the splint, in the case of compound fracture, was described. To render and keep the wound aseptic, the use of salicylic wool beneath the splint was recommended. Mr. Jefferson read notes of two cases of compound fracture of the upper extremity, treated in the manner described, at the York County Hospital. He also referred to twenty-four cases, in which osteotomy had been performed by Mr. Jalland, at the County Hospital. None of these latter cases required a second dressing; and, at the end of three or four weeks, when the dressings were removed, the wounds, with one exception, were found to be healed. In disease of joints, where rest was required, plaster-of-Paris afforded the necessary support, while it permitted the patient to get about with ease. In the early stages of fungous synovitis of the knee, it had been found valuable, after the limb had been straightened under an anæsthetic. In illustration of the value of Sayre's jackets, Mr. Jefferson mentioned the case of a boy, who had had one of these jackets applied for the fifth time. Eighteen months ago, he had acute pain and tenderness in the lower dorsal region, with slight displacement backwards of two vertebræ. Two large psoas abscesses, one on each side, were opened. These had quite healed, and there was not the least pain or tenderness in the affected region of the spine.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY: ORDINARY MEETING.

FRIDAY, FEBRUARY 2ND, 1883.

W. N. PRICE, M.R.C.S.Eng., Vice-President, in the Chair.

Freezing Microtome.—Dr. JACOB exhibited a new ether freezing microtome designed by himself, and described in the JOURNAL of February 10th.

Pathological Specimens.—Dr. CROOKE showed some organisms found in the fluid taken from enlarged cervical glands during the progress of scarlet fever.—Dr. Crooke also showed sections from a case of scarlatinal nephritis, which illustrated the formation and origin of hyaline casts.

Treatment of Carbuncle by Scraping.—Mr. H. B. HEWETSON read notes of a case of carbuncle occurring in an elderly patient, in which, on the eleventh day of the disease, he had made incisions, and then freely scraped away the diseased tissue, removing also portions of the affected skin by means of scissors. Having washed out the cavity with strong carbolic lotion, he filled it with lint dipped in glycerine of carbolic acid, and applied an external dressing of salicylic silk. After three days, the carbolic dressing was discontinued, the silk alone being used. In fourteen days, the patient, a clergyman, was able to resume duty.—Mr. ROBSON thought that the carbolic acid completed the cure by destroying the germs existing in the walls of the carbuncle.

The Value of Circumcision.—Mr. FLETCHER LITTLE enumerated the dangers to health and morals attending the possession of an elongated prepuce, especially if it were not retractable, and advocated the circumcision of every male child a week or fortnight after birth. He believed that masturbation would thus be reduced one-half, and that venereal affections would become much less common, and the treatment of them much more easy. In childhood, the accumulation of secretion caused irritation, and might lead to masturbation. The prescription of athletic exercises, moral precepts, etc., might be in vain if the elongated prepuce were not removed. The author had seen many examples of this.—In the discussion which followed, the author's views received much support; but it was thought by some that it would be sufficient to circumcise only those children in whom the prepuce was either abnormally long, or who had distinct phimosis.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 7TH, 1883.

D. J. LEECH, M.D., President, in the Chair.

Two Recoveries from Fractures of the Base of the Skull.—Mr. JONES exhibited two patients who had recovered from fractures of the base of the skull. Each had sustained the injury by a fall whilst under the influence of drink. The first patient, on admission, was suffering from severe concussion. Soon afterwards, a clear fluid, having the characters of cerebro-spinal fluid, exuded freely from the left ear. Its flow was preceded by bleeding from the meatus, also by vomiting of blood. With the reaction, signs of cerebral irritation developed, and these were followed by an epileptiform convulsion. There was complete deafness, but no indication of paralysis of the facial nerve. Recovery took place slowly; and now, five months after the accident, the patient might be said to have regained his health. In the second case, symptoms of compression set in soon after the fall. There was hæmorrhage from the right ear, also epistaxis and vomiting of blood. On the second day, a plug of brain-matter escaped from the meatus, and it was followed by cerebro-spinal fluid. The symptoms of compression gave place to those indicating irritation of the brain. Besides deafness, this patient had paralysis of the external rectus muscle of the right eye. Convalescence was tedious, but uninterrupted by any untoward events. The functions of the brain became slowly re-established, but memory remained defective, especially in regard to events which immediately preceded the accident.

Nodose Malformation of the Hair.—Dr. BURY showed a boy, aged 7, who exhibited the nodose condition of the hair, described by Dr. Walter G. Smith, in the JOURNAL of May 1st, 1880. The hair of the scalp was thin, dry, brittle, and very short; the average length of the hairs was from half to a quarter inch, and they all, on close inspection, looked beaded. Under the microscope, the shafts were seen to be made up of alternate constrictions and fusiform swellings. The condition had existed from infancy.

Letter Written During the Progress of an Attack of Cerebral Hæmorrhage.—Mr. BOUTFLOWER mentioned the case of a gentleman who had gone into his study to write a letter, and was found fifteen minutes later, by his daughter, on the floor, but quite conscious, and complaining of great pain in the right side of his head. He became unconscious in an hour, and, when seen by a medical man, there was complete hemiplegia. The greater portion of the letter was written clearly and steadily; the last three lines were hardly legible, and the last two words quite indecipherable. Immediately after this he must have fallen, death ensuing in twenty-eight hours.

Cardiac Lesion with Purpura.—Mr. STOCKS showed a photograph

of the face of a boy aged 14, who had extensive aortic and mitral deficiency for six years, complicated, during the last two weeks of life, with subcutaneous hæmorrhages of a more or less purpuric character. The half of his face, above the level of the lower edge of the orbits, was one large ecchymosis, extending to the roots of the hair on the forehead, mottled in appearance. The face, the alæ of the nose, the ears, the edges of the gums, and other parts of the body were studded with patches of the same nature. Of these patches, some had elevated edges, others were raised with effused lymph; some were mottled, others homogeneous in colour. On none did pressure produce any pain or change in colour, neither did they undergo the changes in colour usual in ordinary ecchymoses. At one time his eyelids were so swollen, that it was impossible to open his eyes. When this subsided, the conjunction was seen to be chemosed and ecchymosed. Some of the spots became flatter, and the colour less vivid, leaving brownish stains on the skin. Four days before his death, a fresh crop of these patches appeared, differing in no respect from the preceding ones. He had had slight hæmorrhage from the bowels at the commencement of the attack. During the day previous to his death, he had increased dyspnœa and slight hæmoptysis. He had the characteristic symptoms of regurgitant heart-disease fully developed. There was no albumen in the urine, nor any history of previous blood disease either in himself or in his family. His temperature varied from 101° to 103° Fahr.

Tubercle-Bacillus.— Dr. DRESCHFELD presented a communication on the diagnostic value of tubercle-bacillus, which was published in full on p. 304.

Typhoid Fever at Newton Heath.—Dr. TOMKINS gave an account of a rather sharp outbreak of typhoid fever which had occurred at Newton Heath, a suburb to the north-west of Manchester, in the latter months of last year. The cases, at the date of his report, had been sixty in number, all having arisen within the preceding six or seven weeks. After inquiry, he had arrived at the conclusion that it was almost proved that the cause had been the opening of a large main sewer, the construction of which was most defective. It was unable to empty itself, was unventilated, and was half filled with a mass of stagnant decomposing sewage; the bulk of the cases were situated in a comparatively small area. The district, previously to this sewer being open, was free from typhoid fever. Within two to three weeks of its being disturbed, cases began to occur, and continued to arise during the whole of the eight weeks during which it was being taken up and relaid, some of the severest and earliest fatal ones being in immediate proximity to it. Not until it had been closed three or four weeks was there any marked decrease in the number of cases. The water-supply was from the Manchester Corporation, and was above suspicion; the milk was also, after full investigation, exonerated.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, DECEMBER, 12TH, 1882.

H. E. CLARK, L.R.C.P.Ed., in the Chair.

Congenital Sarcoma of Abdomen.—Mr. H. E. CLARK showed the specimen. The child from whom it was removed was, at the time of death, about a year old. The tumour had first been noticed immediately after birth, as a slight swelling in the neighbourhood of the femoral ring, and resembled a hernia, but was irreducible. When the child was between two and three months old, a swelling appeared in the inguinal canal, and passed gradually down towards the testicle; it had, at the canal, a diameter of about half an inch, and for some time it did not involve the testicle; its appearance caused the recession of the tumour in the femoral region, which completely disappeared. The growth was not very rapid. About two months before the child died, the abdomen began to enlarge, tortuous veins appeared in the abdominal wall, and rapidly extended upwards to the umbilicus, ultimately reaching the chin. The child began to lose flesh, and to suffer from gripes and diarrhœa, and when twelve months old it died. The *post mortem* examination was made by Dr. Lindsay of Lesmahagow, under whose care the child had been. He found the tumour occupying the greater portion of the abdominal cavity, and involving the whole of the spleen; it also passed down into the scrotum, and involved the testicle. It was free in the abdomen, but at the back was attached by means of numerous vessels to the mesentery, and above was adherent to the transverse colon, and below was firmly adherent to the bladder. All the organs, except the spleen and testicle, appeared to be healthy, but there were evidences of slight peritonitis. The whole tumour was composed of small round cells, with a very small amount of homogeneous matter, the cells entirely agreeing with those distinguishing the round-celled sarcoma.

Scirrhus of the Testicle and Spermatic Cord.—Mr. H. E. CLARK also showed a tumour of two years' duration. It was hard and nodular, and had in front of its lower portion a thick-walled vaginal hydrocele. In its removal, it was found necessary to split up the aponeurosis of the external oblique muscle, and to follow the cord upwards as far as the internal abdominal ring. The operation was performed with antiseptic precautions, and the patient made a good recovery. When last seen, the cicatrix was firm and healthy-looking, and the man was in good health.

Dr. NEWMAN showed microscopic sections of both tumours, and remarked, in connection with the first, that it was not very uncommon to find voluminous tumours in the fœtus, or soon after birth; but usually these growths were composed of more highly developed tissue than in the case shown by Mr. Clark. Frequently, several tissues were represented in various stages of development, so that, in one tumour, there might be muscle, cartilage, bone, epithelium, embryonal tissue, etc. To this class of tumours, Virchow had given the name inatoma. Cases of simple sarcoma in the fœtus or young child were very rare, only three cases having been recorded, one by Charbon and Ledegauck (sarcoma of face), a second by Dawson (sarcoma of thigh), and a third case was published in Virchow's *Archiv*. The case of scirrhus of the testicle was also of interest; it was undoubtedly a rare disease; many of the cases published as scirrhus of the testicle, with insufficient histological descriptions, having rather points of resemblance to sarcomata. Dr. Clark's case was undoubtedly one of scirrhus.

Papilloma of Larynx Removed by Partial Thyrotomy.—Drs. COATS and KNOX showed a papilloma removed from the larynx of a man aged 41. It had been growing for thirteen years from the under surface of the left vocal cord, and was about the size of a large bean. It caused complete loss of voice; and, owing to its extensive attachments, several attempts which were made a year ago to remove it by forceps from above were only partially successful. The tumour rapidly recurred. Dr. Knox accordingly, having performed tracheotomy and inserted a tampon, cut through the cricoid cartilage, the crico-thyroid membrane, and the lower two-thirds of the thyroid cartilage. The tumour was then removed by curved scissors. The vocal cords were uninjured; and, as the upper part of the thyroid cartilage was undivided, they were not in any way displaced. After the operation, the parts fell back readily into position, and no deep stitches were required. A tracheotomy-tube was worn for three days till the inflammatory swelling subsided. In four weeks, the patient was perfectly well, and his voice was nearly restored. Dr. Coats examined him with the laryngoscope, and reported that all the movements of the larynx were perfect. The cords were still red and congested, but moved into the middle line quite in the normal way during vocalisation.

Epithelioma of Larynx.—Dr. KNOX also showed the larynx of a man, aged 26, affected with epithelioma. The disease had been rapid in its progress, and the patient had suffered so much from dyspnœa, that he wore a tracheotomy-tube for some months before death. The interior of the larynx and upper part of the trachea were nearly filled with the growth, the vocal cords and posterior part of the cricoid cartilage were destroyed by ulceration, and an opening had formed into the œsophagus.

Myoma of Uterus.—Dr. CRAWFORD RENTON showed a myoma of the uterus weighing 6½ lbs., which he had removed by abdominal section from a patient aged 35. The tumour was attached by a pedicle. During the operation, the bleeding was controlled by Foulis's tourniquet, and Keith's silk ligatures were passed through the pedicle and tied, the cautery being afterwards applied, and the wound closed. On the morning after the operation, the patient was much collapsed; and, with the approval of Drs. Beatson and Allan, Dr. Renton opened the wound, and, finding the pedicle bleeding, drew it out and applied Kœberle's *serre-nœud* around it, and retained it externally by means of a pin passed across the upper portion. The patient progressed favourably, the clamps separating on the twenty-eighth day.

Dr. M'VAIL showed a perforating ulcer of the cæcum.

DURING the quarter ended December 30th last, ninety-three cases of small-pox occurred in Birmingham, two of which ended fatally. In the corresponding quarter of 1881, not a single case was reported.

THE death-rate of Hove last quarter was only 12.5 per 1,000. Three deaths occurred from zymotic disease, one from diphtheria, and two from diarrhœa. The general death-rate for the year 18[illegible] was 13.6 per 1,000.

REVIEWS AND NOTICES.

...S NAPHTHALIN IN DER HEILKUNDE UND IN DER LANDWIRTH-SCHAFT, mit besonderer Rücksicht auf seine Verwendung zur Vertilgung der Reblaus. Von. Dr. M. D. ERNST FISCHER, Privat-docent der Chirurgie an der Kaiser-Wilhelms-Universitaet Strass-burg. Strassburg: Trübner, 1883.—(NAPHTHALIN IN MEDICINE AND AGRICULTURE, with a separate retrospect in its Employment for the Destruction of the Vine-Parasite.)

(ERE is nothing like naphthalin—such is the burden of this pamph-; nor will the reader feel surprised, since he is already acquainted th the spirit of those works wherein carbolic acid, boro-glyceride, d other chemical agents are extolled by their advocates. This spirit not to be depreciated; the thoroughness of enthusiasts and inno-ors infallibly ensures the experimental application of any new rapeutic agent to almost any possible class of disease, medical l surgical, and it is thus that great discoveries are made. The ire for legitimate publicity on the part of the projectors of new thods of treatment, is an aid to reference for all who wish to see practical working of a new system.

Dr. FISCHER'S pamphlet is a very complete history of the medicinal ployment of naphthalin, from the year 1842, when it was first ommended by Rossignol for both the purposes indicated by the e of pamphlet, down to the present day. In the JOUR-L of November 25th, 1882, we devoted a leading article to subject, dwelling on the chemical and physical nature of naph-lin, and the clinical experiences of our present author, of schütz, and of Djankonoff. This pamphlet presents Dr. Fischer's ady recorded experiences in a collected form. Much is urged in our of naphthalin, especially the simplicity of its application, ich is most convenient when it is used in the form of a powder, dissolved in ether. In price, it is suited for all purposes where maximum of economy is imperative. It appears to be absolutely ocuous when employed in its purest form. Dr. Fischer devotes eral pages to its power of destroying germs, based upon careful eriments. The value of a table of 266 cases treated with naph-lin, in the form of powder, between September 1881 and Sep-ber 1882, is diminished by the admission of three cases of iculi capitis, one of pediculi pubis, and one of pediculi vestimen-m, and the inclusion of cases of whitlow, ulcers of the leg, heroma," "injuries of the head," and other trivial or imperfectly cified conditions; yet, at the end of the list, we are informed t, "among these 266 cases treated in the Poliklinik, no deaths are e found, nor any cases of erysipelas of wounds, or any other gerous complication." Deaths from pediculi are recorded with e confidence by historians than by medical writers. Four cases emoval of "atheromatous" cysts without subsequent erysipelas ld not be very remarkable, and the fourteen cases of "injury of head" require further explanation before they can be held up as imony of the virtues of naphthalin. Thirty-two whitlows, and e cases of phlegmon of the hand without erysipelas, must also se us to reflect. The results in operative surgery appear to have n excellent. The agricultural value of naphthalin is not for us to uss. More experience of this chemical agent is necessary before employment becomes general. That it will be at least more versally employed in a few years than it is at present, no one can bt, and then Dr. Fischer will bear the credit of having been its t authoritative and consistent advocate.

NOTES ON BOOKS.

linical Observations on Two Fatal Cases of Enteric Fever, Com-ated by Biliary Calculi. By ROBERT S. ARCHER, A.B., M.B., h. Univ. Dub., Physician, Netherfield Fever Hospital, Liverpool. printed from the *Liverpool Medico-Chirurgical Journal*, January .)—In this little pamphlet Mr. Archer narrates the history of fatal cases of enteric fever, complicated by biliary calculi, and sses the extent to which that complication may have contri-d to the lesions causing death. Of the two cases (who were, ously enough, husband and wife), the woman died about the nth day of illness, from severe hæmorrhage; the man, about fortieth day of illness, from perforation. In both cases the -bladder was found, after death, to contain numerous gall-stones. either had there been, during life, any symptoms to lead to the icion of their presence, and in neither case was there any *post mortem* evidence of their having caused any mischief. Mr. Archer believes, however, that they may have conduced to the fatal result. He believes that biliary calculi "may be supposed to be accessory to a fatal termination," either (1) "directly or mechanically," where a small calculus may escape into the intestine, and by its irritation cause hæmorrhage or perforation, or (2) "indirectly or by reflex," where the irritation caused by the presence of calculi in the gall-bladder, may add to a "greater or less amount of peristaltic action" in the intestine, and thus increase the tendency to hæmorrhage or perforation. The author, therefore, concludes that "the existence of gall stones in enteric fever is a very serious complication." For this conclusion, however, the cases narrated do not seem to us to afford sufficient grounds. It is, of course, possible that the presence of gall-stones may occasionally lead to serious results, through their becoming dislodged and escaping into the intestine, but we imagine that in the majority of cases of enteric fever their presence will be as harmless as it is in the majority of the total cases in which they occur.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

HYDROSTATIC CATHETER.

MESSRS. MAW and SONS have just completed a little instrument which I have designed for washing out the bladder after lithotrity, or on any occasion when such a proceeding is necessary. The especial advantages which I claim for it are: 1. Facility in use for the operator, who, without aid, can turn on the stream or empty the bladder by a simple movement of finger and thumb, thus obviating the necessity of attaching or detaching syringes or other appliances; 2. Constant and easily regulated pressure of cleansing fluid; 3. Non-liability of injecting air into the bladder.

Fig. 1

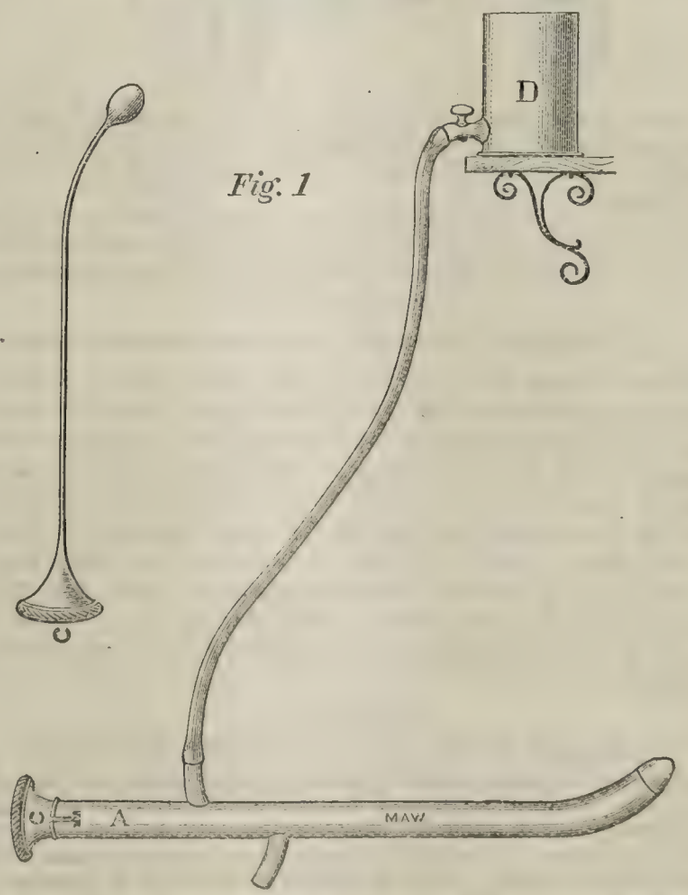


Fig. 1.—Catheter supposed to be in the Bladder, and connected with Reservoir D ready for use.

To put it into use, the stylet (C) is withdrawn, and the valve-ta (B, Fig. 2) substituted. By opening the turn-tap of the reservoir

the fluid to be used flows down the caoutchouc tube, the pressure varying with the height of the reservoir above the operator. In order to direct the stream into the bladder, the valve-tap (B, Fig. 2)

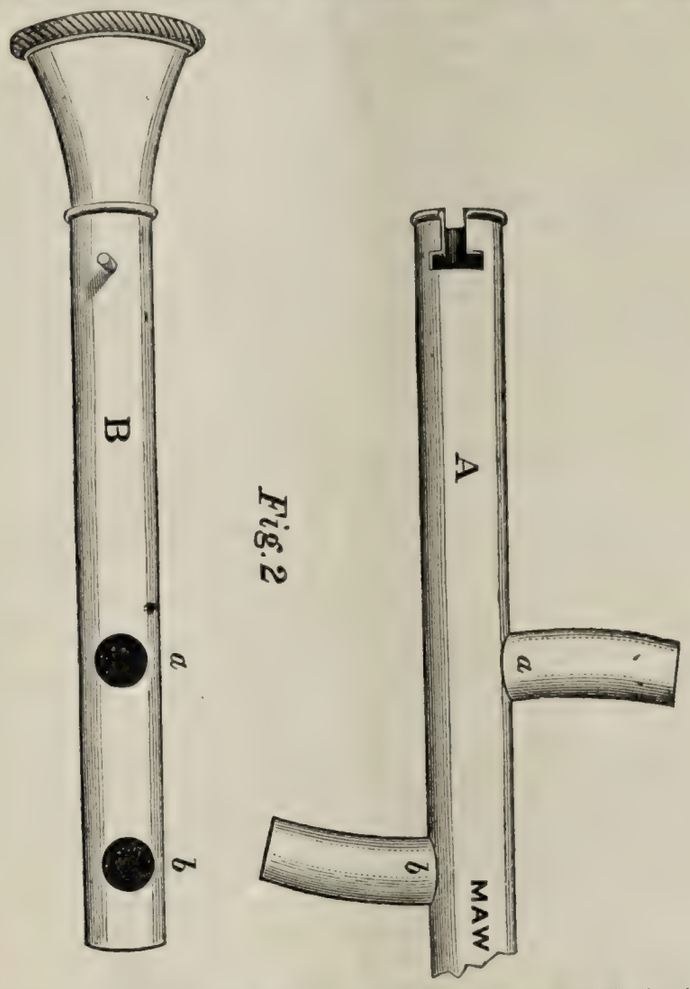


Fig. 2

is turned so that the opening (*a*. B) shall correspond with the inlet-tube (*a*. A); and, to allow the bladder to empty itself, the tap is turned in the opposite direction until the opening (*b*. B) corresponds to the outlet-tube (*b*. A).

The reservoir being graduated, the operator can see at a glance the quantity of fluid injected, and can stop the inflow when he pleases.

R. E. POWER, Medical Officer, H.M.C. Prison, Portsmouth.

CONVALLARIA MAJALIS, AND ITS PREPARATIONS.

MESSRS. SAVORY AND MOORE, 143, New Bond Street, forward to us specimens of extract of convallaria majalis, dose five to eight grains; of liquid extract of convallaria majalis, dose five to twenty minims. They are also makers of convallamarin, the active principle of convallaria, which they have successfully prepared in the form of a pale yellow powder, and of which the dose is from two to five grains; and of a tincture of convallaria, of which the dose is ten to thirty minims. These preparations were made for Dr. Sansom, and were referred to by him as being highly satisfactory in the Lettsomian Lectures, of which we have recently published abstracts.

PARKE, DAVIS, AND CO.'S EMPTY CAPSULES.

THE empty capsules made by Messrs. Parke, Davis, and Co., of Detroit, are admirably adapted for the administration of nauseous medicines, and deserve to be more generally known. It is much simpler to place the requisite dose in one of these capsules, than to make it into a pill, or even to give it in the form of powder. The capsules are made of a pure tasteless gelatine, which dissolves with the greatest readiness. We have given them an extensive trial, and have every reason to be pleased with them. They are made of various shapes and sizes, so that when filled, they may be given by mouth, or may be used as medicated pessaries or suppositories.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 3rd, 1883.

BABY-STARVING.

THE correspondence in progress in our columns expresses the wid interest felt in the vastly important subject of the artificial feedin of infants, while it shows much vagueness and important divergenc of opinion.

During the summer months, the artificial feeding of infants r quires a higher degree of attention and skill on the part of the nur than perhaps in any other period of the year. During the summ months, children suffer more particularly from diarrhœa, which t often depends on improper feeding and adulterated food, so that few remarks on the subject of infant-feeding and condensed mi will not be inappropriate at the present time.

We may summarise, as aids to memory for the benefit of the ov worked busy general practitioner, some important conclusions experienced observers on the great subject of infant-feeding.

1. Milk received directly from the female breast is the natu food for infants. Every other kind of aliment must be regarded artificial, even that drawn from the breast by mechanical means.

2. The results of artificial feeding are usually much inferior those derived from suckling; they may be improved, but can ne equal the natural source whence the infant should derive its nouri ment.

3. During artificial feeding, the first rule to be observed is t relating to the perfect cleanliness of all cups, bottles, etc., employ

4. The value of any artificial food will depend much more on t easiness of digestion than on the quantity of nutritive matter wh it contains.

5. In choosing as a substitute animal milk, we should select t which, in composition and the proportion of nutriment it contai approaches nearest to human milk.

6. The casein contained in different kinds of animal milk va in its degree of digestibility, and the casein of female milk is m readily digested than that contained in cow's milk.

7. Condensed milk is not to be preferred to fresh cow's m when the latter can be procured from healthy animals fed on fodder.

8. The addition of sugar to the milk is liable to promote la fermentation, and to increase the danger of infantile diarrhœa.

9. Every kind of farinaceous food should be avoided during first two or three months, because at that age the salivary gland the mouth digest starch incompletely, whilst those of the panc cannot digest it at all.

10. The majority of infants' food contains starch which has yet been transformed, and hence it is unfit for infants.

11. Liebig's soup is more easily digested by the infant than sw ened farinaceous liquids, because the fermentive element whic contains may assist the transformation of starch into sugar afte gestion of the food.

12. Under an artificial system of feeding, infants take in a m larger quantity of nutriment than they do while suckling.

13. In the majority of cases, acute infantile diarrhœa is produced the formation of an acid in the intestinal canal.

14. The green colour of the dejections also arises from the presence of an acid in considerable quantity in the canal.

15. Inasmuch as lactic fermentation may arise from either kind sugar, this latter, as well as amylaceous substances, should not employed during the course of infantile diarrhœa, whenever the ools are strongly acid.

We presume that, as a general rule, the practitioner will advise east-milk, and when this is defective, or not forthcoming, from y cause, that he will fall back upon the milk of the cow.

Good cow's milk cannot always be obtained. What will be the st substitute? Condensed milk will naturally present itself as ing the most suitable and convenient form of infant alimentaon under such conditions.

Condensed milk, to be of use and to satisfy the requirements of ant life, should possess heat-forming and flesh-forming materials a ratio approximate to that of human milk. Considerable disrete has been brought upon condensed milk by its imperfect manufacre, and by a disregard to those chemical ingredients which render valuable as a food.

Infants may be literally starved, though they are, seemingly, ntifully fed. If a baby be deprived of fully three-eighths of its per allowance of albuminoids, and of three-fourths of its ratio fat, while the sugar and starch are more than doubled, may we say that slow process of starvation is taking place?

We are indebted to the *Chemists' Journal*, December 1882, for an e exposure of a form of adulteration, sophistication, or substitution, result of which, if continued, could not fail to be disastrous to ant life.

There are a number of foreign companies which make and imt condensed milk.

Dr. Stulzer, of Bonn, analysed the milk of a certain company, ich claimed for its milk very superior properties. The following ract from a label on one of the cans of the company sets forth y clearly the claims alleged for it by the vendors.

This condensed milk is superior for infants' food, to even the est of uncondensed milk, because it is uniform in quality, will turn sour, and is not liable to any partial change whatever. For ldings and other cooking uses add about five parts of water to one the milk. . . . For infants, add seven to fourteen parts of water, prepare it immediately before using. Nurses are inclined to ute with too little water."

Remembering the directions, and the laudatory character of the ertisement, let us compare this condensed milk with human and 's milks. It is worked out for us in the following table.

Analysis of Dr. Stulzer, and Dilutions.					Analysis of Frankland.	Mean of 5 Analyses.
nstituents.	Condensed.	With 7 Parts of Water.	With 14 Parts of Water.	Mean.	Human Milk.	Cow's Milk.
eine .	8.79	1.10	0.58	0.88	2.07	4.56
k Sugar	54.22	6.77	3.62	5.19	5.00	4.30
s . .	10.45	1.31	0.70	1.00	3.50	3.57
s . .	1.75	0.22	0.12	0.17	0.20	0.65

Supposing that the nurse dilutes with seven or fourteen parts of ter, we can easily see, by reference to the above table, that the nt is deprived of its proper quantity of casein and fat-elements ntial to infant growth.

The *Chemists' Journal* observes that, singularly enough, the quanies of sugar and salt present are nearly normal, almost tempting to suppose that the deviser of the directions on the label imaged that babies depended almost entirely for their nourishment ugar.

Several letters have lately appeared, in our correspondence, on e ill effects arising from the use of condensed milk. By the light thrown by chemical analyses on one brand of foreign condensed milk, we are not surprised to learn that infants have not thriven well, or done well after operations, when fed on certain brands.

A distinction is necessary before condensed milk should be condemned in a wholesale manner. There are brands and brands. There are makers of condensed milk who have adopted a method of manufacture, which enables them to produce a milk which chemical analysis declares to be approximately like that of human milk. And when such a brand of milk is used, we have strong evidence to prove that infants have thriven upon it—not alone fattening, but gaining in muscle and general vigour. While, on the one hand, nothing can be worse than selling, under misleading statements, a class of food which literally starves the infant—thus bringing discredit upon condensed milk; on the other hand, it would be rash and irrational to expunge from infant dietary all classes of condensed milk.

How is the physician to judge as to the value of the several brands in the market? We think the remedy is a simple one. All makers of condensed milk should be compelled to publish, on the label attached to the can, the exact composition of the milk supplied by them; and should, on chemical analysis, the milk not come up to their own standard, the same punishment should be meted out as is inflicted upon all who offend against the Adulteration Acts,

We might say the punishment should be even more severe, as the interests at stake are so great. Not only are the lives of living little ones sacrificed, but the health and strength of the next generation are imperilled: for it is possible that infants might survive, even though fed on one of the worst forms of condensed milk in the market; but they would grow up sickly and unhealthy, to propagate in due time, equally unhealthy descendants.

M. PASTEUR'S "VACCINE" THEORY.

BRILLIANT as M. Pasteur's experiments are generally recognised to be, and pregnant with interest, both present and prospective, it was hardly to be expected that his theories should be accepted, without question, by other physiologists working in the same lines of study. Dr. Klein, to whom perhaps we owe as much as to any other English investigator, in his particular department of science, has been recently studying afresh M. Pasteur's recorded results, and has been making experiments on his own account, with the result that he finds himself unable to agree, as a general proposition, with the general view of attenuation that Pasteur would propose. The research upon which Dr. Klein has been engaged, and which he is still prosecuting, had for its object, first, to investigate whether and how far the bacillus anthracis undergoes any change, morphologically and physiologieally, when cultivated artificially; and, secondly, whether ordinary bacteria of putrefaction and septic fermentations can, by artificial cultivations, be so modified as, when introduced into the body of an animal, to be productive of disease—*i.e.*, whether it be possible for an innocuous saprophyte to assume the properties of an obnoxious pathogenic organism. His report, which has just been published as an appendix to the annual Blue-book of the Medical Department of the Local Government Board, seems to point to the probability that pathogenic and septic bacteria are either not transmutable the one into the other kind, or are, at any rate, less readily transmitted than has been supposed.

Cultivating disease-bacilli in organic liquids, and in gelatiniform organic substances, prepared in his laboratory, Dr. Klein has found (as Dr. Koch found before him) appearance of changes, both in form and potency, to be undergone by the bacilli. Of some such apparent changes, Dr. Klein shows that they were really due to the presence, in the cultivation-material, of a new bacillus accidentally introduced; and he points out that a mere overgrowth of the one bacillus by the other, as corn may be overgrown by weeds, is not to be confounded with a true change in the original organism, or in its own inherent qualities.

The specific bacillus of a disease, as illustrated by the case of anthrax, has, indeed, in the course of its own proper life, times and occasions of remarkable change in its powers. These are more particularly two. 1. Dr. Klein finds reason for attaching greater importance than had before been assigned to the occurrence of spore-formation in the bacillus. In inoculation experiments with a material containing anthrax-bacilli, it is found that an altogether new virulence is acquired by the material as a consequence of the formation of spores in its bacilli; and Dr. Klein, in demonstrating this fact, is able to show, by some important new observations, that the formation or non-formation of spores in the bacilli is largely a matter of definable circumstance and condition. 2. After several weeks of growth of anthrax-bacillus in any given specimen of Dr. Klein's cultivation-material, the anthrax-bacillus undergoes degeneration; from exhaustion, it would appear, of the pabulum on which it has lived. The change affects more and more threads of the bacillus, and goes on to affect the appearance of the preparation as well under the naked eye as under the microscope. As this degeneration proceeds, the material ceases to injure with certainty the animals into which it is inoculated. But if any effect at all be produced by inoculation of the degenerating material, it is just the same injury, or the same fatal result, as would have been produced on the animal by inoculation of the material before degenerative processes had begun in it. The change is in the number of active bacilli, not in the potency of the several bacilli.

The foregoing changes are those occurring in the course of one cultivation; and in Dr. Klein's observations they are found to occur in exactly the same manner in each of several successive cultivations made by inoculating successive samples of his cultivation-material, each from its predecessor. Through ten, twenty, or thirty cultivations, extending over many weeks, Dr. Klein has grown the bacilli of anthrax at temperatures ranging between 22° C. and 42° C., under conditions especially arranged for securing accuracy and intelligibility of result; and (similar stages of each cultivation being taken for comparison) each successive cultivation has shown him, on the rodents that he has made the subject of experiment, results identical with the cultivation that preceded it. In the course of these successive cultivations, made after the manner that Pasteur and others believe to produce attenuation of virus, Dr. Klein has not been able to discover any indication of such a loss of intensity as shall allow the material of a late cultivation to be put into the body of an animal without killing it, or doing it serious injury, but with the result of thenceforth protecting it against death by anthrax when the poison of the original disease is inoculated into the animal. Thus, Dr. Klein, without throwing doubt on the discovery by Pasteur of a material protective against fatal anthrax in the sheep, would guard against generalising from Pasteur's experience, and against inferring from it that an "attenuated" virus can be had by the recognised method of successive cultivations in organic liquids at 42° C. There is something more than this, he thinks, wanted for the production of Pasteur's anthrax "vaccin," and the conditions for it have not transpired from M. Pasteur's laboratory.

PATHOGENESIS OF PNEUMONIA.

THE pathogenesis of acute croupous pneumonia has, as is well known, been the subject of much discussion for years past. The view of those who have looked upon the inflammatory process in the lung as the local effect of a general disease has gradually been gaining ground, and of late many, especially of the Continental observers, have considered pneumonia as a "specific" fever, and classed it amongst the infectious diseases. Besides the peculiarity of the symptoms (such as the sudden onset, the fever-curve, the quick defervescence while the inflammation is still in its height), the frequent absence of a discoverable cause, and its common association with zymotic diseases, it was chiefly the occasional epidemic character with which it appeared, which lent strong support to th zymotic origin of the disease. Recent observations have still fu ther strengthened this view by the discovery of a peculiar micr coccus in different portions of the lung after death, and also in t fluid removed during life by a subcutaneous injection-syringe fro a patient suffering from pneumonia. As early as 1875, Kle described the presence of a micrococcus in the bronchial secreti and in the ventricles of the brain in cases of pneumonia, which named *Monas pneumoniæ*, and which he believed to be the caus agent of pneumonia (*Archiv für Experiment. Pathologie*, vol. iv, 420). Eberth saw similar micro-organisms in the lung-infiltratio in the pleura, and in the pia mater, in a case of pneumonia comp cated with meningitis (*Deutsch. Arch. für Klinische Medicin.*, v xxviii); and Koch (*Arbeiten aus dem Gesundheitsamt*, p. 46) d scribed and photographed similar micrococci in the capillaries of t lung and the kidneys in a case of acute pneumonia. More extensi observations, however, with similar results, we owe to Friedländ (Virchow's *Arch.*, vol. lxxxvii, p. 319), who found these typi micrococci in all the cases of genuine acute croupous pneumo (eight in number) which he had then an opportunity of examini after death. The method employed consisted either in staini the sections with aniline dyes, after Koch, or in treating th simply with concentrated acetic acid or caustic potash, after hav removed the fat-particles by extraction with chloroform. T micro-organisms resembled, in every particular, those found by other observers, and consisted of more or less oval microco one millimètre in length, usually connected in couples (diplococ occasionally forming longer chains. They were found in very la masses in the alveolar contents amongst the leucocytes and blood-corpuscles, and also in the tissues of the inflamed pleura; in one case they filled completely, and even distorted, the lym atic spaces at the periphery of the inflamed portion of the lung to such an extent, that these lymphatics assumed quite a varic appearance.

In a very recent communication before the Society for Inte Medicine in Berlin, Professor Leyden showed specimens obtai during life from a patient suffering from a severe form of croup pneumonia. A small quantity of fluid, consisting of blood exudation, was removed by a small syringe, and this, on exam tion, showed numerous micrococci, corresponding in size, app ance, and arrangement to those observed by Friedländer, presse between red blood-corpuscles and leucocytes. The patient thirty-six hours after the exploratory puncture; and scrapings the inflamed lung, as well as sections, showed the same microco large quantities. In the discussion which followed, Dr. Gün mentioned a similar case where, for the purpose of a differe diagnosis, an exploratory puncture was made, and where the withdrawn by the syringe contained similar micrococci. The pa died six hours after the puncture (he was moribund on admiss and the hepatised lung was found everywhere crowded with m cocci. Dr. Köbner recognised, in the micrococci exhibited, organ similar to those which he found in lungs of cattle in an epidem peripneumonia bovum; and Dr. Friedländer stated that he now report of more than twenty cases of pneumonia which h amined after death, and where the result was always a positive So far, then, all these observations show that a certain ty micro-organism is found in cases of genuine pneumonia. We as yet, no proof that this really is a pathogenic organism, an cause of pneumonia. Leyden himself states that, in two cases of pneumonia, where, however, the disease had already r course, the fluid withdrawn by puncture showed nothing, and i epidemics of pneumonia—one described by Kühn (*Berl. Wochenschrift*, 1881), where some of the tissues were examin Koch, and the other described by Kerschensteiner, where the c ter of the pneumonia was more of the genuine croupous kind, s for micro-organisms gave negative results. Nor, up to the present

ave experiments with the view of cultivation and inoculation of these rganisms been tried. Further researches are thus needed to eluci-ate the exact relations of the micrococcus to the pneumonic pro-ss. The observations themselves, however, are of considerable nportance, and open out a further fruitful field, both for the athologist and the clinical observer.

THE NEW METHOD OF WATER-TESTING.

E published in our impression of January 6th, 1883, a brief ccount of Dr. Angus Smith's experiment on the development of ving germs in water by Dr. Koch's gelatine process. Dr. Angus mith has now published in the *Sanitary Record* of February 15th, full account of these experiments, so far as he has yet carried iem, together with some interesting photographs of the results btained. There can be no question of the public and sanitary nportance of Dr. Smith's researches. He recognises the fact, now nerally accepted by experts, that chemical testings of water for nitary purposes, how accurate so ever they may be, are and must main, in many respects, unsatisfactory and deficient in informa-on. For that which rules a specific question of the safety or the nger of the water is essentially the source of origin of the organic atter analysed, and described sometimes as indicating previous wage-contamination, sometimes as albuminoid ammonia. That hich rules a specific question of the safety or the danger of the ater, is essentially the source of origin of the organic matter, and s physiological and pathological relations to the human organism. his was abundantly proved by the outbreak of typhoid fever at Cater-m, which was demonstrated to be the result of the contamina-n of the water-supply on one occasion only, by one person, and hich spread typhoid far and wide in the Reigate Valley. In this se, it may be taken as certain that the total amount of lid germs so introduced did not, when diluted by so enor-ous a body of water, add appreciably to the amount of lid contents which, when dried and weighed, the chemi-l balance could detect. Chemical analysis can, indeed, ly suffice to indicate danger when palpably present, though even en the indications supplied might be fallacious; but it is quite capable of determining the question of safety, so far as that estion is related to the presence of specific organic germs of sease.

The highly interesting paper which we publish to-day from the able n of Dr. Percy Frankland indicates how largely chemical research eds to be supplemented by physiological investigation of water. is to be hoped that chemists and sanitarians will follow on the es laid down by Dr. Angus Smith's experiments, and that chemical alysis alone may not be held as conclusive in the case of a polluted ter-supply. Microscopical and physiological research, carried out th the advantages of British and Continental industry and acu-en, will then, it may be hoped, supplement, if not supersede that m of chemical analysis now too much in vogue, and too much ied on, which asserts that sewage-polluted water is innocuous, be-se it is not proven, by some serious outbreak of disease, to be ngerous.

THE COMMUNICABILITY OF PHTHISIS.

E Subcommittee appointed by the Collective Investigation Com-ttee to inquire into the question as to the communicability of thisis, have again, in our present issue, circulated an inquiry er amongst all the members of the British Medical Association, nilar to the one which was circulated a few weeks ago. The ge amount of most valuable information which the first issue of paper has brought them, and which they are now engaged in amining, would alone enable them to present a report, they believe, exceptional value and importance; and the success of this first ue induces them to hope that a second issue of the inquiry paper will bring them still more information, as it may attract the attention of many whom the first, by some accidental circumstance, may have failed to reach, or who, for some reason, have omitted to reply. Nearly seven hundred of the original issue have been returned, and many of these contain striking records of carefully observed cases Members of the Association, in all parts of the world, have manifested their interest in this question by contributing observations and answers are still coming in. It is to be hoped that many may yet be received from our colonial members, who may have had opportunities of watching the progress of the disease in our young and distant colonies.

The affirmative answers naturally attract the greatest interest; but negative replies, with regard to cases which have been surrounded by circumstances which might have favoured communications, are, it need scarcely be said, of almost equal value; while simple negatives have also their importance, as affording evidence, at any rate, of the relative frequency with which cases, supposed to owe their origin to infection, have been observed.

We would also suggest that members who have cases *now* under observation should inquire into the possibility of their having had an infective origin. The Association may be congratulated on the success which has attended this particular investigation, which will afford the materials of a Report in every way creditable to the Association, and indicative of its scientific earnestness and practical vigour.

We would, in conclusion, ask those who hesitate to take the small amount of trouble involved in this return, to reflect for one moment on the amount of labour which the examination of these reports entails on the members of the Subcommittee charged with this inquiry—all men busily engaged in public and private professional work, and who yet cheerfully devote themselves to the task.

THE Prince of Wales will preside at the sixty-ninth anniversary dinner of the Royal Hospital for Diseases of the Chest, City Road, to be held in May next.

PROFESSOR BELL PETTIGREW has recently been reappointed by Her Majesty to represent the Universities of Glasgow and St. Andrew's in the General Medical Council. He has represented these Universities since 1877.

THE Convocation of the University of Oxford has conferred the degree of Master of Arts upon John Burdon Sanderson, F.R.S., Fellow of Magdalen College, and Waynflete Professor of Physiology in the University.

THE usual sitting of the Congrès des Sociétés Savantes will take place in Paris on March 27th, 28th, and 29th next. The Minister of Public Instruction will preside over the concluding meeting on the 30th.

AT Burnley, a very influential public meeting, convened by the Mayor, has been held, at which it was decided to establish an infirmary. It is proposed to have forty beds, and to raise £10,000 for the purpose, towards which £7,000, in addition to a site of two acres, has already been subscribed.

THE hospital returns from Cairo, for the past week, show a marked improvement in the health of the troops. The total force in the country numbers 10,008, of whom 698 are sick—an average of 7 per cent. This proportion is only exceeded in the cavalry, of whom 8½ per cent. are under medical care.

DIPHTHERIA IN ITALY.

A TELEGRAM from Sierra di Falco, near Caltanisetta, in Sicily, where diphtheria is at present epidemic, says that the inhabitants are in a great state of excitement, superstitiously believing—as the Milanese did during the great plague three centuries ago—that the malady is being disseminated by poisoners. An unfortunate pedlar, suspected of being one of these evil-doers, has been seriously maltreated, and barely escaped with his life.

HER ROYAL HIGHNESS THE DUCHESS OF ALBANY.

THE auspicious event of the accouchement of H.R.H. the Duchess of Albany is a source of great pleasure and congratulation. His Royal Highness the Duke of Albany has not only won the hearts of his countrymen by his invariable kindness and sympathy with all good objects, but has in an especial manner shown himself an able, eloquent, and thoughtful patron of scientific and literary progress. Prior to the happy event, there had been some natural anxiety among the many attached friends of the Duchess, as her health had been slightly affected. Happily, we are able to announce that both mother and child are doing well; so much so, that we learn that to-day (Thursday) Dr. Matthews Duncan is not expected to visit Windsor.

ERICHSEN TESTIMONIAL.

FROM a circular issued by Mr. Meredith, honorary secretary, we learn that the presentation of the testimonial to Mr. Erichsen will take place at a public meeting, to be held in the Botanical Theatre at University College, on Saturday, March 10th, at 2.30 P.M., when the chair will be taken by Professor Marshall, F.R.S. The committee hope that as many of the subscribers as possible will be present on this occasion. The successful issue of the labours of the committee is a satisfactory proof of the high esteem in which Mr. Erichsen is held, among the members of the profession, as a surgeon who has made himself equally distinguished for skill in the operating theatre; for the highest literary and teaching abilities, as evidenced by the well-known text-book that bears his name; and, lastly, for that unfortunately somewhat rare virtue, studied courtesy to candidates at examinations.

THE HAMMOND PRIZE.

No essay of sufficient originality having been sent in, the American Neurological Association are again offering the William A. Hammond Prize for universal competition. The prize, which consists of a sum of 500 dollars, is to be awarded to the author of the best essay on the "Functions of the Thalamus in Man," and is open to all nationalities. The essays which are to be based upon original observations and experiments upon man and the lower animals, must be written in the English, French or German languages; if in the ast, the manuscript is to be in the Italian handwriting. Essays are to be sent to Dr. E. C. Seguin, 41, West Twentieth Street, New York City, on or before February 1st, 1884; each essay to be marked by a distinctive device or motto, and accompanied by a sealed envelope bearing the same device or motto, and containing the author's visiting card. The successful essay will become the property of the Association. The award will be publicly declared by the President of the Association at the meeting in June, 1884, and the amount of the prize will be given to the successful competitor in gold coin of the United States, or, if he prefer it, in the shape of a gold medal bearing a suitable device and inscription.

BIRTHS AND DEATHS IN FRANCE IN 1881.

THE official returns, showing the births, deaths, and marriages registered throughout France during 1881, have now been published. The results shown are favourable, from the hygienic point of view, as the increase of births and marriages is accompanied by a decrease in the deaths. The births numbered 937,057, against 920,177 in 1880; the deaths, 828,828, against 858,237; or an increase of 108,229 births over deaths, as compared with 61,940 in the previous year. The legitimate births were 444,972 males and 422,00 females, against 434,862 and 417,088 respectively in the previous year. The surplus of males over females thus increased from 17,77 to 22,966. The illegitimate births were 35,589 males and 34,49 females, against 34,319 and 33,908 in 1880. The marriages numbered 282,079 in 1881, and 279,046 in 1880. In 67 departments France the births exceeded the deaths; in 20, the contrary. Th proportions also differ widely; in the department of the Nord, wit a population of 1,594,080, the births exceeded the deaths by 15,89 in the Seine (Paris), with a population of 2,762,537, the surplus w only 3,045. The excess or deficiency of births compared wi deaths, is not always affected by the wealth of the departmen for among those in which there is a surplus of deaths are some the richest as well as the poorest. Among the wealthy is the Sein et-Oise, which forms an outer circle around Paris, including Ve sailles, and may rank as one of the most prosperous, and in whic with a population of over half-a-million, the deaths exceeded t births by 1,088.

INTERNATIONAL MEDICAL CONGRESS, 1881.

DURING the visit of the International Medical Congress to Lond the Baroness Burdett-Coutts gave a garden party to a large numb of the members of the Congress, and Mr. A. P. Tilt has painted the Baroness a picture in memory of the event. The scene represe the garden of Holly Lodge, and, grouped about the hostess a host, are a large number of gentlemen, and a few ladies. In crowd of about a hundred figures, it is easy to recognise ma familiar faces, and some of the portraits are striking likeness we would especially instance those of Sir William Mac Cormac, Spencer Wells, Dr. George Johnson, M. Charcot, and Profes Donders of Utrecht. Of the general design of the picture it is possible to speak in very high praise. No doubt, the artist had v serious difficulties to contend with; owing to the number of pers who had to be represented, the canvas is very much overcrowd and the ungainly dress to which modern fashion condemns us d not easily lend itself to artistic treatment. The picture, howe from the number of portraits which it contains, is an interesting mento of an important event.

THE MICROPHYTE OF YELLOW FEVER.

DR. CARMONA DEL VALLE believes that he has detected the m phyte characteristic of yellow fever, and proposes to name it *p nospora lutea*. The germs of the cryptogam are found in patient's excretions, and in the fluids of the organism, especially blood and the serous discharge resulting from blisters. Dr. Carm del Valle has also discovered in the matter vomited, besides sp a large quantity of mycelia of various colours, black predomina The *vomito negro* (black vomit), according to this author, is d the presence of these black mycelia; and the blood has not an fluence on the colour. In urine, he has observed small yello granules, which give birth to spores. If rabbits or dogs be inje with this urine, they exhibit febrile symptoms, with increase of perature, which last two or three days; and the urine of the ani under experiment presents the same kind of granules as those obs in that of yellow fever patients. Animals which have once been jected to injection resist the effects of a second. In order to rend animal exempt from yellow fever, it is sufficient to inject into small quantity of distilled water containing the specific fung the disease. The spores of the *peronospora lutea* are present i urine of yellow fever patients for a length of time after the covery. Their presence, Dr. Carmona del Valle believes, is the r why such patients are not subject to a second attack. To tes amount of danger of prophylactic injection, Dr. Carmona del

performed it on himself without any bad result; his urine, however, for some time contained the characteristic granules.

BRITISH PATENT MEDICINES ABROAD.

THE subject of patent medicines is just now engaging the attention of the British Embassy to the Quirinal, and considerable modifications in the rule regulating their importation into Italy are likely to be introduced. The Consiglio Superiore di Sanità (the Upper Sanitary Council) of Italy has just passed a resolution regulating the importation of patent medicines into the kingdom, which is of consequence, not only to the patentees more directly interested, but to a certain extent also, to the English and American travelling public. A list of the foreign patent medicines admissible has been drawn up, all of which are French with two exceptions, Holloway's Ointment and Anderson's Ointment for Horses, a patent made by an English firm established in Florence. To this list an addendum was made permitting the importation of a few more English patents, including Dinneford's Fluid Magnesia, Henry's Solution of Magnesia, James's Horse Blister, Churchill's Syrups, and a few more, but excluding such well known preparations as Chlorodyne, Lactopepine, Cockle's Pills, the syrups of Parish and Fellowes, Eno's Fruit Salt, and other patent medicines much used by our countrymen.

A PURE ALKALOID FROM THE GELSEMINUM SEMPERVIRENS.

GELSEMINUM has always been a rather disappointing remedy; highly successful in one case, it yet fails completely to give any relief in another, and apparently similar, case; hence it has come to be very generally regarded as untrustworthy. Some of this uncertainty may probably depend on variations in the purity or mode of preparation of the tincture or extract. Wormley and, subsequently, Sonnenschein, had obtained from the root an alkaloidal substance named gelsemine, but this body was apparently not pure, and did not yield crystalline salts. In a paper read before the Pharmaceutical Society on February 7th, Mr. A. W. Gerrard described a process by which he has obtained a pure crystallisable gelsemine, which yields crystalline salts. It is colourless, and gives no colour-reactions with nitric or sulphuric acid, so that in its chemical behaviour it bears a pretty close resemblance to strychnine; its formula is $C_{12}H_{14}NO_2$. There seems to be little doubt that this is a stable constant body; and as Mr. Gerrard details the various steps of the process by which it may be obtained, with fulness and precision, there is no reason why the alkaloid should not become an article of commerce, and gradually displace the imperfect and inconstant preparations at present in use in pharmacy.

PRACTICAL APPLICATIONS OF KOCH'S DISCOVERY.

DR. GAIRDNER, of Glasgow, is of opinion that the practical applications of Koch's discovery are to be looked for chiefly in two directions. First, in that of prevention. "This discovery," he remarked at the Glasgow Medical Society, "imposed on medical men the necessity of looking to the observance of the most scrupulous cleanliness. They must have clean hospitals, clean wards and walls, clean rooms and floors. More than ever must this now be the order of the day. They must keep in view that no man was safe unless he got everything round him as clean and as pure as could possibly be managed. Another possible direction in which what they had learned might be applied (though the question was so obscure that probably even Koch would not push it), was in making experiments to ascertain whether the tubercle-bacillus could be cultivated to a milder form. Were this possible, the question might arise whether, as in the case of small-pox and anthrax, the milder form might be utilised as a prophylactic against the more virulent form. In the matter of cure, too, attempts must be made to apply the discovery. For the next year or two, there would be a run on the indiscriminate use of antiseptics in the treatment of phthisis; and probably this would result in disappointment. But this ought not to discourage them, as they might feel sure that, whatever residuum of utility there existed in the antiseptic treatment of phthisis, would eventually be made clear."

FUNCTIONS OF THE PHRENIC NERVE.

MM. HÉNOCQUE and Eloy have made a series of experiments to determine the function of the phrenic nerve in the act of respiration. The results obtained lead them to arrive at the following conclusions. Tearing or section of the inferior intercostal nerves does not perceptibly modify the respiratory tracings during the first few moments following the operation. Section of one of the phrenic nerves, after tearing out the intercostal nerves, modifies the respiratory rhythm of both sides. The tracing of the contractions of the diaphragm, stimulated by one only of the phrenic nerves, and the inferior intercostal nerves of the same side, presents the characteristic aspect of Marey's tracing of the thoracic movements, performed when the subject breathes through a tube. Section of the inferior root of one phrenic nerve does not markedly modify respiration; there is a slight acceleration, but, after section of the phrenic nerve on the other side, the rhythm becomes identical on both sides, and the respiration is weaker. Section of the superior roots of both phrenic nerves produces important modifications in the respiratory rhythm, and an increase of amplitude in the respiratory movements, lasting more than three-quarters of an hour. Section, tearing-out, constriction, and ligature of the upper filament of the phrenic nerve, are all very painful.

PATHOLOGICAL CATALOGUES.

IT is satisfactory to find, from the new volume of the *St. Bartholomew's Hospital Reports*, that the Museum Committee have decided upon facilitating reference to their large and rapidly increasing collection, by an arrangement even superior to that introduced by Professor Flower in his annual report of the Museum of the Royal College of Surgeons. It has been resolved that a descriptive list of new specimens added to the Museum of St. Bartholomew's Hospital shall be annually printed in the *Hospital Reports*, with the object of keeping the catalogue constantly up to date, and of supplying some information as to the progress of the museum. This resolution has been already carried into effect, and Mr. Eve and Mr. Bowlby have prepared a list of this kind, including descriptions of all specimens added to the museum since the publication of the new catalogue. Only a few months since, we strongly urged the advisability of frequent publication of supplements of this kind, in a leader on Museum Catalogues. We must congratulate the Museum Committee at Smithfield on the steps which they have taken, and trust that their example will be followed by all who have the charge of similar collections. In hospitals where no annual or occasional "reports" are published, the frequent issue of a few printed sheets will prove quite sufficient for the purpose of facilitating reference to their pathological museums.

ARSENICAL POISONING.

THE Foreign Office has, at the request of the National Health Society, 44, Berners Street, addressed a communication to its representatives abroad, desiring them to report on the existing legislation in continental countries with reference to the precautions and restrictions imposed on the manufacture and sale of articles in which arsenical pigments are employed. A committee, including Dr. Lauder Brunton, F.R.S., Professor Heisch, F.R.S., Dr. Farquharson, M.P., Dr. Cameron, M.P., Lieut.-General Cotton, C.S.I., Mr. J. Hogg, Mr. Carr, Mr. J. C. Whittle, and Mr. Ernest Hart, with Dr. Willoughby as chairman, has been formed in connection with the society, for investigating the subject of arsenical poisoning in respect to the use of arsenical pigments, paper-hangings, dress-fabrics, and other materials in daily use, and their deleterious effects on health. Re-

ports have been prepared by Dr. Lauder Brunton, F.R.S., and Professor Heisch, F.R.S., on the medical, chemical, and sanitary aspects of the question, and a Bill has been drafted with the object of requiring that, in the case of articles manufactured with arsenical pigments, due notice should be given to the purchaser. A considerable body of information was laid before the committee, showing that the use of arsenical pigments was not confined, as was popularly supposed, to the preparation of green colours, but that numerous cases of arsenical poisoning had occurred in families living in rooms hung with mauve, red, fawn, and other coloured paperhangings in which arsenic was freely used, and from which arsenical powders floated into the air.

DILATATION OF THE NECK OF THE UTERUS.

M. CHASSAGNY of Lyons, in a communication made to the Paris Academy of Medicine, describes his method of thoroughly plugging the vagina, and producing rapid dilatation of the neck of the uterus. He places in the vagina a bladder, with which an India-rubber tube is connected; this, with the help of a siphon, conveys into it the water contained in a receptacle placed about two feet and a half higher than the pelvis of the patient. The bladder becomes distended by the water, and soon fills the vaginal cavity. This brings on abundant secretion, and induces energetic contractions, resulting in the physiological dilatation of the os uteri, which is quickly completed by the mechanical action of the bladder. The bladder is placed in the vagina, and the occlusion of the vulva is obtained by means of an apparatus which M. Chassagny calls the *Elytroptérygoïde* (wings in the vagina). It consists of a cylindrical speculum, which holds the bladder; this is forced out as the water enters, and the act of distension separates the valves of the speculum, which, resting on the sides of the pelvis, prevent the expulsion of the apparatus and of the bladder. M. Chassagny mentions, in his pamphlet, several instances of induced premature labour, in cases of contracted pelvis, obstinate vomiting, eclampsia, etc. M. Chassagny describes two cases of vicious insertion. In both cases, he induced labour before the natural period by having recourse to rapid dilatation. There was not the slightest hæmorrhage, and two living infants were born. In another case, where the mother was in the last stage of suffocative catarrh, M. Chassagny effected, in half an hour, the safe delivery of a living child. The mother rallied for a few moments only. In *post partum* hæmorrhage, the bladder, by completely filling the uterine cavity, closes the openings of the vessels, and, by artificially restoring the pregnant state, determines uterine contraction. The water in the bladder slowly flows away, until the uterus is thoroughly contracted.

OFFICIAL INSPECTION OF EMIGRANTS.

THE importance of due examination being made of all emigrants previous to their departure from this country has already received the attention of the Local Government Board, who, some time since, instructed Dr. Blaxall, one of their medical inspectors, to inquire into the circumstances in which these people are placed previously to their departure, particular inquiry being made as to their vaccination and protection from small-pox. The experience of American boards of health has taught them that small-pox has been introduced into their districts by immigrants coming from ports where the disease has been known to exist. In most of these cases, their exposure has not preceded the sailing of the vessel for more than a day or so, and the disease has seldom been manifested until after the exposed persons had passed quarantine inspection at the ports of entry, when it would break out either while they were in transit by the railroads, or after their arrival at various distributing centres in the western States. The dissemination of small-pox by these means became so serious, that the National Board of Health prepared some further regulations for the inspection of immigrants; and these came into operation in May last. Officers are appointed at the prominent seaports, and, at the railway centres, to examine immigrants, and ascertain their condition as regards vaccination. If the person examined be found to be satisfactorily vaccinated, or if, being unprotected, he consent to be vaccinated, he is furnished with a protection card, which stands good until the next inspecting station is reached. Here the immigrant is again examined, and, if the previous vaccination have failed as frequently happens, he is revaccinated. So he proceeds until he reaches his destination. This system is stated to have been productive of good results. In Illinois alone, where fully 1,500 immigrants are passing through the State every day, one-third were generally found susceptible of the disease, and capable of propagating the contagion. It is further alleged on behalf of the system that, had it not been in force, at least thirty separate cases of infection would have been developed in Illinois, while but one solitary importation of the disease has, up to the present, come to notice.

CORONERS.

SOME unfortunate and conspicuous examples have lately again drawn public and professional attention to the more obvious of the numerous anomalies and anachronisms in the procedure and privileges of the coroner's court. Essentially and solely an official inquiry into the cause of death, the extent, scope, and end of such inquiry, if we may judge from some recent painful instances, seem to be neither governed by adequate precedent, nor ruled by intelligible principle, but rather to be arbitrarily determined by particular exigencies and side issues of questionable convenience or adventitious curiosity, so that in one case the investigation is degraded into a worthless farce by its brevity and incompleteness, while in another it degenerates into an extended public scandal by reason of its idle multiplication of irrelevant trivialities. The time has come when the whole question of the mode of appointment, office, powers, prerogatives, duties, and jurisdiction of coroners, requires examination and revision by competent authority, with the view of initiating legislation, which shall remodel and consolidate existing laws on the subject, and bring the ancient functions of the coroner into harmony with the wants and knowledge of our day. The considerations, which intimately concern public security of life and reputation, are important and pressing, and must soon receive responsible and sufficient settlement. It may be profitable for us at present to again ask the attention of the profession and the legislature to some admirably suggestive resolutions on the office and duties of coroners which were adopted after inquiry, about six years ago, by the Council of the Social Science Association, and presented by that body to the Home Secretary of the time, but, without so far as we know, any action resulting from the proceeding. The resolutions are these:—"1. That, in the opinion of this Council a Parliamentary inquiry into the mode of appointment, the office, duties, and jurisdiction of coroners is imperatively demanded. 2. The Council draw attention to the fact that the office of coroner is one of high antiquity and high utility; that it has been the subject of much and intricate legislation, and has come, in process of time, to be attended with inconveniences in respect of the contingencies by which the coroner is elected, the manner of election, the mode of administration and procedure, the place for holding the court, as well as many points relating to functions, procedure, and responsibility. The Council are of opinion that, in consequence of various social changes since the time of the original creation of the coroner's office, the expediency of obtaining a coroner's inquest either at all or in its present form, the existing relations of the coroner to the justices of the peace, the provision for the attendance of expert witnesses, have become matters requiring fresh and special arrangement. 3. That the question of inquiry into the causes of fires is one of urgency, and should be considered in regard to the appointments, duties, and functions of coroners."

THE METROPOLITAN POLICE.

UDFIELD draws attention, in some recent reports, to a matter h is of serious practical importance to the general public. A e-constable of the A Division had continued on duty all through llness of his two children from scarlatina. It was stated that ad the authority of his divisional surgeon for so doing, the on not having recognised scarlet fever, which may possibly been in an unrecognisable phase at the date of his single There was, however, no question as to the nature of the se, as the process of peeling went on as usual. The constable ed to allow the children to be removed to the hospital, though could not be properly isolated at home. As Dr. Dudfield points not only is it desirable, in the interests of the sick themselves, such cases should be removed to hospital, but it is also for the c interest in a sanitary and in an economic point of view; for retention of cases at home, when they cannot be isolated, is erous to the public, who, moreover, are called upon to pay wages the men cannot render services, as they are not allowed, as a to go on duty while infectious disease prevails in their resi- es. It is particularly important, therefore, that notification of ch cases should be at once given to the health-officer, and that olice authorities should co-operate earnestly in efforts to isolate of infectious illness occurring in the families of police-officers. matter does not appear, however, to be yet thoroughly under- d by the police commissioners, if we may judge by orders which have recently issued. On March 7th, 1882, divisional surgeons instructed, on the occurrence of infectious disease (defined to de small-pox, typhus, scarlet-fever, and diphtheria) in the resi- e of a police-officer, "to visit the premises to verify the fact, o see that the parish authorities receive due notice, so that the s and their contents be properly disinfected." The surgeons lso to report whether, in their opinion, the case ought to be re- d to a fever hospital. Where the surgeon thinks it necessary a police-officer, in whose residence infectious disease has broken should be absent from duty, leave is allowed by the commis- rs on the surgeon's certificate from week to week. By a second , dated November last, the surgeons are instructed to see that e of such cases is received by the medical officer of health, as as all other parish authorities. On January 3rd, however, it ordered that "when the divisional surgeon reports that he con- s a member of a police-officer's family ought to be removed to ever hospital, the case is to be reported to the parochial authori- Certificates of admission to the fever hospital are to be issued lice-officers only;" thus leaving to the parochial authorities the nsibility of removing infectious sick members of the officers' ies. The precise object of the last issued memorandum is not , unless it is to relieve divisional surgeons from the obligation port cases of infectious illness when the sick can be safely ed at home. Such cases, having regard to the circumstances of e-officers' families, would be very few in number. By this new , it would appear that notification is now to be sent to the hial authorities only when the divisional surgeon is of opinion the sick person ought to be removed to hospital. This change, be one—for the language of the order is ambiguous—is clearly he worse, and it would be well if an inquiry were made in ment on the subject.

INDIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

North-West Provinces and Oudh Branch, a new Branch of the h Medical Association, is admirably represented in the pub- serial *Proceedings* of the Branch, which appears in a monthly and of which the December number is before us. The first al meeting of the Branch was held on December 14th; Deputy on-General J. Hendley, C.B., President for the Command, in hair. The President, in his introductory remarks, expressed reat satisfaction that this Indian Branch had been so cordially received by the authorities of the British Medical Association at home, and that it was now in union with the great Medical Association which numbered no fewer than 10,000 members of the British profession at home, in India, and in the colonies, which had done so much to foster the best interests of the profession, and to promote good fellowship, friendly intercourse, and *esprit de corps* among medical men. They were all indebted to the energetic action of one of the Honorary Secretaries, Mr. Shirley Deakin, for starting the Branch, and for devoting much time and trouble in organising their meetings and in conducting the monthly *Proceedings*. These well deserved compliments to Mr. Shirley Deakin, one of the Honorary Secretaries and founder of the Branch, whose energetic services cannot be too warmly acknowledged, were responded to by Mr. Deakin, who, in thanking the President for the manner in which he had noticed his efforts to start the society, stated that he could not have succeeded but for the great interest shown in the welfare of the Branch by Mr. Hendley himself, and by the Surgeon-General, together with the North-West Government, and Sir Alexander Christison, their President. He had to thank Messrs. Sherman Bigg and A. P. O'Connor for their assistance. He trusted, now that the Branch had been established on a firm basis, and since it had been recognised as a Branch—the child of the Jubilee—of the British Medical Association, that it would have a long and useful future before it. The Branch now numbered thirty-six members, and two or three new members were elected at each meeting of the Branch. Renewed efforts would be made to induce other members of the profession in India to join the Association. They had held ten monthly meetings since the organisation of the society in February last, at which papers on various subjects had been read, and interesting cases shown and discussed. He hoped that they might be able to carry out the original intention of the promoters, so as to hold the next annual meeting in Lucknow, Meerut, Agra, or some other large station in the North-Western Provinces or Oudh. They would thus be better able to promote what all desired—a cordiality between the members of their common profession, the members of the two branches of the public service—the Army and the Indian. A vote of thanks was carried with acclamation to Sir Alexander Christison, Bart., the President of the first Branch of the Association, for the support he had given to the Branch in its earlier days. Sir Alexander carried with him the hearty good wishes of the members on his retirement from the Indian Service after thirty-one years' service. The Secretaries were directed to convey the best thanks of the Branch to the General Council of the British Medical Association, for their courtesy in constituting their society the North-Western Provinces and Oudh Branch. Surgeon-Major Temple Wright exhibited Major Hayland's cart with tent. This is so constructed, that the shafts of the cart, when tilted up in the air, constitute the support of the tent, thus doing away with tent-poles, while the cart and its contents are protected from exposure to the weather, the tent being pegged out over the cart. Dr. Wright also showed Mr. P. B. Johnson's dulie, and his own Beloochee uniform with cap and pagri. Papers were read, and it was resolved to hold the next meeting in January, to discuss the subject of the working of the Contagious Diseases Act. A pleasant medical dinner followed.

THE LIVERPOOL HOSPITAL FOR WOMEN.

A CORRESPONDENT writes:—A hospital for women is at length to be established in Liverpool. It is not, indeed, entirely a new institution, but it is hoped that, with a fresh start, the work will be carried on with increased vigour. Liverpool, with its large population, and the northern counties, with their manufacturing towns, offer a never-failing supply of patients with diseases usually treated in special hospitals of this class; and the only difficulty is in the attempt to extend charity without extending pauperism. The hospital for women is to take over the dispensary of the Lying-in Hospital, in which 13,000 cases have been treated annually; and

will have an at present undetermined number of beds for the reception of ovarian and other cases requiring operative procedure. The Lying-in Hospital, which has given up some of its beds to "special cases" for the past twenty-seven years, and has treated outdoor patients for forty-one years, will hereafter devote its funds solely to maternity cases at home and in hospital. The parent institution has assisted the new one with a donation of £1,500, and already over £4,000 have been subscribed. The sum that is required is £10,000. Subscriptions are pouring in rapidly, but meantime the patients continue to be treated at the Lying-in Hospital; and, although several buildings have been found eligible, no purchase has as yet been made. The committee is averse to building, and the general feeling is at present in favour of adapting the old and now disused Southern Hospital for the purpose. This building can accommodate from fifty to sixty beds, but many alterations would be necessary. The subscribers are about four hundred in number; and the amount of their annual subscriptions, eked out by the Hospital Sunday grant, must, in the absence of legacies, be the limit of expenditure. Under these circumstances, the committee has resolved to open, in addition to the free beds, a pay ward in which, by payment of the cost of maintenance, or such portion of it as the committee may determine, patients who are poor, but not altogether without means, may benefit by the institution. A governor, by a donation of £60, or six governors, by six donations of £10, may have a bed set apart for twelve months, and may nominate patients, subject only to approval by the medical staff. A subscriber of one guinea is a governor for one year, and a subscriber of ten guineas is a life-governor. The committee is selected from the governors. Its members are at present twelve in number, and one must retire in each year. The medical staff is nominated by the committee; and the governors, in special general meeting, confirm the nomination or put a veto upon it. In the recent election to fill the first vacancies, notice to applicants was published in the local papers, requiring them to send in applications to the secretary. From these the staff was selected, and upon the 12th ult. their election was unanimously confirmed. The acting honorary staff is subject to annual re-election; and their service is limited to a term of ten years, but may be extended by special determination of the committee. It was hoped that the consulting staff would consist of three leading members of the profession. Dr. Grimsdale, who is a life-governor, and has taken much interest in the progress of the hospital, has consented to be on the consulting staff; but Dr. Cameron, who is also a life-governor, and Mr. Bickersteth, both of whom have given much assistance in council, have been obliged, in form at least, to decline. One is senior physician to the Southern Hospital, and the other is senior surgeon to the Royal Infirmary; and local by-laws prevent them from holding an appointment in any other medical charity. The two senior honorary medical officers of the Lying-in Hospital remain attached to that institution. The junior medical officer and senior assistant have been promoted to the acting staff of the new one; and another gentleman, not previously connected with the hospital, has also been appointed. Three assistant medical officers have been transferred from the old to the new hospital; and already the question has arisen, whether a house-surgeon will be necessary.

SCURVY AND ARCTIC EXPLORATION.

THE subject of the prevention of scurvy attracted medical attention in connection with the expedition of Sir G. Nares, and is of much national importance to us as a maritime nation. The announcement that Mr. W. H. Neale, the surgeon in charge of Mr. Leigh Smith's arctic expedition in the yacht *Eira*, would contribute a paper on the lesson of that expedition with regard to the etiology of scurvy, and that many gentlemen, having special experience of the disease, would contribute their experiences, drew together a crowded audience at the last meeting of the Royal Medical and Chirurgical Society. The expedition started from Peterhead on June 14th, 1881, and, o August 21st of the same year, the *Eira* was heavily nipped by the ic and sank within two hours. Very little was saved from her, and th food of the crew for the following twelve months consisted chief of "walrus and bear-meat," together with about half a pound of pr served vegetables for each man *per diem*. They lived in a hou made of stones and turf, with a canvas curtain. Within it, th temperature was low, but the air was fresh. The outlook was n very hopeful; the food was monotonous, unpalatable, and contain no fresh, and but a small quantity of preserved, vegetables; t crew were not picked men, but a set of whalers got togeth hurriedly at Peterhead and Dundee, after the whaling ships h sailed for the season; yet no case of scurvy occurred, and there w very little sickness, either during the ten months they spent in th hut on Cape Flora, or the six weeks occupied in making the bo journey to Nova Zembla. During the whole of this time, the *Eir* crew had no lime-juice. Now we have been taught to believe th lime-juice is not only an infallible specific for the cure of scurvy, b in the absence of large supplies of fresh vegetables, is an absolut indispensable prophylactic. From his experience in the Arc regions, Mr. Neale boldly asserts the opinion that, if men who h to winter there conform to the necessities of the climate, live properly ventilated huts, not in close overheated cabins, and f upon the bear, walrus, ptarmigan, loom, and other wild game of country, they may afford to dispense with lime-juice. If this opin stood alone, we should not trouble our readers with a long no of it; but it does not stand alone. Dr. Rae, whose experience Arctic regions, and acquaintance with the habits of the native probably unequalled, in the course of a most interesting and grap speech supported Mr. Neale's conclusions from evidence dra from his own numerous expeditions; plenty of fresh meat, pl of exercise and occupation, and plenty of fresh air in the hut, w his specifics for the prevention of scurvy. Vegetables, he poin out, were very valuable, and, as a prophylactic, more effectual t fresh meat; but, where they could not be obtained, the latter c supply their place; only the quantity of fresh meat required very large, about eight pounds a-day for each man. On this p Dr. Reginald Thompson was able, from his experience in Rup Land, to give precisely similar evidence. Thus, as the vet explorer contended, there would seem to be in fresh meat a s quantity of some principle which is contained in larger quantiti fresh vegetables; a principle which will prevent the outbrea scurvy if it be obtained in sufficient quantities, either from me from vegetables. If only meat can be obtained, then a very large q tity must be eaten; and, as a matter of fact, the appetite for where vegetables cannot be obtained, is found to be enormous. the ptarmigan that we shot," said Dr. Rae, "we ate every pa but the beak and the claws; we were very hungry." Other evi of the same kind was adduced by several of the speakers fro records of other expeditions. Kane, for instance, said that, plenty of bear and walrus, he could laugh at scurvy; and Ca Tyson, with a party of men, women with infants at the breast children, spent six months on an ice-floe without any cases of sc Sir William Smart also quoted several instances which afforded lar evidence. It would thus appear that, among men pract acquainted with life in the Arctic regions, there is a very con able consensus of opinion in favour of the value of fresh mea prophylactic. In striking contrast, however, with this, is the op arrived at by the officers of the Army and Indian Medical S from their experience of scurvy in tropical or temperate climates; meat will not, in their experience, prevent scurvy, nor will a diet and herbs; for, as Sir Joseph Fayrer pointed out, scurvy freq occurs among the natives of India, who are exclusively veget This divergence of opinion appears to us to emphasise the ob tions of Mr. John Marshall, the president of the Society, w sisted that the etiology of scurvy was a subject of vast impo

us as a maritime nation, and one that English medicine, deterred from pursuing its career in some directions by restrictive legislation, was manifestly called upon to take up, and investigate thoroughly, and in a scientific spirit. Meanwhile, one suggestion made by Mr. Neale, seems worthy of consideration; in warm climates lactic acid is formed in the muscles and blood a few hours after death, and the warmer the climate, the more rapid probably this formation; at any rate at any temperature ordinarily met with, even in temperate climates, lactic acid is formed in large quantities before the end of the first day after death; in an Arctic winter, however, blood freezes within an hour into a solid mass, and muscle is even more rapidly frozen; thus the blood and meat are preserved throughout the winter in a condition chemically the same as that in which they are when absolutely fresh, and no formation of lactic acid occurs. Whether this be the explanation or not, it seems rational enough to suppose that scurvy, which is a disease of the blood, may be prevented, to some extent at least, by using the fresh blood of healthy animals as a constant article of diet. The lessons to be learnt in view of future expeditions within the Arctic circle would seem to be, first, the advisability of providing a supply of fresh meat for winter consumption: this might be effected, as Dr. Colan suggested, by taking a cargo of sheep to the borders of the ice, and killing them there, so soon as the winter commenced; secondly, to winter on shore in huts, where ventilation could be provided for effectually, the injurious effects of cold in a hut being much less than the injurious effects of a foul heated atmosphere, between the decks of a ship, with all the hatches battened down; and thirdly, to employ the men during the winter, as far as possible, in exercise and hunting on shore. The percentage of carbonic acid in the air of the 'tween decks in the *Alert* and *Discovery* rose as high, it is said, as .5 per cent.; this in itself is a condition certain to produce a deterioration of health, and especially anæmia; anæmia once existent, it is easy to understand how an outbreak of scurvy, one of the earliest and most prominent symptoms of which is anæmia, may be determined by causes that would otherwise not be effective.

SCOTLAND.

MISS FINLAYSON, of the Glasgow Royal Infirmary, has been appointed matron of the Ayr New Hospital.

DR. ADAM, medical superintendent of the Crichton Royal Institution, and Southern Counties Asylum, Dumfries, one of the resident medical assistants, and the matron, have resigned their respective appointments. The directors have accepted the resignations.

PROFESSOR GRAINGER STEWART left on the 27th ult. for the South of France. Before leaving, he addressed a letter to his students, regretting that, in consequence of a rheumatic attack, he had to give up the work of teaching so early in the session. At first he had hoped that his illness would only have been temporary, but on the advice of his medical advisers, he has given up every idea of teaching this session.

A BEQUEST, amounting to about £90,000, has been left to the Royal Infirmary of Edinburgh by the late Mr. Duncan Vertue, of No. 5 Eton Terrace, Edinburgh. Mr. Vertue, who died about a fortnight ago, was formerly a surgeon in the East India Company's service. The bequest will be capitalised, and the interest will, therefore, be of no available.

JURIES AS JUDGES OF INSANITY.

At the Circuit Court held in Glasgow, last week, Lord Deas, the presiding judge, who is always complimentary to the jury, spoke of the gentlemen comprising the jury, as the best judges in cases of insanity. His words to them were these—"No persons whatever are better judges of whether a man is or is not insane, in the eye of the law, than an intelligent jury. Doctors are mere witnesses; you are the jurymen and the judges." Lord Deas may hold this opinion, but there can be no doubt of this, that in cases where the plea of insanity is put forward, the jury rely entirely upon the medical evidence led.

DONATION OF A FEVER HOSPITAL.

AT a meeting of the local authority of Uphall on the 16th ult., the Chairman of the Parochial Board, Mr. Robert Bell, in the name of Mrs. Bell and himself, presented to the parish the titles to the fever hospital which he had recently erected at Broxburn village, as a free gift, to be used for the treatment of infectious diseases. We believe that the building is admirably constructed for such a purpose.

THE GLASGOW TOWN'S HOSPITAL AND ASYLUM.

WE understand that Dr. Littlejohn, of Edinburgh, had been requested by the Board of Supervision, to report upon the site and sanitary arrangements of the Glasgow Town's Hospital and Asylum. We believe that his report is unfavourable to a continuance of the poor-house in its present situation. The City Board, we learn, do not intend to acquiesce in Dr. Littlejohn's opinion, and are prepared to rebut a good many of his statements.

LECTURES IN ABERDEEN.

LAST week, Professor Alleyne Nicholson delivered a lecture on "Granite" to the Aberdeen Natural History Society. The subject was treated in a practical manner, and particular reference was made to the application of the microscope to petrological investigations.—Professor Struthers, on Saturday evening, delivered the last of his course of evening lectures on the "Relation of Man to the Higher Animals." The subject dwelt upon was a comparison of the bones of the human head with those of other animals.

BELVIDERE FEVER HOSPITAL.

THE Glasgow municipal authorities, on the recommendation of the Health Committee, have now agreed to permit the medical students of the different Glasgow schools of medicine to attend the practice of the Belvidere Fever Hospital, in order to get further insight into the diagnosis and treatment of fever cases. Certain rules and regulations have been drawn up in connection with the matter; but there is no doubt that a great privilege has been granted by the authorities, in thus throwing open the practice of the hospital to those desirous of entering on the study of this class of cases.

THE HEALTH OF GLASGOW.

DURING the fortnight ending February 17th, there were 590 deaths registered, representing a death-rate of 30 per 1,000 living. In the corresponding fortnight of last year, the death-rate was 2 per 1,000 lower, the larger proportion of the present excess arising from the greater fatality of diseases of the lungs. The number of deaths from pulmonary diseases during the present fortnight was 212, constituting 36 per cent. of the total deaths. There were 8 deaths from fever, all of them enteric; and the number of deaths from infectious diseases of children was 67—viz, 48 from whooping-cough, 15 from scarlet fever, and 4 from measles. The death-rate from whooping-cough alone was 2.4 per 1,000, and the average age of the forty-eight children who died of this disease was twenty-five months. The number of cases of fever registered was 47—viz., 38 of enteric, 7 of typhus, and 2 undefined. No further extension of the lineal propagation of the group of typhus fever cases, mentioned in last report, had taken place. There were 101 cases of measles, 99 of scarlet fever, 90 of whooping-cough, and 10 of diphtheria registered,

of which 45 were removed to hospital, and the rest supervised at home.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General, for the week ending February 17th, show that the death-rate in the eight principal towns was 25.8 per 1,000 of estimated population. This rate is 2.1 above that for the corresponding week of last year, but 3.0 below that for the previous week of the present year. The lowest mortality was recorded in Aberdeen—viz., 18.1 per 1,000; and the highest in Dundee—viz., 29.6 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.0 per 1,000, or 0.5 below the rate for the previous week. Whooping-cough was the most fatal epidemic, the deaths from it being most numerous in Glasgow and Dundee. From acute diseases of the chest, 165 deaths were registered, or one more than in the previous week. The mean temperature was 40.7°, being 0.1° above that of the week immediately preceding, but 2.7° below that of the corresponding week of last year.

THE PROPOSED OBSERVATORY ON BEN NEVIS.

WE are glad to see that the subject of the proposed establishment of an observatory on Ben Nevis is not being allowed to fall out of sight, and that it is receiving on all hands the attention it deserves. A very influential meeting has just been held in Glasgow, when there was received a deputation from the Scottish Meteorological Society, and when the President of the Society made an interesting statement regarding high-level observations in other countries, and pointed out the great advantages that would follow the establishment of an observatory on Ben Nevis. For this purpose, the sum of £5,000 would at least be required, and of this amount only £1,400 had been already subscribed. On the motion of Professor McKendrick, it was agreed to appoint a Glasgow Committee, to further the scheme and collect subscriptions.

IRELAND.

AN election for a city analyst for the borough of Cork will take place on the 5th inst.

DR. WILKINSON, surgeon to the Limerick Infirmary, died on the 23rd ult., in his 91st year.

BELFAST HOSPITAL SUNDAY FUND.

THE collections for this fund took place in fifty-two churches in Belfast and neighbourhood and have realised a sum of £508 12s. 9d. This is much below what ought to be obtained, but as the entire amount is handed over to only one hospital—the Belfast Royal Hospital—this peculiar arrangement may have something to do with the result.

ZYMOTIC DISEASES IN PROVINCIAL TOWN DISTRICTS.

DURING the December quarter five deaths from small-pox were registered in Belfast, and one in Londonderry. Measles caused 73 deaths in Belfast, 33 in Wexford, and 22 in Dundalk; while of the 158 deaths from scarlet fever no less than 135 occurred in Belfast. Seventy-nine deaths from fever (typhus 39, enteric 19, and simple continued fever 8) were recorded in the fifteen districts; and 105 from diarrhœa and dysentery.

ENNISCORTHY UNION.

WE lately alluded to a proposal of one of the guardians of this union, which recommended that the salaries of the medical officers should be reduced by 25 per cent., and a special meeting of the Board was called to consider the matter. Contrary, however, to expectation, and although every effort was made by the proposer of the resolution to carry his suggestion, it was found that, out of a board of sixty-eight guardians, only nineteen were in favour of the proposal. When the proposer of the resolution and his supporters saw that their cause was hopeless, they disappeared from the board-room with rapidity, amid the laughter of their opponents.

CORK DISTRICT LUNATIC ASYLUM ANNUAL REPORT.

THE number of admissions during the past year was 287, and the total under treatment, 1,212; of whom 171 were discharged, and 113 deaths took place. The percentage of recoveries on the total number in the asylum was 14.2, and on admission, 45.6. No epidemic of any kind took place during the year. Besides the ordinary amusements the opera *Patience* was performed by the Cork Amateur Dramatic Society, and afforded the greatest enjoyment to five hundred patients. Dr. Eames, in his report, states that he hopes the governors of the asylum may approve of, and encourage similar entertainments in the future; as he considers nothing is more calculated to restore or ameliorate the condition of those suffering from such a distressing malady as insanity. The total expenditure for the year was £19,504, which gives a capitation sum on the entire outlay of £21 1s. 8d.

HEALTH OF BELFAST FOR 1882.

DURING the past year, there was a considerably increased mortality from diarrhœa, scarlet fever, measles, and small-pox, as compared with 1881. The deaths from affections of the chest reached a very high figure in the first and last quarters of the year, having been 561 and 642 respectively, while the death-rate from diseases of the lungs alone in these two quarters was as high as 11.9 and 12.6 every 1,000 of the population. During these two periods the temperature was very low, with great moisture and rapid variations in the atmosphere; hence, not only was there an increased mortality from diseases of the respiratory organs, but also from the zymotic diseases above referred to. The mortality from typhus and enteric fever was comparatively low. The birth-rate in 1882 was 33, as compared with 33.4 of the previous year.

THE ST. JOHN AMBULANCE ASSOCIATION.

A MEETING of the Dublin Branch of this Association was held in the Hall of the Royal University of Ireland last Saturday, at which Her Excellency the Countess Spencer conferred the certificates of the Association obtained during the past year. The chair was occupied by Lord Powerscourt, who delivered a short address on the objects of the Association. Mr. J. Dallas Pratt, Honorary Secretary, made a statement of the work that had been done by the Association during the year, from which it appears that 500 persons attended the full course of lectures for instruction in first aid to the injured; of these, 272 obtained certificates. Over 300 women attended the nursing classes, and 225 obtained the vellum certificate, Several classes were at present proceeding. Mr. Pratt also stated that he had received information from one of the inspectors of the Dublin metropolitan police, of several instances, of which he gave particulars, of first aid having been given during the year by constables who had attended the classes. The President of the Dublin Central Committee, Mr. F. R. Davies, a Knight of the Order of St. John of Jerusalem, in proposing a vote of thanks to Her Excellency for attending and conferring the certificates, gave an interesting sketch of the history of the Order, and of the establishment of the St. John Ambulance Association. He stated that the instruction—given pursuant to fixed rules—was strictly confined to rendering "first aid." And the medical testimony was unanimous in stating that, though about 50,000 certificates had been conferred, in no case had there been any attempt to trespass on the province of the regularly qualified practitioners, while a large number of persons had been trained so as to fully understand and intelligently carry out their directions.

THE PROPOSED MEDICAL BENEFIT SOCIETY.

A SPECIAL meeting of the Birmingham and Midland Counties anch of the British Medical Association was held on Thursday, bruary 22nd, for the purpose of considering the desirability of nding a medical sick benefit society. Dr. Balthazar Foster occu- d the chair, and thirty-two members were present.

Dr. W. CLIBBORN, addressing the meeting, spoke as follows:—

Mr. President and Gentlemen: the great need of a sick or benefit ciety for members of the medical profession must be evident to all n who are in the least anxious as to what would become of them ould they be incapacitated from earning their livelihood, or even sabled for a few weeks by any serious illness.

The solving of this problem has exercised many minds, as is testi- d by the numerous correspondents in our medical papers on this bject; as well as by the benevolent, and therefore charitable ganisations which exist in this country for the relief of distressed dical men, which have been, and are at this present time reliev- g many afflicted persons, who would otherwise have no choice tween starvation or the workhouse. But a general feeling seems have arisen, that this is not satisfactory; and the only real solu- n of the difficulty seems to be the establishment of a society on rely commercial principles, into which the elements of benevolence d charity cannot enter—a society where, as a matter of business, nan, acting in accordance with certain fixed rules, can demand, a right, the relief for which he has paid beforehand by his sub- iptions.

The founding of such a society seems to me to be not only feas- e but easy, as I shall endeavour to prove to you, if you will bear h me, for a few moments, while I read to you the lines on which appears to me this society ought to be conducted.

Difficulties crop up in the originating of every scheme; and this ll not be an exception, for we shall have many to encounter, but ne which by a little patience and good management may not be rcome.

The fundamental rules to be observed in a medical sick benefit iety, I shall now bring before you. They are as follows:—(1) e object of the society; (2) The constitution of the society; The qualification for membership; (4) The admission of mem- rs; (5) The benefit to be received; (6) The claiming of benefit; The prevention of fraud; (8) The payments; (9) The expense of nagement.

. *Object.*—The object of the Society is to enable duly qualified mbers of the medical profession to provide for those exigencies sickness or accident, which render them unable to discharge their fessional duties, by supplying, during temporary incapacity, a tain sum per week, and (I wish this to be particularly noticed) ould this incapacity prove permanent, to continue the payment for le, but of a lesser amount, say one half. Thus every member n feel certain that should he be unfortunate enough to be disabled manently, by disease or accident, he can look forward to a cer- n weekly allowance for the remainder of his life.

. *Constitution.*—The society shall be managed by a committee of nagement, which shall be elected annually by the members of e society from amongst their own numbers, which committee all meet at such times as may be appointed, and shall, in all ngs, act for, and in the name of, the society. Their services shall gratuitous, excepting an allowance for expenditure. The com- tee of management shall elect annually a secretary, treasurer, all such officers as may be required. The secretary shall re- ve such remuneration as the committee, at a general meeting, y determine. One or more medical officers shall be appointed in h district, who shall perform the duties of referees to the society, who shall be remunerated by such fee or percentage as may be d. The head office of the society shall be in Birmingham, Lon- , or other large town as may be agreed upon. The society shall registered in accordance with the Companies' Act, to ensure its per constitution.

. *Qualification for Membership.*—All duly qualified members of profession, resident in the United Kingdom, shall be eligible didates for membership (in accordance with the rules of society), excepting officers in the army, navy, or marine rices.

. *Admission of Members.*—Candidates for admission to the society ll produce satisfactory evidence as to their state of health and al habits, such as is demanded by the best assurance companies, shall pass a medical examination by the medical examiner ap- pointed by the society. If any candidate shall, with a view to admission to the society, wilfully make any false statement respecting his age, or state of health, or shall in any other matter deceive any officer of the society, the member so admitted shall be expelled from the society by the committee, after due investigation, and on proof being given, and shall thereupon forfeit all his interest and benefit in the society.

5. *Benefit Received.*—The fund accumulated by the subscriptions paid by the members of the society, shall be applied for the benefit of all members who, suffering from illness or accident, shall be unable to follow their professional duties. Every member shall be entitled to receive, during the first twenty-six weeks of his illness, the full amount for which he has paid. In case his illness shall continue for a longer period than twenty-six weeks, he shall be entitled to half-pay during each week of such continued illness, which half-pay shall be continued for the remainder of his life, should he be permanently disabled. If a member shall receive, within fifty-two weeks, full pay for twenty-six weeks, whether consecutive or not, his benefit shall be reduced to half-pay so long as his illness continues.

6. *Claiming Benefit.*—Any member desirous of receiving benefit from the funds, must forward to the secretary a certificate from a duly qualified medical man, sanctioned by the society, stating his inability to attend to his professional duties, and also the nature of his illness. This certificate must be renewed every week while he remains on the funds, and must be drawn out in accordance with the requirements of the society.

7. *Prevention of Fraud.*—I would suggest that the committee reserve to themselves the right of sending their own medical officer to examine any member they may see fit.

8. *Payments.*—And now, gentlemen, I come to the section which will doubtless be of the greatest interest to you, but which is of peculiar difficulty to me—the payment for all this benefit to be received. The difficulty consists in this, that we have no data to go upon. This society which we propose for your benefit must be looked on in a certain sense as an experiment, for this reason, that, although numerous similar societies exist, and flourish, on account of the carefully drawn out tables of payment to meet the risks of other members of the community, no one has ever tabulated the risks run by a medical man, and hence the difficulty to be encountered in this problem by the actuary. For myself, I consider—and I think, on reflection, you will agree with me—that, taking an average healthy medical man and an artisan, the probability of continued health will be in favour of the medical man. Another fact must not be lost sight of, and that is, that a medical man would never go on the funds for a trifling ailment, because he knows that it never repays him to get another to do his work. He would, therefore, struggle on as long as he was able to, whereas the average working man is apt to go on the box for most trivial ailments. I appeal to all surgeons present who are connected with clubs to know if this is not so.

The scale of payment which is adopted by two of the most successful benefit societies which I have investigated, namely, the Birmingham General Provident Institution, which was established in 1833, now numbers 5,340 members, has invested capital to the amount of £46,969, and affords the benefits which we require, is as follows.

TABLE I.—*Payments for Life. This Table shows the Payments to be made annually to insure £1 a-week allowance in Sickness; the Benefit continuing during Life.*

Age.	Annual Premium. £ s. d.
21	1 14 0
30	2 4 0
35	2 12 0
40	2 19 0
45	3 13 0

The rates of the Hearts of Oak, a society with 95,000 members and invested capital of nearly £500,000, were practically the same; but I thought it better to give you the scale of the Birmingham General Provident, as being best known to most of us, as well as being about the numerical strength to which we would hope to attain in course of time. From their table you may understand that, approximately, a man at thirty will have to pay an annual premium of about double the amount for which he insures per week. A man aged thirty pays £2 4s. a year for £1 a week. This is the nearest approach to what you will have to pay that I can give you. The subject is entirely one for an actuary, who, when other details are more advanced, will be consulted, and who will prepare a table

of payments commencing at the age of twenty-one years, and terminating at forty-five or fifty.

9. *Expense of Management.*—With regard to the expenses of management, whether they shall come out of the general fund, or from a separate fund established for that purpose, has yet to be decided. Ten per cent. is set apart for working expenses in the balance sheet of the General Provident Society, but I think we should require 15 per cent. I further think that if each member were to pay an entrance fee of 21s., the working expenses would be reduced quite 50 per cent., as the principal expenses will be the secretary's salary, medical referee's fees, and stationery. Now, 21s. per head ought to more than pay the medical referee.

This brings me to the end of my list; and I now wish to impress upon each member present that these rules are not to be considered absolute. They are open to the fullest modification, and I merely bring them forward as practical suggestions, that you may know the basis upon which a provisional committee will have to work before the society can, with confidence, be started. The first steps to be taken towards starting this society, will be for this meeting to pass the following resolution approving the scheme:

"That this meeting, called specially to consider the question, is of opinion that a medical sick benefit society would be of great advantage to the profession, and, if instituted in conjunction with the British Medical Association, could be successfully established."

Next, the Committee of Council should be requested to ascertain the opinion of other Branches, and, if this be favourable, to afford all interested in the scheme, an opportunity of meeting at Liverpool next August, during the annual meeting of the Association. By so doing, a start would be made; and a provisional committee appointed. Now it is absolutely necessary that we must have the support of the Association; and by support I do not mean at all in a pecuniary sense—they share no liability, neither will they take part in the further organisation of the society, which must be done by the members themselves. But what we shall want them to do is to recognise us, and by so doing, to give a guarantee to the outside world of the profession, of our respectability, that our scheme is legitimate, and not the offspring of a few enthusiasts anxious to promote a company for their own special benefit. And now, before concluding, let me recapitulate: 1. The society is to afford benefit during temporary or permanent incapacity for work. 2. The committee is to be constituted from amongst members of the society. 3. All duly qualified practitioners are eligible for membership, in accordance with the rules. 4. All candidates must undergo a proper medical examination, and produce satisfactory evidence of their health and habits. 5. Benefits received will be full pay for six months, and half pay for remainder of life, if incapacitated. 6. All claiming benefit must send in a certificate from qualified medical man. 7. Fraud will be reduced to a minimum by the society reserving to itself the right of sending its own medical referee to any member on the funds. 8. The annual premium for a man aged 30 will be about double the amount he assures for per week. 9. The working expenses ought not to exceed 15 per cent.

One word more. Sooner or later this society must be established; it behoves us therefore not to let this opportunity pass, but to work one and all for its accomplishment. At the same time let every individual remember that he is working for himself, and for his own benefit, as well as for that of the society. Many men, I have no doubt, adopting the policy of Fabius, will wait till the society is securely established, and then, joining, will share the benefits with those who have borne the toil and heat of the undertaking. To all such I would say, as Horace said—

"Dum loquimur, fugerit invida
Ætas. Carpe diem quam minimum credula postero."

Mr. RAVENHILL, in seconding the resolution, said that an inexperienced speaker like himself might congratulate himself that the subject was one which did not need the efforts of oratory for its advancement, but which was able to stand by its merits alone. Dr. Clibborn had so fully entered into the subject that there was little left for him to say; and he was glad of this, because he saw many present who could, and he hoped would, give the meeting their opinions upon the subject, for it was important that they should hear all sides, and have it thoroughly threshed out; he should therefore limit what he had to say to a few general observations, thus emphasising some of the remarks made by Dr. Clibborn. "Heaven helps those who help themselves;" and he always looked upon it as a most unfortunate circumstance that the means of assuring against that loss of income, and those increased expenses, which were always attendant upon illness, which were within the reach of working men, had been hitherto denied to members of the profession; but it was not so much in cases of illness (and to this he wished to dir their particular attention) that the need of such a society v shown, as in chronic diseases, and infirmity consequent upon age. He need not remind them, members of the medical professi of the unstable nature of that health which they now enjoyed: need not tell them that they were hastening towards old age, sickness brought with it increased expense, and lessened inco or that prolonged illness often meant no income at all. Let t look in the medical journals; hardly a week passed without a pit appeal from some broken-down member of the profession, w seized on by disease, or overtaken by old age, before he had achie a competency, was thrown upon charity for his support. If t consulted the records of the medical benevolent societies, they w find the same sad tale; nay, he ventured to say that there hardly any one present who did not in his own experie know of some such case; he could not but think that state of things was a disgrace to their profession. Ad ting, then, as he thought they all must admit, the evil behoved them, as wise men, to cast about for a remedy; and, remedy once found, to advance it by all the means in their po Dr. Clibborn had laid before them the constitution, etc., of the posed society; and he had nothing to add to it, except that it purely tentative. He was glad to see that Dr. Clibborn had excl the element of charity from his scheme; so that a man would c his payment in sickness as an absolute legal right, and would tinue so to claim it to the end of his life, should he be so long incap of earning his own living. He wished it to be understood that society was in no way intended to supersede, or in any way to i fere with, the existing medical benevolent societies; they w each be useful in their own way. Charity was a good thing self-help was a better; and there was one thing which he tr they would do for the medical benevolent societies; he trusted they would take away from them the need of relieving medical themselves, so that they could confine themselves to their legiti sphere, the widows and children. It was not always possible man to make adequate provision for those whom he might leav hind him; but the comparatively small annual payment which w be demanded by such a society as the one proposed was withi reach of all; and if, after its establishment, he failed to mak vision for them and himself during his lifetime, and should be incapacitated for work, and be without the means of subsisten would have only himself to thank for it; and, if he made applic to a benevolent society, he could not be surprised if his request looked upon coldly, and he were told that, as he would not provision for himself when he might, he could not blame anyon himself if he got but little assistance or sympathy. He mig asked, was it possible to do all this? Was it possible for a s to give sick pay to all who were ill, and to support other me the victims of chronic disease, perhaps for many years? To t thought, there was one reply which was absolutely concl namely, that this was no new thing, although it was practicall in the profession; that it was done, and done successfu friendly societies established by working men, many of which, had their tables properly drawn out to start with, and having well managed, were in the most flourishing condition; and he of his own knowledge, and was sure that other surgeo friendly societies would bear him out when he said that these so did actually meet all the claims upon them. He had many m of them who came to him every week for their sick note, who ha so for many years, and who would certainly continue to do so end of their days. They were unable to work, owing to so firmity or chronic disease, and were, in fact, supported by the soc which they belonged. If this could be done by working me their small earnings, it could, *à fortiori*, be done by the medical sion. It was true that several attempts had been made to foun ciety, somewhat analogous to the one proposed, in connection w medical profession; one in particular was started twenty yea with Dr. Richardson at the head of it. It did not prove a s and the money was returned to the members. He had s rules of this society, and he would venture to say that th such as would secure the downfall of any society. He woul tion two: one was, "that a member was not entitled to infirmity," by which he understood chronic disease; a other, "that all pay should cease at sixty-five," so that debarred from receiving anything just at the age and the circumstances when he would most need it. With to other attempts, he thought that the secret of thei success might, perhaps, be found in their rules too. On why this society should succeed where others had failed w

hoped to have the assistance of the organisation of the British cal Association in starting it. In conclusion, he hoped that should have the material support of all those who felt that might themselves have need of such a society. From fortunate individuals who, by reason of their private means, e largeness of their savings, could afford to dispense with its and from those seniors of the profession who had never yet backward in furthering any good object that promised to it their brethren, they asked for criticism, for sympathy, and pport.

is resolution was passed, as well as the second of Dr. Clibborn's sals, which was modified as follows: "That the Committee of cil be requested to take steps to ascertain the opinion of other ches upon this subject; and, should that be found to be favour- to take such other steps as may seem desirable."

COLLECTIVE INVESTIGATION OF DISEASE.

The Communicability of Phthisis.

ND list of replies to this inquiry received between January 24th d February 27th.

. Abbott, Esq., Braintree; E. J. Adkins, Esq., Hastings; J. E. Allen, Esq., orden; R. Atkinson, Esq., Ripponden.
. G. Balfour, M.D., Edinburgh; L. J. J. Barnes, M.D., Erith; Surgeon Barrow, Cairo; R. L. Batterbury, M.D., Berkhampstead; J. S. Belcher, New Cross, S.E.; W. Bernard, Esq., Londonderry; C. Biddle, Esq., Mer- Tydvil; George Birt, M.B., Stourbridge; J. Blair, M.D., Shotts, N.B.; J. ce Boyce, Esq., Stillorgan, co. Dublin; W. H. Brace, M.D., Queen's Gate e, S.W.; G. D. Brown, Esq., Ealing, W.; W. A. Buchan, M.B., Manches- . B. Burroughs, Esq., Weston-super-Mare.
. Campbell, Esq., Saddleworth; A. A. Cohen, M.B., Burwash; H. Crutch- .D., Alsager.
. Dykes, Esq., Glynneath.
. Evans, Esq., Northampton; Maurice G. Evans, M.D., Cardiff; T. Eyton- , M.D., Wrexham.
S. Falls, M.D., Bournemouth; S. Winter Fisher, M.D., Brighton; W. , M.D., Bournemouth; J. Farrant Fry, Esq., Swansea.
D. Gaddy, M.D., Lovell, U.S.A.; M. D'Oyley Gilkes, Esq., Hereford; H. , Esq., Huyton, Liverpool; G. Gosset, M.B., Abingdon; F. A. Gray, Esq., St. Mary.
ry A. Hallett, M.D., Kimbolton; W. Hamilton, M.D., Tarbert, co. Kerry; nt Harris, M.D., Wimpole Street, W.; J. Harrison, M.D., Roscommon; Hoar, M.D., Maidstone; W. Lovell Hunter, M.D., Pudsey.
rge Jackson, Esq., Plymouth.
ur Kempe, Esq., Exeter; G. Kirkwood, M.D., Peterborough.
B. Lee, Esq., Heckmondwike; D. J. Leech, M.D., Manchester; H. R. , Esq., Birmingham; G. J. Llewellin, Esq., Brigend; J. Lindsay, M.D., thagow, N.B.; W. H. Lush, Esq., Market Lavington.
McDonald, M.D., Lochmaddy, N.B.; Duncan J. Mackenzie, M.D., Glossop; n McLennan, M.B., Penpont, N.B.; J. Mackae, M.D., Laggan, N.B.; D. gh, Esq., Coventry; H. C. Manley, Esq., Belfast; E. R. Mansell, Esq., ngs; F. Marsh, Esq., Stafford General Infirmary; Kenneth W. Millican, Kineton; Milner Moore, M.D., Coventry; H. H. Muggeridge, Esq., Ash- William Murray, M.D., Burley-in-Wharfedale.
. Leith Napier, M.D., Abbeylands, N.B.; L. Newton, Esq., Huntingdon; rton, M.D., Bournemouth.
. Palmer, Esq., Royal Avenue, S.W.; H. H. Phillips, M.D., Reading; C. E. e, Esq., Buckhurst Hill.
Quirke, Esq., Borris-in-Ossory, Queen's County.
Richardson, Esq., Commercial Road, E.; E. B. Robertson, M.B., Woodford; ick Ross, Esq., Lochs, Stornoway, N.B.; R. B. Ruddock, Esq., Clifton, ; A. J. Russell, M.D., Denver, Colo., U.S.A.
B. Sellers, Esq., Rochdale; G. E. Shuttleworth, M.D., Lancaster; Marion M.D., Paris; D. Turnbull Smith, M.B., Preston; J. Evans Smith, Esq., and; W. A. Smith, M.B., Newport; W. Smyth, M.D., Bainbridge; W. E. nson, M.B., Cavendish Square, W.; H. L. Snow, M.D., Bridgwater; K. art, M.D., Calcutta; E. West Symes, M.D., Halifax.
n-Major H. W. E. Tatham, M.D., Belgaum, India; Herbert Taylor, Kennington Park Road, S.E.; H. Coupland Taylor, M.D., Todmorden; E. pson, M.B., Omagh, co. Tyrone; Morris-Tonge, M.D., Harrow; F. Charle- Turner, M.D., Finsbury Square, E.C.
Law Wade, M.D., Somerset County Asylum; Brigade-Surgeon J. Wales, ng, N.B.; J. H. Walker, Esq., Pickering; W. M. Whittaker, M.B., Valen- o. Kerry; W. L. Winterbotham, M.B., Bridgwater; S. Wright, Esq., ts.

vo inquiry sheets have been returned filled up, but without the names addresses of the senders. Total number of replies received up to Tues- y, February 27th, 668.

...of Returns Received During the Month of February, 1883.

Acute Pneumonia (44).

T. Angrove, Esq., Mildenhall (1); W. Armstrong, Esq., Harpurhey, near ester (1); F. P. Atkinson, M.D., Kingston-on-Thames (1); T. Bates, Esq., ster (1); J. Bellingham, Esq., Dudley (1); W. Bernard, Esq., Londonderry . Chapman, Esq., Brierley Hill (1); J. G. Clendinnen, Esq., Coseley, Staf- re (1); C. P. Coombe, M.D., Castle Cary (1); W. F. Dix, Esq., Small- (1); T. Eyton-Jones, M.D., Wrexham (1); Cottenham Farmer, Esq., Hex- 2); T. W. H. Garstang, Esq., Oldham (2); C. E. Hoar, M.D., Maidstone W. Hope, M.D., Wolverhampton (1); E. Gordon Hull, M.D., Stockton- s (3); H. R. Ker, Esq., Halesowen (1); J. W. Lane, M.D., Bishop's Castle Duncan I. Mackenzie, M.D., Glossop (1); P. Miall, Esq., Bradford (1); Mil- oore, M.D., Coventry (1); J. Munro, M.D., Barnard Castle (4); F. W. Par- Esq., Wimbledon (1); T. E. Parsons, Esq., Wimbledon (1); R. S. Peart, M.D., North Shields (1); T. Pennington, Esq., Liverpool (1); G. Reid, M.D., Stafford (1); R. J. H. Scott, Esq., Bath (1); E. Skinner, Esq., Sheffield (1); P. Caldwell Smith, M.B., Motherwell, N.B. (1); W. J. Spence, Esq., Bradford (1); J. A. Erskine Stuart, Esq., Batley (1); E. Thompson, M.B., Omagh (1); G. Whittle, M.D., Liverpool (1).

Chorea (29).

W. Armstrong, Esq., Harpurhey, near Manchester (1); J. S. Bury, M.D., Pendleton (1); G. Chapman, Esq., Brierley Hill (1); W. T. Colby, M.D., Malton (2); C. P. Coombe, M.D., Castle Cary (1); D. Drummond, M.D., Newcastle-on-Tyne (1); J. Drummond, M.D., South Shields (1); H. Nelson Edwards, Esq., Shrewsbury (3); W. Gowans, Esq., South Shields (2); E. W. Hope, M.D., Wolverhampton (2); R. H. Lloyd, M.D., Lambeth (1); W. G. Lowe, M.D., Burton-on-Trent (1); S. Moritz, M.D., Manchester (1); J. Munro, M.D., Barnard Castle (2); R. S. Peart, M.D., North Shields (1); T. Pennington, Esq., Liverpool (1); G. H. Philipson, M.D., Newcastle-on-Tyne (2); G. Reid, M.D., Stafford (1); P. Caldwell Smith, M.B., Motherwell, N. B. (1); J. A. Erskine Stuart, Esq., Batley (1); E. Thompson, M.B., Omagh (1); G. Whittle, M.D., Liverpool (1); E. T. Wilson, M.B., Cheltenham (1).

Acute Rheumatism (46).

W. Armstrong, Esq.. Harpurhey, near Manchester (1); F. P. Atkinson, M.D., Kingston-on-Thames (1); G. Birt, M.B., Stourbridge (1); W. Carter, M.D., Liverpool (1); G. Chapman, Esq., Brierley Hill (1); E. T. Collins, Esq., Wednesbury (1); C. P. Coombe, M.D., Castle Cary (1); J. Drummond, M.D., South Shields (1); W. Dyson, M.D., Sheffield (3); A. Eddowes, M.D., Market Drayton (1); H. Nelson Edwards, Esq., Shrewsbury (4); T. Eyton-Jones, M.D., Wrexham (3); T. W. H. Garstang, Esq., Dobcross, Oldham (1); W. D. O. Grange, M.D., Moffat, N. B. (1); J. A. Harris, M.D., Chorley (1); E. Gordon Hill, M.D., Stockton-on-Tees (1); E. W. Hope, M.D., Wolverhampton (2); H. R. Ker, M.D., Halesowen (2); W. F. MacCarthy, M.B., Worcester (1); P. W. Macdonald, M.B., Birstall (1); A. G. Mackenzie, Esq., Much Wenlock (4); Duncan J. Mackenzie, M.D., Glossop (1); F. Marsh, Esq., Stafford (1); S. Moritz, M.D., Manchester (1); J. Munro, M.D., Barnard Castle (3); T. Pennington, Esq., Liverpool (1); G. H. Philipson, M.D., Newcastle-on-Tyne (1); G. Reid, M.D., Stafford (1); Herbert S. Renshaw, M.D., Sale, near Manchester (1); P. Caldwell-Smith, M.B., Motherwell, N. B. (1); J. A. Erskine-Stuart, Esq., Batley (1); E. Thompson, M.B., Omagh (1); G. Whittle, M.D., Liverpool (1).

Diphtheria (20).

H. Barnes, M.D., Carlisle (1 case); G. Birt, M.B. Stourbridge (1 case); T Elliott, M.D., Tunbridge Wells (1 case) and (1 sanitary); G. H. Fosbroke, Esq. Alcester (2 cases) and (2 sanitary); T. Partridge, Esq., Stroud (1 sanitary); C. B Plowright, Esq., King's Lynn (1 case) and (1 sanitary); C. J. Renshaw, M.D. Ashton Mersey (1 case) and (1 sanitary); J. M. Taylor, Esq., Burslem (1 case) and (1 sanitary); J. H. Tylecote, M.D. Sandon, (5 cases).

Syphilis (5).

A. Bernard, M.B., Liverpool (4 acquired); G. W. Crowe, M.D., Worcester (1 acquired).

Total returns received during month, 148.

Further Additions to List of Cards received during February.

Acute Pneumonia (Total Additions, 1).

W. E. Luscombe, Esq., Collingham, Notts (1).

Chorea (Total Additions, 3).

H. Handford, M.B., Nottingham (1); G. E. Power, Esq. Hucknall Torkard, Notts (1); H. Williams, Esq., Colston Bassett, Notts (1).

Acute Rheumatism (Total Additions, 4).

W. E. Luscombe, Esq., Collingham Notts (3); Oliver Withers, Esq., New Barford (Notts) (1).

Diphtheria (Total Additions, 4 Clinical, 1 Sanitary).

Robert Mears, Esq., Atherstone, Warwickshire (4 clinical, 1 sanitary).

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

Meetings of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. Francis Fowke, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of the District will be held on Friday, March 9th, at 8.30 P.M. Mr. Watson Cheyne will read a paper on Tubercle: its Etiology and Modern History. Microscopical Preparations will be shown, illustrating the results of the most recent investigations. Mr. Ernest Hart will preside.—G. W. POTTER, M.D., Honorary Secretary, 12, Grosvenor Road.—February 27th, 1883.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Deal on March 22nd, at 3 P.M., Dr. Davey of Walmer in the chair. A discussion on Acute Pneumonia (first card of Collective Investigation Committee) will be led by Mr. Raven, Dr. Parsons, and others. All published cards of the Collective Investigation Committee can be had on application to T. WHITEHEAD REID, Honorary District Secretary, 34, St. George's Place, Canterbury.—February 14th, 1883.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 14th, at 3.30 P.M.; Willoughby Furner, Esq., of Brighton, in the chair. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. The following papers have been promised. 1. Dr. Godson: Retroversion of the Gravid Uterus. 2. Dr. Hollis: A Case of Athetosis, with Remarks thereon (patient shown). 3. Mr. Butlin: On the Pathology and Treatment of Nasal Polypi. 4. Mr. Blaker: *a.* Case of Battey's Operation; *b.* A Case of Fragilitas Ossium (patient shown).—G. B. COLLET, 5, The Steyne, Worthing, T. JENNER VERRALL, 95, Western Road, Brighton, Honorary Secretaries.—February 27th, 1883.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of the above will be held on Thursday, March 8th, at the Queen's Hotel, Upper Norwood, S.E., at 4 P.M.; William Soper, Esq., of Clapham, in the chair. The following papers, etc., have been promised. Dr. A. Sangster: Observations upon Dermato-Syphilis, with Points in Diagnosis. Dr. J. H. Galton: Some Cases of Hernia. J. Sidney Turner, Esq.: Notes on Tracheotomy. Dr. R. M. Miller: Medical Reform. All members of the South-Eastern Branch are entitled to attend, and to introduce professional friends. Dinner will be served at 6 P.M. precisely; charge 7s., exclusive of wine.—J. HERBERT STOWERS, M.D., Honorary Secretary, 23, Finsbury Circus, E.C.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the County Infirmary, Armagh, on Thursday, March 15th, at 12.30 P.M.—ALEX. DEMPSEY, M.D., Honorary Secretary, Clifton Street, Belfast.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held at the Griffin Hotel, Kingston-on-Thames, on Thursday, March 15th, at six o'clock. Members willing to bring forward any subject, are requested to communicate with the Honorary Secretary.—EDWD. L. FENN, M.D.

BATH AND BRISTOL BRANCH.—The fourth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, March 8th, at 7.30; J. K. Spender, M.D., President. The following communications are expected. 1. A Case of Removal of Encysted Osteoma of Neck: F. K. Green. 2. Anæsthetics: J. G. Douglas Kerr, M.B. 3. A Case of Removal of Angioma of Tongue: H. W. Freeman. 4. Periodic Squint in the Adult: F. Richardson Cross, M.B.—R. J. H. SCOTT, E. MARKHAM SKERRITT, M.D., Honorary Secretaries.—Bath, February 1883.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of this District was held at the Iron Room, Christ Church, Erith, on Friday, February 23rd. F. B. JESSETT, Esq., F.R.C.S., was in the Chair.

It was unanimously resolved that a conjoint meeting of the East and West Kent Districts be held at Gravesend in November next.

Papers.—The following papers were read:

1. Dr. Maynard: Case of Gunshot Wound: With Remarks.

2. F. B. Jessett, Esq.: Case of Impermeable Stricture of the Urethra, with numerous Sinuses in the Perinæum, cured by Perineal Section.

3. F. B. Jessett, Esq.: Abscess in Perinæum, connected with old-standing Stricture; with Remarks.

4. Dr. Hoar: A Case of Pelvic Abscess.

Dinner.—Eight members afterwards dined together at the Prince of Wales Hotel.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

THE second meeting of the session was held at the Royal Hospital School, Greenwich, on February 15th; Dr. THOMAS CREED in the Chair.

Papers.—The following papers were read.

1. Mr. Robert J. W. Oswald: A Rare Sequela of Scarlet Fever.

2. Mr. J. Brindley James: On the Influence of the Mind over the Body.

CORRESPONDENCE.

THE PROPOSED MEDICAL BENEFIT SOCIETY.

SIR,—The Birmingham and Midland Counties Branch has decided to request the Committee of Council to take the opinion of the Branches on this matter. I hope that meantime those who sympathise with the movement will continue to send their names to you. Kindly add my name to your list.—I am, sir, etc.

WILLIAM CLIBBORN, B.A., M.D.

Bradford Street, Birmingham.

SIR,—I have been asked by Dr. Fox, Mr. Ewing Smith, and Mr. Harcourt, all of Clifton, to send in their names as adherents to the proposed Medical Benefit Society. I also remark that lately either Dr. Ravenhill or Dr. Clibborn take the credit of starting this proposal. I think it only fair to state that I was the original proposer of the scheme that has started all this correspondence. The statistics that Dr. E. Paget Thurstan sends to this week's JOURNAL are the very things that the committee, when formed, will want, and I hope others will send in similar forms for the committee to peruse.—I am, sir, faithfully yours,

A. H. BOY

Pill, Bristol, February 24th, 1883.

SIR,—Kindly allow me to say a few words in reply to Dr. Thurstan's letter. I have no doubt it will be a very difficult matter, for even an actuary, to determine the probable amount of sickness we are liable to experience, as no sufficient data exist to base the calculations upon. I fear Dr. Thurstan's letter may have a chilling effect on many would-be supporters of the movement. I think he is over-cautious; and, by over-estimating the probable amount of sickness, and, consequently, making the subscriptions too high, his letter may deter many from joining.

The figures Dr. Thurstan gives are, I think, pretty correct as regards the amount of sickness experienced by old-standing friendly societies of the best class; but, for various reasons that I need not mention now, I think there would be less sickness among medical than among labouring men, age for age. But, assuming that the probable amount of sickness would be about equal, then I maintain the figures I gave in my last letter to you—*i.e.*, that each member should pay about 50 per cent. more *per annum* than he would receive per week in case of sickness; in other words, if he wished to receive £5 per week he should pay £7 10s. *per annum*—would be quite enough to cover all risks. According to Dr. Thurstan's figures, the average maximum amount of sickness, between the ages of twenty-five and forty, is 1.266 weeks per member *per annum*, and the average of the minimum for the same ages .879, and the mean of these two 1.072, or a little over one week per member *per annum*—so that, up to this age, a subscription of £5 per member *per annum* would nearly cover the sick-pay; but this is assuming that the same rate of payment would be kept up during the whole year's sickness, which would be contrary to the rules of all friendly societies with which I am acquainted. For the first decade—again taking Dr. Thurstan's figures—there would be less than one week's sickness per member *per annum*, so that there would be a saving of nearly £3 a-year on each member's annual subscription; and I think this amount, with the interest, would cover the extra expenditure likely to be required up to the age of forty years.

One other point in Dr. Thurstan's letter. He says: "Add on 20 per cent. for working expenses." If I thought for one moment that the working expenses would absorb 20 per cent. of our premium or even 10 per cent., I should withdraw at once. Fancy 3,000 members, at £7 10s. a member, paying £4,500 a-year in working expenses!

With your permission, I should like, in a future letter, to point out

few of the leading rules that should guide us in starting this ciety.—I am, sir, faithfully yours, J. BAIN SINCOCK.
Bridgwater, February 28th, 1883.

URTHER letters of adhesion have been received from the following ntlemen:

Mr. Edward J. Adkins, Hastings; Mr. A. H. Fraser, Witham; Mr. W. Forster, Darlington; Mr. Samuel Andrews, Basingstoke; Mr. R. Much, Nottingham; Dr. Alex. R. Coldstream, Florence, Italy; r. Lawson Tait, Birmingham; Mr. Henry Raven, Ditcham, Norlk; Mr. W. H. Platt, Kilburn; Mr. Hugh Orr, Filey, near Scarrough; Mr. A. Graham, London; Mr. Geo. H. Daly, Chippenham; r. A. B. Munro, Bradford, Yorkshire; Mr. E. Jepson, Durham; Mr. H. Paterson, Aberford, near Leeds.

*** The list is rapidly gaining in numbers; but several hundred lhesions should, we think, be enrolled as a preliminary to practical tion, and we shall be glad to continue to receive names.

OVARIOTOMY STATISTICS.

E have been requested to publish the following letter from Mr. ncer Wells to Professor Gross.

3, Upper Grosvenor Street, London, February 27th, 1883.

MY DEAR PROFESSOR GROSS,—You have published in the *Philalphia Medical News* a statement comparing the results of my erations of ovariotomy of 1,088 cases with those of three other erators in 381, 328, and 226 cases each, making a total of 935 ses. The mortality of my cases is given correctly at 22.15 per nt.; and that of the other operators as 10.76, 10.67, and 11.94 per nt. On this plain statement, as you have published it, any one uld conclude that I am a less successful operator than my juniors. ideed, the author of a very eulogistic review of my last book, in e *American Journal of Medical Sciences*, for January 1883—misled a false statement in the *American Journal of Obstetrics* (vol. xv, ge 547) that I "had gone on for twenty years operating on hunreds of cases with a mortality of twenty-five per cent."—takes the ouble to give what he believes to be a true explanation of the igh range of mortality in his" (my) "ovariotomies." He says at I had laboured for an "ideal success;" but "his" (my) "own actice fell short of this ideal." If it were true that, after twenty ars operating, I had gone on operating with a mortality of twenty-e per cent., while others did not exceed 10 or 12, some such planations as those proffered by my able and kindly reviewer, ight serve as my excuse. But it is not true. When I had en operating for twenty years, I had reduced my mortality 11.62 per cent. The results of successive series of one hunred cases, had been made known from 34 in the first and 3 in the second, to 17 in the ninth and 11 in the tenth series of 0 cases. My cases of 1879, 1880, and 1881 had been published ith results of 11.62, 9.57, and 10.7 per cent; and in the preface to y book, published in May 1882, I afford proof that "notwithstandg the fact of my being often called upon to treat patients rejected y other surgeons as unfavourable cases, the progressive diminution the mortality still continues." I added—"It is still more gratiing to be able to add that this increasing success is not confined myself nor to British surgeons, but is also established in Gerany, France, and Italy." There really can be no excuse for this ttempt to discredit me with a high mortality after twenty years' perience, as in my book (pp. 214, 215) I had shown very plainly w, in successive periods of five years, the mortality progressively minished, and that in the first five years about 1 in 3 died; second d third five years about 1 in 4 died; fourth five years about 1 in e died; last two years about 1 in 10 died; or, putting it in nother form, that in the first five years 70 per cent. recovered; cond five years 74 per cent. recovered; third five years 73 per cent. covered; fourth five years 80 per cent. recovered; two last years 90 r cent. recovered.

I trust, my dear Professor, that you will accept my desire to stand ell with my American brethren as a sufficient excuse for this long tter.—And with sincere respects, I remain, faithfully yours,

T. SPENCER WELLS.

THE VERBASCUM THAPSUS.

SIR,—Although most reluctant to trespass further upon your space, th reference to this subject, I am obliged to do so, on account of ving received a number of letters from different parts of the ited Kingdom, inquiring:—1. Whether the mullein leaves were re effectual in a fresh or dried state? 2. Where the seeds are to got? 3. How the plant should be grown? The fresh leaves are the best, and can be procured nearly all the year. Excellent results, however, can be obtained with the dried leaves. The seeds can be had from Dr. John Evans, chemist to the Queen and the Prince of Wales, 49, Dawson Street, Dublin, who would also supply the leaves and their preparations; the seed should be sown very much like cabbage seed. As soon as the little plants spring up, they should be transplanted at proper intervals. The mullein is a hardy biennial, and will grow almost anywhere.—I am, sir, yours, etc.,

F. J. B. QUINLAN.

29, Fitzwilliam Street, Dublin, February 27th, 1883.

ELECTRIC LAMP.

SIR,—I hope you will permit me to correct an erroneous statement of the nature of my electric lamp, contained in your last report of the Odontological Society. It is implied in that report that my lamp is a heated platinum wire, that the rheostat was therefore necessary to prevent its destruction, and that a lamp exhibited at the same time of similar design, and produced by the incandescence of a carbon filament *in vacuo*, was practically indestructible. These statements are all incorrect. The lamp that I have taken so much pains to produce for the illumination of interior cavities, is an incandescent carbon lamp, protected by an outer glass shade, mounted in such a way that there is free access to external air between the two glasses, to neutralise heat. The carbons used are $\frac{1}{100}$ of an inch in diameter, and vary in length from $\frac{1}{10}$ to $\frac{3}{8}$ of an inch; consequently, in using a bichromate battery with a reserve force, I was obliged to construct a rheostat, because it is the easiest thing possible to fuse the carbon filaments and to destroy these lamps, as everybody, with any practical experience, very well knows. There is no novelty in a lamp of heated platinum wire, nor anything new in the use of an unprotected Swan lamp mounted on a handle.—I am, sir, your obedient servant, NATHANIEL STEVENSON.

51, Wimpole Street.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, February 23rd.

The Lunatic Harrison.—Dr. CAMERON asked the Lord-Advocate whether it was a fact that, on the 9th of June last, Thomas Harrison, formerly an inmate of the Cheadle Lunatic Asylum, near Manchester, was illegally seized and lodged in the police-cells in Glasgow by a person said to be an attendant from that institution; whether the attendant was officially warned by one of the sheriffs-substitute of Lanarkshire, that he had acted illegally in attempting to rearrest Harrison without a warrant, and whether a similar official communication was made by the same judge to the police authorities; whether it was true that, on June 15th, Harrison was decoyed by a forged note to the office of his law agent, and, on leaving it, was seized without warrant by persons supposed to be attendants from the Cheadle Lunatic Asylum, and forcibly and illegally carried from Glasgow to that asylum; and whether the Crown authorities had taken any steps to bring to justice the perpetrators of this violation of the laws of Scotland.—The LORD-ADVOCATE said the statements in this question were substantially correct. No complaint, however, had been made to the Crown authorities, nor did they become aware that such occurrence had taken place until notice of the question was given. It was understood that the persons referred to came from Scotland, but their names were not known; but in any view, the case would still be rather one for civil action than for action on the part of the Crown.—Dr. CAMERON asked the Secretary of State for the Home Department whether the facts of Harrison's illegal abduction from Scotland, and confinement in Cheadle Asylum, were officially communicated to the Lord Chancellor in September last; whether the Lord Chancellor was informed that Harrison had courted a public investigation into his mental condition under the Scottish law, and that the solicitor assigned to him by the Court, as agent for the poor, had stated that, during his intercourse with him, he had not noticed any symptoms of insanity; and whether, considering the state of the facts and the illegality of his arrest, an independent investigation had been or would be ordered into Harrison's mental state.—Sir W. HARCOURT: I have a note from the secretary to the Lord Chancellor, who says that the Lord Chancellor has no power to discharge a lunatic summarily; but, if a person is detained without authority, the proper way to release him is by *habeas corpus*. The Lord Chancellor made inquiry into the present case. It appears that the recapture of Mr. Harrison was effected by the superintendent of Cheadle Asylum, over which the Lord Chan-

cellor has no authority; and, as regards Mr. Harrison himself, the visitors' report stated that he was dangerous to himself and others. Since 1877, he was regularly visited.—Dr. CAMERON: In consequence of the answer I have received to this question, I shall take an early opportunity of drawing the attention of the House to the subject.

Medical Appointments.—Mr. GIBSON asked the Secretary of State for War whether the candidates for medical appointments in the army, navy, and India had to give their names and qualifications to the Board of Examiners, instead of being known to the examiners by numbers only, as in almost all other public examinations; whether there was any member of the Board of Examiners with an Irish qualification, or having any connection with Ireland; and whether, having regard to the dissatisfaction and discontent which existed among Irish candidates as to the results of recent examinations, he would either have Ireland represented on the Board of Examiners, or else take care that each candidate should only be known to the examiners by numbers.—The MARQUIS of HARTINGTON said that, of the four examiners, one was an M.D. of Dublin. No complaints upon the subject had reached the War Office; but the Government would consider how far it was desirable to substitute numbers for names.

Tuesday, February 27th.

Naval Sick-Berth Staff.—Mr. CAMPBELL-BANNERMAN, replying to Sir H. D. WOLFF, said that no decision had been arrived at yet respecting the pay and position of the sick-berth staff of the navy.

The following Bills are set down for second reading:—1. Private Lunatic Asylums (Ireland) (Mr. William Corbet), Wednesday, June 6th: 2. Infectious Diseases Notification (Mr. Hastings), Tuesday, March 13th.

HOSPITAL AND DISPENSARY MANAGEMENT.

CORK OPHTHALMIC AND AURAL HOSPITAL.

THE annual meeting was held last week, presided over by the Mayor of Cork. Last year, upwards of 1,500 patients were treated, 208 having been admitted to the wards. The income for the year was £507, of which the large proportion of £338 was obtained from paying patients and those sent in by unions and schools; so, to a great extent, the hospital has been self-supporting. Additional wards were established during the year, which provide for the reception of paying patients who desire separate accommodation, and can afford to pay a larger sum than those admitted to the ordinary wards. During the past six months, Dr. H. Macnaughton Jones was unable to perform the duties connected with his appointment, and Dr. Sandford acted as his *locum tenens*, ultimately, on Dr. Jones's resignation, being appointed surgeon to the hospital. The committee state they cannot permit the severance of Dr. Jones's connection with the hospital, on the occasion of his removal to London, to occur without expressing to him their deep regret at the loss that must be felt, not alone by the medical profession, but also by the public. Dr. Jones will leave several important proofs of his energy and ability after him in Cork, foremost among which is the Ophthalmic Hospital, originated by him, and now occupying a firm and established position as a public hospital. To the same constant exertion and perseverance, Cork is mainly indebted for the Cork Maternity, and the Hospital for Women and Children, both of which institutions in a great measure owe their conception and subsequent success to his efforts. The committee desire, they add, to assure Dr. Jones that he bears with him their warm wishes for that success in his new and enlarged field of work which his energy and conscientious devotion to his profession deserve. Dr. Nathaniel Hobart has consented to act as consulting surgeon, in the room of the late Dr. Gregg. A vote of thanks to Dr. Jones for his services to the hospital was adopted unanimously, and Dr. Jones having made a suitable reply, the proceedings terminated.

PAYING PATIENTS AT ST. THOMAS'S HOSPITAL.

WE learn, from a report forwarded to us by the Treasurer, Mr. Alderman Stone, that the wards, known as St. Thomas's Home, adapted for the reception of 41 of these patients, male and female, have been opened and in working order for 22 months up to December 31st last.

During the first 10 months, ending December 31st, 1881, 261 patients availed themselves of this novel opportunity. The result proved so beneficial, and was so highly appreciated by this class of patients, that the numbers for the year 1882 were increased to 371, and the daily average in the Home in 1882 in round numbers was 35, as compared with 23 in 1881; showing a very considerable augmentation, and proving the necessity for the institution, and the appreciation of it by the public.

The majority of the patients were from London and the vicinit but there were several from the country, and some from t colonies, India, and the United States. They were from a class f which the Home was principally intended, namely, from those livi in chambers and lodgings, strangers and visitors to London, a persons arriving from abroad in ill health or suffering from accide or other injuries. The number of applicants has frequently been excess of the accommodation, and the governors of St. Thoma Hospital are so satisfied, not only with the good done, but with t financial results, that, at the termination of another year, they m deem it advisable to seek authority to open another ward for admission of patients of this class.

St. Thomas's Home is so healthily situated, the system on wh it is arranged and managed is so liberal to the patients, and the dical attendance and nursing so carefully and kindly carried out accordance with the original intentions of the governors of this h pital, that it is not surprising that so large a number of persons quiring such an institution have availed themselves of it; and i hoped and believed that the more the benefits of such an insti tion as St. Thomas's Home become known, the greater will be necessity of affording similar accommodation in the other large h pitals of this country.

MILITARY AND NAVAL MEDICAL SERVICES.

NEW PATTERN MILITARY WATER-BOTTLE AND WATE CART.

FOLLOWING up the suggestions which he has already made for proving the health and comfort of troops during a campaign, for increasing the usefulness of the army surgeon by providing in an improved pouch and belt, with many more surgical applia than he now ordinarily carries—and which have been recently not in the BRITISH MEDICAL JOURNAL—Surgeon-Major L. Corban, M has done still further good service by suggesting certain inexpensiv highly important alterations which can be easily made in the sold water-bottles, and in the regimental water-carts. The water-b as thus improved, has two openings; one, a large one, for filling bottle, which is furnished with a close metallic gauze strainer, co with a screw cap. This strainer prevents many impurities, suc suspended matter, small insects, etc., from being swallowe the thirsty soldier. To the second opening, through whic soldier drinks, is fitted a small charcoal plug. Both plug strainer are firmly fixed to the bottle, so that they may not be or destroyed; and only a little rinsing of the strainer every few is required to keep it clean. The water-carts, of which a mo now on view at the War Exhibition at Humphreys Hall, Albert S.W., is also fitted with a filter of animal charcoal and spongy and with a fine metallic gauze strainer, which is adapted to the ing at the top, and may be removed for occasional cleansing. alterations in bottles and carts are simple and practical, an apparatus which they require cannot easily get out of order. I ing water, when impure, is the cause of so much sickness campaigns, that anything which would tend to purify it, wit expenditure of little or none of the soldier's valuable time, great importance, and should receive the attention of the autho In these filter-carts and water-bottles, an endeavour is made move as much as possible of organic and mineral matters an pended impurities, such as animal and vegetable *débris*, partic mud, sand, etc. The water is twice subjected to the action of charcoal and spongy iron—which combined form one of th water-purifiers—and twice runs through the finest metallic strainers before it passes the soldier's lips. Dr. Corban do assert that this plan will entirely purify doubtful water; thinks it may be reasonably credited with removing a vast a of dangerous impurities which now pass unarrested by any into the stomachs of our soldiers in every campaign. The regulation water-cart and bottle can easily and cheaply be in accordance with Dr. Corban's suggestion, which certainly se possess much value.

THE EASTER REVIEW.

AN important feature of the march and the review will be t sence of a properly organised volunteer ambulance corps, un command of Surgeon Cumming, Scots Guards, numbering si officers and men, the former being the surgeons, and the trained bearers, of metropolitan regiments. The corps will one officer and ten men to each of the five columns whic

ee Bridges on Good Friday morning; and the military authorities e sanctioned the use of ambulance wagons for the occasion. The achments will be commanded by Surgeon Platt, Tower Hamlets e Brigade; Surgeon Egan, 2nd Middlesex Rifles; Acting-Surgeon tlie, London Scottish; Acting-Surgeon Bateman, 5th Surrey es; and Acting-Surgeon White, Tower Hamlets Rifle Brigade. utenant Maclure, London Scottish Rifles, will perform the duties djutant to the corps.

ARMY MEDICAL ORGANISATION.

—It is well understood that two means are essential to success in this world prudence and strength. Without union, the latter is not attainable, but th it all things are possible. Surely unity is as desirable for obtaining tisfactory results in the medical service as in any other; for, as Surgeon-neral Grant observes in his pamphlet on Medical Organisation, "the separa-n of the department into two classes, with different interests, and looking different quarters for support, detracts from its strength and efficiency, and wers its standing." Surgeon-Major Evatt, too, in the last edition of his mphlet, has handled this subject to the same effect in a most able manner. ie truth of Surgeon-General Grant's remarks has been fully exemplified in e late Egyptian campaign, as those who can read between the lines may see the account of the peripatetic in the desert seeking castor-oil and finding ne, in the report of the Guardsman whose arm was amputated without loroform, and in many other fictions of a like nature. All these stories int to the necessity of one unified corps for the entire service, whether home Indian, actuated solely by the desire for professional efficiency, and unity its widest sense.

A high authority has told us the regimental system is dead and buried. It ay safely be predicted that any modification of it, if adopted as some anti-ote, will reintroduce confusion in the medical ranks, weaken professional *rit de corps*, interfere with the equalisation of the roster for home and reign service, and with the proper distribution of medical duties; in short, ll impair the efficiency of the entire medical service of the army.—Your edient servant, THIRTY YEARS' SERVICE.

IRER.—We are informed that the Army Medical Reports to which our cor-spondent refers are out of print.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

UNCERTIFIED DEATHS.

common with other health officers of large urban districts, Mr. her, in his last report on Birkenhead, deplores the considerable ber of deaths that are still returned as uncertified. He states the only local practitioner who possessed a registerable quali-tion, without being on the register, died in January, 1879; the ged causes of death in the uncertified entries are thus absolutely eless, and must be accepted merely as representing the opinions urses or nostrum vendors. Some of the expressions made use of he list, such as phthisis, pneumonia, chronic disease of the nach, and marasmus, are terms that would hardly be employed pt by those laying claim, rightly or wrongly, to some knowledge nedicine. The unqualified person who gave information to the istrar, that a man had died of suppression or retention of urine st, if he had been treating the case, have possessed an amount of rance rarely surpassed. Fortunately the proportion of these ertified deaths is diminishing in Birkenhead year by year. In) it was 3.3 per cent. of the whole number, and in 1880 it was per cent. It is a sad reflection however that, as Mr. Vacher ob-es, nearly three-fourths of the number are infants. The ques-n arises, What was the actual cause of death in respect of the lve babies in the uncertified list who are supposed to have died onvulsions or debility? Doubtless, some died of tubercle, some yphilis, some of exposure, and some from being dosed with thing syrups or teething powders. Doubtless, also, in some the e of death was more or less due to their being prodigies of un-nliness—their poor little unwashed bodies being habitually pped up in soiled clothes, and fed with sour pap from dirty les. As to the six deaths ascribed to premature birth mainly he representation of irresponsible midwives, Mr. Vacher may ask how it is possible to check the use of abortifacients, if the hs of infants can be thus readily registered.

INFECTIOUS DISEASES.

A CORRESPONDENT writes to us from Liverpool: "Scarlet fever is ading rapidly, and no wonder. I saw two gentlemen, in each of se houses there is scarlet fever, enter a crowded omnibus to go town yesterday. A gentleman and his wife, who have scarlet r in their house, come to church; and I saw a sale of furniture house where I know two cases of recovery from scarlet fever been." Some form of notification of infectious disease, such as appears to be contemplated by the resolution carried at the last annual meeting of the Association, is urgently called for at Liverpool, as in other places, and should soon effect a reduction of zymotic epidemics.

COMPOSITE DAIRIES.

IN his report on the health of Torquay during 1882, Mr. Karkeek records a combination of businesses, which, it is to be hoped, is very unusual. Two cases of scarlatina having occurred in families supplied with milk by the same dairy, inquiry was directed to the circumstances of the dairy, when it was ascertained that a laundry was carried on in the same house. Mr. Karkeek adds that the proprietor was somewhat astonished at his objection to these two trades existing in the same building, and conducted by the same persons; and he may, perhaps, have resented the health-officer's impertinent interference, for is not the duty of registering all dairies and cow-sheds, and of seeing that the milk is protected from "infection and contamination," specially imposed by the Contagious Diseases (Animals) Act of 1878 upon the county magistrates? We fear that if this be a fair specimen, the Act is virtually a dead letter in Devon, as in the majority of other counties; and the incident serves to emphasise the necessity of the prompt transference of the duty of the regulation and supervision of dairies from the veterinary to the sanitary authorities. Mr. Mundella promised, indeed, last year that this should be done, and it is to be hoped that the matter will not be overlooked by Sir Charles Dilke.

PAYMENT FOR EXTRAS.

SIR,—If any readers of the JOURNAL could inform me upon the following points, I should feel much obliged. It is a rule in some unions that medical officers are paid extras for some attendances; among the rest, for instrumental midwifery. I want to know would it be considered such a case where one had to remove an adherent placenta? If not, I do not see how turning could be considered instrumental; and either is sometimes much more difficult than a forceps case.—Yours very truly, FELIX.

*** In reference to the question of our correspondent, we would point out to him that, by Article 183, General Consolidated Orders, it is ordained that, in any special case in which great difficulty may have occurred in the delivery, or long subsequent attendance, in respect of some puerperal malady or affection, may have been requisite, any district medical officer shall receive the sum of £2. Under the circumstances named by him, we would advise that he should address the Board of Guardians on the subject, pointing out the special difficulty he may have met with; and the Board, if convinced, can pay him the larger fee; otherwise, it is limited to 10s. 6d.

OBITUARY.

GEORGE MACKENZIE BACON, M.A. Cambridge (Honorary M.D.).

WE have to announce with much regret the death of Dr. G. M. Bacon, on Thursday, February 22nd, at the early age of forty-seven. He was of an old and much esteemed family, several members of which have been remarkable for very considerable intellectual attainments. His grandfather, Mr. Bacon of Norwich, was a man of mark, even among the many distinguished persons who then adorned that town. Contemporary with him were Dalrymple, T. Crosse, and Martineau of our own profession, Alderson, afterwards Baron Alderson, and the artists Opie and his wife, and Crowe. The *Norwich Mercury*, a paper of decided Whig opinions, of which he was editor and proprietor, was in the very foremost ranks of provincial journals. His son, Mr. G. P. Bacon of Lewes, whose death took place not many years ago, followed his father's profession and politics, being editor and proprietor of the *Sussex Advertiser*. He took a very prominent part in local affairs, and in all political matters.

The subject of the present memoir received his medical education at Guy's Hospital, and took his membership of the College of Surgeons in 1858. He went in 1864, in the capacity of deputy to the Medical Superintendent, to the Cambridge County Asylum at Fulbourn, and remained in that appointment for two years. He then decided to travel in order to acquire wider professional knowledge, and to perfect himself in French, German, and Italian, in which languages he was already a proficient. While in Italy, after nearly a year's absence, he received a message urgently desiring him to resume his duties at Fulbourn, in consequence of the serious illness of Dr. Lawrence, the medical officer. At the death of this gentleman, which took place one year later, the medical superintendency was given to Dr. Bacon, who carried on the duties up to the third day before his death, when he was attacked by peritonitis, apparently the result of an incomplete and unnoticed intestinal obstruc-

tion of very long standing. The improvements effected while he was in charge of Fulbourn Asylum were very great. The space allotted to each patient, at first insufficient for the purposes of health and proper treatment, was increased to the full extent required. Whereas the patients used formerly to dine in the day rooms, separate dining-halls were erected, both on the male and female sides. Large workshops were built almost entirely by the labour of the patients, and other enlargements made necessary by the increasing number of patients, were carried out, so that Fulbourn Asylum became an asylum which, for its arrangements and for the employment of the patients in work conducing to their mental and bodily health, may rank with the first.

In 1869, two years after assuming the position of medical superintendent, he modestly commenced that course of unpaid lectures for the Medical School of Cambridge University, for which, eight years later, the rare distinction of the honorary degree of M.A. was spontaneously conferred upon him by the University, he being presented in an eulogistic Latin speech by the public orator.

Of a retiring disposition and somewhat diffident of his powers, his published writings were comparatively few. He was, however, the author of many papers in the BRITISH MEDICAL JOURNAL, *Lancet*, and *Journal of Mental Science*, also of monographs on the Handwriting of the Insane, Primary Cancer of the Brain, etc. Were more required in testimony of his work, it would be found in his many acts of private and unknown generosity. If pecuniary or professional help were required in the families of those with whom he came in contact, he was always ready and willing to give it, and that in such an unostentatious manner that the knowledge of it rested entirely with the two concerned. Did any of the asylum people die, and leave family or friends in need, it was he who headed the subscription list and commended the case to his friends. One of his last acts previous to his final illness was to offer to the Medical School of Guy's Hospital, to which he was much attached, a yearly prize of ten guineas to encourage the use of the ophthalmoscope among the students.

His funeral, which took place at Cherryhinton church, was attended by a large number of persons, including many of his visiting committee and very many medical practitioners from Cambridge and its neighbourhood.

A knowledge of his worth, and of the loss that the profession and the community have sustained, resides in the hearts of those who had the honour of his friendship. In addition to his numerous friends, he leaves a mother, two sisters, and a brother to mourn his loss.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

A NEW CLUB.—A new club has been started in Oxford called the "Oxford Junior Scientific Club," for the purpose of bringing together the junior members of the University for the discussion of scientific subjects, and for mutual intercourse. It has been felt, for some time past, that the undergraduates and Bachelors of Arts of the University, engaged in the pursuit of natural science, do not form a body of sufficient compactness and uniformity. Scientific students in Oxford are labouring under enormous difficulties, and it is only by a feeling of unity and accord amongst those that are directly affected by them, that they can hope to be remedied or reformed. The new scientific club will do something to fill up this gap, and already a number of meetings have been held, which have been largely attended by undergraduates and Bachelors of Arts. The club has elected a number of the most influential of the scientific professors and teachers in the University honorary members, and although they will take little or no part in the proceedings of the ordinary meetings, it is to be hoped that the influence of their names and interest will do a great deal towards keeping alive the energy and enthusiasm of the ordinary members. It is to be hoped that the influence which this club will have upon the medical school in Oxford will soon be felt, in the development of a new spirit and a new enthusiasm in those who are passing through their preliminary scientific education. Little real medical education can be looked for in Oxford at present, but if undergraduates can be made to feel that the portion of their career that is passed amongst test-tubes, bones, and strange beasts, is both intellectually interesting and sociably pleasant, a great stride will have been made towards increasing the size and influence of the Oxford Medical School.

MEDICO-LEGAL NOTES AND QUERIES.

VACCINATION PROSECUTION.

As must have been generally anticipated, the case against Dr. D lop has entirely broken down, and the summons which had taken out against him was on Wednesday dismissed by the m trate. Dr. Dunlop was, a few weeks since, accused of negle to take proper precautions with regard to a child whom he had cinated in the St. Pancras Workhouse, and which subsequently The prosecution attempted to show that he had failed to exa the child before vaccinating it, that it was prematurely born, its condition was not such as to warrant him in performing the ration, and that his offence amounted to manslaughter.

Although the mother was the nominal prosecutrix, it is ob that, but for the action of the Society for the Abolition of Co sory Vaccination, Dr. Dunlop would never have been exposed serious a charge; and there can be but little doubt that pro ings were instituted with a view to throwing obstacles in the w the vaccination, before they leave the workhouses, of children in these institutions.

The child whose death was the subject of the inquiry was th gitimate child of a girl of but sixteen years of age, by a bo was but two years her senior. On the sixth day after the c birth, it was vaccinated, and continued to do well until the e another week, when the mother removed it from the workh The evidence went to show that the place to which she took a barely furnished room, where the opportunities for it to be perly tended were but few; that she carried it out of doors hours and in all kinds of weather; that, in less than a week leaving the workhouse, the arm became inflamed, and the gradually comatose, and in another nine days it died.

At the necropsy, the vaccinated arm was found to be ulc and inflamed, the axillary glands on the same side of the slightly enlarged, and the brain—the only organ affected—c with pus on its upper surface, as well as on the base. Medic timony was given at the Clerkenwell Police Court, where the mons was heard, that the inflammation of the brain was due absorption of septic matter from the arm, and thus death c be attributed to the vaccination of the child.

Without at this moment discussing some of the more d pathological questions which are necessarily raised in this must be obvious that the early vaccination of infants in work will give opportunity to those who are anxious to discredit th ration to associate with its performance the ordinary causes o tality at this period of life.

Until the Local Government Board directed the attent boards of guardians to the subject, many thousands of unvac children left the workhouses, and could not subsequently be by the vaccination officers. Under these circumstances it ca matter for surprise that small-pox has been fatally prevalent metropolis. The report of the medical officer of the Local ment Board just issued contains some interesting evidence point. Dr. Buchanan shows that, of 907 deaths from sm amongst children under ten years of age in 1881, 782 o amongst those who had not been vaccinated. It will be read that this heavy mortality cannot in future be prevented boards of guardians continue to insist upon the vaccination of t children born in workhouses. Fortunately, experience sho this operation may be performed very shortly after birth t risk, if the child be in good health. for during the whole of 1881 but twelve deaths were registered in London from "(and the effects of vaccination."

But while medical men are engaged in carrying out the la has already done so much to prevent death from small-po become necessary, if they are to be exposed to such prosec that to which Dr. Dunlop has been subjected, that some ste be taken for their own protection. Among the many lesso this case teaches, not the least is that which shows that a c man may perform his work faithfully, and yet be the vict cruel persecution.

Drs. Wilks and Bristowe were present in court, and we they been called, prepared to give evidence that the opinio Pepper and Dr. Chalmers was unwarrantable. The exis meningitis in itself was not sufficient to prove the pre pyæmia; there being no other evidence. Nor did they pyæmia resulting from a small ulcer. The absence of tu meningitis in infants is usual. Tubercular meningitis occ

r age. Meningitis as a simple disease is found in children with- any known cause.

PROSECUTION OF AN UNQUALIFIED PRACTITIONER.

he Otley Police Court last month, John Mitchell Rhodes was charged, on e information of Dr. T. S. Usher of Yeadon, that, on February 9th, he did lawfully, wilfully, and falsely pretend to be a licentiate of the Society of pothecaries, London. It appeared that the defendant had been practising Yeadon and the surrounding district for about three years, on the strength a certificate as assistant from Apothecaries' Hall, and that he had signed out a hundred certificates, mostly in cases of vaccination, adding the letters S.A. after his name. These facts were not denied; and the defendant, rough his solicitor, pleaded guilty, and was fined in the full penalty of £20. his request, his solicitor expressed the defendant's sincere regret at having en led into giving the certificates alluded to; and stated that, in conse- ence of these proceedings, he would take steps to qualify under the Medical t at the earliest possible period. We are asked by a member of our Associ- ion, who forwards the report of this prosecution, to give an opinion as to the elihood of Mr. Rhodes being received on the *Register* after such conduct, ovided he should at any time pass the necessary examinations; it is sug- sted, with much force, that "a *locus penitentiæ* should be held to exist for ch cases; and that the object of such prosecutions being rather to protect e public than to punish the individual wrong-doer, such object is best ained when the unqualified practitioner desists from practice until he has tained a diploma. Moreover, we doubt if the registrar has any power to fuse to register an individual who produces proof of possession of a regis- able qualification. To exclude from admission to the *Register* anyone who d been successfully prosecuted under the Medical Act, would not only be to rease ten-thousand-fold the penalty which the legislature has attached to a ach of its provisions, but also, probably, to keep permanently in the ranks unqualified practitioners men who, like the defendant in this suit, have en the error of their ways, and desire to amend them."

PARTNERSHIP RIGHTS.

letter of "Junior" is, in some essential points, contradictory to that of Senior." The matter at issue, as now stated, appears to turn essentially on a use in the partnership deed, which directs that all matters in dispute ould be settled by arbitration. In the face of contradictory statements, it of course, impossible for us to give an opinion.

MEDICAL NEWS.

POTHECARIES' HALL.—The following gentlemen passed their mination in the Science and Practice of Medicine, and received ificates to practise, on Thursday, February 22nd, 1883.

Hubbard, Frederick Edmund, Guy's Hospital.
Lichfield, James William, West Kensington.
Llewellyn, Ernest Evan, 152, Mile End Road, E.
Maddison, Thomas Harwood, 70a, Osnaburgh Street, N.W.
Seymour, John Rushby, 76, Stamford Street, S.E.
Sheppard, Henry Anderson, Southampton.
Stubbs, Robert Pickering, Sunderland.

he following gentleman also on the same day passed the Pri- y Professional Examination.

Williams, Morris James, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

IDBRIDGE COUNTY LUNATIC ASYLUM, Fulbourn.—Resident Medical Superintendent. Salary, £500 per annum. Applications by March 16th.

IDBRIDGE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Principal Medical Officer. Salary, £175 per annum. Applications to Mr. W. P. Littlechild, 5, Queen's Lane, Cambridge, by March 23rd.

LISLE DISPENSARY.—Assistant House-Surgeon. Salary, £100 per annum. Applications to Mr. John Ostell, Honorary Secretary, 14, Bank Street, Carlisle.

CHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by April 7th.

PPING NORTON UNION.—District Medical Officer. Salary, £65 per annum. Applications by March 5th.

NICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Park Place, Cheetham, Manchester.—Honorary Surgeon. Applications by March 6th.

NFANAGHY UNION, Crossroads Dispensary.—Medical Officer. Salary, £110 per annum. Election on March 7th.

AT NORTHERN HOSPITAL, Caledonian Road.—Junior Resident Medical Officer. Applications by March 10th.

PITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resi- dent Clinical Assistant. Applications by March 3rd.

PITAL FOR DISEASES OF THE CHEST, City Road.—House-Physician. Salary, £80 per annum. Applications by March 8th.

ERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum. Applications by March 6th.

NT AND CANTERBURY HOSPITAL.—House Surgeon. Salary £80 per annum. Application by March 23rd.

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. Applications by March 10th.

PARISH OF ST. MARY, ISLINGTON.—Resident Assistant Medical Officer and Dispenser of Medicines. Salary, £100 per annum. Applications by March 13th.

RETFORD DISPENSARY.—Surgeon. Salary, £120 per annum. Applications to the Secretary, the Vicarage, East Retford, by March 3rd.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—House Physician. Salary, £80 per annum. Applications by March 8th.

STEYNING UNION.—Medical Officer for No. 1A District, comprising the parishes of Preston and Patcham, near Brighton. Salary, £50 per annum. Applications by March 6th.

TOWN AND DISTRICT HOSPITAL, Newark-upon-Trent.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by March 12th.

UNIVERSITY COLLEGE, London.—Demonstrator of Physiology. Salary, £150 per annum. Applications to Professor Schäfer before March 15th.

WALSINGHAM UNION.—Medical Officer. Salary, £68 10s. per annum. Applications, endorsed "Medical Officer," to W. M. Rumbelow, Bridge Street, Fakenham, by March 6th.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, Welbeck Street, W.—Casualty Physician. Applications to P. F. Proctor.

YORK LUNATIC ASYLUM.—Resident Medical Superintendent. Salary, £350 per annum. Applications by March 17th.

YORK FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Assistant Medical Officer. Salary, first year, £150; second, £160; third, £170. Applications to J. Brown, Park Street, Groves, York.

MEDICAL APPOINTMENTS.

BICKLE, L. W., M.R.C.S., L.R.C.P., appointed Non-Resident House-Physician to St. Thomas's Hospital.

CHEYNE, W. Watson, M.B., appointed Honorary Surgeon to the Paddington Green Hospital for Sick Children, *vice* A. P. Gould, F.R.C.S., resigned.

CLIPPINGDALE, S. D., M.D., appointed Honorary Surgeon to the Kensington Dispensary, *vice* W. Ottley, M.B., deceased.

CURETON, E., L.R.C.P., appointed Medical Officer of the Workhouse to the Atcham Union, *vice* F. Whitwell, M.R.C.S., resigned.

MILTON, H. M. N., M.R.C.S., L.S.A., appointed House-Surgeon to St. Thomas's Hospital.

MOSELEY, G., F.R.C.S., appointed Resident Surgeon to the Cheltenham Branch Dispensary of the General Hospital.

OWEN, S. H., M.D., appointed Honorary Assistant Medical Officer to the Clinical Hospital and Dispensary for Children, Park Place, Manchester, *vice* H. W. Boddy, M.B., resigned.

POWELL, J. A., M.B., appointed Resident Assistant Medical Officer to the Children's Hospital, Birmingham, *vice* J. S. Leach, L.R.C.P., resigned.

PYE, Walter, F.R.C.S., appointed Surgeon to the Victoria Hospital for Sick Children (late Assistant-Surgeon).

RANNIE, A., M.B., appointed Pathologist and Assistant Medical Officer to the West Riding Lunatic Asylum, Wakefield.

REID, W., M.B., appointed Resident Medical Officer to the Kensington Dispensary, *vice* S. D. Clippingdale, M.D., resigned.

ROGERS, Claude, M.R.C.S., appointed Assistant Dental Surgeon to the Dental Hospital of London, *vice* R. H. Woodhouse, M.R.C.S., resigned.

SAVILL, T. D., M.D.Lond., appointed Resident Accoucheur to St. Thomas's Hospital.

SEWARD, G. H., A. P. S., appointed Dispenser to the West London Hospital.

SHEPPARD, W. J., M.B. and M.S.Durh., M.R.C.S., L.R.C.P., appointed Assistan House-Physician to St. Thomas's Hospital.

SMALE, M., M.R.C.S., appointed Second Dental Surgeon to the Westminste Hospital.

SPENCE, J. B., M.B., appointed Junior Assistant-Physician to the Royal Edinburgh Asylum, *vice* D. Lennox, M.B.

TENCH, C. H., M.D.., L.R.C.S.I., appointed Surgeon to the Reading Provident Dispensary.

WARNOCK, R., L.K.Q.C.P.I., appointed Medical Officer to the Lisnaskea Union, *vice* J. C. Martin, M.B., resigned.

WELLS, A. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to St. Thomas's Hospital.

WHARRY, Arthur J., M.D., M.R.C.S., appointed Government Medical Officer, Kinta District, Lower Perak, Straits Settlements.

WILSON, W. W., M.B., appointed Medical Officer for the Dispensary to the Kilkeel Union, *vice* F. J. R. Irwin, M.B.

WOODHOUSE, R. H., M.R.C.S., appointed Dental Surgeon to the Dental Hospital of London, *vice* A. G. Medwin, M.D., resigned.

YOUNG, A. H., F.R.C.S., appointed Honorary Surgeon to the Salford and Pendleton Royal Hospital and Dispensary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

ROBINSON.—On February 15th, at 12, Albion Street, Hull, the wife of Arthur H. Robinson, M.D., M.R.C.S., of a son.

DEATH.

WYER.—On the 23rd February, 1883, at Whitechurch, Canonicorum, Dorset, Surgeon John Wyer, Retired half-pay 19th Regiment, in the 94th year of his age.

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's return, for the week ending February 17th, that the death-rate recently averaged 33.7 per 1000 in the three principal Indian cities; it was 30.1 in Bombay, 33.6 in Madras, and 38.6 in Calcutta. Cholera caused 61 deaths in Calcutta, and small-pox 32 in Bombay; "fever" again showed the largest proportional fatality in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-two of the largest European cities, was 29.7; it was 7.8 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 40.5, although showing a further decline from still higher rates in recent weeks; the 722 deaths included 30 from diphtheria and 13 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.1, and ranged from 15.8 in Christiania to 29.0 in Stockholm; measles caused 6 deaths in Stockholm, and diphtheria 4 in Christiania. In Paris, the death-rate was equal to 28.4, and showed a further increase upon the rates in recent weeks; the deaths included 55 from diphtheria and croup, 39 from typhoid fever, and 13 from small-pox. The 191 deaths in Brussels, of which 5 resulted from small-pox, were equal to the rate of 24.2. The rate in Geneva was exceptionally high, and equal to 33.5; 2 deaths were referred to diphtheria and croup. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.4, the rate being 30.7 in Rotterdam and 32.1 in Amsterdam; diphtheria caused 7 deaths in Amsterdam, and small-pox 5 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.7, ranging from 24.2 both in Berlin and Dresden, to 32.9 and 37.3 in Vienna and Trieste. Typhoid fever caused 7 deaths in Prague, and diphtheria continues to show fatal prevalence in most of these German cities. The death-rate averaged 27.8 in three of the principal Italian cities; it was equal to 22.1 in Rome, 25.2 in Turin, and 44.9 in Venice; diphtheria caused 5 deaths in Turin. In four of the largest American cities, the rate averaged 23.7, and ranged from 20.1 in Brooklyn to 32.2 in Baltimore. Small-pox caused 75 deaths in Baltimore, showing a decline of 17 from the number in the previous week, and 6 in Philadelphia. Typhoid fever caused 10 deaths in Philadelphia, and diphtheria was more or less fatally prevalent in each of these American cities.—The statistics for the week ending February 24th, show that the death-rate recently averaged 34.8 per 1000 in the three principal Indian cities; it was 29.3 in Bombay, 36.3 in Calcutta, and 40.8 in Madras. Small-pox caused 61 deaths in Bombay and 7 in Madras, while 49 fatal cases of cholera were recorded in Calcutta; the largest proportional fatality of "fever" was recorded in Calcutta. According to the most recent weekly returns, the average annual death-rate, per 1000 persons estimated to be living in twenty-two of the largest European cities, was 29.7, and was no less than 7.0 above the mean rate last week in twenty-eight of the large English towns. The death-rate in St. Petersburg was equal to 39.6, and showed a decline from the high rates in recent weeks; the 706 deaths included 25 fatal cases of scarlet fever and 18 of small-pox. In Copenhagen, Christiania, and Stockholm, the death-rate averaged 25.3, and ranged from 14.5 in Christiania to 31.7 in Stockholm; measles caused 7 deaths in Stockholm, and whooping-cough 5 in Copenhagen. In Paris, the death-rate was 27.8; the deaths included 34 from typhoid fever, and 11 from small-pox. The 175 deaths in Brussels, including 5 fatal cases of small-pox, were equal to a rate of 22.0. In Geneva, the rate was 21.6, and one death from small-pox was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.6, and ranged from 29.5 in the Hague to 31.2 in Amsterdam; 6 deaths from small-pox occurred in Rotterdam, and 5 both of diphtheria and of "fever" in Amsterdam. The Registrar-General's table includes nine Austrian and German cities, in which the mean death-rate was 30.0; it ranged from 25.2 in Dresden, to 33.9 in Vienna and 39.0 in Prague. Small-pox caused 4 deaths in Vienna, while diphtheria showed fatal prevalence in Berlin and Dresden. The death-rate was equal to 24.3 in Rome, and 32.5 in Venice; diphtheria caused 4 deaths in Rome. Lisbon has recently been added to the Registrar-General's list of foreign cities; it appears that the death-rate in that city, during the week ending February 3rd, was equal to 29.3, and 5 fatal cases of small-pox were recorded. In four of the largest American cities, the mean death-rate did not exceed 23.8; the rate ranged from 20.7 in Brooklyn to 29.4 in Baltimore. Small-pox caused 69 deaths in Baltimore and 15 in Philadelphia, and typhoid fever 13 in the last-mentioned city; diphtheria showed excessive fatality in most of these American cities, especially in Baltimore.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily,

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Laryn W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopæd W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., T F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.3 Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S ,1.30; Skin, W., 1.45; S., 9.15; Throat Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Casual Communication, by Mr. Ackery. Adjourned discussion on the following question propounded by Mr. Sewill: "Do the Incontrovertible Facts which we now possess as to its Etiology and Pathology, fully account for the Phenomena of Dental Caries?" Dr. John C. Thorowgood: On Therapeutic Agents for the Promotion of Osseous Development.—The Medical Society of London, 8 P.M. General Meeting, 9 P.M. Dr. Broadbent: Two Cases illustrative of the Successful Employment of the Cold Douche.

TUESDAY.—Pathological Society, 8.30 P.M. Mr. C. Heath: Hypertrophy of Ramus of Lower Jaw (living specimen). Dr. N. Moore: Rheumatoid Arthritis. Mr. Lane: Fracture of Sternum. Dr. Hale White: A Peculiar Process from the Fibula; A Sacculated Bladder. Mr. Roger William: Sarcoma of Bladder (two cases). Dr. Finlay: Sarcomatous Change of Uterine Fibroid; Columnar Epithelioma of Stomach. Mr. Barker: Disease of Bladder and Kidneys. Mr. Clutton: Tumour of Bladder and Skull. Mr. Eve: Simple Ulceration of Bladder. Mr. J. H. Morgan: Multiple Growths in Bladder. Mr. Swinford Edwards: Bladder after Cystotomy.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown. Inaugural Address of the President, Dr. Gervis. Dr. Godson: Clinical Cases of Interest.—Epidemiological Society of London, 8 P.M. Surgeon-General John Murray, M.D.: On the Delhi or Oriental Sore. Deputy Surgeon-General Joseph Ewart, M.D.: On the Causes of the Excessive Mortality among the Women and Children of the European Army in India.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Dr. C. E. Fitzgerald: On the Connection between Uterine and Eye Diseases. Mr. Adams Frost: On Pulsating Exophthalmos. Dr. David Little: Sarcoma of Iris successfully removed. Mr. A. H. Benson: Paresis of Ocular Muscles after Diphtheria. Living and Card Specimens at 8 o'clock. Mr. J. E. Adams: Embolism of both Retinal Arteries. Mr. A. H. Benson: Ophthalmoscopic Drawings. Mr. Adams Frost: Double Pulsating Exophthalmos.

FRIDAY.—Clinical Society of London. Mr. Godlee: On a Case of Fracture of the Radius and Dislocation forwards of the Ulna at the Wrist, in which the lower end of the latter bone was removed to effect reduction. Dr. Pearson and Dr. Broadbent: On a Case of Acute Necrosis of the Right Orbital Plate of the Frontal Bone giving rise to Thrombosis in the Frontal end of the Longitudinal Sinus in the Cavernous Sinus and Ophthalmic Vein. Dr. G. Johnson: On Picric Acid as a Test for Albumen and Sugar in the Urine. Mr. R. W. Parker: Contused Wound of the Thigh and Leg; Gangrene of the Limb; Death. Dr. Dyce Duckworth will exhibit: 1. A Case of Remarkable Hardness of the Ears; 2. A Case of Rheumatismal Subcutaneous Nodules. Dr. S. Mackenzie will show a Case of Subcutaneous Nodules without Definite Rheumatism.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

LICENCES AND DEGREES.

SIR,—I shall esteem it a great favour, if you will kindly answer me, through your valuable paper, the following question: Has a medical man, with these qualifications, viz., L.R.C.P.Edin., L.R.C.S.I., and L.M., any right to put Doctor on his door? I shall feel doubly obliged by your inserting my question, with answer, and any comment you may feel disposed to make.—Truly yours, M. S.

*** This is a question which appears to have a perennial interest for the junior members of our profession; and it is one which might with equal truth be answered in the affirmative or negative, according to the sense in which it is understood. A medical man holding the qualifications named, and being registered, has an undoubted right, under the Medical Act of 1858, to describe himself to the public as one who professes to cure disease; and it is in this respect a mere matter of good taste and professional etiquette whether he shall style himself Mr. ——, Physician and Surgeon, Mr. ——, L.R.C.P.Edin., L.R.C.S.I., and L.M., or Dr. ——. On the other hand, in English professional circles, the title of Doctor is usually accorded only to those who possess the diploma of M.D. If Mr. Simon's proposal, to legalise the use of the title of Doctor by all who, being in possession of "higher titles," choose to take it, were adopted, it would put an end to a fruitful source of heartburnings, and save many columns of correspondence in the medical journals.

MEDICAL STUDENT.—Candidates for the diploma of the Faculty of Physicians and Surgeons of Glasgow must have been engaged in professional study during forty-five months after their registration as medical students. This period of study must include at least four winter sessions' or three winter and two summer sessions' attendance at a recognised medical school. Only the term of pupilage spent since registration can be accepted as a part of the curriculum. "Instruction" in Practical Pharmacy, "attendance on at least six cases of labour," and "proficiency in vaccination, certified by a public vaccinator or registered practitioner," are required; a certificate from the practitioner to whom the student is apprenticed will be valid. It is advisable to consult the Secretary to the Faculty for information concerning the other questions.

DR. G. DE C. M.—We are sure our correspondent will agree with us that the question of precedence, always unimportant, is particularly so in the present aspect of the question, and may very well be deferred.

"OLD AGE" AND "SICKNESS."

A CORRESPONDENT informs us that a friendly society, of which he is medical officer, has refused sick pay to a member, aged 73 years, certified to be incapacitated by "the effects of age." We are asked for our opinion whether "age" constitutes "sickness" or not. It appears to us that it is a legal question, depending upon the working of the rules of the friendly society, and one on which, in the interest of members, all doubts should be definitely set at rest.

EXCELSIOR.—Probably the most comprehensible general useful manual is that by Drs. Bucknill and Tuke, published by Churchill, New Burlington Street.

MEDICAL ADVERTISING.

WE see with regret the advertisements published in *The Friend of the Free State and Bloemfontein Gazette* by Dr. Croghan. Dr. Croghan would hardly have thought it justifiable or according to his professional position in Ireland to have there published such blatant advertisements, and we cannot understand why he should have thought it permissible in entering upon practice in a British colony, to adopt a practice condemned by professional opinion in Great Britain. We are glad to learn that the opinion in South Africa is equally opposed to medical advertising, and we trust that such examples may remain few and far between.

TEMPERANCE VESSELS.

SIR,—Can you inform me if there is a temperance vessel, by which a habitual drunkard could be sent on a sea-voyage with the certainty of his being kept from alcohol while on board? If there be such a vessel, I shall be glad to hear of the owner's address.—Yours, A. M.

*** The "City" line of ships from the *Clyde* to India are all sailed on teetotal principles, and have been so for thirty years past or more. Many of the commanders are total abstainers. The owners are Messrs. George Smith and Sons, Glasgow.

G. H. B. (Bruton).—*The Truth about Vaccination*, containing the summary which our correspondent needs, is published as a shilling pamphlet by Messrs. Smith, Elder, and Co., London.

NEW TREATMENT FOR PARAPHIMOSIS.

SIR,—The method of reduction of paraphimosis, referred to by Mr. Collyns in the JOURNAL of February 10th, was practised by me when house-surgeon at the Salop Infirmary, and first described in the JOURNAL in 1876. As it saves much suffering on the part of the patient, I should like to draw attention once more to it. A month ago, I had a bad case to treat, one which had been neglected for three days. I moistened a piece of lint about four inches long and two inches wide, and enveloped the constricted glans in it, so that the lint passed well in front of the glans. I then wound a piece of pure rubber tubing, which I always have at hand—about the size of a number nine catheter—from before backwards over the lint, and left it on about two minutes. Then, taking the elastic and lint quickly off, the prepuce was easily drawn over the glans. Frequently, on recovering the elastic, the reduction will be found already completed. Mr. O'Connor could not have seen my communication on the subject, or he would not suggest the use of string instead of elastic, which must be more painful than the latter.—I am, sir, yours faithfully, ALFRED EDDOWES, M.D.

Market Drayton, February 12th, 1883.

A. W.—Mr. Pridgin Teale's *Dangers to Health* (Churchill, New Burlington Street); Mr. W. Eassie's *Sanitary Arrangements of Dwellings* (Smith, Elder, and Co., 15, Waterloo Place, S.W.); Mr. Eardley F. Bailey Denton's *Hand-book of House-Sanitation* (E. and F. N. Spon, Charing Cross); E. G. Banner's *Wholesome Houses* (Stanford, Charing Cross).

POISONING ACCIDENTS BY CARBOLIC ACID.

SIR,—In reference to your article (page 168) on Carbolic Acid Poisoning, permit us to draw attention to the fact that all bottles issued by us for public use are ribbed, and have "poison" labels on, and the antidote described. Although several thousands of these bottles have for many years been sent out by us in each month, we cannot trace one case of accidental poisoning by their contents. Hence, it seems to us that our system affords sufficient protection against any ordinary accident.

Suicides by use of carbolic acid are fewer in number than those caused by laudanum. This fact proves that 'scheduling" the latter under the Poisons Act has had no appreciable effect in preventing its abuse; and it cannot be reasonably expected that persons bent on committing suicide will ever be deterred by Act of Parliament from achieving their purpose.—Yours truly,

Manchester, January 29th, 1883. F. C. CALVERT AND CO.

P.S.—We do issue a 50 per cent. preparation of carbolic acid, in a perfectly safe form, but the general public seem to prefer the full strength, No. 5 quality.

J. B. (LEEDS).—Any surgeon of the Leeds Infirmary will put our correspondent in the way of recovery.

A VEGETARIAN'S EXPERIENCE.

SIR,—I send you the result of an experiment I have made. Last year, about this time, I determined to see how I got on if I abstained from the use of animal food. A year has now elapsed since I touched fish, flesh, or fowl. When I first started, I did not feel that satisfaction which one feels after a flesh meal, and the vegetables tasted insipid; in fact, I had to use sauces and pickles to get them down. Time gradually used me to my diet, and now I can eat them just as they are cooked. I have lost all desire for the condiments, such as sauces, pickles, spices, mustard, and pepper; salt I use in small quantity. My taste for alcoholic liquors has also gone, and, with it, my liking for tobacco. I was costive as a rule until I took to vegetable diet, and, during my trial, I have been constipated only once. For the period of a month I was travelling, and could not get my brown bread, and so my bowels did not act so well; but a return to my whole meal bread soon cured that. I am fond of mental work, and I find I can do more work on it than on a mixed diet. I have not had a bilious attack or sick headache since taking to it. Rheumatic pains flitted about my joints, and I was afraid of rheumatic arthritis setting in; but three months sufficed to rid me of these. My urine used to be loaded with lithates, but the sediment went in a fortnight's time, and I have not seen a deposit since. My renal secretion often has a sweetish smell, and sometimes a smell of roast meat. There has been no decrease in my bodily powers, and I can run and take exercise as well as ever. I have gained seven pounds in weight during my experiment. My senses are acuter, especially those of taste and smell. My sexual passion has moderated, and is not so violent as on a mixed diet. I have a good flow of animal spirits, and am very rarely depressed. I do not eat more food on my new diet than I did as a mixed feeder. Breakfast consists of brown bread, apples, and a cup of coffee; in summer, I have lettuce instead of apples. Dinner is usually composed of two vegetables, brown bread, and a pie or pudding. For tea, I have a cup of milk and water, bread and jam. Supper, when taken, is bread and jam, cold pudding, or boiled onions. Eggs, milk, butter, and cheese I use only in moderate quantities. I shall be very pleased to give any information, or will willingly answer any questions.

T. R. ALLINSON, L.R.C.P., etc.

2, Kingsland Road, E., February 19th, 1883.

MR. S. ANDREWS.—We believe the insurance company in question to be perfectly sound, financially and otherwise. The fees you mention, appear to be as high as actuarial calculations admit for the small policies in which the initial expenses are heavy. We doubt the policy in this particular case of industrial assurance by policies of very small value to stand out for fees which would be obviously prohibitory.

PRURITUS ANI: THROAT-SPRAYS: VACCINATION AND ERYSIPELAS.

SIR,—There are two or three things in the last number of the BRITISH MEDICAL JOURNAL to which I wish to refer. 1. There is no disease more easily cured than pruritus ani, if the treatment be applied to the real seat of disease—the inside of the rectum. I have not seen a case for the last thirty years that was not cured in a week by the application of camphor-ointment to the surface of the rectum inside the anus. It can be applied by the finger, and rubbed round on the inside. A drachm of camphor should be powdered very finely, but not dissolved by too much spirit of wine, and then rubbed up with one ounce of lard. I have never known this to fail of cure. 2. When Dr. Dewar introduced the treatment of different diseases about the throat with sulphurous acid spray, I used it very extensively. It certainly had great power in arresting inflammation of the surface, and in healing all ulcerated spots. I found, however, that it was very irritating in all cases where there was bronchial inflammation or an asthmatic tendency. So many people complained of the irritation, and children also disliked it so much, that I have long since ceased to use sulphurous acid. The most agreeable, soothing, and useful application I have ever made in the cases referred to, is carbolic acid spray, made in the strength of one drachm of Calvert's carbolic acid to ten ounces of water. This should be used by a well made spray instrument, which will throw in spray, not water. I have been using this with great satisfaction ever since Dr. Richardson invented his spray-instrument. The first person who put me on the use of it, in consumption, was my old friend Dr. Henry Purdon of Belfast. He also drew the attention of the late Dr. Stokes of Dublin to its use in consumption; and he reported favourably of it. Carbolic spray has a pleasant taste, and is very soothing for a cough. 3. I may mention here that I had a case last year which is very important in relation to vaccination, seeing that so much nonsense is written now-a-days on that subject. I vaccinated the three months' old infant of an intelligent farmer. Everything went on nicely till the sore began to heal. Erysipelas then began in the arm, and extended with great virulence to the whole body. The child was in extreme danger. I ordered the internal use of tinct. ferri per chlort.; and the case did well. This medicine I have been using in erysipelas for many years, and I have hardly ever seen it fail. I could not understand how the erysipelas came, as nothing of the kind had occurred in my previous experience. The operation was performed by very clean ivory points, and the infection, I thought, was particularly good. It puzzled me completely. The father of the child came to me one day, to say that he had found out the secret. His wife had employed a neighbour's little girl for some time as a day-nurse. They had now ascertained that the girl had erysipelas in her arm at the very time I had cut the baby's arm. This, of course, threw a flood of light on the subject.—Yours truly,

JAMES C. L. CARSON, M.D.

Coleraine, Ireland, February 14th, 1883.

MEDICAL PROVIDENCE.

IN reply to numerous correspondents who have written to us for information respecting the Society for the Relief of Widows and Orphans of Medical Men, referred to by our correspondent, "E. H. R.," in our last week's issue, we may state that it is distinctly laid down in *Churchill's Directory*, that members of this Society do, by the small yearly subscription of two guineas, "protect their own families from destitution, should they unexpectedly need it; and its benefits are conferred only on those who are left in indigent circumstances." All legally qualified members of the profession residing within a radius of twenty miles from Charing Cross are eligible for proposal; the mode of admission is by ballot. Any further information may be obtained of the Secretary, Mr. J. B. Blackett, 28, Green Street, Grosvenor Square, W.

DR. ROBERT LEE.—Enough has, we think, been said about the matter, and we cannot afford more space to it.

HYPERIDROSIS.

SIR,—Will any of your readers kindly suggest means likely to cure or lessen this distressing symptom? It occurs in a patient of middle age, regular habits, and nervous temperament. Sometimes in church, or in society, the perspiration, chiefly on the head and face, bursts forth most profusely, rolls down the features in large beads, and lasts for a considerable time. So great an annoyance does it cause, that the sufferer has become a regular recluse, and avoids all places of public resort. Various suggested remedies have been tried; the application of very hot water, belladonna liniment, solution of tannin, desiccating powders, etc., with little or no benefit. Will any specialist recommend something likely to prove beneficial?—I am, yours faithfully, M.D.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. J. Davison, Ballinakill, Queen's co.; Mr. F. R. Mutch, Nottingham; Mr. Shirley F. Murphy, London; Mr. Hugh Orr, Filey, near Scarborough; Mr. Nathaniel Stevenson, London; Mr. A. Graham, London; Dr. J. Minis Harp, Philadelphia; Mr. D. Biddle, Kingston-on-Thames; Messrs. Maw, Son and Thompson, London; An Examiner in Medicine, London; Mr. E. Rickard, Birmingham; Dr. G. de Courcy Morris, York; Mr. T. A. Perry Marsh, Devonport; Mr. Sidney Plowman, London; Mr. Edward Bellamy, London; Mr. Alfred Upton, Brighton; Mr. Arthur H. Benson, Dublin; Mr. A. H. Fraser, Witham, Essex; A Member, Leeds; Mr. W. J. V. Harle, London; Dr. J. W. Moore, Dublin; Dr. C. C. Cock, Ross, Herefordshire; Dr. W. Thomson, Dublin; Dr. Dudley S. Reynolds, Louisville, U.S.A.; Dr. Alex. R. Coldstream, Florence; Mr. C. R. Illingworth, Clayton-le-Moors; Mr. Ernest D. Bower, Gloucester; Mr. Lawson Tait, Birmingham; Mr. H. J. Jupp, London; Mr. Samuel Andrews, Basingstoke; Dr. A. 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BOOKS, ETC., RECEIVED.

Micro-Photography, including a Description of the Wet Collodion and Gelatino-Bromide Processes, together with the Best Methods of Mounting and Preparing Microscopic Objects for Micro-Photography. By A. Cowley Malley, B.A., M.B., B.Ch., T. C. D. London: H. K. Lewis. 1883.

A Synoptical Guide to the Study of Obstetrics; being an Aid to the Student in the Class-Room, in Private Study, and in Preparing for Examinations. By Robert Barnes, M.D.Lond., Obstetric Physician and Lecturer in Obstetrics to St. George's Hospital. London: Smith, Elder, and Co. 1883.

Rheumatism, Gout, and Some Allied Disorders. By Morris Longstreth, M.D., one of the Attending Physicians of the Pennsylvania Hospital, Lecturer on Pathological Anatomy at the Jefferson Medical College, Philadelphia, Pa. London: Sampson Low, Marston, Searle, and Rivington. 1883.

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THE GULSTONIAN LECTURES,
ON
THE STERILITY OF WOMEN,

Delivered at the Royal College of Physicians, February 1883.

By J. MATTHEWS DUNCAN, M.D., LL.D., ETC.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

Lecture II: Part I.—Its Theory or Causation.

Mr. President, Vice-President, and Gentlemen,—In studying the theory or inquiring into the causes of sterility in women, it is advantageous to keep in mind the corresponding condition in plants and in the lower animals, for in all living beings there is more or less similarity of the sexual organs and offices, and disturbance o anction in one division will throw light on disturbance in another On this subject I have made many, but only casual, observations and have had the privilege of conversation with gardeners and breeders, classes of men in whom are found many of remarkable ntelligence and acuteness of observation. But the great storehouse f facts and references on which I rely is Darwin's *Variation of Animals and Plants under Domestication.* Plants, and some animals, propagate otherwise than by sexual generation, but it is only the terility arising from disturbance of the regular course and consequences of sexual union that has a direct or nearly direct bearing n the present inquiry. The sterility of hybrids, which, considering he theory he is supporting, forms naturally the main study of Darwin, is of comparatively little interest to us, and will not be hereafter referred to, but many of the principles of sterility find strong support in the special sterility of hybrids.

Viewing the subject generally, we may anticipate a great result by pointing out the paramount prevalence and paramount potency of constitutional conditions as causes of sterility. Such are cold and heat, overfeeding and underfeeding, youth and old age, degradation of general health, confinement, and interbreeding.

Local conditions occur in plants that are quite sufficient to account for or cause sterility. Such are contabescence of anthers, monstrous flowers, double flowers, seedless fruit. These local conditions are the result of the general or constitutional conditions of the individuals in which they occur; and they have their place rather in the results of sterility, or of the conditions producing sterility, than in the causes of sterility. They have their analogues in such abortions, dead fœtuses, unhealthy offspring, or monstrous products of animals, as are believed to be results of what may be called the sterile diathesis. The causes of sterility are causes of these imperfections, and for that reason they are referred to the sterile tendency. They do, indeed, constitute the sterility to be accounted for. Thus, to wander into hybridism for an example, it is an observation of Gärtner that hybridism in plants, a great cause of sterility, produces also a strong tendency in flowers to become double.

In the vegetable kingdom, everyone has observed that source of sterility which may be, no doubt nearly truly, designated a degradation of general health. A plant covered with flowers is brought from a house where its fertility has been stimulated to the highest degree, and placed as an ornament in a sitting-room, where it remains till its charms are lost, and the result is such an injury to its constitutional vigour, that it is sterile, or nearly sterile, for one or for several subsequent seasons. Its fertility may never be restored, or only after several years of the medical care of a skilful gardener. The scarlet geraniums which are brought from their healthy homes in full bloom to adorn the houses of inhabitants of densely populated cities soon show the injurious influence of their new surroundings, however well they may be cared for; their flowers become less numerous, or are altogether wanting; then their leafage diminishes greatly in quantity, and their existence becomes a mere lingering. A rose-garden, lately in a suburban position near London, becomes surrounded by the growing city, and gradually, as the buildings increase, the fertility of the roses diminishes; the garden becomes useless. Some of our finest forest trees, and among them some plants, grow beautifully in our squares, producing wood in even exaggerated quantity, and a clothing of leaves sufficient for ornament; but there is no wealth of leaves, and there is no seed. In some cases, an exception makes the rule more striking, as when a cherry-tree in the heart of the city of London lately produced flowers and matured its fruit, so far as maturity is indicated by beauty, size, and taste.

Practical gardeners attribute sexual injury to overstimulation by manure, or what they call overfeeding. This ordinarily produces great growth of the tissues; and, when this is restrained by judicious pruning, it forces out a large or excessive crop of flowers and subsequent fruit. In the language of Spencer, there is produced by overfeeding an excess of individuation, the restraint of which results in excess of genesis. The natural tendency of the overfeeding of plants is to produce a degree of relative sterility; and this may show itself in a paucity of flowers, or it may show itself in the production of those double, or monstrous, or abortive flowers which are so much admired. The opposite result is produced by moderate or full feeding. Then, in mature plants, there is not great growth of tissues, but rather a production of fruit. Sometimes, the plant, without assignable cause, but especially if underfed, has an exaggerated production, and is said to run to seed; and, from whatever it may arise, it, in a reflex manner, injures the plant, which consequently becomes blighted, and often dies. Excessive production here seems to take the place of sterility.

The following is an interesting illustration of the effect of overfeeding and of moderately feeding or underfeeding a vine; and it is important because it specifies a particular local condition or disease which is apparently the cause of the infecundity of the overfed plants, and so indicates a line of investigation which may with advantage be pursued in other examples of sterility. In a recent letter from Mr. Thomson, the well-known vine-cultivator, he writes: "A circumstance has arisen in my own experience that I have never seen noticed in print. A vine called the Alnwick seedling, if grown vigorously in rich soil, fails to set its fruit even when aided. This failure is caused by the exudation from the female organ of a dewdrop of sap, which moistens the pollen, and it does not descend through the pistil and impregnate the ova. When the vine is grown in poor soil the dewdrop does not appear, and impregnation takes place; seeds are formed in perfection, but the pulp for which the grape is grown is almost absent. I know," he adds, "no other grape affected in the same way or subject to the same influences."

I know no good account of the sterility of plants as regulated by age, but the influence of age is well recognised. A young fruit-tree bears no fruit, or very little, and that little imperfect; and the careful gardener does not permit it to bear much, or even a little, believing that fruit-bearing injures growth and diminishes future fertility. The influence of old age and decay in fruit-bearing trees is also well known: the fruit is ill-developed, and there is little of it.

"All know," says Spencer, "that a pear-tree continues to increase in size for years before it begins to bear, and that, producing but few pears at first, it is long before it fruits abundantly. A young mulberry, branching out luxuriantly season after season, but covered with nothing but leaves, at length blossoms sparingly, and sets some small and imperfect berries, which it drops while they are green; and it makes these futile attempts time after time before it succeeds in ripening any seeds. But these multiaxial plants, or aggregates of individuals, some of which continue to grow while others become arrested and transformed into seed-bearers, show us the relation less definitely than certain plants that are substantially, if not literally, uniaxial. Of these, the cocoa-nut may be instanced. For some years it goes on shooting up without making any sign of becoming fertile. About the sixth year it flowers, but the flowers wither without result. In the seventh year it flowers and produces a few nuts, but these prove abortive, and drop. In the eighth year it ripens a moderate number of nuts, and afterwards increases the number, until, in the tenth year, it comes into full bearing. Meanwhile, from the time of its first flowering, its growth begins to diminish, and goes on diminishing till the tenth year, when it ceases."

The evil influence of interbreeding is a subject too extensive to enter upon at any length. In plants, it is corroborated by the well-known advantage of crossing of varieties. But it needs no confirmation; for there are self-impotent plants, plants more thoroughly fertilised by a nearly allied species than by pollen of their own species; and there are the wonders of dimorphism with sterility arising from union of individuals not only of the same species, but of the same form. In the works of horticulturists is to be found ample evidence that interbreeding of plants tends to weakness, malformation, and sterility.

The influence of heat and cold is, in plants, well illustrated by the failure of most Alpine species to produce flowers and fruit in lowland gardens, and by the same failure of lowland plants as the

ascend the sides of mountains. A walk in the highlands will show the pines thriving on the hill-sides and well covered with cones; but, as greater altitudes are reached, the trees are observed to become stunted, and the fruit entirely to fail.

The abortion-like sterility of plants is illustrated by the bearing of double flowers, of flowers whose seeds do not ripen, or whose seeds, though apparently perfect, are incapable of germination and growth. In some of the cases of seedless fruit, and of fruit with few seeds, or with one seed, or with imperfect seed, we have also abortion, and at the same time a fine illustration of the working, locally, of the opposition between individuation and genesis. The whole plant, as the vine or the pear-tree, may have the appearance of health, and its fruit alone is unnatural. The tissues of the fruit-capsule are enormously developed, while the seeds have disappeared, or are reduced to one or a small number. The luscious pear or the juicy grape are masses of hypertrophy or myxomatous-like degeneration, while the seeds are the subject of extreme hypoplasia. Gardeners generally ascribe these results to overfeeding and overstimulation by manures and heat; but Darwin is more cautious, and in most cases does not analyse the causes farther than is implied in "unnatural conditions of life." No one, according to Lindley and Darwin, has produced double flowers by promoting the perfect health of the plant.

Before leaving vegetable physiology, I would point out the frequent occurrence in plants of seeds which, though apparently perfect, will not germinate; they cannot be distinguished from their neighbours otherwise than by their incapacity for growing. The same failure to grow is often observed, under closely similar circumstances, in the eggs of fowls and of other birds; they cannot be hatched, although no imperfection is discoverable in them. That there are such ova in other animals and in woman is highly probable, but in them the completeness of the demonstration is unattainable.

Very little is known of the sterility of animals, and it is easily understood that reliable observations can only, with great difficulty, be made on them, especially in a state of nature. Many authors, and latterly Darwin and his collaborators, have paid much attention to the great subject of the sterility of hybrid animals. Observations and experiments in this department are made chiefly on domestic animals, or on wild animals in confinement, and each experiment has a high value. But the sterility of ordinary domestic animals has been little studied. In herds of fine heifers and cows, and in mares, it is occasionally exhibited, but I have no data as to its frequency; and in cattle, at least, observations are imperfect, the animal that, by sterility of one season, disappoints its owner, being generally at once fattened for the butcher.

It is a well-known belief among breeders, which may be historically traced to ancient times, that when the female of any kind is made to breed when very young, she does so at the expense of permanently preventing her own growth to perfection, and she will be likely to produce offspring that is not of the best quality. This failure is well illustrated in the case of the common fowl and of the turkey, the progeny of chickens and of turkeys one year old being not the best of their kind, and specially difficult to rear. Fanciers breed these animals from a female two years and a male three years old. The occurrence of sterility in early and in elderly life is clearly seen, and its degree easily made out in pluriparous mammals, as the dog and pig, and in birds whose broods can be counted, and whose yearly production of eggs can be also numbered. This subject will be discussed fully when we come to consider pluriparity in woman.

Overfeeding, or the production of fatness or of obesity in the the female, is well known to be hostile to fertility, to be an illustration of the opposition of individuation to genesis. By special feeding and fattening turkeys and common fowls, the henwife arrests almost completely the production of eggs. They may also be made fewer by starving the birds, and not fewer only, but also smaller. These birds, when highly fed, sometimes exhibit excessive productiveness, two eggs being laid daily, an instance of great intensity of fertility; but this is not regarded with favour, having, I am told by a turkey-fancier, an injurious influence in their case, by delay of the commencement of laying in the season following that of the excessive production. The breeder of cattle prevents, by careful management, the fattening of the females.

In respect of feeding, comparisons are made between the relative sterility of wild animals and the comparative fertility of domesticated or confined animals of the same species, but the comparisons are not quite satisfactory, from the intermixture of the influences of food, and of domestication or confinement; and again, in the comparisons of animals fed on rich and on poor pasture, sufficient care is not taken to insure that the compared animals are of the same breed. With this previous reflection, I subjoin an interesting passage from Spencer's chapter on nutrition and genesis: "Clear proof," says he, "that abundant nutriment raises the rate of multiplication (and *vice versâ*) occurs among mammals. Compare the litters of the dog with the litters of the wolf and the fox. Whereas those of the one range in number from six to fourteen, the others contain respectively five or six, or occasionally seven, and four or five, or rarely six. Again, the wild cat has four or five kittens, but the tame cat has five or six kittens two or three times a year. So, too, is it with the weasel tribe. The stoat has five young ones once a year. The ferret has two litters yearly, each containing from six to nine, and this, notwithstanding that it is the larger of the two. Perhaps the most striking contrast is that between the wild and tame varieties of the pig. While the one produces, according to its age, from four to eight or ten young ones once a year, the other produces as many as seventeen in a litter; or, in other cases, will bring up five litters of ten each in two years, a rate of reproduction that is unparalleled in animals of as large a size. And let us not omit to note that this excessive fertility occurs where there is the greatest inactivity—where there is plenty to eat and nothing to do. There is no less distinct evidence that, among domesticated mammals themselves, the well-fed individuals are more prolific than the ill-fed individuals. On the high and comparatively infertile Cotswolds, it is unusual for ewes to have twins, but they very commonly have twins in the adjacent rich valley of the Severn. Similarly, among the barren hills of the west of Scotland, two lambs will be born by about one ewe in twenty; whereas, in England, something like one ewe in three will bear two lambs. Nay, in rich pastures, twins are more frequent than single births; and it occasionally happens that, after a genial autumn and consequent good grazing, a flock of ewes will next spring yield double their number of lambs—the triplets balancing the uniparæ. So direct is the relation, that I have heard a farmer assert his ability to foretell, from the high, medium, or low condition of an ewe in the autumn, whether she will next spring bear two, or one, or none."

An interesting department of the sterility of animals is that which results from confinement. This seems specially to affect what are vaguely designated the noble animals. Those which are sterile show great variations; some disdain to cohabit, or have lost sexual desire; others have increase of sexual appetite, and cohabit freely or excessively, but without impregnation resulting, or with the result very rarely following. Some, if impregnated, bring forth only abortions, or young which are born dead, or, if alive, feeble and ill-formed. There is, for instance, as Shorthouse has pointed out, a common occurrence of cleft palate in the lions' cubs born in the Zoological Gardens.

Among birds in confinement, there are many good examples of change of sexual habits and of sterility. In some cases, they have no eggs, or, if they produce, they have only comparatively few, or they may neglect the eggs when produced, or the eggs duly cared for may be incapable of being hatched. This abortional sterility arising from imperfection of eggs as a result of confinement is well proved by experiments made in France on the common fowl. When these birds were allowed considerable freedom, 20 per cent. of the eggs failed to be hatched; when less freedom was allowed, 40 per cent. failed; when closely confined, 60 per cent. were not hatched.

The power of temperatures that are not according to an animal's nature to induce sterility, is no doubt very great. Darwin mentions that Mr. Miller, a former superintendent of the Zoological Gardens, believed that the sterility of the carnivora there was increased by increase of exposure to air and cold. In winter, inadequately sheltered cows either cease to give milk, or give it in diminished quantity. "And," says Spencer, "though giving milk is not the same thing as bearing a young one, yet, as milk is part of the material from which a young one is built up, it is part of the outlay for reproductive purposes, and diminution of it is a loss of reproductive power." Failure to maintain the cow's heat may entail such reduction in the supply of milk as to cause the death of the calf. Hard living, says Darwin, retards the period at which animals conceive, for it has been found disadvantageous in the northern highlands of Scotland to allow cows to bear calves before they are four years old. Roulin found that, in the hot valleys of the equatorial Cordilleras, sheep were not fully fecund.

The common fowl will not breed in Greenland or Northern Siberia. "In this country, it is fed," says Spencer, "through the cold months, but nevertheless, in midwinter, it either wholly leaves off laying, or lays very sparingly. And then we have the further evidence that, if it lays sparingly, it does so only on condition that the heat, as well

s the food, is artificially maintained. Hens lay in cold weather nly when they are kept warm. To which fact may be added the indred one that, when pigeons receive artificial heat, they not only ontinue to hatch longer in autumn, but will recommence in spring ooner than they would otherwise do."

On the subject of the interbreeding of animals, there is a vast ody of opinion as well as of facts showing its power in producing onstrosity and its ally, sterility. "If we were," says Darwin, "to air brothers and sisters in the case of any pure animal, which from ny cause had the least tendency to sterility, the breed would ssuredly be lost in a few generations." Elsewhere, he shows that long continued close interbreeding between the nearest relations liminishes the constitutional vigour, size, and fertility of the offpring; and occasionally leads to malformations, but not necessarily o general deterioration of form or structure. This failure of ferility shows that the evil results of interbreeding are independent of he augmentation of morbid tendencies common to both parents, hough this augmentation no doubt is often highly injurious. Our elief that evil follows from close interbreeding rests to a large exent on the experience of practical breeders, especially of those vho have seen many animals of the kind which can be propagated uickly; but it likewise rests on several carefully recorded experinents. With some animals, close interbreeding may be carried on or a long period with impunity, by the selection of the most vigorous nd healthy individuals; but, sooner or later, evil follows. The evil, owever, comes on so slowly and gradually, that it easily escapes bservation, but can be recognised by the almost instantaneous anner in which size, constitutional vigour, and fertility are re-ained when animals that have long been interbred are crossed vith a distinct family."

Regarding the very remarkable subject of sterility of sexual conection with special individuals only, Darwin says: "It is by no neans rare to find certain males and females which will not breed ogether, though both are known to be perfectly fertile with other nales and females. We have no reason to suppose that this is aused by these animals having been subjected to any change in heir habits of life.....The cause apparently lies in an innate sexual ncompatibility of the pair which are matched. Several instances ave been communicated to me by Mr. W. C. Spooner (well known or his essay on Cross-breeding), by Mr. Eyton of Eyton, by Mr. Wicksted, and other breeders, and especially by Mr. Waring of Chelsield, in relation to horses, cattle, pigs, foxhounds, other dogs, and igeons. In these cases, females which either previously or subsequently were proved to be fertile, failed to breed with certain males, vith whom it was particularly desired to match them. A change n the constitution of the female may sometimes have occurred efore she was put to the second male; but in other cases the xplanation is hardly tenable, for a female known not to be barren as been unsuccessfully paired seven or eight times with the same nale, likewise known to be perfectly fertile. With cart-mares, which sometimes will not breed with stallions of pure blood, but subsequently have bred with cart-stallions, Mr. Spooner is inclined to attribute the failure to the lesser sexual power of the racehorse; but I have heard, from the greatest breeder of racehorses at the present day, through Mr. Waring, that it frequently occurs with the mare to be put several times during one or two seasons to a particular stallion of acknowledged power, and yet prove barren, the mare afterwards breeding at once with some other horse. These facts are worth recording, as they show, like so many previous facts, on what slight constitutional differences the fertility of an animal often depends."

Before leaving the subject of the causes of sterility of animals, I quote a passage from Darwin regarding the results of confinement. "Sufficient evidence," says he, "has now been advanced to prove that animals, when first confined, are eminently liable to suffer in their reproductive systems. We feel at first naturally inclined to attribute the result to loss of health, or at least to loss of vigour; but this view can hardly be admitted, when we reflect how healthy, long-lived, and vigorous many animals are under captivity, such as parrots, and hawks when used for hawking, cheetahs when used for hunting, and elephants. The reproductive organs themselves are not diseased, and the diseases from which animals in menageries usually perish are not those which in any way affect their fertility. No domestic animal is more subject to disease than the sheep, yet it is remarkably prolific. The failure of animals to breed under confinement has been sometimes attributed exclusively to a failure in their sexual instincts. This may occasionally come into play; but there is no obvious reason why this instinct should be specially liable to be affected with perfectly tamed animals, except, indeed, indirectly, through the reproductive system itself being disturbed. Moreover, numerous cases have been given of various animals which couple freely under confinement, but never conceive, or, if they conceive and produce young, these are fewer in number than is natural to the species. In the vegetable kingdom, instinct, of course, can play no part; and we shall presently see (he says) that plants, when removed from their natural conditions, are affected in nearly the same manner as animals. Change of climate cannot be the cause of the loss of fertility; for, whilst many animals imported into Europe from extremely different climates breed freely, many others, when confined in their native land, are completely sterile. Change of food cannot be the chief cause, for ostriches, ducks, and many other animals, which must have undergone a great change in this respect, breed freely. Carnivorous birds, when confined, are extremely sterile; whilst most carnivorous mammals, except plantigrades, are moderately fertile. Nor can the amount of food be the cause; for a sufficient supply will certainly be given to valuable animals; and there is no reason to suppose that much more food would be given to them than to our choice domestic productions, which retain their full fertility. Lastly, we may infer, from the case of the elephant, cheetah, various hawks, and of many animals which are allowed to lead an almost free life in their native land, that want of exercise is not the sole cause. It would appear that any change in the habits of life, whatever these habits may be, if great enough, tends to affect in an inexplicable manner the powers of reproduction. The result depends more on the constitution of the species than on the nature of the change; for certain whole groups are affected more than others; but exceptions always occur, for some species in the most fertile groups refuse to breed, and some in the most sterile groups breed freely. Those animals which usually breed freely under confinement, rarely breed, as I was assured, in the Zoological Gardens, within a year or two of their first importation. When an animal which is generally sterile under confinement happens to breed, the young, apparently, do not inherit this power; for, had this been the case, various quadrupeds and birds which are valuable for exhibition would have become common. Dr. Broca even affirms that many animals in the Jardin des Plantes, after having produced young for three or four successive generations, become sterile; but this may be the result of too close interbreeding. It is a remarkable circumstance, that many mammals and birds have produced hybrids under confinement quite as readily as, or even more readily than, they have procreated their own kind. Of this fact, many instances have been given; and we are thus reminded of those plants which, when cultivated, refuse to be fertilised by their own pollen, but can easily be fertilised by that of a distinct species. Finally, we must conclude, limited as the conclusion is, that changed conditions of life have an especial power of acting injuriously on the reproductive system. The whole case is quite peculiar; for those organs, though not diseased, are thus rendered incapable of performing their proper functions, or perform them imperfectly."

THE METEOROLOGICAL SOCIETY.—The usual monthly meeting of this Society was held on Wednesday evening, the 21st February; Mr. J. K. Laughton, F.R.A.S., President, in the chair. The following papers were read—1. "Notice of a remarkable land fog bank, 'The Larry,' that occurred at Teignmouth, on October 9th, 1882," by G. W. Ormerod, M.A., F.M.S. The "Larry" is a dense mass of rolling white land fog, and is confined to the bottom of the Teign valley, differing therein from the sea fog which rises above the tops of the hills; it appears about daybreak, and has an undulating but well defined upper edge, which leaves the higher part of the hill sides perfectly clear. The author gave an account, illustrated by photographs, of the remarkable fog bank that occurred at Teignmouth on the morning of October 9th. 2. "Barometric depressions between the Azores and the continent of Europe," by Captain J. C. de Brito Capello. The author gave the tracks of several depressions from the Azores to Europe, and showed that if there had been a telegraphic cable, nearly every one of them could have been foretold in England. 3. "Weather-forecasts and storm-warnings on the coast of South Africa," by Captain C. M. Hepworth. 4. "Note on the reduction of barometric readings to the gravity of latitude 45°, and its effects on secular gradients and the calculated height of the neutral plane of pressure in the tropics," by Professor E. D. Archibald.

LECTURES
ON
THE COMPARATIVE PHYSIOLOGY OF MENSTRUATION.

By ALFRED WILTSHIRE, M.D., F.R.C.P. Lond.,

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Lecture II.

Gentlemen,—We may now examine the evidence furnished by observation upon the females of the lower animals at their periods of heat. It will be apparent that there is singular accord in the statements of competent observers upon the phenomena as they present themselves in the various animals; and that, in all the creatures subjected to inquiry, some more or less conspicuous flux or exudation occurs; the majority exhibiting manifestations partaking in varying degrees of a sanguineous character.

In observing domesticated animals, and still more those in a state of captivity, the same allowances for individual variations should be made as would be made in regard of women; in whom we find laborious life and hard fare to some extent diminish the flow; while ease, luxury, and plenty (not excess) promote it. Again, racial peculiarities, with the lower animals as with the human species, may unquestionably affect the character of the flow.

Very slight changes in normal conditions affect the capacity for reproduction in all animals; hence, many creatures fail to breed in captivity, while, on the other hand, domesticable creatures have augmented powers. Mr. Darwin's statements to this effect are numerous and weighty. In *Animals and Plants under Domestication*, vol. ii, pp. 143-4, he says: "It would appear that any change in the habits of life, whatever these habits may be, if great enough, tends to affect in an inexplicable manner the powers of reproduction. The result depends more on the constitution of the species than on the nature of the change; for certain whole groups are affected more than others; but exceptions always occur, for some species in the most fertile groups refuse to breed, and some in the most sterile groups breed freely.....Changed conditions of life have an especial power of acting injuriously on the reproductive system. The whole case is quite peculiar, for these organs, though not diseased, are thus rendered incapable of performing their proper functions, or perform them imperfectly." *Ibid.*, p. 256: "We know that certain groups of organic beings, but with exceptions in each group, have their reproductive systems much more easily affected by changed conditions than other groups; for instance, carnivorous birds more readily than carnivorous mammals, and parrots more readily than pigeons; and this fact harmonises with the apparently capricious manner and degree in which various groups of animals and plants vary under domestication."

Analogous susceptibility is displayed by the human female in the disturbance, mostly arrest, of menstruation that so often attends change of residence. I have met with innumerable instances of this. Nothing is more common than for maid-servants coming from the country to London to have amenorrhœa for some months. Among ladies, many instances of disorder have come under my notice from foreign travel; but the effects are not always injurious. Making due allowances, then, we may now review the evidence at our disposal.

Mr. Simpson's statements, based upon observations made on his own cattle, are as explicit as they are reliable. He states that his heifers usually arrive at puberty at from six to nine months, and sometimes even earlier; and that, after the establishment of the symptoms of heat, or "bulling," the rut recurs, when the bull is not allowed access, with strict regularity every twenty-one days, or three weeks. Œstro-menstruation is shown by swelling of the vulva, which at first weeps an odorous mucus, but soon this becomes quite red from the presence of blood; and when that stage is attained, the heat rapidly subsides, intercourse being then refused. Mr. West, Mr. Simpson's excellent veterinary surgeon, emphatically confirms these observations, and adduces his very large acquaintance with analogous phenomena, personally observed, in other animals, as the mare, female ass, bitch, cat, etc., as well as in cows.

Mr. West made a statement to me which is amply corroborated by remarks of Mr. Darwin's, namely, that in the rougher Welsh and Highland cattle, which lead harder lives, maturity, or the epoch of puberty, arrives much later than in Alderneys or shorthorns; but he adds that a flux of sanguineous character equally occurs in the females of those breeds at the time of the rut. I am indebted to Mr. West for information respecting a remarkable case of "impervious vagina in a heifer," which occurred in his practice, and which illustrates the occurrence of sanguineous menstruation in the heifer. Mr. West was called to see a heifer supposed to be in labour, and unable to calve. On examination, he found the vagina to end in an impervious canal three inches from the vulva. Thinking the fœtus must be dead and abortion prevented by the state of the vagina, Mr. West advised that nothing should be done, hoping the pains might subside. They continued, however, and the heifer lost flesh. Four months afterwards, Mr. West determined to cut through the obstruction. This he did, but having passed it, he found the os uteri contracted; accordingly, into this he inserted a whalebone sound, and dilated it a little, when a reddish-brown offensive fluid began to escape. About two quarts altogether came away, but no signs of a fœtus. The beast recovered. Mr. West concludes with the remark that the fluid "should have come away as a periodic discharge, but was prevented by the impervious state of the vagina, which must have also rendered impregnation impossible."

Mr. West was also so good as to refer me to a similar case published by Mr. Macgillivray, in vol. iii of the *Veterinary Journal*, p. 443. In this case there was an impervious vagina in a heifer, which had never been put to the bull. The creature had severe bearing-down pains, and was thought to have obstruction of the bowels. A passage was forced into the generative canal, and dark brown offensive fluid escaped. Mr. Macgillivray regarded the case as proving "the existence of a menstrual discharge in the brute female analogous to that in the human female." He considered that the "œstral" products had never found vent from the uterus. These views were combated by another veterinary surgeon, Mr. Gerrard, but his arguments, though plausibly advanced, were quite inconclusive. Mr. Gerrard points out that adhesion of the vagina sometimes arises from injury done in copulation; but admitting this as a possible though rare occurrence, it does not apply in Mr. Macgillivray's case. Nor is Mr. Gerrard's argument on the "sero-sanguineous" nature of the fluid valid; for, as will be shown, the sanguineous character of the fluid diminishes as we descend in the organic scale; even in women the catamenial discharge is sometimes abundantly mucous. Mr. Macgillivray replies to his opponent's strictures in the same volume (vol. iv), and conclusively shows that his case was one of impervious vagina. He goes on to express the very decided conviction that the lower animals do certainly have an "œstral" discharge resembling the catamenia of woman, though it is not so invariable, copious, or well defined as in woman. He then gives instances of excessive flow in the cow and mare, and concludes by saying: "The discharge of a more or less quantity of a blood-like fluid in heifers and cows during the cessation of 'heat,' is so common, and so well known to all herdsmen, as scarcely to require any notice here."

Mr. Gerrard, admitting that the "œstral" discharge is frequently more or less tinged with blood in the lower animals, considers that a sanguineous flow is the exception and not the rule; but it is obvious that he is opposed to authorities like Fleming and Saint Cyr as well as to the observation of most competent inquirers. Probably, when it is understood that, in accordance with the law of evolution, the discharge in the lower females is normally less sanguineous than in woman, these discrepancies between undoubtedly honest observers will disappear.

Laycock (*Nervous Diseases of Women*, p. 42) says: "The menstrual period has been considered analogous to the heat of lower animals by numerous writers. Reaumur and others, down to Cruikshank and Blundell, have described the state of the organs of generation in brute females during this period; they have been found fuller than usual of blood, the fallopian tubes in a state of excitement, or applied to the ovary, the latter enlarged and studded with developed Graafian vesicles, and a serous blood-coloured fluid discharged from the vagina. There are various considerations which serve to support this opinion."

"The following may be considered as the true state of the case respecting menstruation. Since the uterus itself is not an essential organ of generation, but merely superadded, and since the influence of the ovaria and testes over all the other processes and organs connected with generation, including the existence of the uterus and its development during gestation, has been demonstrated, the

ppears not the slightest reason for withdrawing the phenomena of enstruation from their agency. It is in the ovaria, then, that we ave to look for the causes of this process. There is every reason to elieve that Graafian vesicles are coming forward at intervals during ne whole period in which the reproductive organs are active; that nese vesicles enlarge and burst in succession, and shed the con-ained ovula, whether sexual connection takes place or not; and hat, from recent researches, these changes in them take place at ach menstrual nisus. If we remember that, during the period of eat in the lower mammals, as the ewe and the sow, and of spawn-ng and egg-laying in birds, fishes, reptiles, insects—indeed, of every lass of oviparous animals—these ovula become developed and are hed, whether they be fructified or not, recurring at the same time o previous statements, we cannot help coming to the conclusion hat the period of menstruation is precisely analogous to the period f heat; that there is, in fact, an excited state of the ovaria at each eriod when ovula are shed; and that the capability of performing his periodic function distinguishes the ovaria of the woman from hose of the impubescent girl and virago. If, at this period, an vulum be vivified by the male semen, conception takes place; and his hypothesis at once explains the doctrine that women more eadily conceive at the menstrual period, maintained by Hippocrates, alen, and their numerous copyists among the ancients, by Dr. Iontgomery and others in later times, and generally believed by emales themselves. When conception has taken place, a new action s set up in the ovaria, which may be considered as a permanent timulus to the whole of the generative organs; and, although the sual nisus may and does occur during pregnancy, its effects are endered less obvious from its permanency.* If, on the other hand, he discharged ovulum or ovula be unimpregnated, the same process is epeated at the next menstrual period, and so continues until age, lisease, or conception interferes with the ovarian system. But we hall find that this periodic movement is not limited to the ovaria, ut that it is an affection of the general system in which the ovaria artake; and that it is through these the secondary system in con-ection with them is influenced, and all the attendant phenomena those of menstruation) excited."

"Recurring to our previous statements, it appears that in many nimals the development of the testes and ovaria, and the shedding f the ovula and spermatic fluid, occur at definite seasons of the ear, and, for the most part, in spring and autumn. The heat also f those animals, in which the genitals are in continuous activity, ccurs at fixed periods, and these must be compared with the eriodic movement of the human female. Again, the period of ges-ation in woman is a multiple of the menstrual period, and it will be seful to inquire into the relations of the periods of utero-gestation n animals generally to that of woman."

"Are the lower animals influenced by a periodic nisus, weekly or nonthly? This question I shall attempt to answer in the affirma-ive, as well as my limited space will allow. It has already been emarked, that the change from fœtal to uterine [? extra-uterine] life is a phase in development which in man occurs at the end of he tenth menstrual period of the female. This is correct as regards he general fact; but it must be added that slight labour-pains ccur at every menstrual period, but most particularly in the third, fifth, and seventh months of gestation; a fœtus of the last-mentioned age being able to maintain an independent existence. The period of incubation of the egg is strictly analogous to the periods of utero-gestation in mammalia; and the same remark is applicable to that of the ova of fishes, reptiles, and insects, with due limitations. For example, in insects, the egg, larva, and chrysalis states correspond to the whole period between conception and puberty in mammalia. Mr. Kirby remarks that winged insects, many brachiopod crustacea, and the batrachian reptiles, in leaving the egg, only quit their first integument, answering to the chorion or external envelope of the human fœtus; they, therefore, still continue in the fœtal state." Laycock also quotes from the *Zoonomia* of the elder Darwin (Erasmus) that, "in mares and bitches, if the venereal orgasm be disappointed of its object, it recurs at monthly periods." (P. 60.)

Laycock adds many illustrations of the periodical recurrence of heat at brief intervals in the lower animals (pp. 60-61); and mentions an instance of a cow which, while in calf, was in heat every three weeks, and calved three weeks after the last time of heat. Kolbe and Buffon are quoted with reference to menstruation in monkeys, the latter asserting that the following monkeys menstruate (besides the ourang-outang): "the Barbary ape, the ribbed-nosed baboon, the lion-tailed baboon, the pig-tailed baboon, the hare-lip monkey, the Malbrouck (*simia sinica*), the white eyelid, the varied, the green, and the moustache monkey."

Laycock states that the rutting of the males is somewhat analogous to the heat of the females in respect of its periodicity, and remarks that "the ring-pigeon lays eggs for fourteen days after pairing, sits other fourteen days, and in fourteen more the young ones leave the nest. The goldfinch completes its nest in three days; it is left unoccupied four days, when the first egg is laid. Reviewing the whole of the preceding facts, it appears a legitimate deduction, that, in animals, changes occur in every three and a half, seven, fourteen, twenty-one, twenty-eight days, or at some definite number of weeks." In most of Laycock's statements I concur.

The valuable contributions of Pouchet to the subject of menstruation lend material support to the view that the function pervades the mammalian series, and is subordinate to the law of evolution already propounded.

He remarks (*Théorie Positive de l'Ovulation Spontanée*, p. 201) that the commotion excited by the maturation of ovules, not only excites the genital apparatus, but reacts upon the whole individual. "Sometimes it is manifested but once during life; the animal—suddenly exhausted by this concentration of all its vital forces—dies soon after having produced its ova; this is observed in the majority of insects. The beings of more robust organisation resist this act, and we see that during the middle period of their life they reproduce annually. The majority of fish, reptiles, amphibia, birds, and mammalia are in this case.....There exists in these creatures a species of periodic growth, as G. Saint-Hilaire has said, during which the blood flows constantly towards the ovaries and excites an expansive movement." He then points out the heightening power of domestication, but insists that, even when the periods are rendered more frequent, they still show intermittence, which in woman is monthly. In the lower vertebrata, the sexual disturbance is not so conspicuous as in higher creatures. In some mammalia the genital orifices and adjacent parts show conspicuous excitement, often accompanied by sanguineous emissions. The names of Aristotle, Linnæus, Buffon, Cuvier, Blumenbach, Saint-Hilaire, and others are quoted in support.

Again: "If observation shows that ova are incontestably produced at fixed epochs in all invertebrate and vertebrate animals, since in them new generations appear constantly after regular and invariable periods, if, I say, that is admitted for all the zoological series, and it cannot even be contested as regards mammalia in a wild state, it becomes evident that the aberration observable in these latter that lived in our habitations, comes only from the new condition in which they are found; for attentive observation shows us that in them equally there are phases of excitation, and that it is during these that ovules are produced and that fecundation is possible. The condition of the human species enters entirely into this category, and if the periods when reproduction is possible are very frequent in women, that belongs manifestly to the amenities of social life."

"In animals the flow of blood is ordinarily less abundant, and the period of excitement returns at longer intervals. Notwithstanding, there exist in the domain of mammology species which are nearly as much regular as certain women, and in which the flow appears almost as frequently." Dugès and Jourdan also remarked these analogies.

Isidore Geoffroy Saint-Hilaire says (Breschet, *Recherches Anatomiques et Physiologiques sur la Gestation des Quadrumanes*, Paris, 1845, p. 4): "In monkeys the flow coincides in all the females with a swelling, more or less manifest, of the vulva and environing parts. This swelling, moderate in the females of the apes, is, on the contrary, very considerable in the females of many species of macacus, and in all the species of cynocephalus. In all the latter it extends not only to the anus, but beyond, and it is so marked that all the orifice seems as if environed by a large collar. The skin at the same time becomes deeply red. In the mandrill, G. Cuvier compares, for volume, to a child's head, the unequal red and inflamed looking protuberance which then forms around the anus. The same phenomena, though a little less pronounced, occur in the females of macacus; and even it often happens in these, for example, and in the females of rhesus and maimons, that the swelling extends to the inferior part of the tail, near the base." Again, Saint-Hilaire (*Histoire Naturelle des Mammiferes*, Paris, 1824) says: "The females of apes, macacus, magots, cynocephalus, and probably of all other kinds of the first tribe, are subject to a flow periodically appearing from month to month. The matters emitted by the vulva are blood and mucosities, sometimes sanguinolent, sometimes white; the flow continues during

* Fleming (*Vet. Obstetrics*, p. 52) says: "Franck has convinced himself, by *post mortem* examination of mares, of the possibility of ova being thrown off from the ovary during pregnancy."

six or eight days, and sometimes more. G. Cuvier fixed even at fifteen days the duration of the flow in a female mandrill which he made the subject of repeated observations."

Cuvier observed menstruation in carnivora, among others, in the genets; and Lesson and Garnot recognised it in the flying-fox (pteropus), which Saint-Hilaire says is periodical. Haller quotes many authors who thought monkeys, cows, deer and bitches offered evident traces of menstruation. Numann and Rainard made similar observations, while Pouchet had himself observed it in bitches, sows, cats, rabbits, and guinea-pigs, especially in the first. (Mr. Bartlett, the able superintendent of the Zoological Gardens, tells me that the discharge may be abundant in the bitch, and that the heat is sometimes long sustained in the carnivora). The wild pigeon produces only once or twice a year, while the varieties which it has given us through care, breed ten times a year, as Aristotle, Buffon, and Blumenbach have observed. Kuhlemann says sheep come to heat every fortnight; sows every fifteen to eighteen days. Kahleis and Numann, that cows come every month or three weeks; Greve, that mares come monthly; and Cuvier, that buffaloes, zebras, and monkeys, come also monthly. Courty also recognised the graduated relation of menstruation in the zoological series.

From his observations on sows, Pouchet concludes that the menstrual phenomena ordinarily precede the rupture of the Graafian follicles. (P. 262:) "During menstruation the vagina of the sow offers a rosy tint, and the mucous fluid which it contains is slightly abundant. Microscopical examination showed me that the latter is composed of fragments of epithelium, cylindrical and pavement; mucus-globules, and blood-corpuscles in small number. . . . The womb, before its bifurcation, is reddened, and its capillaries are highly injected with blood. . . . The cornua are excessively injected with blood. Their mucosa is considerably thickened and spongy, and of a deep red, and, in certain parts, the abundance of blood wherewith it is engorged gives it even a violet coloration. . . . Thus, then, menstruation in the sow is a demonstrated fact. As in the human species, there is an emission of blood; but if this is not abundant, it is because this fluid is found in great part poured out in the immense extent of the internal generative apparatus." During the intermenstrual period, the vaginal and uterine mucous membranes are pale. Pouchet says that the appearances are absolutely similar in the rabbit, but that there is even more blood; and his observations upon bitches, cats, and other mammalia were equally confirmatory.

At p. 266, Pouchet says:—"In a work on the physical and moral system of woman, Roussel (*Système Physique et Moral de la Femme*, Paris, 1813, also edited by Cerise, 1860, Paris) pretends that menstruation is due to civilisation. We have expressed nearly the same opinion; only we think that the social state has not determined the essence of the phenomenon, but that it has only considerably augmented its frequency in rendering it nearly mensual."

Auber also attributes the existence of the function to social advancement (Raciborski, p. 18). "Velpeau (*Tr. Comp. de l'Art des Accouch.*, t. I, p. 126) says that, in Lapland and Greenland, women are not more often regular than every three months; and Gardien (*Tr. d'Accouch. et de Mal. des Femmes*, t. I, p. 233) pretends that in women in Polar countries the menstrual flow takes place only twice or thrice a year." Pouchet, therefore, ably argues the physiological identity of the function in all the mammalian series, including woman; he says (p. 227):—"Menstruation consists in the appearance of a periodic and temporary excitement in the genital apparatus of woman. This function is declared by an afflux of blood in all the organs that share in it, and by the flow externally of a certain quantity of this fluid. Then it is essentially and ordinarily characterised by a swelling and maturation of one of the Graafian vesicles, and by the emission of the ovule which this latter contains."

Trousseau (*Clin. Med.*, p. 598), speaking of signs exhibited by the lower animals while breeding, says:—"Need I add that, during the period of rut in most female animals, the congestion of the genitals manifests itself by a flow of blood, and by an increase in the secretion of the glands, which are annexed to those organs?" Both Tarnier and Chantreuil (*Tr. d'Accouch.*), and Cazin, in his memoir on "Varices in Pregnancy and Parturition" (*Arch. de Zool.* 1880), quote Raimond as stating that "In the females of animals the vagina is coloured red at the epoch of heat; it takes a violet or brownish tinge during pregnancy, and the mucous membrane seems to thicken." Cazeaux says:—"In the rabbit it is tumefaction and almost varicose injection of the vessels of the vulva. To this colouring and tumefaction is added, in the bitch, an odorous secretion, which allures the males and puts them upon the track of the females. Finally, in monkeys a more or less abundant hæmorrhage occurs, which, in the case of the macaques and the cynocephalæ, coincides with so monstrous a swelling of the vulva, that, in certain cases, the surrounding parts are infiltrated, as though inflamed in consequence of the sting of bees."

Raciborski (*Traité de la Menstruation*, p. 43) remarks on the resemblance between the rut and menstruation in the matter of periodicity, and states that sows have symptoms every fortnight to eighteen days, heifers every twenty-one days, sheep every fortnight. Quoting from a friend having choice cattle, he says that the higher breeds require the male more often than inferior breeds; on which he exclaims, "*En voilà un singulier privilége de l'aristocratie dans la race bovine!*"

Generally, in most animals, there is swelling of the external genitals, and a discharge which is often sanguinolent, especially in the heifer, bitch, sow, and rabbit; while in monkeys, particularly in the great species, it often takes the proportion of a hæmorrhage.

[*To be continued.*]

THE TREATMENT OF SYPHILIS.

By J. MARION SIMS, M.D.

More than forty years ago, I practised medicine in Montgomery County, Alabama, near the Creek nation of Indians. Syphilis was then very prevalent among them, and their medicine-men had the reputation of speedily curing it. Their remedies were, of course, decoctions of native herbs. It was generally known that queen's delight (*Stillingia sylvatica*) was one of their principal agents. I had supposed that, when this tribe were removed west of the Mississippi in 1837, their secret of curing syphilis had gone with them; but, when I was in Alabama last year, I learned from my brother-in-law, Dr. B. Rush Jones of Montgomery, the following facts touching this question.

There were, he said, seven or eight years before our civil war, several obstinate cases of secondary syphilis in and around Montgomery, which resisted the usual remedies in the hands of our best physicians. They went the round of the doctors, and could not be cured. At last, one of these was advised to consult a coloured man, Lawson, belonging to Mr. N. D. Barnett, a cotton-planter residing in Montgomery County. In a state of despair, he went to see Lawson, put himself under his treatment, and in a few weeks he was perfectly cured. He returned to town rejoicing at his recovery, and soon others of his fellow-sufferers followed his example, went to consult the coloured man, Lawson, and were likewise cured. These cures by an obscure negro man, a slave, when the highest representatives of science had failed, were much spoken of in both town and country, and attracted the attention of Dr. George W. McDade, a very intelligent and accomplished physician, whom I have known since his early boyhood. Dr. McDade, feeling the greatest interest in the subject, went to see Lawson, who had made these marvellous cures, and obtained from him the formula he had been using so successfully.

Soon after this, Dr. McDade happened to meet Dr. James Freeny, who gave him the following history of the so-called Indian method of treating syphilis. Horace King, a mulatto slave, resided among the Creek Indians for several years before they were removed west of the Mississippi river (1837), and had learned from them their method of treating syphilis. While Horace was engaged in building a bridge at Tallassee, about twenty-five miles from Montgomery, in 1852, he heard that there were many cases of syphilis on Mr. Gipson's plantation near by, and that Drs. Freeny and Banks were the attending physicians; and he called on Dr. Freeny, and told him that he had learned a method of treating syphilis from the Creek Indians, which was universally successful, and that he would like to show it to him. And for this purpose he proposed to take the worst cases on the Gipson plantation for the experiment. Drs. Freeny and Banks selected a certain number of very bad cases, and turned them over to Horace; and they watched from day to day his method, while they continued their own plan with the other cases.

Horace's selected bad cases recovered more rapidly than Dr. Freeny's milder ones, and then Dr. Freeny adopted the Indian method in the other cases on the Gipson plantation, and has not pursued any other plan since.

So thoroughly convinced was Dr. Freeny of the superiority of the Indian remedy, that he wrote to Dr. Warren Stone, Professor of

Surgery in the University of Louisiana, urging him to give it a trial in the wards of the great Charity Hospital of that city.

Dr. Freeny failed to enlist the interest of Professor Warren Stone in the matter, and he made no further effort to bring it before the profession, except by speaking of it to his brethren in his immediate neighbourhood.

After Horace's success on the plantation of Mr. Gipson, and the adoption of his method by the two well known physicians Drs. Freeny and Banks, Mr. Nicholas D. Barnett, a large cotton-planter, sent his servant Lawson, a very intelligent man (before alluded to), to Horace King to learn his remedies, and the method of preparing and using them. Horace readily imparted the desired information, and Lawson returned home, and put the treatment to the test among the negroes on his master's plantation. It was as successful in the hands of Lawson as it had been in those of Horace King.

After a while, other planters in Mr. Barnett's neighbourhood followed his example, and set apart confidential servants to take charge of syphilitic cases, and treat them with the Indian decoction. And thus several adjoining plantations had each its negro doctor, all using the same method with equal success.

This was in a rich section of Montgomery County, where there were many large cotton-plantations in juxtaposition; some of one thousand acres, some of two thousand and more, having from one to two or three hundred slaves on each, while there were others of less size with fewer slaves.

On some plantations—notably, on Mr. Barnett's—the syphilitic cases, male and female, were sent to a hospital specially set apart for the purpose, and there quarantined till they were cured. They were, during the period of treatment, wholly cut off from all communication with the other negroes on the plantation. This was in the time of slavery, when the intelligent and humane master had the right to protect his people against infectious diseases of all sorts. Syphilis was thus controlled, and small-pox effectually stamped out, because the sanitary state of the plantation was intrusted to medical men of the highest intelligence, who were authorised by the master to do all that was necessary for the health of the community.

Dr. McDade says: "It is very remarkable how few cases of secondary syphilis, scrofula, and consumption, existed in those days among the slaves, compared with what we now find. The two latter were then almost unknown among the negroes; but since emancipation they are very common."

"Is secondary syphilis the parent of scrofula and consumption? Certainly, these were rarely seen among the negroes while in slavery; whereas they are now encountered every day. Secondary syphilis was then less frequent among them than now, because their masters took every precaution for their early treatment and cure. But now the negro is free to contract this loathsome disease, and to scatter it as he may. You may ask, Why are they not treated? I answer, Many never apply for treatment; and, when they do, they often disappear before they are cured. And many of them are too poor or too improvident to apply for treatment. Physicians, always the conservators of the public health, never here refuse to treat a case of syphilis because the subject of it is a freedman, poor and improvident."

Professor Samuel D. Gross read an exhaustive paper on the connection between syphilis and scrofula and consumption, before the American Medical Association in 1875, advocating the view that the two latter were the offspring of syphilis, and it would now appear that the history of these in the negro, in slavery and in freedom, goes far to establish the correctness of the views so forcibly set forth by my distinguished countryman.

Dr. McDade says, "that the remedies used by Lawson on Mr. Barnett's plantation, were the same as those used by Horace King. They consisted of ten or a dozen indigenous roots, a handful of each, with a certain quantity of salt, alum, and iron slugs put into three gallons of water, and boiled down to one gallon. Of this the patient took a half pint three times a day. There was also a decoction of roots for washing the syphilitic sores. After obtaining these prescriptions, it was a long time before I made any trial of their virtues. I was deterred by the fact that it would be difficult for any patient to drink and retain half a pint, three times a day, of such a vile decoction. The horrors of syphilis could alone inspire a man with courage to take it. However, I saw that those who did were invariably relieved, whether in the first, second, or third stage of the disease."

"Instead of adopting the so-called Indian remedy as I found it, I began by eliminating the alum, salt, iron nails, and slugs, and all the roots and herbs that I knew must be absolutely inert. I selected the few among them known to possess medicinal properties; and, instead of making a decoction as had been done before, and which had to be made in large quantities every day or two, I had them prepared in the form of fluid extracts, which places the remedy on a scientific basis, and insures uniformity of action. The following is the formula that I and my medical friends have been using for many years."

"Fluid extract of *Smilax sarsaparilla*, fluid extract of *Stillingia sylvatica* (queen's delight), fluid extract of *Lappa minor* (burdock), fluid extract of *Phytolacca decandra* (poke root), *aa* ℥ij, tincture of *Xanthoxylum carolinianum* (prickly ash), ℥j. Take a teaspoonful in water three times a day before meals, and gradually increase to tablespoonful doses.

"In making the fluid extracts, there is some risk of getting a remedy less efficient than the original Indian decoction, because the manufacturer may use roots that have been kept too long, and lost some of their active principles, while the decoction used on the plantations was always made of fresh roots just gathered from the woods. In making the fluid extracts, we should therefore be careful to have them made from roots recently gathered." While Dr. McDade makes fluid extracts of four of his ingredients, he makes a tincture of the fifth. I do not understand why he did not order a fluid extract of that also. I simply give the prescription as it was given to me by Dr. McDade and Dr. Rush Jones.

Stillingia sylvatica has long been used in the Southern States as an antisyphilitic remedy by both the profession and the laity. Professor Thomas Y. Simons of Charleston was the first to call our attention to it (*American Medical Recorder*, 1828). His favourable report was subsequently confirmed by Professor Henry R. Frost, of Charleston, and by Dr. A. Lopez, of Mobile, Alabama (*New Orleans Med. and Surg. Journal*, 1846). Dr. Frost thinks the active principle of the *Stillingia* is somewhat volatile, and says that the root loses much of its activity when kept long. I know that the odour of the recent root is much stronger than the dried. I presume the *Stillingia sylvatica* and the *Smilax sarsaparilla* are the efficient agents in McDade's compound fluid extract. Dr. McDade says: "I could detail many cases illustrating the wonderful antisyphilitic powers of this remedy; but I will give you only two. 1. A young negress contracted syphilis from her husband, who resided on a neighbouring plantation, and visited his wife generally about twice a week. This was long before the war (1861). They were both treated by the late Dr. Alfred McDonald, and they were apparently cured. But they had several children subsequently, and in rapid succession, all of whom died of syphilis soon after birth. The husband and wife were then treated by the Indian decoction, and were permanently cured, as shown by the fact that they had several healthy children afterwards at full term, who grew to manhood and to womanhood. None of them ever showed any signs of syphilis, nor have any of their children. Those of them who have died, died of other diseases of a climatic character."

"2. A negro girl, twenty years old, belonging to Mr. Cobb, had syphilitic iritis. This case had resisted all treatment by the best physicians of the country. She was nearly blind. She was taken in charge by Mr. Barnett's coloured man, Lawson, who gave her the Indian remedy, and she was perfectly and permanently cured, as she never afterwards showed any symptom of the disease. These cases occurred more than twenty-five years ago; and have been under my observation ever since; so you will see that the cures are permanent."

"Mr. Barnett has pursued the same method on his plantation since emancipation that he did during slavery. His man Lawson uses the same compound decoction now that he did in olden times, and cures many cases every year on Mr. Barnett's plantation, and on those adjoining."

Dr. McDade has used his compound as an alterative with great success in scrofula, and he thinks it would be worth trying in some forms of cancer.

Dr. Rush Jones, residing in the city of Montgomery, has a larger field of observation than Dr. McDade, residing in the country, and has really had a larger experience with McDade's antisyphilitic fluid extract than anyone else; and he speaks most favourably of it. He has been treating syphilis for more than forty years, and he says he now has but little dread of undertaking the worst cases, since he has adopted the use of McDade's formula. He repudiates mercury and the iodide of potassium entirely, and says they are unnecessary when McDade's formula is used.

Dr. Rush Jones says: "It is a remarkable fact that I do not see more than one case of syphilis in women to fifty cases in the male. I have inquired of a number of physicians in regard to this fact,

and their experience coincides with mine. How can this be accounted for?"

I am not familiar with the literature of syphilis, and do not know if the fact alluded to by Dr. Rush Jones has been observed in other parts of the world. If so, it seems to me to have an important bearing on the practical application of the Contagious Diseases Acts. And so would the complete history of the working of the quarantine and isolation of infected negroes on the several cotton plantations in Montgomery County, Alabama, during the time of slavery and since emancipation, if we could obtain minute and reliable reports on the subject.

I am no authority on the subject of syphilis; and, if any apology were necessary for this communication, it is this:

I was at the meeting of the London Medical Society on November 26th last, and heard the discussion on the papers of Dr. Drysdale and Dr. Routh on syphilis. From this, it appeared that we now differ as widely on the subject of its treatment, as we did fifty years ago. And this gave me the idea of writing to Dr. Rush Jones and Dr. McDade for the facts which I now lay before the profession.

I have known Dr. Rush Jones all my life, and I have known Dr. McDade, and Dr. Freeny, and Mr. Barnett, for more than forty years, and have perfect confidence in any statement they might make, or I would never have said a word on this subject. I think great credit is due to Dr. Freeny and Dr. Banks for giving the coloured man Horace King an opportunity to demonstrate the value of the Indian decoction in the treatment of syphilis on the plantation of Mr. Gipson. For its success there brought it, with their endorsement, prominently before the community, and extended its use to the plantations of Mr. Barnett and his neighbours.

Too much credit cannot be given to Dr. McDade for investigating the subject, and giving us a formula at once scientific and efficient; for it has proven efficient in the hands of Dr. Rush Jones, Dr. McDade, and many other physicians who have been using it for several years past.

I should be pleased to see the name of McDade used by the profession hereafter to designate the formula and the method of treatment herein set forth. The remedy will doubtless be extensively used, at least for a while; and I sincerely hope it may prove as efficient here as it has in the hands of my friends in Montgomery, Alabama.

PRACTICAL PATHOLOGICAL WORK.

By H. A. REEVES, F.R.C.S.E.,

Surgeon to the Hospital for Women, to the Royal Orthopædic Hospital, and Assistant-Surgeon and Teacher of Practical Surgery at the London Hospital, etc.

How to fix Aniline Dyes.—I feel sure that all working histologists will be thankful for the discovery of a simple and effectual mode of *setting* the various beautiful aniline colours which have been much used of late years, but which do not stand the immersion in spirit and alcohol necessary to prepare them for mounting in Canada Balsam, dammar, or turpentine. It is pretty well known that these dyes are valuable on account of their selective power when properly used. I say properly, because, if employed in the ordinary way, only a general and diffused stain results, and they then are inferior to such a differentiating agent as hæmotoxylin. In all sciences, the discovery of good methods of research has very considerably aided in advancing the progress of discovery, and anything which tends in that direction must be of permanent value. Sections of fresh tissues, or of those hardened in alcohol, Müller's fluid, chromic acid, or chromic and spirit mixture, will answer for several of the methods to be described; but it is better to wash chromic hardened sections in water, and soak them for not less than about half an hour in methylated spirit, before proceeding to dye them. Then it will be found that normal and pathological structures take on distinct double, triple, or multiple staining. I have repeatedly tried the methods described by Heneage Gibbes, Stirling, and some German writers, and have but very rarely indeed succeeded; so that these modes are most uncertain and disheartening, and an easy and efficient substitute will be a great boon. I succeeded in double staining the cord, skin, etc., with the aniline in 1873; and showed some of the preparations to my pupils, among whom was Dr. Mears, the present lecturer on anatomy at Newcastle; also some other preparations of pathological interest which I did not then entirely comprehend; but in 1875 I examined these specimens again with immersion lenses, and found that what I had supposed to be peculiar cells and nuclei, proper to the tumours, and differentiating them from others, was nothing other than the karyokinesis which Auerbach and Strasburger had not long before described as occurring in growing normal vegetable and animal cells. At least half a dozen times since that date I have found karyokinetic cells in rapidly growing tumours, and shall speak more fully of them in my forthcoming work on Diseases of the Breast.

I have frequently found, in attempting double staining with the anilines, that one colour either extracts the other, or blends with it, without differentiation, and that the sections must be mounted in glycerine, or acetate of potash, or a mixture of the two; that even then they are apt to fade, or soak out in the mounting medium. How long the colours will last by the methods to be described I cannot yet say, but see no reason to doubt a vitality enough for all practical and scientific purposes. For teaching, such preparations are of the greatest value, as some stains pick out one structure and some another, with great clearness and beauty.

For the last eighteen months I have been again experimenting with a view of finding some *mordant* for these dyes, and have tried a legion of chemicals, in varying strength, singly and combined. I did not undertake this work hap-hazard, but after studying several modern works on chemistry, and on the art of dyeing. The latter did not help me much, as spirit or alcohol is not used in the ordinary dyeing processes, and, moreover, most of these dyers' becks are worked while the dye is hot. As the modes of *fixing* in calico, wool, leather, or silk dyeing would destroy, or seriously damage animal tissues, it was necessary to find a mordant which would not in any way deteriorate the structures, but this was no easy matter, and it was only by plodding systematically through the selected series, and making numerous variations in the modes of application, that the proper articles were found out. As, in the first instance, these were generally combinations, I had to find out the ingredients, and work with each separately, in varying strengths, before I could be sure which was the real and the best mordant. The purchase of oil immersion objectives, Abbé's achromatic condenser, and numerous chemicals and apparatus being necessary, and as my colleagues and the committee, and our excellent secretary, Mr. Cannon, at the Hospital for Women, all liberally fell in with my views, and fitted up and furnished the laboratory according to my desire, I have very much pleasure in rendering them my sincere thanks. I am also much obliged to Dr. Oliver, the house physician, for having cut sections for me when I have not been able to spare the time.

Before describing the process, I will draw attention to two or three new and beautiful dyes, and also to others which have not been used before, and to others but little known. The new dyes are Phloxine, and Erythrosine. I do not yet know their exact composition, but feel almost sure they are obtained from resorcin, as in many physical and chemical respects they resemble rosine. They stain rapidly and deeply, in weak aqueous solutions, and stand spirit well. Connective substances and the protoplasm of cells are, in rapid staining, preferred by them to nuclei, which, however, stand out on the stained ground-work very clearly. Phloxine is the more beautiful and pleasant colour to work with. Both are soluble in water or spirit, and weak solutions stain quickly. If sections be placed in weak solutions for several hours, the nuclei often take on the stain. Phloxine, and Erythrosine, as supplied to me, are darkish red powders by reflected light, the former having a faint purplish-crimson colour, and the colour of the solutions in a test tube, *i.e.* in transmitted light, will vary according to the strength. Any of the dyes herein mentioned may be obtained direct from the agent of the Badesche Anilin Fabrik, 22, Bush Lane, E.C., or from Messrs. Wright, Layman, and Umney, or in small quantities from Mr. Cooper, chemist, Oxford street, W. Messrs. Brooks, Simpson and Spiller, Broad street, E.C., also keep several of them.

Murexide, has—so far as I have been able to find—not yet been used in microscopy. It is given up by the dyers in favour of rosanilin, and is consequently not in demand, and therefore not easily procured. It is a brownish red powder, and very slightly soluble in cold water, not soluble in spirit, but readily soluble in boiling water. On cooling and filtering, the sections are immersed for five or ten minutes, when it will be found to furnish a good ground stain for double dyeing. With acetate of zinc, murexide gives a yellow stain.

Maroon, phosphine, cerise, and mauve, are all useful and unused colours; phosphine yielding a good ground stain of a rich golden yellow, and may be used with advantage in double staining. The rest resemble most of the other anilines in picking out the nuclei, but they also stain the other structures. Dilute aqueous or alcoholic solutions, stain rapidly, and may be fixed by one of the processes presently to be described, though phosphine holds very well of itself.

nduline is also a new aniline colour, and may be used as above. t is a dark powder, and gives an agreeable pale bluish-purple stain; nd, if used after carmine or picrocarmine, the cell body and intercellular substance will be preferred by the induline, and the nuclei nd connective fibres by the others. It dissolves in warm water or ilute alcohol. Maroon, phosphine, and cerise are new to histology.

Treble Staining.—Methyl anilin violet, and iodine, malachite or methyl reen, combined, give beautiful results. I first worked with aqueous olutions, which yielded good preparations, but now use an alcoholic nixture in the following way. Make a saturated solution of violet n strong alcohol, and filter. Do the same with the green, leaving ome granules in excess at the bottom of the vessel; this solution is greenish-blue. Filter and add the violet solution to it, drop by rop, till the mixture is the colour of Prussian blue, which soon occurs. If a large quantity be made for future use, add a little strong arbolic acid solution, about three drops per ounce of the solution, o prevent decomposition, and to retard the acetic change in the lcohol, which would soon spoil the dye. Filter about twenty drops nto a watch glass, and dilute with spirit, and immerse sections for ve to ten minutes; wash off excess in ordinary water, or better, rain off on filter paper, and set in saturated solution of acetate of otash, and mount in a mixture of equal parts of pure glycerine nd acetate of potash. This gives good preparations for several eeks; but the dyes may be fixed by placing the sections, for three o five minutes, in a mixture of equal parts of a saturated aqueous olution of tannin, to which a little carbolic acid has been added, and istilled water. Then wash in water, and transfer, for the same ime, to a mixture of rather more than one part of tartar emetic, potassio-tartrate of antimony), and rest distilled water; wash, and put n strong pure methylated spirit for five to ten minutes; draw off xcess of spirit on filter paper, and put for five minutes in oil of ajeput, cloves, juniper, aniseed, or turpentine, and mount—after rawing off excess of oil—in Canada balsam or dammar. The tannin nd antimony solutions should be filtered into a watch glass before sing, as also should be the dyes. Preparations hardened in spirit, or füller's fluid, answer best; but chromic hardened sections will do, f previously soaked for twenty to thirty minutes in methylated spirit.)ne part of a saturated aqueous solution of xanthate of soda, and one f distilled water, will partly fix violet for passing through spirit and larifying oil, if this be done quickly; but I have not found it to nswer so well as the tannin and antimony. The xanthate solution s yellow, and has an odour of decomposing cheese. If this process e successfully carried out, and I have not found it to fail if the teps be carefully executed, very striking results are obtained. Connective and elastic tissues and cell protoplasm are stained violet; nuclei, nucleoli, young cells, and leucocytes are greenish-blue. The nuclei of unstriped muscle-fibres, and the nuclei of the sarcolemma f striped fibres, are blue; blood is rusty brown. The young cells f tumours, especially cancer and sarcoma, are greenish-blue, thus roducing a treble stain—violet, blue, and greenish-blue. Sections f lymphatic glands are very pretty, the leucocytes being blue, and he rest violet; and, if tumour cells be present, they are greenish-blue, and readily made out. I have observed that some cells have an intermediate tint, due probably to their protoplasm having commenced to undergo the cancerous change.

Double Staining.—Roseine and green, fixed as above, have given me very satisfactory preparations in sections of tumours, the former selecting the stroma, and the latter the nuclei, but especially the young cells, some of which are also stained with the roseine. The tannin and carbolic solution, if used rather stronger, will often fix these colours without the antimony; and, in sections of tongue and skin, good results and multiple staining may be obtained by first staining in Ranvier's picrocarmine, and putting sections at once in the tannin fluid, then in roseine, and in the tannin again before and after the green; then draw off excess of green on filter-paper, and pass through the antimony, and wash before placing in methylated spirit. Staining in picrocarmine, and passing the sections at once into a mixture of iodine and malachite green, gives multiple staining in several tissues, if the dyes be fixed as above.

To prevent disappointment, I must point out that often sections which look pale by daylight (especially the violet and green preparations) are very clear by artificial light if the illumination be good. I think this is due to the combination of the red and yellow rays of the light with the stained elements of the tissue, and also to the fewness of the violet rays in ordinary oil lamplight, and in gaslight.

Other agents will partially or completely fix some of the anilines, such as arsenious, acetic, hydrochloric, and carbolic acids; hypophosphite of soda, stannate of soda, and silicate of soda, to which a little hydrochloric acid has been added, and should these be tried in special cases. Acids extract aniline blues, and acetic acid has the same effect on violet, but gives good temporary preparations. Saturated aqueous solution of acetate of potash fixes roseine, saffranine, soluble blue, and partly fixes fuchsin, when these colours are used alone, so that they can be passed through spirit and clove-oil. I have found that dilute aqueous solutions of induline, methyl green, and rosins, stand spirit and absolute alcohol without fixing, if used alone.

Dahlia, which is monophenylrosanilin, and some of the other violets, are very serviceable in studying the connective substances, as they distinguish the plasma-cells from the ordinary connective tissue-cells, rather more clearly than the other anilines; the bodies of the cells are stained a pale violet, and nuclei darkly, while the plasma-cell body is dark violet, and nucleus remains clear. As the violets do not, in weak solutions, stain the intercellular substance, they may usefully be combined with some dye that does, such as French archil, murexide, phosphine, picrocarmine, rosine, etc.

Erythrosin, or rosin and green, give a very effective double stain. The following proportions make a good staining fluid. Erythrosin or red eosin, one part (there are a yellow and blue shades of eosin as well); iodine, methyl, or malachite green, sixty parts, dissolved in thirty per cent. solution of warm alcohol. The epithelial nuclei are a bluish violet, the connective nuclei greenish blue, and cell-body and stroma of tumours red.

If sections of skin be stained in methyl green and induline, or *vice versâ*, it will be found that the Malpighian layer is stained a greenish blue, the corium cells and nuclei violet red, nuclei of subcutaneous tissue-cells and the nuclei of vessels and nerve-sheaths are rose-colour. Calberla introduced these dyes (*Morph. Jahrbuch*).

By using ordinary water for washing, and strong methylated spirit for dehydrating and passing into the clarifying oil, without putting in absolute alcohol, time, expense, and trouble are saved, and the curling up of large thin sections avoided; further, if in mounting in Canada balsam or dammar, a drop of spirits of turpentine be put on the cover-glass, and this gently lowered on to the sections, no air-bubbles will form. This practical hint is well worth recollecting. In a further communication, I will draw attention to some other methods of dyeing and fixing the dye in tissues, and in the meantime hope that the above directions will prove of service.

AN EXPERIMENTAL INVESTIGATION OF THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.

By SIDNEY RINGER, M.D., F.R.C.P.,
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AND
HARRINGTON SAINSBURY, M.D., M.R.C.P.

For the purpose of lessening nervous and nervo-muscular action, the above three drugs are perhaps the most frequently employed in medicine. From the physiological evidence forthcoming, it would appear that the action of chloral, in therapeutic doses at any rate, is more especially on the cerebrum; that that of opium similarly employed, is likewise more especially on the cerebrum, but to a more marked degree than obtains for chloral, for whilst chloral, in doses sufficient to produce sleep, is of very little value as an analgesic, opium is, of all other drugs, perhaps the most powerful analgesic. Other differences are to be found. Thus, both drugs threaten by their depressant action on the centres at the base of the brain; but the dangerous paralytic stage is, with opium, preceded by a well-marked stage of stimulation of those centres, as indicated by the slow and full action of the heart and respiration, and the strongly contracted pupils, during the second stage of opium poisoning. A similar stage of stimulation is held to occur with chloral, but it is much less marked. Opium, again, has a marked effect on the centres of the spinal cord, at least in the lower animals, as is seen best in the frog, in which convulsions precede paralysis; these convulsions having been shown by Kölliker to be of spinal origin. With regard to the peripheral structures, both opium and chloral are stated to be without effect on motor nerve or muscular tissue; though with reference to opium the evidence is somewhat conflicting.

Passing to the bromide of potassium, the physiological evidence would show that this salt acts powerfully on all parts of the nervous system, both central and peripheral nervous structures; but that the central nervous system, brain and spinal cord, is more rapidly and deeply affected than the peripheral structures, nerve and muscle.

The action on all these tissues is depressant, paralysant; it is not, however, characteristic of potassium bromide alone, but holds for potassium salts generally, and must be described as a potassium effect.

With reference to the action of these three drugs on the heart, this organ is found arrested in diastole after systemic death, and this in the case of each. The evidence as to the mode of arrest by chloral is conflicting, Rajewsky stating that the arrest is quite independent of the inhibitory nerves, whilst the experiments of Labbée would lead to the inference that chloral influenced the heart through the centres at the base of the brain. Labbée further states that when powdered chloral is placed on the heart of the frog, there results a marked slowing, but no arrest of its action.*

Opium would appear to influence the heart's action very strongly through the vagi, but, in addition, Gscheidlen states that the intrinsic motor ganglia of the heart are first stimulated, then paralysed (*op. cit.*, p. 220).

Potassium bromide and potassium salts generally have been clearly shown to exert a direct paralysing action on the heart.

Thus, then, chloral arrest is doubtfully of intra- or extra-cardiac origin, but it is not muscular. Opium, apart from its extra-cardiac action, affects the heart directly, but a stage of stimulation precedes the stage of paralysis. Bromide of potassium, as a potassium salt, is a direct cardiac paralysant, without apparently any preceding stage of stimulation.

This being so, it became of interest to attack the simpler problem of the action of these three drugs on the isolated frog-heart, or rather on the ventricle of the frog-heart. Such apparatus, after a longer or shorter interval following its removal from the body, begins to beat spontaneously and rhythmically, and accordingly its action may suffer modification in these two directions, viz., of contractility and of rhythm. The former is clearly muscular in its nature, the latter is more probably nervous in character.

Mode of Experimentation.—The ventricle was secured to the double cannula of a Roy's apparatus by means of a ligature, tied as nearly as possible in the auriculo-ventricular groove. The blood mixture with which the heart was fed, consisted of a solution of four grammes of dried bullock's blood in 100 c.c. of a saline solution (this latter consisted of five parts saline solution 0.6 per cent., and two parts of water). In each experiment, 100 c.c. of the blood-mixture were taken.

The contractions of the ventricle were recorded by means of a lever on the blackened surface of a revolving cylinder. At regular intervals of time, each quarter revolution of the cylinder (about two minutes), the drug was added to the whole mass of blood. The dosage was kept uniform, and was such as previous experiment had found necessary to stop the heart within about an hour. The common English frog (*rana temporaria*) was throughout employed. The experiments were performed during the month of October 1882. For the purpose of stimulating the heart, break shocks alone were employed.

Chloral Hydrate.—The strength of the solution employed was 10 per cent.; the reaction to test-paper was faintly acid.

The heart was arrested in diastole. The following table gives the quantities of the drug required in each experiment to effect this arrest:

					Quantity.
October 2nd,	temperature of	room 16° C.,	solution strength	10%,	5.2 c.c.
,, 3rd,	,,	?	,,	,,	4.2 c.c.
,, 3rd,	,,	?	,,	,,	4.5 c.c.
,, 4th,	,,	17° C.,	,,	,,	4.8 c.c.
,, 5th,	,,	16° C.,	,,	,,	4.5 c.c.
,, 5th,	,,	17° C.,	,,	,,	4.5 c.c.
					27.7 c.c.

Average quantity = 4.6 c.c. = 0.46 grammes = 7.09 grains.

With regard to inhibition, the frequency of the spontaneous contractions lessened in every instance under the influence of the drug; this effect appeared early, and, in the majority of the cases, it amounted, practically, to a complete inhibition of spontaneous contraction in the end stages.

The contractile power of the muscular tissue was also affected. This effect was manifest, subsequently to inhibition, in the lessening height of the contractions caused by stimulation. When the full amount of the drug had been added, contractility was completely, or all but completely abolished. Reduction of contractility was not preceded by a stage of stimulation, *i.e.*, of increased action, the height of the trace lessening from the very outset. The breadth of the trace, *i.e.*, the duration of the beat, increased somewhat during the later stages, as compared with the duration of the beat at the start. The period of latency was increased, but not to any marked extent. The state of diminished excitability of the muscular tissue, which invariably attends the stage of active contraction, was lessened in duration under the influence of chloral.*

The excitability of the heart for a rapid and prolonged succession of shocks (*e.g.*, for continuous faradisation) lessens, however, under the influence of chloral; and the fusion of beats which such continuous faradisation may be made to effect with the normal heart, gradually disappears for the heart poisoned with chloral. From the statement preceding this last as to the effect on the "period of diminished excitability," it might have been expected that continuous faradisation would yield a completer fusion instead of a less complete. Whatever be the explanation, whether the effect of exhaustion be a factor or not, the facts are as stated. It must be borne in mind, however, that the continuous faradisation which the hammer of the induction apparatus allows, represents a *rapid* succession of shocks, and also that both make and break shocks alternate in such, *i.e.*, shocks differing not only in strength but also in direction. In testing the effect on the period of diminished excitability, break shocks alone were employed.

A feature in the action of chloral yet remains to be noted. If, after contractility has been considerably lessened—*i.e.*, the height of the trace has been much diminished—a stimulus be thrown in, and then, at the moment of completed systole, another stimulus be made to follow, the muscular tissue will respond to this second stimulus by a further contraction, starting from the condition of systole as from a condition of rest. A third or fourth stimulus, thus placed, will often similarly be effectual, and the trace mounts up, staircase fashion, till at times the original height of beat is almost recovered. This "piling" or "mounting up", as the phenomenon will be subsequently referred to as, was constant for chloral, and occurred up to the very end or close on this—*i.e.*, so long as contractility persisted; it was, however, best marked in the middle stage, or just subsequent to this.

The chloral experiments were completed by observations on the effect of dilution. In four out of the six cases, when the poisoning was complete, the poisoned blood was replaced by the original quantity, 100 c.c. of fresh blood. In one case, no recovery occurred after two and a half revolutions of the cylinder (about twenty minutes) had been allowed to pass; in another, there was a mere trace of recovery after a similar period; in another, after a like time, but faint recovery; in the fourth, after close on three rounds, but very faint recovery. In all these cases, the circulation of the blood mixture was rapid, so that the tissue was thoroughly washed out with the circulating fluid.

To sum up shortly the chloral effects, we find that the cardiac tissue is directly affected by the drug, and that the ultimate expression of this action is diastolic arrest; that, preceding this event the action of the drug is manifested by the slowing or complete arrest of the heart's beats; and that, simultaneously with this, but independently of it, the contractile power of the muscle-substance is affected, down to complete extinction. This depressant action sets in at once; there is no primary stage of stimulation. Limiting now, the consideration to a single contraction, we find that the period of latency grows, but not to any marked extent; but that the "period of diminished excitability", attendant on the stage of active contraction, lessens under the influence of chloral; and, therefore that, in a sense, the muscle is rendered more irritable—a condition analogous, perhaps, to that spoken of clinically as irritable weakness. It is true, the effect of continuous faradisation does not seem quite in accordance with this; but this latter is evidently a more complex phenomenon, and, therefore, less decisive on this point. The phenomenon of "piling up" must further be remembered, as it will serve as a point of contrast.

Hydrochlorate of Morphia.—A five per cent. solution was employed; it gave a neutral reaction to test-paper.

The heart was arrested in diastole.

* See Wood's *Therapeutics*, p. 336. For a general physiological consideration of these three drugs, and for references as to the experimental work done, consult the same author under the headings, Opium, Chloral, Bromide of Potassium, and potassium salts generally.

* This, perhaps, requires further explanation. Contractile tissue generally is, during the stage of active contraction, relatively insusceptible of stimulation, *i.e.*, of responding to further excitation by contraction. This state of diminished excitability attends, of course, the ventricular contraction, and it has a definite duration. Drugs are capable of lessening, or of increasing, the duration of this period. Thus, potassium chloride increases this period, as does also ammonium chloride in the later stages, sodium chloride, on the other hand, lessens somewhat the period.

The following table gives the quantities used in effecting this:

				Quantity.
October 18th,	temp. of room	17° C.,	solution strength 5%,	14.0 c.c.
,, 19th,	,,	17° C.,	,, ,,	16.0 c.c.
,, 19th,	,,	17.5° C.,	,, ,,	14.0 c.c.
,, 20th,	,,	18° C.,	,, ,,	15.0 c.c.
,, 20th,	,,	17.5° C.,	,, ,,	12.0 c.c.
,, 21st,	,,	16° C.,	,, ,,	14.0 c.c.
				85.0 c.c.

Average quantity = 14.16 c.c. = 0.708 grammes = 10.92 grains.

The effect on spontaneous action was, as compared with chloral, ut slightly marked; in the end stages, the beats grew much less requent, it is true, but, on the whole, the effect was but slight.

The contractile power of the muscular tissue was ultimately abo-ished; but, in this process, two points are noteworthy. The first, hat it was not till the later stages that this effect became pro-ounced: thus, with an average toxic dose of 14.16 c.c., the effect n the height of the trace was not marked till 9 c.c., or more, had been added, the subsequent effect being frequently somewhat udden; the second, that a primary stage of increased force of beat receded the decline. With a ventricle emptying itself at the start, t is not possible to show this, since, though it empty itself more apidly and more forcibly, it still does not do more than empty itself, nd the height of the trace remains unaltered. It was possible, owever, in some of the cases, where contraction was not to the full t the commencement, to demonstrate a distinct, though slight, in-rease in the height of the beat.

The duration of the beat was in every case increased, and the ncreased breadth of trace was a constant and early manifestation; t, as a rule, went on increasing somewhat up to the very end.

The period of latency was very greatly increased, and this before ny notable effect on the height of the trace was observable. In ike manner, the "period of diminished excitability" was very con-iderably increased, and this also whilst the height of the trace was pparently unaffected. The effect of continuous faradisation was quite in accordance with these results, the excitability, or readiness f the heart to respond to this mode of stimulation, lessening narkedly as the dose of morphia increased.

In contradistinction to the chloral phenomenon of "piling up", no uch effect was witnessed with morphia; indeed, the excitability of he muscle was so much lowered, that a stimulus thrown in at the moment of completed systole was quite ineffectual. This lowered xcitability extended, moreover, to the period of diastole, and even eyond this to a greater or less extent into the period of pause; so hat, when the toxic effect was well marked, a stimulus thrown in arly, after a contraction had been completed, remained without effect. A yet more interesting phenomenon was observed, viz., that if, sub-sequent to a preceding contraction, such early stimulation did cause esponse, this was comparatively feeble; whilst, after the lapse of a onger interval, the same stimulus caused full contraction. Normally, *i.e.*, with the undrugged heart, a stimulus, if not effective during the period of systole, is effective during a part, if not the whole, of the period of diastole; and, during any part of the pause following a contraction, an effective stimulus will always yield a full contraction; but here, under the influence of morphia, we see that the change, whatever its nature, occurring when the phenomenon of contractility is manifested, is one requiring the element *time* for a change in an opposite direction, *i.e.*, for the restoration of the state preceding the moment of contraction. Normally, then, the processes of change and counterchange are too rapid to admit of demonstration; but in morphia we have a drug which, by lengthening out the process of counterchange, enables us to demonstrate the existence of these processes.

With regard to the effects of dilution, in two cases good recovery followed replacement of the poisoned blood by 100 c.c. fresh blood; the recovery was, however, a slow one as compared, for instance, with the rapid recovery which is observed when a heart poisoned with a potassium salt is washed out with fresh blood-mixture. In one case, simple dilution of the poisoned fluid with an equal bulk of saline, 0.75 per cent. yielded fair recovery, but the recovery here was likewise very slow, requiring about twenty minutes. Of the two cases where fresh blood was substituted for the poisoned, in one, faint recovery occurred at the end of one revolution of the cylinder (8 to 9 minutes); at the end of another revolution, the contractions were good. In the other case, dilution was first tried, and this being ineffectual, substitution was made; in about 10 to 11 minutes from the moment of substitution, there was good recovery.

[*To be continued.*]

NOTES ON A CASE OF FORCIBLE REMOVAL OF THE UTERUS.

By LEONARD CANE, M.D.Lond., B.S.

A NOTE in the JOURNAL (page 389) draws attention to a case which occurred in 1845, where the uterus, the lower part of the small intestines, and the greater part of the large intestine were torn away at a labour. The notes of the following case, where the uterus with some of its appendages was torn away by a midwife, may be interesting.

Mrs. B., aged 29, in delicate health, had her first child about five years ago; the infant was healthy. Then she had two miscarriages, probably due to syphilis; then, about two years ago, a living child, which showed signs of syphilis. She was expecting her confinement about the end of November. On October 26th, 1882, I was sent for to see the patient, who lived about four miles in the country. She stated that, without any known cause, she was suddenly taken with "labour-pains," and had a great deal of "loss." The pains had ceased when I saw her, and she was about the house, but stated that there was still some hæmorrhage going on. On examination, I found the os uteri sufficiently open to admit the tip of the forefinger, and there was a slight amount of hæmorrhage going on. There being no signs of imminent labour, and as she did not expect to be confined for a month, I gave an opiate, told her to remain quiet, and to send at once if anything came on. On October 28th (two days afterwards) I received a message that Mrs. B. died during the night, and that only a neighbour and the village midwife were present. I went to the place, calling upon the midwife on my way to learn particulars. She said that she found Mrs. B. fainting, and with great loss, that the child was born when she got there, but that there was a "false conception," which came away after the child.

I then proceeded to the patient's house, and saw the woman who was present. She told me that, after my visit, on the 26th, the loss stopped, and that, though Mrs. B. seemed very faint and weak, there appeared to be nothing wrong with her. About midnight on the 27th, severe labour-pains came on, and, before she could get any one there, the child was born. There was no one in the house at the time, but she sent the husband as soon as possible for the midwife. She would say nothing further than that soon after the arrival of the midwife, Mrs. B. died suddenly. Mr. Beecroft, a retired surgeon living in the village, was sent for by the midwife, but he did not arrive until after Mrs. B.'s death.

The woman had saved the "after-birth, and what came away with it." On examining this I found, in a basin full of blood and water, the placenta, which was much broken up on its uterine (attached) surface, and had apparently been torn on removal. Besides this there was a substance which proved to be the inverted uterus. On re-inverting this, the whole uterus was found to be torn away, the rupture passing through the vaginal wall in front, about an inch from its reflexion on to the cervix uteri. Behind, it was torn away at the reflexion of the peritoneum from the uterine walls. The broad ligaments were torn, the rupture passing through one ovary, the other ovary was still attached to the uterus. The uterus appeared to be healthy, whilst the ovaries were normal. The inner surface of the uterus, from which the placenta had been detached, was ragged, and small portions of the placenta were still adherent. Unfortunately, the specimen was not preserved.

With the assistance of Dr. W. E. Paley, and Dr. Kirkwood, I made a *post mortem* examination of the body on October 30th. The remainder of the left ovary was in its proper place, the organ being torn in halves. On its surface was a small adherent blood-clot. The uterus, with the rest of its appendages was missing. Nothing else abnormal was found.

The history obtained from the two women at the inquest was very unsatisfactory, and nothing further could be learnt from either of them. They denied using much force, and would say nothing about anything coming after the child. The midwife stated that Mrs. B. was fainting when she arrived; that she cut the cord, took away the child and removed the after-birth, which came away quite easily.

An open verdict was returned.

In addition to the case mentioned in the JOURNAL, Neale's *Digest* (1568-1) mentions two other cases, to be found in the *British and Foreign Med.-Chir. Review*, vol. i, 1856, p. 535, and in the *Medical Times and Gazette*, vol. ii, 1868, p. 728.

ON PREVENTION OF LACERATION OF THE FEMALE PERINÆUM.

By ALEXANDER DUKE, M.K.Q.C.P.I., etc.,
Obstetric Physician to Dr. Steevens' Hospital, Dublin, etc.

THE best authorities are, I think, agreed that it is not advisable to support the perinæum, when that important structure is being distended by the passage of the fœtal head. And the reason is sometimes given that the support is so seldom properly applied that it is better left undone.

However, as it is a most deplorable accident to happen to any female, not only on account of the additional danger to the patient, from the chance of septic absorption, the additional anxiety and trouble it gives to both nurse and doctor, and the train of subsequent evils which it frequently sets up, I consider it a subject worth saying a few words about, if only to draw out the opinion of older and wiser heads, as to the advisability of adopting some preventitive treatment, instead of, as a rule, interfering too late, or at the wrong time, with the calamitous results we so often witness.

The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the text-books on midwifery) is this:—When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and at the onset of a pain, draw back the perinæum firmly, but gently, towards the coccyx, relaxing the tension gradually as the pain lessens till the next ensues, and so on till I can draw back the perinæum with very slight effort. I thus tire out the muscular structure, and produce sufficient relaxation for the head to pass.

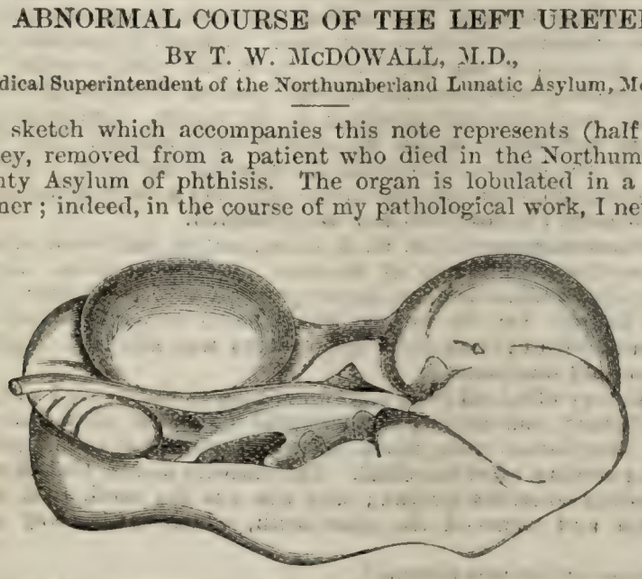
In most cases so treated there is no danger of the perinæum, but when the pubic arch is narrow (which can be easily determined) I take the additional precaution of raising the patient's left hip, and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction of lard or vaselin, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx, or a finger in the rectum, leaving the perinæum untouched. It has always seemed anomalous to me that the perinæum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

The drawing back of the perinæum produces no additional pain to the patient, as it is done during an uterine contraction; and I feel sure that, if nurses and students were educated as to the proper way of preparing the perinæum previously to its distension with the presenting part, we should see and hear less of lacerated perinæum.

ABNORMAL COURSE OF THE LEFT URETER.

By T. W. McDOWALL, M.D.,
Medical Superintendent of the Northumberland Lunatic Asylum, Morpeth.

THE sketch which accompanies this note represents (half size) a kidney, removed from a patient who died in the Northumberland County Asylum of phthisis. The organ is lobulated in a curious manner; indeed, in the course of my pathological work, I never saw



one so irregular and peculiar in form. Indications of lobulation, as seen in the upper half of this kidney, are of frequent occurrence; but the arrangement seen in the lower half is quite exceptional.

But the chief point of interest in this specimen is the direction of the ureter. Instead of descending from the renal pelvis, in the usua manner, to the inner side of the kidney and on the psoas muscle, i lies in the first part of its course on the kidney. On submitting th specimen to Professor Turner, he stated that he had seen such a arrangement; but it must be very unusual, as it is the first of th kind I ever saw in the course of several hundred *post mortem* ex aminations.

The relation of parts is evidently of importance to the surgeon seeing that, in the present day, it is not only a recognised, but mos successful operation, to cut down on the kidney, and remove calcul from the pelvis and upper part of the ureter. As, in the course o years, my surgical knowledge has gradually diminished, throug lack of material wherewith to maintain it, I do not attempt to de scribe, in detail, how much an abnormally placed ureter migh embarrass the surgeon. To reach it, he would be obliged to cu through the whole thickness of the kidney, about one and a hal inches.

CLINICAL MEMORANDA.

COMMUNICABILITY OF PHTHISIS.

AMONG the deaths certified by me, during the last twelve or thirtee years, sixty-three have been from phthisis. Some of these case were complicated by renal or other diseases; some were probabl syphilitic; but all manifested signs of tubercular disease of th lungs. Thirty-five patients were married. Nearly all the patient had bedfellows. The death of one (a man) was followed, six o seven years afterwards, by the death of his wife, "in a decline. She died in the neighbourhood, but not under my care, so that speak from report only. Her parents died early. As all these death happened in country practice, I have generally been able to trac the history of the survivors. In some families, more than one mem ber has died of phthisis; but the disease has been traceable to here ditary taint rather than to direct contagion. For instance: in farmer's family, three deaths have arisen from phthisis, and daughter is now ill; but the years of the patients, intervals of th illnesses, etc., are such as to render the fact of communication ver improbable.

Dr. Janeway is wrong in stating that negative statistics prov nothing. If one hundred persons inhale bacilli, probably half suc persons have some tuberculous taint, then the fact of the very larg majority resisting the contagion proves that the contagium is n active, to say the least. With regard to the effect of inhalations, may note that, quite unintentionally, I obtained proof of their powe to limit the formation of bacilli. When first trying Dr. H. Gibbes mode of staining, I repeatedly examined the sputum from three pa tients, without being able to find any bacilli. These men were usin creasote and carbolic acid in an inhaler regularly; but this had n occurred to me until I found the organisms in other sputa from pa tients not using the antiseptic treatment.

CAREY P. COOMBS, M.D.Lond., Castle Cary.

VACCINIA.

ON January 18th, I vaccinated my fourth child, a boy three month old, with calf-lymph obtained through the Association for the Suppl of Pure Vaccine Lymph. Vaccination was effected in four plac by superficial scratching with a new needle. There was no blee ing. The child had been strong and healthy from its birth. It ha had slight nasal catarrh some weeks before, and had been subje to repeated eruptions of "red-gum;" but no vesicles or pustul were observed up to the time of vaccination, when there was a appearance on the left cheek that was taken for another incipie crop of "red-gum."

On the second and third days, the papules on the cheek becam surmounted by vesicles, which soon began to weep, and presente all the characters of eczema. On the fifth day, there were fo vesicles at the points of inoculation, fairly well developed, and wit clear lymph oozing from them. On the seventh day, or possib late on the sixth, a crop of papules appeared round the points inoculation, and also a few scattered over the body. On the eigh day, the primary vesicles were large and well formed, oozing a goo deal. There was very little areola. On the ninth day, vesicl appeared on what I may call the secondary papules. On the ten day, the primary vesicles, still discharging copiously, were surround by at least fifty discrete, circular, well formed vaccine vesicl several of which were discharging lymph. There were also simil vesicles distributed as follows: one on the opposite elbow, o

on the top of the head, one on the neck, one on the ear, and a few on the body. The child's back, scalp, and the back of its forearms were now covered with a scaly erythematous rash. The arm was swollen and brawny, but not more so than is frequently observed in ordinary cases. There was very little constitutional disturbance. The bowels did not act as usual, but were relieved spontaneously at night.

Eleventh day. A disturbed night, but yet the child slept a good deal. About seventy secondary vesicles were counted on the left arm, five on the left ear, a few on the neck and chest, one on the face, one on the scalp, one on the back, and one on the right elbow.

Twelfth and thirteenth days. The vesicles on the left arm became confluent; indeed, the upper portion of the limb presented exactly the appearance of confluent small-pox. Swelling and constitutional disturbance were still inconsiderable. Scabs beginning to form on the primary vesicles.

Fifteenth day. All the vesicles, secondary as well as primary, dried up into scabs. Eczema on cheek quite dried up. The rash on the back and scalp subsiding.

February 26th. Scalp and back well. Eczema still on left cheek. A small abscess on left nipple; a few erythematous patches on neck and chest. The child appeared very well. The scabs separated in the usual course.

Dr. Warlomont of Brussels wrote to me on February 8th, to the effect that the lymph (which, by the way, was sent to me in tubes, and used about thirty-six hours after I received it) proceeded from a case of spontaneous cow-pox successively transmitted from calf to calf at his "Institut." He considered the case to be one of "vaccine généralisé," which is said to be less rare with calf-lymph than with humanised lymph. He attributed the "anomalies much rather to the ground than to the seed."

All my children have delicate skins, which was evidenced in this case by the primary vesicles bursting spontaneously as early as the fifth day. But my other three children were vaccinated with lymph from the same source without any unusual result. Two questions arise. First, ought I to have delayed vaccination? Secondly, to what extent was the general eruption due to auto-infection? To some extent, no doubt; but I do not think this can have been the case with the numerous vesicles close to the points of inoculation. These appeared to develop in a typical manner. Dr. Horace Jeaffreson, who saw the child from the tenth day, shares this opinion. I may add that none of the three other children were infected.

G. B. LONGSTAFF, M.B., M.R.C.P., Wandsworth.

SURGICAL MEMORANDA.

THE TREATMENT OF SPINAL CURVATURE BY THE PERFORATED FELT JACKET.

UNDER the above heading, Mr. Nelson Hardy, in describing his treatment of a case of excurvation of the spine (BRITISH MEDICAL JOURNAL, March 3rd) states that I have "spoken slightingly" of felt jackets in my pamphlet recently published upon Curvatures of the Spine. I shall be glad to state my reasons for having done so. They are:

1. Because felt jackets compress the walls of the thorax, and thus interfere with respiration;

2. Because the use of such corsets hinders the free development of the dorsal and other muscles;

3. Because felt jackets do not thoroughly control the upper part of the spine;

4. Because I have found it better (when a support is really necessary) to use a light instrument which does not interfere with muscular exertion, but which acts as a support directly the muscles become too tired to keep the spine in an upright position, and which thus prevents the subsidence of the spine into abnormal curves.

I am glad to find that Mr. Hardy recognises the inefficiency of the spinal supports commonly used. I have already, upon several occasions, protested against the use of steel instruments with crutches, and am not surprised that Mr. Hardy's patient derived no benefit from the use of one.

Mr. Hardy's case was probably benefited chiefly by the exercises which he so judiciously prescribed; and I do not doubt that even the plastic felt jacket, imperfect for the purpose though it is, acted, when skilfully applied, as an useful support; but I believe that a more rapid improvement might have been obtained if, instead of a jacket, the felt had been used as a back-splint, in the manner described and figured in the pamphlet which Mr. Hardy has referred to. I have found gutta-percha or leather splints very suitable for excurvation in very young children, but doubtless the plastic felt would serve the purpose very well.

E. NOBLE SMITH, F.R.C.S.Ed.

Queen Anne Street, London.

OBSTETRIC MEMORANDA.

LABOUR COMPLICATED BY VAGINAL OCCLUSION.

A CASE, recorded in the JOURNAL of February 17th last, of "Labour complicated by Cicatricial Occlusion of Vagina," by Dr. Mansell-Moullin, reminds me of one of a somewhat similar character, which occurred in my practice some years ago. I was consulted by the husband of the patient (a medical man), under the following circumstances.

A severe confinement a long time previously was followed by an extensive vesico-vaginal fistula—in fact, a large chasm was formed between the two cavities—which caused, of course, a great amount of distress and inconvenience. Mr. Bryant, of Guy's Hospital, was consulted, who, finding the loss of substance too great to allow of any reasonable hope of success from the ordinary operation, determined upon forming a complete septum across the vagina, and so preventing the continual drain of the urine through the latter; the menstrual discharge having to make its escape through the bladder and urethra. This had to be attained by a series of operations, three of which, I think, had been performed before I saw the patient, with the result of forming a firm and almost complete partition; a small opening, scarcely sufficient to admit a crow-quill, remaining close to the wall of the vagina on the left side. The operation must, indeed, have been most skilfully performed. A slight operation only was required to make the case a complete success; and this it was intended shortly to effect. In the meantime, unfortunately, the patient became pregnant; and at about the fourth or fifth month, I was consulted as to the advisability of inducing premature labour. I advised that the patient should be allowed to go her full time; to wait until the head or other presenting part should begin to press down upon the vaginal septum, and then to divide the latter in the best way we could, and so release the child. This advice was adopted, and at full term I was called to attend her, labour having commenced. When the presenting part, which was fortunately the head, began to press upon the septum, I passed a grooved director above the latter, between this and the head of the child, introducing it through the small opening, and divided it almost completely across by a bistoury. The labour proceeded very satisfactorily; the child was born without difficulty; and the convalescence was most favourable. The original design of Mr. Bryant's operation was, of course, I am sorry to say, frustrated by this untoward event.

GEORGE PADLEY, L.R.C.P.Lond., etc., Consulting Physician to the Swansea Hospital.

ABDOMINAL SECTION FOR PUERPERAL PERITONITIS.

MRS A. M., aged 26, confined on December 6th, 1881, in the Lying-in Hospital, City Road, was discharged from that institution on the sixteenth day after delivery, convalescent. Two days later (the eighteenth after delivery), she noticed a fœtid discharge from the vagina; otherwise she felt fairly well, and continued to do so until the twenty-fourth day after delivery, when she first observed slight but painful enlargement of the abdomen; this increased gradually at first, but much more rapidly afterwards, till January 11th, the thirty-seventh day after delivery, when she first applied to King's College Hospital, and was admitted under Dr. W. S. Playfair.

On admission, there were well marked signs of peritonitis with effusion; the uterus was completely fixed; there was also pleurisy on the left side; temperature 102°. The following morning, the temperature had risen to 103.2°. Double pleurisy and pericarditis, but without any effusion, were discovered, in addition to the abdominal symptoms; these gradually improved under the usual remedies. The abdomen continued to increase in size, though with very little actual pain till January 16th, when, owing to the increasing dyspnœa, it was aspirated, and seventy-two ounces of fluid drawn off from the peritoneal cavity of which the first eight or ten were sero-purulent, and the remainder thick creamy pus. After this, she experienced great relief, and the temperature fell from 101.2° to 99°. For the next fortnight, she appeared to be much better; but, on January 30th, she again began to complain of pain in the abdomen, which was slightly increased in size; this continued till February

11th, when the abdomen was again aspirated, and 96 fluid ounces of pus drawn off. After this, as on the previous occasion, she was very much better, and continued so till the 19th, when the abdomen again began to increase in size, and the temperature to rise until February 24th, when 52 fluid ounces of pus were drawn off by the aspirator, making a total of 220 ounces of fluid from the peritoneal cavity, nearly the whole of which was pus.

On March 7th, as there was a further collection of fluid, Dr. Playfair decided to thoroughly drain the peritoneal cavity, and made an incision in the linea alba about two inches in length, commencing an inch below the umbilicus, a large India-rubber drainage-tube being inserted. The most strict antiseptic precautions (Listerian) were observed. About 40 ounces of pus escaped on this occasion. After this, the temperature, which had been up to 102.4° for the two previous days, immediately fell to normal, and continued so till March 26th, when there was a slight rise, owing to a fresh attack of peritonitis. This entirely subsided on April 1st. For the first week after the operation, the wound had to be dressed every day, but after that less frequently until April 14th, when the drainage-tube was dispensed with, and on the 25th, the wound had entirely healed.

From this date, the patient made a slow but good recovery, being discharged from the hospital on May 24th. The only internal remedies used were quinine, opium, and stimulants.

JAMES HODGES, L.S.A., Henley-on-Thames.

THERAPEUTIC MEMORANDA.

CASCARA SAGRADA IN CONSTIPATION.

Cascara Sagrada, Rhamnus purshiana, is a small tree indigenous to the Pacific coast of North America. The fluid extract I have used is that prepared by Parke, Davis, and Co., Detroit, and procurable of their agents, Messrs. Burgoyne, Burbidges, and Co., London. Its use, in my hands, seems to be indicated in almost all cases of constipation, particularly in cases of torpidity of the liver, with scanty dry stools and indigestion. It seems to act as a stimulant to the muscular fibres of the intestines, through its action upon the sympathetic nerve, this increasing the vermicular movements of the intestines, thus resembling nux vomica. I have used it in several cases of obstinate constipation with very satisfactory results. I generally give twenty drops three times a day in sweetened water for ten days or a fortnight; and then, gradually reducing this dose, the patient is able to establish a habit of regularity. Given in doses of a teaspoonful, it acts as a gentle purgative, without producing any griping tenesmus or nausea; but its action is slow, and, in this sized dose, seems to lose its good property of curing the constipation. With children, with smaller doses, I have had equally good results.

J. FLETCHER HORNE, F.R.C.S.Edin.

SOLUTION OF PERCHLORIDE OF MERCURY IN GONORRHŒA.

TOWARDS the end of last year, Dr. Leistikow read a paper at the Berlin Charité Medical Society detailing the results of his researches on the gonorrhœal bacteria first discovered by Neisser. The various remedies, he contended, used in gonorrhœa, such as zinc, lead, tannic or carbolic acids, after a few injections, dispersed all the bacteria; as did the copaiba balsam, when taken internally. Corrosive sublimate also prevented the development of bacteria; and Dr. Leistikow especially recommended it as the best means of treatment of gonorrhœa, employed in an exceedingly weak solution (10 to 20,000 or 30,000). I am no believer in the germ-theory of disease, or what I conceive to be the silly and unphilosophical treatment based thereon; but I desire simply to point out that, in a paper which was published in these columns in April 1870, I advocated the use of weak solutions of bichloride of mercury in obstinate cases of gleet. The strength of solution then recommended was one to two grains to eight ounces of water; and the statement is made, that I did "not know a case of uncomplicated gleet to resist this treatment."

D. CAMPBELL BLACK, Glasgow.

MR. BROADHURST has blocked the Metropolitan Streets Improvement Bill and the Metropolitan Streets Improvement Act (1877) Amendment Bill, the opposition being based on the ground that inadequate arrangements are made for the house provision of the people who would be dislodged. The Home Secretary has, it is understood, taken up the matter, and a correspondence is now going on between the promoters of the Bills and the Home Office.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GUY'S HOSPITAL.

CASE OF STONE REMOVED FROM THE BLADDER IN ONE OPERATION BY BIGELOW'S METHOD: PNEUMONIA, RECOVERY.

(Under the care of Mr. R. CLEMENT LUCAS.)

[For the report of this case we are indebted to Mr. G. E. C. ANDERSON and Mr. J. D. HUGHES, the clinical clerks.]

H. N., aged 22, a carpenter by trade, was admitted on November 14th, 1882. For about a year he had suffered from irritability of the bladder, and a difficulty in retaining his urine. A month or six weeks before admission this difficulty increased, and he had since been obliged to relieve himself every three quarters of an hour. At night his rest was disturbed by frequent calls to pass urine, and he had often been unable to prevent a dribbling of urine into the bed. About the same time he had noticed the stream suddenly stop when voiding urine, and then he would suffer from a scalding sensation in the glans penis. Emptying the bladder was always followed by pain, and a continuance of the desire to micturate. Three weeks before admission, he went to a surgeon, who sounded his bladder. He went to the surgeon again a week before admission, who, after sounding him, told him he had a stone, and advised him to place himself under Mr. Lucas's care in Guy's Hospital.

Condition on Admission.—The patient was a healthy-looking young man. His testes were somewhat large, and there appeared to be some fluid in both tunicæ vaginales, especially the right. The right epididymis was considerably, and the left slightly enlarged. The glans penis was small, and there was some tendency to phimosis. On passing a sound, a stone was immediately felt, and the sound of impact could also be heard. The urine contained a large amount of ropy mucus and pus; it was alkaline in reaction, and occasionally contained blood.

November 15th.—After resting in bed since his admission, the patient found that he could hold his urine longer. He was ordered a mixture containing potash, hyoscyamus, and pareira.

November 21st.—The patient was placed under chloroform, in order to crush the stone. The bladder was first injected with warm water by means of a syringe and tube. It appeared to be contracted, for it did not hold much, and the penis had to be compressed to prevent the water from being immediately ejected. The lithotrite was then passed, the stone seized, and from the index of the separation of the blades was judged to measure rather more than an inch across. On turning the screw, it slipped once or twice, but was then successfully crushed. The fragments that were taken up for five or six different times, all appeared to be about an inch across, showing that probably the stone had first been seized in a short transverse axis. Two lithotrites were used, one being fenestrated and one not. The latter was more readily clogged. After about six crushings, the aspirating apparatus was used, and some *débris* extracted. A good many smaller pieces, about half-an-inch displacement, were then crushed. Bigelow's large tube could not be introduced until the prepuce was slit up; then a large straight tube of Bigelow's instrument was introduced, and, on working the ball, several fragments and a good deal of sand dropped into the trap. Alternate crushings and suction were continued for some time longer, until no more fragments could be felt in the bladder. In seizing the fragments, the French method of inverting the instrument was adopted. Some of the fragments extracted varied in size from $\frac{1}{4}$ to $\frac{3}{16}$ of an inch, but the greater part came away in very small pieces. The mucous and cutaneous surfaces of the slit prepuce were then stitched together with a continuous carbolised suture, and a morphia suppository were placed in the rectum. There had been very slight hæmorrhage. Before the operation commenced, the right tunica vaginalis was tapped. The weight of the stone was 227 grains after drying. It was composed of uric acid and a shell of phosphates.

November 22nd.—The patient passed a quiet night, sleeping well. Urine was passed an hour after he had recovered from chloroform causing only a slight scalding. Urine was also passed three or four times during the night without any discomfort. It was discoloured

om blood, and contained a little *débris*. It was, unfortunately, rown away. This morning the patient seemed quite well. There as a little tenderness over the region of the bladder and a little ain, referred to the neck of the bladder in micturating.

November 23rd. The urine was passed about every hour and a half. here was less tenderness over the bladder, and less pain in micturting. The urine (alkaline) was still discoloured, and contained a ttle gritty deposit. The pulse was 84, and a little soft. There as no pyrexia; the tongue was clean, and the appetite good.

November 25th. He continued well, and passed his urine without ifficulty. The urine was strained through muslin, but there was no rit; only one small piece of stone was found. There was a reat quantity of mucus. The prepuce was very much swollen, and iere was no primary union. In the evening, he became feverish. lis bowels not having acted since the operation, he had two enemata ıponis, which had a good effect. He had severe headache, and ain in the right side, on coughing, on a deep inspiration, or on ressure. The temperature continued to rise, and was 103° on the ıorning of November 27th. On examination, Mr. Lucas found neumonia at the base of the right lung. In the evening, the temerature was 103.6°.

November 28th. The headache was better, but the patient still elt ill. The temperature in the morning was 102.4°, and in the vening 102°. Some albumen and pus was found in the urine, and great uantities of mucus. Morning temperature, 102.4°; evening temerature, 102°.

November 29th. The temperature was falling gradually; the headche had ceased; and there was little pain in the loins.

November 30th. The urine was clearer, there was no tenderness bout the bladder or urethra, and no pain in micturating. The pain n the right side had quite gone; much œdema of the prepuce still emained, but it was subsiding, and there was very little discharge. 'he morning temperature was 99°, the evening temperature 02.2°.

December 2nd. He still complained of slight headache, which eased in the evening, but returned in the early morning.

December 4th. The temperature was 102.4°, and there was crepiation at the base of the right lung.

December 9th. The urine contained no albumen, but an abundnce of lithates. The temperature was 103.6° on the previous night, nd the pulse was rapid and irregular.

December 11th. A sound was passed into the bladder, but nothing vas felt. In the fossa navicularis, a part of the shell of the stone vas felt, and this was removed by urethra-forceps. It was about ne-tenth of an inch thick. The œdema on the under surface of the repuce had diminished considerably. The lungs were free from repitation. The temperature in the evening was 104.2°, but he ad no rigors.

December 13th. The pulse was weak and small. The temperaure this morning was 99.8°.

December 14th. He had improved in external appearances, and had a fairly good appetite. The urine was slightly turbid, of specific gravity 1020. It contained no albumen. The temperature was 98.8°. He was ordered quinine mixture.

December 18th. The patient was considered so far convalescent, that he was allowed to get up to-day, as his temperature had been normal for the last five days.

December 21st. The œdematous condition of the prepuce had subsided entirely.

December 23rd. He was sounded to-day. There were no traces of stone in the bladder. The breath-sounds were normal. He left the hospital in the afternoon.

REMARKS BY MR. LUCAS.—There are several points of interest in this case, and one of some importance is the occurrence of double epididymitis before any sound was passed. It was this, rather than the condition of his bladder, which caused the patient to seek advice. As a result of the epididymitis, he had acute hydrocele on both sides; but the right tunica vaginalis contained much more fluid than the left, and required to be tapped by the dresser before the major operation could be conveniently commenced. Since this case, I have operated on another, where exactly the same thing happened, double epididymitis having come on suddenly from extension of the inflammation of the bladder to the prostate and ejaculatory ducts. In this latter case, the complication was, for the patient, fortunate, since it caused him to relinquish attendance on a charlatan, whose advice he had followed for twelve months, and seek relief from a registered practitioner, who detected the stone. The operation was protracted, on account of the size of the stone, and the minor troubles of hydrocele and phimosis, which had to be overcome before the instruments could be used with effect; yet the patient experienced immediate relief, and was able to retain his urine for a longer time on the following day than he had been able to do for months before. It will be noticed that, during the first five days after the operation, there was no rise of temperature; and, when he was thus on a fair way to convalescence, he was suddenly seized with pain in his side and high fever. It must not be supposed that the attack of pleuropneumonia which this indicated was the result of the operation. It was directly traceable to a draughty window, which had given the patient who occupied the same bed previously a severe attack of bronchitis. The attack was of a simple character, and gradually subsided in about a fortnight.

Of the value of Bigelow's operation over the lithotomy of the last twenty years, no one who has practised the two operations can have any reasonable doubt. The tolerance of the bladder being established, litholapaxy places the operation for stone within the reach of almost any surgeon.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF BULLET-WOUND OF THE TONGUE.

(Under the care of Mr. MORRANT BAKER.)

[For these notes we are indebted to Mr. HARPER, House-Surgeon.]

H. S., aged 13, a van-boy, was brought to the hospital, late on the evening of January 5th, by his father, who gave the following account. In the father's absence, H. S., and another boy in the same house, had been amusing themselves with firearms. The other boy, whose weapon was a six-chambered revolver, not knowing it was loaded, pointed it at H. S., at about three yards' distance, and fired, wounding him in the face. Very shortly afterwards, the wounded boy was brought to the hospital.

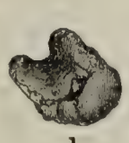
He walked into the surgery, looking slightly dazed, but perfectly sensible and intelligent. There was a wound in the right upper lip, passing right through, and the upper canine and upper lateral incisor teeth on that side were completely extracted—the canine being entire, while the crown of the incisor was broken off. No wound could be found in the hard palate, or cheeks, or floor of the mouth; but, on the upper and anterior surface of the right half of the tongue, was a ragged wound, about the size of a large pea. A probe, passed into this wound, travelled right through the tongue, from before backwards, and emerged into the pharynx, just above the epiglottis. No mark of injury could be seen in the posterior wall of the pharynx.

The boy was then put under chloroform, and as complete an exploration as possible made of the throat, but nothing abnormal could be felt. A Nélaton's porcelain-pointed probe was passed through the tongue, and search made for the bullet, without success. Under the anæsthetic, he vomited freely. The vomit was carefully examined for the missing body, but in vain. He complained of some stiffness and pain in the back of the neck, and the head was held in rather a constrained position; but no wound could be seen, and nothing like a bullet felt. His speech was unaffected, his hearing perfect, and no loss of power or sensation was discoverable anywhere.

He was admitted into Harley Ward, put to bed, and immediately fell asleep quietly. On the following morning, he appeared perfectly well, only complaining of slight pain on swallowing. Below the left inferior maxilla, a hard lump was felt; but the hardness was rather that of an enlarged lymphatic gland than of a metallic body. Directions were given that any fæces passed should be examined for the bullet.

He was kept at rest in bed, and no further treatment attempted, in the absence of any definite indication of the whereabouts of the bullet. The pain on swallowing continued for a day or two, and then diminished gradually; no other symptoms supervened.

On January 11th, six days after the accident, the bullet was passed *per anum*, well coated with fæces. He was quite unconscious of passing anything unusual. As seen in the drawing, it was considerably altered in shape; on one aspect, it was deeply grooved, apparently by the canine tooth, against which it had impinged; while the opposite aspect was flattened, and marked with longitudinal striæ, as though it had grazed some hard body on its course, probably the adjacent tooth. In the drawings, No. 2 represents the original shape of the bullet, and No. 1 the form which it had when found in the stool.



1



2

The next day, he left the hospital; and, when seen a few days later, remained perfectly well.

REMARKS.—The case is interesting from its unusual termination.

The shot being fired at a distance of only three yards, while the revolver would carry about one hundred and fifty, it is remarkable that the teeth should so have broken its force as to allow it to pass through the entire length of the tongue, and drop harmlessly into the gullet behind. In the ordinary course of events, it would probably have either buried itself more or less deeply in the vertebral column, or, glancing off the spine become embedded in the soft parts. The cause of the pain in the neck is obscure; but it is possible that the posterior wall of the pharynx was struck with considerable violence, yet insufficient to cause penetration.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 6TH, 1883.

J. WHITAKER HULKE, F.R.S., F.R.C.S., President, in the Chair.

Hypertrophy of the Ramus of the Lower Jaw.—A young woman, who presented a marked degree of unilateral hypertrophy of the lower jaw, was shown by Mr. CHRISTOPHER HEATH. She was 36 years of age; when 25, she had an attack of left hemiplegia, from which she recovered entirely as regards the limbs, and partially, at least, as regards the face. During the following ten years, the deformity had been gradually produced; the hypertrophy was entirely confined to the ramus, and did not affect the body of the bone at all. The condyles also appeared to be enlarged, and the motions of the jaw were restricted. The pathology of the condition was, Mr. Heath thought, very obscure. The only analogous case with which he was acquainted, was one figured in Dr. Robert Adams's work on rheumatoid arthritis; but in that case there was a distinct rheumatoid affection of the hand and foot, while in Mr. Heath's case there were no rheumatoid pains, or deformities elsewhere. Removal of some considerable portion of the hypertrophied part of the bone would probably, by resulting in a false joint, considerably benefit the patient, and allow more motion between the jaws.—Mr. ROGER WILLIAMS had seen a specimen of exostosis from the angle of the jaw, which had been removed from a young man who was otherwise in good health, and presented no other bony deformities.—The PRESIDENT said that in this case there was no great enlargement of the articular end of the bone, as there was in Dr. Adams's case, and as was ordinarily seen in rheumatoid arthritis.—Mr. CROFT inquired what there was in this case that led Mr. Heath to regard it as an instance of hypertrophy rather than of osteitis deformans; had the patient suffered any pain in the bone?—Mr. HEATH said that the patient had had no pain, and that Sir James Paget, who had examined the patient, had declined to regard the case as one of osteitis deformans. That there was some inflammation of bone of some kind was, however, very probable.

Rheumatoid Arthritis.—Dr. NORMAN MOORE exhibited some vertebræ showing rheumatic arthritis, which had been found in a Roman tomb discovered in digging the foundations of the library at St. Bartholomew's Hospital. The skeleton to which the bones belonged was entire, and lay in a stone sarcophagus preserved at St. Bartholomew's. The vertebræ showed lipping of the edges of the centra, irregularities on the intervertebral surfaces, and, in some places, ankylosis with considerable formation of osseous tissue. There was nowhere any loss of substance. In the middle dorsal vertebræ, there was bony union on both sides; but, lower down, though both sides of the centra were lipped, fresh bone had been formed on the right side only. Della Chiaje had described rheumatic arthritis as shown by bones found at Pompeii; but the St. Bartholomew's tomb, ascribed by antiquarian authorities to the fifth century, perhaps furnished the earliest instance of the disease in England.—Mr. BRUCE CLARKE said that there was a specimen in the museum at Oxford, which the late Professor Rolleston had frequently stated was obtained from tumuli which, he considered, antedated the Christian era.—Mr. CROFT inquired on what grounds the specimen was described as rheumatoid arthritis; he thought that the term ought to be confined to cases where there was a history of rheumatic pains.—The PRESIDENT said that, of a number of skeletons dug up at Saffron Walden, some of them said to be of Roman date, most presented the same changes as in the specimens now shown.—Dr. NORMAN MOORE said that too much importance ought not to be attached to the occurrence of pain. Other changes in joints, of a very definite kind, as, for instance, the deposit of urate of soda occurred where no history of pain could be obtained. The anatomical change was sufficiently well marked to render it certain that the disease was really rheumatoid arthritis.

Fracture of Sternum.—Mr. ARBUTHNOT LANE showed a specimen of fracture of the sternum at the junction of the first and second pieces, and dislocation of the second and third left costal cartilages from their ribs. There was no fracture of ribs or of vertebræ. He also described a form of articulation that he had found in the first costal cartilage whenever it had become sheathed in bone. This might be either a single arthrodial joint or one of two forms of mixed articulation. These conditions were exemplified in the specimen shown. The purpose of these newly formed joints was evidently, he thought, to obviate the rigidity of the cartilage, and to allow the free movement of the sternum in respiration.—Mr. SYMONDS said that it was difficult to account for a boss of bone which was found on the inner surface of the sternum in the specimen shown, near the junction of the second costal cartilage. Possibly it was due to some secondary rheumatic changes in the parts, after the fracture which Mr. Lane supposed to have occurred. The point which Mr. Lane had established with regard to the formation of articulations in costal cartilages, which had undergone ossification, appeared to be of great importance.

A Peculiar Process from the Fibula.—Dr. HALE WHITE exhibited a fibula, which presented on the internal surface, an inch from the upper extremity, a thin bony process an inch long, directed downwards in the fibres of the soleus. No vessels or nerves ran under it, but many muscular fibres arose from it. As far as could be ascertained, this was an unique specimen.—Mr. MORRIS inquired whether it was truly formed bone. In some tendons, especially those inserted into the trochanter major, ossification not uncommonly occurred, leading to much deformity.—The PRESIDENT said that the process in this case was similar to the spicules of bone formed in the adductors in persons much given to riding, and to the similar processes in the deltoid, found, formerly very commonly, in soldiers, especially in the Prussian service. Laceration or bruising was in each instance, no doubt, the cause of the formation of bone.—Dr. WHITE said that the process was true bone, and lay in the muscular fibres, and was not in relation to any tendon.

A Sacculated Bladder in a Female.—Dr. HALE WHITE showed the bladder from a woman who had been admitted into Guy's Hospital for hæmaturia and pyuria. It was thickened, coated with phosphates, and on the inner surface, between the opening of the left ureter and the commencement of the urethra, was the orifice of a sacculus larger than the bladder itself. There was an abscess in the kidney. Probably the impossibility of curing the cystitis arose from the fact that the opening from the sacculus into the bladder was so small, that urine was retained and decomposed. It was pointed out how excessively rare a sacculus of this size was in the female, there being no recorded case in the *Pathological Transactions*, and out of three thousand *post mortem* examinations at Guy's, there was no instance of a sacculated female bladder. Considering that neither stricture nor stone ever caused sacculation of the bladder in women, it was most probable that when it occurred in them it was due to a pelvic cellulitis, which either set up cystitis or led to the formation of an abscess opening into the bladder.—Mr. EVE said that, as Dr. White had examined the records of Guy's Hospital, it would be interesting to know in how many cases of sacculation of the bladder dilatation of the renal pelvis and ureters occurred. His own experience led him to believe that the occurrence of sacculation of the bladder appeared to prevent dilatation of the kidney and its duct.—Mr. A. E. BARKER inquired whether there was any obstruction of the ureter. The sacculus might possibly have been a dermoid cyst. There were cases on record where a dermoid cyst had ruptured into the bladder, giving rise to severe cystitis, and a foul discharge.—Mr. CROFT inquired whether any examination of the bladder with the finger had been made during life.—Mr. HENRY MORRIS asked whether there were no cases of sacculated bladder from enlarged prostate in the Guy's record. In the most marked case of sacculated bladder he had ever seen, this had been the cause, and he believed that it was the most common cause; stricture generally led to a small bladder with hypertrophied walls.—Dr. NORMAN MOORE referred to the case of the scholar, Isaac Casaubon, whose bladder was greatly sacculated; the case, which was recorded and illustrated by his physician, was probably the earliest on record.—The PRESIDENT said that in a case of strangulated hernia operated on by Percival Pott, the contents of the sac was a sacculus containing urine, and apparently directly connected with the bladder.—Dr. HALE WHITE said that there was no evidence of obstruction of the urethra, or that the sacculus was a dermoid cyst. At Guy's Hospital there had been, in three thousand *post mortem* examinations, only twenty cases of sacculated bladder sufficiently marked to be recorded. All the cases occurred in men; eleven patients suffered from stricture, five from stone, two from spinal disease

racture in one case, and transverse myelitis in the other), one om enlarged prostate, and in one there was no other disease of the enito-urinary organs. He could not answer Mr. Eve's question with ertainty, but believed that dilation of the pelvis and ureters was ever noted.

Two Cases of Sarcoma of the Bladder.—In the first specimen, hown by Mr. ROGER WILLIAMS, the sarcoma had developed in a iverticulum. This diverticulum was probably secondary to enlarge- ient of the prostate. Some difficulty in micturition had been pre- ent for several years, but blood had been present in the urine only or about two months before the patient's admission into the Mid- lesex Hospital. Œdema of the left leg subsequently developed, he urine became purulent, and he died from asthenic fever. At the *ost mortem* examination, the pelvis was found to contain a growth vhich had caused flattening of the rectum. The pelvis of the left idney was much dilated, and the kidney-substance was thinned. The bladder was flattened by the growth against the right side of he pelvis, and around it there was some recent purulent cellulitis. About one inch above the orifice of the ureter on the left was a large liverticulum, which contained the tumour, probably a medullary arcoma; the disease had spread downwards, and had involved the rifice of the left ureter. The growth itself was inflamed and sup- urating. There were no secondary deposits in the glands, or in ny part of the body. The second specimen of sarcoma of the ladder was one which had been preserved in the Middlesex Hos- ital Museum. The growth projected from the surface of the ladder; it was villous on the surface, but at the base, and also in he villous processes, there was some small-celled growth.—Mr. A. BOWLBY doubted whether either of the cases were instances of sarcoma. In the first case, the duration of the symptoms, the oc- currence of so much inflammation, and the microscopical appear- ances, did not, he thought, agree well with the idea that the growth was sarcomatous. Sarcomatous tumours were composed of connective tissue cells, and it was not easy to draw the line between a fibro-sarcoma and a fibroma; but where the fibrous tissue prepon- derated, as in the second case, he preferred to use the latter term.—Dr. HADDEN said that he had recently made a *post mortem* examina- tion on a man who died after an illness, the most prominent symptoms of which were hæmaturia and painful micturition. There was a malignant growth involving the trigone, which resembled a scirrhous cancer, and secondary infiltration of the glands behind.—Mr. EVE agreed that the microscopical specimens showed such a tissue as was found in sarcomata and in various other tumours, especially at the margin of a scirrhous growth in the breast. From the presence of alveoli, and of epitheloid cells in the second case, he thought that the case was either a papilloma or an epithelial cancer.—Mr. WILLIAMS said that these tumours of the bladder started from the submucous tissue. The bulk of the tumour was a small-celled growth in both cases, and in the first specimen there was very little fibrous tissue.

Uterine Myoma becoming Sarcomatous.—Microscopical specimens from a large uterine tumour, which had at first presented the ordinary signs of fibroid tumour, but which subsequently became distinctly malignant, were shown by Dr. D. W. FINLAY. The patient was a single woman, aged 59. The catamenia had ceased ten years before her admission into the Middlesex Hospital. When admitted, there was a large tumour occupying the lower part of the abdomen, and extending upwards as far as the umbilicus. The patient soon afterwards sank and died, with symptoms of fever and peritonitis. At the necropsy, there was some evidence of recent peritonitis. The tumour, which was about the size of a fœtal head, was attached to the uterus by a pedicle. The capsule of the tumour had ruptured, and some extravasation of blood had occurred. At one point, the small intestine had become attached to the tumour, and the growth had formed a projection into the cavity of the gut; the fundus of the bladder had also been perforated by it; the tumour on section was hard and firm, and looked like a fibroid at its lower part, but above its tissue was laxer, and, in parts, breaking down. From the body of the uterus there was a small fibroid outgrowth. Secondary deposits had occurred in several situations, namely, in a subcutaneous gland beneath the clavicle (which had been recognised as enlarged during life), in the heart, at the base of the right lung, and in the left kidney. The microscopical examination showed that the tumour itself, in its largest part, was chiefly composed of spindle cells; in the secondary deposits, the number of round cells was larger, and formed the whole bulk of the growths in the heart and lung. Dr. Finlay had been able to find records of but very few cases of this kind; two somewhat similar cases were reported in early volumes of the *Transactions* of the Society, under the title of Recurrent Fibroid Tumours of the Uterus.—Mr. EVE questioned whether the spindle-shaped cells were really sarcomatous spindle-cells, or whether they were not rather embryonic cells in course of development into spindle-shaped muscle fibres. In the case of some specimens of myosarcoma of the kidney, shown during the last session of the Society, he, as well as other observers, had been able to trace the development of the striated fibres from the round cells, by noting numerous intermediate forms.—Dr. DAWSON WILLIAMS pointed out that, in the specimens of tumour of the kidney shown by him, and to which Mr. Eve had referred, it was easy to note the coincident presence of the various forms of cells and fibres, but that there was no proof that any transformation of the one into the other had occurred.—Dr. FINLAY, in reply, observed that the presence of metastatic deposits seemed to separate his case from those referred to by Mr. Eve.

Cases of Anthrax.—Microscopical specimens showing the bacillus anthracis in the serum from a malignant pustule, and in the sputum of the patient, were shown by Mr. DAVIES-COLLEY. The patient was a man forty-three years of age, who worked in a tan-yard. One morning, he was struck on the cheek by the corner of an undressed hide, and a slight scratch was produced. In the course of the day, this became the seat of troublesome itching; and, by the evening, a "boil" had formed there; he had a rigor, and became delirious at night. He did not apply at Guy's Hospital until five days later; there was then a bright red swelling, with a depressed black centre, near the corner of the mouth; the swelling rose abruptly about one-sixth of an inch above the surrounding skin; the glands behind the angle of the jaw were much enlarged. The man was very ill and weak, and the temperature was raised. Mr. Davies-Colley at once excised the tumour, and the man rapidly improved, and was now (a fortnight after admission) apparently quite well. The serum squeezed from the tumour contained abundance of bacilli, but none could be found in the blood. The bacilli were also found in the urine, fæces, and the sweat. Mr. Davies-Colley had examined the records of Guy's Hospital, and found that, up to last summer, seventeen cases of anthrax had occurred in ten years, with four deaths; since the summer, about six more cases had been admitted; four since the beginning of this year. There were several points with regard to this case which he thought worthy of note, especially the rapidity with which constitutional symptoms came on, and their disappearance, four days later, after operation; the local lesion was a little unusual in appearance, owing to the absence of the surrounding circle of vesicles which was commonly seen.—Mr. BRYANT exhibited the parts from a case of anthrax, which had died under his care in Guy's Hospital. The patient was a workman in the same yard as Mr. Davies-Colley's patient. Four days before admission, he noticed a small papule on his cheek, but felt quite well; in the evening, the papule had doubled in size, and he felt ill; on the next morning, he was very ill, the glands beneath the chin were enlarged, and his throat was swollen. When admitted, he was in a torpid state, almost cyanotic, the pulse was 130, the temperature between 100° and 101° Fahr., he was suffering from retching, and soon had a rigor; the malignant pustule, which presented the characteristic sloughy centre and surrounding ring of vesicles, was excised, and the wound touched with carbolic acid. The man, however, died in ten hours. The bacilli were found in the saliva and in the urine.—Dr. MAHOMED, who had made the *post mortem* examination in this case, said that characteristic lesions were found in the stomach, the intestines, and the lungs. They presented an appearance similar to that seen in the skin-lesions, namely, a central slough with a surrounding zone of inflammation; this zone was rather larger than in the skin. In the stomach, the process of separation of the sloughs was advancing. In the small intestines, in certain situations, the margins of the valvulæ conniventes were occupied by dark, almost black sloughs. In the colon, there was intense œdema of the mucous membrane. Sloughing areas were found below this, in the large intestine, almost as low as the rectum. In the lungs were about twenty nodules, visible on the surface, and looking like infarcts; some were solid to the touch; they were, no doubt, produced by the fungous growths. The mesenteric glands were not much enlarged; but, on section, small hæmorrhagic patches, no doubt due to the same cause, were seen. In the peritoneum, there were about two pints of turbid blood-stained fluid. There was in this case no general œdema of the connective tissue, no subserous hæmorrhage, and no pleuritic effusion. At Bradford, nearly all the cases showed lung-symptoms, while intestinal lesions were not observed. In Strasburg, and at Guy's Hospital, the experience had been just the reverse. There was in the case now shown evidence that the anthrax disease was in process of cure, since the sloughs in the stomach were separating. Most of the deaths were

due to dyspnœa, the bacilli, in their growth, depriving the blood of its oxygen.

Albuminous Urine.—Dr. RALFE wished to call attention to the fact that none of the new tests recently recommended for albumen in the urine would distinguish the varieties of albumen found. He exhibited four specimens of urine; one contained ordinary serum-albumen; the second and third, a modified albumen in acid and alkaline urine respectively; and the fourth was a specimen of peptonuria. The new tests failed to distinguish these. The ferrocyanide of potassium test was clean and neat, and, if supplemented by boiling, was trustworthy. As a practical point, he might mention that urine might be boiled over the flame of a candle, by merely interposing a disc of wire gauze, which intercepted the sooty particles. At the termination of the meeting, Dr. Ralfe demonstrated the points referred to.

The Electric Light.—Mr. NATHANIEL STEVENSON demonstrated his small electric light apparatus for use in operations and examinations about the mouth, in Mr. Heath's case of hypertrophy of one ramus of the jaw, shown at the beginning of the meeting.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 1ST, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Congenital Talipes.—Mr. EDMUND OWEN made some remarks upon the simple treatment of congenital talipes. He said the commonest form was that in which the heel was drawn up and the foot inverted—talipes equino-varus. The best treatment for this form was division of only the tendo Achillis; then the application of a tin splint for three days; after which, gentle manipulation should be practised, the heel being brought down, and the foot everted. A plaster-of-Paris bandage should then be applied to the limb in its corrected position, kept on for three weeks, and then reapplied if necessary.—Mr. BENSON BAKER remarked on the simplicity of this plan of treatment, but thought it would only prove successful in the milder forms of the deformity. For severer cases, division of the tendons of the tibial muscles was necessary.—Mr. BALKWILL did not think a permanent cure would result from Mr. Owen's plan.—Mr. NOBLE SMITH said that this treatment only applied to simple cases. Great force could be exerted by means of a tin splint; and, if extension could cure the case, it would be better exercised by this form of splint than by the plaster-of-Paris bandage.—Dr. ALDERSON also spoke, after which Mr. OWEN responded.

Treatment of Post Partum Hæmorrhage.—Dr. PERCY BOULTON read a paper on the treatment of *post partum* hæmorrhage. He pointed out, first, the distinction between this and other forms of puerperal hæmorrhage; and, after speaking of ordinary cases and their treatment, he discussed the treatment of extraordinary cases, or those of the major degree, and passed in review the value of cold, heat, injections of iron, and transfusion. He particularly urged the more frequent use of transfusion, believing that 50 per cent. of those who died from puerperal hæmorrhage would be saved if transfusion were attempted. He was in favour of direct or immediate transfusion from vein to vein, with the simple apparatus used by Professor Schäfer in his experiments on animals; it was cheap, took up no room in the obstetrical bag, and did not get out of order. In the absence of a human blood-giver, he thought a salt-and-water solution, at a temperature of 110° Fahr., strength a teaspoonful to the pint, should be always used, the quantity of the injection being determined by the result. He gave the following objections to mediate transfusion: 1. Loss of time during blood-letting; 2. Cooling of blood during whipping, which necessitated artificial heating and further loss of time; 3. Chances of embolism from imperfect defibrination; 4. Necessity of a more or less complicated pumping apparatus, very apt to get out of order, and to have fibrin deposited on the valves, and so cause embolism; 5. Contamination of blood with bacteria, either during defibrination, or from the instrument, rarely used, getting fouled inside. He thought the use of a cheap, portable instrument, such as he exhibited, which could not get out of order, and could always be at hand, and the adoption of a saline solution when a blood-giver was not forthcoming, were the most likely means of popularising this operation.—Dr. MEADOWS found the occurrence of *post partum* hæmorrhage very rare, and said that, if the third stage of labour were managed with care and determination, it would be rarer still. He was in the habit of following the uterus down with one hand, and not relaxing his hold upon it for a quarter of an hour after delivery of the child, and of always giving a dose of ergot after labour. If, notwithstanding these measures, hæmorrhage did occur, he laid great stress on the employment of galvanism, and always carried a small battery in his obstetrical bag.—Dr. BANTOCK deprecated the plan of introduction of the hand into the cavity of the uterus; it encouraged hæmorrhage.—Mr. MASON and Dr. CULVER JAMES defended the treatment condemned by the previous speaker, especially in cases where there was uterine inertia from the use of ergot before labour.—Mr. Owen, Dr. Alderson, Mr. Philpot, and Mr. F. A. Hill, also took part in the discussion, after which the author briefly replied, and the meeting adjourned.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 5TH, 1883.

FRANCIS MASON, F.R.C.S., President, in the Chair.

The Cold Douche in Delirium Tremens.—Dr. BROADBENT read notes of two cases, illustrating the successful employment of the cold douche. The first case was that of a gentleman, aged about 38, whose health was thoroughly broken down by excesses, especially alcoholic. He had had several attacks of delirium tremens previously to the one from which he at last suffered. All treatment by digitalis, bromides, and subcutaneous injections of morphia, only left him in a state of extreme exhaustion. The face was pale and haggard, the eyes wild, and the skin bathed in perspiration, the pulse soft and small, frequent and irregular. He was almost too feeble to turn his head to follow the images of his fantasy. He was constantly muttering and exclaiming, while his fingers fidgetted with the bed-clothes, and every limb, and almost every muscle was the seat of jactitations. The sleeplessness was continuous. He was, therefore, stripped to the waist, and cold water applied over the chest, neck, and face, by means of a large sponge. The result was that he slept, and on waking, asked where the doctor got that water from, as he should like it again. Dr. Broadbent remarked that delirium tremens seemed to have gone out of fashion, as he had not seen a case since the one just described. The second case in which he had employed the cold douche, was one of sleeplessness and pyrexia after child-birth. He was called on June 3rd, 1881, to see a young married lady, who had been confined of her first child on May 30th; the labour had been severe and prolonged, the perinæum had been ruptured, and the bladder paralysed. From the setting in of the labour, and the day before, there had been no sleep whatever. Besides the sleeplessness, there were pyrexia and severe abdominal pain. The temperature was 104° Fahr. She was restless and tossing herself about in bed, the face flushed, the eyes bright, the expression wild and anxious, the skin perspiring everywhere. The pulse was 120, and the milk was suppressed. There were no symptoms indicating that the pyrexia and sleeplessness arose from peritonitis, or puerperal septicæmia, nor was the local tenderness over the left iliac fossa suggestive of pelvic cellulitis or ovaritis. The cold douche was therefore used, as in the case above described. The patient was sponged all over with tepid vinegar and water, and then douched with cold water. The result was that the patient speedily fell into a calm sleep, the pain in the iliac fossa disappeared, and the temperature fell. There was no further complication, and satisfactory convalescence followed.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL SECTION.

FRIDAY, FEBRUARY 23RD, 1883.

F. E. MANBY, F.R.C.S., in the Chair.

Committees on Morbid Growths.—The reports of the subcommittees appointed to examine specimens exhibited at former meetings by Mr. Bennett May and Mr. Furneaux Jordan were read, and ordered to be entered on the minutes.

Inveterate Psoriasis.—Dr. SIMON showed a very well marked case of extensive inveterate psoriasis.

Papular Syphilide.—Dr. SAUNDBY exhibited the patient brought forward at the last meeting, to show the great improvement that had taken place under specific treatment.

Vesical Calculi.—Mr. H. R. KER showed two calculi which he had removed by lateral lithotomy from two children, one aged three and the other five. Aston Key's straight staff was used.

Dislocation of Shoulder.—Dr. WINDLE showed a specimen of dislocation of the shoulder, with avulsion of the greater tuberosity, the result of a strap accident, taken from the body of a man who died of hæmorrhage from the profunda femoris artery, there being also a compound fracture of the femur.

ute Osteitis of Shoulder-Joint.—Dr. WINDLE also showed the lder-joint of a man who had died from fracture of the right tal bone, followed by meningitis. There was pus in the muscles d the joint. The cartilage over the head of the humerus was ally necrosed and separating, and part of the edge of the glenoid y was denuded and rough. There was no pus in any other , or any secondary abscesses elsewhere.

ironic Disease of Ankle-Joint.—Mr. F. E. MANBY referred to the of a child, aged three, with old-standing caries of the ankle-, which he had treated successfully by removing the diseased ions of bone with Volkmann's sharp spoon. The after-treatment isted in immobilising the joint, and passing a seton of oakum ugh from side to side.

apilloma of Lip.—Dr. BARLING showed a papilloma removed by Pemberton from the upper lip of a man, aged 62. It commenced years previously as a simple wart on the skin of the lip, and ually invaded the mucous membrane, and when removed was ne size of a horse-chestnut. There was no ulceration, induration one, or enlargement of glands in the neighbourhood. The micro- ical appearances were typical simple papillæ.

apilloma of Bladder.—Dr. BARLING showed fragments of a llary growth of the bladder from a patient under the care of Jolly, who removed, by median cystotomy, 750 grains of growth months ago, the patient remaining well up to the present time. had suffered from recurrent attacks of hæmaturia for seven years iously, and until the detection of a fragment of growth in the e cleared up the diagnosis, and led to the operation. A micro- ical specimen was shown.

apilloma of the Sole of the Foot.—Dr. BARLING showed a papil- a removed by Mr. Pemberton from the sole of the foot.

he Bacillus of Syphilis.—Dr. SAUNDBY showed a drawing, and v attention to the recent observations on this subject, especially he paper by Dr. Morison of Baltimore, and the differences ob- ed by him in the bacilli of hard and soft chancre respectively.

ETROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

FEBRUARY 15TH, 1883.

nfluence of the Mind over the Body.—Mr. J. BRINDLEY JAMES a paper on this subject. Recent observations had proved the on of this recognised but mysterious influence to possess a far er scope than was generally supposed; modern investigation e had demonstrated that, in certain persons, mind, sensation, volition could be thoroughly controlled by the suggestive ideas nother individual, although the marked effect exercised by mental tions, in either stimulating or depressing bodily functions, had been universally admitted. In illustration of this theory, he rred to the fact of the peculiar condition of the cerebral func- s which might be created at pleasure in any twenty persons, cted at random, and directed to gaze, for ten minutes consecu- ly, at any given object; such persons (especially if young jects) would be found to act with most complete passive- s in accordance with ideas suggested by another person not s influenced; the fatigued condition into which their mental ulties had been thus brought causing them to lose power over as rendered prominent at this stage. Mr. James further de- bed the phenomena thus induced: mistiness of vision while gaz- at the object, succeeded by lassitude and somnolence in some jects, simple palpebral stiffness in others, deep-drawn sighs, ried respiration, heaving of the chest, etc., in many instances. h subjects, told in a firm confident tone that they could not open ir eyes, would be found really unable to do so, especially if the ope- or drew attention to those organs by a touch, or even by the ple gesture of pointing at them; but, on his simple injunction to n their eyes, they would seem to regain this faculty at once. ese individuals, under these conditions, might be compelled to, debarred from, the execution of any conceivable motion, even inst their will—such as flexion of a limb, rising from or sitting n on a chair, etc. Among instances which Mr. James had him- f witnessed, one subject had been debarred from approaching one ect, and irresistibly impelled towards another, unable to cross a lked line or an imaginary boundary, compelled to walk, dance, or , as desired or ordered, from no volition of his own; while, in other case, the arm had remained suspended or fixed in the act of nking, etc. The most singular of these phenomena, vouched for professional testimony of unquestionable authenticity, was that persons in this state who had been made to repeat, with perfect onunciation and accent, words pronounced to them in languages which must have been utterly impracticable to them at other times —such as Arabic, Sclavonic, etc. Moreover, the lower animals were also susceptible of forcible physical impression by what might strongly attract their attention. In support of this, Mr. James alluded to the well known power of fascination exercised by the serpent over other animals, and on birds, who, at the very sight of the long glittering body, and especially the fixed glaring eyes of their enemy, fell an easy prey to him. He also alluded to the strange uncontrollable desire felt by those who gazed from a lofty precipice, to hurl themselves into the abyss beneath, although conscious such an action would entail inevitable destruction. He further pointed out that, in such conditions as those described, all the sensations might be increased, perverted, or destroyed through the medium of suggestive ideas communicated to the mind. For instance, by concentration of attention on any part of the skin, the sensation of heat or cold, pain or numbness, etc., might be induced. In like manner the power of sight might be impaired, rendered painful, or even lost, while special images might be presented to the vision, or objects made to resemble others to which they did not bear the most remote analogy. The sense of smell might be thus perverted, any kind of scent being ascribed by the imagination to inodorous objects; a rose, in the hands of the victim of such a delusion, smelling to him like an onion, plain water like eau de Cologne. The faculty of hearing might present similar abnormalities. Many a fretful invalid to whom the grinding of street organs was intolerable, would persist, perhaps, in hearing, as he supposed, organs in the most secluded country places. Lastly, the sense of taste might have its similar perversions; plain water might, by such a person, be credited with the sweetness of honey, the bitterness of wormwood, etc. Many instances might be cited of hypochondriacal patients, who persistently concentrated attention on a perfectly sound organ which they believed diseased, until, in course of time, it truly became so. These various delusions of the senses, Mr. James remarked, might, doubtless, prove of no little assistance in tracing out the origin of insanity in many cases. As the senses might be distorted, so, in like manner might the mental faculties be influenced, memory impaired or lost, powers of judgment, discrimination and comparison disabled, and the process of reasoning literally reduced to a *reductio ad absurdum;* the imaginative faculty nevertheless continuing very vivid, the individual readily assuming the voice and demeanour, etc., of persons in widely different and various ranks of life. In conclusion, Mr. James pointed out the immense field of inquiry thrown open by these phenomena to earnest scientific investigators, and the benefit they might eventually confer alike on the science of medicine and on humanity at large, should it finally be found possible to sift the wheat from the tares, and, by disentangling the observations of Mesmer from the web of mysticism, wound round it by superstition on the one hand, and by quackery on the other, to unravel the Gordian knot of the treatment of nervous diseases.

DENTAL INQUISITION.—The *Times* analyses a collection of documents emanating from a society founded in Paris by MM. Victor Hugo, Clémenceau, Barodet, Henri Rochefort, and many Republican Senators and Deputies, under the title of "Ligue de l'Intérêt Public: Société Protectrice des Citoyens contre les Abus." The energies of the association are at present being directed towards the establishment of a system of dental inspection in all the primary schools of Paris; and a petition has been laid before the Municipal Council in furtherance of this object. The memorialists feelingly call attention to the fact that the teeth of boys in *lycées* are regularly looked after at the cost of the State—"that is, at the expense of the working classes;" and they consider that the pupils in poorer schools are entitled to the same privilege. It is proposed, therefore, to adopt a system which is said to be working with the happiest results at Cherbourg, and at Verviers in Belgium. School boys and girls are to pay four visits a year to official dentists, who will become responsible for the good condition of their teeth, and perform whatever extractions are necessary, gratis. The visits are to be compulsory; and by a thoughtful arrangement, which is sure to please the young people, they are to take place on Sundays so as not to interfere with lessons. Parents who allow a boy to miss one of the quarterly inspections on the insufficient ground that there is nothing the matter with his teeth will be punished by seeing his name removed from the dentist's list for six months. On a repetition of the offence the boy will be cut off from the benefits of free dentistry for ever. A powerful committee has been appointed to assist the passage of this valuable measure through the Municipal Council.

REVIEWS AND NOTICES.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES, CONSIDERED. By ROBERT HAMILTON, F.R.C.S., Senior Surgeon to the Liverpool Royal Southern Hospital. London: J. and A. Churchill. Liverpool: A. Holden. 1883.

THE publication of this pamphlet is very opportune, not only because local sanitary authorities begin, at this season of the year, to consider the propriety of applying to Parliament for increased powers, of which those for dealing with infectious disease are becoming more and more common, but also because there are two general, and in some respects rival, Bills before the country just now for two of the great divisions of the kingdom. The one of these—"The General Police and Improvement (Scotland) Bill"—which will be introduced by the Lord Advocate for the portion of the kingdom with the government of which he is more closely associated, contains many provisions of a very wise and judicious character for the early detection and limitation of infectious diseases, but does not propose to make notification compulsory on medical men; while the other, the well known Bill of Mr. Hastings has such compulsory notification as its central principle.

It is well, therefore, to have as much information as possible concerning the actual working of compulsory notification schemes, in order to judge of the likelihood of practical advantage from one or the other Bill; and it is this information which the pamphlet professes to give. The circumstances of its authorship are such as to invest it with more than ordinary interest. In the autumn of last year, when it was hoped by the then Chairman of the Liverpool Health Committee to introduce into a local improvement Bill clauses for compulsory notification by medical men, letters were written by him to, and replies received from, all the localities where that principle had been put into operation, which replies were held by him conclusively to establish its practical utility. To this Mr. HAMILTON, who was a member of the committee, objected that they consisted of nothing more than official expressions of opinion, and that, in order to form a correct judgment, it was necessary to know what the general medical practitioners of the towns thought, and also to ascertain, if possible, by direct reference to official books, what was the actual amount of sanitary improvement effected. He therefore proposed that a deputation should visit eight of the towns which had longest experience of medical compulsion, and subsequently report to the committee. Two deputations were formed, and each visited four towns; but as there was some difference of opinion as to the wording of the report, it was agreed to publish the evidence *in extenso*, and allow the reader of it to judge for himself. Of this evidence, which consists of 260 octavo pages, Mr. Hamilton's pamphlet is, to some extent, an abstract; but it is not this alone, for, as he has explained, he availed himself of opportunities offered to the deputation, especially in Edinburgh, to examine the official records. He visited medical men, also, and went into shops to make inquiries. Indeed, he sought information from all those likely to be influenced by the operation of the law; and when, after months of reflection, he comes forward and unhesitatingly declares his conviction that the law is unsatisfactory, thoughtful men might well pause before they demand its extension.

To turn now to what the pamphlet teaches us: we are struck at the outset by one very curious circumstance. Before the deputations set out, the following official intimation was sent to the medical officers of health of each of the eight towns: "The deputation coming to your borough on" such a day (the date being mentioned) "hope to have the pleasure of meeting you, and would also be glad if you would invite medical practitioners, representing both sides on the notification question, to meet them." It is certainly very significant, that in no single instance was an invitation to meet the deputations issued by the medical officers appealed to; and it would be scarcely credible, were not the evidence on the point absolutely conclusive, that, in Edinburgh, a "medical man who attended for the purpose of giving his evidence as to the working of the Acts was not allowed to enter the room where the deputation was, but was prevented from doing so by the medical officer of health himself." Medical witnesses did, however, appear, and were even heard in those towns where they were not absolutely denied admission to the place of meeting; for it seems that an association for opposing compulsory notification of infectious diseases by medical men, which, this pamphlet says, numbers nearly one thousand members, had sent circulars to a few practitioners, reques ing their presence; and these invitations were responded to.

From all the towns "highly eulogistic reports had been receive in answer to the chairman's inquiries." Yet in all the eight "visite "the deputation obtained a great amount of evidence hostile to t Acts, some of which appears in their Sanitary Officers' Reports. is fair, therefore, to conclude that the deputation would, if they ha visited the remaining eighteen towns, have received an equ amount of information opposed to the statements forwarded by t sanitary authorities of those towns, and therefore casting gre doubt on their intrinsic value."

We will now briefly summarise Mr. Hamilton's conclusions to the several towns.

Bolton.—1. After five years' notification, a marked antagonis between the health-authorities and the medical profession, whi has increased in intensity each year. 2. Concealment of diseas 3. Scarlet fever and measles show no steady diminution since t existence of the Act. 4. But an infinitesimal proportion of tho attacked are isolated in hospital. 5. A second epidemic of sma pox has recently occurred, which the Act did not stamp out.

Blackburn.—1. The attitude of the medical profession to t Act, one of covert hostility. 2. No diminution in scarlet fever. an enormously high death-rate from typhoid fever. 4. "In Blac burn, the Town Council have given their medical officer distinct to understand, not by formal resolution, but by various significa utterances, that he will not be supported if he attempts to put force any of the more objectionable clauses, such as forcible r moval, closure of shops, or prosecution of medical men for non-no fication, except in extreme cases."

Huddersfield.—The Act "seems to have worked with less amou of friction in Huddersfield than in some other towns, partly owi to the medical officer of health being himself opposed to the imp cation of the medical profession in the matter, as he was thorough of opinion that the duty of notifying infectious diseases belong to the householder . . . partly to a discretionary power being, af all, left to the medical profession in this way." "As to the impro ment in the death-rate . . . it would not be right," in the opini of the medical officer of health, "to attribute any but a small p portion to the new Act."

Warrington.—1. "Deep discontent felt, not only by the medi profession, but by the public, at the powers conferred on the sanit authorities. 2. Conflicts before the magistrates between medical officer of health and the friends of middle-class patie whose removal to hospital he insisted on. 3. Admitted concealm of disease. 4. "The general sanitary improvements which ha been carried out in Warrington of late years were admitted to fully as much entitled to account for the steadily improving dea rate which has been going on, *pari passu*, for many years, with Acts, as these last, and it was remarked, that no special or m marked advance had been made since these came into force."

We must pass by Leicester and Nottingham, the conclusions c cerning which seem to be very similar to those for the towns p viously mentioned, in order to allude in some detail to Edinbur This city has again and again been held up as a conspicuous exam of the success of compulsory notification by medical men. Wh, therefore, we find a gentleman, who, like Mr. Hamilton, occupie responsible public position, both as a member of the Health Co mittee and as senior surgeon to one of the largest hospitals Liverpool, deliberately declaring, as the result of his painstak personal inquiry on the spot, that "no greater sham than system in force in Edinburgh to combat the spread of infecti diseases exists anywhere," it behoves us to examine carefully the grounds for such a conclusion. They are as follows:—1. T there was a widespread and lasting epidemic of measles and sca fever, both of which diseases are included in Edinburgh's sched 2. That comparatively very few cases were interfered with by sanitary authority; 3. That comparatively very little disinfection rooms and houses was effected by that authority; 4. That a la amount of money was disbursed without any adequate return.

The following precise figures and facts are given. The med men, by being allowed to append "no immediate attention quired," to their certificates, secure for themselves "perfect latit and no interference on the part of the sanitary authorities," un they themselves invite it. We are not, therefore, surprised to that, in the year 1880, 5,705 certificates with these words appen were sent in, and that only 331 of them had the 'No' cros out, intimating by that, that the medical attendant wished the s tary authorities to take charge of the case; and these 331 were, w scarcely an exception, people of the humblest class, who in ev

would fall under the notice of the parish or sanitary authori-
Further, we find that the amount of disinfecting rooms and
s done by the sanitary authorities during the same year, inclu-
of the above 331, was 641." Thus 5,705 cases of infectious
e made known to the medical officer of health, led to sanitary
utions by the authorities in only 641. How about the rest?
ittlejohn shall answer in his own words: "We send an intima-
fortnight afterwards that we are ready to disinfect." "But
u send the inspector?" "No; no inspector ever enters. We
t interfere." "Not to use disinfectants?" "Not unless it is
nded by the medical man or the ratepayers;" and the above
s show how seldom that is done.

to storing of bedding and clothing, on which such import-
is very properly laid by most sanitarians, this is carried out,
v the sanitary authority of Edinburgh, but by an independent
ution, the Blind Asylum, which charges well for the work. All
the sanitary authority undertakes to do is to remove the
es to the asylum. In consequence of this system, "that class
whom it is most desirable that a thorough disinfection should
rried out with each fresh case of infective disease, is the very
hich avails itself of the least of the sanitary authority's help."
aking of the comparative absence of friction in Edinburgh, Mr.
lton says: "The reason is not far to seek. Any medical man
g a certificate with the words appended to it, 'No immediate
tion required,' and getting 2s. 6d. for each certificate, does not
t to having the opportunity of sending in any amount of them.
an nature would be different in the members of the medical
ssion to what it is in the rest of mankind if they did. Per-
reedom of action, no interference, in fact, no action without a
er request, and a steady addition to their income through sign-
ese certificates, is what few men would object to."

. Hamilton's allegations are serious and damaging, and unless
can be shown to be unfounded, the claim set up for the Edin-
n system, that it is a complete success, must be wholly aban-
d. Not that Mr. Hamilton is alone in discrediting that claim,
e are reminded of the concluding paragraphs of a letter by
ssor Gairdner, in which, after referring to Dr. Littlejohn's mis-
ption of a plan suggested by himself, he remarks:—"Let him
, and perhaps he will then discover how it has happened that
several years of compulsory notification in Edinburgh, the
a-rate of several of the leading epidemic diseases is not lower,
igher than before, and this, while he still holds out to us
the plan adopted in Edinburgh has been an unqualified
ss."

he eighth town visited was Greenock. From the portion of the
phlet which treats of this town, we will make but one or two
extracts. "A courteous letter having been sent to the medical
r of health, Dr. Wallace, he replied, declining to invite any
cal practitioners, whether favourable or otherwise to the Acts,
considered such a meeting would only lead to an unseemly
gle." Yet, speaking of the attitude of the profession on this
ion, he informed the deputation that, "some, originally hostile
mpulsion on the part of the doctor, are favourable to it now.
tell me that if it was a general measure, they would not have
lightest objection to reporting."

was certainly unfortunate that Dr. Wallace declined to invite
doctors, as he was requested to do, so that they could have given
information for themselves; for we learn from the pamphlet
the day but one after the expression of his opinion as to their
ual change of view they met in public assembly, and, with
gle dissentient, passed the following resolutions:—1. That the
ing unanimously agreed that the duty of reporting infectious
se should not be placed upon medical men. 2. That it was not
act, as stated by Dr. Wallace, that a good many medical men
now coming into the view, that it would be better that notifi-
on should be given by them.

reenock, then, is no exception to what appears to be a very
ral rule, that where compulsory notification by medical men
s or is desired, antagonism is at once excited between them and
medical officer of health.

his pamphlet should be carefully studied by all who are interested
he question of notification of infectious disease. Mr. Hamilton,
s concluding paragraphs, suggests the appointment of a Royal
mission to inquire into the whole subject; that in any Act that
l be agreed upon, the number of diseases to be reported shall at
be very few—he mentions small-pox, cholera, and typhus fever;
that house-to-house visitation by young medical men, acting
er the Sanitary Authority, might be advantageous in districts
ally suffering from epidemic disease.

NOTES ON BOOKS.

The Quarterly Journal of Microscopical Science. (Churchill).—The January number of the *Quarterly Journal of Microscopical Science*, appears in a greatly enlarged and improved form. It is now increased to royal 8vo size, and the illustrations presented in this shape are of the very highest artistic merit and scientific value. Professor Lankester deserves the greatest credit for the admirable manner in which he has now, for many years, conducted this serial, and for the essential services to biological science he has thus rendered. Under his management, together with that of the able corps of editors associated with him, he has made the *Quarterly Journal of Microscopical Science* at least equal to the best Continental biological serials. His remarkable power of discerning and encouraging good work, and of discouraging superficial and erroneous researches, has exercised the happiest influence on his contemporaries. The present aspect of the *Quarterly Journal of Microscopical Science* shows that it has already reached a correspondingly prosperous condition, and we hope, also, it gives the earnest of continued and enlarged support from all who are interested in biological progress. Among the most remarkable papers in this number, are those of Dr. Klein on anthrax cultivation, as illustrating the relation of pathogenic to septic bacteria; and of Mr. Thomas on the life-history of the liver-fluke. There are other papers of great original value contained in this number, which is altogether one of the most satisfactory and promising scientific serial issues that has appeared in English literature.

Harness: as it has been, as it is, and as it should be, etc. By JOHN PHILIPSON. (Newcastle-on-Tyne: Andrew Reid, and Mawson, Swan and Morgan. London: Edward Stanford, 55, Charing Cross.)—Mr. Philipson, besides giving some very interesting introductory matter, discusses many questions in harnessing which are of considerable interest to medical men who drive carriages, especially in respect to the use of blinkers, bearing reins, and the general subject of harness and harnessing. His discussion on traction in hilly countries, and his description of the Cape cart, are particularly interesting. The illustrations of the book make it picturesque, and the introduction of Bewick's wood-cuts give special artistic interest.

On Tropical Hyperpyrexia. By Surgeon-Major J. Y. DONALDSON, M.D., A.M.D. (Thacker, Spink, and Co., Calcutta. 1882.)—By tropical hyperpyrexia, the author means that form of sunstroke known as heat-apoplexy, a condition characterised by insensibility combined with high temperature and occasional convulsions. In the cases of this nature which came under the observation of the author, he was able to satisfy himself that, at the time of the occurrence of the attack, the subjects of it were all suffering from fever in some form or other. Symptoms indicating a previous febrile state have also been described by Simpson (*vide* Morehead's *Researches on Diseases in India*) as present in his patients; and Morehead's "ardent fever" is, in the opinion of the author, identical with the same writer's "cerebro-spinal" variety of sunstroke. Moreover, there is a very close resemblance between the symptoms of tropical hyperpyrexia and those developed in the hyperpyrexia of acute rheumatism. Hence the author concludes that "the heat-apoplexy variety of sunstroke is hyperpyrexia occurring in the course of a febrile disease, generally during the hot season in the tropics." This being so, the most important point in the prevention of the hyperpyrexia is the early treatment of the febrile condition on which it supervenes. Accordingly, it is strongly urged that, "whenever the temperature is excessive, all soldiers should be encouraged to report themselves sick on first feeling symptoms of fever, and they should be admitted and treated in hospital." The good resulting from such a course would more than compensate for the extra expense and trouble involved in its adoption. As regards the treatment of the actual condition, the author recommends the following plan, which was followed in his own cases. The patient should be placed, naked, "on his side, on a bed with mattress, on the shady side of the hospital verandah," and water poured on his back, front, and head. During this process, the pulse and the temperature should be carefully noted. Whenever the pulse becomes too frequent, or very feeble, the douche should be stopped, to be recommenced when the pulse grows stronger. When the temperature falls to the normal—which it usually does in from thirty to forty-five minutes—the douche should be discontinued. Thereafter the patient should be kept cool, and ice should be applied to his head. Consciousness, partially restored by the douche, is usually wholly restored in rather over an hour

after the fall of temperature. This plan of treatment proved highly successful in the hands of the author, and was never followed by catarrh or internal congestions.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW SAW-KNIFE, FOR REMOVING PLASTER-OF-PARIS BANDAGES.

To any one who has had a large experience of plaster-of-Paris bandages, either for forming jackets in spine-disease, or for setting fractures, it must have occurred that one great disadvantage in connection with these, was the difficulty experienced in removing them. Various instruments, chiefly of the scissors type, have been suggested for this purpose. These I have found unsatisfactory, and mainly for this reason: that it is frequently impossible to get them sufficiently inserted between the bandage and the skin, for the purpose of cutting, without causing great pain to the patient.



In removing these bandages, there are two parts or layers to be divided. There is the outer stratum, composed of plaster-of-Paris alone; and the inner, of mingled plaster and cloth. For the division of the former, I have found a saw the most serviceable, and for the latter a tolerably sharp knife.

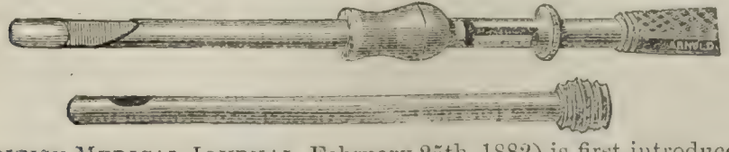
I have accordingly got made for me, by Mr. Young of Edinburgh, an instrument, of which the annexed figure is a faithful representation. The blade at the end has teeth on one side, and a sharp cutting edge on the other. The saw is used to divide the plaster stratum; and, when this is cut through, the blade is turned round, and the cloth layer is then divided. This should be done by holding the blade very obliquely to the surface, there being thus very little risk of cutting through too rapidly on the skin. On the outer end I have got made a screw-driver blade, for the purpose of severing open the hard outer layer when it is thick.

The quickest mode of cutting a plaster bandage would be by a circular saw, driven by a machine on the same principle as that used by dentists in drilling teeth, and attached to a trowel handle, with a shield in front of it, which could be inserted between the bandage and skin, and upon which the saw would act.

ROBERT JOHN GARDEN, M.D., C.M.,
Surgeon to, and Lecturer on Clinical Surgery,
Aberdeen Royal Infirmary, etc.

ANTISEPTIC TROCAR CONVERTIBLE INTO A PROBE-POINTED KNIFE.

IN many of the minor operations of surgery the ready conversion of the exploring instrument into a bistoury will be found serviceable. At the point selected, the antiseptic trocar (exhibited at the Ryde meeting of the Association, 1881, and described and figured in the



BRITISH MEDICAL JOURNAL, February 25th, 1882) is first introduced and a portion of the fluid withdrawn for examination. Incision can now be safely performed by removing the India-rubber cover, and withdrawing the inner tube of the instrument: then introducing the knife, which is made to accurately fit the trocar, and to project a cutting edge of one inch and a quarter A mark in the handle indicates the direction of the blade. The trocar is thus converted into a sheath for a probe pointed bistoury, and is especially adapted for the treatment of empyema and other deep seated abscesses. The instrument is made for me by Messrs. Arnold and Son, of West Smithfield.—J. WARD COUSINS, Surgeon to the Royal Portsmouth Hospital.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 10th, 1883.

RENAL INADEQUACY.

THIS condition, for which Dr. Andrew Clark, from his careful study of the subject, is justly entitled to claim the consideration of the profession, is one which is at once interesting to the physician and the physiologist, and important to the population generally, many of whom, we are inclined to think, it more or less concerns. The renal imperfection in its strict sense, however, is fortunately limited, so far as is known, to a small minority of persons. It may be described as a state in which the kidney, from some cause, is unable fully to discharge its physiological function. Dr. Clark regards this as a stage of disease, as disease essentially of functional stage in which, though there may be some morbid chemical transition of tissue-atoms, there is yet no structural change that can be demonstrated by existing methods of investigation.

If such a kidney be taxed to the full degree of normal excretion, signs of failure show themselves. These signs are, as regards the urine a total amount in twenty-four hours not exceeding forty ounces, a specific gravity varying from 1004 to 1010, and associated with an excretion of urea, often not exceeding 1.3 grains per cent. Neither albumen nor casts may be present, and no signs of Bright's disease proper may show themselves. The general health suffers as time goes on. The patient is never well, never, perhaps, very ill; he has continual *malaise*, sleeps badly, works badly, has indigestion, looks haggard and anæmic, and, after a time, shows some subcutaneous puffiness, not unlike the condition recently described as "myxœdema."

It is also to be noted that such a patient does not justify a hopeful prognosis in case of operation, nor does he readily throw off an inflammatory seizure, even a simple cold. There would seem to be a deficiency of vascular tone, dilatation of vessels readily following local irritation; hence, after operation, hæmorrhage and pyæmia have to be provided against. One would expect that such evidence of malexcretion, with continuous impairment of health, ought soon to be attended by the diagnostic signs of Bright's disease. This happens in some, not in all cases. Some continue long, it may be for life, free from albuminous urine or tube casts.

It may be doubted whether careful microscopical examination (which does not seem to have been carried out in most of Dr. Clark's cases) would not show that there is some slight change in the structure suggestive of early Bright's disease, but the theory that the disorder consists in mere functional inefficiency receives support from the absence in such cases of even the early clinical signs of true pathological state.

However this may be, the results of such an altered physiological state as we have seen are not altogether different from those of chronic renal disease, and are, in themselves, sufficiently serious. It is not natural or probable that persons will suffer for long periods from having their bodily drainage-system out of order, and their tissues loaded with excreta in consequence; and will, after a

ken sleep, spend days in doing fatigue duty, and yet not ultimately grave physical deterioration. It is according to cedent in medicine, and to ordinary common sense, that this should occur; and it is probable that it will commonly be d in by a lesion of the kidney.

management of such cases thus becomes a matter of great neral importance; a matter for the physician, but not less for on-professional man whose weak point happens to be his , and on whose reasonable self-control the efficiency and suc- l issue of such management depends. Yet after all, the strain on his will is not excessive, and consists merely in the endeavo supervise moderately his bodily functions. He must have r habits as to eating, drinking, and sleeping, and must also te the action of his skin and alimentary canal, the latter not n regard to its waste than its ingesta. He must, for instance, forr refrain from following the good old fallacy that butcher's s good at all meals, and must be content to believe that once is sufficiently often as a rule. His breakfast and supper must ht, and mainly farinaceous, and his intervals of eating suffiy long for digestion to do its work, and unbroken by unnecessit-bits thrown in at the instance of the palate. As to lants, if he be wise and fairly vigorous, let him abstain; be wilful or depressed in health, let him drink light liquor gly.

se observations on the inadequate renal function, moreover, to us to have a wide suggestiveness, besides their immediate ation; and to be worthy of consideration by many, who daily e upon their kidneys a pressure of work to which even normal s cannot be always equal; and who believe themselves to be, ppear to be, in excellent bodily condition. It is precisely to in the best apparent condition that these remarks on renal e bring useful hints. There are numbers of men everywhere, especially in large cities, who live, according to their heart's , "well"—that is to say, as regards ample sufficiency of highly shing food—who feel that they may congratulate themselves on having and on feeling the advantage of such nutriment in ways, who, nevertheless, would gain rather than lose in health , the half of their dietary were deducted. The luxuries and niences of life have been multiplied in all times of comparaeace and commercial enterprise; and these factors, in spite of t depression in trade, have been active in our own day. With asing wealth come the means of gratifying taste, and also reent of taste; but there comes besides, and in force, the temptato over-indulgence. Delicacies in food, drink, and smoking rial—rare in the early days of this century, and limited to a few now in every-day use, and to some no plain fare is palatable. old fashion of wholesome diet has to retire before the necessities e palate.

en, apart from the tendency to delicate living, which is probably or less European, there is for many men too much meat-eating is country. No man can conveniently dispose of as much of kind of diet as he can accommodate—not even the Red Indian, is, as nearly as possible, carnivorous; and for one who ws a sedentary calling in shop, counting-house, or study, one cient meal of this kind will usually be enough, if supplemented ne or two others of fish, egg, or farinaceous fare. Such a man do well to be careful that his body's income and expenditure , and that its funded capital exists in the form of healthy tissue, not of superfluous and irritant excrementitious products. He otherwise find, sooner or later, that his organs are not competent high living; and he will also do well to use stimulants ingly, if at all, and to seek refreshment from fatigue rather in ly and sufficient rest than in stimulation or excitement.

ore might be added to the details of this subject; but enough been said to show that, in order to enable one to do good work out suffering from it, and to live a healthy and enjoyable life, it is required that he shall consult the necessities of the body before those of the palate; and shall accept it, on careful scientific evidence, that enough is *better* than a feast.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

In an article on December 2nd last, we adverted to the unsatisfactory condition of the law in reference to the superannuation of asylum medical officers; and pointed out that, if pensions are to be awarded for prolonged service in lunatic asylums, they ought, at least, to be secured to those entitled to them, without solicitation, and without haggling over their amount; and we urged that the pension ought to bear a fixed relation to the amount of salary and the length of service, so that, when accepting an appointment, the occupant might know what he had to look forward to. We are glad to find that views essentially the same as ours have been accepted by the Irish Government, and are embodied in a Bill to be brought in early this year, for the better regulation of pensions to the officers of the Irish Poor-law. Mr. Henry Robinson, the Vice-President of the Irish Local Government Board, made the following most important statements before the Select Committee on the Bill. In reply to questions, Mr. Robinson said:

"My opinion is that the operation of the existing law has been very unsatisfactory and unjust to the union officers, and prejudicial to the interests of the public service. I consider that it is unjust to the officers, because they have no security that they will ever receive superannuation allowances on retiring from the service. There are many instances, indeed, in which pensions have been refused, and in which very great hardship has been inflicted in consequence upon the union officers. There was a return called for in the year 1880 of the medical officers who have retired since the passing of this Act—Mr. Meldon's Return; and this year there was a similar return prepared and laid upon the table of the House with regard to all the other officers, exclusive of medical officers; and, in looking through those returns, there are some very striking cases, indeed, of hardship. . . . I may mention two or three cases which struck me very forcibly. Taking one union, there was a fever hospital nurse, who was seventy years of age, and she had served over twenty-four years—nearly twenty-five—and she was refused a pension on retiring. I believe that one operation of the present system is, that men who have become inefficient by reason of age and infirmity still struggle on in their situations, although they feel unable to discharge the duties properly, and they continue to discharge the duties in an ineffective way, without advantage to the public service. . . . It would be necessary before a man gave notice of retirement, that he should sound the guardians to see what their tone of feeling was towards him. The officers can only know from private information as to how the guardians will vote, and from their knowledge of the guardians, and of the disposition of the guardians towards each officer. I think that is placing officers in a very unsatisfactory and degrading position. . . . There is no fixed rule laid down by any board of guardians in this matter for themselves. One board of guardians could not in such a matter influence the actions of a future board. From the fact that some unions have never given any pensions, and have always refused them, there can be no doubt that the guardians of those unions have arrived at some decision and understanding amongst themselves that they will not grant pensions. To a certain extent, I object to the guardians, who are the payers, having any discretion. The only way we can devise for securing pensions after long services is that there should be an appeal. It is my opinion that, if an officer discharge his duty sufficiently satisfactorily to be retained in office, he is entitled to superannuation."

It will be seen from these extracts that the Vice-President of the Irish Local Government Board fully recognises the fact that guardians have, in many cases, failed in their duty to union officers in the matter of pensions, that the amount of pension and the conditions of receiving them ought to be certain; and that it is degrading to an officer to require to curry favour with guardians in order to get it.

It marks an important advance when these principles are so fully recognised by one holding a high official position. They are, how-

ever, the legitimate extension of a principle already fully recognised; namely this, that though the appointment of an officer rests with the guardians, neither the tenure of the office nor the amount of salary, when once paid, can be interfered with by the board which made the appointment. No one contends that because the salaries of union officers are paid out of the rates, the amount of the salaries should vary from year to year at the will of the ratepayers. Therefore, if an officer so discharges his duty that there is no complaint against him, he is just as much entitled to receive his pension at the end of his service as he is to retain his office from year to year while he performs his service. This cuts away the ground from the argument that the guardians, having local knowledge, are best fitted to decide whether an officer is deserving of a pension. If their local knowledge does not make them aware of such failure of duty as to lead to dismissal, there ought to be no question raised as to his right to a pension.

It is manifest that the announcement of these principles has an important bearing on the interests of the English Poor-law Medical Service. At present the Irish Poor-law Medical Service is in some respects considerably in advance of that of England. The salaries are generally much larger, and the medicines are supplied to the dispensaries by the guardians; thus preventing the unseemly antagonism between the interests of the medical officer and those of the poor which exists when the former provides the cost of medicines out of his own salary. But if the Irish Poor-law medical officer has a larger salary, he has much more work to do, and usually derives but a small portion of his income from private practice. His district is larger—usually from 30 to 50 square miles in extent, and sometimes reaching to even 100; and there is no such restriction on the distribution of medical relief as exists in England where an ordinary labourer, while receiving even low wages, is not entitled to dispensary medical attendance for himself or his family. Somewhere about 75 per cent., or possibly more, of the persons actually receiving medical attendance in Ireland, would not be entitled to it in England. In Ireland, skilled artisans and others in actual receipt of £2 to £4 weekly income, have no difficulty in obtaining dispensary medical attendance for their families; in fact such is customary. In Ireland it is not the custom to form clubs or unions as in England to provide against want of employment or for medical attendance and medicines. There are but a few such organisations in Ireland, and these are designated societies. They are chiefly confined to the cities and large towns, and not many of them think of employing a medical man to attend the members and their families, as in case of illness they have no difficulty in obtaining that from the Poor-law system. Thus it happens that the duties of the Irish dispensary medical officer usually greatly exceed those of his English colleague. His salary is to a great extent his support, and his total income is so small in amount that he is seldom able to lay up a competency for old age. It is for these reasons that the Irish Medical Association has felt it to be a matter of vital importance to get the position of medical officers improved, and especially to secure equitable retiring allowances for them.

Although few, if any, of the English Poor-law medical officers are dependent on their salaries for their whole maintenance, it would still be well worth their while to seek a more adequate remuneration than they at present receive, and greater certainty of pension than they now possess. The lesson is an obvious one; that by making common cause with their Irish colleagues, and aiding them in carrying their Bill, an important precedent will be obtained for similar legislation in England. The success of the Irish Bill is certain, if it receive the warm support of the profession on both sides of the channel.

THE Steyning Guardians have increased the salary of Dr. Thomas Fuller, as medical officer to the workhouse, from £45 to £65 *per annum*.

A NATURAL HISTORY OF BACTERIA.

WITHIN the last few years, terms appertaining to the great a... septic question have become household words in the medical pro... sion. "Bacteria," "Micro-organisms," "Bacillus," and "M... coccus," are now as familiar to the ear as "Spindle-celled sarco... or "Lymphadenoma." The former terms have, what would be c... ventionally called a far more practical bearing than the latter. ... is only young men, and the few elderly enthusiasts, in the g... abstract questions of medical science, that devote much of their t... to the histology of tumours. Such is the case, though whether rig... or wrongly we need not discuss at present. We constantly rea... contemporary medical literature how a surgeon, more or less fa... for his skill as an operator, describes a case of a "malign... tumour, giving details of its removal and other matters chiefl... clinical interest. Added, as though quite a secondary considera... to the end of a report of this kind, we generally find a few lin... the effect that "my house-surgeon, Mr. ———, kindly prepar... microscopic section of the tumour, and declared that it was a ca... subperiosteal mixed sarcoma." Lastly, if the busy operator ... to seek for a systematic classification and description of tumour... can find at once what he desires in several well-known English ... books.

In the case of micro-organisms, it is far otherwise. Firstly, ... student and the young pathologist must study a subject so ... portant in its relation to disease. On the other hand, the sur... in practice, especially if he perform many major operation... constantly brought face to face with the antiseptic question, ... some of its fundamental doctrines depend entirely on the nature ... influence of micro-organisms. But, until lately, a good classific... of such organisms was not to be found in an English text-book. ... is impossible to possess a correct knowledge of the influence of ... group of animals or plants without a fair idea of their natural ... tory. The similar properties of certain drugs become comprehen... when we know that they are prepared from plants belonging t... same natural order. The occasional bitterness and unwholesom... of a garden cucumber is recognised as a reversion to original ... when we remember the properties of certain wild plants to wh... that vegetable is allied. When we understand what bacteria ar... are placed in a better position for knowing, or rather comprehen... what they can do, and, at the least, their great importance in ... antiseptic controversy makes them of interest to us, even if ... granted that everything of medical import in relation to m... organisms has been already worked out; but the case is far o... wise according to every scientific precedent. We want, in fa... know much more than is already known about bacteria.

It is, therefore, satisfactory to find that Dr. Donald Macalist... translating Ziegler's work on pathology—a work which we ... shortly notice in full—has already presented the British me... public with a good systematic botany and pathology of bac... conveniently included in one concise chapter. No more accep... work of reference is at present in existence. Morphological ... pathological questions, and, above all, some explanation of the ... fusing synonyms in vogue among English and Continental aut... ties, will be found in this work, ready for reference.

A brief review of Ziegler and Macalister's chapter on m... organisms will, we believe, prove of some interest to our rea... This is their summary of the natural history of bacteria, organ... about which we have heard so much in detail, discussed from se... different aspects, that a brief synthetical view of the whole ... ject becomes useful in preventing us from falling into error thr... a confused, if not erroneous, idea of primitive facts. The So... mycetes, or Schistomycetes, often spoken of in general term ... bacteria, belong to the Protophytes, the simplest organisms in ... vegetable kingdom: all are unicellular, and devoid of chlorop... They have been classified by Cohn into Sphærobacteria, which ... globular; Microbacteria, or bacteria proper, which are rod-...

smobacteria, which appear as rods, larger than in the second oup, or as thread-like cells, termed Filobacteria; and Spiro-teria, which are spiral, or twisted cells. Cohn believes at bacteria are as capable of exact specific classification as ner plants, and Koch insists on the true specific difference organisms that appear in different forms. The synonyms hich have been applied to the Schizomycetes are very numerous. steur refers to them sometimes as végétaux cryptogames ou croscopiques, animalcules, champignons, infusoires, torulacées, ctéries, vibrioniens, monades, mycoderma. German authorities eak of monaden, vibrionen, mikrozyma, mikrospora, and mona-ne. Billroth, who believed in the specific unity of all these ganisms, introduced the term Coccobacterium, to imply one gle species, which could assume all the forms here described; but s theory is not generally accepted. In this country, many of the ove synonyms are employed, as well as the terms microphytes and crozymes.

The Sphærobacteria include the genus Micrococcus, the fungi most quently found in connection with infective disease, such as æmia, erysipelas, internal suppurations, and the exanthemata. ney are also associated with chicken-cholera, and with a disease long silkworms, where the parent moth, if infected, transmits the ecific micrococcus to its eggs. The other genus is the well known rcina. The Microbacteria form the single genus Bacterium. The mmonest species are B. termo and B. lineola. They form inute rods, which sometimes appear motionless, but are often en to swim or move actively. B. termo is very common in trid organic tissues; B. lineola, a larger species, is found in ater and certain infusions. B. termo is frequently found in the man body, where sloughy tissue is accessible to the air; in fact, e modern doctrine places the guilt of putrefaction on the very esence of the organism. The Desmobacteria or Filobacteria clude the wavy or curved Vibrio, and the long straight Bacillus. ney grow longer and longer, their clear contents next become anular, until spores or gonidia appear, which are set free by the eaking up of the filaments. Some bacilli, especially when in the ood of living animals, multiply by simple transverse division; and me, on the other hand, form spores without first undergoing a eat increase of length. In this genus are the well known species acillus anthracis, malariæ, subtilis, and tuberculosis. A long string Bacillus is sometimes termed a Leptothrix. The species are be-ved to be, in many instances, the direct or even the sole cause of ie infective diseases with which they are associated. The Spiro-acteria include the perfectly harmless Spirochæta denticola, found the teeth, mouth, and nasal cavities of subjects that may be in rfect health; and the Spirochæta Obermeyeri, which is the spirillum" found in the blood of patients suffering from relapsing ver. Its movements are very active.

Ziegler and Macalister also discuss at considerable length the iology of the different species of bacteria, and their relations to thological questions. In a separate form, and in regard to special xperiments and particular diseases, we have read over and over gain the history of researches into the nature of all the organisms bove mentioned; and a brief notice of the Schizomycetes, too meagre to be of real service, is found in several English text-books; ut, with the exception of the American translation of Maguin's *Bacteria*, and the chapter in Ziegler's work, no thoroughly complete lassification of bacteria in general, with concise details of their athological influence, has been collected into the pages of a single ext-book written in the English language.

A CONCERT is arranged to be given, under Royal patronage, at Steinway Hall, on April 10th, in aid of funds to be devoted to furnishing the new wing of St. Mary's Hospital, Paddington. Eminent artistes, with Sir Julius Benedict as conductor, have been engaged for the occasion.

A FUND has been started in Bombay for the purpose of bringing out to India, from England, two or three English ladies of medical training and experience.

THE Pharmaceutical Registrar's Report for this year shows that the number of qualified chemists and druggists on the *Register* for Great Britain was 13,447 on December 31st, 1882, against 13,655 at the same date in the previous year.

THE Municipal Council of Paris has allotted a sum of 3,000 francs for this year, to defray the expenses of organising a pharmaceutical night-service for Paris, on a basis similar to the present night-service of physicians and midwives which that city possesses.

DR. AMBROSE C. HUGHES of Liverpool, who, whilst recently driving in his gig, was thrown out and seriously injured, the carriage having passed over both his legs, is, we are sorry to learn, in a critical state.

AT a recent meeting of the National Mahommedan Association in Bombay, complaints were made as to the treatment of pilgrims by the Turkish authorities, and a resolution was passed to the effect that the quarantine at Kamran should be entirely abolished.

AT the next meeting of the East and West Sussex Districts of the South-Eastern Branch of the British Medical Association, the subject of the proposed formation of a Medical Provident Society will be brought forward.

THE presentation to Mr. Erichsen of his bust in marble, executed by Mr. Haynes Thorneycroft, A.R.A., will take place to-day (Saturday), in the Botanical Theatre of University College, at 2.30 P.M.; Mr. J. Marshall, F.R.S., being chairman.

So great is the distress among the families suffering from small-pox at Stafford, that a public appeal is being made for funds to relieve those who are in want. Through the compulsory isolation of the families in which cases of small-pox exist, the healthy members are precluded from following their usual employment.

ONE of the few surviving medical officers who took part in the Peninsular War has just passed away in the person of Surgeon John Wyer, late 19th Regiment of Foot, whose death is announced as having taken place at Whitchurch, Dorset, in his ninety-fourth year.

DR. FANCOURT BARNES has been appointed Physician to the Royal Maternity Charity, in the place of Dr. Hall Davis, who has occupied that appointment for no less than forty years, and has been elected Consulting Physician to that institution, to which he has so long afforded his valuable services.

THE Swansea and South Wales Nursing Institute, recently started by Lord and Lady Jersey, held its first general meeting at the Swansea Hospital this week, and adopted a code of rules. Those trained at the Institute will attend the upper and middle-class sick for regulated payments and the lower-class gratuitously.

AT the meeting of the Northern District of the Metropolitan Counties Branch, this evening (Friday, March 9th), at the house of Dr. Henty, 308, Camden Road, Mr. Watson Cheyne will read an important paper on Tubercle: its Etiology and Modern History. The paper will be illustrated with a remarkable and highly instructive series of preparations; and the meeting, to which members of the Branch are invited, will be one of great interest.

THE *Nineteenth Century* for this month contains an interesting article by Mr. H. C. Burdett on Hospital Reform, recapitulating the grounds, now well known to the profession, on which a Royal Commission of Inquiry has been asked for from more than one quarter. The article contains much interesting matter, and goes over the whole ground; but the case is hardly so cautiously stated, or so closely reasoned, and the facts and arguments are not marshalled, with the vigour and clearness which might have been expected from the ability of the author and the importance of the subject. The case can hardly be considered to be well proved in this article, which is not without exaggerations, and is hardly judicial in tone.

THE Council of the Pharmaceutical Society have prepared and submitted to the Privy Council a draft Pharmacy Act Amendment Bill, the provisions of which contain a schedule of "poisonous" substances, including among others sulphuric, hydrochloric, nitric, and carbolic acids, and chloride of antimony. It is not sought to limit the sale of these substances to chemists, but patent medicines containing poisonous ingredients, and which by its enactments shall be labelled "poison," may be sold by druggists only. Druggists are alone to dispense medical prescriptions, and in cases of branch shops, qualified managers are to be employed, and companies are forbidden from keeping open druggists' shops. It is also sought by the Council virtually to abolish the major examination of the Pharmaceutical Society, by modifying the existing examinations formulating a curriculum.

DEATH UNDER CHLOROFORM.

A LABOURER, aged 42 years, died at the General Hospital, Birmingham, on March 2nd, whilst under the influence of chloroform. The anæsthetic was administered in order that a tumour might be removed. Before the operation was performed, however, the man died.

THE OBSTETRICAL SOCIETY.

AT the meeting of the Society on Wednesday last, Dr. Gervis, the new President, took the chair, and gave an opening address, in which he dwelt upon the objects of the Society, and threw out suggestions for new work and investigations. At the conclusion of the address, Dr. Barnes proposed, and Dr. Graily Hewitt seconded, a vote of thanks to Dr. Gervis, which was carried by acclamation.

SAMARITANS AT ISSUE.

A SOMEWHAT unpleasant scene occurred on Wednesday night at the Obstetrical Society in the course of debate between Dr. Bantock, Mr. Thornton, and Dr. Savage. The unusual incident of a recriminatory discussion, involving calls to order, disfigured a meeting held for the inauguration of a new president. Dr. Gervis showed a just desire to put an end to the scene (which lasted, however, for some time), and he may no doubt be trusted to prevent the recurrence, or prolongation, of such incidents in the future.

METROPOLITAN WATER SERVICE.

DR. SEDGWICK SAUNDERS reports that in Clement's Lane repeated and urgent complaints are constantly reaching him of the inadequacy of the water-service on high levels in the city. The time allowed by the servants of the New River Company is far too short to fill the cisterns placed in the upper stories of large structures, subdivided as they are into several independent holdings for economic reasons, and much inconvenience is experienced by the occupants, by that deficiency. Cases occasionally arise in which the owners object to lay on any water-service at all, on the ground that the supply of water in cisterns on the top floors is so scanty, that the occupants are not fairly dealt with by the New River Company, who contract to that end with the public, and charge heavily for the accommodation. He has submitted the matter to the judgment of the commission, in the hop that they will see fit to make an urgent remonstrance with the com pany, or take some stringent measures to compel them to show mor consideration for the wants of the public.

LARGE FAMILIES.

WE have recently referred to the figures which indicate the slo "depopulation" of France, by excess of deaths over births. M Pieyre has submitted a Bill for the encouragement of large familie It proposes a reduction of 15 per cent. on the taxes of a father wit five children, and a further 5 per cent. for each additional chil Persons not paying direct taxes, or whose taxes do not exceed 10 francs, are likewise to be tempted by a bonus of 200 francs for fifth child, 300 francs for a sixth, and so on. For this Bill is pr dicted what the French call a *succès de rire*.

VACCINATION.

DR. BUCHANAN, the Medical Officer of the Local Government Boar in summing up the facts and figures relating to vaccination in th metropolis in 1881, notes that they show a saving, by vaccinatio of no fewer than twelve thousand lives of children under ten yea of age. It is not (he adds) to be disputed, that this saving is i great measure due to the operation of the Vaccination Acts of 18 and 1871. A like operation of these Acts, Dr. Buchanan observes, manifested in the change of the age of the people who die fro small-pox in London; the total mortality from this cause amor children under five having fallen from 54 per cent. in the ten yea immediately preceding 1871 to 28 per cent. now.

NIPPED IN THE BUD.

THE latest proposal for the promotion of temperance is one whi aims at the establishment of a Violet Ribbon Army—an organisati specially designed to put a stop to the practice of taking "nips" b persons engaged in commercial pursuits. The members are to pled themselves never to take any kind of intoxicating liquors in publi houses or dining-rooms. To this, however, should be added a pled to abstain from indulging in or offering to others "nips" duri business hours in city offices. In a good many offices, we are told, decanter of wine is prominent on the mantelpiece or side table f callers to help themselves. This pernicious practice should b treated by "nipping it in the bud."

BOARD-SCHOOL GYMNASTS.

WE are glad to learn that the authorities of board-schools in son large towns are now giving their attention to the physical, as w as the mental, training of the children under their charge. Syste atic instruction, by special teachers, in the simpler gymnastic exe cises, is being given in some schools twice, or oftener, weekly, bei officially recognised as an integral portion of the education to afforded to boys and girls alike; and proficiency in physical perfor ances is being stimulated and rewarded by occasional public displa and by suitable prizes and distinctions. This is as it should be, a we hope the good practice to which we refer may soon become gene throughout the schools of the country. Those who have the care young persons in schools may do much in aiding the physical develo ment of their pupils; and, as a consequence, in making their liv longer and happier, by the judicious use of the gymnasium.

THE BIRMINGHAM EYE HOSPITAL.

THE Committee of the Birmingham Eye Hospital have reconsider the changes which they proposed, a few weeks ago, in reference the constitution, privileges, and qualifications of the surgical sta and they have now given notice of their intention to bring forwar at a meeting of the governors of the charity, a series of amend resolutions, which they have prepared upon the questions at issu

ıe resolutions of the committee provide for the representation of e surgical staff upon the management of the hospital; propose raise the number of acting surgeons from four to six; and suggest ıat it shall be required, that candidates for the office of honorary .rgeon shall be Fellows of the Royal College of Surgeons of Eng- nd upon their appointment, or shall obtain the Fellowship within velve months after election; or that they shall be graduates in me- cine and surgery of the Universities of London or Cambridge. It difficult to see the grounds upon which the committee give an cclusive preference to the degrees of London and Cambridge as ternative qualifications to the Fellowship of the College of Sur- ons.

MEDICAL SOCIETY OF LONDON.

T a general meeting of this Society, held on Monday, March 5th, 883, the election of the officers and Council took place, when the ntlemen named below were duly elected to the several offices. *resident:* Sir Joseph Fayrer, M.D., K.C.S.I., F.R.S. *Vice-Presi- nts:* J. Hughlings Jackson, M.D., F.R.S.; John Cawood Words- orth; John Brunton, M.D.; Alfred Cooper. *Treasurer:* Alfred iltshire, M.D. *Librarian:* William Henry Allchin, M.B. *Honorary ecretaries:* Isambard Owen, M.D.; Alfred Pearce Gould. *Secretary r Foreign Correspondence:* Sir William Mac Cormac. *Council:* enry Francis Baker; Samuel Benton; Sidney Coupland, M.D.; ohn Hamilton Craigie; Henry Radcliffe Crocker, M.D.; John Henry rew; William Ewart, M.D.; James Kingston Fowler, M.D.; Heneage ibbes, M.D.; David Henry Goodsall; George Lawson; Henry Morris; rancis Mason; Edmund Owen; Arthur Ernest Sansom, M.D.; harles Brodie Sewell, M.D.; Thomas Gilbart Smith, M.D.; William eath Strange, M.D.; William Johnson Walsham; C. Theodore illiams, M.D.

A FRENCH OPHTHALMOLOGICAL SOCIETY.

r appears that this society, first proposed more than three years go, is at last likely to find a real existence. But our French-speak ıg colleagues—for the society is to embrace also Belgium, and part f Switzerland—have still to combat the difficulties which have been o successfully encountered by the Ophthalmological Society of the nited Kingdom. Where to meet? How often? Whom to admit, r rather, whom to exclude? these are difficulties no less in Paris ıan in London. Dr. Chibret proposes an annual meeting, after the ıanner of the Heidelberg Society, to be held in Paris. This has ıuch to recommend it, as the distances to be travelled over by ome of the members must be considerable. On the other hand, it ıust be remembered that the most recently founded society—that f the United Kingdom—meets six times yearly, and that it experi nces no lack of contributions. The question of whom to admit is a elicate one. New specialist branches of practice are naturally the rofitable hunting-grounds of dubious foreigners and of charlatans. ut, the branch once solidly established in professional opinion as ecessary and reputable, such persons are gradually displaced. Not- withstanding the position that French ophthalmology has attained, till there are not wanting survivors of the old system of things. If, ıowever, a dozen or so of persons of established position and reputa- ion were once associated, the election of future members might be afely left in their hands. The committee, which was originally ap- ointed for the promotion of the society, containing, as it does, the ıames of Giraud-Teulon, Gayet, Parrot, Warlomont, and Landolt, vould furnish a valuable nucleus for future additions, and at the ame time a guarantee for the success of the new Society. We ordially unite in wishing to the latter every success.

FEVER AND SMALL-POX HOSPITALS.

AT a recent meeting of the Metropolitan Asylums Board, a report was presented from the General Purposes Committee on the subject of the recent communications from the Government with regard to he report of the Royal Commission respecting fever and small-pox hospitals. The report congratulated the managers on the decision of the Local Government Board that the provision of additional hospital accommodation for small-pox patients should no longer be delayed. The Local Government Board suggested the establishment on the Thames, fifteen miles below London Bridge, of one or more floating hospitals, in addition to the *Atlas*, with the acquisition of land in proximity to the floating hospitals where less acute cases of small-pox might be received. The Local Government Board had also intimated their willingness to propose legislation conferring on the managers compulsory powers for purchasing wharves or other places for embarkation and disembarkation of patients. Mr. E. H Currie moved a resolution to the effect that a communication should be addressed to the Local Government Board urging upon them the importance of asking Parliament to confer upon the managers compulsory powers, not only for the purchase of wharves, etc. but also for the acquirement of additional hospital sites. The Hon J. G. Talbot, M.P., seconded this motion, and it was carried unanimously. A further resolution was also adopted to enable the committee to elaborate a scheme for the removal of patients by ambulances and steamers, to and from the floating hospitals, etc.

MORBID ANATOMY OF DIABETES.

THE Council of the Pathological Society wishes to give notice that the ordinary meeting on April 3rd, and, if necessary, that held on April 17th will be devoted to the exhibition of specimens illustrating the morbid anatomy of diabetes. Of late years many, often isolated, cases of diabetes have been recorded, with morbid changes in one or other of the viscera; and the Council is of opinion that the time has now come when the collective experience of the members of the Society, with the facts to which many must be able to gain access in the records of the metropolitan hospitals, should be brought together and to light. For instance, the nervous system should furnish ample material in several directions. For macroscopic and microscopic demonstrations of the lesions of the central ganglia, which have been asserted to exist; if not thus directly, yet indirectly, *post mortem* records can afford valuable information for analysis and short statistical treatment; and further material, quite pertinent to the issues involved, might be obtained from the asylums for the aged and insane. We are in absolute ignorance of the state of the sympathetic system in diabetes. The condition of the blood is, as yet, most uncertain. Acetonæmia and fat-embolism particularly require careful sifting in this regard. And for the solid viscera, numerous are the questions which require more ample material for their settlement, whether we take the lungs, the liver, the pancreas, or the kidneys. The Council trusts that those members of the Society who are in a position to add to our knowledge of the morbid anatomy of diabetes in any direction, will set about collecting and condensing their material, that the time absorbed may be utilised to the full.

THE DALRYMPLE HOME.

THE first annual general meeting of the Dalrymple Home for Inebriates Association was held, at 161A, Strand, on Tuesday; Mr. Harry Chubb, in the chair. The committee stated that they had examined forty sites in and near the metropolis. Most of these were found to be unsuitable; for some a very high price was asked, and in other cases the proprietors refused to let to a public institution. The committee had offered to purchase a freehold property, but had not succeeded in their endeavour. They had, however, some sites still in view; and trusted to be able to rent a suitable house and grounds, so as to have the Home open at an early date. There was £600 at their bankers, and £1,100 more was promised. A member of the committee had also promised £500, on condition that nine contributions each of a like amount were forthcoming. The committee tendered their hearty acknowledgments to the British Medical Association for their official and pecuniary support, and for

the use of rooms for committee and other meetings. Funds were urgently needed. The officers appointed for the ensuing year were—*President:* Lord Shaftesbury. *Vice-Presidents:* the Archbishops of Canterbury and York; the Bishops of Carlisle, Durham, Exeter, Gloucester, Hereford, Newcastle, Norwich, Ripon, Rochester, Salisbury, St. David's, and Winchester; Bishop Abraham; Canons Ellison and Hopkins; the Duke of Westminster; Lords Aberdare and Derwent; Sir J. W. Pease, M.P.; Dr. Cameron, M.P.; Dr. Farquharson, M.P.; W. Holms, M.P.; J. J. Colman, M.P.; J. Cowen, M.P.; C. Dalrymple, M.P.; Geo. Palmer, M.P.; A. Pease, M.P.; J. Howard, M.P.; J. P. Corry, M.P.; Sir Henry Thompson; Drs. Andrew Clark and B. W. Richardson; Sir W. T. Charley, Q.C. Dr. Norman Kerr, 42, Grove Road, Regent's Park, N.W., was appointed Honorary Secreary. On the committee are Canon Duckworth, Dr. Alfred Carpenter, Dr. Hart Vinen, and Surgeon-Major Poole, M.D. Among the losses by death were noted those of the Bishop of Llandaff, and ir Thomas Watson.

ROYAL COLLEGE OF SURGEONS.

A MEETING of the Council of the College was held on Thursday, the 8th instant, at the College. The minutes of the quarterly council, held on the 11th of January last, were read and confirmed. Reports were received from the Court of Examiners and the General Purposes Committee. The chief business of the Council was the consideration of the report of the committee of delegates appointed by the Royal College of Physicians and Surgeons, in reference to the formation by the two Colleges of an Examining Board in England under Clause xix. of the Medical Act of 1858. The report was adopted after some discussion. Not having been considered yet by the College of Physicians the publication of its provisions must, however, be deferred.

THE ASTLEY COOPER PRIZE.

IT is announced that the subject chosen for competition for the next award of the Astley Cooper Prize is, "Diseases and Injuries of the Nerves and their Surgical Treatment, together with the Operations performed upon Nerve-trunks in the treatment of various diseases, and descriptions of the changes which ensue in other structures as well as in the Nerves themselves from these Operations." The value of the prize is £300; and it will be awarded to the author of the best essay or treatise on the above-named subject. The essays must contain original experiments and observations, not previously published, and should be illustrated by preparations and by drawings, which, together with the successful essay, become afterwards the exclusive property of Guy's Hospital. The prize cannot be awarded to any essay that is the joint production of any two authors, nor to any relative of any physician or surgeon of Guy's or St. Thomas's Hospital; with these exceptions, it is open for competition to the whole world. Essays, in English, intended for this competition must be sent to Guy's Hospital on or before January 1st, 1886, addressed to the physicians and surgeons of Guy's Hospital; they must be distinguished by a motto, and accompanied by a sealed envelope containing the name and address of the writer. None of the envelopes will be opened except that which accompanies the successful essay; and the unsuccessful essays or treatises, with their illustrative preparations or drawings, can be claimed again after the competition by the respective writers or their agents. A printed form of notice of the conditions of the competition may be had on application to the Dean of Guy's Hospital.

FALSIFICATION OF WINES.

NOW and then, medical men may be desirous to investigate the wines in use in their households, which are not always all that could be desired. For the detection of magenta, archil, or cudbear, in wines, Dr. Haas recommends the methods of Romei or of Falières-Ritter. Romei treats the wine with basic acetate of lead with which archil gives a blue and the others a fine violet precipitate. Each precipitate, shaken up with amyl alcohol, gives a red colour, which, if due to magenta, is discharged either by hydrochloric acid or by ammonia; whereas the acid does not decolorise archil or cudbear, and ammonia changes their red to purple violet. In the Falières-Ritter method, the wine, previously rendered ammoniacal, is shaken up with ether, which, in the presence of archil or cudbear, becomes red, but with magenta remains colourless. Wartna adds ammonia and ether to the concentrated wine while still warm, immersing in it a thread of clean white wool, which is reddened if archil or magenta are present. The red colour of the wool is, in the case of archil and cudbear, extracted by hydrochloric acid; ammonia turns it violet. König follows a somewhat more complex process. Mixing 50 c.c. of wine with a slight excess of ammonia, he boils it in a flask with half a gramme of clean white woollen yarn, until all the alcohol and the excess of ammonia have evaporated. The wool is then well washed in water, and moistened in a test-tube with a 10 per cent. solution of caustic potash, and carefully heated till completely dissolved. The solution is first mixed with half its volume of pure alcohol, and next with a like amount of ether, and shaken but not so violently as to form an emulsion. The ether is then decanted off, and a drop of acetic acid added, when, if a trace of magenta be present, a red colour will appear. On the other hand, if the wine were coloured with archil or cudbear, it is decolorised by prolonged boiling with ammonia, though the colour returns if it be let cool and slightly shaken. If the wool be taken out of the hot liquid, after the colour has disappeared, and exposed to the air, it takes a red colour. As the colouring matter of archil is not precipitated by baryta and magnesia, but changed to purple, the barytic test (recommended by Pasteur, Balard, and Wurtz) and the magnesia test are useless. Lastly, magenta may in time be removed by the precipitate or "crust" formed in the wine; the sediment, therefore if any, must also be examined.

LIQUID EXTRACT OF CINCHONA.

IT is well understood among prescribers that the pharmaceutical preparations of cinchona bark have a medicinal value quite distinct from that possessed by the separate cinchona alkaloids, of which quinine is the most important. Few are aware, however, how imperfectly these preparations, when made according to the official processes, represent in respect to alkaloidal contents the barks from which they are derived. The subject was brought under the notice of the Pharmaceutical Society of Great Britain, on Wednesday evening last, by Dr. B. H. Paul, who stated that, although a "flat calisaya bark," equal to the *Pharmacopœia* standard, is capable of yielding a fluid extract containing 35 grains of "nearly pure quinia" to the fluid ounce, several samples collected from different sources have proved, upon analysis, to contain very small proportions of quinine varying from mere traces up to two grains per fluid ounce. Experiments were therefore made to determine the cause of this deficiency, the results showing that, although it might be to some extent attributable to the known deterioration in the quality of "flat calisaya" bark during recent years, it is due principally to the fact that the official process for making the liquid extracts fails to remove from the bark more than a small proportion of the alkaloids present in it. Thus, a "flat calisaya" was found, upon analysis, to contain only 5.5 grains of quinine to the pound, and the total alkaloids amounted only to 148.25 grains to the pound, or slightly in excess of *Pharmacopœia* requirements (140 grains) as to "nearly pure quinia." Inferior in quality as this bark was, it was capable, used in the pharmacopœial proportions and completely exhausted, of yielding a fluid extract containing 37 grains of total alkaloids; but a fluid extract made from it according to the official process only contained 8.6 per cent. of total alkaloid. In like manner, an India bark that yielded upon analysis 397 grains of total alkaloids per pound, of which 135 grains was quinine, and which was therefore

capable of furnishing a liquid extract containing 99 grains of total alkaloids per fluid ounce, including 35 grains of quinine, when treated according to the official process, gave a fluid extract, which though rich in quinine and cinchotannic acid, contained only 14.32 grains of total alkaloids per fluid ounce, the quinine amounting to but 4.39 grains. Such a liquid extract would therefore only represent about one-seventh of the alkaloid present in the bark from which it had been prepared, while comparative experiments showed that in the official "decoction" the proportion is one-fourth, and in the "infusion" one-sixth. But, as Dr. Paul points out, if it be desirable from a medical point of view to unite in a concentrated form —such as the liquid extract purports to be—all the several medicinal constituents of cinchona bark, alkaloids as well as others, recourse must be had to our improved chemical knowledge of bark for the purpose of devising a method by which this pharmaceutical desideratum may be made practicable.

M. BERTILLON.

A PARIS correspondent writes: "I deeply regret to have to report the death of Dr. Bertillon, the able statistician—or, as he preferred to call himself, *demographer*—who has for many years occupied himself with the subject of vital statistics in their relation to public sanitation. France has long been very much behind England in the collation of vital statistics, as well as in public and private sanitation generally; and it is still humiliating to French medical statistics, that, during the last quarter of a century, no accurate records have been published from year to year. It is only to be regretted that they are, even now, very imperfect, and that the better results attained in some hospitals by the English system of antisepticism and cleanliness, and an approach to trained nursing and decent sanitary arrangements, cannot even now be systematically contrasted, by means of the cold and unanswerable figures of annual registration tables from each hospital, with the deadly consequences which still result in other Paris hospitals from neglect of antiseptic cleanliness, and want of scientific hygiene. In many respects, perhaps, this glaring omission has served the *amour propre* of the profession; for the fearful prevalence of hospital diseases, and disastrous mortality after surgical operations, have remained hidden. On the other hand, the very unfavourable results which these figures would have shown when contrasted with the low mortality in English and American hospitals, would have had a salutary effect in earlier awakening French surgeons from the long slumber of self-satisfaction with which they have so long regarded the ghastly results of their slow decadence in medical and surgical practice, and in practical sanitation, during the last quarter of a century. From this they are now, and have for the past few years been, awakened, and the consequence has been a vast improvement in results in many of the hospitals; that is to say, a great saving in life and lessening of protracted suffering in many patients. M. Bertillon's statistical energy and his official bulletins have been of no small service in this direction."

SMALL-POX IN LONDON.

A PROVINCIAL contemporary points out that a very curious conclusion has been arrived at by a conference of metropolitan Poor-law guardians with reference to the treatment of small-pox, and other infectious diseases, in special hospitals. For some time past, small-pox has prevailed in London in a more or less epidemic form, and all the efforts of the Metropolitan Asylum District Board, with its hospitals and special appliances for dealing with the infection, have failed to stamp out the disease; on the contrary, it appears that, during the ten years the Board has had the matter in hand, small-pox has largely and rapidly increased, instead of being suppressed, as was generally expected, when the Board, with its costly machinery, was established. If this be an accurate statement of the fact, it by no means proves the responsibility of the Board for what has occurred, since there are certain virulent stages of the malady which defy all ameliorative measures for checking the spread of the infection. The London guardians, however, seem to be of a different opinion. They unfavourably contrasted the state of small-pox in the metropolis, when the guardians had the management of it in their own hands, with the present condition of the capital as the result of the action of the Asylums Board. Under the *régime* of the former, the disease, they assert, decreased; under that of the latter, it increased. But the most curious point urged by the experience of the guardians was, that the practice of treating small-pox patients in special hospitals lay at the bottom of the evil, by such institutions becoming centres for the spread of the disease, and nuisances to the unfortunate neighbourhoods in which they are placed. Very few people, probably, like to live next door to a small-pox hospital; but it has been shown, over and over again, that residence in the vicinity of such an establishment is not attended with special dangers. After all, however, the cost of the present system of treating small-pox in the metropolitan area seems to be the great stumbling block to the guardians. Since the formation of the Asylums Board, three millions of pounds have been spent, and half that sum besides incurred as liabilities in carrying out the work of dealing with zymotics; and the conference, therefore, resolved that, in the event of the Government contemplating the retention of the Board, an inquiry should made into its expenditure and management. Nobody will object to the proposed inquiry if its purpose be to increase the efficiency of the Board, and to assist in stamping out a loathsome disease; but, short of this, no consideration of expenditure ought to be allowed to override the adoption of the best system of treating so terrible a scourge as small-pox.

SLEEPY SIGNALMEN.

INQUIRIES into railway accidents have shown, over and over again, that the safety of railway travelling is daily imperilled by the employment of railway signalmen and pointsmen under circumstances which render the exercise of vigilance in their very responsible duties difficult or impossible. Many a so-called accident, involving destruction of human life, has plainly arisen because an unfortunate signalman or pointsman has at last failed to be on the alert at his post, after twelve or more hours of continuous and exhausting night-work. In spite of repeated references in official reports on railway disasters to this lamentable and wholly preventable circumstance, some railway companies, blind alike to their own interests and to the perils of their passengers, appear to continue to overwork their servants in charge of points and signals. This is a matter in which legislative interference is urgently needed, for it is evidently one with which only the power of the law can effectively deal. Clearly it is not enough that reports of Government inspectors should emphasise the danger in question. The safety of the public demands that the evil should be put down once and for all by stringent enactment. Major-General Hutchinson, in reporting to the Board of Trade on the circumstances of an accident which recently happened at Essendine, on the Great Northern Railway, describes it as due to an extraordinary mistake on the part of a signalman in moving a lever. He adds: "He had no motive for the action, and was not in the habit of moving the lever. It must, however, be remembered that, at the time of the collision, he had been on duty for eleven and a half hours; and it is by no means improbable that he had become drowsy, and had unconsciously pulled over, and then put back, this lever, without recollecting what he had done. It is, I am certain, unreasonable to expect signalmen to retain the full use of their powers at the end of twelve hours' nightwork; and I would strongly recommend that, in those signal-cabins where the work is not sufficiently important to allow the regular employment of three signalmen, some arrangements should be made for dividing

the night-work into two periods of about six hours each. Any such arrangement would, I know, be unpopular with the signalmen, but I am convinced that it would conduce to the safety of railway travelling."

MICROCOCCI IN CEREBRO-SPINAL MENINGITIS.

AT a recent meeting of a German medical society (*Verein fur innere Medizin*), Dr. Leyden exhibited germs taken from a case of fatal inflammation of the membranes of the brain and cord. According to him, there is little doubt that meningitis is due to germs. Both Klebs and Ebert have observed meningitis after pneumonia, where micrococci were present in the sputum; indeed, Ebert detected the same germs in the fluid exuded from the inflamed meninges as he found in the pneumonic exudation; the same authority found micrococci in the pus, from a case of pyocephalus. In purulent fluid, found under the meninges of a school-boy, aged 16, Klebs discovered bacteria in active motion. Ebert claims to have observed, in the pus from traumatic cases of meningitis, germs of a different kind to those which he had found in septic cases of the same local affection. The question remains as to whether idiopathic meningitis, independent of wounds, pneumonia, or pyæmia, be a parasitic disease. Dr. Leyden believes that it is essentially due to micro-organisms. He bases his observations on a case under his own observation. A woman, aged 35, was seized with violent vomiting in a railway carriage, on December 22nd, 1882. As she was stepping out of the carriage at the Berlin terminus, she was seized with giddiness, and fell on the platform. Her face was bruised, and the membrana tympani of one ear ruptured, some fluid escaping. A few days later she was admitted into the Charité Hospital, with inflamed ear, violent headache, and constant sickness. After the other tympanic membrane had become perforated, and appropriate treatment adopted, the patient apparently recovered. At the end of last January all the symptoms recurred, with the more special symptoms of cerebro-spinal meningitis, rapidly proving fatal. At the necropsy, the exudation over the pia mater of the brain and cord was found to be very abundant, the otitis had disappeared, and the perforation in each membrane had closed. In the fluid, hosts of micrococci of a perfectly oval form were found, oscillating freely, and rather larger than pneumonic micrococci. Some were solitary, some in pairs, some in chains. In the discussion that followed Dr. Leyden's demonstration, Dr. Baginsky observed that, in children who had apparently recovered from cerebral symptoms after the rupture of one membrana tympani as the result of suppurative otitis, fatal pneumonia sometimes appeared very suddenly in a few days, and this complication was probably due to micro-organisms. In Dr. Leyden's case there were symptoms of intracranial disease before the patient fell out of the railway-carriage; but then rupture of one membrana tympani occurred, discharge escaped, and thus clear evidence of otitis was proved by the accident. The distinction between uncomplicated otitis and mild meningitis is not always easy, and the first disease alone might have existed before the fall. The rupture of the membrane admitted air into a suppurating cavity; and the suspicion that the subsequent cerebro-spinal disease might have been a purely secondary affection is very strong. Dr. Leyden, however, believes that the micrococci of meningeal pus, as seen in this case, are more oval, but oscillate less actively than those of pus simply putrefied by exposure to air: in other words, he endeavours to prove that the meningitis was primary, and that the micrococci existed within the patient's body before the injury.

POISONOUS SNAKES.

THE loss of human and animal life in India from the bite of venomous snakes is very great. Sir Joseph Fayrer has done good service in pointing out that this mortality is, to a great extent, preventable, and in urging upon the local authorities the necessity for taking vigorous measures for its reduction. He made a long and careful investigation of the whole subject, and presented a detailed report thereon to the Government of India, with a request that it should be published and distributed throughout the country, among civil and medical officers, with a view of enabling them to take measures for the protection of human life from poisonous snakes, and for the destruction of the deadly reptiles which have hitherto caused such frightful mortality. According to the *Gazette of India*, some progress in the direction indicated has already been made. It appears that the mortality from snake-bites in the year 1881 was somewhat less than in the preceding year, and that this desirable result was due to the measures that had been taken by the Government to procure the destruction of the thanatophidia. Sir Joseph Fayrer estimates that, since 1870, the appalling number of from 150,000 to 200,000 human beings have been destroyed by venomous snakes in India. He is of opinion that not until a system of organised, determined, and sustained efforts for the destruction of snakes is vigorously carried out, will the evil be fairly grappled with and overcome. It is only by the destruction of the snakes that their evil work can be mitigated. Something, however, may be done by education, if its spread among the poorer people of India should make them more familiar with the appearance of venomous as distinguished from harmless snakes, convince them of the futility of all antidotes, charms, and spells for their protection, and alter their present dangerous practice of living in huts which have the floor on the surface of the ground. During the year 1880, no fewer than 19,060 human beings and 2,536 cattle are reported to have been killed in India by snakes; in 1881, the numbers fell to 18,610 human deaths, and 2,032 head of cattle lost. In 1880, the number of snakes reported as killed was 212,776; in the following year, it reached 254,968. With respect to the measures officially adopted for the destruction of venomous snakes, the following remarks were lately made by the Governor-General of India in Council. "As regards the destruction of venomous snakes, special measures were adopted in some provinces, of which it appears desirable to give a brief account, in case they may be considered suitable for adoption elsewhere. In Bengal, a scheme has been sanctioned by the local government in the case of the Patna division, under which, persons destroying snakes can obtain certificates from certain selected planters, vouching for the poisonous nature of the snakes destroyed. The production of such a certificate entitles the holder to receive from the local authorities the reward offered, whenever he finds an opportunity of applying for it. As observed by the Government of Bengal, this concession will probably be found to add much to the convenience of persons claiming rewards, and to act as an inducement towards the destruction of poisonous snakes. The expediency of extending the scheme will be considered by the local government when the results of the current year's operations are known. In the North-Western Provinces and Oudh, the Lieutenant-Governor has sanctioned the entertainment tentatively in each district of those provinces of a staff of Kanjars, or men of similar caste, who trap and kill reptiles, for the systematic destruction of venomous snakes. It appears that such a plan for the killing of snakes is likely to prove far more efficacious than the mere offer of rewards, although it is true that, unless such operations are confined to towns and villages, and their neighbourhood, where it is believed that the largest number of deaths occur from snake-bite, they will probably be very costly. The Lieutenant-Governor of the Punjab has issued a circular to commissioners and superintendents, drawing attention to the matter, with a view to the adoption of measures for destroying snakes by a system of rewards to be granted by district committees and municipalities. Casts and lithographed pictures of the more common species of deadly snakes have already been supplied to the police-stations in some districts, and deputy-commissioners have been requested to suggest to municipal and district committees the desirability of procuring similar means of reference, for the purpose of testing applications for rewards."

SPINA ON KOCH'S BACILLI.

DR. KOCH'S discovery of a special form of microphyte in the sputa and pulmonary tissues of phthisical patients, although not yet a twelvemonth old, has given rise to a vast number of imitative experiments by scientific physicians and others in all countries where such observers are to be found. In the large majority of instances, the views enunciated by Dr. Koch have been fully accepted; and of late still more definite opinions have been expressed as to the clinical significance of the presence or absence of the bacilli. A Viennese observer has, however, boldly entered the lists against Dr. Koch, and, on the strength of numerous original investigations, attacks the theories of the latter as being founded on mistaken or imperfect experiments. A sketch of Dr. Spina's work is given in the *Wien. Allgem. Med. Zeit.* for February 13th, 1883. The author, who is an assistant in Professor Stricker's Institute, points out that the tubercle-bacillus, as made manifest by Koch and Ehrlich's method, does not possess any chemical properties peculiar to itself; that the reaction with the anilin dyes is not essentially different from that of some other forms of bacteria; that it is not proved whether all the bacteria stained by Koch's method are of equal importance; that the blue-stained rods do not occur constantly in tubercular products, and that their area of distribution does not correspond with that of the tubercular deposit; that, in tubercles of different degrees of development, and especially those deposited on organs which have no immediate contact with atmospheric air, no bacteria at all have been discovered. He combats, further, the view expressed by Koch that the tubercle-bacilli only increase when at a temperature approaching that of living mammals. On the present position of the tubercle question, Dr. Spina expresses himself equally clearly. He maintains that the idea of the possibility of infection by tubercle has not been proved by the experiments made upon animals. The pathological results so obtained do not essentially differ from those obtained by infection of animals with indifferent tissues of a non-tubercular origin. That the bacilli themselves represent the virus of an infectious disease, or that they possess any characteristic affinity for colouring matters, acids, or alkalies, he does not consider by any means proved by the experiments hitherto recorded. That these lowly organisms find their way from the tissues into the sputa he regards as a purely gratuitous assumption: they might just as easily find their way into the bronchi with the atmospheric air. The latter view is greatly borne out by the author's inability to discover the bacilli in the tissues of a tubercular peritoneum, where the tuberculous nodules are not placed in direct communication with air. All the cavities of the body which are in such communication contain various organisms, and especially so when they are the subjects of disease. It would be strange indeed if tubercular cavities in the lungs did not contain them. He maintains that our knowledge of tuberculosis rests now as heretofore upon the clinical characteristics of the disease, and upon the occurrence and the history of the surroundings of the tubercles themselves. We know how tubercle is formed, but we do not yet know any distinct sign by which the tubercular may be distinguished from all other forms of morbid tissue. To one point only in Dr. Koch's conclusions is some antecedent probability allowed, viz., that the air-passages of persons affected with tubercle present especially favourable conditions for the occurrence and development of the various forms of bacteria. Dr. Spina regards this axiom a starting point for future investigation.

ANTHRAX IN BERMONDSEY.

THE synonyms for anthrax are many; charbon externe, charbon symptomatique, black quarter, malignant pustule, to name only a few. The disease, as is well known, is dependent upon the growth of the bacillus anthracis within the body; but the symptoms to which this bacillary growth gives rise are very various, hence the variety of names applied to one and the same disease. This variation in symptoms no doubt depends, to some extent at least, upon the point at which the poison obtains entrance to the body. The disease is, primarily, a disease of cattle, and only affects men who come into contact with the hides or fleeces of diseased animals. At Bradford, where the disease has recently been carefully studied, the infective material was contained only in certain kinds of fleeces, chiefly Van mohair of inferior quality. In handling and cleaning these fleeces, a great deal of dust is produced, and it is supposed that the bacillus entered the system through the lungs. The earliest and most prominent symptoms were generally those of pulmonary disease, and resembled "low" or asthenic pneumonia. At Guy's Hospital, however, where, in the last few years, there have been, we are informed, upwards of twenty cases, inoculation has generally taken place at some abrasion of the skin. A hard brawny induration of the skin, which quickly sloughs at the part first attacked, is then the earliest symptom of the disease, which thus commonly goes by the name of malignant pustule. In these cases, too, as Dr. Mahomed, who showed specimens from a recent case, at the Pathological Society on Tuesday last, pointed out, characteristic lesions, presenting appearances identical with those seen in the skin, are commonly found in the intestines. We have said above that the disease was dependent on the growth of the bacillus, and there can be no doubt that this assertion may be made with more confidence as regards this disease, than of most others now commonly attributed to the baneful influence of microphytes. It has been pretty clearly shown that the most characteristic lesions of anthrax are due to a mechanical mycosis, to an actual blocking up of the smaller vessels by great masses of bacterial growth. We would refer those who desire a discussion of the subject to Mr. Horsley's admirable *résumé* of bacterial pathology in the last report of the medical officer to the Local Government Board; a beautiful drawing of the bacilli blocking the blood-vessels is there given. An inquest was held on March 3rd by Mr. J. W. Payne, the coroner for Southwark, on the body of Wm. Thos. Shepperd, aged 33, of Fair Street, Horselydown, who had died in Guy's Hospital two days earlier. The man was employed in carrying foreign hides and skins from the wharf to a neighbouring warehouse in Tooley Street. The disease ran a somewhat rapid course, and, in spite of the excision of the "pustule," which had formed on the cheek, the man died on the fourth day. At the necropsy, there was found secondary affection of the intestines and lung, and softening of the spleen. In other cases, as, for instance, in the one reported by Mr. Davies-Colley to the Pathological Society at its last meeting, this treatment by excision has been followed by rapid recovery. The frequency with which this disease has been met with at Guy's Hospital is, no doubt, due to its position in the neighbourhood of the great tanyards, leather manufactories, warehouses, and wharves of Bermondsey and Rotherhithe. At the inquest, Mr. Stevens, the house-surgeon, suggested that, in future, as soon as a man employed in handling hides or fleeces fell ill, he should immediately obtain medical assistance; since, by so acting, he not only had a better hope of recovery himself, but steps might at once be taken to arrest the spread of the disease. The attention of the Local Government Board might profitably be directed to the subject, which has caused some consternation among workmen engaged in the skin-warehouses. Unfortunately, though the necessity for inquiry is evident, it will probably be extremely difficult to devise a remedy, as the infected hides cannot readily be recognised.

SCOTLAND.

PROFESSOR FRANCIS OGSTON has intimated to the Faculty of Medicine of Aberdeen University his intention of resigning the Deanship of the faculty, which he has held for many years. At the commencement of this year, it may be remembered, Dr. Ogston withdrew from the office of assessor for the Senatus at the University Court.

At the Paisley Sheriff Court this week, a firm of bleachers and finishers were convicted and fined, under the Factory and Workshops Act for having employed in their work nine women after the hour of six o'clock in the evening.

The Dumfries local authority have resolved to ask the managers of the infirmary that the isolated portion of the institution containing twenty-two beds, be permanently continued, the local authority contributing £40 *per annum*. This annual contribution will entitle the local authority to send in twenty patients suffering from infectious diseases free of charge, but all above this number will have to be paid for at the rate of 3s. per day per patient.

Last week, a death occurred by suicide in Her Majesty's General Prison, Perth. These occurrences in prisons furnish strong evidence for the removal out of the cells of gas-jets, or any other projecting iron bars, which are a temptation to suicidally inclined prisoners, and offer facilities for carrying out their purposes. We believe that in the most recent specimens of prison architecture, none of these things exist; the gas-jet being situated in the wall of the cell, and protected by thick plate-glass, and lighted from the corridors. It is impossible for the medical officer to discover and protect by association every suicidal prisoner. In the more recently erected prisons, suicide by hanging is scarcely possible.

EDINBURGH ROYAL ASYLUM.

The excess of mortality this year was due entirely to organic diseases of the brain, of which fifty patients died, as compared with thirty-two, the average of the previous five years. Two of the deaths were by suicide.

STUDENTS' CONVERSAZIONE IN ABERDEEN.

The members of the Aberdeen University Temperance Society gave their first *conversazione* or "social" in Marischal College, on Saturday evening, and the result proved an unqualified success. Dr. Donaldson presided, and gave a humorous and entertaining address on some aspects of the temperance movement. There was a large attendance of students, professors, and the friends of both. We hope that these *conversaziones* will occur more frequently during the session, now that it has been proved that they may be rendered so attractive.

THE ROYAL MATERNITY HOSPITAL, EDINBURGH.

The annual meeting of the Edinburgh Royal Maternity and Simpson Memorial Hospital was held on the 1st instant, in the hospital, Launston Place, Lord Provost Harrison presiding. The report submitted by the secretary could not, from a financial point of view, be considered satisfactory. The special effort made in 1881, by the directors, to increase the annual income, had not been sustained during the past year, and the result is that the balance is on the wrong side—the expenditure exceeding the income, from all sources, by £3. The falling off of the income, from £635 in 1881, to £483 in 1882, is a cause of anxiety to the directors, who state that unless the annual subscriptions amount to £600, at least, the hospital could not be said to exist on a sound basis. During the past year 216 patients were admitted to the hospital, and 446 were attended at their own homes. Four patients died in the hospital. The Rev. Dr. Macgregor afterwards addressed the meeting, and referred to the social impurities caused by the courting customs of the people, which helped in so large a measure to fill the wards of an institution such as this.

DISCREPANCIES IN ANALYSIS.

At the instance of the Sanitary Department of the city of Glasgow, a milk-dealer was prosecuted for selling sweet milk, which, on analysis, was found to contain 69 per cent. of skimmed milk, and was deprived of 65 per cent. of its original fat. This was the result of the analysis of Dr. Tatlock, public analyst, who also found that the sample, instead of containing 2.5 of fat according to the Somerset House standard, only contained .88. For the defence it was stated that, a fortnight later, the same cow was milked in the presence of several witnesses, and several samples sealed. Three of the samples were sent to Dr. Wallace, who found that one of those samples contained 6 per cent. of added water, and 63 per cent. of skimmed milk; another contained 8 per cent. of added water; and the third, 10 per cent of added water, and 8 per cent. of skimmed milk. A fourth sample was sent to Dr. Clark, who certified it to contain 6½ per cent. of added water. The case, naturally, was adjourned. The discrepancies of analyses are remarkable, presuming there had been no tampering with the milk.

THE FIFE JAMIESON MEMORIAL.

The subscribers to the memorial to the late lamented Dr. Fife Jamieson will be glad to know that the object has now been fully accomplished. Subscriptions have been received from friends and fellow-students of the deceased, amounting to nearly £220. A portion of this sum has been devoted to the erection, within Old Machar Cathedral, of the very handsome memorial tablet of black and white marble, which was very fully described some time ago. The remainder of the fund has been invested, for the purpose of providing a gold medal, to be competed for annually by students in anatomy, in which subject, it will be remembered, Dr. Jamieson was assistant to Dr. Struthers. The competition for the first award of the medal takes place during the current month. The medal is intended to perpetuate the memory of Dr. Jamieson, and to stimulate others to the like enthusiasm for their profession which distinguished him.

GLASGOW SANITARY PROTECTION ASSOCIATION.

The first annual report of this association has just been made public; and from the facts therein stated, it has already done some excellent work, although it has only been a comparatively short time in existence. During that period, no fewer than sixty-four houses in the best parts of Glasgow have been examined, and in a large number serious defects were discovered in the drainage, permitting the entrance of foul air into the interior, and thereby endangering the health of the inmates. One good result which we hope may come out of the work of this association and of the sanitary authorities of the town, is the passing of some legislation, granting powers to the local authorities to supervise the laying of the drainage system of all new houses. In this way, work that is now done in a most negligent and dangerous fashion would be from the first properly carried out, and much future sickness, and perhaps many deaths, averted.

THE LARBERT INSTITUTION FOR IMBECILE CHILDREN.

The supporters of this excellent charity held their twenty-second annual meeting on February 27th, when the report of the directors was read and approved. This report shows that the Institution is making very satisfactory progress, that the management is such as to meet with the high approval of the Commissioners in Lunacy, and that the general health of the inmates during the past year has been good. At the close of last year, there were 123 children under treatment, while, at present, the number amounts to 148, of which 89 are boys and 59 girls. The average daily number resident during the year has been 130, being 9 more than the previous year. The financial statement for the year is also satisfactory, there being a balance in hand of £839 after meeting all the expenses. The vacancy in the medical staff, caused by the death of Dr. Hamilton, has been filled by the appointment of Dr. George Leslie as medical officer. During the year, various alterations have been carried out in the building to add to the comfort of the children, and render the Institution more fitted for the work for which it was established.

REGISTRAR-GENERAL'S RETURNS.

ɪE returns of the Registrar-General, for the week ending February th, show that the death-rate in the eight principal Scotch towns ring the week was 27.4 per 1,000 of estimated population. This te is 4.8 above that for the corresponding week of last year, and 3 above that for the previous week of the present year. The lowest ortality was recorded in Aberdeen—viz., 16.6 per 1,000; and the ghest in Glasgow—viz., 33.3 per 1,000. The mortality from the ven most familiar zymotic diseases was at the rate of 4.5 per 00, or 0.5 above the rate for the previous week. Whooping-cough ntinues to be the most fatal epidemic, the mortality from it being eatest in Glasgow, Dundee, and Greenock. From acute diseases the chest, 138 deaths were registered, or 27 less than in the pre- ous week. The mean temperature was 43.7°, being 3.0° above that the week immediately preceding, and 2.8° below that of the cor- sponding week of last year.

GLASGOW ROYAL INFIRMARY.

'E are glad to understand that the very strained relations which ıve existed for some time between the managers of this charity ıd the medical and surgical staff, and to which reference was made the JOURNAL for February 17th, have been replaced by a more ıciliatory spirit on the part of the lay members. Two or three ings have combined to bring this about, chief among which has ɔen the firm and united action taken by the medical staff in refer- ıce to the subject matters under dispute, and, secondly, the retire- ent from the directorate of the Infirmary of the gentleman whose well- eant, but uncalled for, interference in professional matters has led the very unfortunate state of things which has existed for some onths. It is to be hoped that the usefulness and interests of the ıarity have in no way suffered by what has taken place, and that the future, perfect harmony will exist between the managers and ıe hospital staff, and that the authority of the latter on profes- onal matters will never, for a moment, be called in question.

THE PUBLIC HEALTH (SCOTLAND) ACT.

.s notified at the time in the JOURNAL, the Glasgow Philosophical ociety last year made a remit to its Sanitary and Social Economy ection, asking the members to take into consideration the Public Iealth (Scotland) Act, as it at present stands, and to offer any sug- estions for its improvement that might seem desirable. A sub- ommittee was appointed to take up the matter, and their report has ust been issued. It deals with the subject under the two heads of he administrative and executive machinery contained in the Act, nd the subject matter of the law as there laid down. The former s regarded by the committee as exceedingly defective, as having ntirely broken down, and as in need of complete change. What his change should be, they are not prepared to say definitely; but hey seem inclined to advocate the establishment of an Imperial ocal Government Board for England and Scotland, with members rom both countries. In Scotland, there should be a sanitary inspec- or-general, who should be resident in that country, but should have a eat on the imperial board; and, if possible, he should be an eminent nedical man, who had given special attention to sanitary matters. In him would vest all central authority, and he should have much nore extensive controlling powers than the present Board of Super- ision. Further, the committee advocate the division of the whole of Scotland into health districts, irrespective of county boundaries. With regard to the subject matter of the law, the chief recommenda- ions are the establishment of some form of compulsory notification of infectious disease; the passing of more stringent regulations in connection with the milk-supply of towns; and the granting of powers to compel every district in Scotland to provide proper hos- pital accommodation. Whether Government would see its way to adopt all of these suggestions, in any new sanitary legislation for Scotland, it is impossible to say; but the report is one of consider- able value, and cannot fail to do good in drawing attention to the present defective state of the Public Health (Scotland) Act.

SCARLET FEVER.

THERE is a lull in the agitation which one or two persons got up as to the danger of scarlet fever, which recently broke out on the *Mars* training-ship, spreading to the village of Newport-on-Tay The judicious course adopted in the emergency by the medical officer, Dr. Stewart, who is also medical officer to the local authority was approved of by the latter body. At their last meeting, a report by Dr. James W. Miller of Dundee was submitted, as to the suitability of the attic of the Woodhaven Granary (situated on shore right opposite to the ship) for isolating the cases. The elaborate report furnished by Dr. Miller confirmed in every detail the excellent arrangements made by the medical officer of the ship. The most probable outcome of the agitation will be, that the parochial board of Newport will be compelled to erect an epidemic hospital for the contagious diseases which break out from time to time on the *Mars*. The individuals who have stirred in this matter, and who have sought to impugn the action of Dr. Stewart, cannot be blamed for making known the existence of scarlet fever, although they might have done so less in the form of a "scare;" but when they took to dictate the remedy in the circumstances, they signally failed, and showed an utter absence of humanity in demanding that the *Mars* Committee should take their tender-schooner out of dock and anchor her in the Firth of Tay, for the purpose of treating the cases there. The proposal to treat acute diseases in a small schooner, badly lighted and ventilated—in fact, utterly unsuited for such a purpose—and riding at anchor in a stormy firth, will not commend itself to any sensible person. Dr. Stewart's action has been fully borne out by results. In all, there have been six cases, the last one having appeared three weeks ago. The endeavour to force the *Mars* Committee to treat their contagious cases on board the schooner reminds one of the action of the Arbroath Local Authority two years ago, when they proposed that the ship which came into harbour with small-pox on board should anchor in a dangerous roadstead. It may be mentioned that the Dundee Royal Infirmary and the Epidemic Hospital authorities refused to take any of the cases. To say the least, this is strange, when it is understood that the great majority of the boys on the ship come from Dundee; and that the *Mars* ship has, by decree of the Court of Session, ranked as entitled to participate in funds left by benevolent persons for the industrial schools of Dundee.

IRELAND.

SCARLET FEVER IN LURGAN UNION.

SCARLET fever prevails in this union to a considerable extent, more particularly in the Moira and Aghalee districts. All the necessary precautions are being taken to prevent the disease from spreading; and the board of guardians, at the suggestion of the medical officers, have had a number of placards printed, with the penal clauses of the Act forbidding a "wake" to be held in the house where the disease has occurred, and ordering that no one affected with the disease shall expose himself. The Aghalee National School has been closed during the outbreak.

CASTLEBAR DISTRICT LUNATIC ASYLUM.

SEVENTY-NINE patients were admitted last year, a number above the average; while 29 were discharged, of whom 26 had recovered, and 2 relieved. None of those who recovered had been more than a year ill when admitted, and 18 of the 26 recoveries showed a history of less than three months' illness, results which show the ad-

vantages of early treatment in cases of insanity. Twenty-five deaths took place, 6 of which were due to mere senile decay, and 9 to consumption. The total expenditure amounted to £5,392, and the average number of patients being 282, the average cost per head was £19 2s. 5d.

DR. G. H. KIDD.

AT the approaching Commencements in the University of Dublin, the honorary degree of *Magister in Arte Obstetricâ* will be conferred on Dr. Kidd. This recognition, on the part of the Board of Trinity College, of the position Dr. Kidd occupies in that branch of the profession, which his skill and practice has done so much to advance, will meet with the widest approval. Dr. Kidd is Master of the Coombe Lying-in Hospital, and an ex-President of the Royal College of Surgeons in Ireland, and of the Dublin Branch.

CORK FEVER HOSPITAL.

FROM the annual report, it appears that there has been a great increase of typhus fever, which contributed half the number of admissions, and a mortality of 9.3 per cent., which was equal to the death-rate from all other causes. The type of the fever was of a very malignant character, and almost all the cases were associated with chest-complications and head-symptoms. The income was close on £2,000, and the year closed with a debt of nearly £800; but it is to be hoped that an institution which is of such great service to the citizens will be more liberally supported, the greater part of the income, viz., £1,600, being received from corporation grants. It has been found by experience that the worst cases of fever are admitted from the poorest, most densely populated, and dirtiest parts of the city, where sanitary measures are at a discount. Overcrowding, insufficient supply of pure water, deleterious food, and abuse of stimulants, are all important factors in producing disease; and, if the authorities performed their duty, they would be more anxious to promote sanitation than they have shown themselves.

BELFAST ROYAL HOSPITAL.

THE quarterly meeting of the general committee of the above charity was held in the extern department on the 26th ult. The report stated that the new departments for the eye and ear, and for diseases of women, were in active operation. Four new wards have been provided, with accommodation for ten patients; and, by a rearrangement of the house, two new beds have been added, making an addition of twelve beds to the institution. Suitable arrangements have also been made for the treatment of erysipelas patients. The demands on the Hospital are daily increasing, and more accommodation is required. The waste ground at the rear of the fever ward has been converted into a recreation ground for convalescent fever patients. Fifty-two churches have made returns of collections received, which altogether amount to £508 12s. 9d. Other churches are expected to respond to the appeal: so that it is hoped the church collection will exceed that of last year by £100. The new system of collection from the working classes promises to be a success. From the *employés* of various firms, the sum of £226 19s. 4d. has been already received by the treasurer, and it is believed the amount will be greatly augmented.

PROPOSED TESTIMONIAL TO DR. H. MACNAUGHTON JONES.

AT a large meeting of the citizens, held on the 1st instant, it was resolved to present Dr. Jones with a testimonial previously to his leaving Cork for London. An address will also be given, expressing their high appreciation of the services rendered by him to various charitable institutions in the city. Dr. Jones has held the appointment of dispensary medical officer, and has at various periods been connected with the South Charitable Infirmary, the Fever Hospital, Ophthalmic and Aural Hospital, Women and Childrens' Hospital, and the Maternity. Of some of these he was the founder, and for these and other reasons the testimonial, we have no doubt, will be largely subscribed to, and show the esteem and respect with which Dr. Jones is regarded.

HEALTH OF BELFAST.

THE monthly report furnished by Dr. Browne, medical superintendent officer of health, states that 23 cases of zymotic disease were reported by the medical officers of the subdistricts of Belfast—viz., small-pox, 4; typhus, 5; typhoid, 4; scarlet fever, 10 cases. The Registrar-General, for the four weeks ending February 24th, gave returns of 96 fatal cases of zymotic diseases which had been registered in Belfast—viz., small-pox, 3; measles, 7; scarlet fever, 37; diphtheria, 1; whooping-cough, 28; typhus fever, 4; typhoid fever, 2; simple fever, 1; and diarrhœa, 13 deaths. There were 81 deaths from phthisis, and 172 from pulmonary diseases. The average death-rate for the four weeks was 35. The deaths from scarlet fever and whooping-cough have been considerably above the average. The same applies also to the mortality from lung-diseases. To the rapid rise and fall of temperature occurring during the first three weeks of February, and to the great barometric fluctuations with excess of moisture, Dr. Browne attributes the high death-rate from pulmonary diseases.

FEVER IN LIMERICK.

DR. ROBERT BARRY, consulting sanitary officer, recently drew the attention of the Public Health Committee to an outbreak of fever which existed in Limerick, but the committee marked his communication "read," as they were of opinion that there was no disease or epidemic in the district. To this action of the committee, Dr. Barry very naturally objected and in consequence he has given some details of the epidemic of typhus fever to corroborate his former statement. It was, he says, towards the end of September that typhus became developed. From that time, its victims in Thomondgate district numbered about fifty, twenty-nine of whom were admitted to the workhouse fever hospital. On November 27th, a member of a family who were suffering from the fever, went to Bridgetown, about ten miles from Limerick, and slept with a man named Bourke, who afterwards contracted the disease, and died on December 6th. From Bourke, the disease spread through the village and many families supplied victims. Dr. Barry's letter has been referred to Dr. Gelston, the medical officer of the district in question who denied that an outbreak existed, so as to give him an opportunity of replying to it.

THE DUBLIN SANITARY ASSOCIATION.

THE annual meeting of this Association was recently held under the presidency of Mr. Jonathan Pim. The report of the executive committee showed that the Association now numbers 237 members and has a satisfactory balance to its credit. Amongst the topics referred to in the report was the Compulsory Notification of Infectious Diseases. The Association, while approving of the principle of direct notification of infectious diseases, as contained in Mr. Gray's Bill, but finding that the opposition of the medical profession would be probably a fatal obstacle, is disposed to accept Mr. Meldon's Bill—viz., that proposed by the Dublin Board—as the best compromise under the present circumstances. The decision of the Corporation to expend large sum of money, about £7,000, in building public baths and washhouses, with an estimated expenditure of £500 *per annum* for maintenance, is objected to by the committee. They are of opinion as shown by experience elsewhere, that several small buildings for these purposes, situated in proximity to the dwellings of the poor are more practically useful than a single large pretentious establishment. The report also referred to the important and satisfactory change that had been quietly effected by the Corporation of Dublin in domestic scavenging. The Corporation have now commenced to clear out the ashpits in all the districts of the city, free of cost

ther improvement which has also been introduced by the renging Committee, is that any householder, by providing a box to ain the ashes and refuse of the house, can, at a small charge have nptied daily. The adoption of the report was moved by the President ne King and Queen's College of Physicians, Dr. Moore, and seconded Mr. J. J. Digges La Touche, who forcibly illustrated the good the ociation had done in Dublin, in educating public opinion, by the mple of the Corporation. When the Association was originated, years ago, he said, the attitude of the Corporation towards sures of sanitary reform, if not actually hostile, was at all events ely passive. At the present day, it was not too much to say that Corporation of Dublin were eager and anxious for the promotion sanitary reform. Mr. William Findlater, M.P., in moving the ointment of the officers of the Association for the ensuing year, ce upon the subject of the notification of infectious diseases. He l that, in his opinion, the medical profession ought not to object e the medium of conveying the notification of such diseases to sanitary authority. Modern science was conclusive as to the nense utility of an arrangement of the kind, and in various towns England there were local acts, containing most stringent provi- is for compulsory notification, which were found to work well and sfactorily in practice. It would be desirable to have one general applicable to the whole kingdom, instead of separate and diverse s for each locality, and he would suggest to the medical profes- n that before indulging in gloomy anticipations as to the effect of posing such a duty upon them, they should make inquiry into the king of the local Acts in those districts where it had been in opera- n, and perhaps the result would lead them to modify their views in t respect. Dr. Traill, F.T.C.D., moved the following resolution:— hat this Association is of opinion that every effort should be made ecure the passing of the 'Notification of Infective Diseases Bill Ireland, as the experience in Edinburgh, and other towns where exists, proves its very great value in preventing the spread of ease." He gave a forcible example from his own experience of necessity of some such regulation to provide against very great nger to public health during the existence of epidemics. With ard to the difference of opinion as to the method of notification to adopted, Dr. Traill thought that the solution of the question uld be this—that in all cases where an epidemic broke out in poor tricts, in tenement houses, or in a dispensary district, in which a tor attended patients who had not the means of paying him, he uld be obliged to send a notification of any infectious disease, eiving therefor a moderate fee. With regard to the other class of es—those of patients who could afford to pay for medical attend- e—he believed the best method to adopt in such cases was, that doctor should notify to the occupier of the house that the disease s infectious, and apprise him that it was his duty to inform the itary authority of the fact of the case having occurred in the use, and it should then be the duty of the occupier of the house to tify the fact to the sanitary authority. The resolution was adopted.

EXHIBITION OF HYGIENIC DRESS AND DECORATION.

ARRANGEMENTS have been completed for an exhibition of hygienic ess, sanitary appliances, and household decoration, under Royal d distinguished patronage, and under the direction of the National alth Society, at Humphrey's Hall, Knightsbridge. The exhibition ll be opened on June 2nd next. A meeting in furtherance of the ject will be held at an early date at Grosvenor House, by permis- n of the Duke of Westminster. The executive committee includes ofessor Corfield; Dr. Dawson Williams; Mr. Godwin, F.R.S.; Sir Pollock, Bart.; Mr. Robson (School Board); Mr. Eassie, C.E.; . Saxon Snell, F.R.I.B.A.; Mr. Hugh Lediard; Mr. Turner, R.I.B.A.; Lady Borthwick; Lady Harberton; Mrs. Edward Neville; s. Mark Hammond; Mrs. McLaren; Miss Gladstone; and many ers—Mr. Ernest Hart being chairman. The exhibits will be ided into seven classes, and will include sanitary appliances, ven- ation, appliances for the nursery and for the sick-room, and neral objects of sanitary construction and decoration in houses d hospitals.

THE SIXTH DECENNIAL REVISION OF THE PHARMACOPŒIA OF THE UNITED STATES, AND THE PHARMACOPŒA GERMANICA, EDITIO ALTERA.

I.

THE publication of new editions of the *United States Pharmacopœia* and of the *Pharmacopœa Germanica*, towards the close of last year, cannot fail to be a matter of great interest to all connected with medicine in this country.

No copies of the issue for 1882 of the new *United States Pharmacopœia* have been sent over to Great Britain for sale, and it is only very recently that copies of a reprint, bearing the date of 1883, have been procurable.

When the fact is taken into consideration that no revision of the *British Pharmacopœia* has been made since 1867, it is evident that there is urgent need of a new edition of that volume. Notwithstanding the publication of the Addenda in 1874, many powerful drugs now in common use require official definition, and the strength of their preparations to be fixed.

Under these circumstances, it is our intention to bring before the profession, in a concise form, the more important changes in, and additions to, the pharmacopœias of the United States and of Germany, and to compare those pharmacopœias as far as possible with our own. This is likely to be the more useful, since at this time there is a very general feeling that it is desirable that there should be an equalisation of the strength of the more potent drugs, and of their preparations, throughout the world. This is shown by the fact that, at a meeting of the Materia Medica and Pharmacology Section of the International Medical Congress held in London in 1881, the following resolution was carried *nem. con.*: "This section confirms the resolutions passed at previous international medical congresses as to the utility of a universal pharmacopœia, but is of opinion that it is necessary at once to appoint a committee, consisting of two delegates from every country represented at this congress, which shall co-operate with a committee appointed by the International Pharmaceutical Congress, to prepare a compilation in which the strength of all potent drugs and other preparations is equalised." This resolution was almost identical in terms with one previously passed at a meeting of the International Pharmaceutical Congress, many members of which were present by invitation at the meeting of the Section, and took part in the discussion on this subject. The committees mentioned in the resolution were duly appointed, and are now engaged on their labours.

The existence of pharmacopœias for the United States, for Germany, and for Great Britain, of course equalises the strength of all drugs and their preparations in the respective countries, but it is only comparatively recently that this equalisation has been effected in Germany and Great Britain. As early as 1820, a national pharmacopœia for the United States was published, and superseded the various foreign and local works which had hitherto been used as authorities in different parts of the Union. Provision was made for revision of the work in 1830; and, in that year, a revised pharmacopœia was published in New York. A serious misunderstanding had, however, occurred in the election of delegates to the convention, and "the middle district" expressed its dissatisfaction by causing another revision to be published in Philadelphia in 1831. Since that time, however, decennial revisions have been regularly published; and it is the sixth, published by the authority of the national convention for revising the pharmacopœia, held at Washington in 1880, which we have now before us.

In Great Britain, it was not until 1864, that the reduction to one uniform standard of the processes and descriptions of the pharmacopœias of London, Edinburgh, and Dublin, was effected by the publication of the *British Pharmacopœia* of that year. One revision only of the work has been made. It was published in 1867, and was supplemented by the issue of the Addenda in 1874, and constitutes the existing authority. The compilation of a national pharmacopœia for Germany was made still later. In fact, it was not until 1872 that a *Pharmacopœa Germanica* superseded the many pharmacopœias up to that time in use in Germany, and was made the sole legal authority throughout the German Empire. We, however, learn from the preface of the volume that a *Pharmacopœa Germanica* was prepared by a number of pharmacists, and was published in 1867, under the direction of the North and South German Pharmaceutical Societies. This, of course, had no legal force, but it was submitted for approval to the various Governments before the consolidation of the German Empire. It was chiefly on the lines laid

down in this work, together with assistance from the *Pharmacopœa Borussica*, that the *Pharmacopœa Germanica* of 1872 was prepared. One revision of this work has been published, and it is this revision in 1882, or *editio altera*, which we have now to consider.

There is a striking difference in the constitution of the bodies of men selected to prepare the pharmacopœias of the three countries. In England, the work is done entirely under the direction of a Committee of the General Medical Council; and though that Committee was aided by the distinguished services of Professor Redwood and Mr. Warrington, in the preparation of the pharmacopœia in 1867, still pharmacists have *de jure* no place on any pharmacopœia revision committee.

In the United States, the contrast is very marked. A very large number of colleges of pharmacy sent delegates to the convention in 1880 for revising the pharmacopœia, and pharmacists actually constituted more than half of the committee for revision and publication selected by that convention.

In Germany, the work is intrusted to a commission of twelve physicians, six pharmacologists, six skilled chemists, and six pharmacists, with two army surgeons, and one military pharmacist. Thus it is seen that the interests of pharmacists are fully recognised in both Germany and the United States, and it appears so reasonable that pharmacists should officially have a voice in the compilation of the national pharmacopœia, at least in so far as the preparation of the medicaments is concerned, that we reproduce our remarks made about nine years ago (BRITISH MEDICAL JOURNAL, 1874, vol. I, p. 497) upon a paper by Mr. Umney, on the Addenda:—"Many of the objections urged by Mr. Umney, seem to indicate the necessity of giving greater prominence to the element of practical pharmacy in the Pharmacopœia Committee of the Medical Council. This has long been done in other countries, and the adoption of such a course would certainly be advantageous here; for, though it is true that the decision as to the medicines to be comprised in the pharmacopœia must always remain with those who have to prescribe their use, still questions as to the best means of preparing them for various purposes call greatly for the aid of the practical pharmacist, who, being daily occupied in such work, is enabled to bring to bear the results of his experience, so as to advantageously promote the objects of the physician. If this were properly done, we should then perhaps hear less of the complaints that officinal formulæ were inferior to other methods of preparation. The material services which Professor Redwood has already rendered in this direction, may, perhaps, not without advantage, be supplemented by the aid of other pharmacists."

Of the three pharmacopœias, the German is the only one now printed in Latin. The reasons given for the use of that language are, that medical men are accustomed to prescribe in it, and that it is everywhere understood. The German Government, has, however, sanctioned the publication of an unofficial edition, in the original German text. Considerable dissatisfaction exists in Germany that the pharmacopœia was published in Latin at all, or if it were deemed advisable to print it in that language, that an official translation into German was not made at the same time. The commission intrusted with the revision of the edition in 1872, desired the new official pharmacopœia to be printed in the original German; but by order of the Government a Latin translation was made, and was to be considered the sole legal authority. The *Pharmaceutische Centralhalle* (Neue Folge, Band III, No. 39, p. 447) in particular, expresses the prevailing discontent by asking why any Latin pharmacopœia should have been published at all, if it were found necessary to print a German translation? It points out that it is remarkable that a number of sheets of printed matter should represent the law, while the sense of the law, and possibly the meaning of the "newly coined Latin technical expressions," must be sought for in an unofficial and, as it were, private publication. The following are given as examples of the ambiguity of expression to be found in the existing pharmacopœia. In the description of Ferrum pulveratum, the following occurs:—"*Salis grammata* 0.1 *in grammatis quindecim acidi sulphurici diluti*," etc. The literal translation of *sal* into German is *salz*, but Ferrum pulveratum is not by any means a salt, in the ordinary acceptation of the term. Again, under the head of extracta, the following direction is given: "*omnes liquores agitati—evaporentur.*" The literal meaning of this may be taken to be that all solutions may be evaporated after they have been shaken up. It is hardly necessary to state that the real intention is to direct that agitation should be kept up during evaporation.

We do not venture to express any opinion as to whether a national pharmacopœia should be printed in Latin or in the vernacular tongue; but we have no hesitation in saying that, as it was decided to print the *Pharmacopœa Germanica* in Latin, the work has been admirably done; and, in spite of objections which have been made in this instance, and some of which we have quoted, the individual must be singularly devoid of intelligence who cannot understand the various descriptions of drugs and directions for processes contained in the work.

The arrangement of the matter is now practically the same in the three pharmacopœias. The various articles of the materia medica and their preparations are placed in a single continuous alphabetical list. There is no doubt that this dictionary-like form of arrangement is the most convenient plan that could be adopted. In the *British Pharmacopœia* of 1864, and in the last revision of the pharmacopœia of the United States, the matter was divided into two parts—the one containing the materia medica, and the other the preparations. This caused much inconvenience, and necessitated much delay and annoyance in reference. All this is obviated by the existing simple arrangement. In fact, the need for the very copious index in the *British Pharmacopœia* still in use is almost done away with in that book, since each article of the materia medica is followed there by a complete list of preparations.

In the *United States Pharmacopœia*, this plan is only partially carried out. The cross references under the paragraphs headed Preparations, at the end of many pharmacopœial articles, are, in the words of the preface, "meant to include only those preparations which may be considered as being forms of administration and direct derivatives of the particular drug or preparation under which they are quoted, and, at the same time, such in which the identity of the original drug or preparation has not been materially altered."

In the *Pharmacopœa Germanica*, there are no lists of preparations whatever; so that, in order to find what preparations of a certain drug are official, one is compelled to laboriously wade through the various classes of galenicals in the index.

In the *United States Pharmacopœia*, the division of the articles of the materia medica into primary and secondary lists is abolished. In fact, it is not easy to see any utility in the publication of a mere list of drugs of secondary importance. The absence of any mention of preparations of these destroyed any possible use it could have had. A much more useful secondary list would be one published from time to time during the intervals of revision, indicating the strength of preparations of drugs still on trial or of doubtful efficacy. Thus in this country, such galenicals as tincture of jaborandi, liquid extract of guarana, tincture of gelsemium, tincture of actæa racemosa, etc., are frequently prescribed; but no authoritative formulæ of any of these exists in this country. We have seen specimens of tincture of jaborandi in use varying from two ounces and a half to ten ounces of the leaves to the pint, and tincture of gelsemium varying from two drachms and a half to four or five drachms of the root to the pint. These drugs may be admitted to be of undoubted value; still, if a prescriber wish to obtain some degree of uniformity in the results of their use, he is reduced to the necessity of prescribing a preparation of a particular maker, or is compelled to undergo the additional labour of stating on his prescription the strength which he wishes the preparation to have.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of this Society was held on Thursday, March 1st, Mr. John Marshall, F.R.S., President, took the chair at 8 P.M. and declared the ballot open for one hour, nominating Dr. C. Carter and Mr. George Eastes as scrutineers.

The report of the President and Council, which was read by the Secretary, Mr. BERKELEY HILL, announced to the meeting the continued prosperity of the Society, and the progressive increase in the number of its Fellows.

The number of deaths among them had been nineteen, which was about the average of the last twelve years, and among these were two of the Honorary Fellows, Mr. Charles Darwin and Dr. John Draper.

The new elections had been twenty-six (twenty-one resident and five non-resident.) A few minor changes among the Fellows as to non-residency, etc., were enumerated, and the number of subscriptions was stated to be 301 against 292 in the last report; and the total number of members of the Society, resident, non-resident, and honorary, was 704.

The items of receipt and expenditure were in most cases much the same as in recent years, a slight increase in the latter being observable in the library, stationery, and repairs accounts. There had been

o a large extraordinary expenditure on repairs of the exterior of ; house, which the ground landlord had required to be done, and ich, with an expenditure on the seats in the meeting-room and ıer decorative improvements, amounting in all to £250, had been frayed, with the exception of a small balance, out of the current ceipts of the last two years. It was stated that these alterations, ich to the Society's benefit, had been carried out with great judg- ınt and economy under the careful supervision of the retiring sec- ary, Dr. Reginald Thompson. The payment of the sum of fifty ineas to the Harvey Tercentenary Memorial, voted at previous niversary meetings, having been shown to be illegal, the amount d, owing specially to the exertions of the treasurer, Mr. Cooper rster, been made up by a subscription among forty of the Fellows. The report also alluded to the time having arrived for a second ard of the Marshall Hall Memorial Prize, and stated that the Council ommended to the Society its presentation to Dr. David Ferrier, his investigations into the physiology and pathology of the ner- us system.

A change in the character of the printed proceedings had been ıde by the introduction of reports of the discussion at the meet- gs, and, to facilitate these discussions, abstracts of the papers had en printed for distribution before each meeting.

The report of the librarian stated the number of additions to the rary (467 works), and, referred to the recent triennial inspection the library by the committee, when the library was found in ex- lent condition and perfect working order. The report also gave full tails as to the number of volumes in the library (33,500), the num- r of books taken out, of daily visitors, etc. The adoption of the ort was moved by Dr, Julius Althaus, who congratulated the ciety on its prosperous condition, and praised in eloquent terms, d with references to the contemporary condition of scientific re- arch on the nervous system on the Continent, the judicious award the Marshall Hall Prize to Dr. Ferrier, whose researches ren- red him so worthy a recipient of it. The motion was seconded Mr. Pickering Pick, and carried unanimously.

The President then called upon Dr. David Ferrier to come for- ard, and, addressing to him a few complimentary words upon the ounds on which the award had been made to him, presented him th the diploma recording his selection as the second Marshall all Prizeman, and also with a cheque representing the amount of e prize (£85).

Dr. Ferrier, on receiving the diploma, made a reply, thanking e President and Society for the high honour they had conferred on him in their selection of him as a recipient of the prize.

The President then addressed the meeting.

The President, in commencing his address, introduced at once the bject of the losses the Society had sustained among its Fellows ring the past year, which, he said, were so numerous and im- rtant, that he must defer the task of considering more general estions relating to the interests of the Society, and the progress medicine and surgery, to a future opportunity. The president ve a short classified enumeration of the deceased Fellows, of om, he said, nine were non-resident, including three—Drs. F. E. Hood, F. R. Hogg, and Charles Morehead, who had served with e army in India; three others—Drs. Robert Elliot (of Carlisle), chard Cross (of Scarborough), and William McEwen (of Ches- r), who had been engaged in practice in large provincial towns; d three—Drs. W. W. Johnston, Joseph Williams, and George dd, who had retired from metropolitan practice to reside in the untry. One deceased physician, Sir James Alderson, though he d ceased to belong to the Society, was connected with it for many ars, partly as a non-resident, but chiefly as a resident Fellow, and d, in 1865-6, been a President of the Society. There were eight ceased resident Fellows—Dr. Robert W. Lyell, Dr. Alex. Silver, r. J. T. Clover, Dr. Robert Taylor, Mr. George Critchett, Dr. acock, and Sir Thomas Watson; and there were two honorary llows—Dr. John William Draper (New York), and Mr. Charles rwin.

The President went into full details of the lives of the deceased, king the individuals in each class in the order of the duration of eir fellowship, beginning with the youngest, which, he said, he und to correspond with their ages, influence, and position in the ofession. For such statements, he added, as were not based on s acquaintance with the deceased, or on circumstances regarding em which had come within his own cognisance, he was much in- bted to obituaries which had already appeared in the public urnals. In his notice of Dr. Budd, the President referred to the teresting fact of many of his brothers (seven out of nine) ving become members of the medical profession, to his being third wrangler at Cambridge, and to his successive connection with the Middlesex Hospital, the *Dreadnought* hospital-ship, and King's College; to the offices he held at the College of Physicians, and the production of his standard works on diseases of the liver and stomach.

In his notice of Mr. Clover, he went very fully into the points of the amiability and unselfishness of his character, his patience and cheerful resignation under the wearing effects of chronic pulmonary disease, and his large experience and wonderful ability in the administration of anæsthetics, so well illustrated in his valuable article on the subject in Quain's *Dictionary of Medicine*.

Full notices of the life-incidents, characters, and works of Mr. George Critchett, Dr. T. B. Peacock and Sir Thomas Watson, concluded the obituary portion of the address, in which the speaker largely dwelt upon Mr. Critchett's excellence as a teacher, and his acknowledged dexterity as an operator, his promptness in consultation, and considerate kindness to his patients. He also spoke of Dr. Peacock's predilection for pathological investigations, and his gradual concentration of them on the malformations and diseases of the heart, the presentation of his unrivalled collection of examples of these diseases to the Hunterian Museum; his strongly marked individuality, precision, conscientiousness, and simplicity of character; and his fondness for foreign travel and frequent journeys abroad for the recuperation of his energies. He next referred to the early life of Sir Thomas Watson, the "Nestor of English medicine," who had died at the patriarchal age of 90 years and 9 months; to his connection as physician and lecturer with the Middlesex and King's College Hospitals, and its outcome in the publication of his celebrated lectures, the estimate of which has been in our time almost unique, the descriptions of disease in them being so full and clear, as to cause him to be compared with Sydenham, and their scholarly style having gained him the appellation of the Cicero of English medical literature; to his professional eminence, moral worth, sagacity integrity, and steady adhesion to those high principles of duty which made him so fit to advise on all ethical questions relating to our profession, entitling him justly to the name of the "greatest English physician of the present century."

The President then gave biographies of the two honorary Fellows, Dr. James William Draper the physicist, chemist, and physiologist, and Charles Darwin, the great naturalist, with notices of their works, a discussion of the question of the important influence they had had, especially the latter, on the science of the day; and then summed up his address with reflection on the lessons we might derive from the histories of such careers of our deceased Fellows in the following words. "The thought has often occurred to me, and no doubt to many here besides, what an amount of accumulated experience and wisdom is blotted out at the death of each master of the crafts of medicine and surgery; and, if we reflect on the number of gifted, learned, and industrious men who have passed from our ranks during the last twelve months, we may well feel dismay that so much slowly acquired individual knowledge has been here extinguished, and so much personal power has thus died out. But, fortunately, owing to the liberal intercommunication of ideas which distinguishes the real from the false disciples of Æsculapius—amongst the instruments of which are societies or brotherhoods like ours, such knowledge and power are handed on from period to period, and the example of one generation is emulated by its successors. If we study the record of the lives of our deceased Fellows which I have put before you, we find that they possess one common characteristic—viz., devotion to work. Whether they were born to affluence, or entered upon life supported by moderate or scanty resources—whether their early education was of the highest order, or of humbler pretensions, provided for them or secured with difficulty—at whatever medical school they were trained—whatever professional titles they acquired—whatever the branch of practice to which they had recourse—whether in London, the provinces, or abroad—whether they had the early support of powerful friends, or struggled upward by themselves—whether they were shaped by circumstances, or compelled circumstances to bend to them—whether they aimed solely at professional eminence, or sought relief to their redundant energy in the duties of citizens besides—whether they were rewarded by the rich or the poor, by the public, the profession, the Government, or the Crown—and, lastly, whether their lives were so prolonged as to secure the full fruition of their aims, or were cut so short that they saw but visions of future success—it is apparent, I say, that all were devoted to their work."

After a few words relative to the special interests of the Society in relation to the deceased Fellows, the President concluded with

these words. "It has frequently been remarked, both in prose and verse, that the occasional contemplation of the lives and works of great and good men may help to encourage us to corresponding efforts; and perhaps I may venture to hope that the picture which I have endeavoured to present to you in this passing hour, of the deeds of our recently deceased associates, may serve to deepen our convictions of the value and needs of our noble profession—may nerve such of us as are able to fresh exertions, and concurrently aid in advancing the interests and increasing the prosperity of this Society."

A vote of thanks to the President for his address was moved by Mr. SPENCER WELLS, seconded by Mr. H. W. PAGE; and the motion, having been put to the meeting by the Treasurer, Mr. COOPER FORSTER, was carried with acclamation.

Thanks were also voted, on the motion of Mr. THOMAS SMITH, seconded by Dr. MACFARLANE (of Kilmarnock), and carried unanimously, to the retiring Vice-Presidents and other members of Council; and were also moved by Mr. CHRISTOPHER HEATH, seconded by Mr. R. W. PARKER, and carried with applause, to the retiring Secretary, Dr. Reginald Thompson, and the retiring Librarian, Dr. Edward H. Sieveking, for their zealous and valuable services; the mover especially referring to the rather severe additions to the usual secretarial duties which had fallen to the lot of the retiring Secretary, who, during the three years of his holding office, had had to superintend repairs, alterations, and improvements, external and internal, of the Society's premises, in which his valuable knowledge and judgment in these matters had been of the utmost service to the Society.

During the course of the meeting, the PRESIDENT announced the result of the ballot for officers and council for 1883-84 as follows. *President:* John Marshall, F.R.S. *Vice-Presidents:* *John Russell Reynolds, M.D., F.R.S.; *Reginald Edward Thompson, M.D.; *William Scovell Savory, F.R.S.; *Richard Barwell. *Treasurers:* Charles Bland Radcliffe, M.D.; John Cooper Forster. *Secretaries:* *Reginald Southey, M.D.; M. Berkeley Hill. *Librarians:* *Charles Hilton Fagge, M.D.; John Whitaker Hulke, F.R.S. *Other Members of Council:* *George Fielding Blandford, M.D.; *Dyce Duckworth, M.D.; *Samuel Jones Gee, M.D.; *Frederick William Pavy, M.D., F.R.S.; James E. Pollock, M.D.; George Cowell; Henry Power; Howard Marsh; Septimus W. Sibley; *William Spencer Watson.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

PARLIAMENTARY BILLS COMMITTEE.

NOTICE OF MEETING.

A MEETING of the Parliamentary Bills Committee will be held at the office of the Association, 161A, Strand, (opposite Newcastle Street) London, on Wednesday, the 14th instant, at three o'clock in the afternoon. Business:—To consider the following Bills now n Parliament: Notification of Infectious Diseases; Scotch Police Bill; Pharmaceutical Society's Bill.

London, March 7th, 1883. FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute inform ation on these subjects. There are two cards on Diphtheria, on containing clinical, the other etiological inquiries, together with a explanatory memorandum. One of these cards is intended to serv as a guide to the systematic examination of a house or district fo sanitary purposes. There are also two sets of inquiries concernin Syphilis, one for acquired, the other for inherited, disease. Thes are accompanied by an explanatory memorandum giving informatio concerning the most recently observed symptoms of the inherite disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

* Those gentlemen to whose name an asterisk (*) is prefixed, were not on the Council, or did not fill the same office last year.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meetin of the District will be held on Friday, March 9th, at 8.30 P.M. Mr. Watso Cheyne will read a paper on Tubercle: its Etiology and Modern History. Micr scopical Preparations will be shown, illustrating the results of the most recer investigations. Mr. Ernest Hart will preside.—G. W. POTTER, M.D., Honorar Secretary, 12, Grosvenor Road.—February 27th, 1883.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held the Griffin Hotel, Kingston-on-Thames, on Thursday, March 15th, at six o'cloc Members willing to bring forward any subject, are requested to communica with the Honorary Secretary —EDWD. L. FENN, M.D.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A meetin of the above Districts will be held at the Grand Hotel, Brighton, on Wedne day, March 14th, at 3.30 P.M.; Willoughby Furner, Esq., of Brighton, in t chair. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. The following pape have been promised. 1. Dr. Godson: Retroversion of the Gravid Uterus. Dr. Hollis: A Case of Athetosis, with Remarks thereon (patient shown). 3. M Butlin: On the Pathology and Treatment of Nasal Polypi. 4. Mr. Blaker: Case of Battey's Operation; *b.* A Case of Fragilitas Ossium (patient shown). member will introduce the question of the formation of a Medical Provide Society.—G. B. COLLET, 5, The Steyne, Worthing, T. JENNER VERRALL, Western Road, Brighton, Honorary Secretaries.—March 5th, 1883.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of t above District will be held at the Royal Hotel, Deal, on March 22nd, at 3 P.M Dr. Davey of Walmer in the chair, who very kindly invites members to lunche at his house from 1 to 2.30 P.M. N.B.—The Walmer Station is most convenie for those proposing to lunch. Dinner at the Royal Hotel, Deal, at 5 P.M. A d cussion on Acute Pneumonia (first card of Collective Investigation Committe will be led by Mr. Raven, Dr. Parsons, and others. The President will sh cases of Extroversion of Bladder and Spina Bifida. All published cards the Collective Investigation Committee can be had on application to T. WHIT HEAD REID, Honorary District Secretary, 34, St. George's Place, Canterbury. March 1st, 1883.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be he in the Board Room of the County Infirmary, Armagh, on Thursday, March 15t at 12.30 P.M. Business: Dr. Palmer (Armagh) will read notes of a case of Ar ficial Anus after Operation for Strangulated Hernia; and will show the patie The President will read notes of a case of Strangulated Hernia of fourteen da duration successfully operated on. Mr. Fagan will read a paper on the Natu Symptoms, and Treatment of Hæmarthrosis of the Knee, with reports of cas Dr. Bernard (Londonderry) will exhibit a Patient, the subject of an Abdomi Tumour. Dr. J. Walton Browne (Belfast) will give a short account of a case Tetanus, in which he trephined, and will exhibit the recent parts; he will a give details of a case of Ligature of the Third Part of the Subclavian, and hibit the recent parts. Dr. Workman (Belfast) will exhibit the Bacillus Tub culosis. The President will read notes of three cases of Chorea; also notes o case of Puerperal Convulsions.—ALEX. DEMPSEY, M.D., Honorary Secreta Clifton Street, Belfast.

BORDER COUNTIES BRANCH: SPRING MEETING.

THE opening meeting of the Border Counties Branch was held the Great Central Hotel, Carlisle, on Thursday, February 22nd. T President, Dr. KNIGHT, took the chair at 6 P.M. Twenty-five me bers and visitors were present.

New Members.—Dr. Macdonald of Kirkoswald, and Dr. Alexand of Selkirk, were elected members of the Branch.

The late Dr. R. Elliot.—It was moved by Dr. KNIGHT, seconded by Dr. TIFFIN,

"That the members of the Border Counties Branch desire to press their sense of the great loss which they and the professi generally have sustained by the removal of Dr. Robert Elliot Carlisle, who took the greatest interest in the formation of t Branch, and acted as president during one of the early years of existence. They also beg to convey their sympathy to the fam under their mournful bereavement."

President-Elect.—It was unanimously resolved that Dr. Macdoug be appointed President-Elect.

Representatives on the General Council.—Drs. Barnes, Ledia,

bean, Maclaren, Russell, and Tiffin, were chosen to represent the ch in the General Council of the Association.

epresentation of Branches in the Committee of Council.—Dr. IN proposed, and Dr. BARNES seconded, the following resolus, which were carried unanimously.

"That this Branch, whilst warmly acknowledging the valuable ices of the Committee of Council as hitherto appointed, is ngly of opinion that a more efficient representation of the nches in the executive government of the British Medical Asso- ion is calculated to prove advantageous in the future. That this nch is of opinion that the meetings of the Committee of Council ld not be held exclusively in London."

ases and Specimens were exhibited by Drs. Barnes, Russell, laren, and Lediard.

apers.—The following papers were read.

A Note on Tracheotomy, by Dr. J. A. Macdougall.

Notes of a Case of Pelvic Abscess, by Dr. Muir.

The Treatment of Enlarged Glands in the Neck, by Dr. Lediard.

Four Years' Treatment of Insanity at Garlands, by Dr. Camp- (taken as read, owing to want of time).

upper.—The members and visitors had supper at 9 P.M.; Dr. ght in the chair, Dr. Macdougall in the vice-chair. Subsequently, Highet introduced a discussion "On the Club System of Pay- t in its Relation to Medical Men," which was listened to with t interest, and participated in by many of the members.

CORRESPONDENCE.

A MEDICAL PROVIDENT SOCIETY.

IR,—Please add my name to those who are anxious to see a lical benefit society established. A few years ago, I brought subject to your notice, and offered to bear the preliminary enses; but, to my surprise and disappointment, but few of the fession appeared to take any interest in the matter.—Yours truly,

H. ERNEST TRESTRAIL, M.R.C.P., F.R.C.S.

Valmer House, Aldershot, March 3rd, 1883.

IR,—Will you be good enough to add my name to the list of erents to the proposed medical benefit society? It has been a tter of considerable surprise to me, that something of a similar ure has never been successfully organised before. The proposed lical benefit society meets a want which is not provided for by assurance company or medical charity; and I feel certain that arge number of the younger members of the profession will dly welcome its establishment, and contribute towards its suc- s.—Yours very faithfully,

FREDERICK S. PALMER, M.D., L.R.C.P.Lond.

Compton Lodge, East Sheen, S.W., March 5th, 1883.

SIR,—Please add my name to the list of adherents to the medical nefit society. I have long thought that men who have to keep up an pearance, as we have, and cannot, therefore, put by as much as y could wish, ought to have some provident society to which y could belong. I have long been on the look-out for such a iety.—Yours faithfully, F. C. GRESHAM, M.D., etc.

Bromley Common, Kent, March 6th, 1883.

FIFTH LIST.

RTHER letters of adhesion have been received from the following ntlemen:—

Mr. Arthur Hy. Boissier, Pocklington, Yorkshire; Mr. Charles acpoole, Salisbury; Mr. J. E. Brooks, Ludlow, Salop; Dr. W. L. nter, Pudsey, Leeds; Mr. George F. Edwardes, Blackwell Hos- al, near Alfreton, Derbyshire; Mr. C. W. Belfield, Bristol; Mr. R. Herbertson, New Cumnock, Ayrshire,; Mr. D. MacLeod, Hawick; r. F. A. Hallsworth, Atherstone, Warwick; Mr. I. J. Baker, Hurst ll, near Bilston; Mr. H. J. Knight, Brooklands, Rotherham; Mr. . Ingram Keir, Melksham; Dr. J. Alexander, Paignton; Mr. orge Parsons, Hawkhead, Ambleside; Mr. Hugh P. J. Price, Nar- rth, Pembroke; Mr. James G. Macaskie, Belford; Mr. F. J. Good, Neot's; Mr. W. H. Twort, Camberley; Dr. P. B. Smith, Aber- en; and Dr. W. Culver James, Kensington.

*** The list is rapidly gaining in numbers; but several hundred hesions should, we think, be enrolled as a preliminary to practical tion, and we shall be glad to continue to receive names.

THE LONDON WATER-SUPPLY.

SIR,—I do not propose discussing my friend Dr. Percy Frankland's paper on London Water, published in the JOURNAL of March 3rd. It is enough to say that with much I agree, and that with much I disagree.

I entirely demur, however, to its being supposed that the official returns made to the Registrar-General on the quality of the London water in any respect fairly represent the quality of the month's supply. It is absurd to suppose that the water supplied by a company during one entire month can be judged from the analysis of a single sample. It reminds me of the story told by Hierocles, of a man who, having a house to sell, carried a brick about in his pocket as a specimen.

But I wish, as a medical man, to carry Dr. Percy Frankland's facts one step further than he has done as a pure chemist. And it is this medical aspect of the question (if I mistake not) which will interest your readers. I will accept his table of organic impurity in the Thames water as supplied to London; but against each year I have placed the death-rate of the metropolis (which he has not done), and the results, I venture to think, are most instructive.

Year.	Proportion of Organic Impurity in Thames Water.	Death-rate per 1,000 of the Population.
1868	1,000	23.5
1869	1,016	24.6
1870	795	24.1
1871	928	24.6
1872	1,243	21.5
1873	917	22.5
1874	933	22.6
1875	1,030	23.8
1876	903	22.2
1877	907	21.9
1878	1,056	23.5
1879	1,175	22.6
1880	1,263	21.7
1881	1,007	21.2

"This organic impurity," says Dr. Percy Frankland, "is a very serious matter." Will he, then, explain how it is that, in the years 1872 and 1880, when the organic impurity in the Thames is reported to have been exceptionally high, that the death-rates were exceptionally low; and that, in the year 1870, when the organic impurity was said to be exceptionally low, that the death-rate was exceptionally high?

When Dr. Percy Frankland has explained these coincidences satisfactorily, I shall have other difficulties of a similar kind (and, let me add, far more remarkable) for him to meet before he can consider his conclusions proved.—Your faithful servant,

C. MEYMOTT TIDY, M.B., Professor of Chemistry and of Forensic Medicine at the London Hospital.

3, Mandeville Place, Manchester Square, W.

STUDENTS' RESIDENCES.

SIR,—In a reference to the London Hospital Medical School in your last number, it is stated that, "with the exception of the College at St. Bartholomew's Hospital, and University Hall in connection with University College, there are no residences provided for medical students in London." Will you allow me to add that this College has, since its foundation, provided a certain number of rooms for its students, as well as a dining-hall and a luncheon-room? Twenty-eight students are now living in the College, under the supervision of the tutor.—I am, sir, yours very faithfully,

JOHN CURNOW,

Dean of the Medical Faculty of King's College.

King's College, February 27th, 1883.

DEATHS FROM ANÆSTHETICS.

SIR,—I do not know how we are to arrive at any true estimate of the mortality from anæsthetics, except by such a careful record of their occurrence as is given by Mr. Rogers Williams in your last issue. I have for some years published a yearly list of those accidents I have been able to hear of, but many occur unreported. Surely this should be part of the regular work of the surgical registrars of our large hospitals; and I would suggest that you, sir, should send to the registrars a form to be filled up every six months with some such questions as, "How many deaths have occurred from anæsthetics during the last six months, and from what anæsthetics." leaving a space for noting any particulars. I think, in estimating the mortality from anæsthetics, cases like that of No. 2 in Mr. Williams's list, where the patient was almost moribund, also those numerous ones where the principal agent in the fatal result isth

presence of foreign matter in the air-passages, should be clearly distinguished from those far too common cases when a healthy man goes to a surgeon to have a dislocated joint reduced, or a finger amputated, and dies under the fatal influence of "just a whiff of chloroform." With regard to the statistics of deaths from ether, I think Mr. Williams should give further evidence for his very high estimate of one in 1,050. I have myself given ether about 1,300 times without a death, and I am sure I could collect from my surgical friends, in Leeds alone, statistics of some 8,000 administrations during the past ten years, without a single fatality. The most complete collection of statistics on this point is to be found in the newly published American *Cyclopædia of Surgery*, under the article "Anæsthetics." It is remarkable how different is the experience of military surgeons with regard to the fatality of chloroform from that of our hospitals. During the American war, chloroform was given 80,000 times with but seven deaths. Dr. Richardson calculated from the statistics of London hospitals 35,000 cases with eleven deaths.—I am, etc., ERNEST H. JACOB, M.D.

Leeds, February 27th.

SIR,—In the list of chloroform deaths arranged by Dr. Jacob, of Leeds, for the BRITISH MEDICAL JOURNAL there are two placed to the credit of Cumberland *Infirmary*. One of these was, as stated by Dr. Jacob, due to glottis-spasm, and cannot be rightly reckoned as a death from chloroform. The other did not occur in the *Infirmary*, but in Carlisle *Dispensary*. May I beg of your kindness the insertion of this note, or the correction of this error of Dr. Jacob's?—I remain, sir, yours very obediently, JAMES L. WATERS,

House Surgeon, Cumberland Infirmary, Carlisle.

February 28th, 1883.

THE TREATMENT OF RHEUMATISM.

SIR,—Until the appearance of my little paper, claiming to have established a new departure in the cure of arthritic disease, I had not an idea that, under the sombre garb of the ordinary medical practitioner, there existed such a plethora of benevolence and charitable feeling, or that so many of the members of the profession, out of their redundant stock of information, were so willing, unasked, to supplement the deficiency of those persons who had the temerity to publish in the medical press a report of successful cases treated in a novel manner. I confess to my disillusion; I fear that I shall never be able to return adequate thanks to those gentlemen, your correspondents, who have, with so much pains and such evident proofs of research among musty and forgotten records, sufficiently convinced me that blisters have been "ever since the world began," and that I cannot claim, by a new departure, to be the originator of the cantharidian plaster cure.

Out of the crowd of self-elected guardians of priority, one has been especially prominent, *à propos* of my disputed claim, in vindicating his ideas of men and manners, in announcing truisms in aphoristic style, approving and condemning, in dogmatic language; has erected numbers of wooden Saladins, which he has whacked to his satisfaction; and, after tilting at any and every one who ventured to hold a different opinion from himself, especially upon the local origin and topical cure of disease, apart from polypharmacy, has ridden off on his Rosinante, quite satisfied that he has not left on the field an enemy unvanquished. But this style of writing is not argument, it is mere declamation. You cannot reason with one whose mind is not capable of recognising the initial fact you propose for consideration, nor with those who, with university titles after their names, cannot, or do not, distinguish the difference that exists between the plan of treatment of arthritic ailments, which limits itself to the application of counterirritation to the cardiac region alone, and explains its *modus operandi* by its influence upon the innervation of the heart, and that regards acute rheumatism or endocarditis of neurotic origin, and that class which makes use of promiscuous vesication to the joints, the muscles, and other seats of pain, and that calls to its aid any and every form of medication suggested by fashion or false pathology. I confess that I courted criticism of my paper, but I have been disappointed in the manner in which it has been attempted, I have been treated to any amount of smart writing; but *cui bono?* The fact remains that I and others have cured an increasing number of cases of acute rheumatism, safely, expeditiously, and permanently, by this simple remedy without medicine, and I shall continue to claim for myself the merit of originating the plan. When my original paper was published in the *Dublin Medical Journal*, I forwarded a reprint to some of the leading members of the profession, whose replies contrast favourably with those correspondents to whom I refer. From among a number of complimentary letters, may I ask the favour of you publishing one from the Nestor of the profession, now, alas! no more; one whose nobility of soul soared above all paltry personal feelings, and did not permit my free criticism of his teaching and his pathology to influence his judgment or his invariable courtesy. I send a copy of the original.—I am, etc., ALEXANDER HARKIN.

"16, Henrietta Street, Cavendish Square, W.,

"November 4th, 1881.

"DEAR SIR,—Accept my best thanks for having sent me your very interesting and important pamphlet on the *Pathology and Treatment of Acute Rheumatism*. I wish I could have had the advantage of reading it while I was still in active practice as a physician. You probably are not aware that I have long retired from practice by reason of my great age (I am many weeks gone in my ninetieth year). I am not the less indebted to you for your kind attention.—I am, dear sir, faithfully yours,

"THOMAS WATSON."

SPECIAL CORRESPONDENCE.

ABERDEEN.

Report of Medical Officer of Health—Typhus and Whooping-cough Epidemics, their Lessons—Increase of the Teaching Power—Operative Surgery—Science Lectures.

THE monthly report by Dr. Simpson, medical officer of health, states that during the month of January the death-rate in Aberdeen was equal to 28.01 per 1,000. The typhus epidemic has practically come to an end, as, during the period of one month, only one case has occurred. As to those who suffered from the epidemic, with the exception of a few cleanly people who had unfortunately come into contact with those affected, the rest were living in a state of filth and violating all the ordinary rules of health. The lesson to be drawn from the experience acquired, is that a disease like typhus fever, even although it be most contagious, can be got rid of if proper measures be taken at the outbreak of the epidemic. There has also been an epidemic of whooping-cough, and it is a most remarkable fact that this disease caused more deaths in one month than the whole epidemic of typhus. This is a fact of startling interest, and shows that this disease is most dangerous to life, and that the only safety is to keep children away from those suffering from this infectious disease.

As was noticed in this JOURNAL some time ago, the medical faculty resolved to recognise special lecturers on special departments of medical science, *e.g.*, in hygiene, insanity, diseases of the ear and larynx, etc. This proposal has been approved of by the Senatus and already applications have been received for recognition from several of the younger practitioners in the town. We hope that, ere the summer session begins, these classes will be in full operation. The lecturers will be provided with rooms in Marischal College, as far as is possible. We are also glad to learn that Professor Alexander Ogston has resolved to establish a class of Operative Surgery during the ensuing summer session. This will prove a great addition to the teaching power of this medical school. Thus, with the other practical classes already in operation, Aberdeen will be as well equipped with lecturers on all departments of medicine as any other medical school in the country.

On Saturday evening, Professor Struthers gave his third lecture on "The Relation of Man to the Higher Animals." The lecture was mainly devoted to a comparison of the chest and backbone of man and the man-like apes. The human sternum is an adaptation to the erect, or nearly erect, posture of man and the anthropoid apes. The bilateral condition, which occurs in the orang, is often found as a variation in man. The greater length of the spinous processes of the cervical vertebræ, in the gorilla, is an adaptation to the great muscular development of that part in this animal. The variation in the lumbar vertebræ is more apparent than real. Variations occur in man, giving thirteen pairs of ribs; and the odd one may be in the neck, or on the first lumbar vertebra, as in the gorilla. The importance of these and other variations in the number of vertebræ, in relation to the hypothesis of Mr. Darwin, was pointed out. Rudimentary vertebræ occur in the neck of the whale, although the typical number, seven, is retained. These vertebræ exist in a reduced, and in some whales, in an entirely immovable condition, *e.g.*, the great Greenland whale, even in the young condition. These vertebræ though they are immovable, pass through the same process of development as the cervical vertebræ do in species in which the vertebræ are large and movable.

CAIRO.

M our Cairo correspondent's letter, we take the following ex-
:s.

ıe Sanitary Board of Cairo is said to be somewhat defective in its utive power, and it is much feared that its influence will not re for its proposals that consideration from the Government ·h would have been accorded to a more powerful and better nised institution. One of the English army surgeons has re-ly been added to its members, and it is thought that it might qually advantageous under certain circumstances for the Army ical Board to have a civil surgeon for a member. The value of rienced local advice in the treatment of enteric cases, diarrhœa, ntery, and liver-complaints, so common in this country, cannot oo highly extolled. Egyptian milk, which is never remarkable ts quality, and is too apt to be curdy and abounds in casein, which ıjurious everywhere in gastro-enteric affections, is strongly con-ned. The acid state of the secretions, in warm climates, in these ases, acts by coagulating the albumen, and often causes much ation, independently of the fermentative changes which also injuriously. Native experience expresses a similar objection ggs.

r. Rosenberg, who has been for some years medical officer to the ish Hospital at Constantinople, has been attached as doctor to the lan staff of English officers, a number of whom had been passed ugh a medical examination by Dr. Grant Bey.

eneral Sir Evelyn Wood has addressed an official letter to Dr. nt Bey, asking him if he would be willing to become a medical ndant of the English officers attached to the Egyptian army, and vhat conditions.

case of sickness in the army at Cairo lasting for six weeks will, said, pass through the hands of two, if not three army doctors. ; is considered to be neither fair to the doctors nor to the patient, nothing it is said, is more annoying to a patient than to have his tor visiting him with a sword dangling at his side.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, March 2nd.

Health of the Troops in Egypt.—Lord H. LENNOX asked what was condition of the troops in Egypt.—The CHANCELLOR of the CHEQUER said that the mortality among the troops in Egypt was dily decreasing.—In answer to Sir H. HOLLAND, the MARQUIS HARTINGTON said that a committee had been appointed to in-:e into the alleged deficiencies in the medical department in rpt, and their report would be in the hands of hon. members ore long.

Monday, March 5th.

Army Medical Department.—Sir H. FLETCHER asked the Secretary State for War whether the Departmental Committee appointed to uire into certain matters connected with the Army Medical l Transport Departments during the late Egyptian campaign had de their report; and, if so, whether the report would be laid upon table of the House.—The MARQUIS of HARTINGTON: The com-:tee have not reported yet; but I understand from the chairman, rd Morley, that the report will probably be made within a week two. When I receive the report, I will consider the question of presentation to Parliament; but I do not apprehend that there l be anything to prevent its being laid on the table. I may add .t the labours of the committee have been very arduous, and the dence is voluminous.

The Ventilation of the Metropolitan Railway.—In answer to ques-ns from Mr. BUXTON and Lord A. PERCY, Sir J. M'GAREL-HOGG d that the Metropolitan Board of Works had opposed the Bill ler which the District Railway Company was erecting its hideous ıtilators on the Embankment, both in the Lords and Commons, without success; and it was powerless in the matter. The com-y had not paid a farthing for the space it had taken out of the olic gardens and the roadway; and he was informed that it pos-sed lands which would have been available, but which it had sold building purposes.—In answer to another question, Mr. CHAM-RLAIN said he believed the Board of Trade had no powers.

Metropolitan Sanitary Improvements.—The Metropolitan Board Works asks for Parliamentary powers this session only in connec-n with bridges, streets, and the dwellings of the labouring classes. new powers are applied for in connection with sewers, on the construction of which very large sums have been expended during the last year or two. A six-foot barrel sewer from Lewisham to Deptford is now in course of completion, as well as a sewer of similar dimensions lying at a very low level in the Borough. With these, the Metropolitan main drainage system will be almost complete. The Board has been considerably impeded in making street improvements by two of the sections of the Streets Improvements Act of 1877. In its last published report, the Board said that it has been unable to proceed with street improvements, because it is forbidden to destroy house property "until it has proved to the satisfaction of the Secretary of State that sufficient accommodation in suitable dwellings has been provided elsewhere upon certain lands referred to in the Act, or upon such other lands as may be approved by the Secretary of State, for the same number of persons. The Board has explained on many occasions how impracticable this requirement is when applied to street improvements in some of the central parts of London, as, for instance, the authorised new streets from Tottenham Court Road to Charing Cross, and from Oxford Street to Piccadilly Circus. The making of these new streets will necessitate the clearing away of hundreds of houses occupied wholly or partially by persons of the labouring class; and, considering how densely populated is the surrounding neighbourhood, it may be said to be almost an impossibility to provide habitations in the same locality for the persons displaced." The Board went on to remark on the cheap house accommodation which is to be had in the suburbs, and the easy means of access by workmen's trains; expressing at the same time its determination to carry the whole question before Parliament. In pursuance of this resolution, it is now promoting a Bill to amend, alter, or repeal the thirty-second and thirty-third sections of the Act, and to confer upon the Board further powers of dealing with the dwellings of the labouring classes. Should this proposal become law, the first results will be the making of a new street from Tottenham Court Road to Charing Cross, and the widening of Gray's Inn Road—improvements which the Board has long had in contemplation, but which it has been prevented from carrying into effect in consequence of the disabling provisions of the Streets Improvements Act. Meantime, the Board is going to Parliament with a Bill proposing street improvements of a less sweeping nature. Its schemes include new streets from the Holborn Town Hall to the Angel at Islington, from Trinity Square to the Minories, and from one point in South Lambeth Road to another point in the same road. The Board also asks for powers to widen Upper Street, Islington; Green Street, Bethnal Green; East King Street, Hammersmith; a portion of Walworth Road; and Star Corner, Bermondsey.

The following are among the notices on the paper of the House of Commons.

Commons and Inclosure Acts Amendment Bill.—Sir Joseph Pease: On second reading of the Bill, to move, That the subject of Commons and Inclosures having been fully examined into by a Select Committee of this House so recently as 1869, and having been legislated upon in accordance, for the most part, with the recommendations of the said committee, this House is of opinion that further legislation on this subject is not now required.

Viscount Folkestone: On second reading of the same Bill, to move, That it be read a second time upon this day six months.

HOSPITAL AND DISPENSARY MANAGEMENT.

MIDDLESBOROUGH HOSPITAL SATURDAY AND SUNDAY FUND.

THE distribution of this fund gave rise to considerable discussion at the recent annual meeting. Hitherto it appears to have been the practice to hand over two-thirds of the collection to the North Riding Infirmary, and one-third to the Ormsby Cottage Hospital. This apportionment was originally based upon a calculation of the ordinary expenditure. But it has not worked in a satisfactory manner; and, after a keen debate, the original principle was reaffirmed, and embodied in a resolution, which was carried unanimously. But another subject of more general interest also occupied the attention of the meeting. Up to this time, it has been the custom to forward to the ministers of religion one in-patient ticket for every two guineas collected in their churches. But the average cost of in-patients is about £7, so that the Hospital Sunday collections instead of helping the funds of the Infirmary and the Cottage

Hospital, cause a serious drain upon them. The wisdom of giving a *quid pro quo*, in the form of tickets of admission, has often been called in question. In some places, such, for example, as Oxford, Northampton, Sheffield, and Newcastle-on-Tyne, no tickets are issued for collections received. The sums of money are regarded as donations. And it is obvious that some change will have to be made at Middlesbrough, if the Hospital Sunday is to help, and not to hinder, the good work of the Infirmary and Cottage Hospital.

THE LEWISHAM SELF-SUPPORTING DISPENSARY.

THIS institution deserves the special attention of all those who are interested in the provident movement. The basis on which it stands differs in some important particulars from that which is usually adopted; and, during the two years that it has been in existence, it has been carried on with remarkable success.

As its name indicates, it is not merely provident, but self-supporting. It asks for no charitable assistance, and it has no list of honorary subscribers. But, notwithstanding that this is the case, the management is not handed over entirely to the benefit members. A few of the leading gentry of the neighbourhood act on the committee, and use their influence in recommending the dispensary.

There is no dispensary-house, but the patients attend at the surgeries of the medical officers, and there receive the advice and medicine they require. This system is also in operation at Twickenham, and it has the advantage of saving the expense which is usually incurred in maintaining a central establishment.

The amount paid by members last year, and which formed the total income of the dispensary, was £153 3s. Of this sum, £140 8s. was handed over to the medical officers. Thus it will be seen that the expenses of management were trifling, and that nearly the whole of the funds subscribed went to secure the main object of the institution.

WALSALL HOSPITAL.

THE annual report of the Committee for the year 1882 states that the subscriptions and donations amounted to £523, against £500 in the previous year; and the church and chapel collections amounted to £218, as against £213 in the previous year. The funds raised by the operative classes in support of the hospital showed a decrease, having been £290, as compared with £316 in the previous year, the falling off being in the special efforts, such as annual collections, and not in the weekly collections. The committee are endeavouring to pay to the bequest fund a sum of £2,000, which was borrowed from that fund at the time of the erection of the hospital. In September last, the out-patient department was opened three times a week, instead of twice. The number of out-patients during the year was 4,514, against 4,492 in the previous year. The number of in-patients admitted in the year was 275, being an increase of 45 as compared with the previous year.

THE GENERAL HOSPITAL, BIRMINGHAM.

THE one hundred and third annual report, for the year 1882, has just been published. The total of in- and out-patients treated was 35,782 last year, as compared with 32,995 in 1880. The teeth extractions were 3,965, against 3,808 in the previous year, and 4,876 in 1880. The total expenditure during the year has been £15,007, as compared with £21,735 in the previous year, and £18,419 in 1880; the ordinary expenditure being £14,230 in 1882; £13,160 in 1881, and £12,727 in 1880. From these returns it will be seen that in both the in- and out-patient departments there has been a considerable increase in the number of patients; and for some years past this increase has been steadily going on, till, at the present time, the pressure on the space and resources of the institution is greater than at any former period. During last year 39,747 patients attended at the hospital, 3,324 as in-patients, and 36,423 as out-patients, and of these 25,482 were free cases. The total number is 2,944 in excess of last year, and 13,183 more than in a corresponding period ten years ago. The necessity, therefore, has become still more apparent than it was a year ago for the establishment of a suburban branch hospital for the treatment of chronic cases, which at present occupy for long periods the beds of the hospital. Such cases would derive greater benefit from removal to a locality outside the town, and the committee hope soon to see their way to take steps to obtain that long-projected improvement. The ordinary income exceeds that of last year by £709 17s. 3d., and is due to an addition of £1,933 16s. 8d. in legacies, the receipts in all the other items having fallen off. Ordinary donations show a decrease of £714 1s. 9d.; subscriptions, £98 15s. 4d.; and interest from the bank of £198 9s. 1d. The ex traordinary income amounted to £5,563 (about the same as last year and includes part of the proceeds of the late Musical Festival an of the Hospital Saturday collection. The Musical Festival wa in all respects a great success, and resulted in the payment to th hospital of the handsome sum of £4,500, including £500 paid sinc the accounts for the year were made up. The Hospital Saturda collections have steadily increased, and last year £1,563 0s. 5d. wa received from this source—an increase of £330 over the amour received in 1881. The committee desire again to express thei thanks to the contributors of this most acceptable annual addition t the funds; for, without it, the burden of a heavy debt would rest upo the institution. Almost all the items of ordinary expenditure sho an increase, which is entirely accounted for by the much large number of patients treated during the year. Housekeeping has it creased by £432 4s. 4d., surgery and dispensary by £495 16s. 8d and miscellaneous expenses by £183 8s. 6d.; while there is a d crease of £62 15s. 5d. in ordinary repairs, and £34 12s. 6d. in co valescent institutions. The total expenditure is £6,740 less than th of the previous year, and this result is due to the smaller amour spent on extraordinary alterations and improvements; and a le sum also has been expended on bedding and linen. Notwithstand ing the large sums received from the Musical Festival and the Ho pital Saturday collections, however, the committee regret that, the end of the year, there was an adverse balance of £1,378 13s. 7

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL ORGANISATION.*

AT the present time, when the events of the recent Egyptian campai have led to so many remarks being made in public, as well as pr vately, for and against the arrangements of the Army Medical D partment, and when an important committee is officially engaged preparing a report, after prolonged investigations, of alleged de ciencies in the military hospitals during the war, and of other alli topics, the appearance of two pamphlets on the subject of arm medical organisation is well calculated to attract attention. Th are both, moreover, put forth by medical officers holding good po tions in the department; for, although one of the pamphlets up which these remarks are based appears anonymously, the conten sufficiently show that the writer has had long experience of th service in foreign as well as in home stations.

The pamphlet of Surgeon-Major Evatt has been before the pub for some years, and his strong advocacy of the system common spoken of as the unification plan of army medical organisation familiar to others besides the officers of his own department. Th present edition—the fourth—has been enlarged by some additional arguments, but chiefly by pointing out needs of further develo ments of this system, which, according to the views of the writ the experience obtained during the late Egyptian campaign h made manifest. The scope of the pamphlet, however, is, on th whole, much the same as its scope on its first appearance. It em braces a review of the supposed advantages and drawbacks of t old regimental system of hospital administration, and points out considerable detail the superior advantages of the opposite or un fication system. All the arguments that have been urged by t advocates of the latter system have been brought together, and a put before the reader in very forcible terms. The author, in t early sections of his treatise, gives a sketch of the circumstanc which led to the cessation of the regimental hospital system, and medical officers being specially commissioned in every regiment the army; and particularly refers to Sir William Muir as having la down the lines for the new organisation of the medical service, a as being "the original founder of the system." He omits all me tion of Sir William Muir's predecessor, and of those who, acti under him in the direction of the department, really instituted t change, and who for several years had to bear the brunt of t strong opposition which was raised against it. Dr. Evatt refers t introduction of the non-regimental system of army medical organisati to the year 1873. He might have gone further back; for, in March 18 a general order was published, announcing the fact that "medi officers no longer form part of regimental establishments." A care and impartial history of the changes that have taken place in t

* *Army Medical Organisation: a Comparative Examination of the Regimen and Departmental Systems.* By Surgeon-Major Evatt, M.D. A.M.D. Fou edition. London: Churchill. 1883.—*The Present and Future of the Army Med Department.* Printed for private circulation.

ıy Medical Department of late years has yet to be written; and, ough this is not the purpose of Dr. Evatt's work, as some deption is given in it of the manner in which the important alteras in medical organisation which have occurred during recent rs were introduced, it seems only right to point out that description given does but scant justice to some of those) were mainly instrumental in introducing them. It is hardly essary to follow the arguments brought forward by Dr. Evatt in our of the non-regimental, or station system, of army hospital anisation; they are now generally known, and their force is almost versally acknowledged. At the same time, while the weight of evidence in favour of the general hospital system cannot be erwise than acknowledged, it would have been more satisfactory he objections that have been urged against some of its practical ılts had been more completely answered. It is notorious that r strong complaints have been made throughout the military ice ever since medical officers were removed from regiments, t it has been impossible to procure any satisfactory medical endance for the officers or their families. It has been publicly ed by combatant officers of all grades, that the medical officers t to them have been so repeatedly changed, in some instances ıost daily, that anything like a continued treatment of an illness, vever serious, by one and the same practitioner, has been out of question. Dr. Evatt suggests that a specially chosen and spely qualified staff-surgeon should be appointed for five years to k after sick officers and their families; but, should such a plan adopted, we presume it would only be applied to a few large staıs, and that the many smaller stations in which married officers l soldiers are quartered would still remain subject to the arrangents at present in force. If the subject of complaint exist to the ent which is generally alleged, could not some better method of nagement obviate it, without any change in the general system? en there is the serious evil to the medical officers, especially the ınger medical officers, resulting from the deprivation, with few eptions, of all the advantages which were obtained from attende at well-ordered messes, and the generally beneficial influence association with officers in an establishment under military con. There is certainly much reason for believing, judging from rets that reach us, that, in numerous instances, military medical cers are almost driven to live in a manner that is much to be retted, as well for themselves as for the *prestige* of their departnt, owing to their dissociation from regimental establishments. ese are matters which deserve full consideration, particularly as the best modes of remedying them, consistently with the neceses of modern organisation. There is now a very general agreent that the old regimental system of army hospital administran has passed away beyond recall; that a mixed system of regintal and general hospital administration, advocated by some, st be attended with many points of friction and practical diffities, as well as increased expense; that, on the whole, the unifiion arrangement, as Dr. Evatt has shown, carries with it unimity and superior efficiency in peace and war, as well as economy cost, while it is the only system that can be depended upon for veloping *esprit de corps*, and promoting professional improvement; l, under these circumstances, it seems obvious that the efforts of medical officers of the army should be principally directed to the noval of all such defects that can be rightly urged against this t named system in any of its working details.

The second pamphlet, as its title imports, deals less with questions organisation than with the results of the recent changes in ganisation as regards the position of the medical officers, present d prospective, produced by them. The writer shows that promon is now almost at a standstill, and that in a short time, as itters now stand, hardly any of the surgeon-majors, except those ar the top, can hope to be brigade-surgeons in less than from enty-seven to twenty-eight years' service, while only a very small rcentage of them can ever attain to the administrative grade. If e calculations given are correct, and they appear to be so, being sed on the ages of the medical officers published in the war office ts, such a prospect of stagnation becomes a matter of serious ncern for the authorities in whose hands the administration of e medical service of the army is placed. It becomes a question w far medical officers who attain the ages indicated by the length service mentioned, will be competent to perform the active duties ich devolve on surgeons who are holding appointments in the ecutive ranks of the department. The author suggests several ans for creating a flow of promotion in the department, but parıularly advocates that all administrative officers should be styled rgeons-general, abolishing the title of Deputy Surgeon-general, and that they should vacate their appointments after seven years, or sooner, if they reach the age of sixty before that term has been attained. As a further remedy, the writer desires that pensions should be awarded purely for length of service, irrespective of rank, as is done in the Indian medical service. Under such circumstances, he believes a sufficient inducement would be offered for many medical officers to retire who, though desirous to leave, now remain in the service with a view to attain higher rank, for the sake of the better rates of retirement connected with the advanced position. The writer concludes his observations by drawing attention to the disregard paid in the department to proficiency in professional knowledge. "No matter," he writes, "how good a physician or surgeon a man may be; no matter how hard he works at his profession, no promotion can be gained, nor can he extricate himself from the dead level of mediocrity. Is there an instance on record of a medical officer being promoted for special proficiency in professional knowledge? We think not. Can a remedy for this be found? and how can the authorities be enabled to judge of men's professional abilities? In the first place, much more discriminating reports on this subject should be made by administrative officers. Another plan to assist the authorities in forming a judgment would be the establishment of a departmental professional magazine, in which medical officers could publish their cases or operations, and could put forward their views on medical and sanitary matters—an *United Medical Service Magazine*, published, say monthly, and open to the medical officers of the army, navy, and Indian services." To this suggestion of the writer there cannot possibly be any objection, and we ourselves should heartily welcome the appearance of such a colleague in the ranks of medical literature. The medical officers of the army and navy, carrying on their duties as they do in all parts of the world, have splendid opportunities for making a periodical of the kind highly useful in its professional and scientific aspects, as well as departmentally valuable to the services themselves, whose particular interests it would specially represent.

ARMY MEDICAL DEPARTMENT.—The following is a List of Candidates who were successful for appointments as Surgeons in Her Majesty's British Medical Service, at the Competitive Examination in London, on February 19th, 1883.

	Marks.		Marks.
1 D. Bruce	2630	9 R. R. H. Moore	2220
2 H. C. Gordon	2460	10 P. J. B. O'Shaughnessy	2170
3 H. L. Bell	2447	11 J. R. S. Robertson	2170
4 J. Riordon	2435	12 A. E. Tate	2130
5 H. A. De Loni	2415	13 C. E. Faunce	2130
6 R. H. Firth	2400	14 W. H. Lendrum	2090
7 G. Nelis	2350	15 H. J. Wyatt	2050
8 P. J. Galwey	2280		

NAVAL MEDICAL DEPARTMENT.—The following is a List of the Successful Candidates for appointment as Surgeons in the Royal Navy, at the Competitive Examination, at Burlington Gardens, on February 19th, and following days.

	Marks.		Marks.
1 B. S. Mends	2600	7 J. E. Penn	2100
2 T. J. Crowley	2445	8 R. H. Nicholson	2050
3 A. Keess	2415	9 P. B. Bury	1990
4 D. Lennox	2250	10 J. N. Seymour	1975
5 B. C. E. F. Gunn	2185	11 J. L. Barrington	1885
6 D. T. Hoskyn	2150	12 J. Sugrue	1875

INDIAN MEDICAL SERVICE.—The following is a List of the Successful Candidates for Her Majesty's Indian Medical Service, at the Competitive Examination, held at Burlington House, on February 19th, and following days.

	Marks.		Marks.
1 J. M Young	2555	4 W. H. Quicke	2255
2 G. Jamieson	2525	5 A. O. Evans	2225
3 M. A. T. Collie	2515		

Twenty-two candidates competed for five appointments. Twenty-one were reported qualified.

THE ARMY MEDICAL DEPARTMENT.

THE *Army and Navy Gazette* has never considered the claims of the army surgeons formally, and expended a leader a fortnight ago in the attempt to show that, in the Hunterian Oration, Mr. Spencer Wells talked about what he did not understand; one which London surgeons knew nothing about. The following reply to the editor, from a surgeon-major in the army, effectually disposes of this part of the argument. He writes:—"With reference to your editorial remarks on the value of the opinions of the President of the Royal College of Surgeons, on the subject of the army medical service, I beg to state that you are, in my opinion, not correct in undervaluing Mr. Spencer Wells's views. So far from being inexperienced in these questions, Mr. Spencer Wells has had many opportunities of arriving at a sound judgment on the subject.

1. Mr. Spencer Wells for eight years served as a naval surgeon on foreign service, being thus enabled to see the medical establishments of our home and foreign armies in various quarters of the globe. 2. He served in the East throughout the whole of the Crimean campaign, and was on duty as a military surgeon at Smyrna and Renkioi, in the large hospitals at these places. He thus had large opportunities of seeing the needs of the medical service. 3. Quite apart from these purely English military experiences, Mr. Spencer Wells has also seen much of military surgery in Paris, in 1848, and likewise at Rome and Palermo. 4. Further, you are, I think, in error in believing that it is impossible to exercise a field hospital in peace as a practice for war. It is not only easy to do so, but it is essential in the interests of humanity that such experience should be available for the Army Medical Department. The mere pitching of the camp is a lesson from which much may be learned; the water supply, the sanitation, the field cooking, the field washing of clothes, can all be practised as well in the Long Valley as in the Plains of Roumelia. Further, it would be a valuable experience for all medical officers, if during the summer months tent hospitals were pitched near the larger military hospitals, and any suitable cases treated in them. By this means the wards of the hospitals could, with much sanitary advantage, be emptied for a time, and the custom of treating the sick in tents, as practised in some foreign armies, be introduced amongst us. It is this practice Mr. Spencer Wells desires to see introduced into our service, and I think every military and medical officer will agree in the soundness of his views."

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE SANITARY ASSURANCE ASSOCIATION.

THE second annual meeting of the Sanitary Assurance Association was held at the office, 5, Argyll Place, Regent Street, W., on Thursday, February 22nd. In the absence of Sir Joseph Fayrer, Professor T. Hayter Lewis, F.R.I.B.A., was elected to preside. The Secretary read the report of the Council for the year 1882, from which it appeared that the inspection of houses, supervision of work, and issue of certificates, had been continued on the plan initiated by the Association in 1881. The property placed on the Assurance Register, and inspected during the year, had varied in annual rateable value from £10 to £1,000, and, in every case, the sanitary arrangements had been found to be defective. The report contained the two following paragraphs.

"The financial statement shows that considerable progress has been made since the issue of the first report. The increase during 1882 has been nearly double that of 1881. The Council have cleared off the suspense account outstanding at the end of 1881, and the Association commences its third year of action with a balance on the right side. The increase of success thus achieved in two years, by an undertaking which is as yet imperfectly understood by the general public, seems to indicate that the Association has already met a public want, and that its operations will be extended as it becomes more widely known. In July, in order to meet the convenience of members and subscribers wishing to avail themselves of the services of the Association when about taking a new house, an alteration was made in the scale of fees, by separating the charge for report and specification from supervision of workmen's certificates, so that the charges for the latter are not incurred in cases where, for any reason, the work recommended is not carried out."

Professor Hayter Lewis, in moving the adoption of the report, referred to the work done by the Association during the past year, pointing out that the officers of the Association had inspected a much greater number of houses than in the preceding year. Still he was of opinion that, when the benefits to be derived from such operations were considered, the progress ought, for the future, to be still more rapid. Great good had, however, been done, and he believed that there was ample promise of further good in the same direction. Mr. Henry Rutherford seconded the adoption of the report, saying that the necessity for such an institution was proved by the work having been doubled in the second year of its existence, and that this was remarkable, bearing in mind its novel character, and the apathy usually exhibited by householders in sanitary matters. The material benefits of sanitation upon every inspected house individually, operated indirectly to the benefit of the community at large; for a knowledge of sanitary principles, and the necessity for their practical application, thus became visibly manifest. The report having been adopted unanimously, Mr. Mark H. Judge proposed, and Professor Roger Smith seconded, the re-election of Sir Joseph Fayrer and Mr. H. Rutherford as members of the Council. In order to further develop the growth of the Association, Professor Roger Smith proposed an alteration in the articles under which the Association is incorporated, to enable the number of the executive to be increased to twelve. This was agreed to; and the meeting closed with a vote of thanks to the Chairman, proposed by Dr. Danford Thomas, and seconded by Professor Corfield.

MR. F. MANBY AND THE GUARDIANS OF THE FREEBRIDGE LYNN UNION.

WE have before us correspondence, which has passed between Mr. F. Manby, Public Vaccinator of the Freebridge Lynn Union, Norfolk, the guardians of the union, and the Local Government Board (the Inspector of Public Vaccination intervening); to which, in the interest of the Poor-law Medical Service, we feel it our duty to call attention. It would appear that, in the middle of last October, Mr. Manby was subpœnaed to attend a trial at Winchester, 200 miles away. He immediately engaged the services of Mr. Lockhart Stephens, now house-surgeon at Guy's Hospital, and recently Gold Medallist, as his *locum tenens*. This gentleman also held a certificate of competency as a public vaccinator. Mr. Manby had, in the previous week, vaccinated certain children, the parents of whom had to travel considerable distances in very inclement weather to bring them to be inspected. There were also two fresh cases to be vaccinated, on whom, it would also appear the *locum tenens* thought with reason he was capable of operating. On sending in his account to the guardians of the union, Mr. Manby was informed by the clerk that the board objected to pay, as the cases had not been inspected by a legally appointed deputy accredited by the Board, nor had the two cases of vaccination been performed by the deputy, who alone should have done the same. This letter was accompanied on the part of the clerk by a sincere hope for Mr. Manby's health and happiness for the ensuing year. Thereupon Mr. Manby wrote to state that he would inspect the cases, and he would throw himself on the liberality of the board as to the unfortunate position in which he had been placed in being unexpectedly subpœnaed, but all to no avail. The board, acting under the advice of their clerk, declined to pay anything.

On the receipt of their denial, he addressed himself to the inspector of the district, Dr. Hubert Airy, who, in his reply, writes as follows: "'December 1st, 1859. No. 3. All vaccination and inspection, under contract, shall be performed by the contractor in person, or by some other contractor of the same union acting for him, or by a deputy duly admitted as such (viz., admitted by the guardians on the contractor's application, to act as his occasional deputy).' I presume, however, that your unexpected subpœna left you no time to make application to the guardians for the formal admission of your deputy, and that it was not possible to get another public vaccinator of your union to act in your stead. The legal regulations make no provision for such an emergency. It has to be dealt with on the spur of the moment, and I certainly think you dealt with it in the best way for the public good. I believe that under the circumstances, the Local Government Board would authorise payment by the guardians for these cases."

In consequence of the receipt of this letter, Mr. Manby addressed the Local Government Board on the subject. In their reply, the Board wrote to express its regret that, as the *locum tenens* had not been legally accepted by the board of guardians, they could not enforce payment of the claim by that body. The correspondence is instructive and suggestive. It shows clearly how ready boards of guardians are to act in a narrow spirit towards their medical officers whenever the opportunity arises. Mr. Manby has intimated his intention to resign his office as public vaccinator in the Freebridge Lynn Union.

THE DRAINAGE OF CARSHALTON.

CLERGYMEN are, happily, usually to be found on the side of sanitary reform, and it is fortunate for the cause of hygiene that this is so, since their influence must needs largely sway their parishioners. The exception, however, proves the rule.

The Vicar of Carshalton does not believe in drainage; he pins his faith to earth-closets. He regards it as a proper course to call a vestry meeting to condemn the proposed drainage scheme for Carshalton, and to twit and taunt the medical officer of health for the district (Mr. E. L. Jacob), who had come to the meeting on invitation to give any help he could. This is no place for the discussion of the amenities of vestry meetings, but a brief statement of facts will show whether the Vicar is, or is not justified, in his Quixotic proceedings. On the one hand, we have the responsible medical officer of health pointing out that the death-rate of the parish of Carshalton is three per thousand higher than that of neighbouring larger parishes; that scarlatina has, during several years of late, been very persistently prevalent and fatal there; that the cesspool system of drainage in vogue therein is a great nuisance in many parts of

rish, and is dangerous in other parts; that legal proceedings been threatened by aggrieved persons to stop the pollution of ver Wandle; that the Local Government Board have been ng the sanitary authority to provide sewers, and some of the itants have petitioned for them; and that the Croydon rural ry authorities have made an offer to take the sewage of the a into their new system on terms which are not likely to be red. And, on the other hand, we have the Vicar appealing to rejudices of the meeting, telling them that nothing need be that all sewers are a failure; that the health of the parish is ent, and its death-rate very low; and that earth-closets will the case, with much more to the same effect. It is manifest his misguided attempt to stop the much needed sanitary im- ment of the parish can only be temporarily successful; and it be deplored that the Vicar should place himself in so untenable tion.

SMALL-POX HOSPITAL REPORTS.

I have for years made small-pox hospital reports a study; and I am not rised that those who have not given careful study to them, should imagine the term "unvaccinated," when employed in small-pox hospital reports, as a person who has not had what you call "an attack of vaccinia." Never- ss, it is quite clear that, in the great epidemic of 1870-2, the metropolitan itals reports do not use the term unvaccinated in this sense. I quote, for nce, the Hampstead and Stockwell cases, 5,539 in number, in the 1870-2 rt. The word unvaccinated does not appear. Nor, in the entire report, is e any column of "doubtful." This last word does not once appear. The ccinated are classed as "no marks;" or else, all with no marks are classed vaccinated. But it often happens that the eruption covers up the marks. Russell of Glasgow, a year later, says, in his report, that patients, on reco- , sometimes showed very good marks, who had been classed as unvaccin- ; and he makes the observation, that he sees no notice of this difficulty in London reports.

e want to know, not what is the value of an ideal vaccination, but what is alue of the *de facto* vaccination as it exists under the present laws. I, for nce, am told that the unvaccinated die at 47 per cent. of the cases, and the inated at 9 per cent. What makes the difference? If the virus cannot ent, how can it modify the disease? Is there any reason in nature for a belief? And as I pointed out that you recover no more than 82 per . of the cases now, and recovered 82 per cent. of them long before Jenner's norable May of 1796, is it not most probable that the supposition that the se is modified is false? I appeal to medical men, urging an explanation e reason why an unvaccinated population should show 82 recoveries in cases of small-pox in 1780, and only 53 in 1880? I am quite sure that any mpt to answer this satisfactorily will be carefully considered by those who not understand it on any other ground than a fault of division, insepar- , as it seems to them, from any classification of an eruptive disease by marks made upon the skin previous to the appearance of the disease.

e healing art is a noble one, and deserves all encouragement and support; o select the formula of an age steeped in superstition, and to stereotype formula in law, is bad. When, in addition, this involves invasion, *vi et* s, of the infant frame of every child born, with the virus of disease, it only be disastrous, not only to the art of healing, but to the very first ciples of that art.—Yours truly, ALEX. WHEELER.

rlington, February 25th, 1883.

* In quoting the statistics of the metropolitan small-pox hospitals, we careful to choose those of later years in which the method of tabulating ases has been perfected, and in which the three heads, "vaccinated," vaccinated," and "doubtful," are made use of. This is evident from the arks we made as to the "doubtful" class, a class not always separated in more imperfect statistics of the first year of the hospitals' existence. In nt statistics (*e.g.*, those for the epidemic of 1881), the group "unvaccin- ." contains only those cases about the fact of whose non-vaccination there doubt, as learnt from the patient or the patient's relatives. Those who ent marks of any kind whatsoever are classified as "vaccinated," while e regarding whose vaccination there is any doubt are classed as "doubtful," 'no evidence," or some similar heading. By this mode of classification, possibility of error is reduced to a minimum; and we cannot conceive a e perfectly scientific manner of grouping the cases with regard to the fact accination. In our view, the great majority of the "doubtful" are truly vaccinated;" but, granting that they all belong to the vaccinated group, t do the figures tell us regarding the "*de facto* vaccination as it exists under present laws?" In the South-Eastern District (late Deptford) Hospital in , there were treated 3,185 acute cases of small-pox, of whom 2,303 were ccinated," 531 "unvaccinated," and 351 "doubtful." Of the "vaccinated" "doubtful" combined—a class, in our opinion, containing some unvaccin- as well as vaccinated cases—the death-rate was a fraction over 11 per .; of the "unvaccinated"—a group exclusively composed of cases who unvaccinated, and admitted to be so—the mortality was a fraction over er cent.

e comparison between the present unvaccinated small-pox mortality and small-pox mortality in prevaccination epochs is misleading. It is true Jurin estimated the latter as about 1 in 6, but this estimate was based on res supplied by various persons (some of them laymen) in different parts e country; figures relating not to London, but to other towns, and in t part to country districts, and regarding which there is grave reason to ve both that many deaths caused by anomalous and unrecognised small- were omitted, and that many cases of chicken-pox (which is not a fatal disease) were included. Moreover, small-pox now-a-days is (by reason of vaccination) confined chiefly to the lowest or badly vaccinated classes, while in the last century it affected all classes of society. Any comparison, therefore, is wholly unreliable. Besides, the important question for the community is as to the present fatality of small-pox. That, according to the most carefully compiled hospital statistics, is enormously greater in the unvaccinated than in those who have any claim to be called vaccinated. The antivaccinationists doubt the accuracy and good faith of these statistics; let them adopt the suggestion we threw out, and check them for themselves. A short practical study of this kind is worth years of the theoretical "study" of which Mr. Wheeler writes.

WATER-ANALYSES BY MEDICAL OFFICERS OF HEALTH.

SIR,—Will you kindly inform me if the analysis of water (not testing) is any part of the duty of a medical officer of health.—Yours truly, C. F. W.

*** The analysis of water is not one of the duties specially imposed upon medical officers of health by the orders of the Local Government Board. If a quantitative analysis be required, the sanitary authority should procure it from the public analyst or some analytical chemist. The official orders provide, however, that the medical officer of health shall "inform himself, as far as practicable, respecting all influences affecting, or threatening to affect injuriously, the public health of his district;" and the health-officer can hardly fulfil that requirement satisfactorily unless he make himself acquainted with the general character of the water supplies. To do this, he must not only observe the physical conditions and surroundings of the wells, or other sources of supply, but must also be prepared to use, when necessary, the ordinary chemical tests of purity, or otherwise, of the water.

VACCINATION BY SINGLE PUNCTURES.

NEMO.—It is not illegal to vaccinate in one place only, neither is it in the power of any authority to compel the revaccination of a person so vaccinated. But it is worse than illegal; for one vesicle will only afford protection against small-pox for a very limited period. The vaccinator should not be satisfied unless he produce scars having collectively at least half a square inch of total area.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

SCARBOROUGH.—Dr. Taylor is naturally jealous of the reputation of this popular resort. From some cause rumours are persistently circulated at the commencement of the season, not only as to the general unhealthiness of the town, but as to the fatal prevalence of some epidemic disease therein. Dr. Taylor, however, clearly proves that these rumours are entirely without foundation, inasmuch as the mortality rates were never so low as in 1881. The general rate from all causes was 16.34 per 1,000, which, with the exception of the rate for 1876, is the lowest registered in Scarborough. From zymotic causes the deaths were 27, against 65 for the previous year, and were equal to a rate of 0.8 per 1,000, the lowest ever recorded from this class of disease. Dr. Taylor adds that, notwithstanding the unpleasant rumours which are circulated about the town, it fills none the less; and he has every reason for hoping that those who go there for the benefit of their health, do not go away disappointed. The deaths from diseases of the respiratory organs maintain a somewhat high average, 140 deaths being recorded for the past year; but the deaths from diarrhœa exhibit a great reduction, only 14 deaths having been registered, or 24 less than recorded in 1881. In alluding to the prevalence of scarlet fever, Dr. Taylor urges the need for compulsory notification of infectious diseases, and laments that, with few exceptions, the death-sheet is his only information of the existence of preventible disease in a given locality. The sanitary condition of the borough will doubtless be appreciably improved by the thorough and systematic inspection of each house which is now being made, a course which might, with great advantage, be adopted in other health resorts.

CARLISLE.—Dr. Elliot's report for 1881 is characteristic of the writer, and is entertaining as well as instructive reading. Dr. Elliot reports the city as in a "fairly good condition in the year 1881," and observes that a "comparison with the year immediately before it, as well as with the general average of the next preceding seven years, tends materially to heighten satisfaction, and to induce well-grounded expectations of further progress in lengthening life and improving health." The births in Carlisle last year numbered 1,291, against 1,238 in 1880, and an average of 1,265 for the seven years 1874-80; and the deaths, 717, against 777 in 1880, and an average of 849 in the seven years 1874-80. The zymotic diseases numbered 67, against 106 in 1880, and 141 in the seven years 1874-80. There were two deaths from small-pox, one case being apparently in relation to imported rags sent by rail. Several other cases occurred during the year, and were all removed to the hospital. One death was registered from typhus fever, and this was the only case that occurred. Seven deaths were registered from typhoid fever, and of this number only one

occurred in the hospital. Altogether, thirteen cases of this disease were reported during the year, six of them being removed to hospital. One hundred and seventy-three cases of scarlet fever were also reported, seventy-three of which were removed to the hospital. During the year, 234 notices to abate nuisances were served, and in nearly all cases the nuisances complained of were abated without further compulsion. The work of emptying ashpits was carried on "very regularly and systematically;" 8,758 were emptied during the year. The slaughter-houses, dairy and cowsheds were also kept under supervision.

ILKLEY.—During 1881, a total of 117 births and 77 deaths were registered in this district, equal to rates of 23.4 and 15.4 per 1,000 respectively. Twenty of the deaths occurred in children under one year of age, and 23 in old persons above the age of sixty years. Eight deaths occurred from zymotic disorders, four of this number being from scarlatina. A death from diphtheria resulted from a sanitary defect in drainage, which has since been remedied. Dr. Scott refers to the question of the notification of cases of infectious disease, but thinks that, "although it is theoretically advantageous, we are scarcely as yet in possession of sufficient facts, based on lengthened experience of the working of local Acts, to afford us adequate guidance."

STROUD RURAL DISTRICT.—No fewer than 37 deaths were registered in this district during 1881, being a percentage of 8.3 of the total deaths (442), on the very inadequate information of neighbours and friends. This is undoubtedly an enormous number of uncertified deaths to happen in a district possessing a population of 28,690. Mr. Partridge is rightly of opinion that all uncertified deaths should be inquired into by a qualified person, and not left to the judgment of the policeman, who can know nothing of *post mortem* appearances of overlaying or of premature births. Moreover, "probable" diseases of all kinds are suspicious, especially if noted as occurring in illegitimate children, or in others where the vices of the parents may lead them to neglect or even illtreat their offspring. Cases of overlaying are too often the result of the heavy sleep of drunken parents, for which they should be made responsible. Mr. Partridge also descants at some length upon the untimely death of 85 infants of less than one year of age, which he attributes to the lamentable ignorance displayed on the part of parents. Climatic influences, he states, have no doubt an effect on the mortality, especially when children are clothed, fed, and nursed as they are in this country among the working classes. The limbs and bodies are generally exposed to the cold, even in the winter months; the fermenting mass of sopped bread and sugar, called food; the dirty stinking milk-bottles (very seldom, if ever, washed or scalded), turning the milk sour almost as soon as put into them; and the quantity of ripe and unripe fruit given in the summer; with the ignorance, carelessness, and even neglect, induces a low vitality, and renders the children susceptible to disorders of the chest in the colder months, and in the warmer to diarrhœa and brain-affections. Poverty also has an influence in the causation of this mortality, by compelling the mothers to work during the day, while their unfortunate children are neglected. Mr. Partridge advocates the establishment of *crèches* or day-nurseries; but it is to be doubted whether these would succeed in saving much infant life, unless placed under a strict surveillance, which, in many districts, it would be next to impossible to secure. Twenty-six deaths are ascribed to zymotic causes, half of them being due to scarlatina, and 6 to diarrhœa. Whooping-cough was much less fatal than in 1880, as only 1 death happened as against 21 in the previous year. The sanitary condition of the district progresses under the health-officer's supervision; but an enormous amount of work is still before the authority, and, until this is completed, the state of the district can hardly be called satisfactory.

CHAILEY RURAL DISTRICT.—Mr. Gravely congratulates his authority that the death-rate recorded in 1881 (11.0 per 1,000 of population) was the lowest ever recorded in the district. The total deaths from all causes amounted to 106, being 20 less than in the previous year, and 35 less than in 1879. The decrease is very perceptible in the zymotic fatality, only 6 deaths being registered from these causes, against 15 for 1880, 19 for 1879, and 28 for 1878. Scarlet fever appeared in part of the district; and, upon inspection, Mr. Gravely found several families (the children of which in every instance attended the board-schools) suffering from a severe affection of the throat, with more or less eruption, simulating both scarlet fever and diphtheria. The closing of the board-schools was effective in preventing any further spread of the infection. Rheumatic fever prevailed in many parts of the district, though but two cases were reported as having happened among the pauper class. Two deaths were registered from this cause. During his inspections in the d trict, the health-officer made, as in previous years, a special po of inquiry into the sanitary condition of schools, many of wh require improvement.

BEDMINSTER.—This is an excellent and unusually thought report, affording abundant evidence of the interest that Mr. Ada takes in his health duties. A special feature of the report is statement showing the comparative immunity which the distr enjoys from heart disease and phthisis. To the first malady deaths are attributed, being at the rate of 7.7 per 10,000, whereas mean average for all England is 12.4 per 10,000. Mr. Adams quo Haviland, that, where "sea air has uninterrupted access over country, up broad vales and elevated country, we find less mortal from heart disease," and thinks that the low rate recorded is due this fact, the district having these topographical conditions. deaths from phthisis amounted to fourteen, representing a rate 5.66 per 10,000, or 21.04 per 10,000 below the mean average for England. This is attributed to the pure winds from the Atlan moderated by the position of the hills. The nine deaths from can however, are in excess of the average rate. According to the rec census, the district possesses a population of 24,716, among wh there were 375 deaths registered in 1881, giving an annual rate 15.17 per 1,000. There was a considerable reduction in the morta amongst children under 5 years of age, these deaths being 89 l than the number recorded for 1880. A similar decrease is sho in the deaths from bronchitis, pneumonia and pleurisy. In 1 these deaths were 24, in 1880, 73; and in the previous year 81. alluding to the zymotic diseases, which were fatal to 33 pers Mr. Adams refers to the large amount of sickness in the coal-min district, occurring among colliers, and included under the hea chronic bronchitis, emphysema, and "black lung," all due to w ing in impure air. The sickness amongst colliers between the age 20 and 60, was 67 per cent. above the average. Mr. Adams attributes a large amount of the sickness in his district to ignora and carelessness, and he suggests the formation of visiting parochial committees, with a view of securing an amelioration the condition of some of the inhabitants. In many respects sanitary state of the district is far from satisfactory, but impr ment is gradually being made, and the authority seem fairly aliv their duties.

IPSWICH.—The remarkable decrease in the zymotic deaths in borough is naturally a subject to which Mr. Elliston, in his re for 1881, devotes considerable attention. The total number of de of this class amounted to 65 during 1881, against 185 in the pre year, and represents an annual death-rate of 1.29 per 1,000. decreased rate is readily explained by the reduction in the nu of deaths from diarrhœa, 16 only having been registered, ag 126 in 1880. Mr. Elliston regards the great decrease in the fat last summer as mainly due to the cool and wet weather then e rienced. Of the other zymotic diseases, whooping-cough cause deaths, measles 8, diphtheria 8, and scarlet fever 3. The total d registered during the year amounted to 886, being 137 less th the previous year, and 148 under the average of the preceding years, 1871-80. Amongst a population of 50,213, this mortali equal to an annual death-rate of 17.6 per 1,000. The infantile o tality also exhibits a considerable reduction, the total deat children under five years of age amounting to 1,317, or 132 less in the previous year. Phthisis alone caused 100 deaths, and diseases 125. Mr. Elliston speaks in high terms of the value isolation accommodation afforded by the new Borough Fever o pital; and he reports that, since August last, when it was op 59 patients have been admitted, of which 55 were discharged, the remaining 4 being nearly convalescent at the date of the r The public disinfecting station was also of conspicuous use d the prevalence of scarlatina. As regards sanitary improvement health-officer has to chronicle the completion of the arterial s of sewerage for the borough, the lack of which in former yea undoubtedly contributed to swell the death-rate beyond it proportions.

OKEHAMPTON RURAL DISTRICT.—Mr. Linnington Ash's a report for 1881 on this district is chiefly occupied in dealing wi extensive prevalence of diphtheria and typhoid fever, which oc there during last year. In the last quarter, diphtheria appea Bratton Clovelly, and the outbreak was then made the s of a special report. Besides sore-throats, which were found extremely prevalent, there were at least twenty pronounced c diphtheria, of which four were fatal. The communicability disease from person to person was clearly traced in this epi The schools were closed, and every practicable precaution was

ards the close of the second quarter of the year, another out-
k occurred in the village, where there were altogether about
y cases of diphtheria, or about one in every four of the entire
ulation. The deaths registered were, croup two, "suffocation-
arrh" one, scarlet fever three, and diphtheria two; but Mr. Ash
f opinion that these were, one and all, cases of diphtheria. The
ools were an important factor in the spread of the disease, and
ir closure was, therefore, recommended. Various other precau-
ns were adopted; but cases of the disorder have occurred from
e to time, even so recently as February of the current year.
m typhoid fever, four deaths were registered: two at South, and
at North Tawton At the first of these villages, the cases were
radic, but at North Tawton the outbreak rapidly assumed epi-
nic proportions. So far, Mr. Ash has been unable to discover how
disease was first contracted, but he clearly shows that the sub-
uent cases were due to the use of polluted water. The well of
er belonging to the house in which the first patient lived became
luted by the washings of utensils and by the house-slops thrown
o an insecure drain connected with the pump-trough. Every per-
who afterwards drank the water was struck down with typhoid
er, and each case could be clearly traced to this specifically pol-
ed water. Mr. Ash attributes the prevalence of fever here, and
many surrounding villages, to the prevalent unsanitary condi-
ns, and to the absence of proper privy-accommodation and whole-
ne water-supply. During the year, there were 244 deaths regis-
ed in one district, representing an annual death-rate of 15.9 per
00. This compares not unfavourably with the rate of the previous
r, when all allowances are fairly calculated; but the improve-
nt is more apparent than real, inasmuch as the proportion in
1 was based upon the recent census, while the rate in 1880 was
nded on the census of 1871, since which there has been a de-
ase or loss of 2,287 persons in the district.

CYPRUS.—Dr. Barry has unfortunately had no chance of seeing
results of the work which he inaugurated in this island, as his
t of Sanitary Commissioner has been abolished. But, before
ving, Dr. Barry drew up so excellent a report on the present sani-
y condition of the island as to more than justify the wisdom of
king such an appointment as his was, as well as of his selection
the post. Dr. Barry states that the public health of Cyprus
ring the period reported on was, so far as could be ascertained
the absence of registration, excellent. None of the specific
notic diseases occurred in an epidemic form, only three cases of
all-pox being reported from the Nicosia district, and one of the
ne disease from Famagusta. Fever of malarious origin, how-
er, was prevalent during the summer and autumn in certain of the
v-lying districts, but they were chiefly of a very mild type. At
e part of the Maltese colony, with a population of 43, there was
outbreak of ague and of remittent fever. The whole colony were
k, excepting some of the masters. There were four deaths. The
fficulty of language (these people not speaking Turkish or Greek),
e want of nursing, and the lamentable ignorance and filthiness of
e Maltese, were powerful factors in the sum of the calamity.
nen a large number were removed to the hospital, improvement
s immediate. The outbreak is attributed to the cultivation of
rshy ground during the heat of June. In the Kyrenia district,
4 births and 217 deaths were recorded during 1880, which, based
on a population of 12,466, represent birth- and death-rates of
.6 and 17.4 per 1,000 respectively. If these rates are a fair sample
those for the island, Cyprus may, indeed, be regarded, Dr. Barry
marks, as the sanatorium of the Mediterranean. Referring to the
ccination statistics, Dr. Barry states that, during the year, there
re 4,522 persons operated upon in the island, against 3,105 in
79, showing an increase of 1,417. Of these, 3,680, or 81.43 per
nt., were reported to be successful; 333, or 7.36 per cent., to be
successful, and 509, or 11.25 per cent., failed to present them-
lves for examination. No active objection appears to be enter-
ined on the part of the inhabitants to the operation; in fact, theo-
tically, they recognise its value, even in some instances petition-
g to have it performed. But, practically, the native apathy shows
elf, and the operation is frequently postponed until "to-morrow,"
in other words, *sine die*. An inspection was made of all the
ols in the island, and a special report prepared by Dr. Barry on the
nitary requirements of those situated in four of the most im-
rtant districts. As a result of the recommendations made
erein, considerable improvements were made or are now in pro-
ess. Dr. Barry's notes on the present sanitary circumstances of
e island will be very valuable for those to whom will fall the car-
ing out of his functions in future. In a great majority of cases,
e water is obtained from wells sunk in the subsoil. In the large
towns, it is brought from chains of wells by means of aqueducts lined with cement, in some cases covered, and in some open. The wells are frequently situated in the courtyard or gardens, and, in these cases, are almost invariably in close proximity to the deep unwalled cesspits of the privy. The principal method of excrement-disposal is by means of cesspit-privies. These cesspits are very large and deep, and frequently extend under the public streets. They are never cleansed; when one is full, it is covered with earth, and a new one is dug. Dr. Barry has himself seen cesspits that have been in regular use for over fifty years, and the amount of pollution these cause to the subsoil may be imagined, when it is considered that, at the present time, there are over 2,250 in actual use in Nicosia alone. The suggestions which Dr. Barry makes for sanitary improvement in the island are vigorous and to the point. The most important of these include the improvement, conservation, and protection of water-supply; the provision of sewerage, or other means for the removal of excremental matter, together with the abolition of cesspits; the free admission of air into towns by the widening of streets, and, if possible, the lowering of walls, together with the planting of open spaces; the structural improvement of private houses; the regulation of cattle-keeping; and the regulation of cemeteries.

HALIFAX COMBINATION.—Dr. Britton is unusually fortunate in retaining his district intact for a further period of five years. Deprived of its centre, through Halifax having a separate health-officer, the district is not one that topographically can be commended; but Dr. Britton seems to minimise its disadvantages by active supervision and frequent reporting to the eighteen sanitary authorities under which he acts. A chief part of Dr. Britton's work seems to be the analysis of the water-supply of the various districts. This may be carried to too great a length; and, indeed, it is not unfrequent to see health-officers pinning too much faith upon the chemical constituents of potable waters. Dr. Britton reports that, "when waters have been found contaminated, the cause has been ascertained, and they have been rendered, as far as possible, safe from further danger." He also states that sanitary work has been steadily progressing, and that the public are much more alive to the value and importance of improved sanitary conditions than they were a few years ago. The health-officer's visits of inspection are well received, his suggestions appreciated, and, in most instances, carried out. Zymotic diseases did not prevail to such an extent in 1881 as in 1880, but cases occurred from time to time of scarlatina, measles, and whooping-cough. There were also three cases of small-pox. Schools were, as usual, a fruitful source of infection; and Dr. Britton suggests, that "all children, known to have been away from school through illness, should be compelled to bring a medical certificate, stating the nature of the illness, and whether they were in a fit state to mix with other children, before they should be allowed to return to school." The highest death-rate of the districts comprised in the combination occurred at Southowrann (22.0 per 1,000), the lowest at Rushworth (9.9 per 1,000); though, it must be added, that these rates are calculated on very small numbers. The death-rate of the rural district, which contains the largest number of people, was 17.5 per 1,000. Scattered through Dr. Britton's reports are some interesting instances of the origin of specific disease. Thus, a case of scarlet fever recurred at a farmer's house, in which there had been cases of fever of various kinds for many years. Nothing could be found to account for this, until the floor of the kitchen, which was used as a living room, was taken up, when a large elongated cesspool was found, from which was taken two cart-loads of very offensive sludge. The drain was filled up, and there was no more illness in the house. In another district, a man had been carting manure, from the 17th January to the 20th, at a time when scarlatina was very prevalent in Halifax, and the closets in the infected districts were emptied every other day. On the evening of the 20th, he had sore-throat; and, on the 25th, two of his children began to have scarlatina. On September 17th, a man at Brighouse entered into a house which had an open ashpit under the windows of the bedroom. He complained much of the smell; and, on the 24th, he began to be ill, and had a smart attack of enteric fever. The ashpit was immediately covered, and no other cases resulted. In the latter end of April, an epidemic of diarrhœa broke out in the Rushworth Grammar School, from which forty-two boys, four girls, and four servants suffered. It is supposed to have arisen from the drinking-water having been contaminated by manure from a field. At Outlane, a young woman, aged 27, of delicate constitution, lived in a house, in front of which was a private road, under which ran a drain from some cottages. This drain was broken through by a cart passing over it, and was left in that condition several days. As this woman came home from the mill where she worked to her meals, she complained

much of the smell; and, seven days afterwards, she began to be ill, took to her bed, and lived just fourteen days.

BISLEY.—Mr. Partridge presents a very favourable report on this district for 1881. Of the total deaths (89), 4 only were due to zymotic causes, against 14 for 1880. There was also a marked decrease in the infantile mortality, which represented 10.7 per cent. of the total births, and 21.3 per cent. of the deaths. Although the rate for 1881 was the lowest recorded for some years past, Mr. Partridge thinks it higher than it should be in a district so healthily situated, and that the infantile deaths point, with one exception, to a want of care in either nourishment or clothing. Scarlet fever was present in some parts of the district; but the measures adopted by the health-officer prevented any extensive spread of the disease, and no deaths were registered from this cause. The proximity of privies, etc., to wells, is one of the difficulties constantly met with; and, in this connection, the health-officer states, "the convenience of having wells, closets, pigstyes, and drains near to a back door is generally, even by well-informed people, considered before sanitation; and, until illness occurs as a consequence, it is not thought of."

OBITUARY.

JOHN LIGERTWOOD PATERSON, F.R.S.E.

THIS accomplished and greatly esteemed physician died at Bahia, Brazil, a few weeks ago. Dr. Paterson was born in Midmar, Aberdeenshire, in 1820, and was educated at the Grammar School and Marischal College of Aberdeen, where he graduated as Master of Arts. He acted as assistant to the then Professor of Anatomy in Marischal College, and afterwards took the degree of M.D., and the membership of the Royal College of Surgeons of Edinburgh. He studied at Vienna and Paris, afterwards settled for several years in Pernambuco, from whence he removed to Bahia, where he practised for more than a quarter of a century, and during all that time he never quitted Bahia even for a week's holiday. He returned to Edinburgh several years ago, and devoted some time to attending practical classes. A short time ago he returned to Bahia to attend his brother who, while there, was attacked by paralysis. During this visit to Brazil, Dr. Paterson died. Dr. Paterson was a man of kindly, genial, and warm sympathies, and he lived on the most friendly terms with the native practitioners, by all of whom he was greatly esteemed, and to whose consultations he was invariably called.

FRANCIS GOODCHILD, M.B.(LOND.), M.R.C.S.

THE early and sudden death of Mr. Francis Goodchild, M.B.(Lond.), M.R.C.S., at his residence, Heathfield House, Ealing, has given much sorrow to a large circle of friends to whom he had, in a comparatively short period of time, endeared himself. Born in June 1854, at Heathfield House, Ealing, his career was one of promise. Educated under the care of the Rev. J. Summerhayes, in Ealing, he then went to Marlborough College, and subsequently to the Medical College at Epsom. He there won numerous prizes for scientific and literary attainments, and was also distinguished in athletics, holding the challenge cup for one year. After matriculating at London University, he entered St. George's Hospital, which he quitted to help his father in carrying on his practice in this locality. His premature demise was due to the inhalation of chloroform, which, there is little doubt, he had been accustomed for some time past to inhale as a remedy for insomnia, and hence the fatal accident which terminated his days. Mr. Goodchild, who was a partner of Mr. C. A. Patten, had only recently been proposed by that gentleman as a new member of the British Medical Association.

MEDICO-LEGAL NOTES AND QUERIES.

MEDICO-LEGAL FEES ABROAD.

THE fees for medical opinions in a British court of law are hardly in proportion to the trouble which medical evidence entails on the skilled witness, but at least we do not hear of a fee being curtailed after the doctor has been once paid at the court itself. In a remote part of Bohemia, says the *Casopis Lékaru Ceskych* (a journal written in the language of a nationality that can claim Skoda Czermak, Czerny, Rokitansky, and other medical men who have done everything calculated to elevate the status of their profession in the eyes of their countrymen), an ophthalmic surgeon received a writ to examine the injured eye of a plaintiff, and to report upon the case. He took great pains with the patient, using the ophthalmoscope, a giving a careful and well considered opinion in court. He th claimed two florins for the examination of the case, and thr florins for the opinion, and the clerk of the court paid the witne five florins, without hesitation. Next day the ophthalmic surge received a peremptory order from the court, demanding that should return three florins ninety kreuzer within three days, he had made an exorbitant claim. This incident might literal expose the British practitioner to "the envy of less happier state but, on the other hand, if comparisons between English legal a thorities, and Austrian officials in their relation to medical witness seem odious, the difference between their ideas of liberality is n so very wide.

ALCOHOLIC TEMPERANCE DRINKS.

A SERIOUS blow to total abstinence was inflicted in the Queen's Ben Division on Tuesday, before Mr. Baron Pollock and Mr. Baron Hudd stone, in the case of Leah, appellant, *v.* Minns, respondent. The spondent was summoned before the justices at Nottingham f having sold Summer's Botanic Beer without having a beer licen The justices dismissed the charge, and it was this decision that w now appealed against. The botanic beer was made of herbs a sugar, and contained 5.80 per cent. of proof spirit. In Bass's p ale there was from 10 to 12 per cent. of proof spirit; in ordina table beer from 2½ to 8 per cent., and in lager beer from 10 to per cent. An analysis of other bottles of botanic beer showed l than 5 per cent. of proof spirits, and an analysis of ginger beer s at a halfpenny per bottle contained a similar quantity of spirit. A. L. Smith appeared for the Commissioners of Inland Revem Mr. R. S. Wright for the respondent. The Court said that the formation was laid under the 4 and 5 William IV., and they thoug that since then various things had been sanctioned for the brewi of beer; yet this botanic beer did not come within any definition beer. The respondent had been summoned for a penal offence, a they must not extend the law so as to bring him within it. T appeal was dismissed with costs. We doubt the accuracy of estimate of 5 per cent. of alcohol in ginger beer. If it be at all corre the total abstainers have been imbibing for years abundance of al holic liquor, in spite of their wishes and intentions.

MEDICAL NEWS.

MEDICAL VACANCIES.

ARMAGH UNION, Blackwatertown Dispensary.—Medical Officer. Salary, £ per annum, with fees. Election on the 15th instant.

CAMBRIDGE COUNTY LUNATIC ASYLUM, Fulbourn.—Resident Me Superintendent. Salary, £500 per annum. Applications by March 16th.

CAMBRIDGE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Princ Medical Officer. Salary, £175 per annum. Applications to Mr. W. Littlechild, 5, Queen's Lane, Cambridge, by March 23rd.

CARLISLE DISPENSARY.—Assistant House-Surgeon. Salary, £100 per ann Applications to Mr. John Ostell, Honorary Secretary, 14, Bank Str Carlisle.

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £10 annum. Applications by April 7th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clin Assistant. Applications by March 22nd.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—House-Surgeo Salary, £63 per annum. Applications by March 22nd.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—Junior Resi Medical Officer. Applications by March 17th.

HARTLEPOOLS FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—As ant Medical Officer. Salary, £120 per annum. Applications to J. Tweed 12, Albion Terrace, Hartlepool.

KENT AND CANTERBURY HOSPITAL.—House Surgeon. Salary £80 p annum. Application by March 23rd.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Sa £70 per annum. Applications by March 31st.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, AND LUNATIC HO PITAL OR ASYLUM.—Honorary Assistant-Physician. Applications March 31st.

MIDDLESEX HOSPITAL, W.—Assistant Dental Surgeon. Application March 10th.

NOTTINGHAM DISPENSARY.—Resident Surgeon. Salary, £200 per ann Applications by March 22nd.

PARISH OF ST. MARY, ISLINGTON.—Resident Assistant Medical Office Dispenser of Medicines. Salary, £100 per annum. Applications by Ma 13th.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY.—Hon Surgeon. Applications to the Honorary Secretary, Dispensary, Stoke N ton, by March 13th.

SPALDING UNION.—Resident Medical Officer. Salary, £51. per annu Applications, by March 10th.

'ETER'S HOSPITAL FOR STONE AND URINARY DISEASES, Henrietta treet, Covent Garden.—House-Surgeon. Applications by March 21st.

N AND DISTRICT HOSPITAL, Newark-upon-Trent.—House-Surgeon and ecretary. Salary, £100 per annum. Applications by March 12th.

VERSITY COLLEGE, London.—Demonstrator of Physiology. Salary, £150 er annum. Applications to Professor Schäfer before March 15th.

T END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, ARALYSIS, AND EPILEPSY, 73, Welbeck Street, W.—Casualty Physician. Applications to P. F. Proctor.

TMINSTER HOSPITAL, Broad Sanctuary.—Physician. Applications by March 20th.

TMINSTER HOSPITAL, Broad Sanctuary, S.W.— Assistant-Physician, pplications by March 20th.

K LUNATIC ASYLUM.—Resident Medical Superintendent. Salary, £350 er annum. Applications by March 17th.

K FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Assistant Medical fficer. Salary, first year, £150; second, £160: third, £170. Applications o J. Brown, Park Street, Groves, York.

MEDICAL APPOINTMENTS.

OR, W. C., M.B., appointed House-Surgeon to the Royal Portsmouth, rtsea, and Gosport Hospital, *vice* J. A. Williams, M.B., resigned.

REY, J. B., M.D., appointed Honorary Surgeon to the Chorlton-upon- dlock Dispensary.

S, E., M.R.C.S., appointed Assistant Medical Officer and Dispenser to the ntral London Sick Asylum.

, W., M.A., M.B.Oxon., M.R.C.S., L.R.C.P., appointed House-Physician to Thomas's Hospital.

USON, J. H., M.D., appointed Medical Officer to the Killygordon Disasary District of the Shanorlar Union.

FITHS, C., L.R.C.S., appointed House-Surgeon to the County and Borough Carmarthen Infirmary, *vice* W. Williams, M.R.C.S., resigned.

LIVER, G., M.B., appointed Assistant-Physician to the London Fever Hosal, *vice* G. C. Henderson, M.D., resigned.

-BROWN, C., M.B., C.M.Aberd., M.R.C.S., L.S.A., appointed House-Physician St. Thomas's Hospital.

DY, L.P., M.R.C.S., appointed Resident Medical Officer to the Queen Charte Lying-in Hospital, *vice* W. H. Quicke, M.R.C.S., resigned.

TH, Christopher, F.R.C.S., appointed Consulting Surgeon to the Northest London Hospital.

THCOTE, R. G., M.R.C.S., appointed Assistant Resident Medical Officer to e Chorlton Union, *vice* J. S. Main, M.D., resigned.

INGS, J. W., L.R.C.P., appointed District Medical Officer and Public Vacnator to the Bromyard Union, *vice* J. Owen, M.D., resigned.

L, W., M.R.C.S., L.R.C.P., L.S.A., appointed Assistant House-Surgeon to . Thomas's Hospital.

ES, W. Culver, M.D., C.M., F.R.C.S.E., appointed Honorary Physician to e Westminster Hospital for Women, Vincent Square.

OP, W. H. H., M.B., appointed Honorary Ophthalmic Surgeon to the ddington Green Hospital for Sick Children, *vice* R. M. Gunn, M.B., signed.

TH, S., M.B., appointed Honorary Surgeon to the Hospital for Women and ildren, Vincent Square, *vice* W. Tolwell, M.R.C.S., resigned.

E, A., M.R.C.S., appointed Medical Officer to the Dore Union, *vice* S. K. well, M.D., resigned.

TON, Henry A., L.R.C.P.Edin., M.R.C.S.Eng., appointed Assistant Medical ficer to the Cornwall County Asylum, Bodmin, *vice* F. C. Gayton, M.B., resigned.

DONNELL, J., L.R.C.P., appointed Medical Officer to the Glenmaddy Union, ce P. J. Bodkin, L.K.Q.C.P.I., resigned.

DISON, W. T., M.B., appointed House-Surgeon to the Royal Surrey County ospital.

LARD, A. E., M.B., appointed Extra Dispensary Surgeon to the Western nfirmary, Glasgow.

LSWELL, O. B., L.R.C.P., appointed Assistant Medical Officer and Dispenser the Holborn Union, *vice* S. H. Moore, L.R.C.P., resigned.

LAIR, H., L.R.C.P., appointed Medical Officer to the Parochial Board of chtergaven.

UTHERS, James, F.R.C.P.E., appointed Consulting Physician to the Leith ospital, *vice* the late Dr. Combe.

MPSON, C. S., M.B., appointed Medical Officer to the Barnstaple Union, *vice* Thompson, M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

charge for inserting announcements of Births, Marriages, and Deaths is 3*s.* 6*d.*, *which should be forwarded in stamps with the announcements.*

BIRTHS.

DLE.—On March 5th, at High Street, Merthyr Tydfil, the wife of C. Biddle, R.C.P.Lond., etc., of a daughter.

MMERSLEY.—On the 5th instant, at Rushey Green, Catford, the wife of J. ammersley, M.R.C.S.Eng., of a son.

DEATH.

ON.—On February 22nd, at the Cambridge County Asylum, Fulbourn, George ackenzie Bacon M.A. (Hon.) Cantab., M.D., in his forty-seventh year

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's return, for the week ending the 3rd instant, that the death-rate recently averaged 38.8 per 1000 in the three principal Indian cities; it was 36.0 in Bombay, 37.3 in Madras, and 42.1 in Calcutta. Small-pox caused 71 deaths in Bombay and 4 in Madras, while 47 fatal cases of cholera were recorded in Calcutta; "fever" showed the largest proportional fatality in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-two of the largest European cities, was 29.5, and was no less than 6.5 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 38.3, although showing a further decline from the higher rates in recent weeks; the 683 deaths included 24 from small-pox and 23 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 23.7, ranging from 17.1 in Christiania to 26.3 in Copenhagen; measles caused 6 more deaths in Stockholm, and whooping-cough 5 in Copenhagen. In Paris, the death-rate was equal to 27.7, and was somewhat lower than in the previous week; the deaths included 34 from typhoid fever, and 9 from small-pox. The usual return from Brussels does not appear to have come to hand. The rate in Geneva was equal to 28.3, but no fatal case of zymotic disease was noted. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.2, the highest rate being 33.1 in Amsterdam, where 10 fatal cases of diphtheria were recorded; 7 deaths from small-pox occurred in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.7, and ranged from 23.4 and 23.6 in Berlin and Dresden, to 38.6 and 40.9 in Prague and Trieste. Scarlet fever and diphtheria showed more or less fatal prevalence in all these German cities. The death-rate averaged 26.9 in three of the principal Italian cities; it was equal to 22.8 in Rome, 30.0 in Turin, and 30.3 in Venice; small-pox caused 2 and diphtheria 5 deaths in Turin. In four of the largest American cities, the rate averaged 24.5, and ranged from 21.5 in Philadelphia to 28.7 in Baltimore. Small-pox caused 49 deaths in Baltimore, showing a further decline from recent weekly numbers. Seven deaths from small-pox and 8 from typhoid fever were returned in Philadelphia. Diphtheria was more or less fatally prevalent in each of these American cities.

DISEASED MUTTON.—Illness of a most serious nature has been reported as having occurred in the neighbourhood of Snake's Valley, Western Australia. During the last few weeks there have been several cases in the neighbourhood of Snake's Valley of persons being attacked with illness of a most serious nature. The first symptoms are twitchings of the nerves, somewhat similar to those produced by strychnine, and some days after sudden pain and mania seize the patients, who, if not forcibly restrained, would dash their brains out against the wall, and during the paroxysm do all in their power to bite those holding them. In the last cases, where two were attacked at the same moment, four men were required for four and a half hours to hold one of them on the bed, and after the violence of the attack had passed, that one remained for over twenty-four hours in a state of insensibility. It is suggested that these might possibly have arisen from the presence of parasites in diseased sheep, and the mutton when consumed not being sufficiently cooked.

SLAUGHTER-HOUSE REFORM.—At the usual monthly meeting of the Sanitary and Economic Supply Association, held on the 17th ult., in the School of Science, Gloucester, the Bishop of Gloucester and Bristol in the chair, after a discussion on the above subject, introduced by Dr. Wright, F.R.S., Medical Officer of Health for Cheltenham, the following resolution, proposed by Dr. Bond, and seconded by Mr. G. Bowly, was unanimously adopted:—"That this meeting desires to express its warm approval of the principle of public slaughter-houses as conducive to the interests of economy, health, and humanity; and its earnest hope that the local authority of this neighbourhood will, with as little delay as possible, take such steps as may be in their power to provide for this most pressing want.

A GREAT MEDICAL TEMPERANCE DEMONSTRATION is announced to take place this (Friday) evening, at the Royal Victoria Coffee Hall, Waterloo Road (formerly Victoria Theatre), at a quarter to eight, Dr. Norman Kerr in the chair. The following gentlemen, it is expected, will address the meeting: Dr. Alfred Carpenter, Dr. C. R. Drysdale, Surgeon-General C. R. Francis, M.B., Dr. S. Wielobychi, Surgeon-Major G. K. Poole, M.D., Dr. J. J. Ridge, Mr. Harrison Branthwaite, and Dr. H. W. Williams.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Routh: A Case of Poisoning by Citrate of Caffein. Dr. Robert Lee: On the Diffusion of Medicinal Agents in the Atmosphere. Dr. Symes Thompson: On Alpine Health-Resorts.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. A. Willett and Mr. W. J. Walsham: Second Case of Malformation of the Left Shoulder-Girdle, with Remarks on the Nature of the Deformity. Dr. Percy Kidd: Two Cases of Congenital Syphilis of the Larynx.

WEDNESDAY.—Hunterian Society, 7.30 P.M. Council. 8 P.M. Mr. Tatham: Malformed Heart. Dr. Warner: The Advantages of Antiseptic Precautions in Draining Dropsical Legs.

THURSDAY.—Harveian Society of London, 8.30 P.M. Clinical evening. Several cases and specimens of interest will be exhibited.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Edit 161A, Strand, W.C., London; those concerning business matters, non-delive of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161 Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDIC JOURNAL, are requested to communicate beforehand with the Manager, 16 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, sho authenticate them with their names—of course not necessarily for publicati

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Offic of Health if they will, on forwarding their Annual and other Reports, fav us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to C respondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A MARINE MEDICAL SERVICE.

SIR,—As one who has been a medical officer in the mercantile marine should like to be allowed to make a few brief remarks on one of the points cussed in the leader that appeared in the BRITISH MEDICAL JOURNAL of 10th instant.

In connection with the subject of remuneration, the following pass occurs: "Let saloon passengers be required to pay the surgeon for his servi should they need them, according to a just and specified scale of charges." N I cannot but think that the sum accruing in this way would be, not only varia but, in general, trifling. People, as a rule, are not more likely, by the fac being afloat, to know when they stand in need of medical services than the when ashore. Preventive advice they are not yet enlightened enough to and spontaneously pay for; and one reason why so many fail to consult doctor, when from actual illness they ought to do so, is because they do want to spend a fee, or an unknown number of fees, for what often seem them a trifle. It appears to me, moreover, simply inexcusable that a mod remuneration which, like other survivals, has nothing to commend it but plea of custom—a mode which reason and advancing knowledge alike condem—should unnecessarily be adopted as a part of anything that professes to reform. And further, the anomaly is increased by the fact that the metho payment proposed is different, for no apparent reason, from that suggested the steerage passengers and crew. It is not in the least necessary that "saloon passengers should be pauperised in this respect;" and I am only surpri that, after all that has been said and written recently on the system of pr dent payments for medical services, such a proposal should be found medical leader.

I must venture to suggest that the plan required is something like this. the shipowner be required to pay, say £10 a month, the Government contri ing the same amount towards the medical officer's salary; and where the nur of passengers exceeds, say 500, let an assistant medical officer be appointe half the salary of the principal. The money required for the purpose migh raised wholly, or in part, by a levy of sixpence per head on steerage sengers, and two shillings and sixpence on saloon passengers, the fore moneys being perhaps appropriated as indemnity by the shipowners, and latter by the Government; or both levies might be made, and the me officer's salary paid therefrom, at the rate of £20 a month by the Gov ment alone. But in whatever way the money be raised, the medical offi should be saved the trouble, the embarrassment, and the indignity of collec it. Everything considered, it will probably be found that the necessary vants, the improved accommodation, and the board required to be provide the shipowner, would be quite as much as we could reasonably ask him to tribute, the salary coming from the passengers indirectly, in the manner I indicated.

The objection to paying the medical officer by capitation fees directly, is in all ships, except perhaps the colonial emigration ships, the number of sengers varies considerably from time to time, and the medical officer's would vary of course directly in proportion. From the nature of the ca a large salary cannot be looked for; all the more need, therefore, that it shou be constant in amount, and certain and regular in payment. Of course, £ year is not a penny too much for a good man, but that is scarcely the pa There are plenty of good men who would be content to fill the post for and not a few who do even harder and more onerous work on shore wit such pay. Payment on shore is not, invariably, in proportion to profess skill, and is not likely to be while practices are bought and sold, while thing like a just and ready test for the skill that is worth so much a yea not yet been invented. On the other hand, to make reasonable dem would probably only succeed in raising an amount of opposition which defeat our efforts at reform, or greatly mar the results. W. F. PHILLI

St. Mary Bourne, Andover, February 19th, 1883.

ANOTHER VEGETARIAN'S EXPERIENCE.

SIR,—It may be of interest if any other medical men besides your correspon of last week will give their experience of vegetable diet—or, rather, of a exclusive of butchers' meat—stating why they have adopted it, and the re I am aged 57, and have suffered from lithiasis and rheumatic pains, bes periodic attacks of gastric catarrh. The following is my dietary: *Breakf* 2½ ounces of American breakfast cereals in porridge, a small cup of coffe bread. *Dinner*—First course: 1½ ounce of Snodgrass' prepared pea flour into soup, with one drachm of Kemmerich's extract of meat; second c potatoes and milk; third course: rice and milk, or tapioca and milk. A cup of weak tea, an egg, and bread. I take 15 or 20 ounces of milk in v forms in the course of the day. I have got rid of the rheumatism a lithiasis. I still suffer from the gastric catarrh when exposed to co damp.—Yours, etc., A. W

"GUARANA" COFFEE.

R. G. H. wishes to be informed whether there is such a preparation as "Guara Coffee, and, if so, he would feel obliged with information as to the manufa and price. He has not been able to learn of it through any druggist.

Alcohol and Intoxicating Drinks.

.—Might not even Dr. Kerr be a little less iconoclastic in his criticism, and little more guarded in his assertions on the above subject? It seems possible for such an eminent gentleman as he, with "medical training," "practical acquaintance with the facts of the pathology of alcohol," etc., to fall into error," quite as "naturally," too, to all appearance, as those who ave not obtained and enjoyed such advantages. If the danger to the eformed inebriate lie not in alcohol as alcohol, then in alcohol as what does lie? In alcohol as proportion? Scarcely pure English, such setting! Nor m I persuaded as to its infallibility. Are we to set at nought the power of a rop or two of blood to give rise to all the fierceness in the nature of the tame ger? And it may be a nice point to prove how far the thirst for alcohol in he inebriate actually differs in power and intensity from that for blood in the bove beast. Again, putting aside such a danger altogether, with which lany members of our profession unthinkingly, or unbelievingly, are daily surounding their reformed (?) patients, it still is an absurd thing to bolster up n evil appetite—on a sort of jail-fare, so to speak—in the anticipation of its nguishing to death, in spite of Dr. Kerr's belief in such a system of needless xpense and prolonged thraldom. Why not deal with this craving as we eal with other doomed criminals? The "ginger-beer" retreat recalls to my lemory the case of a friend who, upon religious scruples, abandoned the use f tobacco, to which he had for half a lifetime been a great slave. The ravings "for something to keep him company" were so intense, that he took o carrying mint-lozenges in his pocket, "to kirk and to market," with the esult of becoming as much bound to them as he had formerly been to the narcotic poison." Which, I ask, was the worse state of such a man?

The last paragraph of Dr. Kerr's letter is even more inaccurate. His definion of a poison is very decided and very short; but, unluckily, equally indnite, which is not to be wondered at, inasmuch as it forms one of the vexed uestions amongst toxicologists. But to say that "we know nothing" of the ffects of a minute dose of such a drug as aconite is certainly a gross mistake; nd if Dr. Kerr does not know, he should surely content himself with simply aying so. Mr. Spencer Wells was the first reputed as finding great benefit in small half-minim) doses; but I, with many other allopathetic practitioners even f my own acquaintance, have been quite satisfied with results of one-wentieth of a drop. Is this not minute enough to please Dr. Kerr? As to he truth of such assertion, he can prove for himself in the first case of catarrh, n the early stage, of any of the mucous membranes, that comes under his otice. The only room I can see for a fallacy in connection with these effects s the possibility of it being the other ingredient of the tincture, the spiritus ini. But, then, that is alcohol, the other substance quoted.

Let me only further point out to Dr. Kerr that, should he not be satisfied vith the minuteness of the dose in my argument given, it has still the adantage of possessing such a quality to a much higher degree than the beverages do of alcohol, of which he speaks in such sturdy and positive terms of ecommendation.—I am, yours faithfully,

T. Hislop Johnston, M.B.Ed.

Rosehill, Eskbank, Dalkeith, N.B., February 10th, 1883.

a,—There are some statements in Dr. Norman Kerr's letter of the 10th inst., which are at variance with my experience; and, as the subject of the reclamation of drunkards is an important one, I would like to have them elucidated. Dr. Kerr states that he has "seen marked good following the administration of various intoxicating beverages containing from 5 to 2 per cent" (of alcohol). Now I cannot imagine how such beverages can be considered unintoxicating, as London porter only contains 5.12 per cent. of alcohol, and it is certainly intoxicating.

Then Dr. Kerr speaks of ginger-beer containing 1½ per cent. of alcohol, as having been taken, not only without harm, but with considerable benefit, by reformed drunkards. Half-a-pint of such ginger-beer would contain 1.2 drachms of absolute alcohol, or 2.7 drachms of proof spirit, a quantity which, it appears to me, would be quite sufficient to arouse a dormant craving. I have more than one case in my mind where a sip of wine, which could not have contained ten drops of alcohol, revived a craving which had lain dormant for years, and which, when aroused, was not gratified until delirium tremens and death resulted. In these cases there was undoubtedly the element of taste; but, apart from taste, I cannot help believing that the presence of alcohol in the blood causes a craving which too often leads to a further consumption of alcohol, and that even greatly diluted drinks may be a source of danger to the reformed, who, always prone to relapse, should not have unnecessary temptations placed in their path.

I should like to know why aerated beverages need ferment, and whether ginger ale and lemonade could not easily be obtained free from such measurable quantities of alcohol.

There is another point in which I must join issue with Dr. Kerr; my experience amongst abstainers leads me to believe that the use of the so-called temperance beverages marks a middle ground between the non-abstainer and the abstained of some standing. At first, when the use of alcoholic drinks is given up, various substitutes are tried, but after a time they gradually fall into disuse, and water, the natural beverage, is relied on. In confirmation, I may mention that in a large temperance hotel aerated waters are but little used, and when they are it is chiefly by non-abstainers. The probable solution is that, when the alcohol is eliminated from the blood, the morbid thirst ceases.

I see no hygienic reasons for recommending weak alcoholic or flavoured and sweetened beverages instead of water; but those who differ from me have at present plenty of varieties to recommend, and I hope we will not see the standard of non-intoxicability (according to Government) raised above what it is at present.—Yours, etc., E. MacDowel Cosgrave, M.D., M.B., M.A.

Operation for Hernia.

:R,—Some weeks ago, your correspondent "H. L. H." quoted a passage from Captain Burnaby's book *On Horseback through Asia Minor*, in which it is stated that the Koords are accustomed, in cases of hernia, to burn the skin around the seat of the protrusion; that the proceeding is sometimes attended with considerable benefit. He adds that this method of cure is not generally known to the faculty, and he therefore invites attention to it. May I also invite "H. L. H.'s" attention to the fact that this same operation was practised in the latter half of the tenth century by the Arabian physician Abulcasis. To verify this statement, he may refer to Hæser's *Geschichte der Medicin*, vol. i, p. 550, or to Channing's edition of *Abulcasis de Chirurgiâ*, p. 91.—Yours truly,

E. C. Perry.

King's College, Cambridge.

Incipient Cataract: Optical Illusions.

Sir.—I am attending an elderly lady, who is in an advanced state of Bright's Disease, but, except general debility and œdema, no great sufferer, and in possession of her mental faculties. Cataract is forming on both eyes. Nearly every day she sees for some time a church, numbers of people entering it, carriages driving up, sometimes a market-place full of life opposite her windows, although she is quite aware that there is nothing of the kind in reality. The vision ceases when she shuts her eyes; therefore I cannot consider it a hallucination in the proper sense of the term. May the impaired vision (in an anæmic person) be the cause of it, presenting to the mind confused images for a persisting wrong intepretation?—Yours faithfully,

London February, 27th. Augustus Hess, M.D.

*** The most probable explanation of these appearances is the supposition that the cataract is progressing in the form of dotted or linear opacities, the shadows of which, projected on the retina, are readily imagined by the mind into the forms of objects with which the patient has been or is familiar.

Hyperidrosis.

Sir,—If your correspondent "M.D." will give his patient five drops of nitrite of amyl with a little spirit (one drachm) and tragacanth mixture (one ounce) in some simple vehicle three times a day, I think he will find it will soon cure him.—I am, etc.,

C. H. F. R.

*** People are variously affected by this drug; and full doses require caution and careful watching.

Errata.—At page 434 of the Journal of March 3rd, second column, first and second lines of Mr. Boys' letter, *for* "Dr. Ewing Smith," *read* "Mr. Greig Smith," and *for* "Mr. Harcourt," *read* "Mr. Harsant."

Hemiplegia following Acute Myelitis.

Sir,—If "A Physician," who writes in the Journal of January 6th, will communicate with me, I will give him such particulars of a long-standing and extreme case of hemiplegia following acute myelitis, treated with marvellous success at the Droitwich Brine Baths, as may induce him to try this treatment in the case to which he refers.—I am, etc.,

Gloucester, March 6th, 1883. Geo. A. Hepworth, M.R.C.S., etc.

Tricycles.

Sir,—As one who used a tricycle in country practice for more thon a year, I may be allowed to speak with some authority on the subject. I should certainly not advise any medical man who has long distances to cover, to attempt the use of a tricycle. The exercise is so severe as to entirely weary one out, especially in a hilly country. The machine which I had was the "Salvo," made by Stanley Brothers, of Coventry, and which about three or four years ago was greatly praised by various writers in the Journal. The principal advantage I found, was that for night work, you could start at once, without any delay.—I am, sir, yours, etc.

J. A. Erskine Stuart.

Healy, Batley, Feb., 26th, 1883.

The Dosimetric System.

M.D.—We do not know of any criticism by any recognised authority of the so-called "dosimetric" system. The plan of giving the active principles of drugs in small doses, instead of the crude drug itself, has long been recognised, and is universally practised; but it is nonsense to speak of it as a "system" of medicine.

A Metropolitan Tariff of Fees.

Sir,—The British Medical Association has done, and is doing, much for the honour and welfare of the profession, but it has left one thing undone; it has never drawn up a scale of fees, and a code of ethics, for the general practitioner. It is true that the Manchester Medico-Ethical Association and the Shropshire Branch of the British Medical Association have taken up the subject, but I can affirm, after twenty years' practice, that there is an urgent need for such a guide for the Metropolis. If my suggestion were acted upon, it would prove of very great service to many who now have no certain light to guide them, and it would probably be of use as a standard for the various Branches of the Association.—I am, Sir, your obedient servant,

Lindum.

Vegetarian Cookery.

F.R.S.E. asks if there is a good "vegetarian" cookery book published? He does not mean merely a collection of recipes for cooking vegetables, but one describing various assortments of dishes for different meals.

Enlarged Tonsils.

Sir,—Will some one of your correspondents kindly say, if moderately enlarged tonsils will regain their natural size under any local application, and, if so, what is the best course to adopt? I have always found nitrate of silver effective to a limited extent, but beyond a certain point, it seems to lose its reducing power.—I am, etc.

S.M.

Eruptions following Injections of Morphia.

Sir,—If your correspondent "L.B." will omit the acetic acid from his solution of three grains of acetate of morphia to a drachm of distilled water, and then if he will always inject the solution deeply into the cellular tissue over the abdomen, hips, thighs, or legs, he will never again see an abscess follow its use.—I am, etc.

Medicus.

Persistent Hiccough.

Sir,—In reference to letter of "M. D.," allow me to say that in an obstinate case of hiccough, under my care, some time since, I was able to instantly check it by a subcutaneous injection of one quarter grain of morphia. The cause of the hiccough was a disordered condition of the alimentary canal. Repeated aloetic enemas cured the complaint; and the frequent use of Hunyadi Janos water has prevented the return of what had previously been an almost annual trouble.—I am, yours truly,

Will. J. V. Haile.

February 24th.

Infallible Diagnosis.

"Now in Vienna they're first rate at diagnosis; but then, you see, they always make a point of confirming it by a *post mortem*."—*American Paper*.

A Caution.

SIR,—I think it right to publish the following facts, and put my medical brethren on their guard against an impostor. A tall, dark man, of fairly good address, called on me a few days ago to ask for assistance. He stated that his name was Phillips, and that he was nearly related to two medical gentlemen of that name in practice in London. On inquiry I found that the man's statements were absolutely false. He took good care to leave the neighbourhood before I could ascertain the facts of the case, otherwise I should have given him in charge.—Yours faithfully,

Hopefield Villa, Lydney, Gloucestershire, February 23th, 1883. ANDREW S. CURRIE, M.D.

Paraphimosis.

SIR,—Having been called to a case of paraphimosis in a youth, and having tried the usual remedies, without success, I have great pleasure in bearing testimony to the utility of the application of the narrow bandage, as recently advocated in your JOURNAL—when reduction was easily accomplished.—Yours truly,

Folkestone. ALLEN DUKE.

Treatment of Puerperal Mastitis by Iodide of Lead Ointment.

DR. THOMAS T. GAUNT, in the *American Journal of Obstetrics*, expresses his disappointment at the ill success of belladonna in checking the secretion of milk, but reports good effects from iodide of lead. He says: "The breast being thoroughly dried and perfectly cleansed, we smear its surface with the officinal ointment of the iodide of lead, and then gently rub it in until a considerable quantity is absorbed. Soak a piece of sheet-lint, of a size sufficient to cover the breast, in the following solution: Acetate of lead, from ʒij to ʒss to the pint of a one-to-four solution of alcohol. If we desire a more elegant preparation, eau de Cologne may be substituted. If there be much pain, it is often well to apply an ice-bladder upon the sheet-lint covering the breast. The lint should be frequently dipped in the lead lotion. The following phenomena will present themselves: first, a cessation of pain, fulness, and uneasy feeling of distension, which is so annoying. It is common for the patient, who has been exhausted by pain and consequent loss of sleep, to fall into a refreshing slumber even after the application is made. In the course of three or four hours, the breasts may be completely emptied by an experienced hand. The ointment should be used as a lubricant during the manipulation. By applying the iodide freely twice or thrice daily, the secretion will be gone in less than one week, as a rule. The pivotal point in the treatment is the use of this ointment; the evaporating lotion and cold being only adjuncts. I have proved by repeated trials that, when applied alone, it is capable of exerting an absolute control over the secretion. I believe we here invoke a specific action from the lead iodide. A point of considerable moment is the partial anæsthesia it is capable of inducing, which thus enables us to empty the glands, where before even slight pressure was badly borne. Its action without doubt extends to the epithelial cells and inhibits their secretory activity, as is seen in its action, in cases like the above, in causing the drying up of the secretion."

RUSH.—In the pages of recent back numbers, this subject has frequently been treated.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. Robert W. Jenkins, Fawley, Hants; Mr. Arthur H. Boissier, Pocklington; Dr. Manson Fraser, London; Mr. William Gibson, New York; Dr. A. D. Napier, Dunbar; Dr. A. Carpenter, Croydon; Dr. L. Maybury, Southsea; Dr. A. Dempsey, Belfast; Dr. E. H. Jacob, Leeds; Mr. R. G. Herbertson, New Cumnock, N.B.; Dr. A. T. Myers, London; Mr. A. W. Mayo Robson, Leeds; Mr. T Jackson, Brough, Yorkshire; Dr. Carey Coombs, Castle Cary; Mr. Samuel Stretton, Kidderminster; Mr. T. Whitehead Reid, Canterbury; Dr. J. Solis Cohen, Philadelphia; Mr. George Padley, Swansea; Mr. Charles Mercier, London; Mr. C. W. Belfield, Bristol; Mr. C. T. Kingzett, London; Mr. A. M. Boys, Pill; Mr. Shirley F. Murphy, London; Dr. A. W. Wallace, Parsonstown; Mr. J. Scott Battams, London; Dr. Saundby, Birmingham; Mr. H. Ernest Trestrail, Aldershot; Dr. W. L. Hunter, Pudsey; Mr. J. E. Lane, London; Dr. Milson, South Hampstead; Mr. J. Brooks, Ludlow; Mr. C. A. Patten, Ealing; Mr. J. Fletcher Little, Wharfedale, Leeds; Mr. T. H. Ravenhill, Birmingham; Dr. Sawyer, Birmingham; Mr. George F. Edwards, Alfreton; Dr. F. W. Draper, Boston; Mr. J. C. Hurley, London; Dr. C. Meymott Tidy, London; Miss E. Cons, London; Mr. Alex. P. Fiddian, Cardiff; Mr. Lawson Tait, Birmingham; Dr. G. Mayer, Aix la Chapelle; Mr. Charles Stacpoole, Salisbury; Mr. F. Bowreman Jessett, London; Mr. George May, jun., Reading; Mr. A. E. Harris, Sunderland; Mr. B. G. Morison, London; Our Aberdeen Correspondent; Dr. Leslie Phillips, Birmingham; Mr. Thomas Dixon Savill, London; Mr. D. Biddle, Kingston-on-Thames; Mr. Walsham, London; Dr. D'Arcy Adams, London; Mr. Arthur Cooper, London; Dr. S. Jex Blake, Edinburgh; Mr. W. L. Thompson, London; Mr. Plowman, London; Mr. Gillam, Bromyard; Dr. Murrell, London; Mr. T. A. Perry Marsh, Devonport; Dr. Norman Kerr, London; Mr. I. J. Baker, Hurst Hill, near Bilston; Mr. J. E. Wakefield, London; M. O. H.,; Dr. T. Orme Dudfield, Kensington; Mr. Martin J. Preston, Nottingham; Mr. William J. Black, Pendleton; C. H. V. R.; Mr. D. McLeod, Hawick, N.B.; Mr. R. H. B. Wickham, Newcastle-on-Tyne; Dr. Gerald Mitchell, Templemore, co. Tipperary; Dr. E. J. Ball, Chelsea; Dr. G. W. Potter, London; Mr. W. H. Pearce, London; Mr. John J. Eberle, Thirsk; Mr. Patmore Sheehy, London; A Member, Bath; The Editor of the *Chemist and Druggist*; Dr. Frederick O. Palmer, East Sheen; Dr. L. Charles Smith, Halifax; Mr. F. A. Hallsworth, Atherstone; Mr. T. Jenner Verrall, Brighton; Mr. John Fryer, Dewsbury; Mr. H. J. Knight, Rotherham; Mr. W. Allam, London; Dr. Carter, Liverpool; Our Glasgow Correspondent; Mr. Wm. Berry, Wigan; Mr. George Parsons, Ambleside; Mr. J. Widdup, Welford; Mr. E. C. Perry, Cambridge; The Secretary of the Hospital for Women and Children, Westminster; Dr. Sawyer, Birmingham; Dr. Charles Orton, Newcastle-on-Tyne; Dr. George Harley, London; Dr. R. Maclaren, Carlisle; Our Belfast Correspondent; Our Dublin Correspondent; Dr. E. Holland, London; Mr. James Davison, Ballinakill; Mr. J. H. Crisp, Lacock, Wiltshire; Mr. J. Wickham Barnes, London; Mr. J. Sarjant, Worcester; Dr. James Alexander, Paignton; Mr. G. A. Hopworth, Worcester; Mr. W. Ingram Keir, Melksham; Dr. F. C. Gresham, Bromley Common; Mr. Arthur Cooper, London; Mr. Hendry, Liverpool; Mr William Outhwaite, London; Mr. F. T. Good, St. Neots; Mr. Vacher, Birkenhead; Dr. T. S. Clouston, Morningside, Edinburgh; Mr. G. W. Hastings, London; Mr. E. M. Owens, Leamington; Messrs. Cassell, Petter, Galpin and Co.; The Hon. Secretaries to the Pathological Society, London; Dr. A. Waters, Liverpool; Dr. R. Lee, London; Mr. Jas. G. Macaskie, Belford; O.; H. A. L.; Mr. F. Passmore, London; Dr. Allan MacNaughton; Mr. George Ashmead, Brierley Hill; Mr. Arthur Roberts, Keighley; Mr. John F. J. Sykes, London; Mr. E. Bremridge, London; Mr. Hugh Price, Narberth, South Wales, etc.

BOOKS, ETC., RECEIVED.

The Student's Handbook of Surgical Anatomy. By John M'Lachlan. Edinburgh: E. and S. Livingstone; London: Baillière, Tindall, and Cox. 1883.

A Dictionary of Domestic Medicine and Household Surgery. By Spencer Thomson, M.D., L.R.C.P.Edin. Thoroughly revised and brought down to the present state of medical science by J. C. Steele, M.D., assisted by the Author, with a Chapter on the Management of the Sick-room, illustrated by numerous woodcuts and diagrams. Seventeenth Edition. London: Charles Griffin and Co., Exeter Street, Strand. 1883.

Manual of the Minor Gynæcological Operations and Appliances. By J. Hallida Croom, M.D., F.R.C.P., F.R.C.S.E. Second Edition, revised and enlarged Edinburgh: E. and S. Livingstone; London: Baillière, Tindall, and Cox 1883.

A Guide to the Medical Profession; a Comprehensive Manual conveying the means of entering the Medical Profession in the Chief Countries of the World. By Edwin Wooton. Edited, and with Preface, by Lyttleton Forbes Winslow, M.B., D.C.L. London: L. Upcott Gill, 170, Strand, W.C.

General Surgical Pathology and Therapeutics; in Fifty-one Lectures: a Text Book for Students and Physicians. By Dr. Theodor Billroth, Professor of Surgery in Vienna. With Additions by Dr. Alexander van Winiwarter. Translated from the Fourth German Edition with the Special Permission of the Author, and revised from the Tenth Edition by Charles E. Hackley, A.M., M.D. London: H. K. Lewis. 1883.

Economy of Coal in House Fires; or, How to Convert an Ordinary Fire-Grate into a Slow Combustion Stove at a Small Cost. By T. Pridgin Teale, M.A., F.R.C.S., Surgeon to the General Infirmary at Leeds. London: J. and A. Churchill, New Burlington Street. Leeds: Charles Goodall, Boar Lane. 1883.

Diseases of the Rectum and Anus. By Charles B. Kelsey, M.D., Surgeon to St. Paul's Infirmary for Diseases of the Rectum; Consulting-Surgeon for Diseases of the Rectum to the Harlem Hospital and Dispensary for Women and Children, etc. London: Sampson Low, Marston, Searle, and Rivington. 1883.

Syllabus of Materia Medica for the Use of Students, Teachers, and Practitioners based on the Relative Values of Articles and Preparations in the British Pharmacopœia. By Alexander Harvey, M.D., Emeritus Professor; and Alexander Dyce Davidson, M.D., Regius Professor of Materia Medica in the University of Aberdeen. Sixth Edition. London: H. K. Lewis, 136. Gower Street. 1882.

Refraction of the Eye: its Diagnosis and the Correction of its Errors, with Chapter on Keratoscopy. By A. Stanford Morton, M.B., F.R.C.S.Ed., Senior Assistant-Surgeon Royal South London Ophthalmic Hospital; Clinical Assistant, Moorfields Ophthalmic Hospital. Second Edition. London: H. K. Lewis. 1882.

The Dental Proceedings of the General Medical Council, July 1882: an Address delivered at the Annual General Meeting of the British Dental Association held at Liverpool, August 1882, on the proceedings of the past years (1882) in regard to the Registration of Dentists, with an Appendix thereto. By J. Tomes, F.R.S., the retiring President. Report and Minutes of Evidence on Dental Questions of the Royal Commission on Medical Acts, 1882. Reprinted from the Journal of the British Dental Association.

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THE LUMLEIAN LECTURES

ON

URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians,

BY ALFRED BARING GARROD, M.D., F.R.C.P., F.R.S., ETC.,
Consulting Physician to King's College Hospital.

LECTURE I.

I being requested to deliver the Lumleian Lectures for the present year, at our College, I naturally felt much gratified by the honour it, none the less, I should have hesitated to accept the responsibility of addressing you in my present capacity, had it not so happened that I was at the time engaged in completing some investigations which I had begun many years before. As these had relation to the production of uric acid in the animal economy, and to its morbid manifestations—subjects of deep interest to the physician—I thought that the results of these researches might not be altogether without attractiveness to my professional brethren, if they were made the subject-matter of the present course of lectures.

Having, therefore, a subject to bring before you which contains some little novelty, and, as it were, breaks new ground, I put this forward as my excuse for appearing to-day in the capacity of your Lumleian Lecturer.

I shall not hesitate to dwell somewhat on the physiology of uric acid in my lectures, as I feel sure that any advance in its pathology which the future may show, must largely depend on our having the firm foundation of a correct physiology to build upon—a thing much needed at the present time, if we may draw such a conclusion from the diversity of opinions, as to the production of uric acid, which are in vogue, while we have many holding that the spleen, others that the liver or the lymphatic glands, are the organs devoted to its elaboration. Nor shall I hesitate to dwell upon the condition and composition of the urinary excretion in different classes of animals; for I have long felt that, if in the study of the physiology of uric acid we confine our attention to the human subject, we place ourselves in a position of great disadvantage towards the inquiry, seeing that uric acid and its derivatives pervade the whole animal kingdom. Furthermore, when I considered that, in some animals, the nitrogenised excretion consists almost entirely of uric acid, while in others its amount is extremely small, it occurred to me that, in the study of this principle in various classes of animals we should be most likely to discover the true solution of its formation and the rôle which it plays in the animal economy. For these reasons, I shall lay great stress on the comparative physiology of uric acid in my lectures.

Let us imagine a partition separating the blood from the urinary excretion, such as, in nature, is found in the walls of the renal vessels; then uric acid, free or in combination, may exist either on the one side or on the other side of this membranous partition; if on the one side,—that is, in the blood—it originates symptoms which are referrible to various organs; it may be deposited in the articular tissues, and produce the typical form of joint-gout, with chalk-stones; or may affect the skin in the shape of eczema, or cause cramps, neuralgic pains, dyspepsia, etc., according to the part particularly affected. On these, I shall not touch in this course of lectures, having had full opportunities of setting out my views and researches elsewhere. But uric acid is also to be found on the other side of our imaginary partition, that is, in the urinary excretion, and, under certain circumstances, it forms morbid deposits, such as go by the names of gravel and calculi; and it is to these that I shall confine my attention, with special reference to their pathology and treatment.

The metabolism of the various tissues of which the animal body is composed, which occurs during life, is accompanied by the formation of certain products which require to be eliminated. Leaving out of consideration the inorganic salts, such as the phosphates and chlorides, we have certain elements, chief among which are carbon, hydrogen, oxygen, and nitrogen (some of which four elements enter into all organic compounds), to be got rid of. Of these, a large portion of the carbon, united with oxygen, escapes by the lungs as carbonic anhydride (carbonic acid), while the hydrogen, united with oxygen in the form of water, is thrown out by the skin, lungs, and kidneys. There remains the nitrogen—the element *par excellence* characteristic of life—which is eliminated almost exclusively by the kidneys; in what shape or shapes I will now describe.

In some animals, as the mammalia, including man, urea [$CO(NH_2)_2$ or CH_4N_2O] is the chief nitrogenised principle, and it is the one which is richest in nitrogen, containing as much as 44.66 per cent. This organic body, which was the first to be synthesised or made artificially, being very soluble both in water and in the animal fluids, gives little or no trouble in its elimination, as it forms no concretions, and I am not aware that its presence in the blood produces any marked symptoms; at any rate, it can be injected into that fluid with impunity; for we must take care not to confound a condition of blood showing the mere presence of urea, with the so-called uræmic poisoning.

From many observations it appears that the average quantity of urea excreted in the twenty-four hours is 512.4 grains, and that, for each avoirdupois pound, 3.33 grains are eliminated daily. It is in the form of urea, therefore, that the chief part of the nitrogen in a very large and important class of the animal kingdom is eliminated.

The next principle to be mentioned is uric acid ($C_5H_4N_4O_3$), which was formerly called lithic acid, and has recently been synthesised. This acid, combined with more or less ammonia, forms the chief part of the nitrogenised excretion of birds and reptiles as also of almost all invertebrate animals, and a small part of that of man and the other mammalia. It contains 33.33 per cent. of nitrogen, but, if estimated as urate of ammonia, as much as 37.83 per cent. Its properties, especially as regards solubility in water or the animal fluids, differ greatly from those of urea, for it is with the greatest difficulty that it is dissolved, requiring, when pure, as much as 8,000 times its weight of distilled water at about the temperature of the blood (100° Fahr.). The salts of this acid are more soluble, but yet, in comparison with others, only slightly so, and they and the acid itself readily crystallise out from the fluids in which they are dissolved. It is owing to this property of insolubility that uric acid, although it forms so small a proportion of the urinary excretion in man, so frequently is a cause of disease. In the first place, it may concrete in the kidneys, forming gravel and renal calculi, which, when they reach the bladder, if they remain there for any time, encourage the precipitation of a further quantity of uric acid or urates upon them, and thus vesical calculi are formed; or, secondly, uric acid may be present in the blood and lead to special symptoms in different organs, or become deposited in the form of urate of sodium in various tissues, producing much discomfort.

As it is important to have a knowledge of the relative solubilities of the principal salts of uric acid, as well as of the acid itself, and as no table is known to me which shows their solubility at the temperature of the body, and as great discrepancies exist in the accounts of their solubility at any temperature, I have had a careful set of experiments made, with the results which are set out in the following table.

Table of Solubilities of Uric Acid and its Principal Salts in Distilled Water. Temperature 100° *Fahr.*

		Parts.
Uric acid	Pure	1 in 8,000.
Urate of ammonium (artificially prepared) ...	Acid urate ...	1 in 2,400.
Urate of sodium... ...	„ ...	1 in 1,130.
Urate of potassium ...	„ ...	1 in 500.
Urate of lithium ...	„ ...	1 in 220.
Urate of magnesium ...	„ ...	1 in 1,600.
Urate of calcium ...	„ ...	1 in 2,800.
Urate of lead	„ ...	Insoluble.
Urate of iron	„ ...	Insoluble.

There is a third body, viz., hippuric acid ($C_9H_9NO_3$), which is found in the urinary excretion; largely in that of the herbivorous mammals; in small and varying quantities in the urine of man; but is almost, if not entirely, absent from that of the carnivorous mammals. It will be seen from its formula, that the percentage of nitrogen contained in it amounts to 7.82.

Although hippuric acid has hitherto been regarded as a comparatively insignificant ingredient, at least in the urine of man, we shall, as we advance in our subject, find that it plays an important *rôle* in the metabolism going on in the system, one which, to us, as students of disease, is of deep interest.

It is in the form of one or other of these three substances, with

comparatively slight exceptions, that the whole of the nitrogenised waste of the body is eliminated from the system by the renal organs, little or none escaping by any other channel.

As uric acid is the principle which will chiefly engage our attention in these lectures, and as a correct knowledge of the mode and place of its formation in the economy is of the utmost importance, if we ever hope to arrive at the solution of the problem of the cause of calculi, and to develop some method of preventing their occurrence, and, more especially, as the views at which I have arrived during the study of the subject differ so much from those held by almost all physiologists, I shall not attempt to apologise for occupying your time with the investigation of the nature of this substance, so interesting in its physiology, and, in its pathological development, leading to much suffering, danger, and even death.

Origin of Uric Acid in the Animal Economy.—There are, at least, two possible theories as to the formation of uric acid. Of these, the first is, that it is formed during the metabolism constantly going on either in the system at large, or in special organs—such as the spleen, lymphatic glands, liver, lungs, etc.; and that, when formed, it reaches the blood, and is afterwards rapidly eliminated by the kidneys. From the point of view of this theory, the renal organs are merely the drawers-off or filterers from the blood of the uric acid which it brings to them. On looking over the principal modern books which deal with this subject, and on ascertaining the opinions held by physiologists, pathologists, and the members of the medical profession in general, I find that this view is so popular with them as to be almost universally accepted; in fact, all the attempted explanations of the influence of respiration, of the cutaneous functions, of different kinds of diet and regimen, are based upon the assumption that uric acid owes its origin to a less perfect oxidation of nitrogenised principles in the system than occurs when urea is formed, and that a meat-diet powerfully favours the formation of this acid. For the sake of brevity, I shall, in these lectures, call this the *first* view.

Another, which I shall call the *second* view, may be held. In this, it is assumed that the kidney is the organ whose function it is to produce uric acid; that this principle is formed in the renal cells from nitrogenised matters brought to them by the blood; and that, in so far at least as uric acid is concerned, the kidneys do not act in any degree as filterers or strainers. There are few physiologists or pathologists, at the present time, who hold this opinion; and the discovery of uric acid in the blood, which I made in 1847, seemed, at first sight, to militate against it: for it appears to follow, from the fact of the presence of uric acid in the blood, that it must be formed before the blood reaches the kidneys, and not in those organs.

In the course of our investigation into the value of these two views respectively, we shall have occasion to bring forward almost all the facts at present known with reference to the physiology of uric acid, and these require a satisfactory explanation before we can definitely arrive at any choice between the rival theories. I feel most strongly that a correct knowledge of the physiology of this subject is essential, if we hope to advance further in the pathology of uric acid.

The two theories above mentioned may be shortly summarised as follows. In the first, the kidney is regarded simply in the light of a strainer or filterer of the uric acid which is found in the blood, and passes through to it. In the second, the kidney is held to be the actual producer of uric acid, and the presence of this principle in the blood and tissues is explained by resorption from the renal cells, a process which is scarcely appreciable in health, but becomes more and more marked in proportion to the difficulty which the uric acid has in finding its way to the uriniferous tubes.

In considering the physiology of uric acid, I must, in the first place, draw your attention to the fact that there are great differences between the urine of different classes of animals, both in physical condition and in chemical composition. In some animals, the urinary excretion is very thin and watery; in others, it has the consistency and appearance of thick cream; these differences depending, of course, on the ratio between the water and the solid constituents of the excretion. The constitution of the solid portion of the excretion also varies much; in some urines, the urea is abundant, the uric acid very scanty, or even altogether absent; in others, these two constituents are both present in large quantities; while, in a third class, the urea is either very small in amount, or entirely absent; uric acid, in some form of combination, constituting almost the whole of the solid portion of the urinary excretion.

1. *Mammalia.*—The urine of man we will not discuss at present, as we shall have to speak about it when dealing with the formation of renal calculi and gravel; it may, however, be mentioned in passing that, in constitution, it closely resembles a combination of that of the carnivorous and herbivorous mammals, as, indeed, might have been anticipated from our knowledge of the anatomical structure and the nature of the food of man.

The urinary excretion of the carnivorous mammals is a watery and heavy fluid, its specific gravity being sometimes as high as 1070. I have found that of the lion and tiger to be 1063 and 1064, of a distinctly acid reaction, and a not disagreeable odour; nor is it liable, as has often been asserted, to rapid decomposition. The urine is rich in urea, so much so often, that a single drop placed on a piece of glass will, after a few minutes, become a mass of crystals; and with nitric acid, it immediately becomes solid, from the formation of nitrate of urea. Uric acid is usually found in it, but in very small quantities; never, at least when the animals are kept in confinement and sparingly fed, reaching the amount contained in human urine. In that of the tiger, I have found it readily, and it even crystallised out from such urine when spirit had been added to preserve it. In the lion, I failed to discover it in the only specimen which I examined, but oxalate of calcium was present, a salt which was probably produced by the decomposition of uric acid.

No hippuric acid is found, at least under ordinary circumstances, in the urine of the carnivorous mammals: a fact on which I wish particularly to insist.

Next, as to the herbivorous mammals; the chief points of relation and difference between the urine of these and the carnivorous mammals may be thus summed up. It is usually a heavy fluid. I have found, in the horse, the weight ranging from 1025 to 1045. In the elephant (female), it was 1033; and in the camel, 1047; but only one examination was made in each case. In the cow and ox, I have found it as low as 1014 and as high as 1035. It is always alkaline in reaction, except in the sucking animal, and of a peculiar but not unpleasant odour; and I may here mention that my experience is opposed to the statements of many writers, for I have found very little tendency in such urine to undergo decomposition; in fact, I have placed it side by side with human urine, and found that it remained free from decomposition when the latter had become completely destroyed.

The urine of the herbivorous mammal is rich in urea, less so than that of the lion or tiger, and will not often crystallise on spontaneous evaporation, but generally becomes more or less solid on the addition of nitric acid, owing to the copious formation of nitrate of urea.

As to uric acid, such urines may be said to be free from this principle, except under peculiar circumstances; but, as these exceptions are most important from a physiological point of view, they will be referred to further on.

One of the most characteristic substances found in the urine of herbivora is hippuric acid, which derives its name from the fact that it was first discovered in the urine of the horse. Under ordinary circumstances, this acid exists in quantity at times equal to that of urea.

Hippuric acid is always combined with a base, and, on evaporation of the urine of herbivorous animals, hippurate of sodium crystallises out. I may state here, and we shall find the fact to be not unimportant, that the quantity of hippuric acid in the urine of these animals is very liable to vary, especially in relation to the character of the food taken. It has been asserted that benzoic acid is present; this may be so, but it must be remembered that hippuric acid, in the older analyses, was often mistaken for benzoic acid,; also that the former, in the process of analysis, may at times be converted into the latter.

2. *Birds.*—The urinary excretion of birds, as far as my observations go, is semi-fluid, cream-like, and very rich in uric acid. After being expelled from the body, it soon sets, and becomes a hard white mass, in appearance not unlike plaster-of-Paris. As much as ninety per cent. of uric acid, or even more, has been discovered in it, together with a varying quantity of ammonia. I have always found it distinctly acid in reaction, whether the bird was living on meat or on grain. Most observers have failed to find urea in the urine of herbivorous, or graminivorous birds. I, myself, have never, as yet, been able to detect it; but, in the carnivorous birds, a small quantity is said to be always present, probably never exceeding a fifth part of the uric acid. Nothing is known as yet about the presence or absence of hippuric acid in the urine of birds. I have examined the urinary excretion of a large number of birds—*e.g.* the ostrich, different rheas, the vulture, turkey, common fowl, pigeon, skylark, linnet, green parrakeet (budgerigar), canary-bird, robin, and many other birds, and the uniformity of the chemical composition, as well as the similarity in their physical condition has been very striking.

3. *Reptiles.*—In so far as the eye can discover, or as chemical ıalysis has succeeded in making out, the urinary excretion of ›hidian and saurian reptiles is identical with, or most closely re-mbles that of birds. I have carefully examined that of several ‹thons, boas, cobras, and the common English snake; also of ırious saurians, as the Australian monitor, etc. Urea is said to be ›sent, and, with one exception—viz., the common green snake—I ave failed to find it. Whether it exists, in traces, in such excreta, ; a rule, is at present a moot point. In the chelonian reptiles, the ıcretion differs from that of ophidians and saurians in that it is most liquid, usually consisting of a clear watery fluid, containing ›aque white flakes of urates. These latter vary much in quantity, ‹pending, as I believe, on the length of time which has elapsed ıce food was last taken, these animals, as is well known, often ‹sting for a long period; they differ, also, in amount in different ıelonians. In the land-tortoises, for example, I have found much ore uric acid in the form of these white masses, than in the terra-us or water-tortoises, although the latter are carnivorous, whilst e former are herbivorous animals.

4 and 5.—*Batrachians and Fish.*—With regard to these classes of ·imals but little information has as yet been obtained.

6. *Invertebrata.*—Lastly, one word as to the nature of the urinary ‹cretion in the invertebrates. With the exception of animals be-nging to the class arachnida, as the scorpion and spider, which ·crete guanine ($C_5H_5N_5O$,), a substance found in guano and pro-bly derived from uric acid, and closely related to it in composition, the inveterbrata throw out uric acid or urate of ammonium. is from Dr. John Davy, whose name is associated with many ysiological researches, that most of our knowledge of the excre-n of invertebrate animals is derived. One interesting observation ıich he makes on the subject of the excretion of caterpillars and ›ths is this: "The urine of insects in their earlier or their larval ıte would appear to differ considerably from that of the same in-·ts in their image or perfect form. Thus, whilst, in the latter, it ·s found to consist chiefly of urate of ammonium, in the former, ıte of ammonium was sparingly detected or not at all; what ›med to be hippuric acid being more abundant." We shall find ·ring the course of these lectures that these facts are not without ·nificance.

Having now given a short sketch of the character and composi-n of the urinary excretion of the different classes which compose e animal kingdom, we are naturally confronted by the question: hy this difference in the excretion of nitrogen; why in some imals does it chiefly take the form of urea, in others that of uric id? The supporters of the first view have attempted many ex-ınations; the favourite one being, that it depends on the greater less activity of the function of respiration. This, I believe, ori-ıated with Liebig, and it is a view much insisted on by chemists, r it must be remembered that the uric acid, under the influence oxidating agents, readily breaks up into urea and other products; us, a slight oxidating cause splits it up into urea, allantoin and alic acid, all of which substances are found at times in the animal onomy. Liebig pointed to the fact that mammals, having a high mperature and active respiratory function, throw out but little ic acid and a large quantity of urea; whereas reptiles, with a low mperature and a correspondingly low respiration, throw out their trogen chiefly as uric acid. This view was at first sight most ausible, but unfortunately it was founded on limited data; it was, fact, a most partial view, for we have only to turn to the large ass of birds for its refutation. Here we see animals with the ghest temperature, and a respiration correspondingly active, iminating their nitrogen in exactly the same form as the cold-ooded reptiles.

If other facts were wanting to show the error of this, at first sight ıptivating view, the recent experiments, set out in the *Comptes 'endus* of December 1881, would be sufficient. M. Cazeneuve, in a aper termed "Sur l'Excrétion de l'Acide Urique chez les Oiseaux," escribes how he kept a sparrow-hawk in a cage, and fed it on esh, the bird throwing out a certain quantity of uric acid and urea ı the twenty-four hours; he then put it under the influence of a ırge increase of oxygen, and even kept it for twelve hours in an ·mosphere of pure gas. In no instance, however, was the quantity : uric acid diminished or the urea increased, but the ratio between ıe two remained the same as before. One can hardly help looking ›on this fact as conclusive against the idea that urea and uric acid ·e excreted by animals in proportion to the activity of their re-›iratory function. Lastly, we may look at the excretion in inver-·brate animals, whose temperature is high, while no urea is found ı their nitrogenised excreta.

The nature of the food taken has been thought by many to have a powerful influence on the excretion of uric acid, but it needs very little consideration to show the inaccuracy of this idea; for ophidian reptiles, as the python and boa, which live exclusively on animal food; and grain-eating birds, such as the canary and others, whose food consists entirely of seeds; excrete the same nitrogenised products; in fact, it is difficult to separate the urinary excretion of the one class from that of the other, as I have already stated, both consisting of uric acid in combination with some ammoniacal compound. Again, if we compare a toad with a lizard, the little influence of the character of the food is at once strikingly shown; both animals live on flies, yet the urine of the toad is clear and watery, and contains no appreciable uric acid, whereas that of the lizard resembles cream, and consists mainly of urate of ammonium. The excretion of uric acid and of urea, also, is, doubtless, much influenced by the amount of food taken, whether in the same ratio has not yet been determined.

Some physiologists look upon the spleen as the producer of uric acid; others regard, some the liver, some the lymphatic glands, and some the cartilaginous tissues, as the originators of this principle; but there is one fact which must not be lost sight of, viz., that, whether an animal throws out all its nitrogen in the form of uric acid, or in that of urea, it, equally in each case, possesses a spleen, a liver, lymphatic glands, and cartilaginous tissues.

Of course, if we accept the second theory, and regard the kidneys as the producers of uric acid, the difficulty of the question is at once solved; we have only to regard the kidney as containing different cells; some, perhaps, for the formation of urea; some, at least, for the production of uric acid, and to hold that the number of the latter cells, compared with the other excreting cells of the kidney, differs in different classes of animals. The amount of respiration in any animal would then be of little moment with reference to the excretion of uric acid; nor would the nature of the food, provided only that the blood contained sufficient pabulum fitted for its supply. Possibly, however, many of us already see difficulties ahead, which have to be resolved before such a view can win acceptance.

[*To be continued.*]

THE GULSTONIAN LECTURES,

ON

THE STERILITY OF WOMEN.

Delivered at the Royal College of Physicians, February 1883.

By J. MATTHEWS DUNCAN, M.D., LL.D., ETC.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

Lecture II, Part II.—Its Theory or Causation.

Finally, Shorthouse has pointed out in mares the close alliance between sterility, abortion, and that kind of excessive fertility which is demonstrated by twinning. I quote the examples which he gives in the *Sporting Times* for December 12th, 1874; and, as adding to the force of the evidence, it is to be remembered that, in the mare, twinning is a far rarer event than in woman and the cow: in these it occurs about once in 80 pregnancies; in the mare it is said to be only once in 400:

Miserrima, barren in 1855, 1858, 1867, 1870, and 1871; slipped foal in 1856, 1859, and 1863; had dead twins in 1860 and 1862.
Caricature, barren in 1852, 1854, 1855, 1861, 1867, and 1871; had twins in 1856 and 1863; slipped foal in 1866.
Legerdemain, barren in 1852, 1859, 1864, and 1866; slipped foal in 1849; slipped twins in 1856, 1860, and 1862.
Crystal, barren in 1858, 1860, and 1865; in 1866 slipped twins.
Slander, barren in 1851, 1854, 1864, 1865, and 1866; slipped twins in 1857.
Thimblerig, barren to two horses in 1867; slipped twins in 1869.
Zoe, barren in 1865, 1866, 1867, 1868, 1869, 1870, and 1871; slipped foal in 1860.
No. 1, barren in 1865 and 1868; slipped foal in 1867.
No. 5, barren in 1856, 1858, 1860, 1864, and 1866; slipped foals in 1862 and 1868.
No. 7, barren in 1857 and 1860; had twins in 1858.
No. 8, barren in 1867; had twins in 1861.
No. 9, barren in 1858, 1860, 1864, and 1867; had twins in 1868.
No. 10, barren in 1858, 1860, and 1864; had twins in 1861.

TABLE X.—*Showing the Initial Fecundity of Women of Different Ages within the First Two Years of Marriage.*

											Total.
Ages of wives newly married...	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	4447
Number of wives newly married	700	1835	1120	402	205	110	46	20	6	2	1	3172
Number of wives mothers bearing in 1855, and within two years of marriage	306	1661	849	253	84	17	2	...	...	...	...	1.4
Proportion of latter to former is 1 in	2.3	1.1	1.3	1.5	2.4	6.4	23.0	...	...	...	...	71.33
Or percentage	43.71	90.51	75.80	62.93	40.97	15.45	4.35	...	...	...	...	

No. 11, barren in 1856, 1863, and 1864; slipped foals in 1859 and 1865.

I know no observations worth quoting as to the special sterility of male lower animals, and the subject requires much further investigation. It is not quite a new subject, for it is popularly believed that certain stallions are often inefficacious; and accordingly breeders, in their advertisements, take care to add to the other qualifications of a named horse that he is a "sure getter."

In woman, sterility varies in amount according to the age at marriage. This is shown by the table which I compiled from the data of Edinburgh and Glasgow in 1855. (See Table IX.) It is evident

TABLE IX.—*Showing the Variations of Sterility according to the Age at Marriage.*

									Total
Ages of wives at marriage	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50, &c.	4447
Number of wives ...	700	1835	1120	402	205	110	46	29	3722
First children	649	1905	809	251	96	10	2	...	725
Sterile wives	51	...	311	151	109	100	44	29	16.3
Percentage sterile ...	7.3	...	27.7	37.5	53.2	90.9	95.6	100.0	6.13
Proportion sterile: 1 in	13.72	...	3.60	2.66	1.88	1.10	1.05	1.00	

that this table gives only an approach to the truth, for in its second column there is an excess of children over marriages that cannot have been. Incongruity of this kind is not only accounted for, but to be expected, from the manner in which the table is made up. The numbers of marriages in Edinburgh and Glasgow in 1855, at different ages of the wives, are compared with the numbers of first living children born in the same year to wives married at the same ages in that year or previously, and the number of sterile wives is got by subtracting the latter figures from the former. The comparison is of the first births of one year with the marriages of the same year, while they were mostly the result of the marriages of the former year; and the table is consequently imperfect. It must be remembered that this table, like the others from the same source, gives the title of first children to the firstborn living, excluding the dead from the reckoning—another manifest source of error. But there can be no doubt, I think, of the conclusion as to age which is derivable from it—that women married under twenty years of age have much more sterility than women married from twenty to twenty-four inclusive; and that the sterility of marriages before twenty is less than the sterility of marriages after twenty-four; and that, of marriages after twenty-four, the sterility increases with the age at marriage. A nearly similar conclusion is derivable from the *Statistics of Providence* published by Snow.

The relative sterility of women at different ages is in part shown by their slowness to become mothers, or the length of interval between marriage and childbearing; and this is found to tally with the sterility according to age, which I have just stated. I give another Edinburgh and Glasgow table, embodying the facts bearing on this. (See Table X.) Those married below twenty years of age were longer in married life before becoming mothers than those married between twenty and twenty-four, inclusive. These latter showed the highest fecundity and quickness to commence bearing children. Those, again, married after twenty-four, were slower than their predecessors; and the slowness increased with every additional quinquenniad after that of twenty to twenty-four.

In the quinquenniad preceding twenty, I can give for each single year the increasing delay of childbearing as age decreased. Table XI, from the Edinburgh and Glasgow data, shows this relative sterility of early ages.

At this point of the inquiry as to the influence of age, I interpolate an argument as to the influence of marriage or cohabitation in causing sterility. Although it seems, at first sight, absurd to rank marriage among the causes of sterility, yet the conclusion that it is so, at least in the very young, appears to be inevitable: for, if the women married under twenty are more sterile than those married at twenty to twenty-four, and are also more relatively sterile, so far as delay of childbearing shows this quality, then, if the marriages of the very young—that is, of those under twenty—had been delayed

TABLE XI.—*Showing the Initial Fecundity of Women under Twenty Years of Age within the First Two Years of Marriage.*

Ages of wives newly married	16	17	18	19
Number of wives newly married	43	108	225	314
Number of wives mothers within two years of marriage...	4	27	98	177
Proportion of latter to former is 1 in	10.7	4.0	2.3	1.8
Proportion after correction for immaturity is 1 in ...	7.7	3.3	2.1	1.7
Or percentage	12.90	30.00	46.44	57.84

till the next quinquenniad, they would in greater numbers hav shown fertility, and shown it also more quickly. Now, as the onl difference known between those of twenty to twenty-four, and thos younger, is age at marriage, we may reasonably conclude that pre mature marriage was the cause of the sterility. There may be som analogous injurious influence of too long delayed marriages upo the elderly, and the delay of commencing childbearing may point t it; but we cannot say of them, as we do of the youngest marrie that, if they had still further delayed marriage, they would have ha more chance of being mothers. Some further reference to this ev influence of marriage, and attempt at explanation, will be found i the discussion on sexual pleasure.

I might here adduce evidence of the influence of age which found in the weight and length of the children produced, the lengt and weight rising with the age of the mother to its climax in tl children born to mothers between the ages of twenty and twenty nine inclusive, and then again falling as the age of the mother i creases above twenty-nine. This is a matter tested by too delica variations of length and weight to be, as yet, quite relied on; a great authorities have, indeed, contested its truth—Hecker, for i stance, alleging that the measurements increase with the age of tl mother in a direct sort of proportion. But I have Aristotle on m side. "Premature conjunctions", says he, "produce imperfect o spring, females rather than males, and these feeble in make a short in stature. That this happens in the human race," he ad "as well as other animals, is visible in the puny inhabitants countries where early marriages prevail." The general tenour of t evidence is, indeed, very strong in showing a concurrence of sterilit monstrosity, feebleness, and smallness; and, on that account, I st hold that diminished length and weight of children accompany t diminished fertility of the premature and post-mature women.

It is matter of regret that we can present no demonstration of t influence of age on fecundity founded on the frequency of abortio and of ill-formed children. But we approach near to such eviden and may guess what it would yield, when we present the facts, scar though they be, as to rearing of children and as to idiocy. Table X

TABLE XII.—*Showing the Mortality of Children Born in Marria formed at Different Ages.*

Years elapsed since birth of first child.	Mortality per cent. of the children born to marriages formed at ages—			
	16-20	21-25	26-30	31-35
10	36.87	37.09	37.89	35.43
20	47.44	43.10	44.36	16.67
30	53.03	43.89	48.53	64.29
40	63.12	57.14	68.00	50.00

derived from the data obtained by the Statistical Society in George's-in-the-East, is the only body of facts as to the rearing children born of mothers of different ages that I know of. It sh a diminished amount of rearing of children of the sterile ages. sterility or weakness of reproduction by mothers of sixteen o twenty years of age is shown by the failures in rearing; and increa failures in rearing appear again as the sterile ages above twenty-

re entered on, the failures to rear increasing with the age of the nothers, just as sterility increases at the same ages.

We suppose that, from the time of their birth, the children of hese observations were tended with the same care, or desire of the nothers to act fairly by them; and that we must look to some cause f the failure to rear in the reproductive arrangements. Now, here ve include the nourishment of the child among the reproductive pro-esses; while in our other studies of sterility, we stop at its birth, r, if we proceed further, we consider only conditions presumably lready established, or commenced at the time of birth, such as diocy. The child is naturally fed upon its mother's milk, and the eeding is an extra-uterine continuation of the previously otherwise onducted nutrition of the fœtus. Nursing is part of the reproduc-ive process. The failure to rear may be a result of imperfection of he fœtus, now a child, or it may be the result of the imperfection f the mother as a nurse. I know no method of disentangling the esults of these two causes, but the potency of imperfect nursing is ndoubted. It is an universally recognised rule, in the selec-ion of wet nurses, that very young, or elderly mothers are to be voided.

Imbeciles and idiots may be so from original or innate causes, ometimes called developmental, or from injury or other accidental auses. The undoubted frequency of accidents at birth, or other in-uries, as causing imbecility and idiocy introduces an element which hould be subtracted, with a view to the ascertainment of the influ-nce of the mother's age in the production of the mental weakness; ut, although in individual cases the two kinds, the developmental nd accidental, may with much assurance be distinguished, I know o way of doing so in the statistics to be adduced. Authors on this ubject, especially Little, attach great importance to the resuscitation f the stillborn as an accidental cause of idiocy, and it may be so; ut I am disposed to attribute the necessity for resuscitation partly o the feebleness of the imbecile child produced. Among Langdon own's 2,000 cases, 400, or 20 per cent., were born in a state of sus-ended animation, and 40 per cent. of these 400 were first children. t all events, it will not be disputed that the great majority of diots and imbeciles are so from innate or developmental, not acci-ental, causes acting during or after birth.

Among Mitchell's 443 idiots and imbeciles, 138 were first-born; mong Wilbar's 675 there were 191 first-born; among 100 of Beach's, 0; among 2,000 of Down's, 480. Or among 3,218, 829, or about 6 per cent., were first-born, and presumptively born of young nothers.

"Among 443 idiots and imbeciles consecutively examined," says Mitchell, "I found 138 first-born, or 31.1 per cent.; and 89 last-orn, or 20.1 per cent. When it was known, however, that almost very sixth idiot in Scotland was illegitimate (663 idiots and imbe-iles giving 108 illegitimate, or 17.1 per cent.), it was thought that n element of disturbance was probably thus introduced into the oregoing figures which might affect their value. The great majority f illegitimate children are known to be first-born and only hildren; while not a few of them are last-born, though the last of small number of pregnancies—say of two or three. It was, there-ore, thought desirable that a fresh series of observations should be made, excluding the illegitimate, and dealing only with those born in marriage. It was also thought well to confine these observations to those cases in which not more than one idiot occurred in a family, and in which the idiocy was noticed very soon after birth—that is, in which it was probably congenital. Further, no cases were accepted but those in which the mothers at the time of the inquiry had passed the age of childbearing, though some of them, I think, were widows before that age was reached. All these restric-tions made it difficult to obtain a large series of observations, and

TABLE XIII *(from Arthur Mitchell).—Showing the Comparative Frequency of Births of Idiots, and of all Births, in First and Subsequent Pregnancies.*

Number of Pregnancy.	Percentage of all Births.	Percentage of Idiot Births.
First	22.8	33.0
Second	17.7	18.8
Third	15.5	17.6
Fourth	12.1	2.4
Fifth	9.4	2.4
Sixth	7.4	2.4
Seventh	5.2	7.0
Eighth	3.9	3.5
Ninth	2.6	2.4
Tenth	1.3	7.0
Eleventh	.9	3.5

account for their number not exceeding 85—44 males and 41 females. I sent my results in detail to Dr. Matthews Duncan, who kindly drew up for me the two tables embodying the facts in a way which makes their teaching apparent. (See Table XIII.) This table is read in this way: Of all the children born in Edinburgh and Glasgow in 1855, 22.8 per cent. were first pregnancies; while of the 85 idiots, 33 per cent. were first pregnancies, and so on. What the table appears to teach is briefly this—that idiocy is more likely to occur among first and latest (seventh to eleventh) pregnancies than among others. This is substantially the same thing as was taught by the first inquiry, which included 443 cases, and in which all that was asked was whether the patient was first-born or last-born."

Similar evidence is derivable from the data given by Langdon Down, but in regard to them, we have not the same assurance of the circumstances of the collection as is given by Mitchell in regard to his. Down's data are given in Table XIV.

TABLE XIV *(from Langdon Down).—Showing the Comparative Frequency of Births of Idiots, and of all Births, in First and Subsequent Pregnancies.*

Number of Pregnancy.	Percentage of all Births.	Percentage of Idiot Births.
First	22.8	24
Second	17.7	14
Fourth	12.1	9
Fifth	9.4	5
Sixth	7.4	7
Seventh	5.2	10
Eighth	3.9	2
Ninth	2.6	9
Tenth	1.3	2
Eleventh	.9	2
Twelfth	.4	1
Thirteenth	.2	3
Fourteenth	.06	1

Fortunately, Mitchell gives the age of the mother at the time of the birth of the idiot, and the result is very striking. Down does not give the age of the mother in his collection, but, considering the excess of primiparity, and the very large proportional number of pregnancies of high figure among them, we can have no doubt they would yield a like result.

"The same eighty-five cases," continues Mitchell, "are used in Table XV which were used in Table XIII. This table is read thus:

TABLE XV *(from Arthur Mitchell).—Showing a Comparative Percentage of the Children Born at Different Ages of Mothers to all Children Born, and of the Idiots Born at Different Ages of Mothers to all Idiots Born.*

Age	20-24	25-29	30-34	35-39	40-44	45-49
Percentage of all children	22.62	39.99	23.61	14.76	5.15	0.58
Percentage of Idiots	25.88	25.88	10.58	10.58	23.53	3.53

Of all the children born in Edinburgh and Glasgow in 1855, 22.6 per cent. were born of mothers whose ages were from twenty to twenty-four years; while, of the eighty-five idiots, 25.8 per cent. were born of mothers of corresponding ages, and so on. What we learn from the table is this: that mothers under twenty-four years of age, and above thirty-five, are those more specially liable to have idiocy in their children."

Several times I have been told by men of experience that an old bitch often ends her career of breeding by a dead and premature pup. Whitehead regards those pregnancies which occur near the termination of the fruitful period in women as being the most commonly unsuccessful; and Arthur Mitchell has connected the occurrence of idiocy in a child with the circumstance of its being the last born of its mother. "That in the mother," he remarks, "which leads to the miscarriage may lead also to the idiocy, and the only connection may be one through a common cause. It frequently happens," he adds, "that between the birth of the idiot and that of the child which precedes or follows, an interval occurs which is much longer than usual, or that, after the birth of the idiot, permanent sterility appears." Again, when the idiot is born eighteen or twenty-four months after the preceding child, but when, for six or seven years thereafter, no impregnation occurs, he thought there was reason to suspect that the imperfection in reproductive power, which showed itself in the idiot, had merely another and fuller expression in the subsequent barrenness. And so also when permanent sterility follows. In many cases, indications of barrenness preceded the birth of the idiot, and became permanent thereafter.

We have alluded to prevalent opinions that the lastborn of a woman is specially liable to be a miscarriage, or a weak child, or an idiot, and female rather than male, and have shown that these opinions have considerable support from facts. We have also spoken of the only-child sterility, the mothers being in Ansell's

collection at the high mean age of thirty-one. Now, in addition, there are some, though imperfect, evidences that such children, especially if female, are not merely illustrations of one-child fertility, or only-child sterility, but are also the last of their race. They represent a family's last effort at continuation of its line. Girls in such a position are often heiresses, though not certainly single children, and this circumstance has enabled Galton to follow up their history and to show their infertility. I know several remarkable cases of single children of this kind, feeble, rich, childless, the last of their race; but a collection of cases forms stronger evidence than any scattered good examples. Speaking of marriages of heiresses as peculiarly unprolific, Galton remarks: "We might, indeed, have expected that an heiress, who is the sole issue of a marriage, would not be so fertile as a woman who has many brothers and sisters. Comparative infertility (he adds) must be hereditary in the same way as other physical attributes, and I am assured it is so in the case of domestic animals." In addition to other strong evidence of the same kind, Galton found, in a partial search through the peerage, a total of fourteen heiress-marriages among seventy peers, resulting, he says, in eight instances of absolute sterility, and in two instances of only one son. "I tried the question from another side," he continues, "by taking the marriages of the last peers and comparing the numbers of the children when the mother was an heiress with those when she was not. I took precautions to exclude from the latter all cases where the mother was a co-heiress, or the father an only son. Also, since heiresses are not so very common, I sometimes went back two or three generations for an instance of an heiress marriage. In this way I took fifty cases of each. I give them below, having first doubled the actual results, in order to turn them into percentages:—

TABLE XVI *(from Galton).—Showing the Infertility of Heiresses.*

Number of Sons to each marriage.	One Hundred Marriages of each description.	
	Number of Cases in which the Mother was an Heiress.	Number of Cases in which the Mother was not an Heiress.
0	 22	 2
1	 16	 10
2	 22	 14
3	 22	 34
4	 10	 20
5	 6	 8
6	 2	 8
7	 0	 4
Above	 0	 0
—	 100	 100

"I find that among the wives of peers, 100 who are heiresses have 208 sons and 206 daughters, 100 who are not heiresses have 336 sons and 284 daughters. The latter shows how exceedingly precarious must be the line of a descent from an heiress. . . . One fifth of the heiresses have no male children at all; a full third have not more than one child; three-fifths have not more than two."

DONATIONS AND BEQUESTS.—"An Old Friend" has given £100, additional, to the Westminster Hospital.—Mr. T. A. Denny has given £100 to Miss Mary Wardell's Convalescent Home for Scarlet Fever.—"F. T. B." and "M. T. D." have each given £50 towards finishing the building of the Bexhill Seaside Branch of the Metropolitan Convalescent Institution.—Mr. George John Eyre, of Hove, bequeathed £200 each to the Eastbourne Convalescent Institution, the Earlswood Asylum for Idiots, the Hospital for Nervous Diseases, Paralysis, and Epilepsy, the Royal Hospital for Incurables, the Sussex County Hospital at Brighton, and the Brighton and Hove Dispensary.—The Lincoln County Hospital has received £100 under the will of Mr. Charles Doughty.—Mrs. Atkinson, widow of Mr. William Atkinson, has given £2,000 to University College Hospital, for the endowment of a bed in memory of her husband.—Mr. Joseph Shuttleworth bequeathed £1,000 to the Lincoln General Dispensary.—Mr. James Symes, of Winterborne-Abbas, bequeathed £100 to the Dorset County Hospital, Dorchester.—The Grocers' Company have given £100 to University College Hospital, and £100 to the North-Eastern Hospital for Children.—The Dowager Countess of Craven has given £50 to Miss Mary Wardell's Convalescent Home for Scarlet Fever.—Mr. F. A. Hamilton has given £50 towards the building fund of the Bexhill Seaside Branch of the Metropolitan Convalescent Institution.

LECTURES
ON
THE COMPARATIVE PHYSIOLOGY OF MENSTRUATION.

BY ALFRED WILTSHIRE, M.D., F.R.C.P. LOND.,
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LECTURE II.

(Continued from page 443.)

RACIBORSKI regards woman and the quadrumana probably as the only females who have complete exfoliation of the mucous membrane of the uterus after each conception, and considers that the commencement of this important process is repeated at each ovulation. He says, also (p. 18), that he has seen in the Jardin des Plantes, at Paris, monkeys who were abundantly regular every month for five or six days.

Mr. Darwin incidentally refers to the existence of the periodical function in the females of the lower animals thus (*Animals and Plants under Domestication*, vol. I, pp. 33-4): "Several years ago I saw, confined in the Zoological Gardens of London, a female hybrid from an English dog and jackal, which even in this, the first generation, was so sterile that, as I was assured by her keeper, she did not fully exhibit her proper periods," and again (*Ibid.*, vol. II, p. 132): "Elephants . . . both male and female, have their proper periodical seasons."

Fleming (*Veterinary Obstetrics*, p. 55) says: "The rutting, heat œstrum, or venereal œstrum of animals is analogous to menstruation in woman, and marks the period of maturation in the ovarian ova or ovum, according to species. This condition is intermittent or periodic, not continuous; and is characterised by a peculiar systemic excitement, that usually continues for a somewhat definite period in the two sexes. In the male and female, but especially in the latter the generative organs at this period become more or less turgid and sensitive, and the uro-genital secretions are increased. In the female, there is a determination of blood to the ovaries, and changes take place in these which have already been described. The excitation of the generative apparatus reacts on the whole system, and produces a kind of fever or irritability in the animal; its sensibility is increased; the appetite is more or less in abeyance, or capricious, and usually there is thirst. . . . Attempts at micturition in the female are frequent, but only a small quantity of urine is passed, the mucous membrane of the vagina is injected; and, with soliped, there are oft-repeated movements of the clitoris and vulva, and an opaque white secretion, or even emissions of blood are ejected spasmodically, *per vulvam*." In a foot-note, Fleming says: "Kaiser in the *Magazin für die Gesammte Thierheilkunde* for 1859, mentions a mare, twenty-four years of age, which, every three weeks had a sanguineous emission from the vulva; this discharge ceased towards the middle of pregnancy, but returned after parturition. I have frequently witnessed the periodic discharge from mares either streaked with blood, or blood-tinted;" and then, resuming the text: "In other animals, this ejection sometimes consists of a viscid red tinted or sanguinolent fluid. It has a special and powerful odour which attracts the males. . . . The uterine mucous membrane is also very congested, and there is poured out on its surface a fluid containing epithelial *débris*, mucus, corpuscles, and blood-globules."

"The existence in the lower animals of what is analogous to the menstrual discharge in the human female, has frequently been denied, but without any reason or proof. A discharge of blood from the sexual organs of woman announces the advent of puberty; and its coincidence with the maturity and escape of the ovarian ovule, as well as its periodical appearance until the termination of fertility, establishes between this phenomenon and the heat or 'rut' (œstrum) of animals a very close analogy. Kahleis, Fuschs, Spinola, Numann, and others, have observed this in the cow, and have also noted that the discharge occurs regularly at intervals of nineteen or twenty days when the animal is not giving milk or in calf. The hæmorrhagic flow appears two or three days after the commencement of 'rutting,' and when this is most intense. The amount of blood does not exceed one or two ounces, and the coagulated clots

emains in the vagina until it is expelled with the urine. There can e no doubt as to its source. If, at the moment when traces of it re perceived externally, the cow is killed, and the inner surface of he uterus examined, blood will be seen exuding from the cotyledons. nd this phenomenon has been proved to extend beyond the bovine pecies, for it has been witnessed in the mare, bitch, cat, rabbit, etc.; nd, in the red-coloured mucus of the vagina and uterus, multitudes f blood-corpuscles have been found."

"With regard to the season at which this 'heat' takes place, it has een observed that it is usually in the springtime, when food be-omes plentiful, especially with herbivorous animals. The carnivora re in heat during winter. The mare is usually in heat from April o June, or later. With the cow, whose calf is sold at from one to wo months' old, with a view to utilising the milk, the season, of ourse, is varied—as care is taken to induce conception again as soon s the lacteal secretion begins to diminish; but it has been observed hat midsummer is more particularly the rutting period. And the heat' in sheep, though naturally present in September, is usually nly shown during summer, because the ewes are kept apart from he ram at the natural time, in order that the lambs may be born at favourable season—the spring.....The bitch is in heat from December to February, or in the autumn or springtime. The cat is n this state in January and February, and also in the spring and utumn; sometimes the heat appears three or four times in a year, nd the animal may produce young as frequently, though, in the wild tate, it seldom does so more than twice a year. The pig manifests utting in October or November—at least that is the period when it s usually put to the male; and it may be put a second time towards he end of spring, in order to have two litters within the twelve months. The frequency and duration of the period of 'rutting', or heat', depend upon the age, species, and other circumstances; ut it may be said to persist, in the domesticated animals, from one o fifteen days at the most. The shortest period is witnessed in the ow and sheep, and the longest in the bitch. It is sometimes only resent from twelve to twenty-four hours in some non-fecundated nimals. With impregnation, however, it ordinarily ceases until fter parturition; and, if impregnation does not occur, it gradually isappears until the next period, which is somewhat variable. Its reappearance in the cow has been noted every month or three weeks, nd sometimes at closer intervals; and in the sheep and pig, it lasts for one or two days, and again appears from the fifteenth to the thirtieth day, but usually every month. When removed from artificial conditions, it is stated that the ovine species is in rut in September, that this persists only for a day, but reappears every fourteen days until the end of December. From the spring until the end of summer, it may be said the mare manifests a desire for the horse every three or four weeks, and the objective phenomena which announce it continue from two to four days. In the bitch, they last for nine or ten days, and only appear in the spring and autumn. .....Domesticity, in assuring animals food and shelter, and removing them from risks and alternations of an erratic life, multiplies the returns of this condition. Fowls, pigeons, etc., lay despite the rigours of winter, and the domesticated mammals are in heat at short intervals.....Some animals, as the mare and pig, manifest a desire for the male, and even copulate (shortly after delivery); and it is no less a fact that rutting and impregnation may, and do occur, soon after parturition. The cow, ass, and sheep, and, it is believed, the mare, will copulate with greater certainty of success the ninth day after parturition than at any other time."

Saint-Cyr (*Traité d'Obstétrique Vétérinaire*, page 41) says, that the females of domesticated animals show signs of excitement during the period of heat—not only by general symptoms, but by swelling of the vulva, and an odorous glairy or sanguinolent discharge; and that, in the cow particularly, and frequently in the mare, this discharge is abundantly sanguineous. He says that this sanguineous excretion, which has been studied with care by Numann, Fuschs, Spinola, and others, is a normal phenomenon, and analogous to the catamenial flux of woman.

Denman (*Midwifery*, page 88) says: "It has also been observed that all animals, at the time of their being salacious, or in a state fit for the propagation of the species, have a discharge equivalent to menstruation, which is generally mucous; but in some instances, in very hot seasons and climates, becomes in many of them sanguineous, as I have often observed."

The celebrated Dr. Mead wrote a treatise on the "Influence of the Sun and Moon on Human Bodies," wherein, according to the prevailing notions of the time, he laboured to show that those great luminaries exerted direct influence upon animals; and, speaking of this power over periodical hæmorrhages, he says: "And this action of the moon extends even to those quadrupeds that are menstruated for it has been observed that they generally have those evacuations about the new moon; in particular, mares and monkeys; and that so constantly that, according to the testimony of Horus Apollo, the Egyptians painted the cynocephalus to represent the moon, upon account of a certain sympathy, whereby the female of this animal has evacuations of blood from the uterus at the new and full moon; and they kept monkeys in their temples in order to point out the times of the conjunction of the sun and moon.....Wherefore, the moon's influence is apparent in all animals, provided irregularities in their way of living do not prevent it."

My own personal inquiries into the character of the phenomena observable in females of the lower animals at their times of sexual excitement, show that a more or less marked sanguineous flux occurs in the following: monkeys, mares, cows, sows, and bitches. In the higher monkeys, when they do not suffer through captivity, the flow is almost—sometimes quite—as copious as in women. In some varieties, the genitalia become swollen and brilliantly coloured, so that tomato-like, vermillion-tinted masses render their condition conspicuous. The simiæ also commonly observe monthly regularity in their periods. In mares, the "pouting vent," with its incessant spasmodic opening and closing, and its rosy-coloured, highly odorous, sanguino-mucous weeping, proclaims the period of heat. In the cow, the period recurs every three weeks, and is of brief duration; but, towards its conclusion, it is marked by a distinct flow of blood. Mr. Simpson, of Wray Park, whose accurate observations upon his splendid herd of Jersey cattle during fifteen years may be implicitly relied upon, informs me that the duration of the rut in old cows is briefer than in heifers, but is short in both; and his herdsmen have often to be nimble in getting the services of the bull. When the blood appears, the heat usually subsides, and intercourse is refused. Cows have been known to have excessive loss, resembling the menorrhagia of women. Mr. West confirms these observations from a very wide experience as a veterinary surgeon.

It may here be appropriate to mention that evidence is not wanting to show that the menstrual act in milch cows is apt to derange the creatures' milk temporarily; in some instances rendering it unfit for consumption by suckling infants. It is maintained by certain observers that the milk of menstruating women also deteriorates during the catamenia, when the latter occur during lactation; and I have met with many corroborative examples, though in other cases no particular harm appears to have ensued. The probability of derangement arising from this cause receives some confirmation from the changes which are known to take place in human milk at the catamenial periods. Dr. Barnes states that microscopical examination of milk yielded by menstruating women shows a considerable production of colostrum corpuscles at these epochs. Such milk seems to resemble that first secreted after delivery (colostrum), and in cows this first milk, or "beestings," is known to possess very peculiar properties. It is, for instance, in them so highly albuminous as to coagulate firmly on the application of heat; the resulting *magma* resembling pretty closely custard-pudding; indeed, in country places, I have known "beestings" used for the purpose of making such puddings; and, as in women, this first milk is believed to exert rather an aperient effect upon the offspring. Its colour is much yellower, and its aspect is very different from that of ordinary milk. My inquiries lead me to believe that, besides the alterations recognisable microscopically, there are other, perhaps more important, changes in the composition of menstrual milk, affecting materially not only its corpuscles, fat, and casein, but its chemical constituents, salts, sugar, etc. Probably it is to impairment of the quality of the milk by subtle changes of the kind indicated that the deleterious results are attributable.

Acute emotions of a distressing character, particularly violent anger and jealousy, have been known to alter a mother's milk so completely as to excite symptoms of sudden poisoning, and even convulsions, in the infant.* The secretion must, therefore, obviously be highly susceptible of rapid modification in its structure and composition.

Probably, in a herd of dairy cattle, the admixture of the milk of one or two rutting cows with that of the rest of the herd, is of but

* I lately saw a marked instance of this, in consultation with Dr. Milson. Instances of this have lately been recorded by Dr. Napier (*Lancet*, August 19th, 1882), and by Mr. Walford (*Lancet*, September 2nd, 1882); and my own inquiries have yielded support to this view. Two infants, supplied exclusively from separate cows, showed periodical symptoms of bowel-disorder, so that, in each instance, those in charge of them requested that the children might be supplied from the mixed milk of the dairy, instead of from selected cows.

little consequence; and fortunately, as already stated, the duration of the rut in ruminants is usually brief. Besides, if I am rightly informed, milch cows, like women, do not always manifest symptoms of œstruation during, at any rate, the earlier months of lactation, though they commonly do, and the heat may supervene at any time. But when, as of late has become a growing custom amongst well-to-do people, hand-fed infants have milk supplied exclusively by one cow, periodical disturbance may be manifested in the infant, corresponding with observed periods of heat in the animal.

In sows, the vulvar swelling is considerable, and a sanguineous exudation may appear towards the termination of the period of heat, particularly in well-fed animals. In bitches, the flux is often abundant and prolonged. Mr. Bartlett informs me that the surest method for procuring impregnation in the bitch, is to permit access to the male only when the flow of blood is well established—a statement which is corroborated by information, for which I am indebted to Mr. Bird, J.P., who has bred many bloodhounds. This has some bearing upon moot questions relating to impregnation, conception, and ovulation. In the well-fed carnivora, the heat appears to be sometimes prolonged, when not appeased, by sexual gratification.

Besides the fore-mentioned creatures, personally observed, information respecting other female animals has been given me by reliable observers. Thus, the periods of heat have been recognised in the hippopotamus in the Zoological Gardens. These recur monthly, and the creature's period of gestation is only seven months, which strikes me as remarkably short for so huge an animal; it has been accurately noted, however, on three occasions. The smaller tapir, which has recently bred in the Gardens, is believed to gestate for double this period. Such apparent anomalies show the importance of inquiry into specific or generic peculiarities. In the equine species, which is thought by some to have ancestral affinities with the tapir, the mare goes with young for a long period, her time of gestation being eleven months, while that of the cow is only nine months, as in woman. There is an old saying, known in country places, that "A hare and a mare go a twelve months;" that is, the hare goes one month, while the mare goes eleven.

I am told that she-asses come to heat regularly like mares, but that the periods recur only about every five weeks. They also exhibit swelling and weeping of the vulva. Sheep present similar phenomena, but they are not strongly marked, and recur only seasonally —*i.e.*, in warm months—for a few times, and are of brief duration. Cats are known to have recurring periods of heat, but, how often, I am not reliably informed. Doe rabbits are well known to manifest periodic heat-symptoms, and their vulvar orifice, vagina, etc., show deep purple turgescence.

It is evident that animals susceptible of domestication, become much more prolific under the agency of a constant supply of food, shelter, and such like advantages, and that, in lieu of the merely seasonal manifestations of sexual aptitude displayed by them in a state of nature, they acquire a much more sustained, and frequently renewed, capacity for reproduction, and with it comes the exhibition of aptitude in the characteristic manner peculiar to each creature. As Mr. Darwin says, "Domestication, as a general rule, increases the prolificness of animals and plants." Domestication for the lower females, and civilisation for the human female, have respectively so operated upon their reproductive systems," as to enhance their powers, and repeat, in the intensification, the frequent display of catamenial phenomena.

The foregoing evidence appears sufficient to establish the fact that the lower females present phenomena analogous to those of menstruation in the human female, and even to prove their identity. The facts also seem to justify the chief inference I have ventured to draw from them, namely, that the function is subordinate to the law of evolution, and is related mainly to the degree of evolution to which the sexual system has attained, such evolution being always correlated with other evidences of organic development. They enlighten us respecting the correlations of the reproductive functions in the mammalian world; they show us the singular analogies that exist between the seasonal rutting and delivery of the lower females, and the still observable tendency to commence menstruation, and to bring forth children, in the warmer months, of the human female, that relic of a primordial seasonal aptitude for procreation, the impress of which still remains, and, to some extent, governs the breeding times of humanity. They show us that the rare menstruation at long intervals—six, four, or three months—of girls at puberty, is analogous with the primitive seasonal heat of the lower creatures, and is a repetition of a reversion to an ancestral condition, often imitated again at the decline of sexual life. These and allied facts will find their application, and be constantly appealed to in illustration of the physiology and pathology of the function in womankind; and I trust it will become clear to you that the information acquired through the study of the comparative physiology of menstruation is neither superfluous nor useless, either in the scientific discussion or in the practical application of our knowledge of the subject.

CLINICAL LECTURE
ON MYXŒDEMA,

Delivered in the Newcastle-upon-Tyne Infirmary,

BY THOMAS OLIVER, M.D., M.R.C.P.,
Physician to the Infirmary, and Lecturer on Practical Physiology, College of Medicine, Newcastle-upon-Tyne.

TO-DAY I bring under your notice two cases of a disease which, until lately, has escaped recognition. For its name, myxœdema, as also for a description of its symptoms and morbid anatomy, we are indebted to Dr. Ord, of St. Thomas's Hospital. *Post-mortem* examination has only been performed on two of the sixteen cases hitherto recorded, and, in both the connective tissue of the body was the seat of hyperplastic and degenerative changes. It seems strange that a disease, with such pronounced features as myxœdema, should have escaped clinical observation so long. There is not the least doubt that, by many medical men, cases of myxœdema have been regarded and certified as Bright's disease; but you will notice that, while the resemblance between them at first sight strikes you, the resemblance is only superficial, closer scrutiny enabling you, without any difficulty, to distinguish between the two diseases.

By the term myxœdema, is meant a disease which affects generally middle-aged women. It is slowly progressive in character; the tissues become invaded by a peculiar jelly-like mucin-yielding material. It is unaccompanied by albumen in the urine, or by any of the other signs of primary affection of the kidneys.

It is difficult to assign to it a cause. The middle age of female life has furnished the greatest number of cases, but why we cannot tell. Syphilis and intemperance can, in almost every case, be excluded, and to pregnancy it has no special relation. Dr. Ord is inclined to regard anxiety, domestic worry, etc., as having something to do with its development, and both of my cases lend weight to this supposition. A nervous origin of the complaint is contended for by M. Verneuil, who has seen it follow injuries, the wound in these cases having some supposed influence on the central nervous system capable of producing the special phenomena of myxœdema. This latter theory is, in all probability, the correct one; for in this, as in every physiological or pathological condition, there is no change of structure, be it one of development or of retrogression, without some influence exerted by the nervous system.

While we cannot speak with anything like precision upon its cause, we can say something a little more definite about its pathology. All that we know of its morbid anatomy, however, is derived from a careful microscopical and chemical examination of two cases. In both, the morbid anatomy was the same. Wherever met with, the connective tissue of the body was the seat of overgrowth and degeneration. Its fibrillar element was markedly increased and well marked, its nuclei enormously multiplied, while the intercellular material, or what Dr. Ord calls the interstitial cement, was enormously augmented. Normal tissue yields very little mucin, but the skin in myxœdema yields, we are told, many hundred times the quantity met with in health.

It is to this padding of the intercellular spaces with mucoid material that the swelling of the skin is due, also its translucency and want of secretion. No tissue is spared this infiltration or degeneration. Nerve-tissue, muscle, blood-vessels, mucous membrane, and lymphatic tissue become, in time, the seat of the morbid change; and, while other organs are becoming bulkier as a consequence, the thyroid gland, strange to say, is undergoing extensive atrophy. A period comes, late in the course of the disease, when the morbid process extends to the kidney; the cortical substance, in which the Malpighian bodies are imbedded, becomes invaded by a nuclear proliferation; an invasion which is announced by the presence of albumen in the urine. No organ, in fact, is spared. A similar change affects the central nervous system; its connective tissue becomes enormously increased, and its power of yielding mucin augmented.

Both of these patients who attend here to-day are the subject

myxœdema. They are both of the same age, forty-four; but as . presents, in a more marked degree, the physical signs and mptoms of the disease in question, I shall make her condition the asis of my remarks.

Mrs. W., aged 44, came to the out-patient department of this Infirmary in the early part of last October, complaining of numbness n her hands which are swollen, of swollen face and of a sense f weight and pain in her head. She was a healthy woman until x or seven years ago, but has always been over anxious and worried about trifles. Her husband died after a long and tedious illness two years ago, and since then she has grown much worse. At resent her face is swollen and expressionless, and she complains of it eeling stiff. The eyelids are œdematous, so much so as in great part o obscure the eyeball. While the eyelids are puffy, they do not it on pressure; the upper lids are more swollen than the lower, a act which shows that the œdema is not dependent upon the presence of fluid met with in ordinary dropsy. The skin above and elow the eyelids is translucent, and is the seat of transverse rinkles. On each cheek there is a distinct red blush, but this is ot persistent; it comes and goes without any special relation to states f cardiac activity, so far as I have been able to ascertain. The ose and lips are markedly thickened and swollen. At night when esting, owing to the imperfect closure of the lips, the saliva keeps owing away from the angle of the mouth. Her tongue is bulky. peech is remarkably slow, but distinct. Her mental faculties are ulled; her memory, she says, is bad. Her gait is extremely slow, nsteady, and staggering. On a few occasions she has fallen; as consequence she is very nervous, and is in constant dread when out of oors of being knocked over. It is with difficulty that she can look pwards at objects above her head for any length of time. It makes er giddy, and has caused her to fall. Her hands are swollen, and he skin everywhere is extremely coarse and unperspiring. Her ense of touch and pain is greatly diminished. A darning-needle r a small coin placed between the fingers is not perceived by her. here is insensitiveness. The prick of a needle may or may not be elt, but when it is felt, it is not until a few seconds after the inserion. There is, therefore, slow transmission of sensory impressions. he thyroid gland is extremely atrophied. Many of her teeth have allen out, those that remain are loose and decayed. Her hair is alling off; it is remarkably rough and brittle, and there is a peculiar bronzing of the skin of the forehead near the roots of the hair. Eyebrows and eyelashes have all but disappeared. Everything that she loes is slowly performed. Her speech, gait, and receptiveness of external impressions are all slow. This tardiness enters into all her nental processes, judged of by the delay in her answers to questions, etc. The patellar tendon reflex is present, but there is a marked lelay in the muscular response to the tap. The specific gravity of the rine is 1010, and though repeatedly examined it has never contained lbumen. The pulse varies from 54 to 58, and owing to the thickness of he skin is with difficulty felt at the wrist. The first sound of the heart s heard at the apex, and particularly at the base, is reduplicate; the econd is markedly accentuated. The respirations are 14 per minute, normal (with the exception of crepitation heard over the base of the left ung for some days while resident in the Infirmary), and exhibiting well narked interruption in the flow of inspiration and expiration, a oint to be noticed later on. Temperature varies from 95.6° to 96.5°. During the period, however, that the left lung was the seat of subacute pneumonia, the temperature in the left axilla always exceeded hat of the right by one and a half or two degrees. She complains of a sense of "rising in her stomach," that she feels something hot in her stomach and in the left side of the chest. The left pupil remains more contracted than the right, and does not respond to stimuli like the other. Her bowels are constipated, the act of defæcation is painful and difficult, and is followed by a burning feeling in the neighbourhood of the rectum, a difficulty in all probability due to a swollen condition of the tissues round the anus similar to that which exists at the other orifices.

The other patient, Margaret H., is aged 44 years, and is unmarried. In her case, there is a similar history of anxiety and worry. She presents, but in a minor degree, nearly all the symptoms met with in W. There are, too, the low pulse-ratio, and the peculiar interruption to the respiratory rhythm which we noticed in the other patient.

It is to the reports of the London medical societies that we must look for the earliest notice of this affection—more particularly to the papers of Sir William Gull in the Clinical Society's records, and of Dr. Ord in the *Medico-Chirurgical Transactions*, vol. lxi, and to the article "Myxœdema," by the latter, in Quain's *Dictionary of Medicine*. Nine years ago, Sir William Gull drew the attention of the profession to "five cases illustrative of a peculiar cretinoid state supervening in adult life in women"—cases which are now thought to have been akin to, if not identical with, myxœdema. I had read in the journals accounts of this interesting affection, but my first real experience of the disease was in a patient of Dr. Gowans', exhibited at our Medical Society last session. Since then, these two cases have come under my care, and within the last few days another has been sent to me by Dr. Garson. I mention these facts as bearing upon the geographical distribution of the disease—four occurring in this neighbourhood within a year. All the patients are middle-aged females, and they have all given the same history of their illness and its relation to grief, anxiety, etc. In this respect, my cases coincide with those of Dr. Ord. Some time ago, Dr. Clifford Allbutt wrote a very interesting article on the relationship of chronic Bright's disease, contracted kidney, and grief or anxiety. I cannot help recognising the influence of these latter in the production of myxœdema—a disease in which almost an identical pathological change is developed, although more generally distributed. Just as in the contracted kidney the connective tissue is the seat of the lesion, so here that same tissue is similarly changed, as is also its equivalent in nerve-tissue, the neuroglia. The facts that, in myxœdema, the cortical substance of the kidney becomes the seat of a marked proliferation of nuclei around glomeruli and tubules; that, while albumen is not found in the urine for years, yet is present in its later stages; and that, long before albumen is found in the urine, the sphygmograph registers a degree of high arterial tension, are points which have caused myxœdema to be regarded by some as a form of Bright's disease. With some difficulty, I have obtained a few sphygmographic tracings, and one of them certainly shows high arterial tension. This fact, and the accentuation of the second cardiac sound, are points of importance; but, beyond mentioning the circumstance, I shall not discuss the connection of arterial tension and myxœdema. The morbid change tends to invade the outer coat of the arteries, and this is a point not to be forgotten in the consideration of arterial tension.

Besides the swollen condition of the face and hands, the most prominent symptoms are slowness of thought and action. Muscular movements are slowly performed, and there is incapacity for prolonged muscular effort. Tardiness enters into every action. Answers to questions are not returned immediately. It is some time before the nature of the question is appreciated; some time before thought is expressed in word. Speech is slow, measured, and distinct. Summed up in a few words, there is, as the result of the subcutaneous changes which act the part of a padding to the terminations of the sensory nerves, imperfect reception of external stimuli, and in this way impaired reaction on the part of the brain. A complete pathology of myxœdema cannot be built upon the microscopic appearances and chemical changes found in two *post mortem* examinations; but we can, if clinical records show a persistent similarity in all the cases now met with, take them as our type. Dr. Ord has shown that the lesion of myxœdema is a change in the amount of the white cement of the connective tissue—there being marked excess of the normal mucin-yielding interfibrillar cement. If, then, the nerve-endings in the skin be enveloped in a soft jelly-like material, and be so padded that external stimuli can scarcely reach them there must be not only imperfect reception, but probably, also, slow transmission of sensory impulses to the brain; and, as the central nervous ganglia are the seat of similar changes, the result can only be deficient mental power—seen in the slow process of thought, slow response on the part of the muscles to the will, and imperfect co-ordination on the part of muscle and muscle. The patient becomes gradually drawn away from that position in the world in which she has hitherto played the part of an active intelligent unit. The tendency is for her to sink into a condition of hebetude.

It was to this forced withdrawal of the brain from rapid communication with the external world that Dr. Ord at first thought the mental lethargy due. "With perception becoming slower than usual," he says, "and the central nervous system losing, through the altered state of the skin, its natural and necessary stimulation, there could only be a state of intellectual lethargy and slowness in co-ordination of muscular movements as the necessary consequences." In this chain, slow use, partial disuse, and numbness of faculties are links of one kind; and the constant retardation of guiding sensory impulses a link of another; so that, supposing the myxœdema to be constant, the nervous degradation tends to become progressive. It is, however, no longer a doubtful fact, that the brain itself may primarily become the seat of the myxœdematous changes met with in the skin, and give rise to a series of symptoms belonging more particularly to affection of that organ. The oph-

thalmoscope has failed in either of those cases to reveal the presence of anything abnormal in the discs and retina.

The myxœdematous changes are very generally distributed. Although I have no anatomical proof, I imagine that the sympathetic ganglia become involved in the process. The movements of the heart and intestines, and the function of respiration, all become delayed. The interruption in the respiratory rhythm, too, is noteworthy. It was noticed in both cases that the inspiratory murmur, which was full and prolonged, suddenly became quiescent; nothing was heard for a few seconds, and then came the expiratory. Those of you who were not careful when examining the chest will remember the trap into which you fell by regarding the expiratory murmur as an indication of a renewed act of inspiration. What we really had was this—inspiration; interval of quiescence, lasting as long as the period of inspiration itself; then expiration—a point which seems to show that the terminations of internal sensory nerve-fibres are probably also the seat of myxœdema. This expiratory delay owns the same explanation as the imperfect peripheral perception. The stimulus to inspiration is, briefly, the action of blood containing carbonic acid on the respiratory centre, and the sense of collapse of the lung conveyed thereto by the inspiratory pulmonary fibres of the pneumogastric. This accomplished, expiration is brought about, setting aside laryngeal fibres, through the expiratory fibres of the pneumogastric conveying to the centre a sense of distension of the lung. It is this sense of distension, that is not quickly received, transmitted to, and transformed at, the respiratory centre; and hence the lungs remain in a state of distension for a short period—one of entire quiescence, and not attended by discomfort to the patient, and which forms a distinct break in the respiratory rhythm between inspiration and expiration. I am inclined to think that the slow action of the heart owns a similar explanation.

Once the disease is established, it seems to pursue a downward course. The tendency is for the myxosis to encroach upon blood-vessels and glandular structures, and the termination is Bright's disease; albumen suddenly appearing in the urine, other symptoms of renal disease appearing, and the patient dying comatose.

It being regarded hitherto chiefly in the light of a peripheral lesion, baths, diaphoretics, and tonics have been prescribed. My patients were benefited for a time by the use of iron and liquor ammoniæ acetatis. At Dr. Ord's suggestion, I have been trying thirty-minim doses of tincture of jaborandi thrice daily; and I may state that, under its use, both patients have improved. The skin of the hands has become softer, and the numbness has diminished; but they are still far from well. Phosphorus I intend to try. Nitro-glycerine has been used by others, and, I believe, with benefit; but, as I have never been able to satisfy myself about the existence of high arterial tension in these cases, I have not given it a trial. High arterial tension, if it existed, I should have regarded rather as the effect than as the cause of the disease.

Two points require consideration. You have to remember that, when myxœdema has existed for a time, there is an enormous overgrowth of connective tissue, and a filling up of the intercellular spaces by a large quantity of mucoid material. These two things give rise to all the special symptoms of the disease in question; they constitute its pathognomonic features; but, after all, they are not the disease itself. The diseased conditions which antedated these—be they failure in nutrition by loss of nerve-power, be they alteration in those chemical and physical processes which underlie metabolisis and metastasis—these are the conditions we must try to know; and, knowing them, it will be an easier matter to place the treatment of myxœdema upon a scientific basis.

BEQUESTS AND DONATIONS.—The Sussex County Hospital, Brighton, has received £1,469 5s. 5d. in cash, and £1,975 4s. 8d. in 3 per cent. Consols, under the will of Mr. Joseph Collinson; and £180 under that of Mr. Burwood Godlee.—The Birmingham and Midland Hospital for Women has received £100 anonymously, in commemoration of a golden wedding, per Miss Webster; and £100 under the will of Mr. William Davis of Edgbaston.—The Royal Hospital for Children and Women has received £200, less duty, under the will of Mrs. Eleanor Bailey.—Miss Rawson, of Nydd Hall, has given £105 to the Bradford Infirmary.—The Grocers' Company have given £100 to Miss Mary Wardell's Convalescent Home for Scarlet Fever.—Mr. Quintin Hogg has given £52 10s. to the general fund, and £52 10s. to the Seaside Branch, of the Metropolitan Convalescent Institution.

THE Eccleshall Bierlow guardians have, with the sanction of the Local Government Board, formed the townships of Dore and Totley into a separate medical district, and appointed Dr. George H. H. de Wolfe the medical officer.

ON PICRIC ACID AS A TEST FOR ALBUMEN AND SUGAR IN THE URINE.*

BY GEORGE JOHNSON, M.D., F.R.S.,

Physician to King's College Hospital and Professor of Clinical Medicine in King's College.

DURING a period of about two years, I have been in the habit of using picric acid as a test for albumen in the urine. I was induced to employ this test by my son, G. Stillingfleet Johnson, one of the Demonstrators of Chemistry at King's College, who, while working at the compounds of albumen with the mineral acids, the results of which he published in the journal of the Chemical Society (August 1874), found that picric acid caused coagulation in all the acid compounds of albumen; and he therefore suggested that it might be found a valuable test for albumen in the urine. At that time, we were not aware that it had ever been employed as a test for albumen; and in a communication to the *Lancet* (November 4th, 1882), I spoke of it as a new test; but, a few days after the publication of my paper, I chanced to come upon a leading article in the *Medical Times and Gazette* (vol. ii for 1874, p. 366), in which picric acid is mentioned as having been recommended as a test for albumen by a French physician, M. Galippe. There is, therefore, no novelty in the suggestion; but, so far as I can learn, the true value of the test has not hitherto been appreciated, and therefore it has not come into general use. The test may be used in the form of a saturated aqueous solution, or in the form of powder or crystals. The aqueous solution is most suitable for home use, while the powder or crystals may conveniently be carried in a urinary pocket test-case.† A saturated aqueous solution may be quickly made by adding about fifty times their bulk of boiling distilled or rain water to the powder or crystals; a portion of the acid will crystallise out on cooling, leaving a transparent yellow supernatant liquid. This solution being added to an equal volume of albuminous urine in a test-tube immediately coagulates the albumen. The coagulated picrate of albumen is soluble in alkalies; if, therefore, the urine be highly alkaline, it must be acidulated by a vegetable or a mineral acid before adding the picric acid solution. In my numerous testings for albumen with picric acid, I have not once found it necessary to acidulate the urine. The picric acid solution is itself sufficiently acid to dissolve the phosphatic sediment which results from boiling a neutral or alkaline specimen of urine.

To detect a very minute quantity of albumen, the following method is the best. Into a test-tube about six inches long, the urine is poured to within two inches of the top; then, the tube being held in a slanting position, about an inch of the picric acid solution is gently poured on the surface of the urine, where, in consequence of its low specific gravity (1003), it only partly mixes with the upper layer of the urine; and, as far as the yellow colour of the picric solution extends, there will be more or less turbidity from coagulated albumen, contrasting with the pellucid unstained urine below. If then, the tube be placed in a stand, the coagulated albumen will gradually subside, and form a delicate horizontal film at the junction of the coloured and the unstained stratum of urine; the yellow liquid above and the uncoloured urine below being quite free from turbidity. If the urine should be turbid with urates, it must be cleared by heat before the addition of the picric acid solution.

As a result of numerous careful observations, I have arrived at the conclusion that picric acid applied in this way is a more delicate and, therefore, more trustworthy, test for albumen than nitric acid in cold urine, whether the latter be employed by the method of dropping the acid into the cold urine, or by pouring the urine on the acid previously placed in the tube. The simplest and most satisfactory mode of comparing the two tests as regards their relative delicacy, is to dilute a specimen of albuminous urine until one or the other test fails to act; and it will be found that the picric acid solution shows the presence of albumen in a specimen diluted considerably beyond the point at which the nitric acid fails to give a clear indication. The picric acid, too, often causes an immediate albuminous opalescence in specimens in which nitric acid only slowly, and after an interval of some minutes, gives a similar, but sometimes a doubtful, indication.

It scarcely need be insisted on that, for example, during convalescence from acute albuminuria, it is of the greatest practical importance to be assured that no trace of albumen remains.

Here it may be well to mention that the albuminous opalescence

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* Communicated to the Clinical Society, March 9th, 1883.

† Such a case has been made for me by Hawksley, 357, Oxford Street.

with picric acid which always occurs immediately, if at all, may readily be distinguished from the coarse granular particles of urate of soda, which, after a delay of some minutes, sometimes result from the acidity of the picric solution. These granular masses of urate, sometimes mixed with crystals of free uric acid, quickly fall to the bottom of the test-tube, and carry with them so much of the picric colouring matter, that, when placed under the microscope, they are so opaque as to appear almost black.

In testing with the powder or crystals, as much as is equal in bulk to a peppercorn may be shaken up in a test-tube, with a column of urine about an inch in height. As the powder dissolves, the urine becomes turbid with coagulated albumen. The object is to add as much of the test as the urine will dissolve, and no more. The solution of the picric acid in the urine, and the coagulation of the albumen, are quickened by heating the tube over a spirit-lamp or a candle, or by immersing the tube in hot water.

Another convenient mode of using the powder or crystals is to add fifteen or twenty minims of water to the peppercorn bulk of the acid in a tube, and quicken the solution by the application of heat; an equal bulk of urine is then gradually added to the hot solution, when albumen, if present, is at once detected.

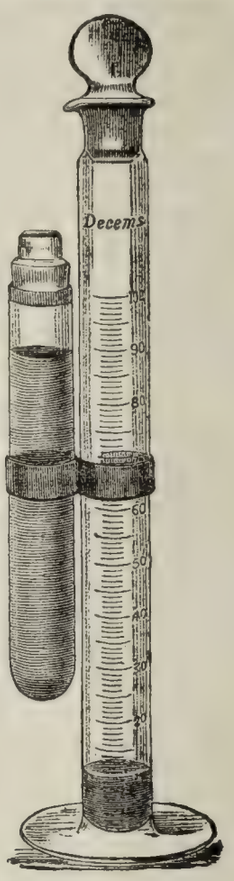
The value of picric acid, as a test for clinical use, is much increased by the fact that, when boiled with a solution of potash, it forms a most delicate test for glucose. As I have stated, in a letter which I addressed to the *Lancet* (November 18th, 1882), I stumbled upon this fact by adding some picric acid solution to a boiling specimen of saccharine urine, which had previously been mixed with half its volume of liquor potassæ. I was at that time not aware of the fact, that the reaction of picric acid with grape sugar had been observed by Braun, a German chemist, nearly twenty years ago. I am indebted to Dr. Pavy for a reference to Braun's paper (Ueber die Umwandlung der Pikrinsäure in Pikramminsäure, und ueber die Nachweisung der Trauben-Zucker. C. D. Braun. *Zeitschrift für Chemie*, 1865). In this paper, it is shown that grape-sugar, when boiled with picric acid and potash, reduces the yellow picric acid to the deep red picramic acid, the depth of colour depending on the amount of sugar present. I am not aware that hitherto any attempt has been made to utilise this as a qualitative clinical test for sugar in the urine, or as a means of accurately estimating the amount of sugar in a saccharine solution. I trust, however, to be able to establish its value for both purposes.

Take a fluid drachm of a solution of grape-sugar, in the proportion of a grain to the fluid ounce; mix it with half a drachm of liquor potassæ (*P.B.*), and ten minims of a saturated solution of picric acid; and make up the mixture to four drachms with distilled water. The mixture is conveniently made in a boiling tube, ten inches long and three-fourths of an inch in diameter, which may be marked below at the height of two and four drachms. With a long boiling tube, there is little risk of the liquid boiling over; and, the steam, condensing in the upper cool part of the tube, flows back as liquid, so that there is little loss by evaporation. The liquid is now raised to the boiling point, and the boiling is continued for sixty seconds by the watch, so as to insure the complete reaction between the sugar and the picric acid. During the process of boiling, the pale yellow colour of the liquid is changed to a beautiful claret red.

The liquid having been cooled, by cautiously immersing the tube in cold water, and it having been ascertained that its level is that of the four-drachm mark on the tube, or, if below the mark, it having been brought up to it by the addition of distilled water, the colour is that which results from decomposition of picric acid, by a grain of sugar to the ounce, four times diluted; in other words, it indicates one-fourth of a grain of sugar to the ounce; and this colour is a convenient standard for comparison in making a volumetric analysis. The picramic acid solution, however, on exposure to light, even for a few hours, becomes paler; but the colour may be exactly imitated by a solution of ferric acetate, with a slight excess of acetic acid and an excess of ferric chloride. The iron solution, we have found to retain its colour unchanged for a fortnight, even when exposed to a strong light; and we expect that, when light is excluded, it may be kept for an indefinite period; and it is, therefore, a convenient standard for comparison.*

If, now, a drachm of a solution of grape-sugar, containing two grains to the ounce, be mixed with the same quantity of liquor potassæ (half-a-drachm) as before, but with double the amount of picric acid (*i.e.*, twenty minims), and made up to four drachms in the boiling tube, the result of boiling the mixture as before for sixty seconds, will be the production of a much darker colour than when the one-grain solution was acted upon; but if now the dark liquid be diluted with its own volume of water, the colour will be the same as that of the one-grain solution.

The dilution is accurately done in a stoppered tube, twelve inches



The picro-saccharimeter, as described in the text. The shading of the side tube indicates the ferric acetate standard. The darker shading at the bottom of the graduated tube shows the saccharine fluid, darkened by boiling with picric acid and potash, and occupying ten divisions before dilution.

long and three quarters of an inch in diameter, graduated into $\frac{1}{10}$ and $\frac{1}{100}$ equal divisions. By the side of this tube, and held in position by an S-shaped band of metal, is a stoppered tube of equal diameter, and about six inches long, containing the standard iron solution.*

Sufficient of the dark saccharine liquid to be analysed is poured in to occupy exactly ten divisions of the graduated tube. Distilled water is then added cautiously, until the colour approaches that of the standard. The level of the liquid is then read off and noted. A more exact comparison of the saccharine liquid with the standard is made by pouring into a flat-bottomed colourless tube, about six inches long and an inch in diameter, as much of the standard as will form a column of liquid about an inch in height, and an exactly equal column of the saccharine liquid in a precisely similar tube. The operator then looks down, through both tubes at once, one being held in each hand, upon the surface of a white porcelain slab, or a piece of white paper. In this way a slight difference of tint is readily recognised, and if the liquid to be analysed be found to be darker than the standard, it is returned to the graduated tube, and diluted until the two liquids are found to be identical in colour, when the final reading is taken. The saccharine liquid having been diluted four times before it was boiled, a colour equal to that of the quarter-grain standard would indicate one grain of sugar per fluid ounce. If further dilution were required—say from ten to twenty divisions—the proportion of sugar would be two grains per ounce, and so on to thirty or forty or upwards, or to intermediate divisions. Thus dilution, from ten to thirty-five divisions, would indicate 3.5 grains of sugar per ounce.

* I hope and believe that our friends and fellow-workers, the pharmaceutical chemists, will prepare standard sugar solutions, and also the ferric acetate standard for those who require them. We have made the ferric acetate by adding ferric chloride to ammonium acetate. It is of primary importance that the standard be correct.

* This picro-saccharimeter was made for me by E. Cetti, 36, Brooke Street, Holborn, E.C.

We have found, by experiment, that ten minims of a cold saturated solution of picric acid are rather more than sufficient for decomposition by one drachm of a solution of grape sugar in the proportion of one grain to the ounce. A drachm of the solution would, of course, contain one-eighth of a grain of sugar. In making an analysis, the picric acid must be added in proportion to the amount of sugar. If the proportion of sugar be as high as six grains per ounce, a drachm of the picric acid solution will be required. If the proportion of sugar be higher than this, the saccharine fluid should be diluted with distilled water in a definite proportion before commencing the analysis, and the product of the analysis of the diluted fluid is then to be multiplied by the degree of dilution—two, five, or ten, as the case may be, to which the original liquid has been subjected.

Distilled water, or clear rain-water, should be used for diluting. Hard water, containing salts of lime, is rendered turbid by the carbonate of lime precipitated by mixture with caustic potash, and any turbidity in the liquid interferes with the estimation of the depth of colour. In testing undiluted urine, a slight turbidity often results from separation of phosphates by the potash. This turbidity may be removed by allowing the phosphates to form a sediment, or more speedily by filtration. When a highly saccharine liquid is diluted five or ten times before mixture with the testing materials, no phosphatic turbidity occurs. In making a volumetric analysis, care must, of course, be taken that the measurements and dilutions are accurately made.

The preliminary dilution of a strongly saccharine specimen may be made in the graduated tube; or into a flask graduated to contain fifty cubic centimètres; five or ten cubic centimètres of the saccharine liquid may be delivered from a graduated pipette; then, the flask being filled up to the graduation with distilled water, the dilution will be ten times with five cubic centimètres, and five times with ten cubic centimètres of the liquid to be analysed

Another important point is that, while the amount of potash remains the same, the picric acid must be in proportion to the amount of sugar in solution. It has already been mentioned that ten minims of the picric acid solution are more than equal to one-eighth of a grain of glucose, which is the amount contained in one drachm of a solution, in the proportion of a grain to a fluid ounce. A slight or even a considerable excess of picric acid does not appreciably affect the colour of the picramic acid, while a deficiency would, of course, lead to an underestimate of the amount of sugar. If an analysis with thirty minims of picric acid solution indicate, say, from three to four grains of sugar, it is probable that some sugar has been left undecomposed, and a second analysis, with a larger proportion of picric acid, might therefore give a higher and a more correct result. If, on the other hand, a second analysis, with a larger proportion of picric acid, give an identical result, we may feel certain that the whole of the sugar has been decomposed, and the amount indicated by the resulting picramic coloration. In any case, when the amount of sugar indicated is less than would suffice to react upon the amount of picric acid employed, the result may be relied upon as correct.

The presence of albumen, even in large amount, has but little influence on the picric acid test for sugar. In illustration of this, the following experiments will suffice. A specimen of urine, normal as regards the amount of saccharine or saccharoid material, but containing a large amount of albumen, was boiled with picric acid and potash with sufficient water to dilute the urine by its own volume of liquid. A second portion was treated in the same way after the separation of the albumen by boiling and filtration, and the first specimen gave a darker tint than the second to a degree that might be considered to indicate one-tenth of a grain of sugar per ounce. Another portion of the urine was decolorised by repeated filtering through charcoal; and, of this, one specimen was tested while it retained its albumen, another after the separation of the albumen—the result being that both yielded identical tints of colour, and this was very slightly paler than that of the specimen which was tested after having been deprived of its albumen without previous decolorisation by charcoal. The explanation is, that pure albumen has no reducing influence on picric acid when boiled with dilute potash, such as is used in testing for sugar; but with seralbumen, as with white of egg, there is associated a colouring matter which is partly separated by filtering off the coagulated albumen, and entirely removed by repeated filtering through charcoal. The colouring matter in question has a reducing influence on picric acid, although the colouring matter of normal urine has been found to have none. The coagulated albumen collected on the filter, after being thoroughly washed, gives no red reaction when boiled with picric acid and potash diluted in the same proportion as that employed in testing for sugar. This has been proved by repeated experiments.*

The accuracy of the picric acid method of volumetric sugar analysis has been fully and fairly tested. Our plan has been to compare the results of this process with those obtained by Dr. Pavy's beautiful and accurate ammonio-cupric method. We have analysed the same specimens, many of them albuminous as well as saccharine, by the two processes, my son employing Dr. Pavy's method in the laboratory at King's College, and I the picric acid process at home; and our results are found to be practically identical, the differences being only such as are due to unavoidable slight errors in conducting an experiment. Both methods, in fact, are based upon the same chemical principle—namely, that glucose, when heated with potash in the presence of an oxidising agent, has a tendency to rob it of its oxygen. In the one process, the reducing action of the sugar is exerted upon an oxide of copper; in the other, upon picric acid. A definite weight of sugar reduces, in the one case, a proportional amount of cupric oxide, and in the other an equivalent proportion of picric acid, with resulting picramic acid, and a corresponding measurable intensity of colour.

The proportion of sugar in the specimens analysed has varied from one grain to fifty grains per fluid ounce. The following may be taken as examples of practically identical results.

	Ammonio-Cupric Method.	Picric Acid Method.
1.	13.5 grs. per fluid oz.	13.5 grs. per fluid oz.
2.	33 „ „	32 „ „
3.	31.2 „ „	30.5 „ „
4.	36.4 „ „	36 „ „
5.	10.3 „ „	9.5 „ „
6.	1.28 „ „	1 „ „
7.	11.5 „ „	11 „ „
8.	36.4 „ „	36 „ „
9.	2.57 „ „	2.5 „ „
10.	3.1 „ „	2.9 „ „
11.	7.27 „ „	7 „ „
12.	16.8 „ „	16 „ „
13.	48.5 „ „	47.5 „ „
14.	27.7 „ „	27 „ „
15.	48.4 „ „	48 „ „
16.	17.47 „ „	17 „ „
17.	49.6 „ „	49 „ „
18.	9.3 „ „	8.5 „ „
19.	9.9 „ „	10 „ „
20.	6.05 „ „	6 „ „

It will be seen that, in the majority of cases, the ammonio-cupric process gives results slightly in excess of the picric acid method This excess is due to some non-saccharine ingredients in the urine which reduce cupric oxide, but not picric acid.

During the last three months, I have tested with the picric acid and potash a large number of specimens of normal urine (about 300) with the almost uniform result of a depth of colour indicating the proportion of 0.6 grain of sugar in the fluid ounce, the indications usually varying between the limits 0.5 and 0.7 grain in the fluid ounce. In a considerable number of cases, my son has tested the same specimen by the ammonio-cupric method, with the indication usually of from 0.7 grain to 0.9 grain in the fluid ounce; *i.e.*, an excess of that obtained by picric acid of from 0.1 to 0.3 grain in the fluid ounce.

The following have been the proportions of the various liquids: drachm of urine, half a drachm of liquor potassæ, ten minims of picric acid solution, made up to two drachms with distilled water. The mixture is kept boiling for a minute, and, when cooled, is compared with the standard. The urine having been diluted by its own volume, a depth of colour equal to that of the standard would indicate 0.5 grain of sugar; but in nearly every case I have found it so much darker than the standard, as to require further dilution equal to 0.1 grain before the standard colour is reached, thus giving an indication of 0.6 grain.

So constant is this degree of colouration with normal urine that if instead of diluting up to two drachms, the dilution be carried further by twenty-four minims, the resulting colour might be taken as an approximation to an exact quarter-grain standard, and, in the ab

* The chemical result of boiling albumen with potash, and the question of the formation of an alkaline sulphide, was discussed at some length in the columns of the *Lancet* during the months of December and January last. For the final communication from my son, in which he demonstrates that the apparently contradictory results obtained by different observers are explained by the varying proportions of the caustic potash employed, the *Lancet* could not find space, but it is published in the *Chemical News*, February 23rd, 1883, page 87.

ence of a more exact standard, might be used for making an nalysis. The question arises—Does normal urine contain as much s 0.6 to 0.7 grain of glucose in the fluid ounce? We are not prepared o assert this without further evidence than we have as yet been ible to obtain; but, if it be not glucose which gives these almost dentical analytical results with the two processes, it must surely be ome nearly allied substance.

There are certain facts connected with the behaviour of this reducing agent so constantly found, and in such constant quantities n normal urine, which point to its saccharine nature. 1. Its reducing effect upon both cupric oxide and picric acid is equal to that which would be exhibited by an equal weight of pure glucose. This s remarkable, since any other substance than glucose or an isomeric sugar would probably reduce more or less either of the picric acid or of the cupric oxide. 2. It is completely destroyed by prolonged ebullition with dilute caustic alkalies. On the other hand, we are unable to assert positively that it is glucose, since it is unfermentable by yeast, and the most careful analyses have failed to produce more than those traces of grape-sugar from normal urine which were obtained by Brücke and Bence Jones (one-fiftieth of a grain per fluid ounce). The results of careful analyses of normal urines tend to show that the secretion of the healthy human kidney contains two distinct classes of cupric oxide-reducing substances, viz., (1.) such substances as uric acid, etc., which are not destroyed by boiling with dilute caustic potash; and (2.) what may be described as saccharoid bodies which *are* disintegrated by such treatment. Moreover, it appears that picric acid is reduced only by the second, or saccharoid group of normal urinary constituents; for the results of analyses by the ammonio-cupric method of healthy urine, which has undergone sufficiently prolonged boiling with dilute potash to completely destroy everything which is capable of reducing picric acid—*i.e.*, everything belonging to group 2, or the saccharoids—invariably show the presence of more or less cupric oxide-reducing substance which has escaped disintegration by the boiling alkali; and on deducting this reduction from the total cupric oxide reduction effected by the original urine, an indication of (?) glucose is obtained equal to that given by the picric acid method with the original urine.

The results of some such analyses are tabulated below, in which all reduction is expressed in grains of glucose in the fluid ounce.

I. Total indication by Picric Acid.	II. Total indication by Ammonio-cupric method.	III. Indication by Ammonio-cupric method, after boiling with Potash.	IV. Difference between II and III, Saccharoid substance.
(1.) 0.6 gr. per fl. ℥	0.909 gr. per fl. ℥	0.276 gr. per fl. ℥	0.63 gr. per fl. ℥
(2.) 0.5 ,, ,, ,,	0.607 ,, ,, ,,	0.09 ,, ,, ,,	0.517 ,, ,, ,,
(3.) 0.35 ,, ,, ,,	0.546 ,, ,, ,,	0.145 ,, ,, ,,	0.401 ,, ,, ,,
(4.) 0.8 ,, ,, ,,	1.245 ,, ,, ,,	0.437 ,, ,, ,,	0.808 ,, ,, ,,

All reductions expressed as grains of glucose per fluid ounce.

These results are explained by the fact that those ingredients of healthy urine which reduce cupric oxide, and are not destroyed by boiling with potash, such as uric acid and urates, have been found to exert no reducing action upon picric acid.

There are at least two undoubted sugars, viz., sorbite and eucalin, which reduce cupric oxide from potassio-cupric tartrate, and are destroyed by boiling with dilute potash, but do not undergo the vinous fermentation under the influence of yeast; and both these sugars are isomeric with glucose. Hence, though the evidence of the identity of the saccharoid ingredient of normal human urine with glucose is incomplete, it is at least probable from its behaviour and reactions that it it may be a true sugar.

I trust that the method of saccharimetry which I have described, will enable every practitioner who has the will, to estimate with ease and accuracy the amount of sugar in any specimen of urine.

NAPHTOL POMMADE.—The naphthol pommade used by Professor Hardy (*Chemist and Druggist*) is made by dissolving one part of purified naphthol in one part of ether, then adding three parts of vaseline, heating in a water-bath until the ether has all been driven off, and, finally, stirring well with seven more parts of vaseline until cool. If the ordinary naphthol of commerce be employed, the pommade will shortly semi-liquefy. To purify the naphthol it must be powdered and treated with about one and a half times its weight of chloroform, the insoluble naphthol being then separated by filtration, and kept in a state of fusion until the odour of the chloroform has quite passed off.

ABSTRACT OF A REPORT ON THE RELATION OF MICRO-ORGANISMS TO TUBERCULOSIS.

Presented to the Association for the Advancement of Medicine by Research, on February 1st, 1883.

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A VISIT was paid to Professor Toussaint at Toulouse, and to Dr. Koch at Berlin, with a view of seeing their methods of experimentation, and the results which they had obtained. Various experiments were seen, and a quantity of material was brought back to England for more detailed examination. The result of the visits, and a full account of the observations made, will be found in the complete report, which will be published in the April number of the *Practitioner*.

It was thought advisable, in the first instance, to repeat some of the experiments which have led observers, more especially in this country, to object to the view of the specific origin of tuberculosis, and to hold that, in rodents at least, any irritation might produce that disease. The present series of experiments were performed under the best hygienic conditions, with complete isolation of the animals from each other, and thorough disinfection of the instruments employed. In six cases, setons of various kinds were introduced, both subcutaneously and into the anterior chamber of the eye; in ten, vaccine-lymph, both from the calf and from man, was employed; in three, pyæmic pus was injected (1) into the eye, (2) subcutaneously, and (3) into the abdominal cavity; and in six, various materials (cork, tubercle hardened in alcohol, and worsted thread) were introduced into the abdominal cavity. None of these twenty-five animals became tuberculous. Some experiments are also cited in the report in which wounds in rodents have been stitched up with cotton thread, and others in which abscesses have been produced in various ways; but in none of these cases did tuberculosis ensue. In explanation of the former results, it is pointed out that, at the time the early experiments on this subject were made, the communicability of tubercle by mediate contagion was not recognised, and, as the precautions necessary for disinfection of instruments had not, at that time, been made out, the channels for the introduction of specific micro-organisms were left unguarded.

Two tubes of serum containing micrococci were obtained from M. Toussaint, who holds that micrococci are the cause of the disease. Toussaint obtains these organisms by inoculation of flasks containing serum and infusion of rabbit, with the blood of tuberculous animals, and he has in some cases succeeded in producing tuberculosis by the injection of these cultivations into other animals. The material obtained from M. Toussaint was injected into three rabbits, two guinea-pigs, one cat, and one mouse; and of these seven animals, six were under observation for a sufficient length of time for the development at least of a local tuberculosis. In no instance did tuberculosis occur. (In all the experiments detailed in this report, inoculation was made into the anterior chamber of the eye, whenever this was practicable. Syringes purified by heat were employed for the purpose.) Cultivations of these micrococci were also made, and injected into nine rabbits and three guinea-pigs. Of these, four rabbits and three guinea-pigs were under observation for a considerable time without the development of tuberculosis in any case. The total result is, that thirteen animals were inoculated with the micrococci with which Toussaint works, and obtained from Toussaint himself, and in no case did tuberculosis occur.

A number of tuberculous organs from animals experimented on by M. Toussaint were also obtained, some of the animals having become tuberculous after the injection of his micrococcal fluid. Careful examination of these organs has shown the presence, often in large number, of the tubercle bacillus described by Dr. Koch, but no micrococci have been found. The conclusion arrived at is that the micrococci described by Professor Toussaint are not the cause of tuberculosis. One of the possible explanations of the results which should not be left out of account, is the following. Professor Toussaint trusts greatly to carbolic acid as a disinfecting agent for the purification of the instruments employed in inoculation. This antiseptic, though effectual for the destruction of the ordinary forms of micro-organisms, as evidenced by the satisfactory results obtained from its use in aseptic surgery has been shown to be ineffectual against the spores of bacilli, unless it acts for a long time. The bacillus of tubercle apparently produces spores, and there is no reason to suppose that these are less resistant than those of bacillus anthracis, and other bacilli. An experiment is given

which shows that a saturated watery solution of carbolic acid, even though it acts as long as fifteen minutes, is not sufficient to arrest the development of the tubercle-bacilli. Therefore, to wash a syringe with carbolic acid is not such a certain means of disinfection in this particular instance as was formerly supposed.

Experiments were also made with cultivations of bacilli obtained from Dr. Koch. Twelve animals were inoculated with these organisms, chiefly into the anterior chamber of the eye, and all of them became tuberculous, and that more rapidly than after inoculation of tubercular tissue. The tubercles produced in these cases were infective, and caused tuberculosis in other animals. On examination of tuberculous material, Koch's tubercle-bacilli are always found, though in varying numbers. They are most numerous in bovine tuberculosis, and least numerous in human tuberculosis. About eighty organs of tuberculous animals, and thirty-six cases of human tuberculosis were examined, and in all of these without exception, tubercle-bacilli were found. The inoculation of these bacilli is more certain and more rapid in its effect than the inoculation of tubercular material from any source, and this seems only explicable on the supposition that in the cultivations of these bacilli the virus of the disease is present in a more or less pure state, and in large amount. Various facts are pointed out leading to the conclusion that in these bacilli we have the virus of the acute tuberculosis caused in the lower animals by the inoculation of tuberculous material.

In applying the facts obtained from experiments on animals to the pathology of tuberculous diseases in man, it is pointed out that all that has as yet been absolutely proved, is that a variety of materials in man which we class together as tuberculous, produce acute tuberculosis when inoculated into rabbits, guinea-pigs, and other animals, and that this result is due only to the tubercle-bacilli in the materials inoculated. It therefore remains for inquiry what relations these bacilli bear to the morbid processes in man in which they are found.

Acute miliary tuberculosis in man resembles in every respect, in histological structure, in tendencies, and in the presence of bacilli, the disease produced in the lower animals by the inoculation of tuberculous material, and there can be little doubt that the cause of both diseases is the same, viz., the tubercle-bacillus. It is, however, much more difficult to understand the relation of these organisms to the localised tuberculous processes in man (phthisis, scrofulous diseases of glands, joints, etc.). Phthisis is alone considered in the present report, and with a view of making clear the conception which the author has formed of the relation of bacilli to this disease, the following facts are brought forward, which he has observed as to the mode of distribution of these organisms in the tissue, and their relation to its histological elements.

Two distinct structures have been described as tubercle in the lungs of rodents, viz., nodules of lymphatic tissue in close proximity to the vessels and bronchi, and nodules which are largely made up of epithelioid cells. If a case of commencing artificial tuberculosis be examined, it will be found that bacilli are only found in the latter nodules, indeed, it is rare, even in the later stages, to find them in the former, and in that case epithelioid cells will be found as well. The bacillus being the cause of this disease, the nodules containing bacilli are alone tubercles. Further, on careful investigation of these nodules, it will be found that bacilli are only present in the epithelioid cells themselves. In making this statement, only young tubercles, and those in which the bacilli are present in moderate numbers are referred to. When there are enormous masses of bacilli, or where there has been confluence of tubercles forming a largish tubercular deposit, some bacilli may be found in the outer part of the tubercle, but the great majority of them occupy the epithelioid tissue. When the bacilli are few in number, one need only look for them in epithelioid cells. Around the epithelioid cells the tissue becomes inflamed, and converted more or less into granulation tissue. As the tubercle becomes older, the epithelioid cells at the centre undergo caseous degeneration, and in this case the bacilli are present in the caseous mass, but are often best seen at its margin, where epithelioid cells still exist, and they may also be found penetrating into the inflammatory tissue. The giant-cells of tubercle can be distinctly traced as originating from epithelioid cells, especially from epithelioid cells containing bacilli. As to the origin of these epithelioid cells in the lungs, the great majority are undoubtedly derived from the alveolar epithelium. The bacilli escape from the blood-vessels or lymphatics, and pass into the alveolar epithelium, where they grow, and cause multiplication of the epithelial cells, until the alveolus becomes completely filled with them. In some instances, however, these cells are probably derived from the epithelioid lining of blood and lymphatic vessels. In the case of the liver, the author thinks they are frequently developed from liver cells, for bacilli may be found in liver cells at the margin of commencing tubercle, and gradation in size and form can be traced between these liver cells, and the epithelioid cells in the centre of the tubercle. The accumulation of the epithelium in the centre of the nodule, leads to obliteration of the vessels around, and to fusion of neighbouring nodules.

With regard to phthisis, the two extremes—the rapid phthisis or caseous pneumonia, and the chronic or fibroid phthisis—are considered. In the rapid phthisis, the alveoli are distended with caseous material, or, in parts where the process is less advanced, with epithelioid cells. Surrounding these, the trabeculæ are thickened, and converted into granulation-tissue. Here the bacilli are found in moderate or considerable numbers in the caseous material or epithelioid cells which fill the alveoli. By-and-by, the walls of adjacent alveoli disappear, and thus irregular cavities are formed, containing caseous material, surrounded by epithelioid cells and inflammatory tissue. In this case, the bacilli are most numerous, and sometimes in enormous masses at the free margin of the cheesy material; and they are also present, though not generally so numerous, in the epithelioid cells at the line of junction of the caseous mass with the surrounding tissue.

In fibroid phthisis, the bacilli are, as a rule, extremely few; but here and there, if a cavity exist, or in the centre of a caseous mass, one may find them in considerable numbers. They may, though very rarely, be also found in the giant-cells, which are generally pretty numerous among the fibrous tissue. As a rule, however, the bacilli are extremely few; but nevertheless, if a sufficient number of sections be carefully examined, a few will be found here and there at the margin of, or in, the caseous masses.

The foregoing facts seem to indicate that, when the tubercle-bacilli reach the alveolus of a lung which is in a suitable condition for their growth, they develop in the epithelial cells lining the alveolus. This alveolus becomes filled with cells, neighbouring alveoli become affected, and the same process goes on in them. The further result will depend on the number and growth of the bacilli, and on whether the patient is a good soil for their development. If they develop well, we have caseous pneumonia; if they grow slowly and with difficulty, we have fibroid phthisis. In the former case, the alveoli become early distended with epithelioid cells; inflammation of the walls of the alveoli ensues; the epithelioid cells soon undergo caseous degeneration; and the presence of the masses leads to atrophy and sloughing of the walls of the alveoli. Infection of neighbouring parts of the lung occurs by continuity, and also by partial coughing up, and re-inhalation of the bacilli into other parts of the lung. In this rapid phthisis, fibrous formation around the alveoli only takes place imperfectly, and the lung rapidly breaks down.

In the case of fibroid phthisis, the bacilli are few, and grow only with difficulty. Thus fibrous formation occurs extensively, and giant-cells are entangled in this fibrous tissue. In parts, however, the process may be more rapid, and these cheesy masses are found, which may lead to breaking down of the lungs and the formation of cavities.

In the report, it is pointed out that, on this view, we have one explanation of the rarity of acute tuberculosis in connection with phthisis, and of the presence of bacilli in sputum even before physical signs are marked; while it is shown that this view is directly corroborated by the results obtained by Tappeiner in his inhalation experiments. Against the statement that phthisis is due to the tubercle-bacillus, might be urged the fact that the bacilli found in the lung after death are often very few in number. Among other facts brought forward with regard to this question, it is stated that extensive tuberculous processes may be found in animals containing few bacilli; and that in cases where bacilli alone were inoculated, and where it is certain that the bacillus was the only agent at work. With regard to the production of phthisis by the inhalation of dust of various kinds, it is pointed out that the foreign particles inhaled probably only prepare the lung for the reception of the bacilli, for in these cases also bacilli are found.

It has often been urged that the milk of tubercular cows is infective. This may be the case when the mammary glands become tuberculous; and the mode in which the bacilli might get into the milk was well illustrated by the appearances found in a tuberculous kidney. Thus, not only were bacilli present in the tubercular mass but they were also found in large numbers in the epithelium of the kidney-tubules, and in the interior of those tubules, both in the vicinity of the mass, and at some distance from it. The author has not yet investigated the subject of tuberculosis of the kidney; but

from what he has seen, he thinks it probable that the epithelium of the tubules is the favourite seat of the bacilli in the kidney, just as the alveolar epithelium is in the lung. In that case, bacilli would be present in the urine, not merely when there were marked tubercular masses in the kidney, but also when the disease was but slightly advanced. From analogy, it is probable that the same is the case in the mammary glands, and bacilli might be present in the milk, even though the disease of the gland was not sufficiently advanced to be noticeable.

The staining solution employed was the Weigert-Ehrlich solution. The formula is—of a saturated watery solution of anilin, 100 parts; of a saturated alcoholic solution of the basic anilin dye (methyl-violet, gentian-violet, fuchsin), eleven parts. Mix and filter before use. Rapid staining is obtained by warming the solution. The specimens are then decolorised by immersion in nitric acid (one part to two of water), and stained in a suitable contrast dye. Very delicate sections are apt to be injured by immersion in the nitric acid. In this case, after staining them in the Weigert-Ehrlich fuchsin solution, they may be washed in distilled water, immersed in alcohol for a moment, and then placed in the following contrast stain for one to two hours: Distilled water, 100 cubic centimètres; saturated alcoholic solution of methylin-blue, 20 cubic centimètres; formic acid, 10 minims. Whenever it is possible, however, Ehrlich's original method is recommended, as being most rapid, most simple, and most satisfactory. By this method of staining, tubercle-bacilli and leprosy-bacilli remain red when the fuchsin solution is employed. Psorospermiæ and the outer coat of some parasites also retain the red colour. Lichtheim has also stated that a micrococcus is frequently found in the fæces, which reacts in a similar manner to the tubercle-bacillus.

ON A CASE OF LICHEN PSORIASIS AT THE BATH MINERAL WATER HOSPITAL.

By JOHN KENT SPENDER, M.D.Lond.,
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PERHAPS few things excite more interest among dermatologists than those apparently hybrid diseases which seem to prove a root of affinity behind quite a diverse outward show. Curiosity, no less than scientific exactness, prompts us to try and find out how old friends can put on such new faces; or rather, as in the present instance, how one can wear two faces at the same time. Now, lichen and psoriasis have been supposed to possess, not only a certain outward likeness, but some identities in their history and origin. Thus Mr. Jonathan Hutchinson, to whom we are indebted for a recent study of this subject (*Lectures on Clinical Surgery*, page 221), contends that we cannot be sure that psoriasis is never lichenoid in the very beginning. The question has two aspects, anatomical and pathological. The same dermal structures may be affected at one or more stages of lichen and psoriasis; and these stages may display such a similar behaviour in both diseases as to indicate a near or even a very close alliance. Of course, the far-off results of these morbid processes may be utterly different, and the intermediate phases may call for different local and general treatment; but like two lines which run in the same direction without being parallel, and intersect at only one given point, so lichen and psoriasis, at a certain period of their course, may wear a resemblance which requires a special experience to disentangle.

The distinction is plain, I hope, between a brief and casual identity of two skin-diseases, and the accidental concurrence of several skin-diseases in the same person (as eczema with lichen, scabies, or even psoriasis), in which there would necessarily be a blending together of the characters of the separate diseases.

I will now relate the case which is the key of these remarks. J. H., aged 44, living at Cirencester, was admitted into the Bath Mineral Water Hospital on October 7th, 1882. A man of middle stature, well nourished, and without apparent special diathesis. At eighteen years of age, a "dry scurf came on the head and face," which continued for some years. Twelve years ago, the eruption "came out also on the arms and legs, and felt dry and hot." In October 1872, he became an in-patient of University College Hospital, under the late Dr. Tilbury Fox; and then the skin was affected on the outside of the arms and legs, on the face, and on different parts of the trunk (chiefly the back). He is clear that Dr. Fox called it "psoriasis"; and, after a frequent inunction with almond-oil, the man says that he was discharged "quite well" at the end of two months. In the course of the following year, a "scurf" came again on the head and face, and, during the next nine years, this never entirely left him; gradually he became altogether worse, and, about two months before he came to our Mineral Water Hospital, "red spots broke out over the belly." When admitted, the outer surfaces of the arms and the legs were a nearly uniform mass of psoriasis, and the back was almost as severely affected. The abdomen, especially on the left side, was covered with spots and patches of lichen. The spots were red, shining, and hardly at all scaly; the patches were of all shapes and sizes, some only an aggregate of spots, others much larger and with a transverse lineage, made up of infiltrated skin, and more or less covered with very fine scales. There could be no doubt that these patches were made up of confluent papules, for single papules were dotted all round their margins. There was no tendency to eczema, and no history of any "discharge." The true lichen groups of spots and patches were limited to the abdomen below the diaphragmatic line, and to the front and inside of both thighs; there was always some "itching" when the patient became heated by a little exercise, or after he had been in bed for a few hours. The local irritation was always worse when he felt "weak or out of spirits." The appetite was poor; the urine "rather thick at times," but it contained no albumen; the action of the bowels was regular. He had been always temperate in every way, but family anxieties had been a serious burden.

I ought to add that, when J. H. entered the hospital, his face had a glazed red appearance, suggestive of pityriasis rubra; and the scalp (he was rather bald) was covered with the fine floury dust of a non-inflammatory pityriasis, or of an old dried-up eczema.

There was one stage in this case during which the condition of the skin of the abdomen was represented with close fidelity by Plate XIII (Lichen Ruber) in Dr. Tilbury Fox's *Atlas of Skin-Diseases*.

The effect of hydrotherapeutic treatment was remarkable in several ways. Faithful to their ancient tradition, the Bath waters soon subdued the psoriasis proper; the scales cleared away, and the skin on the back and on the extensor surfaces of the limbs seemed invigorated with a new nutritional power. But the bathing seemed to have little control over that part of the eruption which might be correctly denominated lichen. We did much more good with the nightly inunction of a mixture of vaseline and sweet almond-oil; this allayed the pruritus, which had before seriously disturbed the man's sleep and otherwise injured the general health. The administration of arsenic was distinctly useful for a short time; it helped the baths in curing the psoriasis, and the only relic of this part of the skin-trouble when the patient was discharged from the hospital consisted in a few faint spots on the flexor side of the arms. The pruritic irritation of the lichen seemed to be increased when iron was combined with the arsenic; but the addition of lead ointment to the other external remedies was very beneficial. Simultaneously, the complexion of the face became nearly natural, and the "dust" on the scalp was much diminished.

A few days ago (January 16th), I had a letter from J. H., stating that the eruption (he means the "lichen") had extended "to the hips, up on the ribs, and down to the knees; it is exceedingly troublesome day and night. The irritation and heat are so bad, I can hardly bear my clothes." I sent him a prescription for an application composed of vaseline, calomel, and oxide of zinc.

I have had lately, in private practice, a case which illustrates the way in which accidental circumstances may cause different forms of skin-disease to succeed each other. A retired farmer, aged 80, very temperate in all his ways, became depressed and generally out of health at the beginning of this January. In a few days, there was an acute eruption of lichen over a large part of the body, but most severely, perhaps, on the upper arms, on the flexure side of the elbows, and about the wrists. There was a rough symmetry in the grouping of the papules, which were sufficiently red and multitudinous to deserve the name of lichen agrius. There was not so much pruritus as a general heat or smarting; and as if to exhibit the eczematous or *boiling-over* process which any form of skin-congestion may undergo, a large vesicle was developed on the front of each wrist among a crowd of angry papules. After a few days, the lichenous eruption desquamated on the arms as cleanly and decisively as if it were the sequel of a specific fever. On January 21st, small bullæ of pemphigus were seen on the backs of both wrists and hands; presently also about the feet and ankles; and soon afterwards, very large bullæ formed on the legs, thighs, and forearms. There were grave adynamic symptoms at the same time. By careful treatment and good nursing, the patient is now (February 4th) pulling safely through.

Now, how are we to interpret this chain of curious phenomena? Do they form a series of what Sir W. Gull calls "nerve-vagaries"—a succession of nerve-storms, one disturbance effacing as soon as pos-

sible what went before, as if in a hurry to display its own signs? Or, according to a less transcendental view, we may regard different elements of skin-texture as affected by certain morbid influences, one after the other; and the wonder is, that a person at such an advanced age should be able to survive the shock of so many cutaneous lesions.

ON PHAGEDÆNIC CARBUNCLE.

By G. F. MASTERMAN, L.K.Q.C.P., M.R.C.S.I., Stourport.

Since the time of Harvey Ludlow, two forms of carbuncle have been recognised: one in which the sloughing does not extend, or very slightly, beyond the original area of the disease; the other, in which this process is accompanied by fresh peripheral mischief, the disease rapidly spreading from the spot where it first appeared, sometimes deeply, but generally limited by the superficial fascia, and attacking preferentially the skin of the face.

That there is some essential difference, not simply due to position, in the two forms of the disease, is generally admitted; but, in the numerous papers on the subject I have lately consulted, I have not found any reason given or suggested to account for it, although the treatment employed in the successful cases of the graver form—the use of perchloride of iron—gives, I think, the key.

Within the last twelve months, I have treated two cases of this facial—or, as I should prefer calling it, phagedænic—carbuncle (for it occasionally attacks and destroys the integument of other parts), and four of the disease of the ordinary type. Now, in the former two, I found strongly marked and obstinate albuminuria; whilst in the latter this condition was uniformly absent. In all the cases, the urine was loaded with lithates, and generally scanty when they first came under treatment; but throughout the progress of all, whether the urine were turbid or perfectly clear, this difference persisted. I found always abundance of albumen in the one, and none in the other, but not the slightest trace of sugar in any instance.

Case I.—A lady, aged 36, mother of six children, in easy circumstances, but living close to a canal, of which the water was occasionally offensive in smell, had enjoyed, up to the time when the carbuncle appeared, excellent health, and had certainly shown no symptoms of renal disease. It was preceded by the usual *malaise;* and then a small hard nodule appeared in the skin at the centre of the posterior edge of the sterno-mastoid muscle; it became very painful, and within two days its nature was evident. I directed it to be well poulticed; gave an active purge; then quinine and iron; and, the following day, destroyed the whole thickness of the skin in the centre of the swelling by a bead of caustic potash fused in a loop of iron wire—a very convenient way of applying it to a small surface; and replaced the poultice. I had hitherto found this plan so perfectly successful in treating carbuncle, that I was surprised to find that the disease extended in spite of it. In four days, it had reached upwards to the ear, and almost down to the clavicle, as well as deeply in front of the muscle. I then asked Dr. Strange and Mr. Walsh of Worcester to see the case with me. Up to that day, I had not specially examined the urine; it was at first thick with urates; but, as it cleared after a few doses of the iron mixture, and appeared normal, it did not seem necessary. However, in anticipation of the question being raised, I tested for glycosuria, found no sugar, but a large amount of albumen. Dr. Strange was kind enough to administer chloroform; and I again and more thoroughly applied potassa fusa to the whole of the sloughing cavity, increased the dose of perchloride of iron, ordered complete rest in bed, and a dose of compound jalap powder every morning. In a few days, the albumen fell to one-eighth; the sloughing stopped, and healthy granulations appeared. The patient was then sent to Malvern, and was soon convalescent; but the albuminuria persisted for about a month afterwards, finally disappearing under the use of arsenic with the iron.

I then had three cases of the ordinary form of carbuncle in succession, each in the nape of the neck. They were treated as I have indicated, and all did well. I carefully examined the urine of each, day by day, but never found the slightest trace of albumen or sugar. After the skin over the centre of the swelling had been fairly destroyed by the caustic, the pain was relieved, the sloughs speedily separated, and the mischief never extended beyond the lump originally formed.

Case II.—Last February, a farm-labourer came to me in an advanced stage of phagedænic carbuncle of the face; it extended from the chin to the angle of the jaw, and was rapidly nearing the orbit. The surface was ash-coloured in the centre, purple at the edges, and full of crater-like apertures, from which most offensive sanious pus escaped. The urine was loaded with albumen, solidifying when boiled; and there was severe constitutional disturbance. I rubbed the whole of the diseased surface with a stick of potassa fusa until the skin was converted into a black gelatinous slough, which was washed away under a stream of water; sent the man to bed, and directed the same treatment as in the first case. Except for rather sharp hæmorrhage one day from the bared facial artery, there was nothing to interfere with the steady improvement which at once set in; and the wound healed with less scarring than I should have thought possible. The albuminuria was not finally got rid of for nearly two months, but it was quickly reduced to a small amount.

This month (May), I have been treating another, but a case of simple carbuncle of the face. The patient, a feeble cachectic-looking man, with a gouty mother, but only inferential evidence of that habit in himself, had two of the characteristic swellings on the cheek, which was swollen, brawny, and very painful throughout. The urine was very scanty, passed with some pain, and thick with urates, but did not contain a trace of albumen or sugar. In spite of the unpromising look of the cheek, the disease did not extend; the carbuncles, which were about two inches apart, did not even coalesce; and, as soon as the sloughs began to separate, the swelling of the cheek subsided.

Now, in looking through all the reports I could find on the subject, I have been particularly struck by the fact that, although glycosuria is generally mentioned as a cause, I have not found a single case where albuminuria is referred to either as a cause or an accompaniment. That it may be the cause of the *difference* between the two varieties of the disease, is, I think, most probable; but it cannot be looked upon as the result of it, from its persistence after the carbuncle has healed, nor, *a fortiori*, as a cause of the disease itself; else, amongst the many cases of albuminuria, acute and chronic, one sees, carbuncle should be of frequent occurrence, and the connection would have been made out long ago.* Probably the same dyscrasia which originates the phagedænic form of the disease leads to the escape of albumen also; and I am especially inclined to think so, because the most careful microscopic examination of the urine failed to yield me any evidence of renal mischief. The albumen seemed to drain away from some change in the blood, and not from any lesion in the uriniferous tubes. I may add that the pulse showed no tactile evidence of unusual pressure.

There was a case of carbuncle attacking the back reported in the Journal about four months ago, which rapidly extended, and eventually killed the patient; and I noticed that no reference was made to the state of the urine, and that perchloride of iron was about the only recognised remedy not given. I have no doubt that, in this case, albuminuria existed.

In treating carbuncle, there is one point I insist upon—almost entirely withholding alcoholic stimulants. In Case I, in deference to my senior, Dr. Strange, wine was given; but I stipulated that it should be dry champagne only, and not much of that. I am sure, from the progress of many cases I have watched, that the time-honoured port-wine treatment simply retards the cure.

CLINICAL MEMORANDA.

DEATHS DURING THE ADMINISTRATION OF ANÆSTHETICS.

I hardly think I shall stand alone in my protest against such cases as Mr. W. Roger Williams quotes being put down as deaths (*bonâ fide*) from anæsthetics. Three at least of the six given ought, in fairness, to be left out of the calculation.

Case I.—To place one drachm of chloroform (without measurement) on a piece of lint, press this closely over the mouth and nose, and then over this throw a towel, is, I think, courting a fatality No wonder the anæsthesia was complete in less than three minutes, and no wonder the patient was asphyxiated. The administrator, not the anæsthetic, was at fault in this unfortunate case.

Case II.—Does the writer think the induction of anæsthesia by chloroform was a wise procedure in this woman? To commence with, the heart must have been acting under the greatest difficulties, so that any shock or excitement might probably have been sufficient to stop it.

Case IV.—There is, in this case, again room for doubt as to the share the anæsthetic had in bringing about the fatal result. In the writer's own history of the case, he says, "before she was well under

* As I have seen but these two cases in connection with albuminuria, it would be premature to express any more definite opinion as to their mutual bearing.

s influence, the operation was commenced." No more of the næsthetic mixture seems to have been given, and the operation (a omewhat long one) was nearly finished before the patient died. Now, I think, before the fatality happened, the woman would probably be almost, if not quite, sensible; and I think it is hardly fair o call this a death due to the anæsthetic, when hardly any anæsthesia was induced. Before anæsthetics were introduced, I believe t was not uncommon for patients to die on the operating table from shock. Might not this have been such a case? I have thought, in reading accounts of deaths occurring during anæsthesia, that in some cases, at least, shock, which the anæsthetic does not annul, might be the real cause of death, and that the patient would have been just as likely to die had the operation been done without anæsthesia.

Mr. Williams has certainly been most unfortunate in seeing such a large percentage of fatal cases. I am happy in thinking, however, that 1 death in 208 for chloroform, and 1 in 1,050 for ether, is at least five times higher than most administrators' death-rates. Mr. Holmes, who must have been present at thousands of administrations, had, up to 1878, only seen one death. The late Mr. Clover gave chloroform by means of his inhaler in 3,000 cases, up to 1872, without a death.

Personally, I have never seen a death, although I have produced anæsthesia, or seen it produced, in over 1,000 cases; and I feel pretty sure the majority of surgeons could speak as favourably.

In looking through a list of the casualties during anæsthesia, one cannot help being struck by the trivial nature of the majority of the operations that were in course of performance at the time. I am afraid, in some of these cases, the administrator was at fault. Either he has given the anæsthetic and performed the operation required single-handed; or, if not so, the chloroformist has thought, because the operation was a simple one, that less care was required in watching the patient. The practice of giving an anæsthetic, and operating single-handed, can hardly be too strongly condemned; in fact, if an administrator does his work conscientiously, he will not even look at the operation in progress, but, with his finger on the pulse, and eyes on the chest of the patient, will be prepared to treat the first suspicious symptom. I am not sanguine that we shall ever entirely do away with a small death-rate from anæsthetics; but feel sure that, with ether, such an inhaler as Ormsby's, and a feeling on the part of the administrator that, as regards responsibility, he is second to none in the operation, a man may anæsthetise almost daily without an accident.

It seems highly inconsistent that such a responsible proceeding as the administration of anæsthetics should not form part of the education of a medical man, when the knowledge of such a trivial operation as vaccination is insisted upon.

GEORGE H. PATTERSON, L.R.C.P.Lond., M.R.C.S.Eng., etc.,
Aberford, near Leeds.

PULSE-BREATH AND PULSATILE RESPIRATION

IN the JOURNAL of March 3rd, there is an interesting article by Dr. Finlayson upon pulsatile respiration, appended to which is a list of references to other articles on the same subject. May I be allowed to add to the series a "Note on the Diagnosis of Cavity in the Lung," in the *Lancet* of December 18th, 1880, in which I describe two examples of the same peculiar physical sign, indicating its meaning, and the mode of its production?

I ought, perhaps, to say, that further experience has shown the presence of slighter degrees of pulsatile respiration in cases where there seemed no reason to doubt the integrity of the lungs; it has been noted in aneurysm of the aorta, where, in fact, with hypertrophied heart and narrowed trachea, it was to be expected, but it has also been found in people who seemed quite free from organic disease; its importance, therefore, as a diagnostic is probably not great when standing alone, but cases may occur in which, when taken along with other symptoms, it may materially help in pointing out the nature and position of disease.

SOLOMON CHARLES SMITH, M.D., Halifax.

PERIOD OF INCUBATION IN MEASLES.

SEVERAL communications have lately appeared in the JOURNAL with reference to the incubation period of scarlatina. An outbreak of measles has recently come under my notice; and I think it desirable that the evidence it affords, as to the length of incubation in this disease, should be placed on record.

A local girls' school opened on January 15th; and, on the 25th, one of the teachers showed a rash, which was recognised as measles. On inquiry, it transpired that she had a brother suffering from measles at her home in Liverpool. Immediately the disease was diagnosed, the teacher was removed; but on February 8th, five children, all belonging to this teacher's class, began to develop the eruption, and were sent away. On the 22nd, another child showed the eruption; and on the 25th, another.

These facts seem to me strongly to corroborate what has been laid down by the best authorities on this subject. Nearly all mention fourteen days as a usual period of incubation in measles, reckoning from the inception to the appearance of the rash. Tanner fixes the period at ten to fourteen days; Aitken, at thirteen to fourteen days; Squire, at seven to seventeen days; and Bristowe, at seven to twenty-one days. In the Faröe Islands' outbreak, when the best opportunities for making exact observations offered, it was noticed that "in all cases, thirteen or fourteen days elapsed from the day of infection to the commencement of the eruption, whether the infection had taken place during the prodromal or the eruptive stage." (Ziemssen.) Again, in the nine cases returned to Dr. Haddon, when he was investigating this subject, the incubation period ranged from ten to fourteen days.

FRANCIS VACHER, Birkenhead.

SURGICAL MEMORANDA.

A NOVEL AGENT IN THE RADICAL CURE OF HYDROCELE.

IN bringing this matter before the profession, I feel bound to admit that, but for a curious accidental circumstance, the agent might never have presented itself to my notice. In the year 1875, I proposed to operate upon a patient, aged 65, for the radical cure of hydrocele of the tunica vaginalis. The disease had existed for about ten years, and had been repeatedly emptied by other surgeons. At this time I removed, by the trocar and cannula, about twelve ounces of serum, and, by accident, took from my pocket a bottle containing about two drachms of liquor ergotæ (Battey) in the place of the same quantity of tincture of iodine, which it was my intention to throw into the cavity. On my return home, I discovered the mistake, and watched the patient for some hours at intervals. No inflammatory state occurred, and there was entire absence of pain, so that I allowed my patient to return to his ordinary occupation the next morning. To the present time, there has been no return of the abnormal secretion. I have since, on two occasions, used the same plan with perfect success, and I attribute the cure to a specific action, exerted by ergot, which re-establishes the balance between secretion and absorption.

J. E. W. WALKER, M.R.C.S.E., L.S.A., late H.M., 55th Regt.

THERAPEUTIC MEMORANDA.

INJECTION OF SULPHURIC ETHER FOR THE TREATMENT OF SCIATICA AND LUMBAGO.

THE successful results I have invariably found attending this system of treatment, which I have adopted for the last four years with my rheumatic patients, have decided me to give publicity to the course from which I have seen so much benefit derived. Its plan is simple enough. After preliminary dry-cupping over the seat of lesion, I inject subcutaneously ten minims of sulphuric ether, gradually increasing it till I have injected thirty minims (assuming I find no marked progress, in the course of a week, of the treatment above-named). I have found it advisable to precede this by a brisk purgative at the outset, and to administer a mixture, containing five grains of salicylate of soda, in an ounce of infusion of gentian, every two hours, concurrently with internal and external applications. In not one case have I yet found this curative system fail; but, in about a week's time usually, the patient is cured. Sufferers from lumbago have come to me nearly bent double with pains in the lumbar region, and have walked away erect and free from their distress after dry-cupping. I have seen sciatic patients come in limping, and go out free from the least indication. I can especially instance the case of one patient, an old man, who had been the round of all the London hospitals to no avail, for nine years previous to his consulting me. He had been given up by all as a hopeless case. On my asking whether he was willing I should try a method of treatment on lines hitherto unattempted, and, on his consenting to the same, I pursued the system of subcutaneous injection already described, until I attained the administration of a drachm of sulphuric ether. Marked improvement followed this

course, which I, however, was obliged to suspend, owing to the formation of a hard cicatrix over the seat of the sciatic nerve. Nevertheless, after this was removed, the patient ultimately found himself completely recovered; and, during the five years which have elapsed since he first came to me, has sustained but one attack of sciatica, of a very slight character. I sincerely hope these few remarks on my own practical experience of this system of treatment of cases, the persistency of which so frequently baffles the efforts of the most experienced practitioners, may prove of some practical utility in similar cases. J. BRINDLEY JAMES, M.R.C.S.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS. March 8th, 1883.

Tumour of Thigh.—Mr. MORRANT BAKER sought the opinion of his colleagues with regard to the case of a young woman, aged 15, who had been admitted under his care three days earlier. On the inner side of the right thigh, about three inches above the knee, was an elongated oval tumour, about four inches in length, and about two and a half in breadth. The edge was well defined, and there was no fluctuation; on the posterior aspect, there was some undefined swelling of the femur. The tumour appeared to lie beneath the muscles, and to be firmly fixed to the bone; the femoral glands were slightly enlarged, but the skin was healthy, and not attached to the tumour; there was slight tenderness on pressure, and some pain in walking. About three months earlier, she had experienced some shooting pains in the part, but a swelling had only been noticed about a fortnight before admission. The only other illness she had had was an attack of chorea when twelve years old. Mr. Morrant Baker said that he felt considerable doubt as to the nature of the tumour; it might be inflammatory, or an exostosis, or a new growth; on the whole, he thought it was most probably a case of osteitis or periostitis, perhaps with some superficial necrosis. He proposed to keep the part at rest, and to prescribe iodide of potassium; if, in spite of this treatment, the tumour continued to increase, he would cut down upon it, and be guided by what was found.—Mr. SAVORY thought that the tumour, from its indolence, from the degree in which it was raised in proportion to its extent, and from the absence of much tenderness, was not of an inflammatory nature; neither did he think it was an exostosis, it was not sufficiently defined; he feared that it was a new growth. It was a case to watch very narrowly.—Mr. T. SMITH and Mr. WILLETT were both of opinion that the swelling was an exostosis; and Mr. H. MARSH observed that, though exostoses generally had a narrow neck, they sometimes had more the appearance of an outgrowth from the bone.—Mr. BUTLIN thought that the situation, the size, and the smooth surface of the tumour were against the supposition that it was sarcomatous; he thought it most probably inflammatory.—Mr. WALSHAM was inclined to diagnose an exostosis, but thought that the swelling might be inflammatory.—Mr. HARRISON CRIPPS said that the case reminded him very forcibly of one which had been under the care of Mr. Smith some years ago, and in which the swelling turned out to be due to necrosis.—Mr. SHUTER observed that exostoses were sometimes mushroom-shaped, and that this case might be an instance.

Tumour in the Frontal Region of Obscure Nature.—Mr. SHUTER showed a young woman who stated that, for the previous three years, she had noticed that, whenever she bent her head forwards, a swelling made its appearance in the frontal region. This swelling proved, on examination, to be about one inch in diameter; it was situated a little to the left of the middle line, just below the hairy scalp, and entirely disappeared when she raised her head. Mr. Shuter thought that he could detect a small aperture in the skull at the site of the tumour; on the left, behind the frontal eminence, was a large depressed scar, marking the site of a nævus, which had been removed some years before. The nature of the swelling was obscure, but, on the whole, he was inclined to think it was a meningocele; the fact that militated most against this view was that a swelling had only been noticed for three years.—Mr. THOMAS SMITH thought that the swelling was a nævus; the increased fulness on bending the head forward might be due to vascular turgescence.—Mr. WILLETT, on the other hand, thought that the swelling contained fluid, and communicated with the meningeal cavity.—Mr. HOWARD MARSH remarked that he never remembered to have seen a nævus swell up so much, and disappear so completely, according to the position of the head; at the same time, he had never seen a meningocele first noticed at so advanced an age, so that he remained in great doubt as to the nature of the case.—Mr. BUTLIN said that he did not believe a nævus could fill up so rapidly; moreover, the skin over it was not at all dusky; he was inclined to think that it was a meningocele.—Mr. WALSHAM took the opposite view; he did not think the swelling communicated with the interior of the skull. He had seen cases where a nævus swelled up very rapidly when the head was hung down, and could quite believe that this tumour was nævoid.—Mr. HARRISON CRIPPS was also of opinion that the swelling was a nævus; he thought that, when the jugular vein was compressed, the swelling increased, and this was not likely to happen if the swelling were a meningocele.

Though there was thus a considerable difference of opinion as to the nature of the case, there was a general agreement that no surgical interference was called for.

ST. MARY'S HOSPITAL.

OPERATIONS, February 21st, 1883.

Organic Stricture of the Rectum.—Mr. NORTON operated on a middle-aged woman for a fibrous ring around the rectum. He remarked that no thickening of the bowel could be detected, either above or below the narrowing, and that the condition was probably not of a malignant nature. The incision was made posteriorly, and dilatation was effected by the index finger.

Vesical Calculus, composed of Oxalate of Lime, removed at one Sitting.—Mr. EDMUND OWEN operated upon a young man who was the subject of vesical calculus; the symptoms had been acute for some weeks before the patient was admitted into the hospital. A previous sounding showed that the stone was about the size of the top of the thumb; and as it gave a clear ring, it was evidently hard; it proved to be composed of oxalate of lime. Without difficulty, a large lithotrite of Bigelow's pattern was introduced, and the stone seized and crushed; then the lithotrite was removed, and by a catheter, of about No. 17 of the English scale, and possessing a large eye, the crushed material was washed out by the rubber evacuating bottle. When fragments ceased to escape, a sound was introduced, and the bladder was found clear of *débris*. Mr. Owen pointed out how this operation differed essentially from that which would have been performed in a similar case a few years ago. It had fallen to his lot, as it had to that of many surgeons, to crush a stone at one sitting; but that had been the result more of accident than of design. English surgery had maintained that as little as possible should be done in the way of interference at each "sitting;" that the man should be brought under operation time after time; that the fragments should remain in the bladder, in order that they might become "water-worn," and so escape with greater comfort. The principle of Bigelow's operation involved the getting rid of the stone—however large it might be—at one single operation. The late Dr. Otis had demonstrated the capacity of the male urethra; and Dr. Bigelow, making practical use of this information, had shown surgeons how to treat vesical calculus in the adult.

Castration for Cancer.—Mr. OWEN next removed the left testicle of a young man for malignant disease. There had been a history of syphilis made out, and during the few weeks that the patient had been in the hospital he had been placed upon mercurial treatment, but without improvement; indeed, the gland had somewhat increased in size, and had at the time of operation grown to the size of a goose's egg, but without implicating the scrotal coverings. A free incision was made from the external abdominal ring, and the testicle detached and drawn out; the cord was tied with a short silk ligature and divided below it; a drainage-tube was placed along the wound, which was then closed with wire sutures and dressed with absorbent wool and marine lint, a firmly applied T-bandage covering all. Section of the mass showed it to be, probably, of a sarcomatous nature.

Gastrostomy.—The next patient operated on was under the care of Mr. PAGE. He was a thin man, about 50 years of age, who, for some months, had complained of increasing difficulty in swallowing, and in whose œsophagus a firm and impermeable stricture had been detected at the cardiac end. An oblique incision was made along the left tenth costal cartilage for about three inches. The sheath

f the rectus was opened in its outer part, and the exposed part of ıe muscle divided. Bleeding vessels were secured with catgut, and, ter a cautious dissection, the peritoneum was opened for about an ıch, and the stomach brought into immediate view. By a series f fine sutures, the peritoneal coat of the stomach was then attached) the margins of the peritoneal aperture, and a sponge was firmly andaged into the gap in the abdominal wall. Mr. Page contented imself with the performance of this first stage of the operation, referring to open the stomach with a tenotomy-knife after the two ıyers of peritoneum had become securely adherent. The operation as conducted throughout with strict Listerian precautions.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 13TH, 1883.

Congenital Syphilis of the Larynx.—A case of this affection was ıown by Dr. PERCY KIDD. In a girl, aged 18, who was the ıbject of choroiditis in the position of the yellow spot in the right ye, a remarkable state of the larynx was visible. The vocal cords ere adherent to one another, at their anterior extremities, by a web f reddish-grey colour. On the left cord, at its posterior third, there as a small conical outgrowth. The posterior part of the right ven-icular band was occupied by a roundish red swelling. The vocal ords were pinkish, and moved freely; but the patient was almost phonic. The epiglottis was thickened, and bent backwards towards ıe larynx; its margin irregular and jagged, as if partially eaten way. The lateral incisor teeth were somewhat jagged.

A Second Case of Malformation of the Left Shoulder-Girdle, with Remarks on the Probable Nature of the Deformity. By ALFRED WILLETT, F.R.C.S., and W. J. WALSHAM, F.R.C.S.—In the sixty-ıurth volume of the *Transactions*, the authors described "The Dissection of a Specimen of Congenital Malformation of the Bony horax, Spinal Column, and Left Scapular Arch, removed from ıe body of a woman, thirty-two years old, with remarks on the robable nature of the Deformities." The malformation of the ıoulder-girdle consisted of a triangular bridge of bone stretch-ıg between the spinal column and the scapula. The present aper was founded on a similar malformation in a child, eight ears old, from whom the bridge-like piece of bone was removed y Mr. Willett, the child making a good recovery. The portion f bone removed was of an irregular triangular form, with a truncated pex. It had an osseous attachment to the spines of the seventh cer-ical and first dorsal vertebræ, and was connected by a layer of car-lage to the base of the scapula. It measured one inch and three-ghths in length, and one inch and a quarter at its widest part. It as covered by periosteum, and muscular fibres were inserted into it. he malformation was evidently similar to that in the former specimen, hich, for comparison, was again exhibited. It differed, however, ı that the union of the bridge of bone to the scapula in the first ase was osseous, in the present case cartilaginous—a difference hich, the authors believed, threw additional light on the nature of ıe deformity. They regarded it, in both specimens, as an over-evelopment of the epiphysis which normally existed along the pos-erior border of the scapula, and, consequently, as the homologue of ıe suprascapular bone of the lower vertebrata. The points that ıey thought to favour such a view were: 1, the apparent con-ınuity in the first specimen of the bridge of bone with the supra-capular epiphysis, of which it appeared to be an outgrowth; 2, its artilaginous attachment in the second specimen to the scapula central piece); 3, the absence of analogy between these cases and xostoses, and the impossibility of explaining how, if they were xostoses from a vertebra, they could have become secondarily ttached to the scapula; 4, the insertion of certain muscles into hem, showing that the abnormality occurred at a very early period f development; 5, the abnormal condition, in the first specimen, f the scapula itself, and the presence of concomitant malforma-ions of evident congenital origin. The intimate osseous union of he bridge of bone to the spine might suggest its being a so-called pinal exostosis. It differed from such, however, in that it was not overed with cartilage except where united to the scapula, in its lattened condition, in its growth in only one direction, and in its road base of attachment to the scapula. The union to both the pine and the scapula, moreover, could be better explained on the ıssumption of its being a suprascapula. That an overgrowth of the epiphysis might occur was shown by specimens in the museums of the Royal College of Surgeons and St. Bartholomew's Hospital. The epiphysis normally existing in man at the base of the scapula presented a much higher grade of development in some of the lower animals; in some it remained throughout life as a distinct bone—the suprascapula, which in some even (the thornback skate) was united to the spine. As the suprascapular epiphysis in man was admitted by all to be the homologue of the suprascapular bone of animals, it followed that if the bridge of bone were an overgrowth of the epiphysis, it must also be the homologue of the suprascapular bone. This epiphysis in man might actually present an abnormal backward development (as in specimens in the museums of the Royal College of Surgeons and St. Bartholomew's Hospital) comparable to that, for example, in the rabbit. It was advancing, therefore, but one step further to compare the bridge of bone in one specimen to the distinct suprascapula of the frog, and but one step further still to conceive it united to the spine, as in the skate. On this theory the authors regarded the abnormality not as a mere overgrowth of the scapula, but as having existed in its present form, though of course unossified, from the time of the differentiation of the cartilaginous shoulder-girdle from the mesoblast, and therefore as having had an attachment to the spine from the earliest period of its development. Considering the similarity of the primitive cartilaginous shoulder-girdle in all early vertebrates, it would not seem that such a grave departure from normal development was required to produce the abnormality. Analogous processes were not wanting in the human body; for instance, the overgrowth of the tranverse processes of the seventh cervical vertebra into a cervical rib. If by a forward extension the transverse process, the homologue of a rib, might, as in birds, be developed into an actual rib, why might not the scapular epiphysis, the homologue of the suprascapula, be devoloped by a similar but backward extension into an actual suprascapular epiphysis, as in reptiles and fishes? Given a cartilaginous union between the scapula and the spine, there was no difficulty in explaining how the ossific centres in the spinous process and suprascapula would meet and become fused, any more than in the analogous process of the union of the epiphysis and diaphysis in an ordinary long bone. The probabilities of the malformation having existed from a very early period of development were strengthened by the following facts: 1, the attachment of the muscles into the bridge of bone; 2, the rudimentary condition of the scapula itself in the first specimen; 3, the concomitant malformations of the spine, ribs, and clavicle, which were shown in the former paper to have occurred at a very early period of the development of the embryo.—The PRESIDENT remarked on the singular fact that two instances of the same conditions had come under the notice of the same observers, although they were, as far as the authors knew, unique. The first had been brought before the Society as the result of a *post mortem* discovery; the second had been diagnosed during life, and the malformation corrected by an operation which had proved in the main points successful. The question arose whether the abnormal bone was an irregular development, such as an osseous replacement of the rhomboid muscles, or a reversion to an elder type. He believed that Professor Flower doubted the conclusion of the authors of the paper, but he was not aware that he had suggested any other.—Mr. HOWSE referrred to the analogies offered by comparative anatomy. All modern investigation tended to show that mammals had been derived directly from the amphibia; and the skeleton of the amphibia, as he explained, lent support to the theory of the paper; and further, that the limb-girdle had been developed from the limb, and not the limb from the limb-girdle. In the case of the skate, the movements were very anomalous, and the parts analogous to the shoulder-girdle (of which he exhibited a specimen) had undergone much modification to suit the special requirements of the animal. There was a completely ossified suprascapula, forming a synchondrosis with the vertebral column. Among the mammals already so highly specialised, nature had little scope for creating anything new, and so fell back not unfrequently on structures which had lost their first functions, and utilised them for fresh purposes. The Eustachian tube, for example, was a specialised relic of a portion of the mandibular arch of some lower forms. And the recurrence of ancestral conditions in mammals was further illustrated by the last traces which were to be found in the mole and the platypus of the many bones which made up the mandible of the amphibia; so, too, the parasphenoid bone, characteristic of the fishes, was found in the flying lemurs. A general review of the phenomena of inheritance and reversion led him to agree with the view of the authors of the paper. The complete fusion of the suprascapula which they had shown with the vertebral body was a point, perhaps, of some difficulty. In some of the toads (*e.g.*, Molossus), the ossification was similarly

complete; and there could be no doubt that, if the suprascapula were there, and were not fixed, it would be useless. In the skates, the fusion had taken place for the attainment of greater mobility.—Mr. THANE was also inclined to agree with the conclusions of the authors of the paper. One interpretation of the facts which had been suggested was, that the bony malformation was the result of the ossification of a muscle; but that, he thought, could not certainly be the case in the first instance which had been brought forward by Messrs. Willett and Walsham, for, in that, careful dissection had shown that the muscles passed over the bony structure. The early date of the ossification of this bone, which certainly had all the appearances of a suprascapula, was not surprising; for parts which were going to be overdeveloped developed early, and *vice versâ*. Parts which were only relics developed late, as might be seen in the case of the coracoid process. The complete union of this anomalous bone with the spinal column, he admitted, was the difficult point in the theory that it was a suprascapula, and he felt puzzled to explain it satisfactorily; but it would certainly be much more difficult to explain its connection with the scapula if it were considered as an outgrowth of the spine. In explaining the presence of the bone at all, atavism was certainly the agency to which it was natural to attribute it; the cervical rib, which was occasionally found in man, was the best parallel case.—Dr. CURNOW observed that the main difficulty of the hypothesis, that this bone was the analogue of the suprascapula, lay in the fact that it was connected with the vertebral column, and that the explanation of this connection was not to be drawn from the connection in the skates. He should be glad to learn from Mr. Willett if there had been any similar, or analogous, malformation in any other member of the family.—Mr. BERKELEY HILL read a letter from Professor A. Milnes Marshall, regretting his inability to attend, and expressing his dissent from the conclusion of the paper for the following reasons: 1, the connection of the shoulder-girdle with the spine in the skates was formed for uses special to themselves; 2, the theory implied a supposition of the descent of mammalia from fishes, to which the absence of intermediate links was a fatal objection; 3, the fact that the malformation was unilateral, was a serious objection to the hypothesis that it was a reversion; 4, the other malformations, mentioned in the same case, were not shown to be reversions.—The PRESIDENT pointed out that, in both the cases in which the malformation had been noticed, it was on the left side, and suggested that that might show a greater steadiness of adherence to normal type to belong to the right side. If the theory that the bone was ossified muscle were true, he thought the bone would have been found to be laminated in bands, and of a very different type from the actual specimen, which was of normal bone, ossified from cartilage. The union with the vertebral column, he was inclined to think, was sufficiently explained as a physiological conjunction due to adhesion from gradual approximation, not as due to reversion to an elder type.—Mr. WILLETT introduced the child to the notice of the Fellows, showing, at the same time, a cast of her shoulders before the operation for the excision of the anomalous bone. She had now little difficulty in lifting both arms straight above her head, and the left scapula was movable with tolerable freedom. Before the operation it was fixed, and the elbow could not be raised nearly as high as the shoulder. He fully admitted the difficulty of explanation of the union of the bone with the vertebræ, but thought Mr. Howse had lessened that difficulty by showing how, in limbs, the ossification must proceed from without inwards; and he regarded the method of union, which the President had suggested, by proximity and attrition, as not improbable. In answer to Dr. Curnow, he said he was sorry to be unable to produce any family history. The girl was an only child, her mother had died soon after her birth, and nothing could be learnt from her father. He fully agreed with the President that, if the abnormality were ossified muscle, the structure of the bone would have been very different from what it was. He was sorry Professor A. Milnes Marshall was not there to explain his objections rather more fully, and to suggest some alternative hypothesis, which, he noticed, he had not attempted.—Mr. WALSHAM had shown the specimen he had formerly exhibited to Professor Milnes Marshall when he was a student at St. Bartholomew's Hospital, not many years ago, and he had then expressed his agreement in the hypothesis of the suprascapula; the reasons of his change of opinion he had not made very clear. Professor Flower, writing of the bone excised, had called it a scapular element, but had not gone so far as to admit the entire theory of reversion. Professor Parker, on seeing it, had recognised it with delight as a specimen for which he had long been looking.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 9TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

A Case of Fracture of the Radius, and Dislocation Forwards of the Ulna at the Wrist, in which the lower end of the latter bone was removed to effect reduction.—Mr. GODLEE read notes of this case. The patient, aged 20, was jumping a high jump at a gymnasium, when his feet slipped forwards on a badly secured mat, and the whole weight of his body fell suddenly on his hands, which were placed behind him. The left radius was fractured at the junction of the middle and lower thirds, the fracture being compound; the lower end of the ulna was displaced forwards, and projected in front of the carpus beneath the skin. All attempts at reduction, both with and without an anæsthetic, proved unsuccessful. An incision was made over the lower end of the ulna, and a hook passed under the tendon of the flexor carpi ulnaris, which had slipped behind the bone, but the bones could not be replaced until first the styloid process, and then the lower end of the ulna, had been sawn off. The wound was treated antiseptically, and healed without any inflammatory disturbance. In ten days, it was placed in a plaster-of-Paris apparatus, and, in about six weeks, passive movement was commenced. The limb was now almost as useful as the other, and could be employed for gymnastic exercise as well as the ordinary uses of life, but pronation was not quite so free as before. The patient was shown.—Mr. LUCAS described a somewhat similar case which came under his care in the autumn. A woman had fractured both radii; that on the right being an ordinary Colles's fracture; on the left side, there was a compound fracture, with protrusion of both ulna and radius. Reduction was effected with less difficulty than in Mr. Godlee's case, but, erysipelas setting in, amputation had to be resorted to; in spite of which, however, the patient died fourteen hours afterwards. The lower fragment of the radius was found in front. Mr. Godlee had made use of anatomical facts which he (Mr. Lucas) had pointed out six years ago, viz., that the muscles of the radial side more than counterbalanced those of the ulnar side of the forearm. He regarded excision of the lower end of the ulna as a perfect operation; no opening into the joint being entailed by it.—Mr. HEATH said he had removed the lower end of the ulna in a certain case last year with the result that recovery ensued, the patient having a good, useful hand. Such operations were a great advance on those which involved amputation as a means of treatment.—Mr. GODLEE briefly replied.

Case of Acute Necrosis of the Right Orbital Plate of the Frontal Bone giving rise to Thrombosis in the Frontal end of the Longitudinal Sinus, in the Cavernous Sinus and Ophthalmic Vein.—Dr. PEARSON read, for himself and Dr. BROADBENT, the notes of this case. The patient was a girl, aged nine years and eight months. Four days after exposure to cold on a foggy November afternoon, symptoms of stiff neck, and relaxed throat, causing restless nights, began, but so gradually that medical attendance was not called in till the fourth day. When first seen, the noticeable point in the case was that the child put both hands to her head to lift it when asked to sit up in bed. On the fifth day of the disease there was marked improvement, after a saline aperient and four grain doses of salicylate of soda every four hours. In the morning the right upper eyelid had become puffy, but the swelling went down again. There were slight droppings of blood from the nose three several times during the day. On the sixth day, after a restless night, with some wandering, followed by a morning sleep of two and a half hours, the child woke up sufficiently well to listen to fairy tales and talk about them. She felt the neck so much better that she volunteered to get out of bed alone to show her throat, but still holding one hand lightly to the head. There was some sensitiveness to light, and the right eyelid was again puffed. The same evening great restlessness set in, the child throwing the legs and arms about and calling out. The tumefaction of the right eyebrow had now markedly increased, and there was strong delirium. The temperature at 11.30 P.M. was 103.3°; pulse, 140; respirations, 38. Bromide of potassium was added to the salicylate mixture, and, after a sleep of an hour and twenty minutes, the pulse was 120, and temperature 101.6°. On the seventh day the right eyebrow was quite tense and glazed and livid with tumefaction, and delirium continued. At 1 A.M. the temperature was 104°. Two leeches were applied to the right temple, and three grains of calomel were given, to be followed by a saline purge. Towards evening the strength perceptibly diminished. Just after midnight the pulse was 138; respiration 52; temperature, 105.7°. At 4.30 A.M., temperature, 106.4°; 6.30 A.M.

temperature, 107.7°; at 9.45 A.M., temperature, 107.9°; and death took place at 10.45 on the morning of the eighth day from the commencement of symptoms. *Post mortem* examination, five hours after death. At once, on removing the scalp, the frontal portion of the longitudinal sinus showed itself overcharged, staining the periosteum externally. On lifting the brain, the dura mater covering the petrous portion of the right temporal bone was found smeared with thick yellow lymph. The same lymph smeared the pons and the parts comprised in the circle of Willis. The right temporo-sphenoidal lobe of the brain was protuberant, due to serous infiltration from obstruction to the venous return. The right optic nerve and the fat surrounding it were stained with the same clinging yellow lymph. The periosteum of the right orbital plate of the frontal bone was stained with inflammation, and destroyed in patches.—Mr. GOULD said that thrombosis of the cavernous sinus had been said to produce pulsation behind the eyeball; was there any such pulsation in this case?—A MEMBER remarked that in cases of acute necrosis, there was fluctuation to be felt; was any made out in this case?—Dr. MAHOMED inquired if there was any flush or redness in the early stage of the case. In a somewhat similar case of necrosis of the frontal bone, which he thought to be due to erysipelas, there were found *post mortem* small multiple abscesses in the brain.—Dr. BROADBENT said he had but few observations to make in addition to those made in the paper. There was no pulsation from behind the eyeball; no fluctuation in the swollen lid. The principal mischief existed on the cerebral side of the frontal bone; the dura mater was penetrated in several places, whereas the periosteum of the orbit was not perforated. In consequence of the perfect mobility of the two eyes, he had concluded that an inflammatory condition of the orbit was excluded.—Dr. PEARSON said that the thick fluid about the orbit looked as if it might become pus, if allowed to go a stage further. There was no pulsation of the eyeball, no redness of the skin; scarcely anything at first to make one think the case would end fatally.

Picric Acid as a Test for Albumen and Sugar in the Urine.—Dr. GEORGE JOHNSON read a paper on this subject, which is published at page 504 of this week's BRITISH MEDICAL JOURNAL. During the reading of the paper, many experiments, in illustration of it, were made by his son, Mr. S. Johnson.—The PRESIDENT said the thanks of the Society were due to Dr. Johnson for his excellent and careful experiments. He thought the method of testing which had been exhibited was one likely to shorten clinical work; he had great faith in Dr. Johnson's method, which, he thought, was accurate, and would lead to a considerable saving of time.—Dr. SOUTHEY said that Dr. Johnson had so exhausted the subject as to leave little to discuss. These new tests would aid physicians much in their clinical practice. He himself had recently, since Dr. Johnson had introduced the picric acid test for albumen, constantly used it, and had never found any other so easy of application, or delicate in its reaction. He thought that normal urines, as they had been considered, constantly contained small quantities of albumen and sugar; and that the presence of these substances in urine in very small amounts should not, therefore, be considered so important as in the past they had been deemed. Small amounts of albumen were constantly found in urines of high specific gravity.—Dr. MAHOMED said that picric acid found albumen where boiling and nitric acid had failed to detect it. He thought that, if possible, less rather than more delicate tests for this frequent ingredient of urine were required.—Mr. M. MACHARDY said that he had found picric acid such an accurate test for albumen that, if it gave no reaction, he was now sure that heat and nitric acid would also fail to detect albumen. The busy practitioner sometimes used heat and nitric acid together in the same specimen of urine, by which he formed a nitrate of albumen that was soluble. To such a specimen, he had sometimes added the picric acid solution, with the result that the whole of it had immediately become turbid; and the albumen, which was before undetected, had been at once rendered visible. A man, four days previously, had been admitted to King's College Hospital with a black eye; upon the ophthalmoscope being used, retinitis, which he (Mr. MacHardy) thought must be due to albuminuria, was discovered. The truth of this supposition was at once substantiated upon testing the urine with picric acid. The man's arteries were tense; the heart was hypertrophied; but now, four days later, neither heat nor nitric acid rendered the albumen visible, whereas picric acid still detected it at once. In a doubtful specimen of urine, the following was a good test to apply, as showing the accuracy of the picric acid test: at the bottom of a test-tube place strong nitric acid, upon it pour a layer of the doubtful urine, and upon this a layer of the picric acid solution. As this latter had a specific gravity of 1003 only, it would ride easily on the surface of the urine, and, where the two met, would at once indicate by its turbidity the presence of the albumen. As regarded the quantitative accuracy of the picric acid test for sugar, he might say that no practitioner to whom he had written instructions for the carrying of it out had made an error of more than a grain or two in the ounce, when computing in this way the quantity of sugar present in the urine of diabetic patients. This showed that it was also easily applied, and very reliable. Du Bois Raymond had stated, that sugar was present in all urines, to the extent of about .6 of a grain; but that the creatine ordinarily masked the reaction; when, however, the creatine was changed to creatinine, as after fevers, then the sugar could be detected with the ordinary tests other than picric acid.—Dr. JOHNSON, in reply, said that Dr. Mahomed's reliance upon untrustworthy tests for small quantities of albumen accounted for his published statement that granular kidney was often unassociated with albuminuria.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MARCH 8TH, 1883.

FREDERICK MASON, ESQ., of Bath, one of the Vice-Presidents, in the Chair.

Discussion.—The CHAIRMAN announced that the meeting on June 7th would be devoted to communications on a special subject, the Relation of Eye-Disease to Disease of the Spinal Cord. The subject would probably be opened by Dr. Gowers; further particulars will be subsequently announced.

The Ophthalmoscopic Appearances at Periods long subsequent to Embolism of the Central Artery.—Mr. JAMAS E. ADAMS showed drawings of the fundus oculi from a man, aged 61, who suddenly lost the sight of the right eye, on July 5th, 1871, and of the left in a precisely similar manner, on August 24th, 1881. The arteries in each eye contained scarcely any blood, and many of them were quite thread-like; the veins here and there showed old inflammatory changes, and one large trunk in the left eye was "beaded." There were also well-marked traces of old neuro-retinitis, and the maculæ were occupied by well defined patches of choroido-retinitis; the changes were more advanced in the right eye.—Mr. NETTLESHIP asked Mr. Adams whether he regarded the choroidal changes as the result of choroiditis, or as the remnants left by the great swelling of the retina, which generally occurred after embolism of the central artery of the retina. The occurrence of choroiditis, as a consequence of embolism, must be an extremely unusual event.—Mr. ADAMS said that he had meant to convey that he believed the changes to be purely retinal, due, at any rate in the first instance, to the exudative changes which ordinarily occur after embolism. The term choroido-retinitis, which he had used in his paper, was commonly used vaguely, but he did not think that in reality the changes amounted to more than a disturbance of the pigment-layer.

On the Connection between Disease of the Eye and Affections of the Sexual Organs in Females.—An elaborate paper on this subject was read by Dr. C. E. FITZGERALD, of Dublin. The author, after alluding to Dr. Mooren's paper on Disturbances of Vision and Uterine Diseases, said that, though the existence of a connection between diseases of the eye and affections of the genital organs in females would probably be admitted by most people, yet the literature on the subject was extremely scanty. Professor Förster's article in the handbook of Gräfe and Sæmisch had placed the matter on a surer basis, but nevertheless it was unsatisfactory. He then related a case in which a violent neuro-retinitis occurred some time after a sudden cessation of the menses. The vision improved under treatment, and with the reappearance of the menses. In a case of disseminated choroiditis with floating opacities in the vitreous humour, multiple fibroid tumours of the uterus were found; and it was suggested that possibly these tumours affected the circulation, so as to react injuriously on the delicate vascular tissue of the eye. Dr. Mooren had drawn attention to the subject of masturbation, in proof that an irritation of the vagina might have an influence in producing retinal hyperæsthesia or accommodative asthenopia. Dr. FitzGerald believed that the habit was practised by females much more frequently than was generally supposed, and mentioned three cases in which he believed it had acted most injuriously upon the eyes. He considered the subject one of grave importance; and that, however unpleasant it might be, it ought to be thoroughly investigated.—Mr. JONATHAN HUTCHINSON quite agreed with Dr. Fitzgerald in thinking that the subject deserved investigation; it was, no doubt, generally avoided, but this was due, he believed, to the vagueness of

the subject, and the great difficulty with which trustworthy facts could be obtained. He had himself dealt with the question in a clinical lecture, which was published in the *Royal London Ophthalmic Hospital Reports*, vol. ix; and he had there expressed the belief that, in some cases, disease of the eye was due to disturbance of the generative organs. He had, after careful investigation, come to the conclusion that few cases of diseases of the eye were related in any way to masturbation; that is to say, serious disease; for *muscæ volitantes*, no doubt, did in some cases depend on that habit. He had met with no evidence to support the theory that choroiditis disseminata, for instance, had any connection with reflex disturbance, or failing nutritive force, due to uterine disease. He had seen cases of vitreous softening and opacities attributed by the patients to masturbation; but, on the other hand, he saw many cases of grave derangement, indeed total wreck of the nervous system due to the practice, without any changes in the eyes. With regard to uterine fibroids, the evidence was even more vague.—Mr. SPENCER WATSON believed that many cases of chronic eye-disease became aggravated on the cessation of the menses; great congestion of the head was then liable to occur, and, in chronic choroiditis, hæmorrhage into the choroid was a common accident; in chronic progressive myopia, disastrous events, such as detachment of the retina, were apt to occur, owing, as he believed, to the congestion of the head.—Mr. A. H. BENSON doubted the wisdom of classing masturbation as a disease of the sexual organs; it was in reality a symptom, and was extremely common among lunatics. It was quite possible that the changes in the eye, and the habit referred to, were both the consequences of some one central nervous change.—Dr. BUZZARD said that he had seen many cases of disturbance of the nervous system in connection with masturbation; but, in the eyes, never anything more serious than some trouble of accommodation.—The CHAIRMAN observed that he had never met with cases of eye-disease in relation to disturbance of the sexual organs, except in so far as the eyes shared in the general debility produced.—Dr. FITZGERALD, in reply, said that his paper was designed to be merely suggestive; more investigation with regard to the influence of uterine tumours on the eye was, he thought, desirable. In many cases, masturbation was quite independent of a central lesion; and the eye-trouble which was, in his experience, commonest, was asthenopia; the occurrence of that symptom, combined with evidence of irritation about the external genitals, would raise a suspicion in his mind.

Pulsating Exophthalmos.—Mr. W. ADAMS FROST exhibited a living specimen of pulsating exophthalmos affecting both orbits. The patient was a man, aged 38, who, when ten years old, was run over, and had symptoms of fracture of the middle fossa of the skull. Since the accident, a pulsating swelling had existed above the left eye, and he had heard a drumming noise in his head. Until within the last few years, the left eye was very prominent. When exhibited, however, the eye had ceased to be prominent, and he suffered no inconvenience. The eye was rotated inwards, and beneath the eye-brow was an oval swelling of the size of a filbert; in the angle between the nose and the orbit there was a flatter and more diffuse swelling. There was pulsation in both swellings, and a thrill in the nasal portion. Above the right eye was a small soft pulsating swelling. A loud *bruit* was audible over the left orbit. Pressure on the left carotid arrested pulsation in both orbits. Mr. Frost was of opinion that the symptoms were due to a fracture of the base crossing the left internal carotid artery, and establishing a communication between it and the sinus, which had led to varicose distension of the orbital veins, and that this varicose condition had extended by the transverse sinus to the veins of the opposite orbit. He reviewed the evidence afforded by the necropsies of nineteen cases which were on record, and pointed out that, in the majority of these, an arterio-venous communication was present, and that in nearly all the cases the pulsating swelling was formed by the distended orbital veins. The frequency with which symptoms of fracture of the skull were present in similar cases was also referred to.—Mr. HIGGENS suggested that an arterio-venous communication within the orbit might in some cases account for the symptoms, and referred to Mr. Lansdown's case, in which the orbit was wounded by the bursting of a soda-water bottle; in that case the wound was followed by protrusion of the eyeball, and the establishment of a *bruit*, and noises in the head. Mr. Lansdown cut down on the swelling which had formed at the inner angle of the orbit, and tied several enlarged vessels; this operation cured the patient.—Mr. A. P. GOULD referred to a case now under the care of Mr. Hulke in the Middlesex Hospital. The patient was a man aged 28, who had suffered from a pulsatile tumour of the orbit; the pulsation was most marked at the inner angle of the orbit; a few weeks ago, the common carotid was tied, when the eye receded, and the pulsation ceased; quite recently, however, a slight thrill had returned, though there was no pulsation.—Mr. FROST, in reply, observed that the case referred to by Mr. Higgens resembled one recorded by Mr. Lawson; his own differed from both, since both orbits were affected.

Case of Sarcomatous Tumour of Iris; Successful Removal.—Dr. DAVID LITTLE (Manchester) described the case of a young and healthy woman, aged 20, first seen by him on June 20th, 1880. Sixteen months previously, her left eye became suddenly blind while in the act of stooping, and remained so for a week. On recovering sight, she for the first time observed a spot on the coloured part of the same eye. Her family history was good. The tumour was situated on the lower and outer quadrant of the iris, extending from the pupillary margin to the periphery of the iris; it was of the size of a small pea, of a pale brownish colour, with a few fine vessels on its surface and numerous red points. The eye in every other respect was healthy, and free from irritation, and the vision was normal. On November 20th, 1880, the tumour had slightly increased in size, and it was decided to remove it. The patient was put under ether, and a linear incision was made with a Gräfe's knife, close to the corneo-scleral junction; the tumour and corresponding piece of iris were removed without difficulty; there was no bleeding into the anterior chamber. In the course of three weeks, the eye had fully recovered, and the vision was equal to $\frac{2}{2}\frac{0}{0}$. It was now more than two years since the operation was performed; and up to three months ago, there was no evidence of recurrence, and the vision was normal. The specimen was handed to Dr. Dreschfeld, Professor of Pathology in Owens College, for microscopical examination. The mass consisted almost entirely of round cells, containing a large round nucleus, filling up nearly the whole of the cell, and showing in its centre one or more highly refractive nucleoli. There were also a few spindle shaped cells with nuclei; only a few cells contained brown pigment. The blood-vessels were all of the embryonic type. The microscopic examination thus showed the tumour to be a pigmented round-celled sarcoma. A few similar cases are on record.

Diphtheritic Paralysis.—Mr. ARTHUR BENSON (Dublin) read a paper on paralysis of some of the ocular muscles after diphtheria and gave some particulars of a case which had recently been under his care. The patient was a girl, aged 11 years. The primary throat affection was cured in four weeks. The ciliary muscles were affected in the fifth week, and continued so for about seven weeks. The soft palate was affected in the sixth week, and remained so for about two weeks. The hearing was affected in the sixth week, and remained so for about one week. The levatores palpebrarum were affected in the ninth week, and continued so for about one week. The recti externi muscles were affected in the ninth week, two days after the levatores palpebrarum, and remained so for about three weeks. The convergent strabismus and diplopia were present during the tenth week, and lasted for about four days. The weakness of the lower extremities began in the tenth week, and lasted for about three weeks. Numbness and tingling in the feet began about the tenth week, and lasted for about the same time as the weakness, three weeks. He regarded paralysis of the ciliary muscle, without alteration of the condition of the iris, as the most frequent implication of the intrinsic muscles of the eye. The question as to the seat and nature of the lesion causing the paralysis was discussed. The seat of the lesion was, he believed, in the brain and spinal cord, and combated Dr. Hughlings Jackson's sympathetic theory, on the grounds that disease of the lenticular ganglion would be accompanied by some change in the action of the pupil. The portion of the nervous system, lesion in which would cause isolated bilateral paralysis of accommodation, was, he thought, Hensen and Voelcker's centre for accommodation in the hinder part of the floor of the third ventricle. The deafness, on which Dr. Jackson laid stress as confirmatory of his theory of disease of the otic ganglion, was, Mr. Benson thought, more likely to be the result of the paresis of the palate, with which it was accompanied, than of interference with the nervous supply to the tensor tympani muscle. Paresis of both levatores palpebrarum and of both external recti muscles, as well as the frequent occurrence of paralysis in distant parts of the body, and perverted sensation, all disproved the sympathetic hypothesis. Dr. Ferrier had found that, at the base of the first frontal, and extending partly into the second frontal convolution, there was, in the monkey, an area, irritation of which caused elevation of the eyelids. Disease of this centre would account for the ptosis, which was bilateral. As to the nature of the lesion, but little was known. *Post mortem* examinations had shown in many cases numerous hæmorrhages into the nervous centres, and in some cases a swollen

ndition of the large motor cells in the anterior cornua of the rd. Such changes, though they might occur in fatal cases, seemed likely to be the cause of paralysis, so fugitive and harmless as phtheritic paralysis usually was. Mr. Benson thought that emorrhages, larger or smaller, numerous or few, as the case might , were a more probable cause. Hæmorrhages had in several cases en found in diphtheritic paralysis. Hæmorrhages might be of y size, and the symptoms would be severe in proportion to the tent and position of the extravasation. Small hæmorrhages might absorbed with great rapidity, and have but little, if any, ill result; rger hæmorrhages would account for the hemiplegic and other ave forms which were met with at times.

Card Specimens:

The following drawings were shown by Mr. ARTHUR BENSON; A Retino-Ciliary Artery, *i.e.*, a branch from the central artery the retina which apparently went to join the ciliary arteries doubling back, and penetrating the disc near its border. 2. A cent Spontaneous Detachment of the Retina, showing a rent its structure. 3. Retinitis from Cerebral Disease, simulating tinitis albuminurica. 4. Retinitis Albuminurica (typical). 5. A culiar condition of the Vitreous Body, with Disease in the Macula d Metamorphopsia. 6. Opaque Nerve-Fibres (typical case), with me disease about the macula.

Dislocation of Lens, of twelve years' standing.— Dr. SAMUEL EST exhibited a woman, who, twelve years earlier, had "knocked r eye against the corner of a table;" vision at once became gravely ected. The right pupil was dilated to the extremest degree, and esented a notch on the upper part, corresponding with a linear ar in the sclerotic and cornea. The opaque lens lay free in the reous body, and moved with the eye; the optic disc and choroid re atrophied.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 12TH, 1883.

SIR JOSEPH FAYRER, K.C.S.I., M.D., President, in the Chair.

HE PRESIDENT gave a short opening address, on taking the chair, d alluded to the long roll of names of distinguished men, who, presidents, had directed the progress of the Society until it had tained its present high position.

Poisoning by Citrate of Caffeine.—Dr. ROUTH read a paper on a se of poisoning by citrate of caffeine. The effervescent citrate of shop was intended, but the pure citrate was sent. The patient covered.—The PRESIDENT did not know of any similar case in en. The caffeine was like theine and the alkaloid of coca and araguay tea, in increasing the power of muscular effort.—Dr. HOROWGOOD mentioned cases in which citrate of caffeine had en useful in cases of asthma.—Dr. GILBART SMITH had given trate of caffeine in cardiac and renal disease, and in asthma.—Dr. OUTH, in reply, had noticed no convulsions, only marked muscular emors. There was certainly paralysis, and the man had to be rried upstairs. There was nothing like tetanus.

The Antiseptic Treatment of Pulmonary Disease.—Dr. LEE re- arked that the principles on which antiseptic surgery were unded, might be extended to the treatment of pulmonary diseases, rovided that the difference between diffusion in a vapour and a uid were attended to. In the volatilisation of any antiseptic or edicinal agent, it was necessary that the water with which it was ixed should be evaporated; and no practical use resulted om simply mixing the substance with hot water, and breathing e steam. Dr. Lee stated that the rate of volatilisation of any bstance when boiled with water depended on its own boiling point, s specific gravity, and its readiness to mix with water. In the case of e oil of the eucalyptus globulus, by mixing alcohol with it, the te of evaporation could be controlled; for, though its boiling oint was 320°, its specific gravity was less than water, and it vola- lised when mixed with it much more readily than the water. arbolic acid had the singular property of volatilising in exactly the me proportion as the water with which it was mixed; and thus it as the most suitable for all antiseptic methods of treatment.—Dr. allimore, Dr. Drewett, and the President, made remarks.

BORDER COUNTIES BRANCH.

ORDINARY MEETING, FEBRUARY 22ND, 1883.

Tracheotomy.—Dr. J. A. MACDOUGALL (Carlisle) read a paper on his subject. The primary object with which the note was read was o draw attention to the fact that the trachea, especially in young hildren, could with perfect safety be opened through the isthmus of the thyroid; and that, this being the case, the high operation was the one which, in ordinary circumstances, should be selected. It was also urged that, in severe cases of true croup, if decided amendment did not follow active treatment, carefully carried out for eight hours, the best chance of recovery lay, in the majority of instances, in tracheotomy; further, that, the existing condition having become so urgent as to demand consideration of the operation, its performance was not to be delayed on account of apparent amelioration—an amelioration of which time too surely proved the falseness.

Case of Pelvic Abscess.—Dr. MUIR of Selkirk described this case. The patient, a man aged 32, who had never been ill before, was seized with perityphlitis, which ended in suppuration. The abscess seemed to be pointing above the groin, but the tumour suddenly disappeared, and coincidently there were symptoms of intestinal obstruction and retention of urine, accompanied by alarming collapse, tympanitis, hiccough, and vomiting; all of which were completely and rapidly relieved on the evacuation of a quantity of fœtid pus by means of an aspirator introduced *per rectum*, and puncturing a fluctuating tumour felt there. A week afterwards, the dangerous symptoms returned, and were again relieved in the same way. Complete recovery followed.

The Treatment of Enlarged Glands in the Neck.—Dr. LEDIARD drew attention to the frequency of this disease in Cumberland, and the absence of any specific remedy. Brief allusion was made to the pathology of strumous glands, and the subsequent changes of caseation and suppuration, these conditions being the ones most suitable for operative measures, which were recommended in chronic cases where there was no sign of yielding to other treatment. Billroth's operations were adduced in support of the paper, as well as Treves's rule for interference. Extirpation was to be made through skin-incisions near the sterno-mastoid muscle; the glands teased out if firm, but scooped out of their capsules if soft and adherent. Dr. Lediard's own experience was limited to five cases, in all of which the results had been satisfactory.

Four Years' Treatment of Insanity at Garlands Asylum.—Dr. CAMPBELL began by mentioning that, at a meeting of this Branch four years ago, he had submitted an analysis of treatment and results for the previous years in the asylum under his charge, dealing specially with several recognised forms of insanity, with the insomnia met with in the different mental states, with the treatment by sedatives, hypnotics, and several other agencies valuable in curative treatment. He stated that the character of cases sent to asylums had much changed during the last fifteen years; that asylums were becoming more like hospitals than they were; and gave reasons for this opinion, discussing legislative and other causes which had operated in producing this change. He then entered on the subject of failure of recovery, and proposed that there should be more discussion of modes of treatment in asylums, more comparison of results; that only in this way could knowledge be advanced and real causes found for the disparities that at present exist in the recovery-rates of different asylums. He then detailed the treatment that had been adopted in the cases admitted during the last four years at Garlands, showing, in a tabular form, the general results, the numbers treated by tonics, hypnotics, and continuous sedatives; mentioned the other forms of treatment that had been used, and analysed the cases of the patients who had failed to recover; then shortly gave his views as to the value of outdoor exercise, rest in bed, and seclusion. He dealt with the money-saving of a high recovery-rate. At Garlands, with a death-rate of 7.7, a weekly cost of 9s. 7½d. each, recovery meant a saving to the patient's union of £325, if he kept well for life; and this was irrespective of the capital outlay in the asylum building and furnishing. He had always thought this aspect of a recovery was not brought into proper prominence. Outlay in sufficient medical attendance was more profitable than in stone and lime for additions, or in additional officers for purposes of management. He concluded: "My experience convinces me that, given the same character of admissions, the more individual medical care, attention, consideration, and judicious curative treatment an insane patient receives, the greater will be his chance of recovery, the higher will be the asylum recovery-rate." A table, showing the general results of three periods comprising fourteen years, ended the paper.

The Club System of Payment.—Dr. HIGHET of Workington introduced a discussion on the club system of payment in its relation to medical men. The points to which Dr. Highet more particularly called attention were—1. The present low rate at which many clubs are held; and 2. The introduction into those clubs of those other than working men, in many instances in receipt of large incomes, and occupying good positions in society; in the case of large public

works, the managers, clerks, etc., being attended for 2s. per week, the same sum as paid by the poorest labourer in the employment. That medical men should hold such appointments from, and be appointed by, the directors, and not be at the mercy of the workmen; and that no man whose income was above say, £130 year, or whose name did not appear on the pay-sheet, should be entitled to medical attendance at the usual club-rate. In the case of friendly society clubs, the sum paid by each individual member should not be less than, say, 3s. 6d. or 4s. a year. Men who rise in the world, and come to make good incomes, should not participate in this arrangement.

ACADEMY OF MEDICINE IN IRELAND: OBSTETRICAL SECTION.

FRIDAY, JANUARY 26TH, 1883.

JOHN DENHAM, M.D., President, in the Chair.

Specimens.—Dr. ATTHILL showed a large Subperitoneal Fibroid which he had recently removed from a patient by abdominal section.—Mr. ABRAHAM showed a specimen of Ectopia of Viscera in a fœtal male cat of about five weeks. The heart, liver, stomach, and greater part of the intestines were quite extruded from the body-cavity, through a nearly central opening in the abdominal wall. A few membranous shreds could be traced from the margins of the opening over the viscera.—Mr. ABRAHAM also showed an example of Dichotomy in the left Foreleg of a Sheep. The bones of the two fairly developed feet started from the carpus. They were nearly equal in length; but the outer one, probably the accessory, was the slenderer, and wanted also some of its flexor and extensor tendons. A common integument covered both feet, as far as the metacarpo-phalangeal joints.

Abortion for Hæmorrhage.—Dr. W. J. SMYLY reported a case in which the induction of abortion at the fifth month was necessitated by hæmorrhage. The patient was a pluripara, and, since a previous miscarriage, had suffered from symptoms of endometritis. In February 1882, she again became pregnant, and, for four months and a half subsequently, she was subject to frequently recurring hæmorrhages, which at last became very frequent and profuse. Labour was accordingly provoked by the introduction of a sponge-tent, and accelerated by Barnes's dilators. The decidua was enormously hypertrophied, the result, probably, of the endometritis. The fœtus was of a size corresponding to the period of pregnancy, and showed signs of commencing decomposition. A large quantity of firm laminated clots preceded and followed the expulsion of the ovum. The patient died of septico-pyæmia on the thirty-second day after delivery.—Dr. MACAN said that the term induction of abortion was scarcely right in cases of molar pregnancy, or of a certainly dead embryo. Strictly speaking, the phrase was only applicable where the fœtus was living, and capable of going on to its full term.—Dr. NEVILLE said that, whenever excessive hæmorrhage threatened the mother's life in early pregnancy, the steps which should be taken to stop the bleeding were also those which would usually accelerate abortion. In the presence of great hæmorrhage, such steps might be properly taken, even though the embryo could in no way be ascertained to be dead.—Dr. MACSWINEY thought that, in Dr. Smyly's patient, conservative measures had been too long persisted in. Abortion might justifiably have been sooner hastened.—Dr. R. HENRY said that, in this class of cases, expulsion of the ovum should be expedited, with the view of stopping dangerous hæmorrhage, and preventing an opportunity for autoinfection.—Dr. SMYLY said that the case cited in his paper was not one of a molar pregnancy. Decomposition having only commenced in the fœtus, it could only have been dead for two or three days. Had abortion been brought on any sooner, the fœtus might have been born alive. He still thought that the nature of the case justified the title of his paper.

Ocular Disease, and Disorder of the Female Genital Organs.—Dr. C. E. FITZGERALD read a paper on the connection between ocular diseases and certain affections of the female generative organs.—The PRESIDENT had lately under his care a child of only eight years old, who, he had no doubt, masturbated. She had never menstruated, and suffered from organic brain-disease. One question was, whether the practice was not sometimes induced by some derangement of the general health affecting the brain.—Dr. MACAN remarked that the question of masturbation was a most difficult one. Without the patient's own confession, they could not be absolutely sure about it; but there might be evidence sufficient for a moral belief. The symptoms which he looked on as signs of masturbation in an unmarried woman, were flabbiness of the vulva, great relaxation of the parts, and the possibility of palpating the ovaries. Besides, the ravenous appetite, the muddy complexion, and the entire moral aspect of the woman, proclaimed the onanist.—Dr. HENRY KENNEDY said that, in his experience, masturbation among females was general, but had not found much difficulty in getting them to admit it. The question of connection between such practices and diseases of the eye was a very difficult one, and almost required a man to be at once a specialist in two departments. The immediate effects of the practice were confined to the external parts, and no disease in the proper sense of the term was set up in the vagina, or in the uterus. The more remote effects were not confined to the eye alone. The disease *petit mal* had directly resulted from the habit in both men and women. Amongst the signs were drooping of the eyelids, dilatation of the pupils, and complaints of loss of vision.—Dr. MACSWINEY was sceptical as to the general prevalence of masturbation on the part of young girls. There should be the utmost caution before entertaining a question of the sort respecting a young girl brought to a medical man for advice.—Mr. ARTHUR BENSON said it was difficult to understand how so many eye-affections as had been mentioned could be produced by one common cause, and it seemed more reasonable to suppose that both the masturbation and the ocular affection were in common the result of some nervous disease.—Mr. SWANZY said there were other irritations of the sexual organs besides the one mentioned, which gave rise in females to diseases of the eye. In the end they might find that both the masturbation and the ocular affection were the result of one and the same cause—namely, an affection of the base of the brain. He had seen a patient in whom the menopause combined with mental excitement had appeared to him to determine an attack of optic neuritis terminating in atrophy. In this case, the cessation of the catamenia had appeared to act deleteriously, converting what had been previously an habitual congestion into an inflammation.—Mr. STORY said that there was a connection between the uterus and the eye, just as there was connection between the uterus and every other organ; but that there was any peculiar connection he did not believe. He had never seen a case of hysterical amblyopia. He did not disbelieve in the affection, but he did not believe that it occurred without there being a definite physical cause for it. He could understand absolute loss of vision being produced by hæmorrhage upon some portion of the optic nerve, behind the eyeball, which might afterwards be absorbed and vision restored. The proofs given in the paper of Dr. Moorer which Dr. Fitzgerald had made the basis of his paper, seemed to be unsatisfactory as regarded the alleged connection between affections of the uterus and affections of the eye.—Dr. DOYLE did not believe the connection between masturbation and eye affections to be made out on the evidence adduced.—Dr. NEVILLE objected to masturbation being regarded as a disease of the generative system. It was very often a vice, while in other cases it was symptomatic of disease rather than a disease in itself. Sometimes it originated in a local source of irritation such as acrid discharges from the genital organs or in boys by a long prepuce, while sometimes it was due to distinct or latent nervous diseases. Eye-affections, such as atrophy of the optic nerve were naturally here to be looked on as symptomatic. It must not be forgotten that the apparent connection between affections of the generative system and the eye, might merely be coincidences. To prove the causal relation of the former, it must be shown that they preceded the affections of the eye, that the menstrual molimenia influenced the course of the eye affection, and also that their cure was essential as a part of the treatment, at least of the latter. It was certain that disease of the generative organs with disordered menstruation would react on a disease of the eye as on the rest of the system; but this reaction was not to be confounded with causation.—Dr. FITZGERALD replied, and the Section adjourned.

BEQUESTS AND DONATIONS.—The annual report of the Lincoln County Hospital acknowledges the receipt of £4,500 under the will of Mr. Richard Ellison, of Sudbrooke.—"T. W. R." has given £1,000 to University College Hospital, £1,000 to King's College Hospital, £500 to the British Home for Incurables, and £500 to the Hospital for Consumption at Brompton.—The Rev. Gerald Carew, of Mylton Hall, Salop, bequeathed £1,000 to the Taunton and Somerset Hospital, payable at the death of his wife.—The Rev. Augutsus Clissold of Broadwater Down, Sussex, bequeathed £500 each to the Royal Hospital for Incurables and the Cancer Hospital.—The Newcastle Infirmary has received £92 10s. from Sir William G. Armstrong, C.B., being the amount received by him for tickets of admission to Jesmond Dene during the past year.

REVIEWS AND NOTICES.

ICE AND ITS CLIMATE. By Dr. A BARÉTY. Translated into English from the French edition, with additions, by CHARLES WEST, M.D., F.R.C.P.Lond.; and with an appendix on the vegetation of the Riviera, by Professor ALLMAN, F.R.S., President of the Linnean Society. Pp. 162. London: EDWARD STANFORD; Nice: Galignani Library, Quai Massena; and Paris, 224, Rue de Rivoli. 1882.

r. WEST, who for three years past has made Nice his winter home, as translated this book of his friend, Dr. BARÉTY, the result of any years' observation. It is addressed chiefly to medical men, ut contains the information which invalids require who think of aying at Nice, and which will enable them wisely to select their sidence. The subject is treated in two parts; in the first are noted ie fundamental characteristics of the Nice climate, and the conitions on which they depend; in the second part, the therapeutical fects of the climate are indicated, and its applicability in various iseases is detailed. Two small maps of Nice and its suburbs are ontained in the work, and are useful for reference. In the first art of the book, the natural conditions that govern the climate of ice, its position in the arena of half of a large amphitheatre of ills open on the south to the sun and the sea, both hills and sea eflecting the sunshine and warmth upon the town, are remarked pon. Next, the characters of its alluvial soil, absolutely free from amp, and the marine nature of its atmosphere, are described. All iese are termed the invariable conditions which, in a large measure, overn its climate. Amongst the variable conditions influencing ie climate, the chief position is assigned to its mean temperature, hich is high, being about 60.23° for the year, or 51.17° for the six onths from November to April, which constitute the invalids' season. hen the barometric pressure, the hygrometrical condition of the tmosphere, the winds, and their comparative prevalence at difrent months and seasons; the rainfall which, for the whole year, verages 31.930 inches; the amount of clouded days and days of unshine; the almost entire absence of snow, and a careful account f the variations in these several climatic conditions, are recorded. ext follows a summary of the meteorology of Nice, month by onth. In the second part of the work the suitability of Nice for valids engages attention. In Chapter I, the influence of its undance of sunlight on asthmatic, strumous, and rachitic patients; f the sun's warmth and of its direct rays—sun-baths as they may e termed—on persons suffering from anæmia and chest affections; f its dry atmosphere on many classes of invalids; and of the three ones into which the town is divisible, viz., that of the seaboard, hat of the plain, and that of the hills, which differ greatly from ach other in climatology and in suitability for the treatment of ifferent maladies; and lastly, of various hygienic rules laid down or invalids—all these matters are treated of *in extenso* and *seriatim*. hapter II gives in full detail the indications for, and contra-indiations against, the climate of Nice, and particularly notices the arked difference which the three zones of the town exhibit in their ffect upon various morbid states. It enumerates the different iseases which are benefited by a residence at Nice, and particularly describes, in about twenty pages, its influence on phthisis in ts many varieties and stages, whilst detailing many items of valuble advice to such patients, which a lengthened clinical experience as elaborated.

The third part of the book gives a description of Nice, geographical and historical, dwelling upon the embankment of the Var, he primitive inhabitants of the region, the ancient Roman roads of he locality, the Grecian settlements and city, and the founding of he neighbouring town of Antipolis, now Antibes; of the old Roman ity which occupied some of the site of modern Nice, and of its emains, which are now visible; of the harbour of Nice, and of the nodern progress of the city which, in 1822, contained only 22,000 nhabitants, whereas it now numbers over 70,000; and of the many alks and excursions to be found in its neighbourhood. Lastly, an excellent chapter is devoted to the aspects of vegetation of the Riviera by Professor Allman, which was the subject of the presiential address delivered before the Linnæan Society in May 1880. It particularly notices the aspects of vegetation in the littoral disricts of Provence, the Maritime Alps, and the western extremity of of the Ligurian Riviera; and is called a chapter on the Physiognomy and Distribution of Plants. It adds greatly to the interest of the book for appreciative lovers of nature, describing, as it does, the flora of a region which is singularly interesting. To practitioners who are desirous of learning the characteristics of the climate of Nice, and who desire to know what it is likely to do for their patients, we can heartily commend this little work, at which both author and translator seem to have worked *con amore*.

NOTES ON BOOKS.

SPENCER THOMSON'S *Dictionary of Domestic Medicine and Household Surgery* (Charles Griffin and Co.) appears in its seventeenth edition, edited by Dr. Steele of Guy's Hospital. This edition has been rendered especially useful to lay readers by the addition of a considerable body of information on public and personal hygiene and systematic nursing. Preventive medicine is that department of medicine in which it is peculiarly important that anxious mothers should be initiated; and it would, in our opinion, have been very desirable that this part of the book should have been even more developed, at the cost, perhaps, of the exclusion of many articles in which we can see little advantage. For instance, we find no article under the head of "Isolation," and a long article under the head of "Laryngoscope." Disinfectants might have been treated at greater length with advantage, and with more precision. The chapter on the "sick-room" seems similarly deficient on the all important subject of isolation, of disinfectants, and of means to be taken to prevent the spread of infection. We do not find any precise directions in respect to the special infections of whooping-cough, measles, scarlet fever, typhoid fever, etc.; and no doubt directions may be found scattered about the book, but we have not been able to light upon them in their proper place, and it appears to us that any dictionary of domestic medicine ought now to give the utmost prominence to these points. With this reservation, however, we may speak of this Dictionary in terms of great commendation.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

POCKET MEDICAL EMERGENCY CASE.

By T. FREDERICK PEARSE, M.D.

THE case described by the above title, is made of ebony, and in shape resembles a large drawing pencil.

At one end is a special and neatly packed hypodermic syringe; the other end is made up of a series of compartments (fitted on somewhat like the pieces of an object glass, belonging to a microscope), containing discs and perles of certain drugs likely to be required on an emergency.



The chief substances provided for are morphia, to relieve sudden and acute pain; apomorphia, to induce immediate vomiting; nitrite of amyl in perles, for relaxing spasm of muscles in angina, asthma, etc.; ergotine, for hæmorrhage; and ether, in perles, as a rapid stimulant for syncope, etc.

Each compartment is distinctly marked with the name and the quantity of each drug it contains. The whole forms a most compact case, which can be very readily carried in the pocket, and provides for almost every emergency not requiring surgical instruments. It has been made for me by Messrs. Arnold and Sons, of London.

CONVALLARIA.

SIR,—In the notice which you were good enough to give us in the BRITISH MEDICAL JOURNAL of last week, respecting our preparations of convallaria, we see that the dose of the alkaloid—convallamarin—is stated therein to be from two to five grains; it should be one-eighth of a grain to two grains. As the difference is considerable, we should be much obliged if, in order to avoid any possibility of mistake, you would kindly have the necessary correction made in the next issue.—We are sir, your very obedient servants,

March 6th, 1883. SAVORY AND MOORE.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 17th, 1883.

THE GOVERNMENT MEDICAL REFORM BILL.

AN effort in the interest of the public is again made in medical legislation, and bids fair to destroy the unworthy competition for candidates which has been so clearly proved to exist amongst the numerous licensing bodies. The Royal Colleges of England have, since the report of the Royal Commission on the Medical Acts, and in face of the imminence of compulsory legislation, shown considerable activity in the direction of combining to grant a complete licence; but, supposing success crowned the attempt, the Apothecaries' Hall on the one hand, the University of Durham on the other, to say nothing of the corporations north of the Tweed, would still be empowered to grant their respective licences and medical degrees, and tempt to their portals the imperfectly trained and idle candidates who might dread the ordeal presented by the examination of the two colleges. The time has passed when such action on their part can be considered other than retrogressive and greatly to be deprecated. The conduct of the Government, in introducing a Medical Bill, affords the fullest justification of the Association and the profession in relying on the implied promise of the Lord President of the Privy Council, when, in November last, his lordship stated to the deputation of the Medical Reform Committee that he felt "that legislation upon the subject of medical education and licensing (and effectual legislation too) ought to take place as soon as possible, and that he and the Vice-President would be much disappointed if that did not take place during the ensuing session." The deputation, acting in obedience to the mandate of the Association, imposed on them by the unanimous voice of the jubilee meeting at Worcester, urgently prayed the Government to introduce a Bill based on the Report of the Royal Commission, with the assurance of the support of the Association and of the profession. The deputation was accompanied by representatives of the leading medical journals. On February 5th, Dr. Jacob, the President of the Alliance Association, had an interview with the Vice-President of the Privy Council, and presented a memorial from the President and Council of the Irish Medical Association to the same effect; and, in doing so, stated that they desired to support the action of the Medical Reform Committee of the British Medical Association.

The Bill of the Government is now before the Legislature; it behoves the profession, therefore, to see whether it accords with the Report of the Royal Commission; and if, on examination, it be found to do so, the profession and the Association are pledged to secure its success. The long delay, the hope deferred, that has marked the progress of medical legislation, has not been without good effects. The numerous Bills, private as well as of Governments of different shades of opinion; the reference of various Bills to the Select Committee that sat during two sessions of the late Parliament; the continuance of the investigation before the strong Royal Commission which, last year, concluded its labours, have thoroughly exhausted the inquiry in the view of all reasonable and disinterested persons, and solved the long vexed questions connected with the subject.

The Royal Commission reported—

1. For the formation of a Divisional Board in each of the three divisions of the kingdom for the conduct of compulsory minimum examinations in medicine, surgery, and obstetrics, which should confer the sole qualification for registration and licence to practise.

2. For the direct representation of the profession on the Medical Council, and for the diminution of the influence of the licensing corporations thereon.

3. For strengthening the powers of the Medical Council thus amended in composition.

4. For making more effective the penal clauses against the false assumption of medical titles.

5. For the conduct of prosecutions for offending against the Act by the Public Prosecutor.

These conclusions of the Royal Commission afford a new point of departure. All the medical Bills introduced since 1858, whether Governmental or private, have simply been Bills to amend the Medical Act. That of the Duke of Richmond, in the late Government, was "A Bill to amend the Medical Act, 1858."

The Bill which the present Lord President of the Privy Council has just introduced into the House of Lords, marks a decided improvement in this respect. Since 1858, medical legislation has merely heaped one Bill on another. All these Bills are printed in the *Medical Register;* out of them six are wholly repealed and the others much simplified, in the Lord President's Bill, which is intituled, "An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners," and will be cited, for all purposes, by the short title of "The Medical Act, 1883." The laws relating to medical practitioners will thus be codified, simplified, and virtually comprised in this new Act of 1883. Rules are distinctly laid down for the formation of the medical boards. The number of members of these boards is fixed at fifteen for England, eleven for Scotland, and eleven for Ireland. In England, the members are to be two each for the Universities of Oxford, Cambridge, and London, one each for the University of Durham and the Victoria University, Manchester, three each for the two Royal Colleges; and one for the Apothecaries' Society; in Scotland three for the University of Edinburgh, two each for Glasgow and Aberdeen, one for St. Andrew's, one each for the two Colleges of Edinburgh and one for the Glasgow Faculty; in Ireland, two each for the University of Dublin and the Royal University, three each for the Colleges of Physicians and Surgeons, and one for the Apothecaries Hall.

The Medical Council may suggest an increase of members, or may also, subject to the approval of the Privy Council, "deprive any constituent authority of the privilege of returning a member or members to a medical board, if of opinion that such authority has so diminished in importance as not to be entitled to such privilege; thus providing for the difficult task of extinguishing effete authorities.

These medical boards will regulate examinations, subject to the ntrol of the Medical Council and Privy Council.

The Medical Council is to be composed of eighteen members, six Crown minees; two direct representatives for England, one for Scotland, d one for Ireland; and four members to be elected by the Medical ard of England, two by that of Scotland, and two by that of Ireland. The regulation of education and examinations will be confided to e medical boards, in subjection to the Medical Council.

The penalty on misuse of medical titles is given at considerable ngth, Clause 30. "If any person, whether a registered medical actitioner or not, takes or uses a medical title which he is not enled to take or use, he shall, on summary conviction, be liable to a nalty not exceeding twenty pounds; or if he takes or uses a medical le which is by this Act not permitted to be entered on the *Register*." If any person who is not a registered medical practitioner repre-nt himself as such, or use any name, title, addition, or descrip-n implying it, he shall, on summary conviction, be liable to a nalty not exceeding twenty pounds.

If any person who is not registered, who practises for gain, or o receives any payment for practising medicine or surgery, use designation of, or represent himself to be, a physician, sur-on, doctor, or apothecary, or use any designation or description t he is qualified by law to practise medicine, surgery, or mid-fery, he shall be liable to the like penalty. Several persons may osecute, including the Public Prosecutor.

Further, by Clause 6, it is enacted that "a person shall not be enled to recover in any court of law in the United Kingdom any penses, charges, or fees, for any medical or surgical advice or endance, or for any operation, unless he prove upon the trial t he is a registered medical practitioner."

Space will not permit us to give a complete summary of this im-rtant Bill, which far surpasses in statesmanlike completeness any t have preceded it. It provides for the formation of divisional dical boards, not only for the present, but for the future; and for extinction of effete authorities; it compels every candidate for gistration to pass an examination in all branches of the profession fore a board above all suspicion. It does not compel affiliation to corporation as a preliminary to registration. In this, it resembles first draft of the Duke of Richmond's Bill, the Bill of Lord Ripon, d adopts the conclusion of the Select Committee of the House Commons which sat on Mr. Headlam's Bill in 1856, and unani-ously decided that the diploma they would give of "Licentiate Medicine and Surgery" should be all-sufficient to enable its pos-sor to practise without joining any corporation.

This Bill also rectifies the anomaly in the Act of 1858, whereby University of Durham was favoured with a representative on General Medical Council for itself, while the University of inburgh, being linked with the University of Aberdeen, in the urn of one member to the Council, had only half a representa-e, and the Apothecaries' Hall of Ireland equalled in representa-n the Royal College of Surgeons of England with its tremendous l of members. That trading corporations like the Apothecaries' ieties should maintain their undue privileges in representation, ile great provincial educational institutions like the Victoria iversity, Manchester, were hopelessly left out in the cold, is an omaly which now seems near rectification.

To secure the success of this great measure, judicious as bold, is w the bounden duty of the Association which has induced the Government to promote it. The Association will be true to the principles which it has advocated for half a century, and will support the Government which has listened to its voice and to the voice of the profession. Corporations will be active to retard, mutilate, and defeat a Bill which touches many corporate interests, and which deals with the question of Medical Reform from the point of view of the highest professional interests, and not of the individual interests of licensing bodies. The Bill will need all the support which the profession can give it. At all the meetings of the Branches, powers to petition the Legislature should be taken, and the members of the legislature in both Houses of Parliament, should, irrespective of party, be forthwith canvassed to support the Lord President's Bill. The matter is so urgent that we shall be glad to hear, without delay, from members of the Association who have secured parliamentary support to the Government measure.

HOSPITAL COLLEGES FOR MEDICAL STUDENTS.

Much has been said of late about what the student should do immediately after qualification, and it has been suggested that the law should enforce a fair education in matters immediately appertaining to the requirements of private practice. Control of this kind after a legal licence to practise has been granted is, however, impracticable. On the other hand, we have recently heard much talk, and seen a great deal of paternal legislation in relation to the student. It has been deemed insufficient that he should present himself before examiners at certain fixed or unsettled intervals, and be examined, subject to no previous questions as to whether he has spent twelve regulation months in actual work, or scrambled through his anatomical studies in six weeks, after satisfying the authorities at his hospital by being present in the body, rather than in the spirit, at lectures and dissections. Hence the examination for first year's students was enforced; and, on similar principles, we have heard of regulations to enforce a fair interval of time between primary and pass examinations. The recent action of the London Hospital has revived another question worth discussion, for we must wait and judge results with regard to the above-mentioned regulations. It is very advisable to consider, not only how the medical student works, but how and where he lives. We say the recent action of a large metropolitan hospital has revived this question, for it is not new; it has only lain dormant, and has not even rested in absolute abeyance as a mere scheme, but has continued for long in process of solution by practical demonstration. In plain words, there are three medical schools that have resident colleges for students attached to them, and a fourth is about to follow this example. Are such colleges required, and is it advisable that they should be instituted at all the remaining hospitals? To answer this question, we must consider how the student generally lives, and what advantages and disadvantages are involved in the collegiate system.

Parents, elderly friends, and young but senior acquaintances, are all, but especially the latter, apt to possess singularly short memories regarding their own tastes in past days. They are ever inclined to pity the average student. To their eyes they see him as an unlucky individual who, after hard work at his hospital, must return every evening to a gloomy room in a lodging-house situated in some dull and antiquated suburb, and they are shocked at the pipes, text books, stethoscopes and evening papers too often scattered about the chamber in unpicturesque confusion. They forget that in youth and early manhood almost everything looks cheerful, that the absence of pride about locality is very wholesome, from certain points of view, and that even habits of untidiness are generally remedied by the discipline of dresserships and house-surgeoncies. The daily journeys to and from hospital promote health, or at least, observation. The amount of knowledge in housekeeping, necessary for a lodger who objects to extortion, and yet, however young, expects it, is greater than that required by a resident in an establishment where tariffs and commons prevail, and it is very advisable that the young prac-

titioner should begin life with some idea of weekly bills. As for bad company, idle companions can penetrate to any lodgings or any college, if not kept away by strength of will.

A collegiate establishment, on the other hand, requires more than furnished apartments and a landlord. Many students are massed together, one chief officer, a dean, or warden, is required to keep order and to prevent abuses on the part of manciples, often worse harpies than landladies, and less easily controlled by the student. On the character of this head of the college everything depends; in some cases, he may be compelled, in virtue of his office, to devote all his time to collegiate government, or, on the other he hand, may be a member of the hospital staff, which, under such circumstances, is apt to mean an overworked man. In the first case his influence is damaged by the fact that he is not a physician or surgeon on the staff. In the second, he of necessity has not sufficient time to spend over pressing collegiate questions. The resident student has, as a rule, less respect for his room and furniture, which he looks upon as common property, than when he lives in private lodgings. Lastly, when a mass of students live together, the noisier are ever apt to trouble the quieter, who live in adjacent rooms.

There is, however, another side to the question, we mean the proximity of the student to hospital wards. For the dresser, and the clinical clerk, residence in a college alone can insure this very desirable arrangement. Residence outside the hospital wards, even when in a street facing the institution, is far less advantageous in this respect. The student in college can stroll round the walls after his dinner, accompanying his house-surgeon, and thus gain invaluable practical experience without fatigue. When a case of strangulated hernia, or an accident requiring immediate operation, is brought in at night, the resident student can be called up by the porter. In short, the advantages of residence in college are so great as to justify, according to our belief, the establishment of hospital colleges in connection with all the metropolitan schools that as yet do not possess them. Third and fourth year's students should ever be preferred as inmates. By this arrangement the wards would be utilised for educational purposes to their highest possible degree, and not merely reserved for students on duty for the day, as dressers or clerks. In fact, for senior students, a college offers even more incontestable advantages than can be afforded to first and second year's men by residence at the house of a tutor. It affords two years of clinical experience, in place of some six months of work as dresser, or clerk, work often confined to a few hours in the morning and afternoon.

MEDICAL FACULTIES OF OXFORD AND CAMBRIDGE.

Our "University Intelligence" contains, this week, the satisfactory announcement that a committee appointed to consider the subject of instituting certain additional professorships in the University of Cambridge, has recommended that the teaching of Physiology in the University shall be aided henceforth by the creation of an University Professorship; and that a Professorship of Surgery shall be formally instituted. The proposal has to be discussed; but there can be no doubt that it will be carried into effect. Hitherto, the teaching of physiology has been conducted by Dr. Michael Foster, in virtue of his office as Prælector at Trinity College in connection with the University; but the creation of an University Professorship will fill up what has long been an important *lacuna* in the University teaching, and will give to physiological teaching its proper place in the hierarchy of the higher studies at the University of Cambridge. The like importance attaches to the proposed creation of a Professorship of Surgery. Professor Humphry, in his desire to consolidate the work in which he has taken so brilliant a part, and for which the profession of medicine in this country is, and will long feel itself, heavily indebted to him, offers to undertake the new Professorship without salary, retiring from the Professorship of Anatomy which he at present holds. The circumstances which call for and which justify such exceptional liberality, speak for themselves. It is an arrangement which reflects the highest honour upon him, and which the University will, no doubt, gladly, and with proud humility, gracefully accept. The office, to Professor Humphry's successors, will not always remain without endowment. It is of the highest importance that the whole circle of professorships should be completed, and there still remains to be added a Professorship of Therapeutics and Pharmacology to those already included in the official list.

The University of Oxford must turn with averted eyes from the brilliant example offered by Cambridge with her great working medical school, students, brilliant faculty, and splendidly fitted hives of biological research and study. Oxford stands, year by year more solitary in her humiliation as the only great university in this or any other country which is destitute of medical students, and where it does not treat them and medical science with scornful inhospitality, mocks them with hollow pretences of medical education, which attract medical students only to deceive them.

The radical difference between the two Universities is, that Professor Humphry and Dr. Michael Foster have been determined that there shall be a great medical school at Cambridge, and have, with slender resources, succeeded in planting a great medical school there, and in attaching the medical profession to the noble University of which they are leading spirits; while Professor Acland has been equally determined that there shall not be a medical student in Oxford if he can prevent it, and directly and by every indirect method, has frustrated, to the utmost of his power, the efforts of those who have sought to create a working medical school at Oxford, and to restore to medicine the vast endowments which belong to her in that University, and which have been diverted to other purposes. Cambridge offers as brilliant an example of how to create a medical school, as Oxford shows melancholy proof of how one man can avail to destroy the remnant and to prevent the restoration of a medical school. Oddly enough it is, we believe as much the boast of one as of the other, that each has succeeded in the work to which he has set himself.

THE NEW COLLEGE MONOPOLY.

The proceedings of the London College of Physicians are transacted *in camerâ*, and under a pledge of College secrecy. Under such circumstances, and looking to the singular bareness of the minute issued, which we transcribe in another page, we feel precluded from referring at length to the information within our reach as to the circumstances under which the new "scheme of conjoint examination" of which we are able to furnish details, was brought forward and passed at the last comitia. It is sufficient, in face of the more important event of the publication of the Government Medical Reform Bill, to point out that this new scheme breaks the pledge which the College has given to maintain and support a system of conjoint examination by all the English medical authorities, and aims at creating a new monopoly, adding a new complication to the existing complexity of examination and necessary systems, and increasing the burdens of the English student and practitioner who desires a double qualification; unless, indeed, he choose to be forced through the doors of both these corporations, and to take what they both choose to give him, and at their mutually agreed price. At any time, such a scheme would have been lamentable, from the public and professional points of view. It is now singularly inopportune. It flies in the face of previous declarations, and of the known wishes and indicated cause of action of the whole body of the profession. The best we can wish it, and the worst we need now say of it, is that, being issued simultaneously with the great scheme of the Government, it is to be hoped that the day of its birth may also be the day of its decease; and that it may die stillborn and unregistered. It is almost uniquely bad, even among College compacts.

THE Medical Acts Amendment Bill now before the House of rds consists of eight parts and seventy-five clauses.

MISS EDITH SHOVE, M.B.Lond., has been appointed medical superendent of the female staff at the General Post Office.

THE *Citizen* states that the Port Sanitary Committee have agreed recommend the Corporation to erect a hospital on the Kentish ire, in the neighbourhood of the spot below Gravesend, where the spital ship *Rhin* is now stationed, at a cost not exceeding £5,000.

WE are pleased to learn that Mr. Herbert Sieveking was presented H.R.H. the Prince of Wales on the 12th inst. by General Lord olseley, in appreciation of his excellent administration of the ctoria Hospital in Cairo, which Lord Wolseley, as well as nearly other high military men in Egypt, including H.R.H. the Duke Connaught, frequently visited.

PROFESSOR FLOWER will bring his course of lectures, on the atomy of the Horse and its Allies, to a close this day (Friday); l, owing to the theatre being required for the primary and pass minations for the diploma of membership of the College, Mr. F. Eve, the Erasmus Wilson Lecturer, will not commence his course lectures on Cysts, and Cystic Tumours in General, until some ie in June next. The time will be duly announced.

TEA AND COFFEE FROM GUANO.

XANTHINE, a substance found in urine, and consequently in guano, reons' and fowls' dung, etc., is well known to chemists. On the ier hand, coffee and tea contain caffeine and theobromine. Herr cher has discovered a process which allows caffeine and theomine to be obtained at will from xanthine. Thus chemistry has nferred on us the doubtful benefits of being able to obtain an tract of tea and coffee derived from guano.

DEATH UNDER CHLOROFORM.

Wednesday, March 7th, a labourer named David Crawford, hteen years of age, residing at Lasswade, died while under chlorom. It appears that Crawford, early on Wednesday, was making experiment to discover how a fellow-labourer had got his hand ined by putting it under the piston-rod of an engine while it was in tion. In doing so, Crawford got his forefinger and thumb severely erated; and, in order to perform the operation of amputation, . Allison of Lasswade administered chloroform, and while Crawd was under the influence of the drug he expired.

THE COST OF AN EPIDEMIC.

JULES ROCHARD has estimated that typhoid fever cost the Paris nicipality, in 1882, 23,487,727 francs (£939,509). The stay of the tients in hospitals represents 240,083 days, at 3 francs 60 centimes day, making a total of 744,257 francs 30 centimes paid by the nicipality. If to this sum be added 1,187,120 francs, as repreting the loss incurred by the patients during their convalescence lowing only two francs for each day), a total of 1,871,570 francs centimes is arrived at as the cost of the patients treated in hosals. By a similar calculation, the loss resulting from private tients treated in their own homes until recovery is estimated at 31,727 francs. In 1882, there were 3,276 deaths from typhoid er. Assuming that each individual has cost 6,000 francs for food, ucation, etc., these deaths represent a loss to the public revenue 19,656,000 francs. To this must be added the expenses of illness, king a total loss of 23,487,727 francs during the year in Paris ne. Along with the mortality from typhoid fever, the general ath-rate from all diseases has increased. If this were reduced to the proportion which it had ten years ago, there would be an annual reduction of 11,182 deaths, representing a saving of 67,092,000 francs. Even if this be reduced to half, there still remains 33,545,000 francs which could be saved annually by the adoption of hygienic measures, representing a capital of 670,920,000 francs.

THE BROWN INSTITUTION.

AT a meeting of the committee of the Institution held on the 14th instant, leave of absence for three months was granted to Dr. Roy, the professor-superintendent, in order that he might proceed to the river La Plata. The object of his visit to this region is the investigation of a serious epizootic disease prevalent amongst, and very destructive to, the vast herds of sheep and cattle which are kept in these districts, and which is said to have extended to human beings. The company at whose request Dr. Roy goes out has submitted morbid specimens both to him and to M. Pasteur; but, though the disease is said to resemble anthrax, no satisfactory evidence on the point has been obtained. The incident itself, of engaging the services of the Professor-Superintendent of the Brown Institution in such an inquiry, is an additional and striking illustration of the wise benevolence which led to the foundation of "The Brown."

OVERWORK OF RAILWAY SERVANTS.

THE importance of limiting the work of railway servants has, says the *Pall Mall Gazette*, frequently been recognised in this country, but no one has ventured to propose to abolish overwork on railways by Act of Parliament. The State Legislature of Pennsylvania is now considering a Bill making it unlawful for any city railway officials to permit a conductor or driver to work more than twelve hours in a day, on penalty of imprisonment for not less than one month, and not more than six months. As at present it is said the conductors and drivers are often worked seventeen consecutive hours in Philadelphia, the need for some drastic remedy is obvious. But what a sensation there would be in this country if the general manager of one of our great railways was sent to pick oakum for a month for overworking an engine-man or goods' guard.

SUCCESSFUL PROSECUTION.

AT Lambeth, a person assuming the name of Hamilton Archibald Jacob, 55, and who, it was stated, had been practising as a physician and surgeon at different places in Peckham, was charged on remand, at the instance of the Medical Alliance Association, with falsely representing himself as a doctor, contrary to the provisions of the Medical Act. The defendant, in answer to the charges, declared that he had not been practising this year at all. Mr. Collison said it was of the greatest importance to put down such a dangerous system. He ordered the defendant to pay a fine of £20 and £5 5s. costs, the alternative being three months' imprisonment. The Medical Alliance Association has, in this prosecution, once more rendered an acceptable service, and scored a further success in the task, which it has pursued with exceptional vigour, of clearing away the pests who prey upon society with sham medical diplomas. In this case, the alternative of imprisonment has, we believe, been elected, and the Alliance will be mulcted in costs.

THE BIRMINGHAM MEDICAL INSTITUTE.

THE annual report of the Birmingham Medical Institute records a condition of steady development and healthy progress during the past year. Thirty-one new members have been added, bringing the present total up to one hundred and ninety-six. Donations of money amounting to £253 have been received since the last report. The financial position of the Institute is satisfactory, although, owing to exceptional circumstances, there was a debt upon the general fund of £158 at the end of the year. To meet this deficit, the committee appeal for increased subscriptions. From the report of the honorary

librarians, Mr. Lloyd Owen and Dr. Saundby, it appears that the library is now a fairly representative collection of medical books and periodicals, and that it is patronised at present by a large and increasing number of borrowers. The library contains 9,650 volumes, as against 9,300 at the end of the previous year. That the value of the library is growing in the appreciation of professional readers is shown by the fact that, last year 813 volumes were issued to 100 borrowers, as compared with 450 volumes issued to 73 borrowers in the preceding year. The reading-room is well supplied with British and foreign periodical literature. During the year several valuable gifts of books were received. The chief local professional societies, namely, the Birmingham and Midland Branch of the Association, the Midland Medical Society, and the Birmingham Medical Benevolent Society, continue to hold their meetings in the Institute.

DUPUYTREN'S ENTEROTOME.

LAST October, a very stout woman was admitted into St. Bartholomew's Hospital, under the care of Mr. Willett, suffering from a strangulated ventral hernia, situated midway between the umbilicus and the pubes—a very unusual situation. The patient had delayed long before applying to the hospital; and, when herniotomy was performed, the gut was found to be gangrenous, and an artificial anus resulted. The condition of the woman was thus very serious, as the portion of bowel which had sloughed was a knuckle of the small intestine, probably rather high up. All fæces passed by the artificial anus, and the woman steadily emaciated. After delaying long enough to preclude the hope of spontaneous cure, Mr. Willett determined to resort to Dupuytren's operation, which consists in applying a clamp of peculiar construction to the piece of intestinal wall, called by Dupuytren the *éperon* or spur, which intervenes between the upper and lower portions of gut at the artificial anus. After considerable delay, two enterotomes were procured from Paris; and one of these, a modification of Dupuytren's original instrument, was applied on February 23rd. The patient experienced no pain or inconvenience, and the enterotome came away on March 1st, holding in its jaws a piece of shrivelled tissue. Up to the present time, no benefit has apparently resulted from the operation; but it is gratifying to find that the gloomy forebodings, with which the proposal to apply the enterotome was received by some, have not been fulfilled.

MEDICINE IN JAPAN.

M. CHARLES RÉMY writes from Tokio that a German medical school is established there, concerning which, owing to the courtesy of its professors, he has been able to gather some new facts in medicine. He has observed that illnesses common to both Europeans and Japanese present their special differences. In enteric fever, there is an absence of stupor; neither do bed-sores appear. Phthisis there as often declares itself by adhesive peritonitis (*peritonite exsudative*), which is cured for a time, as it does among us by pleurisy. Distomata of the liver and lungs are pathological conditions frequently met with. Dr. Rémy believes that he knows at least a dozen medical students who daily expectorate ova of pulmonary distoma. Filaria is sometimes observed; among dogs, it is occasionally present in the coats of the aorta, where it causes aneurysm. M. Rémy also sends some interesting information concerning the Japanese method of rearing children. Mothers suckle their children until they reach four five, and six years of age. M. Rémy remarks that Japanese women are small, but have an astonishing faculty of producing milk (*une puissance galactogène étonnante*). Rickets is unknown in Japan. This fact invalidates M. Parrot's theory concerning rickets, inasmuch as syphilis, and consequently hereditary syphilis, are very general in Japan. Dr. Rémy bears testimony to the skill with which Japanese doctors practise acupuncture, though now it is rarely done. Dr. Rémy underwent a personal experience of it, which proved perfectly painless. He saw the needle penetrate the skin, or would not have believed that acupuncture had been performed. When it was done through his clothes, he searched for the mark of the needle, to assure himself that the operation was effected. Last summer, Japan was visited by a severe epidemic of cholera. At Tokio, four hundred persons died from it in a week but only two Europeans during the entire year.

PRESCRIBING DRUGGISTS.

A CASE of suicide, of somewhat exceptional details as to its method which happened in Birmingham last week, draws attenion once more to the perilous facility with which, in spite of restrictive legislation poisons may be purchased, and to the fatal danger to which the public is exposed by unqualified persons undertaking the treatmen of disease. A man, aged 32, who had suffered for months from some chronic nervous affection and insomnia, was found dead in his bed a letter which he left, and other evidence, showed that he had committed suicide by taking at once a quantity of "sleeping draughts which had been supplied to him. Pretending to take a draugh every night, he saved his doses until he had collected the supply fo a fortnight, when he swallowed the whole of the fourteen draught at once, and death resulted. It appears that the mother of the de ceased consulted a druggist about her son's sleeplessness, whereupo the druggist forthwith undertook the management of the case, an prescribed, and continued regularly to supply, a nightly draugh containing twenty grains of hydrate of chloral and five drops o tincture of opium. Without any medical authority at any time, th druggist continued to supply these draughts for several weeks, an the friends of the deceased did not secure skilled professional assis ance for him. The suicide effected his purpose by taking in on dose 280 grains of hydrate of chloral and 70 drops of laudanum.

PARALDEHYDE.

AT the last meeting of the Pharmaceutical Society, Mr. Holm called attention to a specimen of the very curious body known a paraldehyde, which has lately been described in the BRITIS MEDICAL JOURNAL (February 3rd, p. 215) as a new hypnotic po sessing the advantage over chloral of stregthening the action of th heart. Specimens of pure aldehyde, aldehyde ammonia and ald hyde resin had been sent at the same time by Mr. Williams illustrate some remarks which he had intended to make, but he w unable to be present. In his absence, Mr. Holmes, whose remar are reported in the *Pharmaceutical Journal*, said that paraldehy had the formula $C_6 H_{12} O_3$, and might be regarded as three mo cules of aldehyde grouped into one, the formula of aldehyde bei $C_2 H_4 O$. The vapour density of paraldehyde was three tim greater, and the boiling point more than three times higher, th that of aldehyde. It was very remarkable, therefore, that this bo differed entirely in its chemical, physical, and therapeutic prop ties from aldehyde. Thus aldehyde formed with ammoniacal g the crystalline compound aldehyde ammonia, and when mixed wi alcohol and heated with caustic potash, formed aldehyde resin; b neither of these substances was formed by paraldehyde, nor had the power of reducing nitrate of silver like aldehyde. Paraldehy had an odour resembling that of acetal, and was soluble in abo eight parts of cold, and less of hot water, while aldehyde possess a very suffocating odour, and was freely miscible with water and al hol in all proportions. Yet the same substances which caused the mo cular changes by which paraldehyde was produced, would at a lo temperature, gave rise to the very different crystalline body, metal hyde. The difference in therapeutical properties caused by sli molecular changes, must be a subject of great interest to medi men. The group of aldehydes also possessed a considerable i portance from the point of view of botany and materia medi since they were intimately connected, as recently shown by Mes Cross and Bevan, with the formation of vegetable products, s

th the changes that take place in the tissues of plants, which peared to be largely due to the facility with which aldehyde rmed polymeric bodies, the ease with which they were decom-sed, and the readiness with which they formed compounds with her bodies.

THE GOVERNMENT ANIMAL VACCINE STATION.

IE results obtained at the new Government animal vaccine station e recorded by Dr. Cory, in his first annual report to the Medical ficer of the Local Government Board. Beginning with the approved mph-stock of Dr. Carsten of The Hague, Dr. Cory vaccinated, uring the latter half of 1881 and the first two months of 1882, a ccession of forty-six calves with fairly good results, and forwarded the Board a total of 975 charges, of which 500 were sent out to nety-six practitioners who desired it. He gives, in his report, a story of the operations of the station, and of the descent of the mph. Of the effects produced by the lymph in the hands of the actitioners to whom it was sent, it is not possible to give any use-l account; but Dr. Cory, in the few experimental uses he made of e lymph at St. Thomas's Hospital, succeeded, after a little experi-ce, in obtaining fairly complete results with it when he stored it points, and used it within five days of its being taken from the calf. ıe characters of the vesicles and of the resulting scars were satisfac-ry. Stored in tubes, the lymph did not give him the same degree success. Dr. Cory further reports on a new lymph furnished by . Dubreuilh, of Bordeaux. The first sample of this lymph was ly seventeen removes, through the calf, from a "spontaneous case" cow-pox. This lymph-stock was discovered on November 26th, 81, at a farm in the village of La Forêt, not far from Bordeaux. was brought to Paris by Dr. Dubreuilh, who is the vaccinator of e Gironde; and the results of the vaccination done with the lymph ere reported by Dr. Hervieux, in the *Gazette Hebdomadaire de édecine et Chirurgie* of January 26th, 1882. Comparative in-ulation with it and with lymph of the Hague stock has led Dr ry to give preference to the Bordeaux lymph-stock, and that mph is now being cultivated at the Government station from calf calf with excellent results, in supersession of the Hague stock.

PRIVATE BILL LEGISLATION.

IE remarkable discussion in the House of Commons, on the 6th stant, will have enlightened the public mind on a question which s, for some years, received attention in these columns—notably in e reports of the Parliamentary Bills Committee. The Private Bill gislation is at present nothing else than a farce. No sort of effec-e control is exercised over the demands of local authorities or mpanies; and, if a Government department make a report on a ll, it is more often than not entirely ignored. The decisions of the mmittees who make or mar the fortunes of private Bills are, as rd Redesdale has well expressed it, mere lotteries, in which the ngest purse is likely to draw the prize. Even Mr. Dodson had thing to urge in favour of the present tribunal, though, with icial reluctance to do anything, he would not go with Mr. Sellar in e reforms which he admirably advocated. It is admittedly ysically impossible that the House, constituted as it now is, should t satisfactorily through all the labours of private legislation at esent thrust upon it. There are two hundred and twenty-one Bills wn for consideration this Session. One Bill, three years ago, was ught over for no less than twenty-four days in committee. This is, doubt, an exceptional instance; but it shows the length to which oneyed corporations are prepared to stretch the public patience to in their ends. Whether Mr. Sellar's proposed remedies are suffi-ent for the purpose, we are not competent to judge; but we are und to say that, under the present arrangements, the interests of e medical profession largely suffer; and that no tribunal could ell be more unsatisfactory, from the public-health point of view, an the committees now exercising practically imperial sway over cal proposals.

OBSTETRIC DISCUSSIONS.

DR. BANTOCK writes to say that, with reference to our recent note on Samaritans at Issue, describing an incident at the last meeting of the Obstetrical Society, "although the scene was undoubtedly a discreditable one," for his part, he studiously avoided anything recriminatory or offensive. Dr. Savage writes also to say that he did not recriminate, but only criticised. Each of these gentlemen is entitled to take his own view of the precise shade of expression which would most properly describe his intention; nor have we any doubt that all who took part in it were actuated by the best motives and that each is perfectly convinced that he was right. We should not go so far as Dr. Bantock, and pronounce the scene "discreditable," but it was certainly unpleasant, and the heat of the discussion was unsuited to a scientific society. We have no intention to allow the discussion of any of its details to occupy space, which is sorely needed in these pages for much more important purposes; nor do our remarks convey any other meaning than that it is very desirable that members of a scientific society and colleagues in a hospital should, in debates at that society, adopt a tone of studious courtesy and goodwill in discussing scientific facts, or refuting criticisms of what occurs either in their own practice or in the practice of others. It will certainly not be contended that the discussion was kept within these lines, and carried on under these conditions. On the other hand, the members of the Society generally, and parties to the discussion, will no doubt concur that it is desirable that these conditions should be observed in future.

THE BLOOD IN BERI-BERI.

DR. PEREIRA of Bahia, who, in the sultry and somewhat sickly climate of Brazil, has had ample opportunities of studying the pathology of beri-beri, has lately published some important observations on the condition of the blood in that obscure disease. He finds that there is a notable decrease in the number of the red corpuscles, with a corresponding increase in the white. His researches have also demonstrated the existence in the blood of a minute micrococcus, not hitherto observed. These minute bodies are not rod-shaped like the ordinary bacillus, but spherical. They are endowed with a certain contractile power, and rotate freely round their own axes. They occur singly or in masses, and admit of easy demonstration when coloured by aniline. If cultivated artificially after Pasteur's method, they may be propagated indefinitely; but, when injected under the skin in dogs, they did reappear in the blood, and, indeed, gave rise only to slight local phenomena of inflammation. They were found to occur in about 2 per cent. of the apparently healthy persons examined by Dr. Pereira. It is probable, therefore, that these minute organisms cannot be looked on as the prime or specific cause of beri-beri. Their existence may be taken rather as a proof that the blood has undergone some alteration which, in some unexplained way, renders it a more suitable nidus for their multiplication than it is in its normal condition.

MERCURY IN DENTISTRY.

DR. EUGENE S. TALBOT, of Chicago, in a paper read at the Dental Section of the American Medical Association, dwelt impressively upon the alleged injurious effects of mercury, as used in dentistry; he discussed especially the use of amalgam fillings in natural teeth. He stated that "there can no longer be doubt that amalgam fillings in teeth will sooner or later produce mercurial poisoning. The dire effects of this metal are not always seen immediately after the fillings are inserted, years sometimes elapsing before the injurious effects are felt and noticed." The history of two well marked cases was given by Dr. Talbot. The amalgam fillings were removed, and gutta percha temporarily substituted, these in turn being replaced with gold, after which all symptoms of mercurial poisoning disappeared. A detailed account of a series of experiments made by him were then presented, the conclusions and results being as fol-

lows. "1. Mercurial vapour is given off from amalgam fillings at all ages and from all varieties, even from fillings sixteen years old, the vaporisation being sufficient in quantity to respond to chemical tests. 2. Minute doses of mercury, if taken internally three times a day, are capable of producing decided effects. 3. Mercury when inhaled into the lungs is far more active than when taken into the stomach. 4. If small doses taken into the stomach occasionally are capable of producing marked effects, and the vapour is much more active than the solid preparations of the metal, is it not a necessary consequence that amalgam fillings, which are constantly giving off mercurial fumes to be inhaled into the lungs, not a few times daily, but always, without cessation, day or night,—is it not a necessary consequence that, in many sensitive persons, such fillings must produce deleterious effects? 5. When tons of this material are consumed annually, is it not credible that many constitutions are affected? 6. Physicians in treating dyspeptics, anæmics, and persons suffering from nervous debility, would do well to examine the mouths of patients, and know if artificial teeth on red rubber, or fillings of natural teeth, have in their composition mercury or any of its compounds."

NEW FORMATION OF ARTICULAR HEADS OF BONES AFTER SUBCAPSULAR PERIOSTEAL RESECTIONS.

DR. BAJARDI has made a series of experiments on dogs three months old, always choosing as the region for his experiments the lower extremity of the femur. The results obtained by him differ in some respects from those obtained by Wagner and Ollier, but confirm the results arrived at from resections of human bones made by Lüelle, Doutrelepont, Heinemann, Czerny, Weichselbann, and Jagetho. Dr. Bajardi arrives at the following conclusions. 1. Resection of an articular extremity of a bone, practised on a young animal, is followed by an exact reproduction of the part, provided that the periosteum and articular capsule be kept intact, according to Larghe's method. 2. The articular extremity thus produced is composed of spongy tissue, and a greater or less extent of its surface is covered with an investing cartilage. 3. The bony and cartilaginous portions of the new articular extremity are developed partly from the diaphysis, partly from the marrow, and to a limited extent from the connective tissue which covers almost the whole of the bony portion of the excised epiphysis. 4. The new formation begins primarily in the marrow, in the form of embryonic connective tissue, which becomes rapidly transformed into cartilaginous and osseous tissue. 5. The periosteum of the diaphysis, and the connective tissue which covers the osseous portion of the apophysis, do not take part in the process of development until a later period. 6. The articular surfaces of the tibia and patella, when left intact, may or may not be very considerably modified, according to the re-establishment, or not, of the original conditions of movement and reciprocal pressure. 7. These modifications consist in proliferation of the upper layer of cartilage cells, consequent on the peripheral cells becoming atrophied; in dissociation of the ground-substance (fibrous tissue), consequent on cellular proliferation and atrophy; and in transformation of cartilaginous tissue into fibrous tissue. 8. These modifications always commence in the superficial strata of the investing cartilage, and more or less slowly reach the lower or deeper strata.

TESTS FOR ALBUMEN AND SUGAR IN URINE.

THE expectation that the recent demonstrations given to the Clinical Society by Dr. Pavy and by Dr. Oliver, of their different methods of testing for albumen in urine, would lead to a paper on the same subject by Dr. George Johnson, was happily not unfulfilled, for at the last meeting of the society, as will be seen from our report of the proceedings, he described the method of testing which he has recently practised, whilst his son, Mr. G. S. Johnson, demonstrated the reactions. The compound which Dr. Johnson employs is picric acid, a cheap crystalline substance, which can be carried in a pocket case, and is extremely easy of application when it is required to test a specimen of urine at the bedside of the patient; or which may be carried as a saturated solution without the fear of corrosion, which always attends the transportation of any quantity, however minute, of nitric acid. Dr. Johnson immensely increased the interest of his paper by showing, too, that picric acid, when boiled with a solution of potash, forms a most delicate test for glucose. Dr. Johnson happened to stumble upon this reaction, though it seems to have been known to Braun, a German chemist, about twenty years ago. To Dr. Johnson, however, is due the credit of elaborating the process and giving to it such accuracy as to make it a delicate quantitative test for diabetic sugar. The way in which this is done is described in Dr. Johnson's paper, published at page 505 of this number of the BRITISH MEDICAL JOURNAL, to which we would direct the attention of clinical physicians and medical practitioners. The ease with which the quantity of glucose in a specimen of diabetic urine can be estimated was well shown by Mr. G. S. Johnson, at the meeting of the Clinical Society, when in a few minutes he made a quantitative analysis of a specimen of such urine, containing forty-eight grains of sugar per ounce. Heat and nitric acid are now demonstrated to be untrustworthy tests for albumen; and Dr. Pavy's pellets, Dr. Oliver's test-papers, or Dr. Johnson's picric acid solution, will doubtless one or all come into extensive use.

A SINGULAR EPIDEMIC.

SPECIAL reference is made by Dr. Lake, in his report on the health of Teignmouth during the past year, to an epidemic of a remarkable nature which prevailed in all parts of the town and amongst all classes, reaching its greatest development during and after the frost and foggy weather of December. It was evidently not connected with any question of water-supply, and sufferers from it obtained their milk from all the different dairies in the town. Its main features were severe headache and general pains in the limbs, more or less feverish reaction, furred tongue, sore-throat, herpetic eruptions about the lips and cheeks, with soreness and tenderness of the mouth; in some cases, herpetic sores on the tonsils, simulating diphtheritic patches, a swollen and tender condition of the glands and muscles of the throat and neck, and considerable general debility during and especially after, the attack. These symptoms were not always present, and varied largely as to degree, the central feature especially, the sore-throat and more or less swollen glands being in many cases so trivial as hardly to be noticed, while in others it was painful and severe. A relapse, even after a slight attack, was apt to be more severe than the original one, or to present more serious conditions. In not a few cases, it was followed by acute rheumatism or by erysipelas. As Dr. Lake observes, few, if any, of these symptoms are not to be met with from occasional atmospheric states, or during customary epidemic catarrhs. Yet, having regard to the general characteristics of this one, to the combination of its symptoms, and to the nature of allied epidemics in other parts of the country, it must, he thinks, be classed as more than an ordinary epidemic of sore-throat, catarrhal in form and atmospheric in origin and having features which show relations in some points, at least, to certain forms of diphtheria. Although extensively prevalent, it was generally free from any serious complications—a circumstance which Dr. Lake regards, with perhaps some justification, as due to the good sanitary condition of the district.

THE CAIRO SANITARY BOARD.

A GREAT scandal has been caused in Cairo by the appointment on the new Sanitary Board, of a certain Ismalum Bey, as Head of the Department of Public Analysts, at a salary of £2,000 a-year. Dr. Grant-Bey and the chief army medical officer for the time (D. Irving) are members of the Board. This Board was not consulted as to the appointment of this person; and it appears that, although

sessing no single qualification for the post, entirely destitute chemical knowledge or experience, he has been appointed, nout consultation with the Board, at a salary of £2,000 ear. Such an appointment is not only a disgraceful job, reflect- the highest possible discredit on the Khedive's Government, but o scandalous a reflection upon all the members of the Board with om this gentleman is appointed to sit, that the European mem- s (Dr. Grant-Bey and Dr. Irvine) have very properly refused to nd since his appointment. It is, no doubt, difficult for Lord ferin to interfere directly in such a matter; and it is important t the Khedive's Government should be brought to act in such ters upon the recognised rules of public conduct and trustworthy inistration. To appoint a Sanitary Board, and then to thrust office, at a high salary, a person utterly unfit, and having no ntific qualifications whatever, for a post requiring high scientific acity, great prudence and skill, and unquestionable probity, is iscredit the whole work of the Board, and to render it powerless disgraced. Dr. Grant-Bey could not, with any self-respect, ac- ling to our European views of the duty of medical men holding gnised diplomas and occupying responsible positions in the pro- ion, consent to be a party to such a proceeding; or consult, in way, on professional subjects, with a gentleman destitute of omas or qualifications of any sort. He is to be commended for course he has taken; and it is to be hoped that the Government he Khedive, having been misled in this matter, will immediately el the appointment.

MR. WATSON CHEYNE, ON THE BACILLUS OF TUBERCLE.

brilliant research of Mr. Watson Cheyne, of which we publish abstract report to-day, places the discovery of Koch on a yet er basis than it has hitherto attained. The results of Toussaint, Toulouse, who had at an earlier period claimed to have discovered pecific organism, a micrococcus, have been examined *in loco*, found (to put the matter in a word) to be due to errors of ex- ment and uncleanliness of instruments—two sources of error ch have misled innumerable investigators, and are especially a nbling block in bacterial research. The micrococcus which ssaint thought essential, was a fly on the wheel, and, inoculated ie, did not produce tuberculosis; that which infected was the cidental impurity," the bacilli with which the air of this labo- ry of pathological research was impregnated. The evidence the bacillus is the active agent of virus, is carried on by cumu- ve facts in Mr. Cheyne's research, till it amounts to almost irre- ible proof. Tubercle itself infects only slowly and uncertainly; tubercular matter of scrofulous glands most slowly; the latter tains but few bacilli. The more numerous the bacilli in the erculous growth, the more active the inoculation; and by far the t active and rapid inoculation is by the injection of bacilli ie." When, as Weigert and Ponfick have shown, the tuberculous with advances into the lumen of a blood-vessel, and the bacilli washed on by the blood, then tuberculisation is acute and genera- d. The bacilli are found in the epithelioid cells, in the centre of anatomical elements of commencing tubercle. They coincide with area of tuberculisation; they are found in tubercle of the meninges, itoneum, arteries, and elsewhere, where there is no access of Mr. Cheyne gave an exposition, at length, of his view, which s masterly, luminous, and convincing, at the meeting on Friday of North London District of the Metropolitan Counties Branch. His parations are a most interesting, important, and extensive series. room was crowded, and those members of the Branch who were vileged to hear this able account of one of the most careful and lliant researches of the day, and to study the profoundly in- active series of preparations of bacilli in all forms and varieties ocal tubercle, will long remember the occasion as one of endur- interest and historical importance.

ANTHRAX IN BERMONDSEY.

THE importance of this subject must be our excuse for recurring to the frequent occurrence of cases of malignant pustule in Bermondsey, Rotherhithe, and other districts in the south-east of London. The publicity of no subject can be more important for the benefit of all those engaged in the leather trade. From inquiries set on foot at one warehouse, by Mr. Symonds, it was ascertained that a partner in a leather firm had died, after a short illness, from a spot in the back of the neck, like that which the labourers at the warehouses had, but that it had been attributed to the bite of a mosquito at Mortlake. Mr. Davies-Colley, in a paper read last year before the Royal Medical and Chirurgical Society, and published in the last volume of their *Transactions* (a paper which has not as yet attracted the attention that its importance demands), collected and tabulated no fewer than seventeen cases from the records of Guy's Hospital in the last nine years, and six other cases have occurred there since. Fourteen of the seventeen cases recorded by Mr. Davies-Colley, had been engaged in handling hides or fleeces, either as tanners or wharf-labourers; and the few cases, where no such history was procured—apart from imperfection in their records—lived in the neighbourhood of Bermondsey, and it is very possible that the poison may have been conveyed to them by flies. In all the cases the pustule was upon an exposed part of the body. A further proof that this disease is not as yet well recognised, is afforded by the fact that several of the men affected, stated that they had lost fellow workmen from the same disease; and a suggestive note is quoted by Mr. Davies-Colley, from the *Daily News*, of March 11th, 1882, by an inquest upon a case of the kind where the man died from a spreading œdema, accompanied by symptoms of blood-poisoning, which was attributed to the absorption of arsenic from the hides through an abrasion in the cheek. As a rule, the diagnosis is easy, the malignant pustule, with its black central slough surrounded by small vesicles, and seated in the centre of a raised indurated area, being very characteristic; when, however, as is sometimes the case, this local lesion is replaced by widespread, so called, malignant œdema, or where, as at Bradford, the poison enters the system by other channels, probably by the lungs, the disease is more difficult to diagnose. Mr. Davies-Colley, from the experience obtained at Guy's Hospital, strongly recommends excision of the primary cutaneous lesion, the so-called pustule. Of fifteen cases thus treated, all except two recovered rapidly; and this, notwithstanding that twelve showed an extension of the disease beyond the limits of the central eschar, and that eight had well marked constitutional symptoms. These facts are very important, and from a clinical point of view at least, cannot be gainsaid; it is incumbent upon us in every case of malignant pustule, to resort to this line of treatment without hesitation or delay. The exact rationale of the treatment is not yet fully worked out, but it would appear that new material is constantly being disseminated from the "pustule," and that thus recovery is prevented. It was stated that the man upon whom Mr. Davies-Colley operated most recently was in a fair way to recovery, and that the bacillus had been found in all his excretions. Since so great an amount of ignorance as to the nature of the disease prevails, as we have shown, both among employers and employed, we would suggest to the Privy Council the advisability of circulating printed notices among the leather warehouses, not only of Bermondsey, but throughout the country, calling attention to the risk of acquiring malignant pustule in the trade, detailing its symptoms, and recommending early application to a medical practitioner. No quarantine regulations could be proposed, because, in the first place, the hides in the warehouses where the disease has broken out may have come from all parts of the world, from Cape Town, Morocco, Bombay, and Australia, and because, secondly, the bacillus anthracis is not easy to destroy. It is true that Professor Ewart's experimeuts, made in 1878, seem to show that neither the bacillus nor its spores will resist a temperature considerably below boiling point, but on the other hand it is

stated that some of the workmen attacked had not handled the hides until they had undergone a prolonged soaking in quicklime and water.

SCOTLAND.

TYPHOID fever has broken out in Lochee, a suburb of Dundee, and already three streets are affected.

THE Medical Faculty of the University of Aberdeen have unanimously elected Mr. Brazier, the Professor of Chemistry, to the office of Dean of that Faculty, *vice* Professor F. Ogston, who has resigned.

FOLLOWING the example of a section of the students of Edinburgh University, the students of St. Andrew's have decided, by a majority of votes, that the rectorial election, which takes place at the beginning of next session, shall be conducted upon non-political lines.

AT the quarterly Court of the Governors of the Dundee Royal Infirmary, donations amounting to £2,700 were received from four individuals on behalf of the institution, including the proposed children's ward.

AS yet, there is no abatement of the measles epidemic which appeared in Orkney some weeks ago. There is scarcely a parish in the island that is not affected. Fortunately the cases continue to be of a mild type, and few fatal cases have occurred.

DR. RUTHERFORD of Woodilee is, we believe, a candidate for the appointment of Medical Superintendent of the Crichton Royal Institution and Southern Counties Asylum, Dumfries. Other names have been mentioned in connection with this appointment, and several specialists are in the field for the appointment to Woodilee Asylum.

HONORARY DEGREES OF LL.D.

MEMBERS of the medical profession will learn with satisfaction that, at a meeting of the Senatus of the University of Aberdeen, held on Saturday last, the Senatus resolved to confer the degree of LL.D. upon R. Farquharson, M.D., M.P. for West Aberdeenshire, and also upon Dr. James Ross of Manchester, author of a work of high merit on *Diseases of the Nervous System*. The selection of these two gentlemen for this honour will give great satisfaction to the profession.

ABERDEEN DISPENSARY.

FROM the report of the secretary of this institution, it appears that the number of cases coming under treatment by the medical officers of the Dispensary during the past year was 10,860. Of the gross number, 9,104 were ordinary and zymotic, 243 child-births, 666 vaccinations, 687 dental operations, and 160 ear and throat diseases. The number of patients visited at their own houses was 2,830. The total number of ordinary and zymotic diseases treated at the institution is the largest ever recorded, and is 969 in excess of the total of the previous year. In order to extend the benefits of the institution as much as possible to the poor, the managers have, in addition to the ordinary morning hour of attendance, sanctioned the attendance at the Dispensary buildings of two of the medical officers at a separat hour in the afternoon twice a week for the special treatment of ear and throat diseases, and diseases of women. O these special cases, 160 were treated during the past year.

HOSPITAL SUNDAY IN ABERDEEN.

ONE of the early volumes of the Minutes of the Aberdeen Infirmar has been lost for some time, but has fortunately been recovered In this volume, there is a minute, of April 1763, under which th Kirk-Session and Synod of Aberdeen had appointed that an annua collection for the Infirmary be made in the churches on "the firs Lord's day of January 1764, and every succeeding year," thus anti cipating, by more than a century, the establishment in England c "Hospital Sunday."

PATHOLOGY IN ABERDEEN UNIVERSITY.

THIS vexed question, which has been mentioned several times i the columns of this JOURNAL, has now been arranged in the follow ing manner. At a meeting of the managers of the Royal Infirmar held on Monday, it was resolved to grant permission to the patho logist (Dr. Rodger) to appoint at his discretion the professor pathological anatomy in the university (Dr. Hamilton) to act occ sionally as his substitute, and thus afford him opportunities of co ducting pathological teaching in the hospital. This arrangeme will extend the usefulness of the chair, and thereby carry out mor fully the conditions of the endowment as indicated by Sir Erasm Wilson.

PROPOSED AMBULANCE IN ABERDEEN.

THE quarterly report of the Committee of Management of t Aberdeen Infirmary states that they have under consideration a pr posal by the Aberdeen Public Health Committee, to obtain a support, through joint payment by the Infirmary managers and t Town Council, of an ambulance for the purpose of conveying perso suffering from infectious disease to the Infirmary and the epidem hospital. The cost of the ambulance itself would be, it is stat probably from £70 to £100, in addition to which it would be nec sary to make an arrangement with some horse-hirer in town for su plying a horse and driver when required.

PAISLEY BURGH PAROCHIAL ASYLUM.

UNDER existing arrangements, the Glasgow Parochial Board find necessary to send some of their insane paupers to be accommoda in Riccartsbar Asylum at Paisley. A deputation of the City Bo was appointed to visit the asylum, and report on the condition of t inmates. This report, we regret to observe, is of an unsatisfact nature, and takes exception to the personal cleanliness of the p tients, to the condition of their clothing and bedding, and, in a l degree, to the quality of their food. While the deputation v visiting the asylum, one of the Commissioners in Lunacy was a engaged in making his annual inspection, and it will be interest to hear what his views are on the different points complained for, if there be laxness and want of proper care in the manage of the Paisley Burgh Parochial Asylum, no time should be lost having matters remedied, and the District Board of Lunacy sho be empowered to move in the matter.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending March show that the death-rate in the eight principal towns during week was 25.1 per 1,000 of estimated population. This rate is 5 above that for the corresponding week of last year, but 2.3 be that for the previous week of the present year. The lowest m tality was recorded in Leith—viz., 18.4 per 1,000; and the highes Glasgow—viz., 28.9 per 1,000. The mortality from the seven m familiar zymotic diseases was at the rate of 4.4 per 1,000, or 0.1 bel

ıe rate for the previous week. Whooping-cough continues to be ıe most fatal miasmatic disease. From acute diseases of the chest, 51 deaths were registered, or 13 more than in the previous week. he mean temperature was 44.5°, being 0.8° above that of the week nmediately preceding, and 3.6° above that of the corresponding eek of last year.

GLASGOW OPHTHALMIC INSTITUTION.

HE fourteenth annual general meeting of the subscribers and supɔrters of this institution was held on the 12th instant, to hear the ınual report of the work done by the charity during the past velve months. It seems that in addition to a considerable number ' patients remaining on the books at the beginning of the year, 306 new cases have been admitted, of which number 2,929 were spensary patients, while 377 were admitted into the hospital ·r treatment. These figures show an increase of 59 in-door patients, ıd a decrease of 75 out-door ones, as compared with the previous ·ar. Of the 3,306 cases under treatment, 3,139 were cured, 95 reɔved, and 72 dismissed as incapable of further benefit. The ordiıry income had amounted to £1,140, and had almost sufficed to ver the expenditure. As is the case with the revenue of the lasgow Eye Infirmary, workmen's contributions rank very largely the amount of subscriptions received, no less than 252 workops having contributed during the past year.

HEALTH OF GLASGOW.

3. RUSSELL, medical officer of health, reports that during the rtnight ending March 3rd, there was 609 deaths registered, which ves a death-rate of 31 per 1,000 living. In the corresponding fortght of last year the mean temperature was slightly higher, the infall greater, and the death-rate 6½ per 1,000 less. There were 9 more deaths in this fortnight, and speaking generally it may be id that it has been one of general ill-health, as well as of special ·ality from the prevalence of zymotic diseases, especially whoopingugh and scarlet fever. Although there is no special diminution the mortality from whooping-cough for the fortnight, during the st week there have been only 14 deaths, the lowest number for veral months. The average age of the 46 fatal cases was 21¾ nths. There are at present in Belvidere Hospital 120 cases of rlet fever, 67 enteric fever, 41 measles, 31 whooping-cough, 19 hus, 6 erysipelas, 1 diphtheria, and 1 small-pox—in all, 286 ients, as compared with 297 this day fortnight, and 165 at the responding period of last year.

THE GLASGOW ROYAL INFIRMARY.

R. WILLIAM MACEWEN, the Chairman of the House Committee the Glasgow Royal Infirmary, has resigned his post. With this ignation, it is fervently to be hoped there will be peace in this titution for some time to come. For the last eighteen months, it been one scene of turmoil and strife, in which the Chairman of House Committee has taken a prominent part, by injudiciously posing the medical and surgical staff on questions that were rely for them to settle. We believe an attempt is being made to ng Mr. Macewen back as a manager. If this step be persevered it will be fatal to the best interests of the institution, as the ire staff, with an *esprit de corps* that is most commendable, are in plete unity as to future action. No one will for a moment deny t Mr. Macewen has done good service for the Infirmary; but, in *rôle* of Jupiter Tonans, he threatens to undo all he has ever ne. A special pleading, in the shape of a leading article in one of dailies, has appeared on his behalf. This article accused the dents of being insubordinate in their conduct, and unfitted for ir duties. To this they have replied, stating that no charge of conduct or breach of discipline had ever been brought against m, and that all of them, as graduates of a Scotch university, were ally qualified to administer chloroform. The visiting staff have remained silent as yet; but they are prepared, not only to state their case to the satisfaction of the contributors, but also to take immediate action if the necessity arises.

THE EDINBURGH HEALTH SOCIETY.

THE annual meeting of the members of the Edinburgh Health Society was held on the 10th instant. Among those present were: Professors Douglas Maclagan and Annandale, and Dr. J. A. Russell, one of the lecturers of the Society. It was stated that, since the origin of this society, two years ago, nearly 400,000 separate lectures had been sold. It is a pity, however, that there is a falling off in the voluntary subscriptions and members' subscriptions, when it is remembered that excellent work has been accomplished through this society, if one may judge from the crowded audiences that have listened to the lectures. The object of this society has always been twofold—primarily the delivery of the lectures, and secondarily the formation of a strong and widespread public opinion in favour of the observance of the laws of health both in public and domestic life. It is gratifying to know that the society has directed their attention to the site of the old Edinburgh Royal Infirmary, with the object of bringing about its preservation as an open public square or garden, which is much needed for the dense population in its vicinity.

THE NECESSITY FOR SEPARATE HOUSE-SANITATION.

IN the last number of the JOURNAL, we drew attention to the work of the Glasgow Sanitary Association, as embodied in its annual report, and to the great benefits it conferred on the community. Equally strong testimony of the good work being done by the Glasgow sanitary authorities has just been made public in a communication by Mr. Kenneth Macleod, the sanitary inspector, in which he gives details as to the conditions in which the drains were in 236 properties that were inspected and subjected to the smoke test. Of these, 229 were found defective, permitting the escape of sewer-air into the dwellings, and only 7 were thoroughly tight and efficient. Details are given as to the defects discovered, and they were nearly all entirely due to imperfect workmanship in the original construction of the drains and their connections, showing clearly the necessity for special supervision over every newly constructed system, and the prohibition of its use until thoroughly tested, and certified safe and complete by a competent officer appointed for that purpose. Some facts as to the presence or absence of disease in the houses examined would be of interest.

EXTRA PRACTICAL MEDICAL CLASSES IN ABERDEEN.

THE Medical Faculty and Senatus of the University of Aberdeen have resolved to recognise extra lecturers, who may be willing to give practical instruction in such subjects as cannot be conveniently taught within Marischal College. Three applications have been received and favourably entertained, viz., from Dr. M. Booth, for Diseases of the Larynx and Ear; Dr. Reid, of the Lunatic Asylum, for Insanity; and Dr. Simpson, Medical Officer of Health, for Practical Instruction in Public Health. We are glad to see that this University is so solicitous for the wants of its medical students, and all will hail this step as a move in the right direction. These classes are intended to be thoroughly practical, and will be held during the ensuing summer session. Thus additional facilities—long desired, and urgently wanted—are now to be supplied in a thoroughly practical and useful form. These classes are not classes which are required as "qualifying" for medical graduation, but are merely classes where opportunities are afforded to the student of becoming practically acquainted with certain accessory, yet important, departments of medical study. They will correspond to the short courses of instruction given by *privat docents* in the German universisies.

THE GLASGOW TOWNS HOSPITAL AND ASYLUM.

As mentioned in the JOURNAL of March 3rd, an unfavourable report was made by Dr. Littlejohn of Edinburgh to the Board of Supervision as to the site and construction of the Glasgow Towns Hospital and Asylum. A committee of the City Board have just made public a reply, in which they strive to minimise the strictures passed by Dr. Littlejohn on the building, and seem to hold firmly that it is unnecessary to incur the expense of new erections, as those now used may, with the needful alterations, be made quite suitable for the proper accommodation of the poor. It is right to state that this is not the unanimous view of the members of the board, some of them being in favour of entirely abandoning the present premises, and removing to a building in the country with better hygienic surroundings than the present ones. Amidst this conflict of opinions, there can be no doubt that the report of an independent and neutral person, such as Dr. Littlejohn, well versed in all sanitary matters, should carry considerable weight, and the Board of Supervision will act wisely if they insist on a final settlement of a point which has now for some time been frequently brought up, as to whether the present accommodation for the poor of Glasgow be in every respect suitable.

UNREPORTED INFECTIOUS DISEASE IN GLASGOW.

DR. RUSSELL reports as follows concerning a group of typhus cases centering in the southern district, which merit mention. "They illustrate well the sort of facts which pass from week to week under the official eye, and which gradually produce opinions in the official mind—opinions which, when exposed without the experience which begot them, or to persons ignorant of that experience, may appear unreasonable. On December 23rd, four cases of typhus fever were removed from an unticketed dirty house of two apartments on the south side. The householder had just recovered from an attack of what was thought to be enteric fever by the medical man who attended him. An endeavour was made to persuade him and the other members of the family—four in all—to go to the reception-house, but without success. The usual processes of washing and disinfection were carried out, but of course the personal clothing in use, and the persons of those remaining inmates were untouched. On January 11th, a child, and on 14th another, were removed to hospital, and disinfection again carried out. A baby had been given to a neighbour woman to mind. On January 22nd, her two grown-up daughters were removed to hospital. The father quarrelled with this neighbour about payment, and the baby was transferred to another neighbour, from whose house it was removed on January 30th, with typhus. On February 1st, six cases of typhus were removed from a house of three apartments, a few closes off in the same street. This house was presided over by one of those women who wash as seldom as possible, throwing cast-off articles into presses and below beds. No fewer than 707 such articles were turned out under the inspector's eye, and sent to Belvidere for washing, besides 93 mere filthy rags which were burned. They are friends of the original family, and the slightest whiff of typhus poison would take root in such a soil. A brother-in-law in the northern district, whose house is also dirty and untidy, is now ill with typhus; and his daughter has just recovered. There are thus eighteen cases of typhus, infecting five different houses, derived from one unreported case, of which at least twelve would not have arisen had the reception-house been accepted when offered."

IRELAND.

MEASLES is very prevalent at present in the county Limerick, more particularly in the Rathkeale district. The type of the disease, however, is of a mild character, and few, if any, deaths have taken place.

TESTIMONIAL TO DR. H. MACNAUGHTON JONES, OF CORK.

THE testimonial which is about to be presented to Dr. H. Macnaughton Jones, prior to his departure for Cork, promises to be very successful, as shown by the interest taken in it by the citizens generally, and a large number of contributions have already been received. The list closes this week.

HEALTH OF CORK.

DURING the four weeks ending February 24th, the total number of registered deaths amounted to 150, including 31 dying in the workhouse, and, therefore, outside the borough; and 168 births took place. The annual death-rate per 1000 inhabitants during this period, gives a total ratio of mortality equal to 25.0; but, deducting those who died in the workhouse, the urban death-rate will then stand at 19.0, from infectious diseases 0.3, an infant mortality of 3.0, and a birth-rate of 27.0. These figures contrast favourably with those for the corresponding period last year.

AMPUTATION AT THE SHOULDER-JOINT.

THIS operation was performed last week in the City of Dublin Hospital by Mr. Henry Gray Croly. The patient, a girl aged 20 years was admitted with ununited fracture of the surgical neck of the right humerus. The bone had been broken three times—twice by direct violence, and the third time the bone gave way in the act of pulling on a tight boot. Mr. Croly cut down on the fracture under the spray, drilled the ends of the bones, and wired them. The case was not a favourable one for the operation, inasmuch as the periosteum was separated to a considerable extent, and the ends of the bones were widely apart. Necrosis setting in, and extensive suppuration and hectic threatening the patient's life, amputation was decided upon. The patient is doing well, her temperature being normal on the fifth day. Strict antiseptic precautions have been adopted in this case.

COLLAPSE OF THE PROPOSED COMBINED EXAMINATION SCHEME OF THE IRISH COLLEGES.

THE latest proposal for a combined examination for a joint licence of the King and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland has, as we anticipated, collapsed. As we lately stated in the JOURNAL, a joint committee of the Colleges drew up a scheme, which was submitted to the Colleges. Clause 4 of this scheme provided, "That the colleges shall bind themselves not to grant separate diplomas, except to candidates who already hold, in the case of the College of Physicians, surgical diplomas, approved of by the College of Physicians; and in the case of the College of Surgeons, medical diplomas approved of by the College of Surgeons." The Council of the College of Surgeons declined to approve of this reciprocal clause, which the College of Physicians looked upon as the essential part of the scheme. Under these circumstances, the College of Physicians have declined to take any further steps for carrying out a conjoint examination scheme.

HEALTH OF DUBLIN: ANNUAL REPORT.

DURING last year, the births registered in the Dublin registration district numbered 10,073, being equal to 1 in 35, or 29 per 1,000; and the deaths 9,699, or 27.8. Omitting 238 deaths, being those of persons admitted into public institutions from localities outside the district, the death-rate for 1882 was 27.2 per 1,000. The deaths from zymotic diseases amounted to 1,389, being considerably above the number recorded for the preceding year, but much under the average for the ten years 1872-81. Omitting 22 deaths of hospital patients, the deaths from the principal zymotic diseases amounted to 1,19 or at a rate of 3.4 per 1,000. Measles caused 567 deaths, against 155 in 1881; scarlet fever 37, against 120; diphtheria, 31; and whooping-cough, 81. To fever, 248 deaths were attributed, the

less than in the preceding year; erysipelas, 50; and diarrhœa dysentery, 247. Phthisis caused 1,182 deaths; bronchitis, 1,444; umonia, 407; and croup, 61. Eight hundred and fifty-three hs of children were due to convulsions, against 813 in the pre- s year. Apoplexy caused 140 deaths; epilepsy, 30; other dis- s of the brain and nervous system, 453; liver-diseases, 139; ary diseases, 130; cancer, 198; mesenteric disease, 230; tuber- r meningitis, 152; and rheumatism, 44.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

SIDERABLE consternation has been excited among candidates he letters, testimonials, or licence of this College, by the issue formidable looking schedule to those candidates who had in- led to present themselves for examination next month. It is known that the Irish College lately adopted a new scheme of ation and examination, which is compulsory upon all students commence their studies now. It was not anticipated however, ven stated, as far as we know, that the scheme should be made spective. In fact it was announced that students who com- ced medical study prior to the session 1882-83, might present nselves either under the old or new system. Under the old sys- a student could present himself for examination on producing ficates of attendance on a recognised hospital for three winter three summer sessions—twenty-seven months. According to new schedule, candidates presenting themselves for examination April, must have been registered as medical students for forty- months. Such a regulation would have a serious effect, not only n all those third year's men who, under the old system, were g in for the examination in April, but also on a large number of nd year's men. Both classes entered the study of their profes- with the understanding that they could obtain the licence of College after three years' study. They now suddenly find that dditional year of study has been placed upon them, Several ings of students have been held with the view of taking steps duce the Council of the College to alter this new regulation, with ence to which the following resolutions have been adopted at neral meeting of the Medical Students' Club: 1. "That this ting views with regret the action of the Council of the College urgeons with regard to their change of rules, seriously affecting ents entered under the old curriculum, and that we hereby offer n our sincere sympathy, and pledge ourselves to support them l lawful steps they may take to obtain redress." 2. "That con- ing the fact that their action will cause heavy pecuniary loss me, and to many little short of utter ruin, the present meeting ctfully requests the Council to consider their decision, and ad- those students to their examinations on the terms under h they commenced their professional studies." A very ly attended meeting of students was also held in the ichael College of Medicine on Tuesday, and a form of petition agreed upon for presentation to the Council at its meeting on sday, praying that those students who had joined the Royal ge of Surgeons under the old curriculum, might be allowed to nt themselves for examination on the same conditions as ofore. We have little doubt but that the Council will grant request, or possibly may have done so before this appears, as is reason to believe that the issue of the schedule, in as far as olied to students registered prior to July 1882, and now pre- g themselves for their final examination, was, probably, a ter on the part of some of the college officials.

ROYAL COLLEGE OF PHYSICIANS.

e extraordinary meeting of the College held March 13th, the es of the last meeting were confirmed. A letter from Sir r Watson was read, acknowledging the receipt of the resolu- of the College in reference to the death of his father. Dr. , Sir Henry Cooper, Dr. Balfour, and Dr. W. Ogle were admitted illors.

report of the Committee on Conjoint Examination was received dopted.

THE SIXTH DECENNIAL REVISION OF THE PHARMACOPŒIA OF THE UNITED STATES, AND THE PHARMACOPŒA GERMANICA, EDITIO ALTERA.

II.

IN the previous article, the history of the formation of national pharmacopœias for Great Britain, for the United States, and for Germany, was briefly reviewed, and the language and arrangement employed in each considered. The nomenclature now claims attention.

First, as to the names of substances having a definite chemical composition. As early as 1871 (*Pharmaceutical Journal*, iii, 1, 801, 822, 862), Professor Attfield discussed, in a series of long papers, the nomenclature proper for chemicals in the pharmacopœia. He strongly advocated the adoption of an unitary system. This, however, was to be employed in such a way that, by making a few slight alterations in the termination of a few of the chemical names, a system of pharmaceutical nomenclature might be adopted, which, while perfectly harmonious with, should be quite independent of, scientific chemical nomenclature, and so should possess the greatest elements of permanence. The proposed changes were, chiefly, that the compounds of the alkali metals and alkaline earth-metals, instead of being named, as hitherto, on two distinct systems, should follow but one; that, instead of salts of potassium and potash, there should be salts of potassium only; instead of sodium and soda, compounds of sodium only; and so with preparations of ammonium, lithium, calcium, magnesium, and aluminium. Exceptional alterations were also proposed, such as oxyacetate of lead for subacetate of lead, tartrate of antimony and potassium for tartarated antimony, oxynitrate of bismuth for subnitrate of bismuth, etc. This plan has been practically, but not quite entirely adopted throughout in the *United States Pharmacopœia*. In our own, we still use a system of nomenclature which would seem to indicate that while, in some salts there is a direct combination between a metal and various elements, in others—viz., the oxygen salts—the oxide of the metal is concerned; thus, sodii chloridum, sodæ carbonas; potassii iodidum, potassæ chloras; calcii chloridum, calcis phosphas; etc.; the names soda, potash, lime, etc., having been used since the discovery of the metals of the alkalies and of the alkaline earths, to designate the oxides of the respective metals.

In the *Pharmacopœa Germanica*, the names for chemicals are very different from those in use either in England or in the United States; for, though such alteration has been made that the metal rather than the oxide is indicated as being concerned in combination, the name representing the particular salt must seem peculiar to any but German eyes; thus, when a metal and a radicle free from oxygen are combined to form a salt, the name characteristic of the salt terminates in *-atum;* but, when oxygen is present, the names end in *-icum;* thus kalium brom*atum* stands for our bromide of potassium, kalium ferrocyan*atum* for our ferrocyanide of potassium, and kalium permangan*icum* for our permanganate of potash. The following short comparative table will illustrate what has been stated.

Common English Name.	*British Pharmacopœia*, 1867.	*United States Pharmacopœia*, 1863.	*United States Pharmacopœia*, 1873 and 1882.	*Pharmacopœa Germanica*, 1872.	*Pharmacopœa Germanica*, 1882.
Iodide of potassium.	Potassii iodidum.	Potassii iodidum.	Potassii iodidum.	Kalium iodatum.	Kalium iodatum.
Nitre	Potassæ nitras.	Potassæ nitras.	Potassii nitras.	Kali nitricum.	Kalium nitricum.
Epsom salt	Magnesiæ sulphas.	Magnesiæ sulphas.	Magnesii sulphas.	Magnesia sulfurica.	Magnesium sulfuricum.
Dried carbonate of soda.	Sodæ carbonas exsiccata.	Sodæ carbonas exsiccata.	Sodii carbonas exsiccata (1873). Sodii carbonas exsiccatus (1882).	Natrum carbonicum siccum.	Natrium carbonicum siccum.
Phosphate of lime.	Calcis phosphas.	Calcis phosphas precipitata.	Calcii phosphas precipitata (1873). Calcii phosphas precipitatus (1882).	Calcaria phosphorica.	Calcium phosphoricum.

It will be seen that, in the *United States Pharmacopœia*, the gender of such words as carbonas, etc., has been made masculine in 1882. In some exceptional cases, the names of chemicals differ widely in

the three pharmacopœias; thus, tartar emetic is named antimonium tartaratum in the *British Pharmacopœia*, antimonii et potassii tartras in the *United States Pharmacopœia*, and tartarus stibiatus in the *Pharmacopœa Germanica*.

Some special alterations in nomenclature bring the *United States Pharmacopœia* into accord with those of Great Britain and Germany. Thus, glycerina, brominium, chlorinium, and iodinium, become glycerinum, bromum, chlorum, and iodum respectively. In the *British* and *United States Pharmacopœias*, translations of the Latin names of drugs and chemicals are appended in all cases, and, in many, synonyms follow (in the American volume, whenever the English name has been altered, the name used in the previous pharmacopœia is given); but, in the *Pharmacopœa Germanica*, no translations whatever of any Latin words are given throughout the whole book, and synonyms are relegated to a table at the end.

The methods of giving terminations to the names of alkaloids, and so-called neutral principles, differ in the three pharmacopœias, as the following table will show.

British Pharmacopœia, 1867.	*British Pharmacopœia* (translation), 1867.	*United States Pharmacopœia* 1882.	*United States Pharmacopœia* (translation), 1882.	*Pharmacopœa Germanica*, 1882.
Atropia	Atropia	Atropina	Atropine	Atropinum
Santoninum	Santonin	Santoninum	Santonin	Santoninum

It will be seen that neutral principles and alkaloids have the same terminations in the *Pharmacopœa Germanica*, that the *United States Pharmacopœia* gives the termination *ina* to alkaloids (a change from *ia* in the previous revision), and that, in the English names, *ina* is translated into *ine* (also a change from *ia* in the 1873 pharmacopœia).

In the vegetable materia medica, the generic name of the plant is commonly the whole official Latin name of the drug in the *United States Pharmacopœia*, excepting when more than one part of the plant is officially ordered. In such cases, the parts to be used are indicated in the Latin. In the *Pharmacopœa Germanica*, the parts to be used are indicated, and are placed first in the title, so that roots, barks, leaves, etc., are arranged in groups. In the *British Pharmacopœia*, the parts are indicated and come last, so that no such grouping occurs. Rheum, *United States Pharmacopœia*, corresponds to rhei radix, *British Pharmacopœia*, and radix rhei, *Pharmacopœa Germanica;* and aspidium, *United States Pharmacopœia*, corresponds to filix mas, *British Pharmacopœia* (an exception to the usual nomenclature), and rhizoma filicis, *Pharmacopœa Germanica*.

The *United States* and *German Pharmacopœias* omit all processes for the manufacture of substances having a definite chemical composition, including the alkaloids and so-called neutral principles, excepting that, in the *United States Pharmacopœia*, processes are given in cases in which different results would be produced by the adoption of different methods of manufacture. With regard to chemicals, in both volumes, the physical characters, tests of purity, the establishment of definite limits of unavoidable impurity, and tests for the absence of adulterants, and methods of assay, whenever the substance is capable of being usefully assayed, are given. In the *United States Pharmacopœia*, this is done the more fully; the object of each test is added in parenthesis, and many solubilities are given also in the descriptions. In the *British Pharmacopœia*, in addition to the physical and chemical characters, full details for the manufacture of chemicals are given, with few exceptions, such as methods for making acetic, glacial acetic, arsenious, benzoic, nitric, and sulphuric acids, prepared chalk, sulphate of copper, mercury, iodine, nitrate of potash, sulphate of potash, etc. It is manifest that many of these could not be conveniently or economically prepared on the small scale by the pharmacist.

Symbolic formulæ are given in the *British* and *United States Pharmacopœias* only, and, in each, two formulæ attached to every definite chemical body, the one according to the new notation, the other according to the old. All doses are omitted from the *United States Pharmacopœia*. In the *British Pharmacopœia* they are given, but with the special reservation that, the quantities stated under this head are intended to represent average doses only in ordinary cases for adults, and that "they are not authoritatively enjoined by the council, and the practitioner must rely on his own judgment, and act on his own responsibility, in graduating the doses of any therapeutic agents which he may wish to administer to his patients."

In the *Pharmacopœa Germanica*, the extreme doses only are appended to powerful drugs. In these cases, the single dose is mentioned, and, in addition, the amount that may be given in the twenty-four hours; thus, in connection with acidum carbolicum, the following statement is made: "Dosis maxima singula, 0.1; Dosis maxima pro die, 0.5." A table is also added, at the end of the book, of doses of powerful drugs, which must not be exceeded for internal use unless the prescriber attach the sign (!)

In the all important matter of weights and measures, there is, at the present time, the widest possible divergence between the systems adopted by the three pharmacopœias; and little or no progress seems to have been made towards uniformity. Avoirdupois weight only are used in the *British Pharmacopœia*, and the metric system is not official, except as giving alternative weights and measures in preparing volumetric solutions. The ounce avoirdupois equals 437.5 grains, and is somewhat inconvenient for prescribers, as there is no subdivision between the grain and ounce, and the ounce is not a simple multiple of the grain. The *British Pharmacopœia*, however, renders it optional for the physician in prescribing to use the symbols ℈ and ʒ, the former representing 20, and the latter 60 grains, if such should be found to conduce to accuracy or convenience. In the measurement of liquids, the imperial measure is used for the higher denominations, and the fluid-ounce, and its subdivisions into fluid drachms and minims, for the lower denominations. The imperial pint equals 20 fluid-ounces, and the fluid-ounce of distilled water equals 480 minims, and weighs one avoirdupois ounce, or 437.5 grains. Hence, it will be seen that the minim and grain of distilled water have nothing in common.

In the *United States Pharmacopœia* of 1882, the use of all measures of capacity, excepting in the case of fluid extracts, is abandoned. The committee of revision was directed by the Convention of 18 to adopt the use of parts by weight, in place of a system of arbitrary weights and measures; but the committee at that time did not carry out this direction; but in the *Pharmacopœia* of 1882, parts by weight are ordered throughout, excepting in fluid extracts. In these, one centimètre of the finished product is made to be equivalent to one cubic gramme of the material used. In the *Pharmacopœia* for 187 one fluid-ounce was made equivalent to one troy ounce of material. As the troy ounce and the fluid-ounce are not commensurate, this change causes the new fluid extracts to be about 5 per cent. weaker than those of the preceding pharmacopœia.

The following synopsis, in which metric, troy, and avoirdupois weights are quoted, shows the relation of the crude drug to the finished product when made by the process of the *Pharmacopœia* of 1882, and by that of the preceding one.

Weight of Drug.	Measure of Fluid-Extract. *Pharm.* 1882.	*Pharm.* 1873.
*100 grammes of drug make	100 cubic centimètres	94.9 cubic centimètres.
100 troy ounces of drug make	105.3 fluid-ounces	100 fluid-ounces.
100 avoirdupois ounces of drug make	96 fluid-ounces	91.1 fluid-ounces.

* *United States Pharmacopœia Preface*, xxx.

In the *Pharmacopœia* of 1872, troy weights (1 ounce = 480 gr.) were official; in the present one, they are simply mentioned in the preliminary notices "as being referred to by physicians in prescribing, and by pharmacists in dispensing medicines." The grain weights, however, still used in the directions for making pills where the quantities of ingredients ordered are for a definite number of pills, but here the equivalent weights in grammes are given side by side with the grain weights, thus:

PILULÆ ALOES ET MYRRHÆ.
Pills of Aloes and Myrrh.

	Grains.	Gramm.
Purified aloes, in fine powder, two hundred grains	200	13.00
Myrrh, in fine powder, one hundred grains	100	6.50
Aromatic powder, fifty grains	50	3.25
Syrup in sufficient quantity.		
	350	22.75
To make one hundred pills	100.	

The Committee recommends that, in abbreviation, the grain should always be written with a small initial letter, as gr.; and that grammes and cubic centimètres should be written with capitals as Gm. and C.c. respectively. In the new *German Pharmacopœia* parts by weight are used throughout, as in the previous edition, excepting in methods of assay, in which it is necessary to employ both weights and measures, when the metric system of grammes and cubic centimètres is, of course, employed. To sum up, the *British Pharmacopœia* still uses both measures of capacity and of weight, the first being imperial measure, and the second avoirdupois, and the metric system of weights and measures only as an alternative in the preparation of volumetric solutions. The *United States*

armacopœia no longer employs troy weights and wine measure, ich were official in the previous edition, but orders parts by ight generally. In some instances, however, grains are used, and others grammes and cubic centimètres; and the latter in all antitative determinations of quality or purity. The *Pharmacopœa rmanica* orders parts by weight in the preparation of all enicals, and the metric system exclusively in methods of ay.

As regards temperature, the *British Pharmacopœia* employs Fahrenheit scale only; the *United States Pharmacopœia* ommends the use of the centigrade thermometer, or, in absence, Fahrenheit's. All temperatures in the text are en in centigrade degrees, but in every case with the equivalent Fahrenheit degrees appended in brackets. The *Pharmacopœa rmanica* employs the centigrade scale only. Specific gravities to be taken at 15° Cent. (59° Fahr.), unless there is special refer- e to temperature, in both the *German* and *United States Phar- copœias.* In the *British Pharmacopœia*, they are to be taken at Fahr. In this respect, there is a change in the United States m 60° Fahr. to 15° Cent. (59° Fahr.).

REGISTRATION OF INFECTIOUS DISEASES.

the meeting of the Parliamentary Bills Committee on Wednesday, following resolution, proposed by Dr. ALFRED CARPENTER, and onded by Mr. NELSON HARDY, was unanimously passed:

'That the President of the Local Government Board be requested receive a deputation from the Parliamentary Bills Committee, for purpose of urging upon him that the local authorities should have the power of imposing the duty of compulsory notification medical practitioners."

Mr. Hastings's Bill will not come on for consideration until after ister, but it will be desirable for the Branches to take early and ective steps to make the wishes of the Association known in this tter to their Parliamentary representatives.

The resolution carried at the annual meeting at Worcester, on ich the Parliamentary Bills Committee are acting, is as follows:

'That the meeting earnestly desires compulsory notification of fectious disease, but it wishes to express its opinion that the com- sion to notify should be placed upon the householder, as his duty a citizen, and not upon the doctor."

A deputation on the subject, headed by Sir Trevor Lawrence, had interview on Monday last with Sir Charles Dilke, President of Local Government Board.

CONJOINT EXAMINATION.

REPORT OF THE COMMITTEE OF THE ROYAL COLLEGE OF PHYSICIANS, APPOINTED OCTOBER 26TH, 1882.

E Committee appointed by the College "to consider and report early as possible what combination the College can best enter o for examination purposes so as to secure for England, without ther delay, one complete pass examination board, which shall be isfactory to the profession, the Medical Council, and the Govern- nt," beg to report as follows.

At a meeting of your Committee, it was resolved, "that it is de- able, in the interests of the profession, and would be to the advan- e of the public, that the Royal College of Physicians and the yal College of Surgeons should combine to form a common joint mining board for granting their respective licences in medicine l surgery."

With this object, The President, Sir William Jenner, Sir Risdon nnett, Sir William Gull, Dr. Acland, Dr. Sieveking, Dr. Ord, and Registrar, were appointed as delegates to communicate with the horities of the Royal College of Surgeons, to consider and report your Committee under what conditions, if any, a combination uld be arranged for a conjoint complete medical and surgical exa- nation.

A communication was accordingly addressed to the Council of the yal College of Surgeons, inviting them (if they were still of the nion expressed in their letter of July 1880), to appoint delegates confer with those appointed by your Committee, on the subject of ombination between the two Colleges for examination purposes.

This invitation was cordially accepted by the Council of the Royal llege of Surgeons, and the following were named as their dele- gates: the President, Mr. T. Spencer Wells; the Vice-Presidents, Mr. Marshall, Mr. Cooper Forster; Sir James Paget, Mr. Erichsen, Mr. Savory, and Mr. Holmes.

The delegates representing the two Colleges held several meetings, and, on March 1st, presented to your Committee a report, comprising: 1. A scheme for constituting an examining board in England under the provisions of Clause 19 of the Medical Act. 2. Regulations relating to examiners and the conduct of examinations. 3. Regulations relating to professional education and examination. 4. Financial arrangements.

The report of the delegates appears to have been so carefully considered, and so entirely represents the opinions of your Committee, that they have adopted that report, and submit it to the consideration of the College.

SCHEME FOR CONSTITUTING AN EXAMINING BOARD IN ENGLAND, UNDER THE PROVISIONS OF CLAUSE XIX OF THE MEDICAL ACT, 1858.

The following scheme for constituting an Examining Board in England, by the Royal College of Physicians of London and the Royal College of Surgeons of England, has been submitted to the consideration of those authorities.

I. That a Board of Examiners be appointed in this division of the United Kingdom by the co-operation of the Royal College of Physicians of London and the Royal College of Surgeons of England; it being understood that, liberty being left to each College to confer as it may think proper its honorary distinctions, each of them will abstain, as far as allowed by law, from the exercise of its independent privilege of giving a qualification necessary for admission to the *Medical Register.*

II. That the Board be constituted of examiners appointed by the Royal College of Physicians of London and the Royal College of Surgeons of England, in such manner as they shall severally think fit.

III. That examiners shall be appointed to conduct examinations on the following subjects: 1. Chemistry and Chemical Physics; 2. Materia Medica; 3. Medical Botany; 4. Pharmacy; 5. Anatomy; 6. Physiology; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine; or on such subjects as may be hereafter required.

IV. That the appointment of examiners be apportioned according to a plan to be agreed upon by the two Colleges.

V. That a Committee of Management be appointed, to consist of three representatives from each of the two Colleges; and that no member of such committee be eligible for appointment as an examiner.

VI. That one representative from each College retire from the committee annually, but that the retiring members be eligible for re-appointment.

VII. That two representatives from each College constitute a quorum of the committee.

VIII. That the duties of the Committee of Management be as follows: 1. To arrange the examinations, in accordance with regulations approved by the two Colleges; 2. To appoint paid visitors of the first and second examinations; 3. To consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by either or both Colleges, and to report thereon.

IX. That there be three examinations on professional subjects.

X. That the fees for the qualifications of the two Colleges remain as at present.

XI. That each College pay the examiners whom it may appoint.

XII. That every candidate who shall have passed the final examination conducted by the board shall, subject to the by-laws of each College, be entitled to receive the licence of the Royal College of Physicians of London and the diploma of member of the Royal College of Surgeons of England.

XIII. That either of the Colleges shall be at liberty to withdraw from this scheme, and from the Examining Board to be constituted hereunder, at any time after five years from the 1st day of October, 1883, on giving to the other College one year's previous notice in writing, dating from the 1st day of October in that year, of its intention so to do; and that, at the expiration of the time limited by such notice, the College giving the same shall be released from all obligation to conform to the terms of this scheme, or to any rules or regulations which may hereafter be made for giving effect to it.

(Signed) WILLIAM JENNER, President of the Royal College of Physicians, London.

THOMAS SPENCER WELLS, President of the Royal College of Surgeons, England.

TESTIMONIAL TO MR. J. ERIC ERICHSEN, F.R.S.

A VERY large public meeting was held on Saturday last, in the Botanical Theatre at University College, London, on the occasion of the presentation of a testimonial to Mr. J. E. Erichsen, F.R.S., for many years Professor of Surgery and of Clinical Surgery in the College, and at the present time Emeritus Professor. Among those present were Sir Joseph Fayrer, K.C.S.I.; Sir Henry Thompson, Mr. Spencer Wells, the greater part of the staff of University College Hospital, many distinguished physicians and surgeons from other metropolitan hospitals, and a large number of ladies.

The chair was taken by Mr. John Marshall; and in the centre of the theatre was placed upon a marble pedestal the bust of Mr. Erichsen, which had been executed by Mr. Hamo Thorneycroft, for the subscribers to the testimonial fund. The same sculptor also executed the bust of the late lamented Professor Sharpey; and, as fine works of art, both busts are of equal merit.

After the reading of reports by the Secretary, Mr. Meredith, and the Treasurer, Mr. Marcus Beck, Dr. William Wood, in referring to his long friendship with Mr. Erichsen, spoke of the high reputation that surgeon had earned, not only by his skill as an operator, but likewise as the author of the great work on *Surgery*, which would be the most enduring monument to his fame. Dr. Wood concluded by moving the following resolution: "That the bust be presented to University College, as a permanent memorial of Mr. Erichsen's great and acknowledged services to the School of Medicine of University College, as well as to students of surgery in all parts of the world." The motion was seconded by Mr. William Adams, a former house-surgeon to University College Hospital, and carried unanimously.

Sir Henry Thompson moved, "That the surplus be now offered to Mr. Erichsen as a personal gift from the body of the subscribers, to be devoted by him to any purpose which he may himself select." Mr. Erichsen, he said, had made his appearance at a most critical period in the history of University College, and how well he had filled the chair of Surgery it was not necessary to say. The motion was seconded by Dr. Brodie Sewell, and carried unanimously.

The CHAIRMAN, in speaking in high terms of the bust, observed that he would not like to say that it was a case of calcareous degeneration, but it rather appeared to be an instance of marmorification, so perfectly did it reproduce the features of the original. Enveloped by the professional robe, it seemed as if the bust might be taken for the ghost of his friend, but he could assure the subscribers that no ghost had entered or had come out of the sculptor's studio. As to the artistic excellence of the bust, the audience might take his word for it that it was high; and, as he was neither a sculptor nor an expert, there seemed to be some judicial authority for setting a high value on his opinion; he thought he could detect the refined artistic sense, and sympathetic touch of the artist whose mind alone had conceived, whose hand alone had executed, the bust that stood before them, his friend Mr. Hamo Thorneycroft. The Chairman then formally presented the bust to Mr. Talfourd Ely, who, as Secretary of the Council of University College, represented that body. The Chairman then presented, with some congratulatory remarks, to Mr. Erichsen a portfolio containing the names of the subscribers, and a cheque representing the surplus of the fund.

Mr. ERICHSEN said that it would be idle to pretend that he was not highly gratified and deeply moved by the presentation of the testimonial, and by the words—the too flattering words—of encomium with which he had been referred to. The book which he held in his hand, the list of subscribers, containing as it did the names of old pupils, old colleagues, and old friends, was a testimony of priceless value. There was but one drop of bitter in the cup; he could not but regard such a testimonial as one of the milestones of life, which must bring home to the mind of the recipient the length of the path already trodden, and the short road which there yet remained to traverse. It seemed to say to him that his working days were over; it was a recognition of services rendered, offered to one from whom further services could hardly be hoped. But it was a great and enduring honour to reflect that his bust would find a place side by side with those of such men as Sharpey, Parkes, Liston, and Quain. To University College he owed a deep debt of gratitude; it was the institution which first threw open its appointments to the most meritorious, where first nepotism was disregarded, where promotion by purchase, direct or indirect, had never existed, and where no personal canvass of governors was permissible; to the operation of these regulations, he owed the possibility of embarking on the career which had been his. With regard to the surplus, he had determined to devote it to some object which would tend to increase the excellence of surgical knowledge and education among the students of the Medical School, and had decided to establish with it an annual prize for operative surgery, which should take the form of a surgical instrument case.

A vote of thanks to the Chairman was moved by Sir JOSEPH FAYRER, who briefly referred to the debt that naval and military surgeons owed to Mr. Erichsen for his great work. The motion was seconded in a few words by Mr. SPENCER WELLS, and the meeting broke up after a few words of thanks from Mr. MARSHALL.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 21st, May 21st, September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at Exeter Hall, Strand, London, on Wednesday, the 11th day of April next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 15th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at the Royal Hotel, Deal, on March 22nd, at 3 P.M. Dr. Davey of Walmer in the chair, who very kindly invites members to lunche at his house from 1 to 2.30 P.M. N.B.—The Walmer Station is most convenient for those proposing to lunch. Dinner at the Royal Hotel, Deal, at 5 P.M. A discussion on Acute Pneumonia (first card of Collective Investigation Committee

be led by Mr. Raven, Dr. Parsons, and others. The President will show s of Extroversion of Bladder and Spina Bifida. All published cards of Collective Investigation Committee can be had on application to T. WHITE-D REID, Honorary District Secretary, 34, St. George's Place, Canterbury.—ch 1st, 1883.

OUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meeting be held at Bridgend, on Wednesday, April 18th. Members desiring to read ers, etc., are requested to send titles to either of the undersigned by the end larch.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honor-Secretaries.

ORTH WALES BRANCH.—The thirty-third intermediate meeting will be held he Castle Hotel, Conway, on Thursday, March 29th, at 12 o'clock (noon). r the meeting, the members and guests will dine together. Notice of papers e read should be sent to the Honorary Secretary. Agenda—The subject of President's Address at the annual meeting will be continued and discussed ., Counter-irritation). Paper: Compound Fracture of Skull, etc., by J. F. fith, Pen-y-groes. Notice of Motion: "That the subject of Working Men's s be discussed at the Intermediate Meeting."—J. LLOYD ROBERTS, Honorary etary.—Denbigh, March 9th, 1883.

OUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting will eld at the Bush Hotel, Farnham, on Thursday, March 29th, 1883. Business: ussion on Collective Investigation of Disease. Elect Secretary for Collective stigation Committee. Dr. Pearse: Medical Ethics and Fees. Dr. Boxall: iseptics in General Practice. Mr. Napper: A Case of Compound Comminuted ture of the Skull.—A. ARTHUR NAPPER, Honorary Secretary, Broad Oak, leigh, Surrey.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

e fourth meeting of the District was held on the 9th ult., at 308, den Road, Mr. ERNEST HART in the chair.

ubercle.—Mr. Watson Cheyne read a paper on Tubercle; its logy and Modern History.

BATH AND BRISTOL BRANCH.

e fourth ordinary meeting of the session was held at the Grand ap Room Hotel, Bath, on Thursday evening, March 8th; J. K. NDER, M.D., President, in the chair. There were also present ty-three members and two visitors.

ew Members.—The following new members were elected:—gory Stock, M.R.C.S., Bristol; W. Fairbanks, M.D., Wells; A. ng, L.R.C.S., Bristol; J. P. Bush, M.R.C.S., Bristol; A. H. Boys, .C.S., Pill; G. G. D. Willett, M.R.C.S., Bristol; J. S. Kane, M.D., ondsbury.

t was mentioned by the Honorary Secretary, that the Local ncil had decided that the last meeting of the session should be oted to a discussion on "Pneumonia," and the work of the Col-ive Investigation Committee.

apers.—The following papers were read and discussed:

Mr. F. K. Green described a Case of Removal of Encysted oma of the Neck, and showed the specimen. Mr. F. Parsons made e remarks.

Dr. Kerr read a paper on Anæsthetics. Dr. Spender, Mr. kins, Mr. Gaine, Mr. Lansdown, Mr. G. H. Terry, and Dr. Mark-n Skerritt took part in the discussion which followed.

Mr. Freeman read a paper on a Case of Removal of Angioma Tongue, and showed microscopical sections of the growth. Mr. ig Smith made some remarks.

Mr. F. Richardson Cross read a paper on Periodic Squint in Adult.—March, 1883.

JAMAICA BRANCH: ANNUAL MEETING.

e annual meeting of this Branch was held on January 30th, ing been postponed from December 30th, in consequence of the mitous fire which had occurred in the town.

fficers and Council.—The following were elected:

resident: Arthur R. Saunders, M.B. *President-Elect:* M. Stern, .C.P.Ed. *Honorary Secretary and Treasurer:* M. Stern, .C.P.Ed. *Council;* J. Cargill, M.D.; C. Gayleard, L.R.C.P.Ed.; es Ogilvie, Esq.; J. C. Phillipps, M.D.; John Pringle, M.B.; D. oss, M.D,; and F. H. Saunders, Esq.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

e sixth ordinary meeting was held at the Medical Institute on ch 8th; Dr. DEWES in the Chair. Thirty-four members were ent.

ew Members.—Mr. Wright Wilson and Mr. T. W. Norbury were ted members.

he late Mr. Watkin Williams.—The PRESIDENT proposed, and Dr. FOSTER seconded, the following resolution, which was carried unanimously.

"That this meeting begs to express its sense of the loss the Branch and the Association have sustained in the death of Mr. Watkin Williams, who many years devoted himself to the work of the Branch, both as Treasurer and as one of its first members, and who was, moreover, one of the earliest and most loyal members of the British Medical Association."

Papers,—The following papers were read

1. Dr. SAVAGE read a paper on Abdominal Sections performed in 1882.—Dr. MALINS spoke on the paper, and thanked Dr. Savage for bringing an account of his cases before the Branch.—Mr. SAMPSON GAMGEE congratulated Dr. Savage on his successes, and on the candour with which he had commented on the question of treatment of wounds, putting aside his once favourite spray, and admitting that the great essential was to keep the wound clean and dry. On this matter Mr. Gamgee never had any doubt. He had from the first stood out against the fallacious applications of the germ-theory, and maintained that the vast majority of wounds healed perfectly under dry and unfrequent dressing, rest, position, and pressure. No new surgical theory was in question. The physiological and practical foundation of the pre-Hunterian school was unshaken; and no modern statistics had surpassed those of Alanson at Liverpool more than a century ago, Larrey's twelve recoveries after fourteen primary amputations at the shoulder-joint, and Syme's thirty-five recoveries after the ligature of thirty-six femoral arteries.

2. Mr. PRIESTLEY SMITH read a paper on the Defects in the Field of Vision, and gave a demonstration of a new Perimeter.—Mr. LLOYD OWEN and Mr. EALES spoke to the paper, and congratulated Mr. Smith on his instrument.

3. Mr. JORDAN LLOYD read a paper on a case of Operation for Fractured Patella.

CORRESPONDENCE.

THE NEW COLLEGE CONCORDAT.

SIR,—At a committee meeting at the Royal College of Physicians on Monday last, the report on the conjoint examination between the College of Physicians and Surgeons was hurried through with such haste, that no opportunity was afforded either for considering this important subject, or for obtaining answers even to the questions that were asked by some of the Fellows. A question was asked whether the colleges were acting in accordance with the law in their proposed plans, and to this important question no answer could be or was given. I myself, in common with other Fellows, was desirous of knowing whether the determination of the colleges "to abstain, so far as allowed by law, from the exercise of their independent privileges of giving qualifications necessary for admission to the *Medical Register*," implied that neither college would confer its qualification on a candidate except he pass the examination of the other college; or whether the College of Physicians would refuse its licence without an examination in surgery by the College of Surgeons of England to a Fellow of the College of Surgeons of Ireland; or whether the College of Surgeons in England would refuse its diploma to a graduate in medicine of the University of Edinburgh until he had passed an examination in medicine at the College of Physicians. It seemed to me at the meeting that most of those who took part in the discussion did not understand the full bearing of the question any more than yours, etc.

A PUZZLED FELLOW.

MEDICAL PROVIDENT SOCIETY.

SIR,—I have been greatly interested in the correspondence appearing in your columns in reference to the proposed Medical Benefit Association.

When the question was first mooted, I made a draft of a letter intended to appear in the JOURNAL, advocating the desirability of promoting such an association; but the principal points I then thought of have since been placed before the members of the British Medical Association, with the exception of one; and I shall not trouble you further, than suggest the advisability of giving the option to intending members to subscribe according to the amount

they are anxious to receive in the event of being incapacitated; as some members possibly would be content to receive £1 per week, whilst others would sooner provide for £5 per week. I shall be glad if you will kindly add my name to the list of those who are anxious to join.—Your obedient servant,

Aberayron, March 8th, 1883. EDWARD WILLIAMS.

SIR,—Be kind enough to add my name to the list for a Medical Provident Society, to which I shall be most happy to give my cordial support. Such an institution will certainly prove—if once established on a secure basis—an inestimable boon to the profession generally.—I have the honour to be, sir, yours faithfully,

JAMES DENHAM BRADBURN, F.R.C.S.Edin.

Eccles, Manchester, March 13th, 1883.

SIR,—In requesting you to add my name to the list of practitioners desirous of uniting to form a Sick Benefit Society for medical men, I beg to inform you that provision in time of sickness is a subject in which I have taken much interest; and that I have been making inquiries, during the past three years, of various Assurance companies, with results to the effect that those that had compensated during disablement from sickness had ceased to enrol members, or that disablement from accident only was compensated for by them.

I further learned that the chief point of objection to the extension of the working of existing benefit societies, so as to include medical practitioners, is the difficulty of supervision of cases among members of an association so widely spread, and possessing a tendency to resent any supervision whatever in their own cases, after having acted as a check (in the capacity of club-surgeons) on men of the working class, forming the majority of benefit societies.

From personal observation, I have concluded that persons of the middle or professional class, belonging to such societies, resent the slightest supervision or direction by officers appointed by the management committees with these objects in view, viz., the welfare of the funds of the societies, and the *proper* compensations for the various *disablements*. I have italicised above, because many men hold theories that they are not free from disablement until they experience the return of the vigour of youth, with which no benefit society can deal, except under the heading of "infirmity of age."

I would suggest that "district medical referees" be appointed, as in the working of the Railway Passengers' Accidental Assurance Company, who should be called upon by the management committee for reports on cases that appear too persistent, judging from the statements contained in the original declarations of sickness.

Wishing the formation and working of the contemplated sick benefit society for medical men success, so that we may no longer be termed an "improvident class of the community," I am, yours truly, GEO. A. RAE, Physician and Surgeon, Medical Officer of the Friendly Societies' Medical Institution, Devonport; and fully provided for, except with a locum tenens, during disablement through sickness.

77, Albert Road, Devonport, March 14th, 1883.

SIR,—I shall be glad if you would kindly add my name to the list of those who desire to establish the proposed Medical Benefit Society. It is a project which, I think, should meet with the unanimous support of practitioners. I know of so many cases where, in the case of illness of any length of time, families of medical men would be put to much inconvenience and straitened circumstances. A society such as the one proposed should, therefore, have the help of the more luxurious members of the profession as well, for we none of us know what may happen to any one of us.—Yours very truly,

Dudley, March 13th, 1883. FRANK S. GOULDEN.

SIXTH LIST.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. W. E. Stainton Stanley, Wellow, Bath; Mr. W. E. Green, Sandown, Isle of Wight; Dr. A. H. Bampton, North Hill, Plymouth; Mr. Hy. Heurtly Sankey, Littlemore; Mr. Wm. Pearson, Glasgow; Dr. C. A. Owens, Long Stratton, Norfolk; Mr. F. S. Manisty, Wrexham, Denbigh; James Parette, Bristol; Mr. James Stewart, Tarbert, Harris, N.B.; Dr. Samuel Warren, Hoylake, Cheshire.

*** The list is rapidly gaining in numbers; but several hundred adhesions should, we think, be enrolled as a preliminary to practical action, and we shall be glad to continue to receive names.

THE MEDICAL AND SANITARY DEPARTMENT OF OCEAN STEAM-SHIPS, AND THE POSITION OF SHIP-SURGEONS.

SIR,—Fourteen months have passed since first I called attention to this subject, and nearly three since an unequivocal resolution was unanimously adopted by the Manchester Medico-Ethical Association, and statements were published over my name of a nature so serious, that none can pretend to regard them as unworthy of notice.

These statements have been amply confirmed by the highest authorities. The medical journals are unanimous and urgent in warning voyagers of their danger, and demanding reforms unquestionably necessary in the position and status of surgeons employed on passenger-ships.

The daily press, also, widely recognising the grave public importance of the subject, has ably supported our views, and seconded our demands. We have not been opposed. Our statements and statistics have not been questioned, nor has anyone ventured to dispute the momentous conclusions we have drawn from them. It may, therefore, be assumed that upon all sides is admitted the truth of what has been asserted, and the justice and expediency of the remedial measures proposed; and, this being so, it may fairly be hoped that those responsible will need no further stimulus to institute reforms upon the lines indicated by those best qualified to judge. I wish, however, in prospect of soon leaving England to reside at New York, to repeat that I am now "able and ready to prove" every statement which has been advanced by me, if called upon to do so by any responsible person. I desire, also, to explain that our action in this matter is far from hostile to the shipping interests of this country; for defective as are English vessels in the particulars complained of, those of other nations—notably the Danish, German, and French—are far more so. And should the Board of Trade adopt in full the suggestions which have been offered, and institute a competent and independent "Marine Medical Service," for the special care of trans-Atlantic passengers, such a course will, no doubt, avert from English shipowners the more drastic remedies which may soon be applied to their foreign competitors in the emigrant-carrying trade. Popular feeling in the United States is intense upon this subject. Persons occupying high positions are deeply interested in it, and eagerly welcome any feasible scheme for the better protection of immigrants. It cannot, therefore, be doubted that, when it has been demonstrated that American citizens, and persons intending to become citizens, are subjected to grave dangers, through shortcomings in the medical and sanitary administration of Atlantic steamers, the Government at Washington will not hesitate to enforce upon these steamers whatever measures may seem to it necessary. It should be remembered that the United States alone is interested in the safety and welfare of these persons. It has been calculated that each one of them safely landed is equivalent to an addition of 2,000 dollars to the national wealth of the Republic. The helplessness of emigrants on ship-board—probably one-half of whom are aliens to the flag under which they travel—is easily understood; and, the sympathy of the court of inquiry and of the public press notwithstanding, the futility of their usually disconnected complaints in opposition to the hard swearing of ship-officials has been repeatedly demonstrated. Should the American authorities, therefore, insist upon every vessel bringing emigrants to the United States carrying an independent medical superintendent, appointed at Washington, responsible to the United States Government alone, and assured by it of the fullest powers in all matters affecting the health of the passengers, such a proceeding could not be questioned upon grounds of either justice or expediency; indeed, would but follow the precedent of our own colonies which have long since declared this the only guarantee that our own passenger laws should be faithfully observed throughout the voyage. That the American Government has full command of the trade, and ample power to legislate, as it may please, for vessels of any nationality carrying emigrants to its ports, is well understood by Liverpool shipowners, and has been unmistakably asserted by successive Acts of Congress—by none more emphatically than by the ill-advised, and, in many respects, ridiculous law of 1882. British shipowners who pay into the United States treasury a fine of 10 dollars because a British subject, who had never before left his native land, should chance to die upon their British ship, within half a mile of the British coast, will need little assurance that the Government, which has made and enforces this law, lacks neither power nor inclination to insist upon any precaution it may deem advisable for the protection of its own citizens.

It rests with our Government "to spare our national pride" in

iliation of more direct American interference in so important a nch of our national trade."

o far as I am aware, the principal Liverpool companies, although urally unwilling to increase expenditure, and objecting to a arine Medical Service" not immediately subject to themselves, are pared to meet this matter in an honourable and straightforward rit. It has, however, come to my knowledge, that one company been so puerile as to demand from each of its surgeons a letter, laring himself satisfied with the existing state of affairs. It has n already explained that each company has the power, and that majority not unfrequently exercise it, of dismissing any surgeon m their employment, without notice and without reason being igned. Under these circumstances, such a statement, manifestly orted *in terrorem*, would be entirely worthless as evidence; or e must consign the giver to that class of inefficients who are con- t to leave their work undone, and are "ready to accept employ- nt upon any terms." It is evident that those who would learn truth in this matter, must seek it privately, or from surgeons no ger connected with the sea-services. Further, it may be said that satisfaction of any particular gentlemen now in employment—xious although their professional brethren would be to promote it s not the object we have in view. We have asserted: that the rtality on Atlantic steamers is excessive; that the sanitary ar- igements are, without exception, far from perfect—often grossly fective; that the medical officers are appointed without due regard age, qualifications, professional experience, or character; that they denied such independent authority in sanitary matters as is essen- l to their efficiency as sanitary officers; that their responsibility these matters is entirely undefined; that they are not allowed requisite assistance for the proper care and treatment of the k; that the hospitals are usually insufficient, often ill-placed, l occasionally taken from the control of the surgeon, and de- ed to other purposes than the accommodation of the sick; that medical officer is generally allotted quarters without regard to health, personal comfort, or the possibility of efficiently discharg- his professional duties; that his tenure of office is uncertain at st, and often dependent upon the mere caprice of other officials; l, lastly, that his remuneration, on a par with the cook, steward, l fifth engineer, is monstrously unjust. If this Company be xious to do battle, let it produce a surgeon who will undertake to prove these statements, even one who will stake his knowledge of val hygiene upon the perfect sanitary condition of his own ship. shall be prepared to meet him.—I am, sir, your obedient servant,

J. A. IRWIN, M.A.Cantab., M.D.Dub., M.R.C.S.Eng.,
Late Honorary Physician to the Manchester Southern Hospital, etc.

83, Regent Street, London, and Adelphi Hotel, Liverpool, March 6th, 1882.

THE PARKES MUSEUM.

SIR,—In the process of the migration of this museum from iiversity College, London, to its new premises in Margaret reet, the whole collection has undergone a careful re-examina- on; this revision is now approaching completion, and the Council, ile regretting the delay in the reopening of the museum which has isen from this cause, believe that the increased efficiency and com- eteness will more than compensate for it.

My object in writing to you is to draw special attention to our brary. It is hoped that, within a short time it may become a presentative collection of works on sanitary science, and we would k all interested in the formation of such a library to present any orks on hygiene and the allied sciences of which they may be the thors; books, pamphlets, plans, and maps, bearing especially on e subject of Water Supply, in its geological, engineering, or alytical aspects, on Epidemiology, on the disposal of Sewage, on tal Statistics, and on Health-Resorts, will be welcome additions. n advance in the desired direction was made at the last meeting of e Council, on the 12th inst., when the offer from Mr. Ernest Hart, present to the museum, arranged and bound, a valuable collection the Health-Reports from all parts of the country, was gratefully cepted. The collection, which, I understand, is nearly complete r the last six years, will form in itself a library of reference in- luable in its way, and such as is nowhere else, so far as I am vare, available. We hope to be able to add, year by year, as they e published, the reports of the medical officers of health through- it the country.

The library already contains a considerable number of works of ference, and of plans, maps, and statistical tables. Some additions have recently been made, and we have to thank the United States Government, Dr. J. Tatham, of Salford, Dr. John James, Dr. G. V. Poore, and Messrs. John Taylor and Riddett, of Cannes, for recent gifts. Through the kindness of the Hon. Edward Erskine, C.B., formerly Plenipotentiary Extraordinary at Athens, and Minister at Stockholm, the museum has become the possessor of a number of pamphlets, drawings, and photographs, sent by Dr. Geisse, of Ems.

The museum contains a large and well-lighted reading-room, to which members will have access, and which will be supplied with periodicals and works of reference.

Mr. Edwin Chadwick, C.B., the veteran pioneer in sanitary science, has shown his interest in the work of the museum by offering to present a medal.—I am, etc., DAWSON WILLIAMS, M.D.,
Honorary Secretary.

The Parkes Museum,
74A, Margaret Street, Regent Street.

RENAL INADEQUACY.

SIR,—There is probably a printer's error in the statement of your leading article, that sufferers from this condition excrete only 1.3 grains of urea *per diem*; but my object in writing is not to point out this, but to direct attention to what appears to me to be the really novel feature of Dr. Clark's observation, and one of which, I think, he has failed to give us quite sufficient evidence. It is, in fact, this diminution of the secretion of urea. It is well known that, according to the best authorities (Bartels and Grainger Stewart) who have investigated the point, in that most insidious malady, the contracting form of Bright's disease, the excretion of urea is generally normal, in spite of the low specific gravity of the urine, the relative diminution of urea being compensated for by the increased quantity of that secretion. It is only when, from any cause, the urine is diminished, that the excretion of urea falls in amount. Obviously, therefore, Dr. Clark's patients are not cases of contracting kidney, unless he has happened to come upon a certain number of such cases during a period of temporary urinary reduction. In fact, he asks us to accept the doctrine that these patients possess kidneys which, although free from structural change, are functionally far inferior to most kidneys in a very advanced state of chronic organic disease.

This is a view which I, for one, cannot at present accept. I recognise a class of patients very similar to those whom Dr. Clark describes; it is very large and frequently to be met with, and the line of treatment indicated by Dr. Clark, namely, the diminution in the quantity of diet more especially, is of much importance, as was recognised years ago by Prout, who writing of such cases said, "the error of quantity is of infinitely more importance than the error of quality. Any stomach can digest a little of anything, but no stomach can digest a great deal of anything. This is a maxim that ought to be universally borne in mind where diet is concerned, and in particular is of the very first consequence in the present diseases." But while recognising them, I have always regarded them as belonging to the great class of lithæmic patients of whom Dr. Murchison wrote so well, and so many of whom ultimately became the subjects of the contracting form of Bright's disease. That the pathology of such cases is not satisfactorily explained by Murchison or by any one else, I am quite willing to admit. I know that the condition, though so easy to recognise, is far too vague and ill-defined. We subdivide such cases, no doubt, but these subdivisions are mainly at the wrong end, when the long continuance of the disease has brought about morbid changes, dilated heart, Bright's disease, cirrhotic liver, etc. I should welcome some indication for classification in the early stages, but I do not believe at the present time this can be done. One man is told he has gout, when he has never had gout, nor has he any family tendency to gout. Others are told that their heart, kidneys, or liver is at fault.

But such diagnoses are not calculated to raise the public estimate of professional intelligence. We can go no farther than that the processes of assimilation are defective, and do our best by careful dieting, and such aids to digestion as experience and physiological chemistry suggest to us, to maintain an equilibrium between the ingesta and the organs of digestion. For this purpose, I know no better rules than those laid down by Dr. Andrew Clark in his recent papers, for the attainment of this object; if the principle can be summed up in one word, it is moderation in diet, in exercise, in work, in all things.—I am, yours obediently,

ROBERT SAUNDBY, M.D.

47, New Hall Street, Birmingham, March 10th 1883.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 14th.

Medical Act Amendment Bill.—VISCOUNT CRANBROOK stated that he saw the Medical Act Amendment Bill down for second reading to-night. There were many public bodies in England and Scotland affected by the measure, who had hardly had time to consider its provisions; therefore he trusted the Lord Privy Seal would allow it to be postponed until after Easter.—Lord CARLINGFORD was understood to reply that he would postpone the second reading, to meet the convenience of the public bodies in question, until the first Thursday after the Easter holidays.

HOUSE OF COMMONS.—Thursday, March 8th.

Vaccination of Pauper Children.—Mr. HOPWOOD asked the President of the Local Government Board whether the order of the Local Government Board of January 27th, addressed to boards of guardians, did not recite, with approval, that "some boards of guardians have passed a resolution requiring the medical officer, subject to the exercise of his judgment as to making exception in particular cases, to secure the vaccination of all children born in the workhouse as soon as possible after birth;" whether the Local Government Board placed any and what limit of age before which a newly-born child should not be vaccinated; and whether the department was aware that its orders or directions formed no defence in point of law to the vaccinating officer on a charge of manslaughter by reason of too early vaccination.—Sir C. DILKE: I presume the honourable member refers to an order of January 27th, 1882, as there is no order under that date in the present year. The practice is as stated by the hon. member in the first paragraph.

Friday, March 9th.

Vaccination in the Army.—Mr. P. A. TAYLOR asked the Secretary of State for War whether every recruit on entering the army was compelled to be vaccinated without reference to any objection he might entertain to the operation, to the fact of his having been previously vaccinated, or to his having had the small-pox; and, if so, whether recruiting officers have orders to explain this fact before enlistment.—The MARQUIS of HARTINGTON: Every recruit without exception is vaccinated on entering the army. No orders are given to recruiting officers to explain the regulations as to vaccination before enlistment, but no case of objection has ever been brought to notice.

The District Railway Ventilating Shafts.—Mr. PULESTON asked the President of the Board of Trade whether, from a sanitary point of view, some action should be taken to prevent the emission of poisonous gases into the thoroughfares and gardens frequented by the public.—Mr. CHAMBERLAIN said he could not say what was likely to be the exact sanitary effect of the fumes in the immediate neighbourhood of the ventilators referred to, but he had no authority to interfere in the matter.

Monday, March 12th.

The Egyptian Medal for Female Nurses.—Dr. FARQUHARSON asked the Secretary of State for War whether the female nurses employed during the recent military operations in Egypt would receive the medal for the campaign.—Lord HARTINGTON: The medal for the campaign in Egypt is granted only to those who served in Egypt between July 16th and September 14th, 1882. The female nurses of the Army Medical Department who served in Egypt during that period have received the medal.

The Emigrant Ship Oxford.—Sir HENRY PEEK asked whether attention had been drawn to the ship *Oxford*, which sailed on January 25th, 1883, for New Zealand, with four hundred emigrants; but, having been dismasted in the Bay of Biscay, was towed into Cardiff about February 16th to refit; whether the emigrants had been sent to Devonport to await her refitting, and were there so crowded that three or four were compelled to sleep in one bed; whether several cases of typhus fever had occurred; and whether an allowance of 1s. 6d. per day was made to those persons lodging with their friends, and had such allowances been paid without deductions.—Mr. CHAMBERLAIN: My attention has been called to this ship *Oxford*, which took out between three hundred and four hundred emigrants. I am informed that typhus fever has broken out, and that two seamen are suffering from it. Of the total number of emigrants who returned in the *Oxford*, fifty-one returned to their homes, and some went into lodgings with their friends at Plymouth. It does not, however, appear that the disease was in consequence of overcrowding, as only one complaint has been received, and it is being investigated. The emigrants are entitled to their 1s. 6d. a-day, and, if any one does not receive it, he can at any moment apply to the Board of Trade office on the subject.—In answer to a further question, Mr. CHAMBERLAIN said that the typhus fever might have broken out in consequence of the failure of the water-supply.

Irish Wakes.—Mr. CORBET asked the Chief Secretary for Ireland whether his attention had been directed to a letter in the *Freeman's Journal* of March 6th, from which it appeared that a wake was allowed to be held for two days and nights on the body of a man named Bartholomew Roe, who died in St. Andrew's parish, Dublin of fever of a very malignant type, leaving a widow and eight young children; that the widow was struck down, and died in a few days that some of the children had taken the disease, and were now inmates of Cork Street Fever Hospital; and whether he would cause inquiry to be made with a view to preventing similar occurrences in future.—Mr. TREVELYAN: My attention has been drawn to this case and I have made inquiry on the subject. The facts are substantially as stated. The dispensary medical doctor, who, I am informed, is a newly appointed and inexperienced officer, cautioned the people against the holding of a wake. Further inquiry as to his action in the matter is being made. Active steps have been taken by the local sanitary authority to prevent any further spread of the disease.

Sale of Poisons.—In reply to Mr. WARTON, Mr. MUNDELLA said: It is the intention of the Government to introduce a Bill for the further regulation of the sale of poisons, which will include provisions respecting the sale of so-called patent medicines of a poisonous character. The Bill will be introduced in the other House of Parliament.

Oversizing of Cotton Cloth.—Mr. BROADHURST asked the Secretary for the Home Department whether he was now in a position to give a reply to the memorial of the cotton operatives for a medical inquiry into the system of oversizing of cotton cloth.—Sir W. HARCOURT: The facts placed before me are sufficient to justify medical inquiry being held into the effect upon the persons employed on this process.

Tuesday, March 13th.

Compulsory Vaccination.—Mr. P. A. TAYLOR asked the President of the Local Government Board whether, in the appointment of public vaccinators, the conditions and restrictions under which vaccination was to be enforced were made the subject of specific contract; and if he would provide means to make the terms of such contract as widely known as possible, so that, in cases where disease or death followed upon the operation, parents might have the satisfaction of knowing that all the precautions deemed necessary by the medical advisers of the Local Government Board had been scrupulously observed.—Mr. CHAMBERLAIN: The contracts with public vaccinators contain a provision that the vaccinations shall be performed in accordance with certain instructions to public vaccinators which were issued by the Privy Council in 1871. Copies of those instructions have been freely issued by the Local Government Board, and they will be quite prepared to furnish copies whenever they are applied to for the purpose. No further means of making the terms of these instructions known appear to the Board to be necessary.

Smoke Consuming Engines.—Mr. ASHMEAD-BARTLETT brought in a Bill (which was read a first time) to render the use of smoke-consuming engines compulsory on the underground railways in London.

Adulteration of Beer.—A Bill for better securing the purity of beer has been issued. It enacts that every person who sells or exposes for sale, by wholesale or retail, any beer brewed from or containing any ingredients other than hops or malt from barley, shall keep conspicuously posted at the bar, or other place where such beer is sold or exposed for sale, a legible notice stating what other ingredients are contained in such beer. Any person who sells or exposes for sale any such beer as aforesaid, without complying with the above enactment, shall be liable to a fine not exceeding in the case of the first offence twenty pounds, and in the case of the second or any subsequent offence fifty pounds. Any fine incurred under this section may be recovered summarily by any informer, and one-half of the fine shall in every case be paid to the informer. The term "beer" includes beer (other than black or spruce beer), ale, and porter. It is not proposed that the Act should extend to Scotland or Ireland.

MR. F. B. JESSETT, F.R.C.S. has, on the occasion of his leaving Erith, been presented by his friends with a testimonial consisting of a handsome hall chiming clock, an elegant vase on stand, accompanied with an illuminated address containing the subscribers' names. Some pleasing additions were also made by Mr. Jessett's friends to the consulting-room of his new residence.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.

A CORRESPONDENT writes:—Waste in bricks and mortar has come to be too commonplace an affair in reference to hospitals for any new instance of the kind to excite much wonderment, or even surprise. But the circumstances of the recent so-called extension of the Devonshire Hospital at Buxton, are sufficiently striking to warrant a description of them, if only for the purpose of showing how wrong-headed ignorant people of good intentions may be. To understand completely the history of the hospital, one must go back a good many years. The Buxton Bath Charity may be said to have had an existence extending over several centuries. We hear of it definitely for the first time as the "Treasury of the Bath," in Dr. Jones's account of the Buxton Waters, dated 1572, and an annual report referring to the year 1785 is still extant. There seems to have been no period at which the mineral waters of Buxton were not known and valued for their healing action upon rheumatic affections, and there is indirect evidence that, concurrently with the constructions erected to meet the requirements of the wealthy, there were always baths for the use of the poor. From sixteen poor patients thus relieved at one and the same time during the closing years of the last century, to the 300 poor persons relieved year by year, during a long period previously to 1859, the Buxton Bath Charity continued its useful work, the use of the baths and waters and pecuniary aid having been regularly afforded to the deserving poor. The abuses incidental to the boarding-out of the patients, and the absence of necessary comforts and appliances, induced the then Duke of Devonshire, in 1858, to give up, for the purposes of a hospital, half of a large pile of buildings originally erected for stables for the Buxton hotels, but before the opening of the railway not so much required for that purpose. The hospital thus constituted received first a hundred, and afterwards a hundred and fifty patients at a time, and performed a most useful work for something like twenty years.

But, in the year 1879, the governors of the Cotton Districts Convalescent Fund, seeking to assist a hospital that had been of so much benefit to the operatives of Lancashire, made it a grant of £24,000 for its extension and enlargement. From this moment, the financial troubles of the hospital began. It is to be remembered that the buildings in which it was situated were originally intended for stables, and had served as such since the beginning of the century. They consisted essentially of two-storied erections with upper floor being used as hay-lofts and sleeping boxes for the (stable-boys), ranged round an immense circular exercising ground measuring fifty yards in diameter, and girded by a number of massive columns. The half of these buildings not already made over to the hospital trustees, was, as the inscription states, "obtained" from the Duke of Devonshire, or, in plain English, sold by him for £5,000; and, instead of the whole place being razed to the ground, and rebuilt as a hospital conceived on proper principles, the existing building was gutted, and the hospital requirements made to adapt themselves to its very extraordinary shape.

The immense circular space in the centre was "utilised" as an airing and recreation ground for the patients; and, having of necessity to be covered in, a dome of Brobdignagian proportions has been built over it. The admirers of this dome point with pride to the indubitable fact that it is larger than any other dome that has ever been erected. The Pantheon is only 142 feet, St. Peter's at Rome only 139, and St. Paul's Cathedral only 112 feet in diameter; but the dome at Buxton Hospital is 150 feet in diameter. It may, however, be seriously doubted whether an "architectural ornament" that costs no less than five thousand pounds, and necessitates two miles of hot-water pipes to warm the hospital, is not rather an expensive luxury. The cardinal mistake of the extension—a mistake admitted by everyone outside the committee of management—has been the retention, as the pivot of the hospital system, of this absurdly large and utterly unneeded central hall.* All the rooms and wards are now made to ventilate into it; and though a colossal ventilator, nine feet high, has been placed at the apex, it can hardly be so useful or so wholesome for the purposes of a recreation ground as a much less pretentious and infinitely less expensive one would be built out of a properly constructed hospital.

The stable buildings, gutted, as already mentioned, and rearranged for the purposes of the hospital, have proved too awkward, in size and shape, to admit of the construction of proper day and sleeping rooms. The day rooms are too low in proportion to their size, and the sleeping rooms partake too much of their old hayloft character. There is, on the upper floor, hardly a room of reasonable shape, and all have gables and other devices for diminishing their cubic space. Moreover, the actual building work has been so disgracefully scamped, that every wall is stained with rain-soakings, and, on windy nights, the down draughts are so terrible that patients are almost blown out of bed. It is stated on authority, that it is no uncommon thing for the inmates to have to get up at night because the rain is dropping on to the beds; and this, in the case of sufferers from rheumatic complaints, is, as needs hardly to be said, especially serious. When the site was adapted for its new purpose, the precaution of concreting the foundations was not taken. Although it is stated that the contractor removed a considerable depth of earth from the surface, this was manifestly insufficient in the case of a site on a porous soil soaked for a hundred years with stable litter. Under these circumstances, it is not surprising to learn that a smell of stables is not an unfrequent characteristic of the air of some of the rooms in the hospital.

But the most serious error, from the point of view of the patients' recovery, has yet to be noted. Poor people come from all parts of Lancashire and other manufacturing centres to obtain the benefit which bathing in the Buxton waters will afford their crippled joints. Rheumatism, gout, sciatica, and neuralgia, with their allied maladies, are the diseases for which the hospital is set up; and its special purpose is to afford shelter, appliances, and the necessary medical supervision, whilst the water is exercising its curative effect. Not a hundred yards from the hospital, the healing spring is perpetually sending forth its water in vast quantities from rocky fissures in the limestone through nine openings within a few yards from one another. The water is the property of the Duke of Devonshire, who is credited with obtaining an income of close upon £10,000 a year from this source alone.* But from time immemorial the poor have had the use of the water free; and accordingly it might have been expected that advantage would have been taken of the munificence of the Cotton Famine Fund to pump the water into the precincts of the hospital itself, which might surely have been accomplished at the cost of a few hundred pounds. The great central space over which so much sentiment has been expended might then have been utilised for baths, to and from which patients might be taken from their own beds, without change of atmosphere or troublesome dressings. Not so. Money has, indeed, been spent in erecting a drinking-fountain and four separate baths a few yards from the spring; but the natural bath, to which the hospital patients have to go, remains, as before, at the rear of a back yard of one of the hotels, down an incline of dangerous steepness, and in a space so confined that it is practically useless for the purpose. Ten people can bathe in it at once, if they pack tightly together; but there are only two dressing-boxes, and no sanitary conveniences at all. To reach this delectable bath, as well as the drinking-fountain and the separate baths, it is necessary for poor crippled folk to dress, to walk down a steep road for (to them) a considerable distance, and to toil back uphill, with their pores all open, and their muscles relaxed by the effects of the warm water—for the spring maintains a constant temperature of 82° Fahr. The water must indeed be a powerful remedial agent, if it can do good under such conditions as these.

For all this, however, the authorities have not even the excuse of economy of expenditure. With abundant building materials at their very hand, and many other advantages, it may safely be predicated that, with the £24,000 granted them by the Cotton Famine Fund, a properly arranged and properly equipped hospital for the special description of infirmity which the Buxton waters benefit might have been erected. Yet the last annual report of the hospital tells us that, irrespective altogether of the £5,000 paid to the Duke of Devonshire for the site, the extensions have already cost close upon £29,000, and there is a disputed account open with the

* The following details of the size of the hall may assist in giving an idea of its magnitude. Total height from floor to roof of lantern, 93 feet; to top of ventilator, 102 feet; superficial area, half an acre; cubical contents, one million feet. It is capable of holding six thousand people, and, amongst its other attractions, it boasts a remarkable echo.

* It may be mentioned incidentally, as showing how illiberally the baths are conducted that, notwithstanding the water bubbles up in unlimited quantities, ready heated to a temperature of 82°, no less than half-a-crown is charged for a single bath, no reduction being made if a quantity be taken. It is true that one may bathe *coram populo* for a sum of two shillings, or may even immerse oneself in a dimly-lighted tank for a shilling; but the circumstances of many patients' maladies forbid this promiscuous assemblage. No reduction is made to people of straightened means, except at impossible hours; and, by a recent ukase, no tickets purchased during a particular month are available after the last day of that month! Can the ducal owner of the baths be a party to this handicapping nature in its efforts to solace its afflicted children?

contractor for the inevitable "extras" of £3,000 more. To provide for this extra drain, the committee have already had to sell £4,000 of their invested stock, and are preparing to sell more for the further expenses in connection with the extension that have not yet come into the account. Like most irresponsible people, they seem to regard it as no fault of their own that this waste of money has taken place. What is in its way as remarkable as anything in this almost incredible story is the small amount of supervision that the Trustees of the Cotton Fund—hard-headed commercial men—seem to have exercised over the expenditure of their grant.

THE NEW METROPOLITAN DISPENSARY MOVEMENT.

Sir Edmund Hay Currie, in presiding at Dalston, on the evening of March 1st, over a large meeting of working men, clearly pointed out the difficulties which the poorer classes of London have to face in obtaining good medical advice, and said that he hoped it would not be long before the Metropolitan Provident Medical Association had covered the whole of the metropolis with a network of their independent and self-supporting provident dispensaries. Then, he trusted, the large hospitals would see their way to give consultative advice to the members of those instituiions. No greater good could be done in London. By a very moderate regular payment, quite within their means, the working classes would be able to obtain good medical treatment without the risk of incurring a doctor's bill which they could not afford to pay. There were some very good private dispensaries, where advice and medicine might be obtained for one shilling per visit, but he regretted to say there were also many sham private dispensaries, some of which, he had been informed, only kept two kinds of medicine for every disorder. There were, in addition, numbers of men calling themselves "medical men," who had not the diplomas they ought to have to authorise them to practice. This condition of things led to very serious evils, and it was high time such frauds upon the working classes were entirely swept away. He had the highest opinion of the medical profession at large, and knew, from personal experience, that no class of the community gave away a greater amount of charitable assistance to the poor. The plan, therefore, of appointing medical men on the local dispensing committees was merely a just one, and would tend to strengthen the new system founded by the Metropolitan Provident Medical Association," and help it to become sound and practical.

The meeting was subsequently addressed by Mr. Allanson Picton, M.A., Mr. William Bousfield, member of the London School Board, and vice-chairman of the Association; the Rev. G. S. Hassard, M.A., vicar of Holy Trinity, Dalston; Mr. Gates, Mr. Lowles, Mr. Grimshire, Mr. Radley, and others, all of whom earnestly advocated the immediate establishment of a branch of the association at Dalston.

MILITARY AND NAVAL MEDICAL SERVICES.

Naval Medical Service.—The following appointments have been made:—Fleet-Surgeon—Duncan M'Nab Johnston, to the *Neptune*. Staff-Surgeon—William Middleton Power, to the *Hector*, *vice* D. M'Nab Johnston. Surgeons—William Henry Patterson and Maurice Murray R. Mackenzie, to the *Neptune;* John J. Dinnis, to the *Asia*, *vice* W. H. Patterson; Malcolm Vincent Stace, to the *Cambridge*, *vice* M. M. R. Mackenzie; Charles A. Macaulay, to Haulbowline Hospital, *vice* John Tyndall; Charles E. Geoghegan, to the *Warrior*, *vice* C. A. Macaulay; James M'Cardie Martin, to the *Superb*, *vice* Alexander R. Joyce; John Wilson, to Plymouth Hospital, *vice* R. J. Barry. Mr. Septimus Farmer has been appointed Admiralty-Surgeon and Agent at Gwithian, *vice* Dr. Thomas Sanctuary.

ARMY MEDICAL ORGANISATION.

Sir,—In your review of the second of two pamphlets under the above heading you quote the suggestions of the author, that all administrative officers should be styled Surgeons-General; that the rank of Deputy Surgeon-General should be abolished; that the administrative officers should hold office for only seven years; and pensions awarded purely for length of service, irrespective of rank. I fully concur in the above views. I would limit inspectorial rank to five years, except in the case of the Director-General, who should be selected from officers of this rank, whether on full-pay or half-pay, because he thus becomes more immediately connected with the War Office, and his sympathies are in accordance therewith. I would let all officers serve on as long as they are capable of serving, or of being of any use to the State; for half-pay appointments are onerous, without the *prestige* that appertains to those on full-pay. Elect, if you will, that fifty-five or sixty years of age shall be the maximum for active service abroad, but no half-pay should be compulsory except in cases of inefficiency or permanent retirement, for officers under th administrative grade. There are numbers of officers at the above ages quit capable of performing executive duties; and why should they be compelled t idleness, and the State reap no advantage from their knowledge and exper ence.—I am, sir, your obedient servant, Progress.

March 12th, 1883.

Army Surgeons and the Hospital Corps.—Some correspon dents write to us as if it were a settled thing that the army medi cal officers are to be deprived of the direction and control of the me of the hospital corps who are assigned to them for carrying out th nursing duties of the military hospitals. No good purpose woul be served by publishing the objections which are sent to us agains the separation, so far as exercise of authority is concerned, of medi cal officers from the men who have to act under them; for we hav no reason to believe that it has been determined to take any suc imprudent step as to make the separation. We are not in the secret of Lord Morley's Committee, and know nothing of the recommenda tions which the committee may have agreed upon as regards change in organisation of the Army Medical Department; but, from all w hear, we shall be rather surprised if it is not found, when the repo of the committee is made public, that the recommendations of th committee will have been in a direction towards consolidating, rath than weakening the connection between the medical officers and th men of the hospital corps. Certainly, anything like a severan of the existing relations between the medical officers and the nur ing staff would be a fruitful source of mischief and inefficienc but, as we have already said, we do not think any such unwise pr ceeding is contemplated.

Army Medical Department.—Surgeon-General John Sheld Furlong, M.D., has been granted retired pay. Surgeons-Maj James Mackay, M.D., and Lancelot A. White have been granted r tired pay, with the honorary rank of Brigade-Surgeon.

Surgeon John Wyer, late 19th Foot, has died from exhausti the result of gastric catarrh, induced by cold. Surgeon Wyer, w was a pupil of Sir Anthony White, and afterwards served under S Stapleton Cotton at Salamanca, Vittoria, and in the Pyrenees, w one of the oldest members of the Army Medical Department, and t oldest member of the Royal College of Surgeons. He held a goc service pension of £100 *per annum*, conferred upon him in 1879.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

SANITARY RESULTS AT GREENOCK.

Mr. George A. D. Mackay, the energetic sanitary inspector Greenock, has collected some interesting facts showing the dim nution in the death-rate of that town, in consequence of the sa tary improvements that have of late years been undertaken by t local authorities. Prior to 1876, when the authority sought par mentary powers to carry out a scheme of town improvement, ma of the older parts of the borough were simply hotbeds of disease, a sources of very great expense to the community. In many of e closes and blocks of buildings, the mortality was appalling, rang from 40 per 1,000 to 67 per 1,000 on an average of ten years. T general mortality of the whole town was very high—higher, inde than that of any other town in Scotland. Under these circu stances, the local authority sought and obtained, in 1877, an Act Parliament with special powers for police and sanitary purpo which, although often referred to before in these columns, are t so unusually comprehensive and searching as to merit repetition their entirety. They include the notification, on the part of ev householder, to the sanitary inspector, of the occurrence of any ca of infectious disease in his house within twenty-four hours of s being ascertained to be such, under a penalty; the right of the l authority or of its executive officers to prevent the distribution sale of milk in the town from any farm within the bounds of Re frewshire on which a case of infectious disease has appeared, unl they are satisfied that the arrangements in respect of the pat are such as not to endanger the public; the right to remove to reception-house the unaffected members of any household in wh fever or other infectious disease makes its appearance, when, in opinion of the medical officer of health, it is expedient in the pu interest; the right to license and regulate houses let in lodgi the right to measure and ticket small houses, with the view of pre venting overcrowding therein; the right of the sanitary inspect to

upon any occupant of a house who keeps the same in a dirty or holesome condition to cleanse and purify it, under a penalty in of non-compliance with the requisition; and many other useful lations.

ie beneficial results of the discriminatory exercise of these ers have been abundantly manifested. The mean annual mor- y of Greenock, which in the twenty-one years from 1855 to 1875 31.24 per 1,000 of the population, declined to 24.00 per 1,000 for five years 1876 to 1880, and to 22.14 for the year 1881, which is lowest on record. The difference, therefore, in the rate of mor- y between the last five years of the past decade and the pre- ng twenty-one years was as much as 7.24 for every 1,000 of the ılation, which represents at Greenock a saving of 2,310 lives in years. This decrease is, as might be expected, largely due to liminution in the number of deaths from the infectious group iseases. Taking the total deaths from the fourteen zymotic dis- s, they were in the last five years 621 fewer than in the five s 1857-61, 1,454 fewer than in the five years 1862-66, 920 fewer in the five years 1867-71, and 1,123 fewer than in the five years -6, notwithstanding the great increase in the number of the ılation. Mr. Mackay and his local authority may well be encou- d by such figures as these.

HE ANTIVACCINISTS ON DR. BUCHANAN'S REPORT.

statement by Dr. Buchanan, in his recent report to the Local ernment Board, as to the saving of infant life effected by vac- tion, has revived an old argument of the antivaccinists. It is ged by some of these that, while vaccination may have dimin- l the death-rate from small-pox, it has, at the same time, in- sed the death-rate from such other diseases as syphilis and fula. The deaths among children from these diseases have, it ointed out, steadily increased concurrently with the diffusion of ination; and it is hence concluded that the increase has been ed by vaccination. *Post hoc ergo propter hoc* is an argument h seems to be in great favour among the antivaccinists—and, ed, among all who ride an "anti" hobby—but it hardly approves f to unprejudiced minds. The fallacy, in the instance in ques- , is a very glaring one. That the infantile death-rate from small- has enormously diminished concurrently with the spread of vac- tion is a fact admitting of no denial, whatever explanation may iven of the fact. But the children thus rescued from death from ll-pox are not exempt from death from other diseases. Hence, rge additional population are now exposed to other infantile ases, and, as a natural consequence, the death-rate from these ases has increased. In the same way, if a prophylactic were overed for scarlet fever, and put generally in practice, there ld be, concurrently with the decrease in the scarlet fever deaths, ncrease in the death-rate from other infantile diseases over h the prophylactic had no influence. But the increase in the r could not be ascribed, except indirectly, to the prophylactic; neither can the actual increase in the diseases specified be ed to the discredit of vaccination. There is not a tittle of evi- e to show that vaccination gives rise directly to any of the dis- s in question; and it is absurd to ascribe such a direct influ- to it on the ground of the increase in the general death-rate other infantile diseases. That it has an indirect influence of nature we have described, is a necessary result of its efficacy as otection against small-pox, but that indirect influence is cer- ly no reason for abandoning the operation. The antivaccinists ly do not mean to demand that a known prophylactic against disease (and that one of the most virulent type) shall not ut in practice till a prophylactic be discovered also for all other ases.

THE CASE OF DR. DUNLOP.

following resolutions were passed at a meeting of the Council he Poor-law Medical Officers' Association, held on Tuesday, ch 13th.

That this Council begs to express its sincere sympathy with Dr. lop, the Medical Officer of St. Pancras Workhouse, in the un- ted persecution to which he has been exposed in the recent ecution for manslaughter; and that this Council further expresses atisfaction that the St. Pancras Board of Guardians should have eadily undertaken his defence, whereby Dr. Dunlop was saved a severe pecuniary liability.

The Council also desire to thank their Chairman, Dr. Joseph ers, for the public spirited manner in which he aided Dr. Dunlop is defence.'

REPORTS OF MEDICAL OFFICERS OF HEALTH.

STRATFORD-ON-AVON COMBINATION.—We have seldom read a report which better fulfils its object of instructing and guiding sanitary authorities in the performance of their duties than Mr. Fosbroke's report for 1881. It is admirably simple in style, and so cunningly arranged that the non-professional reader can read it without much mental effort, and even with a certain interest. It is of course hopeless to expect that all health-officers will be so energetic and diplomatic as Mr. Fosbroke. The record that Mr. Fosbroke gives is an eminently encouraging one, not only for his own district, but for others less fortunately circumstanced at present, as showing what real progress may be made without any very vast expenditure of money, but simply by both authority and officer steadily pursuing their duties. The report is so far incomplete that the boroughs of Evesham and Stratford-on-Avon are, for reasons that do not appear, omitted; but Mr. Fosbroke does his best, in the absence of statistics as to these places, to present as complete a picture as possible of the disease and mortality in the area under his jurisdiction. The death-rate for the Stratford-on-Avon district (population, 14,439) was 12.8 per 1,000, a considerable decrease on the rates of previous years. A similar result is reported with regard to Alcester, with a population of 17,317, and a death-rate of 15.2 per 1,000. In the Evesham district (population, 10,158) there was an increase in the death-rate, which was 15.3 per 1,000 for 1881 against 11.6 and 15.7 respectively for the two previous years. Upon the whole, the mortality from all causes exhibits a gradual but persistent decline. As regards zymotic diseases, Mr. Fosbroke reports that each of the districts experienced an exceptional immunity from measles, not a single death being registered from this disease. Scarlatina, however, was prevalent in several villages, and caused five deaths. Mr. Fosbroke regrets that the unprofessional part of the community do not understand the meaning of the term, that this term and scarlet fever are synonymous. In the Evesham district, where the disease was most fatal, imperfect isolation led to the spread of the infection. At Alcester, although there were seven apparently disconnected outbreaks, only fifteen families were invaded. Not six of these were limited to single households. This limitation of the disease to single families affords conclusive evidence of the value of the local sanatorium. Had this not been in existence there seems little doubt that scarlatina would have assumed serious proportions in the neighbourhood, and probably terminated fatally in several cases. Diphtheria is credited with six deaths, four of which occurred in Alcester, where the disease was of a comparatively more malignant type than in the other districts. Most of the cases were associated with local insanitary conditions, but one or two occurred in houses of the healthiest description. Mr. Fosbroke has nothing new to say in regard to this prevalence. He found, however, that family susceptibility was in one or two instances well marked, and there was decided evidence of antecedent "sore throat" in one family, which corroborates the opinion advanced by Dr. Thorne Thorne, and supported by Mr. Fosbroke, to the effect that "sore throat" may, under certain circumstances, by "progressive development" result in diphtheria. But few cases of typhoid fever occurred during the year, the total "fever"-rate for the combination being 0.11 per 1,000, Eleven outbreaks of typhoid fever were dealt with during the year, and in five of these the disease was contracted outside the combined district. Whooping cough caused eight deaths, and diarrhœa eleven, and none of these latter were due to defective sanitary conditions. Small-pox was imported into the combination, and owing to the absence of immediate isolation accommodation, the disease was communicated to fourteen persons, one of whom died. Mr. Fosbroke speaks in high terms of the arrangement by which medical men practising in the district notify cases of infectious disease upon payment of a fee of half-a-crown. In consequence of this notification he inquired into no less than 163 cases of such diseases, which occurred in the combination during 1881. In alluding to the question of isolation accommodation, attention is directed to the value of the Alcester sanatorium in suppressing the epidemic of scarlatina there; and Mr. Fosbroke again advocates the erection of similar institutions in Stratford-on-Avon and Evesham, or the combination of these districts with that of Alcester. In the matter of sanitary improvement, there is evidence of much solid work having been accomplished during the year. Although Mr. Fosbroke has no great extension of the public water-supply to report, he states that more polluted wells were dealt with in 1881 than in any year since the Public Health Act became law. Numerous improvements have been made in house drainage, particularly in securing efficient ventilation An examination of some of the larger houses in the district led

the discovery of some remarkably unhealthy conditions. The adoption of a code of by-laws to regulate the erection of buildings is recommended as the most efficient mode of checking the numerous evils which arise from the faulty construction of houses.

BOLLINGTON.—During 1881, there were 134 births and 67 deaths registered in this district, equal to rates of 33.8 and 16.91 per 1,000 respectively. The last census returned the population at 3,962, an increase of 296 upon the census of 1871; and Mr. Allen thinks that the published mortality returns for the past few years have not appeared in as favourable a light as circumstances would have warranted. In 1880, the death-rate was 23.73; in 1879, 21.27; and, in 1878, 19.91; in 1877, 18.54; and, in the previous year, 23.73. These calculations appear to have been based upon the previous census, when the population was 3,666; but Mr. Allen does not appear to have estimated, from year to year, the population of his district, so that the discrepancy is readily explained. Only 5 deaths were registered from zymotic causes, including 3 from whooping-cough, 1 from croup, and 1 from diarrhœa. The death-rate from these causes was 1.3 per 1,000 against an average rate from the same class of disease of 2.7 for the last five years. The prevalence of scarlet fever in the district leads Mr. Allen to remind his authority of the urgent need of a disinfecting apparatus. Scavenging was fairly carried out; but the health-officer is of opinion that the condition of his district would be considerably improved if the whole of the ashpits could be swept away, and the pail system adopted instead.

STALYBRIDGE.—Mr. Roberts-Dudley's report for 1881 is far too meagre for a borough which, according to the recent census, possesses a population of 23,889 souls, and, moreover, what information is afforded is statistical only. During 1881 there were 773 births, and 542 deaths registered, equal to rates per 1,000 of 32.65, and 22.68 respectively. The death rate was somewhat higher than in the previous year, but Mr. Dudley comforts his authority and himself, by stating that it is small when compared with the average rates of other towns. The fatal cases from zymotic causes were, however, much fewer than in 1880, when 75 deaths were registered. Of the 59 which occurred during the past year, 9 were from scarlet fever, 16 from whooping-cough, 27 from diarrhœa, 5 from doubtful fevers, and one each from typhus and typhoid. The report contains no account of the cause or spread of these diseases, while the sanitary condition of the borough is dismissed with a statement of the current work performed by the nuisance-inspector.

WORTLEY RURAL DISTRICT, No. 1.—Dr. Drew, in a valedictory report to the Sanitary Authority, states that the district has an area of 21,000 acres, and a population (by last census) of nearly 17,000 persons. It has been under Dr. Drew's care, as medical officer of health, since April, 1873. During the two and a-half years next following that date, the annual mortality of the district averaged 24 per 1,000; during the two and a-half years last past, the average annual mortality has been only 17 per 1,000. This means that if the former rate of mortality had persisted yet, 119 persons would die annually who now live. This great saving of life and prevention of disease may be fairly attributed to the sanitary measures adopted by the sanitary authority, and to the diligence of their officers, conspicuous amongst whom is Dr. Drew himself.

OBITUARY.

JOHN JAMES HILL, J.P., L.R.C.P.ED., etc., LAMBTON, NEW SOUTH WALES.

MANY old friends and fellow students would learn with regret, from the BRITISH MEDICAL JOURNAL (January 6th) of the death of Dr. J. J. Hill, which took place on December 19th, 1882, at Lambton, near Newcastle, New South Wales, and was telegraphed to this country.

From further particulars received by the last mail, it appears that the cause of his death was an attack of apoplexy supervening upon an illness of three weeks' duration.

Dr. Hill, who was the eldest son of the Rev. R. Hill, B.A., vicar of Royton, Lancashire, was born at the Vicarage, Potterspury, Northamptonshire, in November 1843, and had, therefore, just completed his thirty-ninth year. He studied at the Andersonian University and Royal Infirmary, Glasgow, and shortly after obtaining the double qualification in 1865, proceeded to Australia as Surgeon-Superintendent in the Emigration Service; and, after practising for a short time in Melbourne, settled at Lambton, near Newcastle, New South Wales, the principal colliery district of Australasia, where he conducted a very large and lucrative practice for about fifteen years, and became well and widely known. He had been a magistrate for the colony for many years, and was, at the time of his death, filling for the second time the office of Mayor of Lambton. He was also a member of the Royal Society of New South Wales, Honorary Surgeon to the Newcastle Hospital, Government Medical Officer for the district, and Surgeon to the collieries and other works.

Of a very generous, humane, and kindly disposition, an able surgeon and skilful operator, and possessing an extensive knowledge of his profession in all its branches, his loss will be greatly felt in the district in which he lived, and where he took a prominent and active part in all public affairs. By his death, the poor have lost a friend who was always ready and willing to assist them when in need, either professionally or otherwise. His memory will long live with kindly affection in the hearts of his mourning relatives and friends.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

CLINICAL LECTURESHIPS.—The Hebdomadal Council on March 13th elected Edward B. Gray, D.M., of Exeter College, Senior Physician to the Radcliffe Infirmary, as Lichfield Clinical Lecturer in Medicine; and Alfred Winkfield, F.R.C.S., Senior Surgeon to the Infirmary, as Lichfield Clinical Lecturer at that institution. These lectureships have been created in place of the clinical professorship which was some time since resigned by the Regius Professor of Medicine, Dr. Acland.

SCIENCE GRANTS.—Convocation has passed a series of money votes: one of £500 for three years, for the general purposes of the Bodleian Library; another of £1,500, for apparatus for the use of the new Professor of Physiology (Dr. Burdon Sanderson); and a third of £7,500, for an annexe to the University Museum, and the necessary fittings for the reception of the anthropological collection presented by General Pitt-Rivers to the University on condition a shelter being provided for it.

RADCLIFFE TRAVELLING FELLOWSHIP.—Mr. G. A. Buckmaster, B.A, and late Natural Science Demy of Magdalen College, has, after examination, been elected to the above fellowship. Mr. Buckmaster also gained the Burdett-Coutts Scholarship in 1882. The fellowship is of the annual value of £200, tenable for three years; the Fellow elected engaging to travel abroad for his improvement in the study of medicine, and to graduate in medicine in the University of Oxford. A Fellow forfeits his fellowship by spending more than eighteen months within the United Kingdom.

UNIVERSITY OF CAMBRIDGE.

NEW PROFESSORSHIPS.—According to the *Cambridge University Reporter* of March 12th, the Council of the Senate have reported as follows. By Statute B.ch. vi. § 2 it is provided that "Professorships shall be established in the University for the following subjects viz.: Physiology, Pathology, and Mental Philosophy and Logic. The Professors shall be appointed in such order as the University may think fit, as soon as sufficient funds can be provided conveniently for the purpose from the Common University Fund or from other sources." The Council ask the opinion of the General Board of Studies as to the order in which these Professorships ought to be filled up; and the following resolution was passed by the Board on December 11th, 1882: "This Board considers that the Professorships established by Statute B ch. vi. § 2 should be filled up in the following order: (1) Physiology, (2) Pathology, (3) Mental Philosophy and Logic, and that the appointment of the first two Professorships is urgent." The Vice-Chancellor has communicated to the Council the following resolution of the Financial Board, passed at a meeting held on March 7th: "That, in the opinion of this Board there are funds arising from the Common University Fund, from which the endowment of the Professorship of Physiology established by Statute B ch. vi. § 2 may be met." The Council therefore recommend: 1. That appointments to the Professorships established by Statute B ch. vi. §2 be made in the following order: (1) Physiology, (2) Pathology, (3) Mental Philosophy and Logic. 2. That immediate steps be taken for the appointment of a Professor of Physiology.

PROFESSORSHIP OF SURGERY.—The *Cambridge University Reporter* of March 12th announces that, the Council of the Senate have reported as follows. On March 29th, 1878, the Board of Medical Studies, in a communication addressed to the Studies Syndics, unanimously recommended the establishment of a Professorship of

gery. In a communication from the Special Board for Medicine le to the General Board of Studies, and signed by all the resident nbers of the Board, the Board state among other recommendations, "the appointment of a Professor of Surgery is urgently neces-." They also make the following statement: "The University probably not at once find itself able to found a Professorship of gery with an adequate endowment. In these circumstances, fessor Humphry has liberally offered to accept such a Professorship hout stipend, retiring at the same time from the Professorship of atomy. The Board are therefore of opinion that a Professorship Surgery should forthwith be established; and that the Professor- may be for the present without stipend. It would of course be essary at some future time to make provision for a stipend, and put the chair on a permanent footing." The General Board of dies, at a meeting held on Monday, March 5th, 1883, passed the owing resolution: "That this Board approves of the recommen- ion of the special Board for Medicine with reference to a Profes- ship of Surgery, and recommends that the Council take such steps nay be necessary to enable the University to avail itself of Pro- sor Humphry's generous offer."

'he Council are aware that several objections may be reasonably ed against the establishment of a Professorship without stipend, l that the appointment of a Professor of Anatomy under the Statutes will entail an additional charge upon the University. ing into consideration, however, the resolutions of the Special rd for Medicine and of the General Board of Studies, and the portance at the present juncture of doing whatever is possible to elop the vigorous and increasing School of Medicine in the iversity, they are of opinion that, with a view to enable the versity to take advantage of Professor Humphry's liberal offer, rofessorship of Surgery should be established, to which no stipend uld be assigned for the present.

Notice of discussion of both these reports will be given early next n.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their amination in the Science and Practice of Medicine, and received ificates to practise, on Thursday, March 8th, 1883.

Bennett, William Frederick, Princess Road, Leicester.
Collins, Edward Treacher, 1, Albert Terrace, Regent's Park.
Crocker, John Hedley, Gunnaslake, Calstock, Cornwall.
Evans, William Arnold, 14, Burngreave Road, Sheffield.
Horrocks, William Henry, 18, Great Meashy Street, Liverpool.
Jones, John Herney, Eccles, Manchester.
Oliver, Franklin Hewett, Maidstone.
Reynolds, Ernest Septimus, 2, Seymour Grove, Old Trafford, Manchester.
Rowland, John Jones, 19, Argyle Square, W.C.
Slader, George William Burgess, Pendils, Amroth, Pembrokeshire.
Walker, Joseph, Kirkby, Liverpool.

The following gentlemen also on the same day passed the Pri- ry Professional Examination.

Satchel, Charles George, University College.
Spreat, John Henry, St. Bartholomew's Hospital.

d on the 1st.

Williamson, Herbert Holdrich, University College.

MEDICAL VACANCIES.

MBRIDGE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Principal Medical Officer. Salary, £175 per annum. Applications to Mr. W. P. Littlechild, 5, Queen's Lane, Cambridge, by March 23rd.

ARING CROSS HOSPITAL.—Assistant Physician. Applications to the Medical Committee by March 24th.

ARING CROSS HOSPITAL.—Assistant Physician-Accoucheur. Applications to the Medical Committee by March 24th.

ICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by April 7th.

ST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clinical Assistant. Applications by March 22nd.

NERAL INFIRMARY, Hertford.—House-Surgeon and Secretary. Salary, £100 per annum. Applications to the Secretary.

EAT NORTHERN HOSPITAL, Caledonian Road, N.—House-Surgeon. Salary, £63 per annum. Applications by March 22nd.

EAT NORTHERN HOSPITAL, Caledonian Road, N.—Junior Resident Medical Officer. Applications by March 17th.

NLEY UNION.—Medical Officer. Salary, £100 per annum. Applications by March 21st.

LLOWAY AND NORTH ISLINGTON DISPENSARY.—Surgeon. Applications to the Honorary-Secretary, care of Resident Medical Officer, Dispensary, Palmer Road, Holloway, N.

JOINT COUNTIES ASYLUM, Carmarthen.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications to the Medical Superintendent by March 30th.

KENT AND CANTERBURY HOSPITAL.—House Surgeon. Salary £80 per annum. Application by March 23rd.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum. Applications by March 31st.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, AND LUNATIC HOSPITAL OR ASYLUM.—Honorary Assistant-Physician. Applications by March 31st.

NOTTINGHAM DISPENSARY.—Resident Surgeon. Salary, £200 per annum. Applications by March 22nd.

ROYAL ACADEMY OF ARTS.—Professor of Anatomy. Applications to the Secretary, Piccadilly, by March 24th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, Henrietta Street, Covent Garden.—House-Surgeon. Applications by March 21st.

STANLEY HOSPITAL, Liverpool.—Junior House-Surgeon. Salary £70 per Annum. Applications by March 22nd.

WESTMINSTER HOSPITAL, Broad Sanctuary.—Physician. Applications by March 20th.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Assistant-Physician, Applications by March 20th.

YORK LUNATIC ASYLUM.—Resident Medical Superintendent. Salary, £350 per annum. Applications by March 17th.

MEDICAL APPOINTMENTS.

BLACK, W. J., M.R.C.S., appointed District Surgeon for the Pendleton Branch Dispensary to the Salford Royal Hospital *vice* F. H. Folkes, L.R.C.P., resigned.

DELAHUNT, J., L.R.C.S.E., appointed Medical Officer to the Belmullet Union *vice* A. Phayre, L.K.Q.C.P.I., deceased.

FOLKES, F. H., L.R.C.P., appointed House-Surgeon to the Salford Royal Hospital, *vice* J. Newton, M.R.C.S., resigned.

FRANCIS, L., M.B., appointed Resident Clinical Assistant to the West Riding Lunatic Asylum *vice* J. Hammond, L.R.C.P., resigned.

HEWKLEY, F., M.R.C.S., appointed Assistant Medical Superintendent to the Royal India Asylum, Ealing, W.

HUTCHINSON, S. J., M.R.C.S.,Eng., appointed Dental Surgeon to University College Hospital and Clinical Lecturer on Dental Surgery, *vice* G. A. Ibbetson, F.R.C.S., who has been appointed Consulting Dental Surgeon.

JACKSON, J. W., M.R.C.S., appointed Junior Assistant House-Surgeon to the Sheffield Public Dispensary.

KING, D. A., M.R.C.P., appointed Assistant Physician to the West London Hospital, *vice* J. C. Fish, M.D.

SMART, H., M.D., appointed Assistant Medical Officer to the Rochester and District Friendly Societies Medical Association, *vice* J. R. Buck, L.R.C.P., resigned.

STURGES, F., L.S.A., appointed Assistant House-Surgeon and Dispenser to the Kent and Canterbury Hospital, *vice* H. J. Dyson, M.R.C.S., resigned.

YOUNG, A. H., M.B., appointed Honorary Surgeon to the Salford Royal Hospital, *vice* J. H. Walmsley, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

BUCKELL—BUCKELL.—On March 7th, at the Congregational Church, Salisbury, by the Rev. W. Roberts, Arthur Edward Buckell, M.D., third son of Leonard Buckell, M.D., of Chichester, to Ellen Maria, third daughter of the late William Buckell, of Salisbury.

DEATH.

FIELD.—On March 9th, at 31, Lower Seymour Street, Portman Square, Norman George, the eldest son of George and Pauline Field, in his eighth year.

DEATH UNDER CHLOROFORM.—An inquest has been held by Dr. Danford Thomas as to the death of Ernest Burley, aged 7 years, the son of a farm-labourer, who died at St. Mary's Hospital, whither he had been taken suffering from a disease of the knee-joint. Evidence was given by the assistant surgeon at the hospital, to the effect that chloroform was given to the child preparatory to the opening of an abscess; but, before the operation was performed, the child died. Chloroform was given about forty times a week at the institution, and the last death before this was more than two years ago. The jury returned a verdict of "Death from failure of the heart's action while under the influence of chloroform."

ADULTERATION OF PEPPER.—M. Charbonnier, in the *Répertoire de Pharmacie*, says that olive-husks are used on a very large scale to adulterate pepper. They are known as *poivrette*. Formerly they were used as fuel or manure; now they will sell at 25f. to 30f. the 100 kilos., apparently in consequence of their usefulness for the purpose indicated. When cleaned, dried, and ground, they very much resemble pepper in appearance, and the miscroscopic structure of the cells is so similar to that of the husk of pepper, that only a close comparison will indicate the difference.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Hugh Smith: A Case of Bigelow's Operation. Dr. Manson will read a paper on Distoma Ringeri and Endemic Hæmoptysis.

TUESDAY.—Pathological Society, 8.30 P.M. Dr. Finlay: Epithelioma of Stomach, with Secondary Nodules in the Skin. Mr. Horsley: Adeno-Sarcoma of Testicle and Abdominal Viscera. Mr. A. Barker: Lymphatic Cyst of Bladder producing Obstruction of the Ureters and Renal Disease. Mr. Clutton: Tumour of Skull and Bladder. Dr. Angel Money: Rheumatic Nodules, with Microscopic Specimens. Dr. Cavafy: Heart-Disease and Rheumatic Subcutaneous Nodule. Dr. Drewitt: Rheumatic Nodules (two living cases). Mr. Davies-Colley: Sarcomatous Ulceration of the Back Dr. F. Taylor: Sarcomatous Ulceration of the Back.

WEDNESDAY.—Meteorological Society, 7 P.M. Dr. Henry Cook: Notes on a March to the Hills of Beloochistan in North-West India, with Remarks on the Simoom, and on Dust-Storms. At 8 P.M., the meeting will be adjourned, in order to afford the Fellows and their friends an opportunity of inspecting the Exhibition of Meteorological Instruments for Travellers, and of such new instruments as have been invented and first constructed since the last exhibition. The President, Mr. J. K. Laughton, will give a short discourse on the instruments.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

SINGLE *v.* MULTIPLE VACCINATION.

SIR,—Bold is your honourable correspondent, who, in the JOURNAL of March 10th at page 487, states that one vesicle will alone afford protection against small pox for a very limited period, and that the vaccine scars on each person vaccinated should collectively cover at least half a square inch of area. In spite of antiquated theories, now still fashionable, experience induces me to believe that, within reasonable bounds, and other circumstances being favourable, the subsequent efficacy of vaccination depends rather upon the quantity, quality, purity, and activity of the subcutaneous dose of vaccine-lymph inserted, than upon a diffuse collective chart of multiple contiguous ugly sores or scars, which process of exuberant excessive medical tatooing is far more worthy of an untutored savage than a scientific surgeon.

The recent progress in our knowledge of the *quasi* artificial life of bacteria in our modern laboratories, as also their life-history in the bodies of men and other animals, should now induce us to bury such ancestral prejudices. However, to repeat a past blunder from the older text-books is always an easier and more rapid method than either philosophical reflection and deduction based upon the advancing information of the hour, or the accurate observation of original research.—I am, sir, yours, etc.,

J. LAWRENCE-HAMILTON, M.R.C.S.

34, Gloucester Terrace, Hyde Park, March 14th, 1883.

*** If our correspondent will consult the tabulated experience of Mr. Marson (extending over twenty years' work at the London Small-pox Hospital) and the more recent experience of the small-pox hospitals of the Metropolitan Asylums Board, as set forth in their annual returns, he will find there abundant evidence of the value of what he is pleased to term "exuberant excessive medical tatooing"—evidence based on "accurate observation," and admitting not only of "philosophical reflection," but of very positive "deduction."

H. L. S. (London).—We see no very early prospect of being able to carry out our wish in the matter.

MEDICAL ETIQUETTE.

SIR,—I should feel much obliged for your opinion as to the following point. Dr. Jones, we shall say, is called by the family to see a case (not an emergency case), when he knows or suspects that Dr. Brown has hitherto been the medical attendant of the family. I take for granted that it is Dr. Jones's duty to find out whether they are still patients of Dr. Brown's, and only to attend on receiving a satisfactory reply.

1. Is it his duty to find out from the family whether Dr. Brown has been duly informed of the fact that he is no longer their doctor?

2. Is it the duty of Dr. Jones to inform Dr. Brown of the fact in question?—I am, yours, etc., R. M. S.

*** In the absence of certain essential details in the above briefly stated case, our reply must necessarily be one of a general rather than of specific individual application. We would, therefore, simply observe that, if the patient to whom Dr. Jones has been called in have recently been, or may be, under the care of Dr. Brown, he should on no account (not being a case of urgency) interfere, but request a consultation with Dr. B. Should the latter decline this, or if the patient insists on dispensing with his services, and communication to that effect be made to him, Dr. J. will be justified in taking charge of the case. If, again, on the other hand, Dr. B. have not been in attendance during the present illness, and a longer or shorter interval has elapsed since the immediately preceding ailment for which he (Dr. B.) was consulted, Dr. J. will be justified in attending without previous communication being made to Dr. B.; for, be the cause what it may, or however unwilling we may be to supplant a brother practitioner, there cannot, we take it, be a doubt that patients have a perfect right (a right which, in the case of our own legal and other advisers, we should be very apt to assert) to change their medical advisers without assigning the reason; though such, it may be safely assumed, is generally well understood by the superseded practitioner. Such is the accepted rule. At the same time, if the respective practitioners are upon terms of cordial intimacy, a friendly confidential representation of the facts to the discarded practitioner will be both courteous and judicious. The duty of intimating to Dr. B. that his professional services are dispensed with devolves upon the patient or family, and not upon Dr. J.; who should, however, ere he assumes charge of the case, satisfy himself that such communication has been made.

Workhouse Stimulants.

. Norman Kerr writes to the *Standard*:—"In the Report just issued of the irst year of the Marylebone Workhouse since the opening of the new Infirmary at Notting Hill, the able and experienced master, Mr. Douglas, speaks most favourably of the general good conduct of the inmates. A prominent actor in the promotion of this desiral le state of order is disclosed in a paragraph in Mr. Douglas's Report, to the effect that, during the year, not a single ounce of ale, porter, wine, brandy, gin or whiskey had been ordered by the medical officer, and, except on Christmas Day, there had been no fermented or spirituous liquors consumed in the Workhouse by the inmates. The average daily number of inmates was 1557. It may be of interest to add that the cost of alcoholic stimulants consumed by patients in the Infirmary during 1882 was £246, while in the last year, when the sick were in the Workhouse, the cost of alcohol for the latter was £1,608, a decrease of £1,362 in the twelve months."

China.

,—Will one of your numerous correspondents kindly inform me what chances there are for practice in China? Nature of climate, and, if any appointments, what are they? Indeed, any information would be very acceptable.—Yours truly,

Shanghai.

. Ireland's letter has been received, and shall have attention.

Medical Libraries.

.—Would any of your correspondents give their experience of the various medical libraries in London? I wish to ascertain which contains the most recent medical works.—Yours faithfully,

Progress.

. Britton.—The report of 1882 has been duly received, and will be noticed in due course. Unfortunately, the pressure on our space is such, that upwards of eighty notices of the kind are still awaiting publication. We have, however, made arrangements by which we hope to accelerate the publication of matters of this kind.

Prurigo Podicis.

,—Having a distressing case of prurigo podicis, and having tried the remedies mentioned in Hebra on *Diseases of the Skin*, not one of which have been of much avail, I should be glad if any of your members would sugest any effectual remedy for that painful affection.—I am, sir, your obedient servant,

One in a Difficulty.

Medicine as Practised by Animals.

,—I have read with great pleasure, in the Journal of the 10th instant, your interesting leading article on Medicine as Practised by Animals. Will you kindly allow me to mention an instance of medicine as practised by a cat, which has recently come under my observation?

A young cat which was born blind, and which shows extraordinary acts of instinct, amounting almost to reasoning intelligence, began to suffer from epileptiform fits and abscesses of the face in the summer of the past year. From the age of three or four months, the animal could go all over the house and garden nearly as well as if she had her sight. So long as pieces of furniture were in their usual places, she rarely, even in her playful gambols, knocked herself against any of them; but several times, when chairs and tables were displaced, she has hit her head with great force against them, and on one occasion her head came into violent collision with a mowing machine. The fits and abscesses were, therefore, sufficiently accounted for by the injuries which the cat received. An abscess, which recurred every ten or twelve days, formed on the right cheek, and usually opened under the right eye and into the nostrils. At the outset, the matter discharged was pus, but afterwards blood escaped with the pus, and sometimes blood, without any appreciable quantity of pus, escaped by the same openings. The fits, which gradually increased in violence and frequency, were not much under the control of bromide of potassium.

The great amiability of temper the poor animal displayed during her sufferings, which occasionally must have been very severe, was remarkable. She could hardly be induced to take any food with the exception of a little cream; consequently she soon wasted away to mere skin and bone. The bowels were generally constipated for days at a time, and her breath had a most unbearable fœtid odour.

I may mention, too, that the poor animal became intensely dropsical, the abdomen becoming distended almost like an inflated bladder. Her heart could be seen to beat violently on her making the slightest exertion, and on several occasions she coughed up quantities of blood. She breathed through the open mouth, owing to the nostrils being blocked up with tenacious matter, which she from time to time endeavoured to discharge by violent sneezings.

The animal's treatment of herself was very simple, but as far as it went was, think, fairly good. She lay in a basket made warm and comfortable, which she rarely left, excepting to crawl to the fireplace in order to procure well-burned cinders, which she ate with avidity. This being observed, willow charcoal was procured, and daily put in a place accessible to her. At first she rather disliked the willow charcoal, but soon she became fond of it. To milk she seemed to have a great repugnance; nevertheless, milk was the means she used to act on her bowels. For days the bowels would not act; then all at once she would begin to lap milk in quantities, which fluid never failed to operate on the bowels in less than an hour. The disliked milk then was the means the cat used to keep the bowels open, and the charcoal was the remedy which she employed in order, in all probability, to correct the fœtid state of the breath, and the emanations from the decomposing secretions of the mouth and nose, and perhaps also to allay some uneasy sensations in her stomach. When the disease had been going on for two or three months, the idea of giving her sulphide of calcium, for the recurrent suppuration, struck me. She was therefore given about a quarter of a grain of the medicine three or four times a day. On the suppuration the calcium acted slowly and surely; but on the dropsy, which had existed for some months, it acted like a charm, for in a few weeks the water disappeared without leaving a trace. In fact, all the formidable symptoms rapidly passed away, the suppuration being the last to disappear, owing doubtless to some disease of the bones of the face.

The cat is now a beautiful animal, fat and with a fine white fur, and as playful as a kitten. It had been often said by those who saw the animal when in the height of her illness, that it was cruelty not to destroy her. Her recovery is, however, most instructive, not only on account of the means which she herself used, but more especially on account of the favourable effects the sulphide of calcium had on the dropsy.—I am, sir, yours truly,

Lincoln, February 15th, 1883. William O'Neill, M.D., M.R.C.P.Lond., etc.

Calf-Lymph.

Dr. George Harley asks: Where is the best place to obtain vaccine-lymph direct from the heifer?

*** Our correspondent cannot do better than apply to the National Vaccine Establishment, Local Government Board, Whitehall, S.W. Lymph is taken from calves at the Animal Vaccine Establishment at 95, Lamb's Conduit Street, W.C., every Tuesday and Thursday morning, and sent by special messenger to Whitehall, so that it can be distributed on these days to the various applicants without delay.

Epithelioma of the Lower Lip in Women.

Sir,—I do not think this disease is so very rare among females as Dr. Wilson thinks (Journal, February 10th, 1883, p. 251). In Ireland, smoking with a cutty-pipe is quite common among women. In Scotland, too, unless I mistake, many women smoke; consequently, the Irish and Scotch general practitioners must see many cases in females. I remember seeing one case in the extern room of the Cork North Infirmary in 1870. The woman was a smoker, and about fifty years old. I removed one in 1876, in Chicago, from the right side of the lower lip of a woman, aged forty-two. The patient was a very obese woman, subject to asthma, for the relief of which she sometimes smoked her husband's pipe. From beginning the use of the pipe to removal only two months elapsed. This woman sat on a chair, and was held quiet by her husband and son while I removed the growth, which was circular, shallow, and three-fourths of an inch in diameter, by the usual method. Union by first intention resulted.

P. O'Connell, M.D., C.M.
Sioux City, Iowa, U.S.A.

Dr. Hartigan.—We fear we cannot publish the case unless the author's name be appended.

Flatulence.

Sir,—Cases like that alluded to by "Felix," in the Journal of February 24th, are not unfrequent, and often very distressing, and difficult to relieve. I do not profess to have a cure, and will be pleased to see remedial measures suggested by others. But I beg to annex a couple of prescriptions which I have often given with success. One is a teaspoonful of ammoniated tincture of valerian in a glass of water, repeated in two hours. The other is: ℞ Creasote gtt. viii; pulv. assafœtidæ gr. vi; extr. belladonnæ gr. iv; morphiæ hydrochlor. gr. i. Mix and divide into twelve pills; one to be taken when required, and repeated in three or four hours.—I am, etc.,

J. M.

A Member.—Dr. Fancourt Barnes's *Manual for Midwives*, published by Messrs. Smith, Elder, and Co., is a suitable book for your purpose.

Bichromate of Potash in Syphilis.

In answer to Surgeon-Major Buchanan, Dublin, we direct our correspondent's attention to Dr. J. E. Guntz's experiences, details of which will be found in the Journal of February 24th, 1883, page 369.

Dr. Lysander Maybury (Landport) writes, and we are pleased to announce, that the advertisement issued by his patient in the columns of the *Hampshire Telegraph*, to which we referred in our issue of February 24th, was inserted without his knowledge or authority. Dr. Maybury's refutation appeared in the local paper of the following week.

Whooping-cough, Bronchitis, and Albuminuria.

Sir,—Some years since, I forget how many, one of my grandsons from Canada was staying here on account of the delicacy of his health. Unfortunately whooping-cough appeared in this district in a severe form. The boy took the disease, and the case turned out so severe, that I had almost despaired of his recovery. The ordinary treatment seemed to be entirely powerless. At this juncture I noticed in some of the journals, that two cases had been treated in Berlin by croton chloral hydrate. I telegraphed to London for some of the medicine, and I commenced its use the moment I received it. The effects were marvellous, and the child was out of danger in three days. I have used this medicine ever since, wherever I had the opportunity, with the same satisfactory results. For many years I have thought that whooping-cough and asthma were affections of the nervous system, and that the best place to look for a cure was to the class of medicines which act on the nervous centres. Even in simple bronchial colds, as well as in bronchitis, we will derive great advantage from adding bromide of ammonium, bromide of potassium, and iodide of potassium, to the ordinary treatment. I have tried the chloral-hydrate in three cases of albuminuria, as recommended by some of the physicians in Berlin. The dose I gave was five grains three times a day; and in each case the albumen has entirely disappeared.—Yours truly,

Coleraine, Ireland. James C. L. Carson, M.D.

G. H.—Hill and Cooper: *Syphilis and Local Contagious Disorders*, second edition, 1881. Bumstead and Taylor: *Venereal Diseases*, fourth edition, 1879. Lancereaux: *Traité de la Syphilis*, second edition, 1874. Jullien: *Maladies Vénériennes*, 1879. Fournier: *Syphilis Chez la Femme*. Zeissl: *Lehrbuch der Syphilis*.

Fees for Evidence in County Courts.

Sir,—Will you kindly give me the benefit of your advice in the following case? Last year I attended a man who died from injuries received in falling from a roof. His friends are claiming damages from his employers, and I am subpœnaed to give evidence in the county court. On the subpœna being served upon me with the sum of 10s., I objected, believing the proper fee to be one guinea, and refused to take the 10s. Subsequently it was left with me with the information that my "expenses would be taxed at the end of the trial."

In due course I attended the court, and the hearing of the case was adjourned for nearly a month. Will it be right for me to ask the judge for the additional 11s. before being sworn, or am I bound to give evidence, and say nothing about it? Should the decision be given in favour of the defendant there will be no prospect of getting anything at all for my expenses.—I enclose my card, and am, yours truly,

A Junior Member.

*** Our correspondent is entitled to the balance of his expenses for attending the court and to give evidence, before being examined; and if he demand the payment of the same, as witnesses frequently do before giving their testimony in civil cases, the judge will, we believe, order them to be then paid. A witness in such a case is not bound to give evidence before his fee for such is paid.

"GERMAN MEASLES."

SIR,—Will you kindly inform me if "German measles" can spread as either scarlatina or measles. I am sorry to trouble you with a question of this kind, I was asked it by my vicar, the statement being made to him by the medical officer of health for the district. I answered, no, but I said I would put it to the JOURNAL. If you will kindly answer it through the JOURNAL, I shall be obliged.—I am, yours truly, A MEMBER.

*** There can be no doubt that "German measles" spreads by contagion just like scarlatina and measles. In recognition of this fact, it is by some authors known as "Epidemic Roseola." Its contagion, however, seems to be less active than the contagion either of scarlatina or of measles.

GROSSLY IRREGULAR.—The Registrar-General is, we believe, willing to prosecute in all cases where there is a fair chance of conviction, but the evidence presented must of course be first-hand, and not hearsay, such as lawyers would consider as likely to lead to conviction. If our correspondent can produce such evidence, we believe that he will find no difficulty in obtaining the desired result.

PUZZLED.—The fee, under such circumstances, would vary altogether according to the usual fees charged by our correspondent in his practice, and any understanding which may exist between him and his patient. For the visits to London, a fee of one-third of a guinea per mile for distance one way would be reasonable.

MEDICINE AND PHARMACY.

SIR,—The conclusion to be drawn from the letters written in reply to that which was signed "An Examiner in Medicine" last November, is, that there are fewer objections to the combined work of prescribing and dispensing by medical practitioners, than to the separation of them. It is a very important matter, as pointed out, that we should consider this subject carefully. In our desire to elevate the profession, it is quite an open question whether we should not encourage the system of druggists prescribing for the public, as they are only too ready to do; and certainly without benefit to any but themselves. Highly educated men will not do the work of poor general practice; and, in the interests of the public far more than of ourselves, I hope that the profession will express a very decided opinion on the duties of the examining bodies, that they must clearly recognise the fact, that a good, simple, practical examination is required for those who are to engage at once in general practice, where a competent knowledge of pharmacy is as important as that of medicine and surgery; and that it is not desirable to raise the standard beyond this point.

You will probably make this important subject a matter of consideration, as was suggested last week by one of your correspondents, and place before us a fair summary of conflicting opinions.—I am, sir, yours, etc.,

AN EXAMINER IN MEDICINE.

JUSTITIA.—The letter of "Justitia" is so entirely wanting in details of time, place, and the institution pointed at, that it would be useless to publish such communication. He should give the necessary information, and it should be signed for publication.

THE letter of a member (Fovant) affords no data for making any calculation.

SOME UNRECORDED EFFECTS OF ARSENIC.

SIR,—Six cases of psoriasis recently came under my care, and the following effects of arsenic were noticed during treatment (Fowler's solution).

1. For the first two days, increase of appetite, but diminished digestive powers; the former shortly ceased, but the latter remained during the entire time the arsenic was taken.

2. After ten or more days, the voice became weak and husky, particularly in singing, with a constant tendency to crack, and a feeling of fatigue after short use.

3. Noises in ears, with occasional slight deafness.

4. Tingling sensation of skin, with tendency of legs and arms to go asleep.

5. Throbbing and feeling of fulness about head and neck on stooping, or after slight exertion.

6. Sexual desire greatly diminished, with almost impossible penile erection.

7. Occipito-frontalis muscle felt to the patient hot, tight, heavy, with a constant dull aching, and as if it had increased very much in thickness; and

8. Powers of comprehension, concentration, and remembrance dulled, with consequent desire for solitude.

I have found that five-drop doses of chlorodyne given with the arsenical solution minimises these and other well known effects, without interfering with the action of the metal on the skin. As regards psoriasis, flannel should never be worn next the skin, as the irritation it produces increases the disease.—I am, etc., F. A. MACPHERSON.

105, Queen's Road, Liverpool, E.

W. E. GREEN should write to the secretary of St. Thomas's Home and St. Thomas's Hospital, or to the secretaries of either the Home Hospital, Fitzroy Square, or the Bolingbroke Pay Hospital, Wandsworth, S.W., which is the cheapest.

ERRATUM.—In the JOURNAL of March 10th, page 486, column 2, *for* "Mr. F. Manby," *read* "Mr. A. R. Manby."

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Tapeworms, the Sources, Varieties, and Treatment; with One Hundred and Eighty Cases. By T. Spencer Cobbold, M.D., F.R.S. Fourth Edition. London: Longmans, Green and Co. 1883.

How to Help Cases of Distress: a Handy Reference Book for Almoners, Almsgivers, and Others. By C. S. Loch, Secretary to the Council of the Charity Organisation Society, London, January 1883. London: Longmans, Green and Co., and offices of the Council of the Charity Organisation Society, 15 Buckingham Street, London, W.C.

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THE LUMLEIAN LECTURES

ON

URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

By ALFRED BARING GARROD, M.D., F.R.C.P., F.R.S., ETC.,
Consulting Physician to King's College Hospital.

LECTURE I.

(Continued from page 497.)

Let us pass on to another point in the physiology of uric acid. How can we explain the fact that, in proportion to the weight of their bodies, some animals excrete so large a quantity of such an insoluble principle as uric acid, or even as urate of ammonium, the one requiring 8,000, the other 2,400 times its weight of water at the body-temperature to dissolve it? The human subject excretes, on an average, in the twenty-four hours, about one part of uric acid for each 120,000 parts of his weight: or, estimating the weight of a man at about ten and a half stone, throws out about eight grains of this acid daily. This is an average arrived at from a very large number of observations, which you will find detailed in Dr. Edmund Parkes's valuable work.

In the case of the lower animals, I could find no facts on record relating to this subject, and therefore had to undertake to supply them for myself by means of the following observations and experiments. I had a cage constructed, with a glass floor, so as to be able to collect the whole of the excreta of the twenty-four hours from the bird that occupied it, and from such I carefully ascertained the quantity of uric acid—no difficult process.

1. A canary-bird was kept in the cage, its food consisting of a supply of canary-seed, millet, and hemp, together with water. In twenty-four hours, I found that the excretion of uric acid was 2.1 grains, and the weight of the bird was 277 grains; so that the ratio of the uric acid excreted in twenty-four hours to the weight of the bird itself was 1:132.2.

2. An Australian grass-parrakeet was next kept for twenty-four hours in the same cage, and fed on the same food. The weight of the excreted uric acid was 3.1 grains; that of the bird, 415 grains. The ratio of the uric acid to the weight of the bird was 1:133.8.

Had I calculated the weight of the bird from the weight of its excreted uric acid, taking the ratio in the case of the canary for my standard, I should have estimated the weight of the parrakeet at 409 grains instead of 415, a calculation not very far from the truth for such an estimate, when we consider that a few seeds more or less in the crop of the bird would have covered the difference. The observation was repeated with a second parrakeet of the same weight, and the same result was obtained, viz., 3.1 grains of uric acid in the twenty-four hours. In the sparrow-hawk, eating an enormous quantity of flesh, Cazeneuve found the average daily excretion about 34 grains; and, estimating the hawk (he does not give the weight) at nine and a half ounces—a weight which is probably above the true average—the ratio of the weight of uric acid to that of the bird would be 1:110. Let us, then, take 1:120 as a fair ratio, including in the calculation both carnivorous and graminivorous birds, and we arrive at the somewhat startling conclusion that the bird, in proportion to its weight, excretes 1,000 times more uric acid than man.

In cold-blooded animals, as the reptiles, it is difficult to perform such observations as we have now detailed; but there is one observation, bearing upon this point, which I have come across. Dr. Busch, more than twenty years ago, found that the kidney-cells in a common vineyard snail contained a granular matter, consisting of uric acid or an urate, which required fifty times the weight of the body of the snail to dissolve it.

In pursuit of this subject, I made further observations on the relation between the daily weight of the uric acid excreted, and the weight of the renal organs themselves. In the case of a lark, I found that the ratio of the weight of bird to that of kidneys was 125:1; in that of a linnet, 118:1; in that of a turkey, 172:1; but this latter bird was in a fattened condition, so the ratio may be somewhat misleading. Taking the lark and linnet, therefore, after calculating their daily excretion of uric acid, we find that it amounts to more than the weight of the kidneys of the same birds. Let us reflect on these facts. Is it possible to conceive, if we assume that the uric acid first exists in the blood, that the amount of this fluid passing through the renal organs could excrete as much of this principle as we have found, as a fact, to be thrown out? True, in the case of man, who excretes only one thousandth part of the uric acid thrown out by birds, we could easily imagine this to be the process; but the more we consider the facts about birds, the more difficult does it become to believe in this explanation; and, if we go further, and hold it impossible, then the first view as to the formation of uric acid appears to me to fall to the ground.

As this question is of the utmost importance to physiology, and as its decision must necessarily be followed by weighty consequences, it is essential that nothing should be left undone which might help us to the truth. With this object before us, there arise many points which must be determined; and, first of all, we must ascertain the condition of the blood of various animals, especially with regard to the presence or absence of uric acid. I have obtained many such data from observations made during a long course of years. I have several times examined the blood of man in health, and many hundred times in various diseases; and the conclusion at which I have arrived is this: that, in absolute health, the uric acid in the blood is inappreciable by our tests, and that that fluid does not contain the one hundred thousandth part of its weight of the acid; while, in gout, the blood is very rich in this principle, as I showed in 1847; that uric acid is also found, in much smaller but still appreciable quantities, in individuals who are developing a gouty condition, or who are under the poisonous influence of lead. This subject, however, I have already discussed elsewhere.

In the blood of various other mammals, as the ox, sheep, and pig, I have never found a trace of uric acid by the uric acid thread test.

I have also examined the blood of several species of birds, as the turkey, common fowl, pigeon, and duck, repeatedly in some instances, and have found it as free from uric acid as that of the mammal.

The turtle is the only reptile whose blood I have analysed; here I found oxalates present, but no uric acid. As seen in this country, however, the turtle can hardly be regarded as being in a normal condition, having in many cases taken no food for weeks, or even months. The only other observation on the blood of reptiles that I know of is one by Dr. John Davy, who examined the blood of two snakes (*Viper communis*), but failed to detect any uric acid in it. The result of these observations must be looked upon as somewhat striking, and even startling, to those who regard the uric acid in the urine as simply a filtration from the blood, when we remember that the blood of birds, whose urinary excretion is almost entirely composed of uric acid, is as free from that principle as the blood of the herbivorous mammal, in whose urine it is usually difficult to detect a trace; or, again, that the blood of the bird is as free as, and often freer than, that of man from uric acid, though it excretes daily about $\frac{1}{120}$th of its own weight of that principle, man eliminating not more than $\frac{1}{120000}$th.

Let us go a step further in the inquiry, and let us assume, for the sake of argument, that the blood of a bird contains, which it certainly does not, $\frac{1}{50000}$th of its weight of uric acid—a quantity which, if present, could easily be detected by my so-called "uric acid thread test"—and let us make a rough calculation of the quantity of blood which passes through the kidneys in the twenty-four hours. The figures contained in the table may be regarded as sufficiently correct for the purpose of illustration.

I assume the weight of the bird to be represented by a certain figure, for convenience sake, and all the appended numbers have relation to that number.

TABLE—*Illustrative only.*

Weight of bird	277.0
,, heart	4.0
,, kidneys	2.5
,, blood in body (calculated at 8.5 per cent. from starting)	23.5
Weight of uric acid excreted in 24 hours ...	2.1
,, blood thrown from left ventricle at each beat of heart	1.0
Pulsations of heart in 24 hours (120 per minute)	172,800
Weight of blood passing through kidneys at each beat	0.10 (?)
Weight of blood passing through kidneys in 24 hours	17,280

Assuming that one-tenth of the blood that leaves the left ventricle at each beat passes through the kidneys, in which case nearly seven thousand times the weight of the organs would pass through them in twenty-four hours, then the whole of that quantity would not contain one-sixth part of the uric acid excreted during the same time by the bird. We have, in this illustration, given every possible advantage to the supporters of the first theory; for we have assumed not only that what I should imagine to be a most abnormally large amount of blood passes through the kidneys, but also that the blood contains a much larger quantity of uric acid than is really the case. Add to this that we have assumed, in the calculation, that no trace of uric acid escapes filtration in every passage of blood through the renal vessels—a most improbable assumption—seeing that, if arsenic is given to a person, and after a few days its administration is stopped, the metal can be detected in the urine for two, three, or even four days afterwards, although in constantly decreasing amounts. This I observed for myself many years ago. We shall soon have occasion to see what the filtering powers of the kidneys really amount to; in other words, how much uric acid they can excrete from a blood which is known to be rich in that principle.

Before passing on, I would say a word with respect to the data contained in the above table. The bird was weighed with its feathers on; the weights of the heart and kidneys were the mean of several observations which I had made; the weight of blood in the body was calculated from the experiments of Welcker on the starling, forwarded to me by Dr. Michael Foster; and the number of pulsations of the heart, and the quantity of blood thrown from the left ventricle at each, were the result of calculations from data obtained from different sources. I am desirous, however, that the table should be regarded as being one made only for the purpose of illustration.

The next point is to ascertain what takes place when uric acid, in the form of one of its salts, is administered by the stomach or injected into the blood. In 1849, I gave urates of ammonium, sodium, and potassium, with the following results.

A man was passing, on an average, 8.07 grains of uric acid in the twenty-four hours, taking no drug. Urate of potassium was given in five-grain doses three times a day. The dose was afterwards increased to ten grains. During the time he was taking the urates, the average excretion of uric acid was 8.25 grains—*i.e.*, practically the same as before. I find appended to this case a note of no little interest; viz., that, during the administration of the urates, the man, who had some eczema, experienced a great increase of skin-irritation, which subsided on their discontinuance. This goes far to prove, first, that the substance was absorbed into the blood; and, secondly, that some forms of eczema are closely connected with the presence of uric acid in the blood. To another man I gave, at first urate of sodium, and afterwards urate of ammonia, in doses of fifteen to thirty grains, without the slightest detectible increase of uric acid in the urine.

Subsequently, Wöhler and Frerichs found that, when urates of potassium and sodium were taken, there was an increase of the urea and a sediment of oxalate of calcium in the urine, but no augmentation of the uric acid.

Neubauer found that, in rabbits, the administration of large quantities of uric acid was followed by a corresponding increase of the excreted urea, but no uric acid was discovered in the urine. The injection of urates into the veins, was followed by the same negative result as ensued when uric acid was given by the stomach.

If the kidneys act merely as strainers off from the blood of the uric acid brought to them by that fluid, how can we explain these facts? Is it not impossible to do so? If, however, we regard the kidneys as the producers or manufacturers of uric acid from matters brought to them by the blood, then all difficulty with respect to the facts above mentioned vanishes, and we see at once why the amount of uric acid has no necessary relation to the character of the food, but depends on the activity of the formative cells, and the quantity of pabulum brought to them during a given time. Before we proceed to discuss another point in the physiology of uric acid, you must allow me for the moment to assume, what I shall afterwards have an opportunity of proving, that, in the kidney-cells, this acid exists combined with ammonia, or, at any rate, with a base yielding ammonia, and not with any fixed base, as soda, potash, or lime; but that, when it is found in the blood, or deposited in the tissues, either of man or the lower animals, it is in the form of urate of sodium.

As far back as the year 1847, when I first found uric acid in the blood, I proved that it was in the form of the soda salt; this was shown, not only by its crystalline form and by its leaving, when burnt, an alkaline ash, which imparted to flame the peculiar colour but also by other chemical tests; and subsequent observations have abundantly confirmed what was then first shown.

Before the beginning of this century, Wollaston had proved that the deposits which occur in gouty subjects, and are commonly called chalk-stones, are composed of this same urate of sodium; and there are, on record, a few instances of such deposits in the lower animals, some natural, others produced artificially by arresting the elimination of uric acid, which latter have been found to have the same composition as the others. A few years ago, an interesting case of this sort came under my notice, which, as it strikingly illustrates the question which we are now considering, I will relate as concisely as possible.

An Australian grass-parrakeet, which had been quite recently imported, came into my possession, and within a few weeks of its arrival I found on the digits of its claws little white nodules or protuberances, most of them larger than a pin's head. The bird soon sickened, and slowly died. It was afterwards found that each of these nodules contained a cheesy matter, which, under the microscope exhibited the appearance of being made up of innumerable very fine needle-like crystals, polarising light with great intensity; and, when chemically examined, yielding an abundance of uric acid, but no ammonia. When incinerated, it yielded the characteristic soda ash. The deposit was, therefore, composed of urate of sodium. It was afterwards discovered that, not only were the digits of the claws studded with this matter, but that it extended along the shaft of each leg, and there was a long rod of the same substance in front of the cervical vertebræ, behind the trachea. On the board will be seen drawings showing not only the microscopic characters of the deposit but also the appearance of the leg and claw. Unfortunately, the kidneys of this bird were not examined till the contents of the abdomen were dried and shrivelled up.

Zaleski, in his work on the function of the kidneys, has given drawings of the *post mortem* appearances of animals, in the various tissues of whose bodies deposits had been produced as a result of ligaturing the ureters.

Let us now see how these facts can be explained on one or other of the two theories of the formation of uric acid. On the first, it is not difficult to suppose that uric acid may be formed, either in that shape or as urate of sodium (at any rate, it would exist in the blood as the soda salt), and become deposited, under certain circumstances in different organs and tissues of the body; but then comes the difficulty of explaining how it is that it is thrown out by the kidneys combined, not with soda, but with ammonia. I cannot conceive any satisfactory explanation under this theory. I know of no chemical conditions which would render such a change possible and would cause urate of sodium to be filtered through as urate of ammonium.

Let us now, for a moment, adopt the second view, and assume that urate of ammonium is produced in the kidneys, and that it sometimes becomes resorbed (the word, though uncommon, is the best expression of the process) into the blood after its formation. How is it that it then becomes changed into urate of sodium? There is no difficulty here, for I have shown that, when urate of ammonium is added to a solution containing a large excess of either phosphate or chloride of sodium, it is converted into urate of sodium, and will crystallise out as such. However, in order that I might remove all doubt about this fact in the case of blood, I made the following experiment. I took a considerable quantity of the serum of the blood of a healthy pig, ascertained, by the "thread test", that it was practically free from uric acid, and then proceeded to add to it a concentrated solution of urate of ammonium. The serum was then upon allowed to remain a short time at the temperature of the body and subsequently dried on glass and scaled off. On searching for uric acid, it was separated easily in the crystalline form; not, however, as it had been added to the blood-serum as urate of ammonium but as urate of sodium. All difficulty, therefore, as to the explanation of the change in the salt as it passes from the kidney-cells into the blood is at once removed, and it necessarily follows that the tissue-deposits which occur in disease must be composed of urate of sodium.

It may, however, be asserted that uric acid exists in the urine of man chiefly as urate of sodium, not as the ammonia salt, and that I have only assumed that it exists as urate of ammonium in the kidney-cells. The former of these assertions is doubtless true, with regard to the urine of man and the carnivorous mammal. With reference to the latter, I must still ask that the truth of my assumption may be taken on faith for a short time, until I have an opportunity of proving it.

The explanation of the presence of urate of sodium in the urine most simple, for urate of ammonium, excreted, as it is, in small ntities by man, meets at once with large amounts both of phos- te and chloride of sodium, and with mere traces of any ammonia . Hence the same change ensues as when urate of ammonium lissolved in blood-serum, and it becomes converted almost entirely urate of sodium. I have made many observations tending to cidate this subject. If healthy human urine, dense in character, not giving any deposit on cooling, has a hot concentrated solu- of urate of ammonium added to it, it frequently throws down a ious precipitate, on being kept in the cold; this I have found to sist mainly of urate of sodium, thus showing that a similar nge ensues whether the ammonia salt is absorbed into the blood is sent forwards and united with the other constituents of the nary excretion. There is no doubt that the urate deposit in urine st vary much, although, as a rule, it is mainly composed of the la salt; for, if salts of magnesium or calcium, or even potassium, contained in the urine, some of the soda salt will be replaced urates of these bases; and, again, if the urine becomes ammo- cal by decomposition, then urate of ammonium, a most insoluble t, as will be seen from the table of solubilities, will crystallise .

I may state that urate of sodium in excess of ammonia salts is nverted into urate of ammonium in the same way that urate of monium in excess of soda salts is changed into urate of sodium; t, when either of these urates meets in solution with equivalent ntities of both ammonia and soda salts, then both urates crys- lise out on evaporation, and hence it follows that the crystals, hough often mainly composed of one urate, necessarily contain at st traces of the other, and, sometimes, much more than traces, ording to the relative amounts of the different salts contained in urine. I think it will be found that a clear understanding of action of the different salts upon each other will explain nearly the discrepant statements to be found in different treatises upon s point.

As I have already said, those who consider that uric acid is med before it reaches the kidneys, usually look to some other gan as its source, the spleen having been often fixed upon. On s subject, Dr. Michael Foster makes the following remark, in his rk on *Physiology*: "The constant presence of uric acid is remark- le, especially since it has been found, even in the spleen of imals, such as the herbivora, whose urine contains none." And ain, he says: "No less suggestive is the fact that the increase of c acid during ague and during ordinary pyrexia seems to run rallel to the turgescence, and therefore, presumably, the activity of e spleen." As I had never examined the spleen for the presence uric acid, I made the following experiment:

One thousand grains of the spleen of the ox, and the same amount the spleens of the turkey and common fowl were dried in a water- th and reduced to powder. This was afterwards treated with stilled water, first made alkaline with carbonate of sodium, and erwards dialysed for two or three days into distilled water. The alysed fluid was then evaporated to a syrupy consistence. A drop that obtained from the ox was strongly acidified with nitric acid, d evaporated to dryness; a very distinct colour from the produc- n of murexide was obtained, which became intensified by the tion of the vapour of ammonia. When the same syrupy fluid was idified by acetic acid, and a few drops allowed to dry spontane- sly on glass, distinct evidence was obtained of the presence of ic acid crystals, which became unmistakable when polarised light as employed. On treating the concentrated fluids obtained from e birds in the same way, viz., for the production of murexide and r the crystals, it was with the greatest difficulty that any indica- n of the presence of uric acid could be detected by either test. ese experiments were repeated, and with the same results. Un- ss the process of dialysis be employed, the uric acid is much asked by a peculiar matter which accompanies it in its solutions. is is at least partially got rid of by dialysis.

If the spleen be the organ in which uric acid is formed, why ould not this acid be present in the urine of herbivorous as well carnivorous mammals? On the same assumption, should we not pect that uric acid would exist in much larger quantities in the leen of animals whose urinary excretion consists mainly of that inciple, than in others whose urine is often devoid of it? As far s my experiments go, the very reverse is the case; for, while uric id was easily detected in the spleen of the ox, in that of the bird was most difficult to discover it.

Again, it would naturally be expected that in animals that throw ut uric acid, the spleen would be larger, proportionally, than in others; but I am not aware that such is the case. It must also be remembered that uric acid has been asserted by different observers to be present in other organs besides the spleen, as the liver, lymphatic glands, and brain; and from this last, W. Müller separated about 1 part of uric acid in 40,000 parts of weight, yet no one would consider that the production of uric acid is one of the functions of the brain.

Assuming that our second view is correct, and that the kidneys are the true formative organs, then an explanation of the presence of uric acid in the spleen, liver, and other parts is not difficult. When, from any cause, there is an appreciable back-flow of uric acid from the renal organs, and resorption, then the blood becomes more or less impregnated with that principle, as we find to be the case in disease; and, under these circumstances, it is attracted by various tissues, and becomes united with them. That such attraction or elective affinity does exist for certain poisons I have full proof in a case of arsenical poisoning which came under my care in the hospital about twenty-five years ago. A young man had swallowed a dessertspoonful of arsenious acid. As he survived this four days, there was plenty of time for the poison to be absorbed. I embraced the opportunity of examining the principal organs of the body for arsenic, and found it in all parts, though in very different amounts. The liver appeared to be most rich in the metal, then the spleen and the skin. May it not be the case that, when uric acid exists in the blood, it is attracted differently by different organs, and thus the spleen and liver more frequently contain appreciable quantities than other tissues? Or again, may it not be that in some organs, as the spleen, the substance of which, if not acid during life, rapidly becomes so after death, while the blood remains strongly alkaline, the uric acid becomes less soluble, and more easily retained? Or yet again, may it not be that, being united to these organs, the uric acid escapes certain destructive influences to which, if it remained in the circulating fluid, it might be exposed?

Although I have been drawn, by the force of the arguments in its favour, into regarding the second view of the origin of uric acid as the more sound, yet I do not wish, even in my own mind, to become a partisan of any theory, desiring only to arrive at truth; and I have, therefore, endeavoured equally to seek out and discuss facts which are antagonistic to one or other view, with those which appear to favour it.

Before concluding this, the purely physiological part of our subject, I will state that there are a few facts which demand full explanation under any theory which claims to be accepted as the true one. For instance, the urine of the sucking calf, and of the young of other herbivora, contains uric acid in notable quantities, while that of the adult animal is usually free from it. How can this be reconciled with the view that uric acid is formed in the kidneys? There are also other facts closely allied to these which appear to be equally difficult of explanation by the second theory.

In the course of these lectures, I hope to be enabled fully to solve these difficulties; and, in so doing, to bring before you many observations, the results of which may prove to be of great service and value, both in pathology and in therapeutics.

THE ALLEGED OUTBREAK OF TYPHOID FEVER IN AN EMIGRANT DEPÔT.—A Plymouth correspondent telegraphs: The allegation contained in Mr. Puleston's question to the President of the Board of Trade last night, as well as in that of which Sir Henry Peek has given notice for Monday, that typhoid fever broke out in the Plymouth Emigrant Depôt, through overcrowding and want of proper accommodation and attention, is found, on inquiry, to be without foundation. Mr. Hassard, the surgeon of the emigration ship, *Oxford*, states that the outbreak is due entirely to the tank water, which the emigrants drank while on board the ship, and that the premonitory symptoms of typhoid made their appearance before the passengers disembarked. The moment he discovered this, he prohibited the further use of the water from the tanks, and in this way prevented the spread of the disease. There were nine cases in all, and one of them has proved fatal. Mr. Hassard speaks in the highest terms of the sanitary arrangements in particular, and of the arrangements generally at the depôt, and in this he is borne out by the opinion of Dr. Blaxall, who visited the establishmant about two months since, and expressed himself particularly satisfied with everything he saw.

THE Nottingham guardians have passed a resolution to the effect that the medical officers of the union shall announce themselves as such on plates outside their residences, and that the expense shall be defrayed by the guardians.

THE GULSTONIAN LECTURES,
ON
THE STERILITY OF WOMEN.

Delivered at the Royal College of Physicians, February 1883.

By J. MATTHEWS DUNCAN, M.D., LL.D., ETC.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

LECTURE II: PART III.—ITS THEORY OR CAUSATION.

IN Galton's statement of the actual infertility of heiresses, there is observable a remarkable comparative paucity of male issue—a fact which goes, like many others, to confirm the ancient and still prevalent opinion that relative sterility or weakness of reproductive energy tends to the production of females rather than males. This department of the study of sterility I shall not enter on, the causes of the excess of females over males in all births being the subject of an extensive literature, and its relations being too numerous and complicated for advantageous discussion in this place. But I may state that I have long been impressed with a belief, in accordance with the chief pertinent facts, that the excess of female births is due to the prevalence of a degree of weakness of reproductive energy. Excess of female births is coincident with other evidences of sterility.

We have already given reasons for believing that, when a woman bears above ten of a family, she shows an unnatural or excessive amount of fertility; and this belief is corroborated by the demonstration we now propose to give, that excessive families occur chiefly in women who are married in the sterile age, or age of weak reproductive energy characterised by absolute sterility and by morbid production, whether abortive, premature, or mature. At present, we only consider the production of mature children, and we find the unnatural intensity of fertility in the young shown by absolutely large numbers, that is, above ten; while, in the elderly, it is shown by rapidity of births or intensity of fertility, so long as it lasts; and we may here remark that it has been elsewhere proved that, for such women as begin childbearing late in life, there is a prolongation of the period of fertility beyond the average age of ceasing to bear, not a prolongation, as estimated from beginning to end, of actual childbearing.

That the fertile younger are more fertile than the fertile older is shown by the following table of data derived from St. George's-in-

TABLE XVII.—*Showing the Fertility of Mothers Married at Different Ages.*

Years Elapsed since Birth of First Child.	Average Number of Children to each Marriage formed at Ages:			
	16-20.	21-25.	26-30.	31-35.
10	5.05	4.51	4.12	3.44
20	7.68	7.01	6.43	3.00
30	8.41	7.89	6.80	7.00
40	10.85	8.24	5.00	4.00

the-East. That the younger fertile have a longer perseverance in fertility than the fertile older is shown by Table XVIII, derived

TABLE XVIII.—*Showing the Amount of Continuance in Fertility of Wives Married at Various Ages, as shown within Twelve Months.*

Age of mother at marriage	15-19	20-24	25-29	30-34	35-39	Total.
The number child-bearing in the fifth year of married life is 1 in...	2.6	2.7	4.1	4.9	10.5	3.2
The number child-bearing in the tenth year of married life is 1 in	3.2	4.0	5.9	8.7	—	4.1
The number child-bearing in the fifteenth year of married life is 1 in	4.6	6.8	18.2	37.4	—	8.0
The number child-bearing in the twentieth year of married life is 1 in	8.5	14.6	129.8	—	—	16.3
The number child-bearing in the twenty-fifth year of married life is 1 in	63.0	480.5	—	—	—	171.9

from my work on *Fecundity*. That the unnatural intensity of fertility in women bearing large families begins with the commenc ment of childbearing, is shown by Table XIX, from Ansell, whi

TABLE XIX *(from Ansell).—Showing Intensity of Fertility in Mothers of Families of Different Numbers.*

In Families consisting of the Undermentioned Numbers of Children.	Interval between the Marriage of the Parents and Birth of the—		
	1st Child.	2nd Child.	3rd Child.
	Years.	Years.	Years.
1, 2, or 3	1.78	4.84	7.38
4, 5, or 6	1.37	3.32	5.49
7, 8, or 9	1.18	2.82	4.68
10, 11, or 12	1.05	2.54	4.15
13, 14, or 15	1.06	2.40	3.81
16 or more	0.96	2.15	3.47

demonstrates the rapidity, only up to the birth of the third child, families of various numbers. Up to the third birth, the rapidity twice as great in families of sixteen or more as in families not abo three; and it is easily counted that, while the small families ca slowly, and the excessive families quickly, the families from sev to twelve came nearly at the average rate of one every eighte months. That the unnatural rapidity of childbearing in excessi families continues throughout childbearing life is shown clearly Tables IV and V. In my table, the quickest childbearing is eve ten months, the family being nineteen in number. In Ansel table, the quickest is every fifteen months, the family bei eighteen.

Lastly we show, by a table framed from the Edinburgh a Glasgow data, that the wives beginning fertility at advanced peric of life have an unnatural intensity of fertility while it lasts, greater intensity than that of women married and beginning childbear at the best ages. (See Table XX.) This table re

TABLE XX.—*Showing the Intensity of Fertility in Wives Mothers Different Ages.*

Duration of Marriage.	Mother's Age.						
	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45-
Under five years	1.128	1.519	1.825	1.844	1.827	1.698	1.2
Five years and under ten ...	2.500	3.190	3.750	4.048	4.085	3.792	4.0
Ten years and under fifteen ...	—	5.333	5.453	5.903	6.197	5.964	6.5
Fifteen years and under twenty	—	—	6.000	—	7.911	7.993	8.4
Twenty years and under twenty-five	—	—	—	7.000	9.396	9.718	10.5
Twenty-five years and under thirty	—	—	—	—	—	12.368	13.0
Thirty years	—	—	—	—	—	—	13.0

thus: To take the second row of figures—Fertile women five ye married and under ten have, if they are now from fifteen to ninet years of age, 2.5 children; if now from twenty to twenty-four ye of age, 3.19 children; if now from twenty-five to twenty-nine ye of age, 3.75 children, and so on.

Multiparity is a term already well recognised as implying that t subjects of it have had two or more pregnancies and births; bu woman may bring forth two or more children at once, and to t condition we apply the term pluriparity. The most common deg of pluriparity is the production of twins, these occurring about on in every eighty pregnancies. Triplets and higher numbers are ve much rarer, and the rarity increases with the number.

Chiari, Braun, and Spaeth have given good evidence that ab tions are comparatively more frequent in plural than in ordin pregnancies. M'Clintock, founding on large experience, shows th hydramnios is also common. Acephalous monsters are found o in plural pregnancies. Monstrosities of all kinds are commoner plural than in ordinary pregnancies. There are more dead-bo children in plural pregnancies. The children born alive in plu pregnancies are more difficult to rear. "The proportion," sa Ansell, "of infants that are stillborn or die soon after birth is, the case of males nearly five times, and in the case of females nea four times, greater in multiple than in single births."

Subsequently, we shall adduce evidence that pluriparity is specia associated with idiocy and imbecility of the children, and that specially affects the sterile ages, or ages of weakness of reproducti Excessive family, that is, above ten in number, specially affects same ages, and is dangerous to the lives and injurious to the hea

both mothers and children. Both have therefore an alliance
ı sterility.

ı a case of quintuplets the mother's age was forty and the preg-
cy the tenth. In 7 cases of quadruplets the age of the mother
given in 6, and the mean is twenty-seven; the number of preg-
cy was given in 6, and the mean is nearly three. The ages were
eteen and twenty with first pregnancies; twenty-five with third
gnancy; thirty with number of pregnancy not stated; thirty-two
h a fifth pregnancy; and thirty-five with a fourth pregnancy. In
case of second pregnancy the age of the mother was not given.
m a great variety of sources I have collected 43 cases of triplets
l of these I give in the subjoined tables some account). (See
le XXI.) In 40 cases the age of the mother is given, and the

TABLE. XXI.—*Showing the Ages of Mothers in Forty Cases of Triplets.*

of mother...	19	20	23	24	25	27	28	29	30	31	32	33	34	35	36	37	38	44
ıber of cases	1	3	1	2	4	2	2	1	6	1	1	1	1	6	2	2	3	1

ın is thirty. In 41 cases the number of the pregnancy is given,
the mean is four. (See Table XXII.) It is naturally expected

ABLE XXII.—*Showing the Number of Pregnancy in Forty-one Coses of Triplets.*

ıber of pregnancy...	1	2	3	4	5	6	7	8	10	11	12
ıber of triplets	8	8	12	2	2	2	3	1	1	1	1

t our best evidence should be derived from twins; but while this
·eally so, we have, even in these cases, to deplore the inadequacy
he data in point of number. I have not at present sufficient
e at my disposal to enter into the details of the production of
ns, and for these I refer you to my work on *Fecundity*. It is
re shown that the frequency of twins increases with the age of
mother and with the number of the pregnancy, the very early
s of the mothers and the first pregnancy forming exceptions to
rule.

n a paper by Arthur Mitchell, published in the *Medical Times
l Gazette* (Nov. 15th, 1862), he shows that twins are peculiarly
ble to be imbeciles or idiots. The conclusions of Mitchell's paper
so pertinent to the present subject, that I quote them here at
gth. "1. Among imbeciles and idiots, a much larger proportion
ıctually found to be twin-born than among the general commu-
y. 2. Among the relatives of imbeciles and idiots, twinning is
o found to be very frequent. 3. In families, when twinning is
quent, bodily deformities [of defect and of excess] likewise occur
h frequency. 4. The whole history of twin births is exceptional,
icates imperfect development and feeble organisation in the
oduct, and leads us to regard twinning in the human species as a
arture from the physiological rule, and therefore injurious to all
ıcerned. 5. When we pass from twins to triplets and quadruplets,
rything we know regarding these latter gives support to the
ıeral conclusions in question."

Besides these accumulated dangers and disasters to the children
oduced in plural pregnancies, we know that plural pregnancy is
ngerous and disastrous to the mothers. The trivial and the
ıver disorders of pregnancy are more common in pluriparous than
uniparous women, and the disasters and deaths in childbirth and
childbed are also more numerous in the pluriparous than in the
iparous. Nothing can be better demonstrated than that woman
naturally or normally uniparous, and that pluriparity is an un-
tural or abnormal condition connected with sterility by being
served in the sterile ages, or ages of weakness or imperfection of
·roductive power. It does not imply the desirable productiveness
health and vigour, but the reverse.

Pluriparity in a population, then, is not an indication that its
cial condition is as it should be. It shows, according to its
ıount, that marriages take place too early or too late in life; and
may be predicated of such a population, that it has a correspond-
gly large maternal and infantile mortality, and that the reared
ildren are not of the finest. While woman is normally or physio-
gically uniparous, like the mare and cow, many of the other
mestic animals are normally or physiologically pluriparous, as the
g, the rabbit, and the sow; and the fertility of most birds is a
rt of pluriparity.

In the uniparous animals, pluriparity is rare in various degrees in
e different kinds; but the extreme rarity in some, as in the mare,
ay to some extent depend on the circumstance that, in general,
ly the finest specimens at the most suitable ages are allowed to
hibit their fertility. Little, indeed, is known about them with the
actness desiderated with a view to comparison with woman; yet
we may safely assert that, among breeders of horses and cattle, the production of twins is, with a view to their interest in both mother and offspring, not looked upon with favour.

In the sheep, there is such a frequency of twins, and even of triplets, that there may be some hesitation in classing it with uniparous mammals.

In the pluriparous animals, on the other hand, uniparity is uncommon, and pauciparity is an indication of reproductive weakness or imperfection, while a just degree of pluriparity is natural or physiological. "It is remarked," says Spencer, "by Buffon, that when a sow of less than a year old has young, the number of the litter is small, and its members are feeble, and even imperfect."

The domestic hen, in its fertile career, admirably illustrates the rise and decline of pluriparity, and the variations are in accord with the great law of age, which holds good in women and in all living beings. Its first and its last productions are small in size, and are believed to be peculiarly liable to be addled or without yelk, or to be otherwise incapable of being hatched. In its first year, according to Geyelin, it produces only 15 or 20 eggs; in its second, 100 or more, up to 120; in its third year, from 120 to 135, and here the climax of fertility is reached; in its fourth year, it produces from 100 to 115; in its fifth, from 60 to 80; in its sixth, from 50 to 60; in its seventh, from 35 to 40; in its eighth, from 15 to 20; in its ninth, from 1 to 10. The fertility rises quickly to its summum in the third year of life, and more slowly fades to its disappearance in the tenth year of life.

In like manner, the bitch and pig begin their fertile course with a small number, which year by year rapidly increases; and, after a few years, whose number I cannot give, again decreases, till fecundity disappears, this last production being often a premature or a dead fœtus. The pluriparous animal has its best young when its progeny is most numerous. The best young may be so described, as in pups, on account of their intelligence, docility, or special talents; or they may, as in a litter of pigs, be best because they are large and easily made to grow to great bulk or weight. In the case of the bitch, it is impossible to reduce to an exact statement the value of pluriparity, but it is no doubt very great; and while it is the case that, when most in number are produced there is also most in weight, the statement of weight of the pups gives no idea of their value. In a litter of pigs, the value of pluriparity is a simpler matter, being estimated almost entirely by weight and capability of rapid growth; and both may be very well stated in figures.

The uniparous mare has a foal, which may be valued partly for bulk, especially if it is to do rough, heavy work; but the bulk of a foal bred in the racing stud is a matter of comparatively little moment; and I daresay all will agree that the nobler the breed of horses, or the higher the qualities expected in them, so is bulk in the foal of less and less importance, and so also is pluriparity less and less desirable.

We have already used estimates of weight and length of single children as indications of fertility in woman; and, if weight and length of twins were a test of paramount import, then twinning would, correspondingly, connote fertility, as 12 lb. exceeds 6½ or 7 lb. But there are higher qualities than the combined weights and lengths, and it is these higher qualities that are deficient in twins. Weight and length are valued merely as indications of general health and full development of individuals, not of twins.

Pluriparity in uniparous animals is rare, and for its study great accumulation of instances is required; and knowledge regarding it in these animals is tardily gained. Pluriparity in some common domestic animals is an every-day matter; and, without any deliberate study, its variations strike even the obtuse—a class often specially sensible of the pecuniary advantages of the higher degrees of pluriparity. It is the striking characters and advantages of high degrees of pluriparity in pluriparous animals that have led to the general adoption of the erroneous opinion, that pluriparity, even in the uniparous animals, as in woman, is an unqualified sign of fertility.

In pluriparous animals, and specially in the common hen, the quick rise and more gradual decline of fecundity is plainly observed; the climax in the hen, as in other pluriparous animals, being marked by the highest number of annual production, or in a single brood or litter. In woman, there is the same kind of variation; but in her it is a decline from occasional pluriparity to the production, with due intervals, of the best kind of single births; and the rise is back again to occasional pluriparity, and hurry of births one after another.

In the common hen, the rise to the climax occupies three years of life, and the more gradual decline occupies six years, according to Geyelin's data, already given. In woman, the decline to the lowest

if we count roughly, from fifteen to twenty-five years of age, occupies ten years, and the more gradual rise, from twenty-five to forty-five, occupies twenty years. In the hen, the rise is from 15 to 135, and the decline from 135 to 1. In woman, the decline is from about 1.02 to 1, and the rise again to about 1.02. There can be little doubt that a similar rise and fall, or fall and rise, are to be found in the history of the fertility of other living things. The curve of this climax and anti-climax is not a part of a circle. Dr. Routh, in a valuable paper on "Procreative Power," published in the *London Journal of Medicine* for 1850, describes this curve, representing what he calls the inclination of procreative power, and thinks the circle is perhaps the nearest that could be selected; but the circle cannot be made to represent the figures on which he relies. He makes the age of greatest fecundity in woman twenty-six, and the climax and anti-climax may be partially indicated by the following figures, which he gives: At fifteen years of age, the figure is 22; at twenty, it is 82; at twenty-six, it is 100; at thirty, it is 92; at thirty-five, it is 74; at forty, it is 54; at forty-five, it is 39.

In leaving the subject of twins, it is natural to refer to malformations and monstrosities as showing weakness or disorder of the reproductive powers, but on this point I have no good detailed evidence to adduce meantime. Yet it is well known that a great body of opinion is in favour of the view, and there are many facts pointing in the same direction. In the course of these lectures, I have frequently mentioned such opinions and facts, but the subject is well worthy of special study. Here I would only refer to the frequent combinations of idiocy and malformation, of idiocy and twins, of idiocy and premature or post-mature maternity, of malformation and twins, of interbreeding and malformation, of interbreeding and sterility, as combining to form an argument that may, if worked out, be found to be conclusive on this question.

Experiments in producing malformations and monstrosities in the common fowl have been very fruitful in results, and demand caution in judgment as to the potency of such influences as age of the mother. Especially interesting in this view is the recent discovery of Dareste that mere delay of incubation, in the case of the eggs of the common fowl, is a cause of malformation in the chick.

REMARKS
ON THE
LOCAL ORIGIN OF MALIGNANT GROWTHS.*

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S.,

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Mr. President and Gentlemen,—The subject before us is, as I understand it, the nature and scope of the local influences which induce malignant action. We accept, as being too obvious to need demonstration, the statement that cancer has both exciting and predisposing influences. The question, whether cancer be a local or a constitutional disease, seems to me, when put in such terms, to be almost childish; and I confess that I shall feel greatly disappointed if, in the discussion which is to follow my remarks, it should be in any way assumed that this is the matter in debate. Malignant processes of cell-growth are, I submit, not in any sense specific; they are modifications of the normal conditions of cell-life, and they depend not in the slightest degree upon the introduction of any new germs from without. They are the results of the sum of influences to which the organism has been exposed during its personal career; and it follows, as a matter of course, that these must have been some of them constitutional, and some of them local. It is with the latter that we have to deal to-day, and with these alone. It may, however, clear the matter somewhat if I first say a few words on the doctrine of cancer, and as to the general conditions which predispose to malignant action. In doing this, and indeed throughout my paper, I shall use the term cancer in its old sense, as denoting all forms and varieties of malignant disease.

The general result of modern histological inquiry has been, I believe, to lead us to regard the malignant process as, in the main, a local reversion to fœtal modes of growth. A certain group of cell-elements succeeds in freeing itself from the central control of the organism, and develops for itself upon a plan which is really retrograde, and which produces structures, which are not only in themselves useless, but which possess the power of infecting their neighbours. These growths are beyond the influence, or almost so, of the various agents which have been found effective in controlling inflammation. I am not sure that this insusceptibility to the action of drugs is not the principal characteristic of cancer. The infection of the glands, of the viscera, and of the organism generally, is a power which cancer shares with inflammatory processes. The more we investigate, probably, the more clearly we shall see that all inflammations are really infective; and that, from every structure in a state of inflammatory disease, particulate elements are shed, which, being carried in the lymphatic and vascular channels, may reproduce processes more or less similar in distant parts. The attempt, therefore, to distinguish between inflammation and malignant new growth, by reference to the infective power of the latter, thus breaks down. It is only because the results of general infection are, in the case of cancer, conspicuous and incurable, that we have come to regard this phenomenon as almost pathognomonic.

As it will be part of my assertion to-day, that inflammatory processes may pass by almost insensible gradations into those of malignancy, it becomes of much importance to get rid of false impressions as to the features which distinguish them. If we could find some remedy, the internal administration of which should cause a malignant ulcer to heal, or a malignant growth to melt away, as we witness when mercury or iodide of potassium is given for syphilitic formations, we should soon cease to notice any clearly marked clinical distinctions between cancer and inflammation. Nor, I truth, is the cancerous growth wholly beyond the reach of the remedies for inflammation. It is possibly true that none of the internal remedies—such as mercury, antimony, arsenic, and the like—have any appreciable influence upon it; but the local application of cold, and the local use of such agents as lead and spirits of wine, which repress cell-growth, have, if vigorously employed, a unquestionable power in retarding its development.

No one has ever doubted that there are constitutional states which predispose to cancer. In the first place, it is obvious that the structure in which it begins must be alive; and, in the next, it is clear that all living tissues are not equally liable to it, nor the tissues of all living organisms. It occurs in the lower animals as well as in man, but not with equal frequency in all. Possibly it is very rare in wild animals, and happens almost solely in those in whom the average duration of life is prolonged through artificial protection. Amongst the lower animals, as with ourselves, it is an appanage of old age. Senility, either of the structure concerned or of the entire individual, appears to be almost necessary to its production. When exceptions to this occur, they are probably due to the influence of inheritance. Speaking generally, there is no clinical fact more decidedly marked than that the tissues of young persons however much exposed to the influences which in more advanced years are prone to evoke the disease, are not liable to take on a cancerous mode of growth. Whatever its character, and however prolonged its influence, we do not expect to see local irritation produce cancer in any person under middle age. When exceptions occur they are to be exceptionally explained.

Sometimes it is not so much senility of the entire organism as what we may term local senility, an old age of the tissues concerned which is premature, and does not correspond with that of the body as a whole. Nor, indeed, is it correct to say that the degree of senility is the measure of the proneness to cancer, for it is not the conditions of advanced senile atrophy that cancer is most apt to occur, but rather in its commencement. Tissues and organs which are just passing out of use, which are just commencing to decline, are those which are most prone to develop it. Of this law, the female breast offers us the best and most instructive example. It is quite possible that it is under this head that we ought to place part, at least, of the influence which previously existing local disease appears to exert in evoking cancer. Moles, and other forms of congenital excess, as well as certain innocent forms of new growth not congenital, are, as is well known, liable to be attacked by cancer. It may be that these growths run through their life more rapidly than normal structures, and thus, on the score of senility, become liable to cancer more early than the rest. It may be also, and it is improbably is, that this, too, is the way in which long-continued local inflammation sometimes acts; exhausting, as it were, the vital vigour of the part affected, and reducing it to the level of those of much older individuals. In this way, local inflammation may play the part both of predisposing and of exciting cause.

A few words must be said as to the causes of variety in the ca

* Read in the Section of Pathology at the annual meeting of the British Medical Association in Worcester, August 1882.

erous process. It would appear to be the fact that the different issues are all of them liable, with greater or less frequency, to take in this mode of morbid growth, and that in each the new product derives peculiarities from the precise place of its birth. The expression "place of birth" does not, I am aware, cover the whole ground; for the cells in which the first cancer-nodule arises are not only its home, but its parents also. The peculiarities which a cancer takes at its origin it keeps throughout its course. However widely it extends locally, how dissimilar soever may be the structures which it invades, it still keeps its original character. Nowhere is this better illustrated and proven than in the instance of epithelial cancer of the integument of the face. I will class the disease known as "rodent ulcer" as being unquestionably a form of epithelial cancer. Now, the facts appear to be pretty nearly these. If malignant action originate on any part of the skin of the face—the ears, lips, mouth, and mucous membrane of the eye, excepted—it will be of a kind which proceeds slowly, and always remains local, having no power to implicate either the lymphatics or the blood. This is the so-called "rodent ulcer." But if malignant action be originated on the lips (the red prolabium), or in or on the ear, it will be of a much more rapid kind, and will cause early implication of the lymphatic glands. It will kill its victim in a year; whilst the "rodent ulcer" may easily take twenty years before it causes death. Everything depends upon the precise tissue in which the disease takes its birth; for the "rodent ulcer" may involve the lips secondarily, but it does not, on that account, acquire any modification of its character. I could not produce to you any better example of this fact than that which this portrait illustrates. It shows us a malignant ulcer which has destroyed the outer angle of the mouth and part of the lower lip, but which had existed ten years when the portrait was taken, and had shown no tendency to implicate the glands. The explanation of this apparent discrepancy is that it began, according to the patient's clear testimony, not on the prolabium, but on the skin near to it.

As I have just asserted, the clinical observer may, without resort to the microscope, easily find proof of the law adverted to, and may note that each special tissue, almost, I might say, each individual region, gives peculiarity to the cancer which originates in it. But the histologist can carry things much further, and can explain the peculiar progress of different forms of cancer which have begun, so far as naked eye observation can go, in the same structure. He can show us that, although varieties of malignant action may begin in one and the same organ, or in one and the same region, they do not necessarily begin in identical structures. There is no organ, no part of an organ, which is not complex as regards its ultimate constitution; and with this complexity comes the possibility of variety in the precise spot in which morbid action takes its origin. Thus, in connection with true carcinoma of the breast, we have recently had it suggested by Dr. Thin and others that, when the process begins first in the epithelial lining of the ducts, it may, and probably does, differ in not unimportant features from that which begins in the acini. So, in the case of the integument of the face, although almost all forms of malignant disease originating there take on the clinical features of rodent ulcer, and are slow in progress, yet we have marked exceptions. When these exceptions occur, they are, doubtless, to be referred to the fact that the disease does not always begin in the same elements. I will not, in the presence of Dr. Thin and Mr. Butlin, and with the recollection of the amount of skilled labour which has been expended upon the question, presume to say in which of the skin-elements the common type of rodent ulcer has its birth. It is not, however, necessary to be sure of that before venturing to feel confident that when remarkable deviations from type are witnessed, they are due to deviations from ordinary rule as regards origination-tissue. When sarcoma begins in the skin of the face, whether pigmented or not, I presume no one will doubt that it starts in elements which are not the same as those in which epithelial cancer begins. I do but extend the line of this argument, when I infer that the peculiarities of various forms of epithelial cancer itself are due to the same cause. I show some drawings of a form of epithelioma of the face, clinically very different from what we usually observe.

It is needful here to say a few words as to the *Inheritance* of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged, with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice, may perhaps be usefully classed as three, senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts as regards chimney-sweeps' cancer give perhaps the best illustration of what I mean. Before this malady was practically suppressed by Act of Parliament, I believe it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with much greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instance by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what it is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can be given will be to say that it is a peculiarity in cell-structure generally; not germs, not a blood-malady, but a special type of cell organisation, permitting, with greater ease than in other persons, the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot-cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for one moment doubt that, in some instances, the inherited proclivity may be so strong, that it does not wait for the help of any exciting causes, but manifests its power in the production of a cancer which may be considered spontaneous. It is probably in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue-proclivity may be transmitted, possibly even germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance, I wholly deny that we can allow it rank as a true cause of cancer.

It is time that I should cease from these general and somewhat speculative considerations, and come more closely to the details of the matter in hand. I trust, however, that what I have said will not be found to have been wholly beside the mark, but that it has really cleared the way for that which is to follow. My wish has been that our minds should be brought to that point of view in which we may see that it is, after all, just possible that what we call cancer is only a modification of the inflammatory process; or, at any rate, to put the proposition in a more restricted form, that it is almost always preceded and initiated by changes which are of that character.

I have adverted, in passing, to several matters of clinical experience on this point; but it may be well now to enumerate *seriatim*, but as briefly as I can, the several classes of fact which we have to consider. Many of these possess no kind of novelty, and have, indeed, been often before cited and discussed with almost identical objects to those which induce me now to reproduce them.

First, let me ask whether it is not within the experience of surgeons that there are certain rare and exceptional forms of chronic ulceration which histologists will not accept as cancer, but which run a clinically malignant course. To this group the so-called rodent ulcer belonged for many years. It was "a peculiar ulcer of the eyelids," "Jacob's ulcer;" and able microscopic observers assured us that no elements could be found in its growth which differed from those of chronic inflammation. The more developed processes of modern research have, however, changed this; and we now know that the differences between epithelial cancer and rodent ulcer are those of degree, and not of kind; and clinical observation, thus supported by the microscope, without hesitation places it as a form of cancer. I am entitled, then, to claim the rodent ulcer as resulting from a form of morbid action which stands halfway between common inflammation and cancer.

It may be worth while to glance for a moment at the varieties which this ulcer may present. We are far too apt, in this instance as in many others, when a peculiar pathological process has had the misfortune to receive a distinctive name, to assume that it is always

one and the same in its features. I could produce much evidence to show that different examples of rodent ulcer vary very greatly in the degree in which they resemble either chronic inflammation on the one hand or the ordinary type of epithelial cancer on the other.

I think there are other forms of disease which still stand in the position which rodent ulcer occupied not long ago, and which some forms of it still possess, of being literally and absolutely half-way between inflammation and cancer. Some of the forms of ulceration of the rectum, with thickening and stricture, locally incurable, but not constitutionally infective, come into this category. So also does the disease to which French surgeons give the name of *œsthiomène*. In this malady, the ulceration is steadily aggressive, very slow in progress, not attended by anything which, strictly speaking, can rank as new growth, and without tendency to implication of the lymphatic glands. It is not influenced, so far as I know, by internal medication; and although, both as regards it and the common forms of stricture of the rectum, it is quite true that they often originate in syphilitic subjects, they are not under the influence of iodide of potassium. In this clinical feature, they correspond with what we know of all forms of malignant disease, that they are amenable only to local treatment.

I am sure that I have repeatedly seen syphilitic ulceration with inflammatory hypertrophy glide into cancer so imperceptibly and gradually, that I could not tell when the one ended and the other began; and my impression is strong, as I have several times before publicly stated, that parts formerly affected by syphilitic inflammation possess a special degree of proneness to take on malignancy.

A gentleman was under my care some time ago for syphilitic laryngitis, with extensive destruction of parts and narrowing of the glottis. Swelling occurred about the thyroid cartilage; and, in the performance of tracheotomy, I had to pass through what appeared to be a gumma, which had an abscess in its middle. Granulation-masses sprang up around the tracheal cannula; these resisted all treatment; and, after some months, the persistent growth of a large bossy mass obliged us to realise that at length we had to deal with a malignant neoplasm.

Many years ago, Mr. Cock described, in the *Guy's Hospital Reports*, a peculiar tumour of the scalp, which, originating in a sebaceous cyst, finally assumed the features of a locally malignant growth. Of these, I show now some remarkable illustrations. In one of these, the ulceration, attended by free warty, or cauliflower growth, had involved almost the whole scalp; yet it was excised by my colleague, Mr. Rivington, without return or implication of glands.

The cancer which occurs in scars, and to which, if I mistake not, Mr. Cæsar Hawkins was one of the first to draw attention, is another illustration of the power of local peculiarities in evoking malignant action, and also in stamping peculiarity upon it. I believe that in this form of cancer, as in the rodent, there is seldom any gland-disease.

The almost absolute restriction of cancer of the lip to males—that is, to those who smoke—is so definite as to suggest the possibility of constructing a sexual classification of cancer. This might be done in considerable detail by reference to the local influences to which the several parts of the body are in the two sexes relatively exposed, and would supply testimony of great strength in support of the doctrine of local origin.

In a paper upon the antecedents of cancer of the tongue, many years ago, I insisted upon the great frequency with which syphilitic inflammation is its precursor, and probably its cause. Every year's experience confirms this impression, and furnishes but too numerous illustrations of the difficulty which even the best trained observers find in recognising the stage at which syphilitic ulceration, sclerosis, or papilloma, may pass into the condition of declared malignancy. The cases of cancer of the tongue which are not preceded by some form of syphilitic inflammation are, in fact, exceptional. I must hold, also, that the results of operations for cancer of the tongue very strongly confirm the theory of its local origin; for, in a large majority of cases, if the operation be done early and boldly, there is no return in the organ.

I ought to say a few words respecting the association of cancer of the penis with phimosis and other local causes of irritation, and also as to those cases in which cancer follows injuries, and in which it begins in the substance of other new growths: but I must pass these topics over with a bare mention. I must not, however, neglect to remind you of the fallacy of supposing that the influence of external irritation is confined to external cancers. If this doctrine be true for the various forms of malignant action beginning in the skin, or in those mucous tracts which are open to our inspection, we may safely assume that it is true also, and perhaps with not less cogency, of those parts which are concealed.

In bringing these remarks to a close, allow me, Mr. President, to give expression to the pleasure which it has afforded me to be permitted to introduce this subject. It is one which has engaged a large share of my thoughts during the whole of my professional life; and more than twenty years ago, I read before the Hunterian Society a paper which contained, in the main, the same arguments which I have to-day brought forward. I then held, as I have now done, that cancer is, in the main, a disease local in its beginnings; and I insisted on the paramount importance of this doctrine as the only safe basis for surgical treatment. The general opinion of the profession has, if I mistake not, much advanced in this direction since then. It was helped much by the discussion which took place in 1874 before the Pathological Society. On that occasion, Mr. Campbell de Morgan, in a most able speech, introduced the subject, and upheld the doctrine of local origin. In the debate which followed, I had the honour of taking part, and I then re-stated, in the strongest terms which I could find, my concurrence with his opinion, and my belief that, in nineteen cases out of twenty, cancer begins as a local growth, and that the infection of the system may be prevented if the removal be sufficiently early and sufficiently free. Some years later, in a second paper before the Hunterian Society, I introduced and defended the expression "precancerous stage of cancer." I hoped that a readily used phrase of this kind might avail something in attracting the attention of the profession at large to the subject. At the same time, I suggested and recommended that our operative measures might often be justified before the diagnosis of cancer could be established, and that sound surgery might find its most beneficent vocation in the anticipatory excision of suspected parts. An ingenious argument in support of the doctrine of the constitutional origin of cancer has been based upon the fact that it so almost constantly recurs after removal. But, before we can allow any weight to this contention, we must inquire where it recurs. If the recurrence be in the lymphatic glands, or in other parts in close proximity to the growth, it proves only that excision was delayed too long, and that infection had already been accomplished. We do not allege that syphilis originates in the system because the excision of a chancre seldom prevents the full development of the disease: nor would a farmer who allowed a thistle to seed before it was cut down, have any right to infer from next year's crop that his field had a constitutional tendency to the production of thistles.

Let me now briefly glance back upon what I have been stating in relation to the discussion which is to follow. I have tried to urge respecting cancerous new growth that it by no means occupies a position of such absolute isolation as has been supposed, and that, when not the result of inheritance, it is not only sometimes, but almost invariably, preceded by conditions of cell-change which are identical with those of chronic inflammation. For this I have proposed the name Precancerous Stage. I have further suggested that there are cases in which the changes never advance beyond this introductory condition, and the malady remains ill characterised to the last. Into the details of the microscopic changes, and how, in the various tissues, chronic inflammation gradually slides into cancer, I have not entered. I have avoided this important aspect of the subject for several reasons: partly because I feared it might be of comparatively little interest to some of my hearers; partly because the clinical evidence seems to me sufficient, and even more convincing than any which the microscope can offer; but in still greater part, because I knew that there would be those to take part in the discussion of much greater knowledge upon it than myself. If the discussion should not prove a copious and valuable one, it will not be because I have exhausted the subject, for I have left not only this topic but several others wholly untouched. Nor will it be, I think, because I have expressed my own opinions with undue reticence or caution. I have stated them broadly, and, perhaps, even with some rashness, believing that to be at once the best method of conveying my own meaning and of eliciting the opinions of others. There is, however, another and far stronger motive for being outspoken in this matter. It is the conviction which grows with each year's experience, that in the rules of practice which would spring out of the full and hearty adoption of the doctrine of the local origin of cancer rests our only hope of being able to save those who consult us, from the horrors of this dreadful malady. "Too late! too late!" is written in legible characters upon three-fourths of cancer-cases when they come under the notice of the operating surgeon. When the doctrine of the precancerous stage shall be widely adopted, and when surgeons generally shall recognise the propriety—let me say the duty—of operation for purposes of prevention, then, and I believe not till then, shall we witness a con-

iderable reduction in the mortality of cancer. In no other direction is any hope of improvement to be discerned. I made this assertion twenty years ago before the Hunterian Society, and I feel t to be a duty to repeat it now with all the emphasis that I may be permitted to give it.

Sir JAMES PAGET said that he had been quite conscious that the opinion had been of late years increasing, that cancer was in its origin local. But this did not preclude the adoption of the idea of "constitutional element" in the formation. It was necessary to define the term "constitutional," which used to be regarded as synonymous with "something in the blood," whereas at present the word was more fairly used as expressing something that was prevalent through the whole body. In the subject of cancer there was undoubtedly something preceding the cancer present in the part in which it would subsequently appear, although that person was not more likely than others to have cancer in any other part. If it were necessary that that were to be held as being essential to the doctrine of the local origin of cancer, then it was necessary to meet a class of facts which were opposed to it. The negative evidence of inheritance with regard to disease was absolutely worthless. Scarcely any man certainly knew that his great-grandparents did not have such or such a disease, and many inherited tendencies without being aware of it. Sir James referred to a person who died of cancer of the stomach, whose two daughters and many of their children (to the total of twelve or fourteen in all) also died of cancer in different organs. In such instances as this, no local tendency was transmitted; no malformation was transmitted; but that which was transmitted was something general—something which, in each of these persons, was planted in a different organ from the others, and was determined in each individual to this or that part. He would not say that the transmission was in the blood, lymph, or tissues, but that it was a general influence. At the same time, he fully admitted the existence of a precancerous stage, the importance of which Mr. Hutchinson had urged. In support of his view, he quoted the case of a patient who had recurrence of cancer in the opposite breast to that which had been the primary seat of the growth, and had been removed twelve years before. Was not this explained by the same general condition pervading her? and was it not that, in turn, each breast had been subjected to the same local influence? Similar support was afforded by the occurrence of cancer in the scars of burns of long standing. Whilst, then, not doubting that many facts supported the local development of a cancer, it was impossible to exclude the general or constitutional influence, without which the local influence would not operate to produce the disease. The presence of these two factors occurred in other diseases—*e.g.*, the tendency to gout was inherited and was present in the child, but the local manifestations of the disease were only evolved in later life. Thus it was also that syphilis might be latent for years, until some injury caused its manifestations.

Dr. THIN (London) remarked on the absence of all positive knowledge regarding the changes by which a physiologically healthy epithelial cell acquired the properties of stimulating an abnormal increase in the number of cells present in a part. The newly formed epithelial cells of a cancer differed in their vital properties, and in their chemical constitution, from healthy epithelial cells. Their contact was not tolerated by the adjacent vascular tissues, on which they acted like an irritating foreign body, and the action of staining reagents showed that they differed chemically from normal epithelium. It had been imagined that, as a preliminary condition to the changes which they underwent, the cells reverted to their embryonic condition. He found no evidence of this supposed reversion. As regards the changes which epithelial cells underwent in becoming a distinctly cancerous epithelium, he could not recognise them as being changes which were peculiar to the embryonic state, or to any stage which characterised epithelium in the healthy body. The hypothesis which seemed to him to explain best the perverted vital action in epithelial cells which led to cancerous formations, was the assumption of a feeble differentiation of the epithelial layers in the embryo. According to this theory, the liability to cancer must be carried back to the earliest stage of embryonic life, when one set of cells took on the epithelial character, and another that of the connective tissue. If, at this period, the vital qualities of the epithelium were feebly developed, the epithelial structures would, throughout life, be liable to take on perverted action under causes more or less slight. Local irritation would be liable to cause cancerous growths in persons whose epithelium had remained permanently weakened by original fault of development. It was in this way that it was possible to explain how, in some cases, local causes alone seemed to produce cancer, whilst, in other cases, the cause appeared to be in the constitution of the individual; and also how the cancerous diathesis ran strongly in certain families. He was unable to follow Mr. Hutchinson in regarding rodent ulcer (or rodent cancer) as representing a transition between inflammatory conditions and cancerous changes. The specific cancerous changes were as highly developed in rodent ulcer as they were in any other form of cancer. The reason why, at one time, confusion had existed regarding the pathology of rodent ulcer, was not to be found in the fact that the cancerous changes were imperfectly developed, but in the fact that the special type of cancerous development was associated with the formation of an epithelium which had a small round nucleus and a yielding perishable protoplasm. The preservation of this peculiar epithelium, and of the relation of the groups which it formed to the neighbouring tissues, required special measures in making preparations; but, if those measures were taken, there was no difficulty in observing the complete independence of the new growth, and in being satisfied that there was no transition between the epithelial clusters and the products of inflammation. Nor did, in his opinion, the peculiar disease of the female genital organs, to which Mr. Hutchinson had referred (the *œsthiomène* of Huguier), afford an example of a half-way condition between inflammation and cancer. He had carefully examined some of these cases, and had satisfied himself that they were not connected with cancerous change.

Mr. BUTLIN (London) said that, during the past few years, he had often had to ask what was known of the cause of tumours, or of the conditions which precede tumours; and the reply was, that we now were aware of preceding conditions of two different kinds. first, those which were merely interesting; second, those which were very valuable. To the first class belonged traumatism, deep-seated inflammations, and inheritance—all of which, most believed, were strong predisposing causes, some of which were probably exciting causes, of tumours. This knowledge or belief could not at present be put to any practical use, although possibly, at some future time, it might become possible to do so. To the second class belonged certain typical morbid conditions, some of which were hypertrophic, some inflammatory. Thus moles, warts, and excrescences of the surface of the body, passed in certain instances into epithelioma; fissures, cracks, and warts of the lips became epithelioma; chronic inflammatory conditions of the tongue (psoriasis, ichthyosis, etc.) led to epithelioma; and certain chronic inflammatory conditions of the vessels and areola led undoubtedly to deep-seated cancers of the breast. This knowledge could be applied in practice: for, by removing or destroying these preceding conditions, as soon as they presented suspicious characters, the formation of cancer could be prevented in a certain number of persons. He hoped that the knowledge of these preceding conditions of the second kind might be widely and speedily increased: for it lent a charm to pathology which practical surgery had not always thought it possessed. He was strongly of opinion that not only inflammatory conditions of the nipple, but also ill-developed conditions, predisposed to cancer.

Dr. COUPLAND (London) suggested that the fact of long delay in the recurrence of cancer might be explained on the purely local view, by assuming that the organ secondarily infected might be the seat of cancer in a latent state.

Mr. HUTCHINSON, in reply, said that he had but little to add, since most of those who had taken part in the debate had supported the views which he had advanced. If there were any difference between his opinions and those of his teacher and friend Sir James Paget, they concerned the relative importance of predisposing and exciting causes, and were very trifling. He agreed entirely with Sir James in assigning great influence to inherited tendency; but, as he had urged in his paper, such tendency must have been acquired in the first instance. This consideration threw us back in the search for causes upon the two great classes—senility of tissue and local damage. Dr. Thin had asserted that rodent cancer was easily recognised as such by the microscope. This was to be admitted in the late and well characterised stages, but not in the earliest. There was a period in which he believed it was quite impossible to establish such diagnosis; and this assertion was to be applied, also, to the early stages of malignant disease of the lip, tongue, penis, and other parts. In all of these, it was, he feared, true that the microscope, for the most part, became of use just when, to the experienced eye, it became unnecessary; when the precancerous stage was past, and malignancy well declared. Dr. Thin stated that he had examined cases of *œsthiomène*, and found no histological evidence of cancer; and he argued from that circumstance that the disease did not afford a connecting link between cancer

and chronic inflammation. But really this was precisely as he (Mr Hutchinson) had stated the facts. A disease which clinically ran a more or less malignant course showed to the microscope only inflammation products. Whether the disease was called a local cancer or not, depended entirely upon whether a histological or a clinical definition of cancer was adopted. Dr. Coupland had suggested that, when recurrences of cancer after operation were delayed for very long periods, they still did not prove anything more than local origin, since the germinal plasma might possibly remain long latent. This was probably true, but there need be no anxiety on the part of the advocate of the local origin to adopt it to the exclusion of that of separate and spontaneous production. No doubt, constitutional tendency was, in some persons, of considerable strength; and this, together with the abundance of local causes, might well explain occasional multiplicity of new growths, whether simultaneous or after long intervals. He recollected the case of a lady for whom many years ago he excised an eye, on account of melanotic sarcoma. She remained well eight years, and then died of epithelial carcinoma of the vagina and uterus. He did not regard it as an instance of dormant cells, but rather of independent production of a second growth. When the disease, after a long interval, reappeared in the original site, or in the proximal lymphatic glands, then probably Dr. Coupland's suggestion would be the correct one.

AN EXPERIMENTAL INVESTIGATION OF THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.

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(Continued from page 453.)

Extract of Opium.—The experiments with this preparation may be more cursorily given; for, in the main, the results obtained were similar to those which the morphia gave. A 10 per cent. solution of the watery extract was employed. The quantities required to arrest the heart in diastole gave, for the six experiments, an average of 3.26 c.c.; whilst the 5 per cent. solution of the hydrochlorate of morphia, it will be remembered, gave 14.16 c.c. as the average toxic dose. This, of course, would make the opium rather more than twice as poisonous as the morphia. There can, however, be little doubt but that this discrepancy is due to the extract of opium solution being acid, for in an even very feebly acid solution, the ventricle ceases to beat. The quantity table hence loses its value; and, indeed, the qualitative results are vitiated from the same cause, although, with the exception that inhibition was more marked than with morphia, the agreement was tolerably close; thus latent period and "period of diminished excitability" were similarly affected; the behaviour to continuous faradisation was likewise similar; and the results, both of dilution of the poisoned fluid and of substitution of the same by fresh blood, were also similar. The "exhaustion" or "recovery" effect described under morphia was exceedingly well shown, much more perfectly than in the case of morphia; and it was possible, by placing the stimuli, to get either a descending or ascending staircase of contractions.

There remains for description the bromide of potassium. The experiments with this drug were made about ten to twelve months previously, and the results given in a paper in the *Medico-Chir. Trans.* for 1882, from which the following is taken.

The heart is arrested in diastole. The average quantity requisite for this was 2.13 c.c. of a ten per cent. solution; this is equivalent to 0.213 grammes of the salt, or 3.28 grains. Inhibition, though less marked than with chloride and iodide of potassium, is still a characteristic feature. Contractility is diminished from the outset, no stage of stimulation preceding; in the end, there is complete abolition of the power to contract. The duration of the contraction is not increased; on the contrary, a pointing of the apex of the trace occurs; this is uniformly the case with potassium salts.

Experiments subsequent to those above mentioned have shown that the "period of latency" is considerably increased, as also is the "period of diminished excitability." The excitability for continuous faradisation is lessened for bromide of potassium, as it is for the other potassium salts examined (*op. cit.*).

Dilution of the circulating poisoned fluid with an equal volume of fresh blood was tried in three cases with restoration of good spontaneous beats. Replacement with fresh blood would, of course, have been yet more effective.

To discuss the results obtained, we note that, in contradistinction to the somewhat large group of systolic arrestors, these three drugs, chloral, morphia, bromide of potassium, arrest the ventricle in diastole; this, we know, will result from a toxic dose administered to the organism in its entirety; but these experiments show further that these drugs are depressants, when applied directly to the substance of the ventricle; and they demonstrate that, contrary to what one would be led to infer from Labbé's statement, chloral is capable of arresting the isolated ventricle.

The question as to whether the quantitative results here obtained will help us with reference to the toxic dose required for the entire organism, must clearly be answered in the negative. The working of the entire organism is an accurate and delicate adjustment of numerous functions; and, as the strength of the rope is the strength of the weakest part, so the power of resistance of the entire organism is the power of resistance of the most delicate part of the complex structure. The structure of the great nerve-centres is, as a rule, the weakest point, and hence, in general, systemic death results, whilst the peripheral structures still functionate more or less perfectly.

Here, in these experiments, the drug is pushed on to the complete extinction of the peripheral structure, *i.e.*, to a degree beyond, though it is impossible to say by how much beyond, the death point of the entire organism. The curious action of curare in selecting, not the nerve-centres, but the muscle-endings of the motor nerves, shows that it is not always the nerve-centres which first succumb, and stays one from inference as to the relationship of the death-points of central and peripheral structures. Still, much may be learnt from comparative action on a peripheral structure, and, in particular, a definiteness in the results obtained quite impossible else.

Considered thus, we learn, first, the qualitative similarity of action of chloral, morphia, and bromide of potassium; they are depressants, and they are so by inhibition, and by direct diminution of muscular contractility. Compared, we note that, whilst inhibition is a well marked factor for both chloral and bromide of potassium it is but slight for morphia. Compared further, we note that, for both chloral and bromide of potassium, the action on muscular contractility is depressant from the onset, whilst morphia presents a fairly well marked stage of stimulation, or of heightened muscular contractility, preceding the stage of depression. Further, with reference to morphia, must be noted the really enormous dose required to destroy contractility, *i.e.*, the slight action of the drug on the cardiac tissues. We may here state, moreover, that "contractility was not appreciably affected till late in the action of the drug, while then the decline was rather rapid; in other words, the resisting power was maintained till a considerable percentage dose of the poison was reached. These results are in complete conformity with the statement, previously noted, that morphia affects but slightly the peripheral structures, nerve and muscle; and comparison in respect of quantity will place both chloral and bromide of potassium as far more poisonous to peripheral structures than morphia.

The isolated heart of the frog, we have stated, manifests a twofold activity, viz., contractility and rhythm; chloral and bromide of potassium we find threatening in both of these directions—there is the direct weakening of the contractile power, there is the tendency to inhibit. Is the presumption unlikely that nervo-muscular action generally, which rhythm and contractility may serve to typify, will be similarly affected qualitatively, and that the action of bromide of potassium and of chloral will be generally depressant to nervous and muscular tissues; also that the qualitative relation above seen to hold for the three drugs will apply generally? If so, a more extended inference as to the relative value of the three drugs in question will be possible; but, even if one limit oneself to the consideration of the local cardiac action, it must be evident that a drug such as morphia—which, in the doses employed in medicine, must be practically without local influence on the heart, or which, to a very small extent of this action, must be stimulant rather than depressant in nature—is to be preferred over drugs such as chloral and bromide of potassium, which in their smallest doses appear to be depressant, and which are employed therapeutically in far larger doses than morphia.

Clinically, the dangers of bromide of potassium and of chloral ıve been recognised; and thus, in our text-books, we find the atements that the presence of grave adynamic symptoms contra-dicate chloral and bromide of potassium. Opium, on the other ınd, in such adynamic states, frequently appears to lend actual pport. The results of definite experiment we find to accord with e results of clinical experience; and the value of the former lies that they confirm, and by their definiteness must tend to enforce, ıe teachings of the latter.

The choice of a drug is, however, no simple matter; an advantage ere may be outbalanced by a disadvantage there; and practical en may object that they would gladly give opium, but that the sordered stomach, blunted appetite, inactive liver, and torpid in-stines, more than outweigh the advantages of opium administra-on. This clearly is a matter for consideration in the individual se under treatment; and the decision will have to be according one or other element, asthenia, or derangement of the digestive, c., powers, is most to be feared.

These objections to opium, on the one hand, and chloral and omide of potassium, on the other hand, raise the question as to hether, in very many cases, a drug, at present rather extensively ed, especially in America, viz., bromide of sodium, might not with lvantage be substituted in their place. The salts of sodium gene-lly contrast very markedly with those of potassium; for the chlo-des, bromides, and iodides of these two metals, the lowest figure ould represent the potassium as ten times as active as the sodium. ıese precise numbers refer to action on the ventricle of the frog's art;* but on all hands the evidence is forthcoming that, whilst lts of potassium are very poisonous, those of sodium are very ightly so. One of the marked points of contrast between the two ts of salts is to be found in respect of inhibition; potassium salts hibit the frog's ventricle strongly, sodium salts scarcely at all. ere, however, we are considering drugs as to their cardiac effect; ıd, in respect of this, sodium bromide would rank far ahead of omide of potassium, chloral, or opium, as to innocuousness. The jections holding for opium would not apply here, for sodium salts e generally very little disturbing to the tissues. With these ad-ıntages the general verdict of clinical experience is to the efficacy bromide of sodium as a hypnotic, and, indeed, as a substitute for omide of potassium; and should this position but be maintained, is clear that bromide of sodium will be in very many cases the dative above all others to be selected.

In conclusion, it remains for us to consider briefly one or two ints, and to show that the statements with reference to ıe effect of the drugs on "latent period" and "period of iminished excitability" bear on the question of depressant ction. Clearly this is so; for, if a stimulus be longer mani-sting itself, this, all other things being equal, corresponds to lessened or depressed condition of the tissues; and the same pplies to the "period of diminished excitability;" for if, *cæteris aribus*, the cardiac muscle is longer recovering from the effects of n antecedent contraction—longer returning to a condition of ex-itability—that, again, is a form of depressed function. Both of hese forms of depressed activity are observed to a very marked egree for morphia; whilst yet spontaneous action may be but little ffected, and whilst the height of the contraction may have scarcely ppreciably suffered. These morphia effects are very noteworthy; or it would thus appear that certain functions of the tissues may be ery profoundly modified, whilst yet others suffer but slightly. They ust also be remembered for the sake of contrast with the bromide f potassium and chloral; the former produces effects like those of norphia, but these do not become apparent till the value of the eat has suffered appreciably; the functions of the tissue, at such ime, are therefore more profoundly depressed, the vitality is more ffected. The opposite effect of chloral on the diminished excita-ility may be remembered as a point of contrast with the other two alts, if its further meaning be not very apparent. The dilution-xperiments are of considerable interest; for, whatever the nature f the changes taking place in the tissues, and constituting toxic ction, we perceive that, of the three drugs, chloral is the one from which recovery is least ready, whilst potassium-bromide is that whose effect is most readily removed. The recovery-experiments are those from which we learn most here, for they indicate that the legree of change constituting toxic action in such cases cannot be very profound; indeed, the functions of the tissues at such times are more properly considered as simply suspended: they return with the restoration of the antecedent conditions. Chemical action, of any degree of intensity or stability, would scarcely be compatible with this ready restoration. The further consideration of this point cannot, however, now be entered on.

* See *Medico-Chirurgical Transactions*, vol. lxv, concerning the action of the salts of potash, soda, and ammonia on the frog's heart.

A CASE OF RECURRENT HÆMATINURIA.*

By W. JONES-MORRIS, M.R.C.S.Eng., L.R.C.P.Edin.,
Local Secretary Collective Investigation Committee.

I HAVE the pleasure of bringing before your notice to-day a case which was of great interest to me for some months, and one that is comparatively speaking unusual, and therefore not unworthy of our consideration. It is a case of Recurrent Hæmatinuria, a term perhaps novel, but I think justified by the history and symptoms.

The disease hæmatinuria has been described under various name s by different writers on the subject, *e.g.*, Intermittent Hæmatinuria, by Harley and Dickinson; Paroxsymal Hæmatinuria, by Greenhow; Intermittent or Paroxysmal Hæmatinuria by Sir William Gull, Legg, Begbie, and our countryman, William Roberts. The object of the different writers in their nomenclature has been to convey the idea of the presence in the urine of hæmatine or hæmato-globuline; and that occurring paroxysmally or being of an intermittent character, such intermittency varying in the several cases related, from a few hours to a few days. But, in the case I will lay before you, the hæmatinuria only occurred for a few days in every four weeks: so that the term "intermittent" or "paroxysmal" is hardly appropriate, and I have designated it recurrent or remittent, as I think one of those terms conveys the peculiar nature of the case better than the others mentioned.

T. J., aged 10, an intelligent well-developed and healthy looking lad, had been suffering, September 27th, 1877, for some days from a partial suppression of uriue, so little being passed that his mother became alarmed, and owing to its continuance called me in. He had slight puffiness of the face, especially under the eyes, no dropsy or swelling of the feet, complained of no pain in the lumbar region, or in fact anywhere; the conjunctivæ were quite clear, and there was nothing icteric in his complexion, and no swelling of or pain over the liver. The urine was high-coloured, and contained albumen to the extent of one-fourth.

The only cause that could be ascribed for the symptoms was, that he had a few days previously got a wetting while sailing some model yachts, a pastime of which he was fond, and, as may be imagined, he often became wet and was repeatedly sitting for hours with wet feet.

As the suppression was the leading symptom, he was ordered to bed; fomentations were applied to the loins, and an effervescing citrate of potash mixture given, with benefit; but, before the kidneys were restored to their normal activity, he was seized on the 29th with convulsions, which, under chloral-hydrate in ten-grain doses, every two hours, were stopped.

On October 5th, his urine became of a very dark colour, almost suddenly, but was voided in natural quantity; and with this he complained of great pain over and around the umbilicus, but none over the loins, even on firm pressure. In three days after this a most extensive crop of petechiæ appeared on the legs and thighs, but not on the body, more marked on the legs and knees than on the thigh, and on the knees being almost scarlet and seemingly coalescing, so that when closely examined they resembled minute arterioles on the skin. After their appearance, the urine began to regain its normal colour, although darker; and subsequently to this return towards the normal state of the urine the petechiæ disappeared, but the pain around the umbilicus continued along with flitting pains in the joints, particularly the shoulders and knees, but unaccompanied by any swelling.

The urine during the attack was of a dark mahogany colour (No. 9 Vogel), was alkaline, of specific gravity 1022, and albuminous to the extent of three-fourths to one-half, and contained, under the microscope, some granular matter, oxalates, and one or two faint granular tube-casts, but no blood-corpuscles. He was given Easton's syrup, in the hope that the iron, by its hæmostatic powers, would prevent

* Read before the North Wales Branch.

hæmaturia to deal with; but little benefit resulted, as the urine was still considerably darker in colour than normal, and the proportion of albumen, although decreased, was still one-eighth to one-fourth.

In the beginning of November, the urine again became darker in colour, and eventually to 9 Vogel, again followed by a petechial crop, and, as a consequence, a diminution of the hæmatin. When examined microscopically, it retained the characteristics already mentioned, and still no blood-corpuscles. His medicine was now changed to seven minims of spiritus turpentine every four hours, which seemed to be acting well, as in about ten days after this treatment was adopted the urine became normal in colour, but a faint trace of albumen was still present.

At the beginning of December, he was again similarly attacked, with the same development of the petechial crop, for a few days, and, with its cessation, an improvement in the urine.

On January 1st, 1878, the urine again returned to its abnormal state, the petechiæ successively appearing and disappearing with diminution in the colour of the urine.

I now changed his medicine to five grains of the chloride of ammonium four times a day, this drug being much lauded by the late Dr. Warburton Begbie in hæmaturia. In a few days, his urine became almost normal in colour, and a very scanty precipitate was the result of the addition of nitric acid.

On February 3rd, the urine again became darker in colour, but not nearly so marked as in the former "attacks"; this was not followed by the petechial crop; the attack, if I may so call it, only lasted two or three days. He was advised to continue the medicine, and he has not had any recurrence of the symptoms, and in June 1878 was as strong and healthy as ever he was, and his urine in a perfectly healthy condition.

In the imperfect and hasty history narrated, you will observe the disease appeared as the result of a cold, which is regarded as one of the exciting causes of this, as of almost every other, disease; but, although the onset may be fairly attributed to it, the subsequent course and recurrence of the disease cannot, as during the whole time he was under treatment he was confined, for the most part, to his bed, and most rigidly to his room, which had a fire lit night and day, so that the chances of his fresh "taking cold" were reduced to a minimum. Another cause assigned for this disease is hepatic derangement; as in a case of Dr. Harley's, whenever the urine assumed a darkened colour, a congestion of the chylopoietic viscera, of a transient and periodic character, was the precursor; but, in this case, there was no trace of any complication of the liver whatever. A third, and one on which Dr. Wm. Roberts lays great stress, is ague, and he clearly traces two out of four cases narrated to malarial origin; but, in this case, there was no trace whatever of it, not even the invading rigor peculiar to diseases arising from cold.

Dr. Begbie, however, in his able article,* says, "According to our present knowledge, unquestionably defective, I think it very probable that in paroxysmal hæmaturia the primary morbid change takes place in the blood. The kidney, however, speedily suffers;" and further on he states, "that the renal function should be so seriously, although only temporarily influenced, so as to determine the passage of either albumen, blood, or blood-colouring matter, it may, I think, be presumed, and more particularly in the latter case, that some morbid change in the blood itself, although it has as yet eluded detection, has existed, probably, some product of faulty hepatic function being the *fons et origo mali*," thereby coinciding to some extent with the experience of Dr. Harley.

Of the symptoms demanding a passing notice are the following.

1. Pain in the joints has been mentioned by Dr. Roberts as having occurred in one of his patients, but there was, accompanying it, swelling which was not present in this case; there is no doubt it was of neurotic, or what amounts to the same thing, rheumatic character.

2. Pain over the loins was almost a constant symptom in the cases quoted, but in this case there was a marked absence, even at the time it would have been most expected; viz., before the outbreak of hæmatinuria, although undoubtedly the pain around the umbilicus was analogous to it, and dependent on the kidney-affection, as all medicaments to relieve the bowels were worthless.

3. The presence of excessive colouring matter of the blood in the urine was the chief symptom in this case, and is the crucial and distinguishing symptom of the disease. The urine was of a dark port-wine colour during the height of the attack, and contained no blood-corpuscles, but only granular matter with urates and oxalates.

4. There was one symptom in connection with this case which throws some light upon it, viz., the petechial eruption which generally appeared two or three days after the onset of the attack, and was followed by a diminution of the blood colour in the urine. The presence of petechiæ opens a doubt whether this was really a case of hæmatinuria, or whether it was not a symptom or concomitant of purpura; the presence of both symptoms no doubt lead one to infer that the disease is really of a purpuric origin, but there were in this case none of the manifestations of purpura, such as spongy gums, epistaxis, or melæna, that would have been expected in such a condition.

If Dr. Begbie's view be adopted as to the causation of the malady, hæmatinuria is essentially of a blood-origin, and that the circulatory system is surcharged with effete material that, under normal circumstances, would have been eliminated by the kidneys, and they, having too much stress or pressure brought to bear upon them, fail to excrete the excrementitious matter. The blood according to Dr. Begbie, relieved itself by throwing out some portions in the form of petechiæ, one would, however, have expected that, in such a case, they would have been general and not confined to the lower extremities; and the non-selection of the mucous surfaces, where purpuric extravasation invariably takes place, is an important diagnostic mark to the exclusion of purpura. The microscopic appearances allay any doubts on this point, as in purpura there is, along with the other symptoms, blood in the urine, whereas here we had only the blood-colouring matter.

Treatment.—All remedies seemed to be of no avail, except the chloride of ammonium, which Dr. Begbie recommends; and the good effects he had seen following its administration in relieving neuralgic affections, warranted him in concluding that it would exert a beneficial influence on a disease in which he considered that a disturbance of the blood and nervous system co-existed.

NOTE, January 1883.—This lad has been in good health ever since, and follows the precarious occupation of a sailor; but, notwithstanding the inclemencies incident to his vocation, he has not had any return in any degree of the symptoms detailed.

* *Edinburgh Medical Journal*, vol. xxi, 1875.

A NEW OPERATION FOR SPINA BIFIDA.*

BY A. W. MAYO ROBSON, F.R.C.S.Eng.,

Assistant-Surgeon to the Leeds General Infirmary; Lecturer on Pathology in the Leeds School of Medicine.

KNOWING the pathology of spina bifida to be deficiency of the neural arches of the vertebræ, with a projection of the spinal membranes through the cleft, it has seemed to me that the methods of cure hitherto adopted have been either dangerous or uncertain, or both, and have all been wanting in scientific aim. These methods are: ligature; elastic ligature, leading to gradual removal; injection of tincture of iodine, or of iodine and glycerine; simple excision; and removal by the clamp. But their value may, perhaps, be best judged of by the following paragraph, taken from Holmes's *Surgery*: "Viewing, then, the great danger of any effectual surgical treatment, it seems better to watch the case carefully, and not to interfere, unless the tumour is growing."

More than a year ago, I thought over an operation, which, however, I have had no opportunity of performing until a few weeks since. The following account of the case I am about to show will serve to illustrate the method I advocate.

Mrs. S. consulted me concerning her child, a few days old, which was the subject of a spina bifida in the lumbar region, of the size of a tennis-ball. She told me that, during the early part of her pregnancy, she had been very much "out of sorts," and had eaten very little. This, I think, may possibly have had something to do with the deformity in the child—just as underfeeding a pregnant mother may produce hare-lip in the infant.

The tumour had such thin walls that, in certain parts, as may be seen in the specimen on the table, it was perfectly transparent. There was a distinct impulse on coughing or crying; and the communication between the dilated sac and the spinal canal could be felt to be more than an inch in length, and over half an inch wide.

I advised an operation, but suggested that it should be done after a month or two, in order that the child might gain strength; but,

* Paper read, and Child and Specimen shown, before the Leeds and West Riding Medico-Chirurgical Society.

n October 26th—*i.e.*, when it was six days old—the skin had be-
ome so red and thin over the upper part of the swelling, that I saw
would burst if left a day longer: hence I decided to operate at
hat early period.

Mr. Wm. Hall kindly gave chloroform, and, when the infant was
ully anæsthetised, I made a vertical incision on each side of the
umour, about half an inch from its base, through the skin, and
hen very carefully dissected the integuments from the meninges,
ntil I reached the laminæ of the vertebræ; this required very careful
issection, as the membranes left were so thin as to be perfectly
ranslucent; the fluid was now let out by puncturing with fine
issors, which were also used to cut away the redundant membranes.
he cauda equina was fully exposed, lying on the floor of the spinal
anal. I now had two folds on each side, each fold being of a
ifferent width, the two inner meningeal folds three-fourths and
alf an inch respectively, and the two skin-flaps of the same width;
ut whilst the wider meningeal flap was on the right, the wider skin-
ap was on the left. Thus, when sutures were applied, the lines of
nion were not opposite.

Acting on the same principle as is carried out in uniting the peri-
oneum, I brought together the serous surfaces of the arachnoid by
everal sutures, so as to completely shut off the spinal canal.

Mr. Mayo had, in the meantime, been kindly dissecting (under
he antiseptic spray) the periosteum from the femur and frontal
one of a rabbit, which he had just killed. This periosteum I now
laced, with its osteogenic layer undermost, over the closed men-
nges, and carefully sutured it to the periosteum of the laminæ on
ach side, and to the bony margins above and below. After this the
kin was sutured, a layer of protective applied, and a pad of salicy-
c wool placed over the wound.

The whole operation, which occupied more than an hour, was per-
ormed under the eucalyptus air. Catgut ligatures were employed,
nd the instruments and sponges were well carbolised. On the second
ay, the nurse, in applying the napkins, displaced the dressing; but
though the skin-wound slightly opened, there was no formation of
us, and no slough came away; in fact, through the small opening,
could see that granulations had sprung up from the superficial
rface of the interposed periosteum.

The child has thriven, and has not had a single bad symptom.

As yet I cannot feel any bony crackling, but the skin is level with
he surface, and the case is practically cured; if bone form, how-
ver, the covering will be all the firmer, and the spinal canal will be
hysiologically perfect.

I had mentioned my intention to Mr. Jessop, a short time before
performed the operation, and he kindly offered to let me have
ome periosteum from an amputated leg; but, unfortunately, the
nflamed condition of the sac gave me no chance of choosing my
me. The capability of grafting living tissues, and seeing them
ill live, has been proved in the case of cuticle on the surface
f ulcers and skin in cases of ectropion; the special instance which
uggested the grafting of periosteum to my mind, was the
itnessing of the continued vitality of two flaps of skin which I
etached from the forearm and transplanted to the nose, in a
ase of nasal deformity.

The points of interest to which I would draw attention are:

1. The performance of the operation with strict antiseptic pre-
autions, the eucalyptus air being used instead of carbolic spray.

2. The principle of closing the meninges, by bringing together
he serous surfaces, as in peritoneal surgery.

3. The possibility of transplanting periosteum, and its continu-
ng to live.

4. The entire absence of adverse symptoms.

5. The illness of the mother during early period of pregnancy,
nd its questionable bearing on the condition of the child.

The following description of the specimen, which is preserved in
he Leeds Medical School Museum, has been furnished by the
urator, Mr. F. H. Mayo.

The sac, somewhat contracted from being in spirit, is about the
ize and shape of half a swan's egg, being 2½ inches in length, from
bove downwards; 1¾ inches in breadth, from side to side; 1¾
nches in depth, from base to apex. The sac-wall consists of true
kin and subcutaneous tissue, lined by serous membrane, and is
bout the thickness of ordinary skin, except at one point, about the
ize of a sixpence, situated just to the right of the apex, where it is
o thin as to be quite transparent, appearing to consist only of the
erous membrane and a very thin layer of epidermis, and where
resh minute blood-vessels could be distinctly seen ramifying over
t.

February 10th, 1883.—It is now four months since the operation, and two months since the child was shown to the Leeds and West Riding Medico-Chirurgical Society.

It has thriven well, and is now strong and healthy. The skin over the lumbar region is quite flat with the rest of the back, and the site of the tumour is only marked by the line of incision.

Apparently no new bone has formed, since the structures covering the spinal hiatus feel soft. They seem to be thicker than the skin and meninges employed to cover in the gap; therefore, it is just possible that the transplanted periosteum has survived, and now renders the covering more firm than it otherwise would be.

Although one cannot help feeling disappointed that new bone has not formed, I shall hope to have better success when I can transplant periosteum from a recently amputated limb, and not from one of the lower animals.

With or without the transplantation of a bone-forming membrane, this method seems to me to be worthy of further trial; as in the above recorded case, the cure is as good as can be desired.

INJURIES OF THE HEAD IN RELATION TO CRIMES OF VIOLENCE.

By CLIFFORD L. DREW, M.B., M.R.C.S.Eng., etc.,
Late Resident Surgeon, Millbank Convict Prison.

The subject of crimes of violence in connection with cranial injuries is, I believe, as far as the Convict Service is concerned, an uninvestigated field. All scars, or other cranial injuries, are entered in the description of the prisoner on his medical history sheet, but I am not aware of any possible connection of these with the prisoner's position being considered in the light of cause and effect. My attention was called to this subject by several very interesting cases, which were sufficiently well marked to at least make one wish the subject could receive more attention. A very shrewd observer told me that, after nearly thirty years' experience among prisoners of the most violent and dangerous type, he was fully convinced that the cranial injuries received by prisoners did, in some way, influence their careers. One thing is certain; that, among convicts, a great number of epileptics is found; and when one considers that it is quite exceptional to find a prisoner of the lower class without the remains of a scalp wound, the question naturally occurs—what effect has the injury had? Out of one hundred cases, taken indiscriminately, I found only 8.8 per cent. without some cranial injury or other. As many prisoners have led exceedingly vicious lives, and many, probably, have inherited tendencies, it would very likely be impossible to ever draw any reliable conclusion on the subject of simple scalp wounds.

The subject which these few remarks is intended to open up, is that of depressed fractures in relationship to murderous assault and crimes of that order. The following are good examples of different types of cases referred to.

Case I.—The prisoner, a mate of a vessel, well educated, and with an exceedingly retentive memory for dates and names, was sentenced to penal servitude for attempting to shoot one of the crew. As a rule, his certificates showed that his conduct had been excellent, but one or two told a different tale. On several occasions he had broken out in paroxysms of frenzy, and had attempted violence, for which he was placed under restraint. This man was put under medical observation, as he showed signs of mental derangement. His one great complaint was "an undue quantity of blood to his head," and, indeed, this remark first drew my attention to his condition. A lengthened observation confirmed the suspicion of his mental state, and he was eventually removed on this account. He always objected to answering questions, as he said he became confused, and could not correctly state what he wanted to say. During a conversation one day, he told me that, at the former prison, he had received corporal punishment for insolence to an official. I can hardly believe this, as that sort of punishment is now only resorted to in extreme cases. I should fancy that no director would undertake the responsibility of according such a punishment for an offence of that nature. If his statement were true, it would be conclusive proof that his mental condition had not been suspected. This man had a depressed fracture of the frontal bone, caused many years ago by falling on a nail.

Case II was that of a different type of criminal from the last. This convict, during work, made a murderous attack with a shovel on a warder. In his case, there was also a deeply depressed fracture of the skull. His intellect was of a low order, but he showed no evidence, during many months of observation, of passion.

Case III occurred in a soldier—a most insubordinate man, with uncontrollable temper. In this case, there was a depressed fracture of the frontal bone. This fracture prevented his being certified fit for corporal punishment.

Roderick McLean, who attempted to shoot Her Majesty, I believe had received an injury to his head; and another instance occurred in the case of a man who, on being checked or contradicted in a public-house, made a murderous attack on a policeman. In both these cases, we have no evidence of the nature of the injuries. These cases are examples of classes of criminals deserving great attention. We know how men who have received sunstroke or other injuries to the head are often irritable, and easily affected by a small quantity of alcohol. How much more would a depressed fracture be likely to cause these results? Whether the fracture cause a protrusion of the inner plate of the skull, thickening of the membranes, or inflammatory deposit, the morbid condition is a latent one, and only requires an exciting cause to produce results. This exciting cause may be alcohol, any irritating remark or contradiction; and either of these appears sufficient to develop paroxysms of uncontrollable passion.

The important question to which this subject gives rise is, Does such injury, and consequent local affection of the brain, weaken the moral control of the individual? The inquiry is a most difficult one, and thorough investigation is probably impossible, as far as convicts are concerned, for the following reasons: 1. The statements of the convict cannot be relied upon; 2. In most cases, no family history can be obtained.

One object is gained by investigating this subject; and that is, to consider all criminals with depressed fractures of the skull as dangerous, and requiring specially careful and judicious management. If it can be proved that such men are easily excited, and rendered unaccountable for their actions, surely they should not be treated as ordinary criminals, subjected to rigid discipline, and surrounded by associations that would naturally tend to excite the paroxysms of maniacal passion. It may be said that these were cases of homicidal mania; if so, the question still remains, What had the fracture to do with the condition?

These few, and, for the foregoing reasons, necessarily incomplete remarks, are made simply as a hint for the further investigation of a subject of no slight importance to both the criminal and the public at large. I no longer have any opportunity for continuing the inquiry; but, should any light on the subject be forthcoming, my object will be effected.

GUNSHOT-WOUND OF ABDOMEN: ABDOMINAL SECTION: WOUNDED INTESTINE SUTURED TO SURFACE: DEATH FROM SHOCK.

By JORDAN LLOYD, F.R.C.S.Eng.,
Casualty Surgeon to Queen's Hospital, Birmingham.

The following case is of interest, being the first, so far as I am aware, in which this procedure has been adopted. It is the outcome of remarks upon this subject published in the British Medical Journal of December 10th and 17th, 1881, by Dr. Marion Sims.

M.L., aged 19, a domestic servant, was admitted into Queen's Hospital late in the evening of February 23rd last. She had been accidentally shot in the abdomen a few hours previously. There was little evidence of shock; she had not vomited. The bullet had entered slightly to the left of the median line, immediately above the pubes. A finger passed readily into the peritoneal cavity. A drainage-tube was inserted into the wound. On the following day, she had some pain in the belly, and was sick. Temperature 99°; pulse 100. On the 25th, her symptoms had increased, but were not urgent. Evening temperature, 99°; pulse 136. On the 26th, she was much worse; vomiting persistent; pain constant and very severe; belly distended; face flushed; anxious expression; temperature 99.4°; pulse thready, 148. In the evening, I opened her abdomen in the usual manner; there was at once a free gush of stinking thick brownish-red fluid. The great omentum was first seen red and thickened in its lower half, and fairly natural above. The intestines in the pelvis and lower zone of the belly were matted together. The wound was traced into the abdomen, and then became lost. A coil of gut was hooked up out of the left iliac region, and in it a ragged wound about three-quarters of an inch in diameter was found, through which yellow fæces escaped. The cavity of the belly was washed with plain lukewarm water; a large glass drainage-tube was inserted into the pelvis; the intestine was stitched to the centre of the wound, the remainder of which was closed with silk sutures. She never rallied from the operation, and died about half an hour afterwards.

Post mortem examination showed that the bullet had entered half an inch above the pubes, and three-quarters of an inch to the left of the mid-line; it had contused the apex of the bladder; had cut through the free edge of a coil of small intestine; had perforated the mesentery, and lay between this latter and the transverse mesocolon. The upper half of the abdominal cavity and its contents were not inflamed. The peritoneum had been efficiently cleaned, being free from all foreign matter.

When the patient was admitted to hospital, it was considered doubtful, from the situation of the wound and the comparative absence of shock, whether she had an injury to any abdominal viscus. It was thought best, therefore, not to open the belly at once. The onset of peritonitis at a later period, and the clearly threatening fatal issue, called for and justified the treatment subsequently undertaken. I should not hesitate in a similar case to immediately open the abdomen, and ascertain the precise nature of the injury with which I had to deal. The greatest source of danger in these cases is delay. The most precious moments to the surgeon are those immediately subsequent to the injury, when the peritoneum has undergone as yet no pathological change; when it is merely polluted by products of a most irritating but easily removable character. Should no lesion of abdominal contents have occurred, the operation-wound may be closed; the patient's dangers being but little increased by the investigation. When wounded viscera are discovered, they may either be fastened to the surface, or sutured and returned, according to the nature of the lesion. In the majority of instances, I think it will be found desirable to secure them to the surface. Where delay, say of three or four days, has been inevitable, as must of course sometimes happen, I should content myself with merely opening the peritoneum, liberating the pent-up fluids, washing the presenting cavity, being careful in no way to disturb the viscera, and then securing in a large sized Keith's drainage-tube. I think we shall find, if a patient live three or four days after such an injury, that the wounded viscera will be practically closed by adhesions to neighbouring parts, and should not be disturbed. In my case, I am of opinion that the foul discharge which escaped when the abdomen was opened was due, not to fæces which were pouring out at the time of the operation, but to those which immediately followed the accident; the contents of the gut and those of the peritoneal cavity being strikingly dissimilar.

I must thank my colleague, Mr. West, for entrusting the patient to my care; and my friend Mr. Lawson Tait, for his valuable and courteous presence at the operation.

OBSERVATIONS ON THE TREATMENT OF UTERINE CANCER WITH CHIAN TURPENTINE.

By E. HOLLAND, M.D., M.R.C.P., F.R.C.S.,
Senior Assistant Physician Hospital for Women, etc.

It is pretty generally known in the professional and lay society of England, that Chian turpentine was introduced to our notice by Mr. Clay of Birmingham as a specific for cancer of the uterus, and that, from the first, preconceived prejudice almost excluded anything like a fair and patient trial of the vaunted virtues of this old Ægean drug. Chian turpentine, however, became in great demand, scarce, and dear, no two obtainable specimens being alike; and in this chaos of circumstances, it was a reasonable assumption on the part of Mr. Clay that the reported failures of the drug were owing either to its fictitiousness, or to our imperfect method of administration; and, as I had previously treated a series of cases with a variety of specimens, I considered it would be best to repeat my observations with the essence of Chian turpentine of Mr. Clay's pharmacy, and of his own apothecary's preparation. This second series of cases were appropriated as they presented themselves; and, with one exception, were so well advanced that no competent person could entertain the least doubt of their malignant nature. The essence was administered alone, or in association only with its local application as an ointment (one ounce of vaseline to half a drachm of Chian turpentine), and it was pressed from one to three months; no surgical operation being in the meanwhile allowed.

It is a well known fact amongst gynæcologists, that syphilitic disease of the uterus occasionally so closely mimics malignant disease that the diagnosis can be alone effected by a reference to specific treatment; and, consequently, where the history revealed any doubt, the case was at first treated by iodide of potassium, and the Chian

pentine subsequently persevered, in with only such intermissions its irritant effects necessitated.

None of the cases were cured; none had their invading progress cidedly arrested. One case, caught in the most initial stage—a v small epithelial granulations—progressed steadily week by week, der the eyes of a dozen interested observers, in spite of the gular administration of the Chian essence and the local application the ointment by tampon. Some patients for a few weeks reported emselves as better, and appeared more cheerful; one especially as noted as returning quite hilarious after a week's trial of the new medy; half believed that the pain and hæmorrhage were less, but, on ore close investigation, the greater or less amount of bleeding was and to be correlative with the greater or less duration of horizontal st, especially at the menstrual nisus.

In my first series of cases, the Chian turpentine appeared to mitigate in, moderate hæmorrhage, and to temporarily create a more hopeful and brighter condition; but, in the second series, these desirable fects, *cæteris paribus*, were less and less apparent, and, therefore, has failed to reveal to me any quality of specificity in pronounced erine cancer.

In the weary treatment of malignant disease, whether of the uterus mamma, in both public and private practice, the drug retains some pularity, and there is no reason why it should not be countenanced the solatium of a forlorn hope to a desperate sufferer—always aring in mind the probability of strangury when it is applied ally to the uterus, and of eczema when it is applied to the mamma. The wisdom of the profession regards cancer as a disease of inrent lethality, evincing the greatest variety in its evolution, natural ogress, and decay; and that as yet, and probably for ever, the only medy it can countenance, as a possible cure, is early and complete tirpation. On the other hand, there are many advanced cases of erine cancer where surgical operations, once, twice, thrice, or even e times repeated, may be resorted to with a relief sufficient of mediate suffering sufficient to justify such procedures in the inion of the most conscientious of operators.

EPOSITION OF COMPLETE INVERSION OF UTERUS AFTER FIVE YEARS' DURATION.

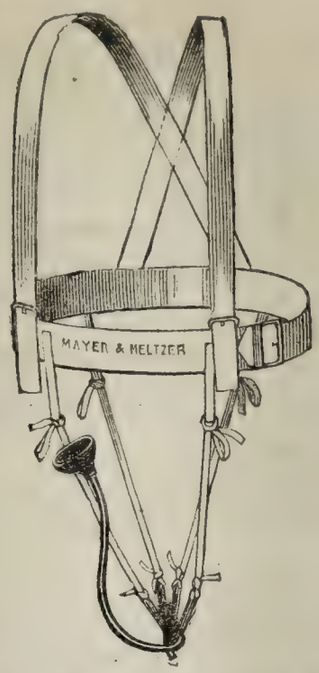
By ARTHUR W. EDIS, M.D., F.R.C.P.

sistant Obstetric Physician to the Middlesex Hospital; Physician to the Chelsea Hospital for Women.

RS. D., aged 29, married at 21, mother of two children, widow, ad suffered from more or less continuous uterine hæmorrhage since er last confinement in December 1877. At times, the loss amounted most to flooding, especially at the menstrual periods, when it ould last for nearly a fortnight. Her general health was fairly ood, and seemed to be less influenced by the constant drain upon er system than might have been anticipated. She suffered from o unusual pain beyond a sense of dragging in the loins, and pain xtending up to the back of her head, worse on walking or standing. ttempts had been made to prevent this "falling of the womb" y the insertion of a ring-pessary, as also to reduce the displaceent by means of air-ball pessaries, the patient, on one occasion, eing treated for two weeks consecutively, remaining in bed and ollowing out strictly the injunctions given. She was seen in the arly part of August 1882 by Dr. B. Arcedeckne Duncan, who diagnosed the displacement, and asked me to see her in consultation vith him.

On examination *per vaginam*, a soft, velvety, globular mass, sensitive to the touch, and bleeding readily, was found occupying two-thirds of the vagina; it was adherent by a surface about the size of a sixpenny-piece to the posterior vaginal wall. The uterine sound could only be passed about half an inch beyond the rim of the cervix, which could be felt encircling the pedicle of the tumour. On conjoined manipulation, the fundus could not be detected in its usual position behind the pubes, but only a cup-shaped depression on deep pressure. The nature of the case was so evident, that it was considered unnecessary to examine *per rectum*, or to pass a sound into the bladder to confirm the diagnosis. As the menstrual period was just pending, it was arranged to wait until this was over before commencing efforts to reduce the misplaced organ.

On August 22nd, at 9.30 A.M., the patient having been kept in bed for a few days and the bowels carefully regulated, Aveling's uterine repositor was carefully adjusted. The adhesion of the fundus uteri to the posterior vaginal wall was torn through with the finger, scarcely any hæmorrhage resulting. A morphia suppository was inserted *per anum*, to allay any pain likely to be caused by the pressure of the instrument.



The patient was seen at intervals of about three hours during the day, and the amount of pressure carefully regulated. Scarcely any inconvenience was experienced, the pulse and temperature remaining normal. The urine was drawn off with a catheter. At 10 P.M. the pulse was 72, the temperature 99°, the patient very comfortable

August 23rd. 9.30. A.M. The patient slept fairly well with the aid of a morphia suppository; pulse 72, temperature 99°. The bulk of the stem was found to be buried within the rim of the cervix, and was, with some little difficulty, removed. The vagina was syringed with Condy's fluid diluted, and the stem readjusted. 9.30 P.M. Pulse and temperature normal. The patient felt very comfortable; stem *in situ*.

August 24th, 9.30 A.M. Forty-eight hours from commencement of efforts at reposition; pulse 96, temperature 99°. The patient had a comfortable night. The bulk of the instrument was completely within the uterus, the stem firmly gripped by the now contracted os uteri. After washing out the vagina, on examination, the partly inverted fundus could just be felt within the uterus. It being that possibly the concavity of the bulb of the repositor prevented complete reinversion, a small India-rubber ball, about one inch in diameter was passed into the uterus, and the repositor reapplied. 9.30 P.M. On examination, the bulb of the repositor was found to be external to the os uteri, evidently not exerting pressure upon the fundus. The ball was therefore removed, the vagina washed out, and the bulb of the repositor readjusted on the still partially inverted fundus uteri. Pulse 96, temperature 100°. A morphia suppository (*Gr.* 1-6th) was inserted *per anum*.

August 25th, 9.30 A.M. On examination, the bulb of the repositor was found to be completely imbedded in the cavity of the uterus. The apparatus was removed, and the vagina washed out as before; pulse 96, temperature 99°. On passing the finger within the cervix, the fundus uteri could no longer be detected. The patient was kept quiet in bed, and an enema administered. 4 P.M. Dr. Duncan and myself examined most carefully, but failed to detect any remains of inversion. The uterine sound passed upwards and forwards three and a half inches, and the fundus could be felt in its normal position by conjoined manipulation. A mixture of ergot and cinchona was prescribed, and the patient kept in the recumbent position for nearly a week subsequently. She convalesced rapidly, and, when heard of some months afterwards, reported herself as "quite well, the periods regular, not profuse nor painful." She has since married again, and remains perfectly well.

REMARKS.—The reinversion was completed within seventy-two hours; practically, it was all but accomplished in forty-eight hours. During the last twenty-four hours, owing to the tenderness produced, the elastic pressure was lessened. One disadvantage of the bulb being conical in shape is that, after the process of reinversion is well advanced, the cervix contracts around the stem of the bulb, rendering the extraction of the latter difficult. If the bulb of the instrument were altered in shape, so as to be of an uniform thick-

ness for at least four inches, only slightly conical, so as to prevent the os uteri contracting around it, its withdrawal would be greatly facilitated.

CLINICAL MEMORANDA.

SPONTANEOUS GANGRENE OF ARM, FOLLOWING PRESUMED EMBOLISM.

At the beginning of September, 1880, Mary M., aged 70 years, had a very painful and œdematous condition of the right lower extremity. Infiltration of the subcutaneous tissues increased for several days, when, after saline and diuretic treatment, puncturing at intervals, and keeping the limb covered in cotton wool in the horizontal position, these symptoms subsided, and in the course of a few weeks the patient resumed her normal health, and could walk about as usual, the limb being kept bandaged for some time longer. No history of the case could be given; there were no abnormal cardiac sounds, no intrapelvic tumour or swelling or other cause of vascular obstruction detected. The popliteal pulsation was scarcely perceptible, that of the posterior tibial extinct.

From this condition convalescence continued uninterruptedly, when, about Christmas, an attack of acute diarrhœa and vomiting (not attributable to errors in diet) occurred, from which, in a few days, she recovered.

In the early part of the spring following, her left forearm became very painful with the burning sensation characteristic of incipient gangrene, the digital extremities presenting a purplish white hue. No pulsation could be felt, the integuments of the forearm were quite cold, the case turning out one of spontaneous gangrene, accompanied by excessive pain for many weeks, alleviated only by anodynes. The forearm from about the middle third, in an oblique direction upwards and outwards, became black and shrivelled below a line of demarcation, when amputation was resorted to, the stump healing with a slight protrusion of the radius, which was afterwards excised. The patient has since done well, and, for her age, recovered her usual good state of health. I have given these bare details of a case of some interest, and will leave others to form their conclusions as to the etiology of its phenomena. J. H. Crisp, Lacock, Wilts.

THE TREATMENT OF SPERMATORRHŒA.

Obstinate cases of spermatorrhœa and frequent nocturnal emissions constantly come under the care of the practitioner. Too frequently the medical man consulted simply tells the patient that, if he break off the pernicious habit of masturbation, which has probably originated his malady, he will soon quickly recover. But, in fact, in most cases, the habit has already been abandoned before he comes to seek advice; and these cases do not get well for months or even years afterwards, unless proper measures be taken. Knowing that he has left off this bad habit, and that he nevertheless does not improve, his complaint being made light of by the regular practitioner, and being greatly depressed in mind, he seeks the advice of the quack, who is always ready to benefit by these cases. I will give an outline of the treatment I have followed, and which I have found most successful in several such cases. The treatment should be—1. Moral, 2. Hygienic; 3. Medicinal. 1. *Moral. a.* The pernicious habit of masturbation, which has probably been the origin of the complaint, must at once be discontinued, or no good can result from any treatment. *b.* The thoughts should be directed from himself by his having regular work and exercise. *c.* The anxiety of mind which ensues should be allayed as much as possible, and a happy state of mind instituted. 2. *Hygienic. a.* The patient should have regular but not excessive mental employment, and bodily exercise in the form of walking, riding, or outdoor sports and games. *b.* Cold sponging of the genitals night and morning for some minutes, or as long as can comfortably be borne, is a most important agent in giving tone to the relaxed organs. *c.* The patient should have a hard mattress, and as little and as light clothing as possible at night. Care should be taken not to lie on the back, which may be prevented by wearing a knotted towel over the spine, or by some other device. *d.* No quantity of liquid should be taken before retiring to rest, and the bladder should be emptied the last thing. 3. *Medicinal.* A mixture containing tincture of perchloride of iron and tincture of nux vomica should be given twice or three times a day; also a pill containing a fourth or a third of a grain of extract of belladonna with three grains of camphor should be given at first every night, and then every other night, immediately before going to bed. If these lines of treatment be adhered to, the patient, whether suffering from real spermatorrhœa or simply from frequently returning nocturnal emissions, will steadily improve, and the emissions will occur less and less frequently, till, in the course of a few weeks, or possibly months—for a malady of long standing (as this usually is) is never cured immediately—they will cease altogether, or only occur at such intervals as may be deemed normal, and in which there is no harm whatever.

H. Coupland Taylor, M.D., Todmorden.

PATHOLOGICAL MEMORANDA.

FIBRINOUS DEPOSIT IN THE HEART AND PULMONARY ARTERY.

I was much interested by the discussion at the Pathological Society of the question of fibrinous deposits in the heart and pulmonary artery. I have long been of the opinion, as the result of numerous *post mortem* examinations in cases of death occurring after severe injuries, that the immediate cause of death in almost all cases of "traumatic shock" is to be attributed to *ante mortem* deposits of fibrin in the right heart and pulmonary artery. This may not be so true of cases that are immediately or very soon fatal, by reason of the excessive amount of organic lesion immediately produced by the injury, as in cases where death supervenes after more or less interval, and where the nature and amount of the original injury are quite insufficient to account for subsequent death. Injuries to bones seem to have a peculiar influence in producing the condition; and I have seen strong healthy young men die from simple fractured ribs, without complication, in whom the *ante mortem* clot was the only thing present to account for death. I am induced to write these few lines, hoping that the subject may attract further attention from the profession. Franklin Gillespie, M.D., Surgeon-Major, Aldershot.

OBSTETRIC MEMORANDA.

OCCIPITO-POSTERIOR PRESENTATIONS.

The case of the above that occurred in the British Lying-in Hospital, under the care of Dr. Fancourt Barnes, in which Tarnier's forceps were used, and reported in the British Medical Journal for February 3rd, 1883, has made me desirous of making a few remarks on these very often troublesome presentations. It may be noticed that the exact cranial position in that case, whether third or fourth, was not given, which is of some importance, as my experience is that the fourth position is the more difficult one of the two to manage. In such cases, I have lately followed the practice of Smellie, who advocated the position of the head being rectified by raising, and rotation of it into an anterior one before traction is applied; and by this plan I have, I believe, of late preserved the lives of four infants. This method was brought to my notice by Dr. A. F. Stevens of Stoke Newington, to whom I shall be always grateful for the knowledge of it, in a discussion which followed the reading of a paper on the use of the forceps by Dr. Ducat of Highbury, at the Æsculapian Club in November last.

Between November 26th and December 22nd, 1882, I came across, in my own practice, the large number of four of these presentations, but only one since, on March 2nd, 1883, in a friend's practice, in which instance the same plan of rectification was successfully carried out. In three of my cases, the labour having come to a standstill, and the forceps being absolutely requisite, the positions were altered by Smellie's method, and the fourth was rectified by nature and manipulation. Of the three altered, all the patients being under the influence of chloroform, the first was a multipara, with her eighth child, the head being in the fourth position. The forceps, applied in the ordinary manner, failed to move the head; the position was therefore changed into a first one by raising and rotating it, and delivery was then effected with the greatest ease in a few seconds. The second one, also a multipara, had always been obliged to have the forceps used in her confinements, and had been so delivered by myself without any difficulty in September 1881, but on this occasion, December 14th, 1882, the forceps failed. The position was then discovered to be a third, and was altered by the same method into a second, and delivery was then easily and quickly over. The third was a primipara, aged 27 years, with the head in the fourth position, which was straightway changed into a first, and the difficulty at once ended. It is certainly necessary to

most accurate in diagnosis, as to whether the cranial position be d or fourth, or rotation may be wrongly directed; and it is also l to apply the forceps in the reverse way, and over the ears ore rotating, as otherwise two dangers may be met with—viz., t the anterior edge of the forceps, in the ordinary way of appli- ion, may injure or destroy one or both eyes, as occurred to my- in a case about two years ago; and also that it is possible, if handles of the forceps, when the forceps are not applied re- sely, be brought forward too soon, or too much forward over the es, the head being on the perinæum, that the points may pass ough that structure. With the forceps reversed, the difficulty of ir application is, of course, increased, but it is by no means in- ased to any great extent.

I feel sure that, if the ease with which these difficult occipito- terior presentations can be so overcome were more known, the vice of Smellie would be more generally followed; and, also, that danger of lacerating the perinæum, which is so great in these es, would be greatly avoided; for in none of my cases did lacera- n occur, and not even in the primipara (and it may be remarked, passing, that in not one of the patients did a bad symptom fol- the confinement); and the necessity of craniotomy would less en occur, and the use of such powerful instruments as Tarnier's ceps would be much less often called for, the traction required in se cases being very greatly diminished when the plan of rotation irst of all pursued.

To those who have not read Smellie, I would strongly recommend t cases 258 and 260 in volume ii of his treatise on *Midwifery*, ted by Dr. McClintock, and published by the New Sydenham iety, be carefully perused, for they are most interesting and in- active.

PATMORE SHEEHY.

, Claremont Square, N.

ON STERILITY CAUSED BY ANOMALOUS MEMBRANE: ITS EXCISION: CONCEPTION.

October 1878, a lady aged 28, married seven years, but childless, sulted Dr. Kidd and myself concerning sterility. She was a per- of great beauty and large frame, and the mammæ were well deve- ed. A symmetrical membrane, evidently congenital, was found cross the vagina, about three inches above the myrtiform uncles. There was a central circular aperture, about two lines in meter; and, a sound being passed through it, a cavity, about an h long and as wide as the vagina, was found to lie before the vix. The front of the membrane, being convex and smooth, might mistaken for this part, save for the different shape of the open- gs. At the circumference posteriorly, it was thick enough to sug- st the possibility of a close relation with the peritoneum. There s no other abnormality, and the patient and her husband were ite unaware that any malformation existed. The possible risk of unding the peritoneum having been explained, Dr. Kidd wholly cised the membrane, using the scalpel and forceps with which sicq-vaginal fistulæ are pared. A perfectly normal cervix and os eri were disclosed. A glass dilator was worn, with occasional in- rvals, for five weeks. The lady is now in the last month of preg- ncy. I regret I did not examine the membrane for muscular sue, as spermatozoa may have been excluded by sphincter action. the opening was above the level of the os, the expulsion of the rvical process, which probably precedes, and the aspiration which ceeds the ejaculation of semen, may have been interfered with. mbryology scarcely explains this malformation. The idea, that e Müllerian canal was suppressed above, the other below, would a far-fetched way of accounting for so symmetrical a structure in otherwise normal vagina. The dilatable sphincter between the ogenital canal and the vestibule in the monotremes is somewhat milar. I find no previous record of this anomaly; while cases of uble uterus and vagina, the marsupial type, from want of fusion the Müllerian canals, are pretty frequent.

E. D. MAPOTHER, Surgeon to St. Vincent's Hospital; ex-President R.C.S.I.

PRESENTATION.—At Llandvindod Wells, on Saturday last, a depu- tion waited upon W. Bowen Davies, Esq., L.R.C.P. Lond., the onorary Medical Director of the Llandvindod Wells Convalescent ome and Cottage Hospital, and presented him with a purse of one undred and twenty-five guineas as a token of esteem, and in acknow- dgment of work done, and the public spirit he has always shown furthering the interests and welfare of this popular watering lace.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

LIVERPOOL ROYAL INFIRMARY.

MALIGNANT STRICTURE OF PHARYNX: SPASM OF GLOTTIS: TRACHEOTOMY: GASTROSTOMY.

(Under the care of Mr. RUSHTON PARKER.)

E. B., aged 34, was introduced on November 5th, 1879, by the late Dr. Baker, on account of difficulty in swallowing liquids, and inability to swallow solids. She was a little thin woman, who had been confined six months previously. She had noticed the above symptoms for only a week or two. The voice, too, was a harsh bass alternating with whispers. With the finger, a narrowing could be felt in the lowest part of the pharynx, behind the larynx, and the mucous membrane was occupied by a hard thickening surrounding the narrowed point. In case this and the laryngeal affection might be due to syphilitic inflammation, a grain of grey powder was given three times a day, and some slight improvement occurred in the power of swallowing, during the few weeks that she attended as an out-patient. A history of miscarriages also seemed to give support to the probability of this cause of the malady. On December 13th she was in a state of such obvious dyspnœa that she was admitted into hospital at once. This feature had existed two days, and was found, on laryngoscopic examination, to be due to almost complete approximation of the vocal cords during inspiration, their separation only occurring during expiration. There was evidently now a loss of the function that opens the glottis, at the proper times, by separating the vocal cords, and it was concluded that the muscles abducting the cords were lamed by the growth adjacent to or infiltrating them. There was no cyanosis, but tracheotomy was determined upon as a necessary early procedure. Accordingly this was done under the influence of ether on the following day. The opening was made above the thyroid isthmus, that structure being depressed a little for the purpose, after detaching the fascia from the lower margin of the cricoid cartilage in the bloodless manner described in the BRITISH MEDICAL JOURNAL, May 25th, 1878, p. 752. A Durham's metal tube was put in, and the patient almost immediately profited by the increased respiratory current. Up to December 24th she continued to swallow liquids, though in only small quantity. But, after that, anything she attempted to swallow came out through the tube, and the nurse was found to be giving her eggs, beef-tea, and alcohol by the rectum only. It was therefore directed that the materials of her diet were to be previously prepared with pepsin and hydrochloric acid, and administered by the rectum every three hours, day and night. These nutrient enemata were well tolerated, and she declared that the feeling of hunger was distinctly assuaged by them. But she lost flesh gradually, and it soon became evident that starvation was threatened. A few attempts were gently made to pass bougies down the œsophagus, but always without success.

On January 2nd, 1880, gastrostomy was undertaken. She took ether perfectly well, on a sponge placed around the orifice of her trachea-tube; and the incision was made below the margins of the left lower ribs, through the rectus abdominis muscle. All vessels were tied before opening the abdomen, and the stomach (which was not very easily picked up) was firmly sewn to the wall around the opening by a large number of thread stitches, carbolised and waxed, and tied on the skin more tightly than is usually proper, with the view of promoting adhesion of the peritoneal surfaces. The stomach was not opened into, but a loose stitch was left hanging as an easy guide to the centre of its exposed surface. Lister's precautions, with carbolic lotion, spray, protective and gauze dressings, were employed throughout. The next day, she had violent retching, with consequent dragging pain in the wound; repeated on subsequent days with a cough that also came on. Both symptoms appeared to be relieved by morphia given subcutaneously.

The dressing was changed the day after the operation, and removed altogether after two more, when the stomach was opened, and a tube put in. The stomach-wall was found to be very thin and friable. On the seventh day after the second operation, a little thin pea-soup was passed into the stomach, and retained by corking the tube. A sensation of warmth was the only feeling produced; and,

though this fluid was at first retained, even during coughing, it eventually all escaped in the course of about two hours. The next day, some more was given, and several ounces were retained. Injections had been kept up *per rectum*, digested as before alluded to; but no obvious benefit resulted from any of the food administered in any way. She had, for the previous few days, frequently gargled her throat and glottis with cold water, which she allowed to pass out through the trachea-tube, to allay a burning sensation. She became much weaker on the eighth day after the operation of gastrostomy, and died in the course of the night, apparently of starvation alone.

The wound was occupied by an unaltered blood-clot up to the removal of the dressings, and continued free from any unhealthy change. The constitutional reaction observed was a quickening of the pulse to 120 per minute on the evening of operation, subsiding to 100 the day following, and to about 80 in a day more. The operation was exceedingly well borne in every way, and no incident of any kind occurred to suggest that it had done harm.

At the *post mortem* examination, there was no trace of peritonitis beyond the area exposed to the dressings; in fact, there was very slight adhesion of the stomach to the parietes in front round the greater extent of the stitched line, and none whatever in a small part of this. The bronchial tubes contained a little puriform mucus, but, except a small collection of pus near the tracheal wound, there was no other recent structural or organic abnormality beyond the wounds and the pharyngeal growth. Other changes, not recent, were a slight pleuritic adhesion, and a condition of granular kidney, not far advanced. This last observation was verified microscopically. The pharyngeal tumour was a flat, warty, white-coloured epithelioma, which, in microscopical section, showed a quite ordinary arrangement of epithelial accumulation, in follicular masses bounded by a line of rete Malpighii, and inclosing typical "birds' nest" cells.

REMARKS BY MR. RUSHTON PARKER.—The operation of gastrostomy was in this case wholly ineffectual, having been done apparently too late. The complication of the trachea-tube, and the associated harassing cough, probably constituted an adverse circumstance; but the main obstacle seems to have been the state of exhaustion that the patient had previously reached, to a degree not then realised. The notion of attempting relief in this way never arose, until it began to be feared that starvation was about to commence in earnest. It turned out that it had already commenced, and was well advanced before it was recognised; having been probably masked by the uncomplaining courage of the patient, and by the warmth, opium, and other nursing comforts by which she was protected. The *post mortem* examination was made by Mr. Paul, whose report and histological slides have, on re-inspection, been of essential value in preparing this account.

MANCHESTER ROYAL INFIRMARY.

BULLET-WOUND OF CHEST, FOLLOWED BY PNEUMOTHORAX, AND HÆMOTHORAX, AND PLEURITIS; PARACENTESIS, RECOVERY.

(Under the care of Mr. JONES.)

CHARLES H., aged 36, was admitted on August 10th, 1882, with a bullet-wound in the fifth left intercostal space, a little external to the nipple-line. The orifice of the wound, scorched and blackened by the powder, was half-an-inch in diameter, and the track, after passing inwards about an inch, was found to turn outwards and backwards behind the sixth rib. There was no wound of exit, and the position of the bullet could not be ascertained. The patient was suffering from severe shock, with excitement, and there was considerable hæmorrhage from the wound, but, at the time, no hæmoptysis existed. Ether was injected subcutaneously, and the hæmorrhage arrested by means of collodion and a pad of lint. The following morning the patient was more calm, but still suffering from shock.

August 12th. There was absence of pain, except on deep inspiration, when a sharp pain extended from the wound to the left shoulder. A small patch of emphysema was present on the outer side of the wound. The position of the heart was normal, and its sounds natural. The pulmonary resonance was good in front, but tympanitic at the upper part of the left side behind, with dulness at the base. A few crepitations were heard in the left axillary region. The patient expectorated a little mucus, tinged with bright blood. The temperature, in the evening was 100.6°. Antimony, in small doses, was administered.

August 17th. In the evening, the temperature rose to 102°. The patient lay on the left side, and had considerable dyspnœa, with acute pain on respiring deeply. The heart was somewhat displaced to the right. Examination of the chest revealed a dulness on the left side, posteriorly reaching up to the spine of the scapula; also an absence of breath-sounds and vocal fremitus over the same region. A large patch of ecchymosis, below the angle of the left scapula, was detected. He was much troubled with an irritable cough, but had no expectoration. The patient continued in much the same condition, the temperature never exceeding 100°, until the evening of the 27th, when the cough and dyspnœa increased, and the temperature again reached 102°. The dulness occupied fully two-thirds of the left side behind, while bronchial breathing and bronchophony existed in the upper third, and in the left infraclavicular region. The patch of ecchymosis was beginning to disappear.

August 30th. The physical signs remained about the same. Dyspnœa was increasing. The heart was now greatly displaced to the right, and its apex-beat could not be detected on the left of the sternum.

August 31st. The chest was tapped by means of an aspirator introduced a little anterior to the lower angle of the left scapula, and twenty-six and a half ounces of sanguineous, highly albuminous, frothy fluid were withdrawn. The dyspnœa was at once relieved, and the cough and pain considerably diminished. During the first fortnight in September, the breathing again became embarrassed. On September 14th, paracentesis was repeated, and seventeen ounces of fluid removed.

September 21st. The patient could now lie in any position, and appeared quite cheerful. The cough and fever had disappeared. In front, the lung-resonance and breath-sounds had become normal. Behind, some dulness still remained, but breathing was faintly audible.

The patient was allowed to leave his bed at the beginning of October. He steadily regained strength, and was discharged from the infirmary on the 13th, with the dulness still extending to the angle of the scapula, and the breath-sounds very imperfectly heard over the base.

REMARKS.—There are several reasons for thinking that, in this case, the lung was wounded. Apart from the collapse, which was very severe and prolonged, the presence of air and blood in the pleural cavity tend to the conclusion that the bullet, in its course backwards, injured the pulmonary tissue. It is true the blood may have escaped from a wounded intercostal artery; but against this view of its source is the fact that its presence was not detected until after the lapse of thirty-six hours, although the chest had been carefully examined. The tympanic resonance, discovered the morning after admission, was replaced by dulness, which gradually extended from below upwards, and eventually reached the spine of the scapula. The hæmoptysis was very slight, and occurred on the second day, when, presumably, reaction had already commenced.

By the fifth day, the accumulation of fluid in the pleural cavity became very considerable, and, in consequence, the heart was decidedly displaced. The removal of the serum by thoracentesis exercised a marked influence upon the breathing; before the operation, the patient was undoubtedly in much distress, but afterwards respiration was tolerably tranquil. The general treatment consisted in absolute rest, with low diet, the use of morphia subcutaneously to subdue restlessness, and the administration of small doses (five minims every four hours) of antimonial wine while the fever was at its height.

The external wound gave no trouble, and healed in a few days.

BEQUESTS AND DONATIONS.—The Brighton and Hove Dispensary has received £3,465 9s. 9d. under the will of Mr. Joseph Collinson.—The Royal London Ophthalmic Hospital has received £450 under the will of Mr. T. Y. Marshall, of the Transvaal, South Africa.—Mr. W. Hodgson, of Gilston Park, has given £200 to the Cumberland Infirmary.—Mr. John Henry Smith has given £105 to the Derbyshire General Infirmary.—The Merchant Taylors' Company have given £105 to University College Hospital.—Colonel Meller has given £100, and the Grocers' Company £50 to the Royal Alexandra Hospital for Sick Children, Brighton.—Mr. Charles Churchill and "L. M. R." have each given £50 to the Bexhill Seaside Branch of the Metropolitan Convalescent Institution.

DEODORISATION OF IODOFORM.—Dr. Popoff (*Pharm. Zeitsch für Russland*, quoted in the *Chemist and Druggist*) says that iodoform completely loses its disagreeable odour if agitated with either essence of eucalyptus or turpentine. As these substances act as antiseptics, and as only a very small quantity is necessary, he sees no objection to the addition of one of them—eucalyptus preferably—to ointments in which iodoform is the active ingredient.

REPORTS OF SOCIETIES.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FEBRUARY 2ND, 1883.

E. HART VINEN, M.D., President, in the Chair.

Dyspepsia.—Dr. HOOD read a paper on dyspepsia. He drew special attention to those cases of gastric lesion in which dyspepsia played an important part as a symptom, and suggested that, in many cases of so-called simple dyspepsia, there was a definite lesion. The carefully compiled category of symptoms incidental to ulceration of the stomach suggested that the diagnosis was easy, the very opposite of that being clinically the case. In the early part of 1879, he had placed under his charge a gentleman aged 40, who had spent many years in the colonies. For eight years he had been a sufferer from dyspepsia, the commencement of which he attributed to irregularities of diet. He first felt pain over the region of the stomach. Soon he suffered from attacks of vomiting and acid water-brash. Failing to obtain relief, he came to England. When first seen, eighteen months after his arrival, his symptoms were much intensified. Blood was found in his vomit. Presently the stomach became intensely irritable, the patient being supported entirely by means of nutrient enemata. Slowly the grave symptoms subsided, and he regained flesh. In six weeks, he went about as usual. Three weeks afterwards, while sitting, on moving suddenly he felt a pain in the stomach, and died within twelve hours. The *post mortem* examination showed perforation of the stomach at its anterior base. A small healed ulcer, at its base no thicker than tissue-paper, had given way, and the contents of the stomach had been poured into the peritoneal cavity. The stomach in the immediate vicinity of the pyloric orifice was honeycombed with the remains of the cicatrices of old ulcers, that presented small depressions corresponding to the position of gastric follicles. Another patient, whose symptoms bore some resemblance to those of the preceding case, was under his care at the same time. This was a German gentleman, aged 40, who had suffered from painful digestion about fourteen years. In the early days of his illness he had felt pain after taking food. Later, he began to suffer from occasional vomiting. When first seen he was rather emaciated. The stomach usually emptied itself at the end of the day. On several occasions a coffee-coloured matter had been ejected, and altered blood was sometimes mingled with the vomit. The stomach descended below its natural limit, and a small lump could be felt in the epigastric region, indicating obstructive disease of the pylorus. Under treatment, flesh was gained, the vomiting ceased, and the stomach recovered its natural size. But the lump remained. Subsequently he went to his business abroad, when the symptoms returned, and he died of exhaustion. Ulceration of the stomach was of very frequent occurrence, but the symptoms of ulceration varied very greatly. Although hæmorrhage was an important symptom, it was not judicious to wait for the presence of blood before inferring the existence of ulceration. In treating assumed ulcer, the patient must be kept in a recumbent posture. Where there was much enlargement of the stomach, Dr. Hood generally used a counter-irritant, and he freely prescribed the various preparations of opium in those cases where there was no doubt that the dyspepsia did not arise from hepatic engorgement; not only stimulated the bowels, but also made the patient less intolerant of restraint. Where the presence of ulceration was well marked, such treatment should be resorted to as would be insisted on if the ulcer occurred on the surface of the body. In the case of a lady, who at the time of first seeing him was afraid to take the simplest food, and in whom there was found in the epigastric region a spot very tender on pressure, he ordered her to bed, recommended rich milk and light broth as diet, and prescribed six drops of laudanum every four hours. Iodine was suggested as a counter-irritant. A simple soap-and-water enema was to be used every other day. From the first the patient's progress was satisfactory. She left her bed in fourteen days, and recently he received a letter stating that she was quite well.—Dr. DANIEL said that three or four years ago he attended a gentleman who had acted as special artist for a newspaper during the Franco-German war. He was a fine muscular man, but had contracted indigestion. He gave calomel and colocynth. But the symptoms increased, and the patient eventually died of exhaustion.—Dr. SCHACHT suggested that, in addition to rest, an enema every other day was important. Constipation was an awkward symptom, and the enema, by relieving the stomach, allowed the opium to do its work.—Dr. CAMPBELL POPE said that he overcame constipation with bismuth in conjunction with belladonna.—Dr. ORTON said that he knew of a practitioner who had symptoms of ulceration for thirty-five years, and who at last collapsed from vomiting. The *post mortem* examination revealed ulcers in all stages.—Dr. HOOD, in reply, suggested that marked dyspepsia required the most careful examination, for early diagnosis was very difficult. The ulcers were really boils of the stomach resulting in choked glands. He was strongly of opinion that dyspepsia demanded vigorous treatment.

Refracture of a Patella.—Mr. C. B. KEETLEY briefly mentioned a case of refracture of a fractured patella after bony union had been obtained.

Artificial Limbs.—Dr. JAMES THOMPSON showed examples of the Beaufort artificial limbs, and explained their peculiarities and advantages.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, FEBRUARY 2ND, 1883.

J. M. PURSER, M.D., President, in the Chair.

Exhibition of Specimens.—Dr. C. F. MOORE exhibited a living patient, a strong woman, aged 71, suffering from Molluscum Simplex. Neither her children, nor grand-children, nor any relative had a similar disease. The growths commenced twenty-five years ago, without pain or injury to her health, in sizes varying from small-shot to that of a small grape; some small, some pendulous, growing on the face, neck, hands, chest, and arms; none on the lower limbs. —Mr. ABRAHAM showed microscopic mountings of new Blood-vessels, inosculating in granulation-tissue among the meshes of a Sponge skeleton after grafting.—Dr. WARREN showed an example of strangulated Obturator Hernia, which had been discovered after death.—Mr. WHEELER showed an arm amputated for Compound Fracture, with extreme laceration; also a drawing of Erectile Tumour of the forearm, removed successfully from a boy, aged 16, by excision; also a cast of Congenital Deformity of the Hand, consisting in the absence of the little and ring fingers, with grooving of the middle and index, the thumb being normal.

Penetrating Wound of the Bladder.—Mr. STOKES exhibited the bladder of a patient, who had been recently under observation in the Richmond Hospital, suffering from an exceptionally rare form of penetrating wound of the bladder. The patient, a youth aged 16, employed in an ironfoundry establishment, was playing with a companion at vaulting over a pair of long forger's tongs. A failure attended one of his attempts to clear the instrument, and one of the long handles passed through the anus into the rectum, a considerable distance. The boy fell, and the handle of the tongs was promptly removed by his companion. When brought to hospital, he was in a state of great collapse. His sufferings were extreme. There was some slight hæmorrhage from the rectum; and the urine, when drawn off, was found deeply tinged with blood. On the second day, all the symptoms were much aggravated. The abdomen became tympanitic and swollen, the pain agonising, and there was great vesical irritability. On the third day, the patient became delirious, in which condition he remained until released from his sufferings, seventy-four hours after the accident happened. The necropsy revealed a perforation of the anterior wall of the rectum, about an inch and a half from the anus. Here the instrument had passed into the bladder, through the trigone, and emerged at the fundus of the organ, opening into the peritoneal cavity, in which there was a large quantity of purulent fluid. There were well-marked signs of extensive peritonitis.—In the discussion which followed, Mr. CROLY directed attention to the value which he assigned to præcordial anxiety as a diagnostic symptom of ruptured bladder—a view which was not sustained by the facts of the case which Mr. Stokes recorded.

Microscopic Diagnosis of Phthisis.—Dr. PURSER exhibited the viscera of a man who had died of phthisis. In the lungs, there were tracts of dense fibrous tissue, surrounding the bronchial tubes and pulmonary vessels, and extending to the neighbouring portions of the pulmonary tissue. This was extensively consolidated by fibrous thickening of the alveoli. There were numerous tubercles, which had, for the most part, undergone fibrous changes. Caseation was not present to any great extent, but there was a large cavity due to this cause at the base of the right lung, with smaller cavities at both apices. The bronchial glands were indurated, and contained tubercle. Tubercles were abundant in the liver and spleen, both of which organs were amyloid. In this case, the bacillus tuberculosus had been detected in the sputum five weeks before un-

equivocal signs of phthisis had been detected by the stethoscope.—Dr. FINNY said the patient in question, when under his care, was the subject of amyloid disease of the liver. The point of greatest interest on that part of the case was the evidence it afforded bearing on the view of Schüppel and others as to where amyloid disease began It was not amyloid degeneration springing from small arteries in the liver, and in which the whole enlargement was due to the liver-cells being involved in the disease. Here the liver-cells were pushed aside by the growing of the amyloid disease, the result of which was a sort of infiltration, which caused atrophy and degeneration of the liver-cells and the destruction of their functions.—Dr. WALTER SMITH said this was the first case published in Ireland in which a microscopical diagnosis of phthisis had been made, and that five weeks before the ordinary signs of the disease could be detected by a skilled ear. He did not know whether they could hold that the converse proposition was true—namely, that the absence of bacilli argued the absence of phthisis. A gentleman came under his care with evidence of an intrathoracic tumour. The evidences of that disease subsided, and the gentleman recovered, but he got a cough, began to expectorate a quantity of purulent fluid, and became thinner, and it was evident that there was mischief at the right lung. He (Dr. Smith) forwarded some of his sputum to Dr. Purser, who, having examined it, informed him that he had been unable to detect any bacilli in it. That was several months ago, and the patient had not since developed any symptoms of phthisis.

MIDLAND MEDICAL SOCIETY

WEDNESDAY, FEBRUARY 21ST, 1883.

E. MALINS, M.D., President, in the Chair

Exophthalmos and Optic Neuritis.—Mr. EALES showed a girl, aged 14, who had been affected with a sudden and rapidly increasing exophthalmos, accompanied with optic neuritis. After a few days, the exophthalmos began to subside, a discharge of fœtid pus taking place from the right nostril at the same time. There was no conclusive history of syphilis or struma, but frontal headache had been experienced for three months. Mr. Eales considered this to be a case of caries of the bones between the cavities of the orbit and nose, with formation of pus, and perforation into the orbit.—Mr. PRIESTLEY SMITH narrated a case almost identical occurring in his own practice, but in which there was a history of syphilis.

Injury of the Knee-Joint.—Mr. WEST exhibited a boy whose left knee-joint had been widely opened, the result of an accident. Suppuration followed; but, under strict antiseptic measures, a perfect recovery resulted in six weeks.

Sarcomata. — Mr. CHAVASSE showed two large sarcomatous tumours recently removed. The first originated at the upper third of the shaft of the tibia in a girl, aged 17, and was as large as a fœtal head. The history extended over a period of six months; and, before admission to the General Hospital, it had been incised as an ordinary strumous swelling. The limb was removed at the upper third of the thigh, and a rapid recovery ensued. The second case was that of a girl, aged 12, who had complained of pain in the right shoulder-joint for two months, which was attributed to rheumatism. One month before admission to the hospital a tumour was noticed over the right scapula; this rapidly increased, until it was of the size of a man's clenched fist, and was accompanied by emaciation. The whole of the scapula was removed, but the patient died of shock seven hours after the operation. Both tumours were mixed forms of sarcomata and of periosteal origin.

Specimens of Renal Disease.—Dr. WINDLE showed the following specimens. 1. A large deposit of carcinoma in a left kidney, secondary to scirrhous mammæ of two and a half years' duration, the patient being a female, aged 62. This was the only secondary deposit existing. After removal of the breast, very little urine was passed, and none at all the day preceding death. The fatal termination occurred six days after the operation. 2. He also showed renal calculi. The right kidney was very small, containing several calculi, and the gland-structure was much destroyed. The left kidney was larger than normal, but otherwise unaltered. 3. Dr. Windle showed a right kidney, containing one large branched calculus, and one small round one. The substance of the gland was much destroyed. The left kidney was a mass of structureless fat, containing a small calculus.

The Use of Eserine in Glaucoma.—Mr. PRIESTLEY SMITH read a paper, in which the action of eserine in the several forms of glaucoma was discussed. It was shown that the opposite effects of eserine and atropine on glaucomatous tension, were not due to any influence over secretion, but to changes in the mechanical relations of the iris. Whenever atropine or eserine produced any pronounced changes in the tension of the eye, they did so by altering the relations of the iris, in such a way as to hinder or promote the escape of the intra-ocular fluid. This assertion was supported by comparing clinical experience with the facts discoverable by dissecting in the chief varieties of glaucoma. A series of drawings from specimens of glaucoma was exhibited. In forming an opinion as to the propriety of using eserine, in any individual case, the question should be asked: Is there an obstruction in the eye which is capable of reduction by contraction of the pupil? The speaker advocated caution in the use of the remedy, inasmuch as, where it did no good, it was apt to do harm, because it increased the flow of blood through the vessels of the iris, and had been known to induce hæmorrhage. Also, it should never be allowed to stand unduly in the way of operative treatment.

Chronic Inflammation of Joints.—Mr. WEST read a paper on chronic joint-inflammations and their treatment, which he illustrated by various cases that had been under his care. He reviewed the pathology of such inflammation as it occurred in the synovial membranes, ligaments, and bones; and the effects which were subsequently produced on the cartilages. He advocated immobilisation of the limb, or rest by the weight-extension plan, together with aspiration in cases where considerable effusion existed. He recommended the application of ice or freezing mixtures to the surface of joints in the state of acute inflammation; and the use of free incision, with drainage and antiseptic dressings, in cases where pus had formed in any articulation.

REVIEWS AND NOTICES.

IMPERFECT HEARING, AND THE HYGIENE OF THE EAR. By LAURENCE TURNBULL, M.D., Aural Surgeon to the Jefferson Medical College Hospital. 3rd Edition, pp. 147. Philadelphia: Lippincott and Co.

AFTER a somewhat discursive chapter on the progress of otology, in which a variety of questions are shortly treated, the author gives his results on the limit of perception of musical tones by the human ear (Chap. I.). In his experiments he has employed König's rods, and has been careful to have the temperature to correspond as nearly as possible, in the different observations. From their acuteness of perception of high tones, cases, he finds, divide themselves into three classes: 1. Ordinary patients or hospital cases from the lower walks of life, all of whose perceptions are more or less dulled, the ear being no exception: 2. Cultivated and refined people who have no special musical training: 3. Skilled and professional musicians. Physicians whose ears are trained in auscultation and percussion, would form a class intermediate between 2 and 3. Chapter II. treats of tinnitus and of auditory vertigo. In the treatment of tinnitus, the author relies chiefly on the internal administration of hydrobromic acid, and on the intratympanic inflation of hydrobromic ether, also on total abstinence from alcohol. The acid he uses is prepared according to Squibb's method, which yields a liquid of which one drachm contains fifty minims of hydrobromic acid, corresponding, as regards bromine equivalent, to thirty minims of potassium bromide. Chapter III. is devoted to a consideration of the importance of the treatment of the nasopharyngeal space, tonsils and uvula in acute and chronic catarrh of the middle ear. In hypertrophy of the mucous membrane over the turbinated bones the author combines with the application of astringents, incisions into the swollen tissue, which, however, sometimes bleed very freely. The remaining chapters treat successively of artificial perforation of the membrana tympani, diseases of the mastoid region, the hygiene of the apparatus of hearing, with causes and prevention of deafness and deaf-mutism (including the effect of consanguineous marriages on the production of these affections), the education of deaf-mutes, and lastly, on instruments to assist the hearing. This last chapter consists of a comparison between the audiphone and the various forms of hearing-trumpets to the advantage of the latter. On the whole, the book undoubtedly contains many practical hints as well as interesting cases. In our opinion, however, it would be much more readable if it were not so loosely and inaccurately put together, and if its arrangement were somewhat more systematic in character. This feature may, perhaps, be accounted for by the volume being an expansion of the author's pamphlet on tinnitus aurium, and may, we trust, be remedied in a future edition.

NOTES ON BOOKS.

Gross' System of Surgery (Smith, Elder and Co.) appears now in sixth edition, thoroughly rewritten and revised. As indicating e care with which the revision has been carried out, it may be ted that the chapters on the respiratory organs, the eye, and the r, have respectively received careful revision at the hands of Dr. Solis Cohen, Dr. George C. Harlan, and Dr. Charles H. Burnett; ile Professor Edward C. Seguin, of New York, furnishes a section cranio-cerebral topography—a subject new to books of surgery, . Battey has supplied valuable matter relative to oöphorectomy, and . Lewis Hall Sayre, one relative to the application of the plaster- ket in the treatment of spinal diseases. The index, which is of elaborate character, has been carefully prepared by Dr. R. J. nglison. The book is very fully, though somewhat roughly, illus- ted. As usual in American books of surgery, there is rather an cess of engraving relating to the devices of instrument-makers, d a paucity of careful pathological drawings. Professor Gross rdly does justice, we think, to the extent to which Listerism has volutionised modern surgery; that is to say, though he recognises revolution, he hardly adequately traces it to its cause. Anyone o looks through the book, cannot fail to remark that all the nges have been due to that marvellous and happy audacity in gery which enables the surgeons in America, as well as in rope, to contemplate as within the sphere of remedial operation, eases of internal organs in a close cavity, which, when the earlier tions of this book appeared, were considered quite beyond the ge of practical surgery. This boldness and success has revolu- ised the practice of surgery throughout the world; and, although question is now often raised whether the precise technical thods employed by Mr. Lister are absolutely essential to success, whether they may be replaced by other antiseptic methods, rtheless it is plain that the doctrine which Lister has taught, l the methods which he devised, have been, and are still, the ef motors in the great surgical movement which we are witness- throughout the world. The sober and conservative judgment Professor Gross is happily expressed in discussing most of these rations, so far as he does discuss them, but the progress of gery so far outstrips the activity of even the most liberal conser- ism, that numerous surgical proceedings, which are already hin the range of habitual practice, are but lightly touched upon these volumes. This, however, is only the necessary fate of any ndard book written during a period of active progress. That fessor Gross' work worthily occupies a standard position, is just reward of the intelligent, conscientious, and persevering our, which he has for many years bestowed upon the study and ctice of his profession, of the ability and good judgment with ich he has investigated the data of others as well as his own clusions, and of the care with which he has applied his know- ge to practice.

Clinical Lectures on the Diseases of Women. By J. MATTHEWS NCAN, M.D. Second edition. (London: J. and A. Churchill. 83.)—These clinical lectures were delivered by the author, in St. rtholomew's Hospital. The present edition is dedicated to Mr. ter, who has, the author states in his dedication, "by his work in iseptics done more for the safety of lying-in women than any stetrician." Sixteen additional lectures, not including appendices, ve been added. The first chapter is "On Abdominal Signs," giving rt directions for diagnosis through the abdomen. Chapter II is ded "On Pelvic Signs," and describes the manipulations used *vaginam*. In discussing the methods of digital touch, Dr. Dun- insists on the importance of the action of bearing-down effort connection with descent of the uterus. He states: "You will ice that, in making examinations in 'Martha,' I often urge the man to bear down strongly, and encourage her to continue the ort, and in this way I get all the information wanted. On her e, a woman can easily press out a replaced procident uterus, which t inside while she came into the theatre and got on to the table. woman can often, while lying on her side, by bearing down, press a pessary which keeps its place very well during her ordinary ry-day life." In the chapter "On Minor Displacements," the ative importance of descent, version, and flexion, is contrasted. Duncan states: "It is, I believe, universally admitted that ver- ns, flexions, and descent, are not necessarily the cause of any dis- nfort or disorder, and this is a cardinal fact in this question. ink of it. Thousands of blooming, happy, fertile women have placements. To treat a displacement, simply because it exists, a grave error, and yet not a rare one." The author does not appear to regard anteflexion pessaries with favour; he says: "I have seen most kinds of anteflexion pessaries as placed by their inventors, and too often replaced and replaced, but I have never seen one materially modify the flexion. I have myself never used one, and have no intention of doing so. There is another bad and too common practice which I must not omit to mention here; that is what is called straightening or putting up the womb, or replacing it, time after time, by the probe or finger. This has no other effect than to irritate the organ, for the displacement recurs immediately after the probe or finger is removed, as the practice itself shows.' The appendices include chapters on Open Fallopian Tube and Cervix Uteri; on Spontaneous Dilatation of the Virgin Uterus, with Hæmorrhage; and notes on the morbid anatomy of Douglas's pouch. As will be seen from the above extracts, the lectures discuss the medical rather than the surgical aspect of gynæcology.

Diseases of the Uterus, Ovaries, and Fallopian Tubes. By A. COURTY. Translated from the Third Edition by AGNES M'LAREN, M.D. (London: J. and A. Churchill. 1882.)—This work has long been favourably known to English obstetricians, and we are glad to see it in an English garb. It forms a portly volume of 802 pages, illustrated by 431 figures. Although, as might be expected, the views pathological and therapeutical of the French school of gynæcology form the basis of the work, Professor Courty has by no means neglected the study of English authors. The works of McClintock, Tyler Smith, Simpson, and, more especially, Barnes, have been drawn upon with discrimination and advantage. The chapter on the Anatomy, Physiology, and Teratology of the Organs of Generation, abounds with information of the most valuable nature. The operations of autoplasty by excision of wedge-shaped pieces of fibrous tissue, and turning down the flaps of vaginal or external mucous membrane on to the cervical or internal mucous membrane, and by excision of conical pieces of the vaginal portion of the cervix, and by the formation of artificial commissures in cases of dysmenorrhœa, are stated by the author to be of value in many cases. He has seen some, several years after operation, in which the enlargement of the orifice with solid commissures had remained intact. In the patients who had undergone this operation, dysmenorrhœa was cured, and, in several, pregnancy had occurred. The translation is well done, and reflects credit on Dr. M'Laren. The book will be welcome to those practitioners who either have not already studied it in the original or who are not conversant with the French language.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CASCARA SAGRADA.

THE cascara sagrada, or sacred bark—the *Rhamnus purshiana* of the botanists—has of late found favour as a remedy for chronic constipation. As is well known, other members of the same genus possess purgative properties, notably the *Rhamnus catharticus*, or buckthorn The fluid extract of cascara, introduced by Messrs. Parke Davis and Co., is a reliable preparation, and, in doses from half a drachm to a drachm, proves efficacious. The cascara cordial made by this firm is an extract of the same species of rhamnus combined with aromatics. It is by no means unpalatable, and is usually taken without difficulty.

PARKE DAVIS AND CO.'S FLUID EXTRACTS.

WE have received from Messrs. Parke Davis and Co. specimens of their fluid extracts. We have given several of them a prolonged trial clinically, and are satisfied that they possess the properties attributed to them. The fluid extract of grindelia robusta is especially deserving of mention, and is undoubtedly of much value in the treatment of certain forms of asthma. Cheken is another useful remedy, and may be given with confidence as an expectorant and sedative in chronic bronchitis and winter cough—a class of case by no means readily amenable to treatment. Jamaica dogwood is said to possess narcotic properties; but the exact indications for its employment require to be more definitely stated. Damiana has been found useful in the treatment of impotence and spermatorrhœa, and is likely to come largely into use. Messrs. Parke Davis and Co.'s fluid extracts are excellent.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 24th, 1883.

THE MEDICAL BILL OF 1883.

WE have already expressed our cordial approval of the principle embodied in the Medical Bill of 1883. The present Government have, in fact, dealt with the long-vexed question of medical reform in a manner which must win the respect and support of by far the majority of practitioners throughout the country. This is the first time that an attempt has been made by any Government to grapple with the subject from the medical practitioners' point of view, in contradistinction to that of the corporations. That their interests are frequently opposed to one another, is apparent from the evidence recently given before the Royal Commission. If further proof of this were necessary, the latest outcome of the conjoint action of the two English Royal Colleges must convince the most sceptical persons how impossible it is, without the intervention of Government, to expect any real improvement in Medical Education. Moreover, supposing the joint action of the Colleges had been satisfactory, it leaves the main question absolutely unaffected, for the majority of our students would turn from an expensive and elaborate curriculum and examinations to licensing authorities of a very different kind. The Government, however, we repeat have, at the instigation of Lord Camperdown's commission, boldly espoused the cause of the profession; the arguments for and against the medical corporations have been ably and fully stated before the Royal Commission; and the conclusions arrived at by the Chairman, Sir G. Jessel, Sir W. Jenner, Dr. R. McDonnell, and others, are to be found embodied in the clauses of the present Bill.

It remains for the profession to support the Government by every legitimate means at their command; and it will require all our efforts to overcome the opposition of the General Medical Council and the Corporations to this Bill. Compact, powerful, and well-disciplined bodies of this kind are not easily thwarted. The General Medical Council has already, we understand, been called together. In truth, the battle between the profession and the existing medical educational authorities will be a severe one. In order that the voice of the profession should be heard, it is through the individual influence of medical practitioners throughout the country, brought to bear on Members of Parliament, that we must hope to win our cause. If the circumstances of the case be fairly set before members of Parliament, they must come to recognise the fact that it is not only just, but expedient, to support the Bill. Of one thing we may be quite certain; and that is, if the present opportunity be allowed to pass, it will not recur during this century, and so the work of medical reform will be indefinitely postponed. Further, let us warn our readers that passive obstruction on the part of our opponents may as effectively prevent the passage of this Bill through its various stages as open resistance; so that it behoves us to throw all our energies into the subject, and urge on the Government he necessity that exists for pressing this measure on the attention of Parliament during the present session.

Having said this much in favour of the principles of the Bill under consideration, we feel bound to point out some defects in its details, which seem to us to require revision. It appears that the Bill hardly emphasises with sufficient force the point, strongly insisted on by the profession, that medical students should not only pass examinations demonstrating the efficiency of their preliminary or school education, but that they should be required to complete their training in science before commencing their hospital studies. This point has been frequently referred to by the witnesses examined before the Royal Commission, and it was forcibly urged that the preliminary and scientific training of our students should be entrusted to our universities and other educational authorities, their certificate being accepted as proof of a student's proficiency in these subjects. Certificates from recognised authorities having been registered by the Medical Council, two years or more should elapse before a student is permitted to appear before one or other of the medical boards, and during this time the ordering of the student's attendance on hospital practice should be left in the hands of the medical boards. In fact, the constitution and formation of the Medical Boards, as laid down in the 10th and three following sections of the Bill, is all that could be desired; but when we pass on to those on medical education, there is an indecision in the wording of the Bill, which it is very desirable should be revised. In this way, we believe, it will be possible to insure a wider latitude to students in the choice of the schools in which they can study science, but the efficiency of which schools is by no means always commensurate with their power of giving instruction in the practice of medicine and surgery. For instance, we can well imagine that one of our Universities might have excellent science schools, but inadequate hospital accommodation. In a case of this kind the student, having completed his preliminary and scientific studies under advantageous circumstances, and passed the necessary examinations, might move on to one or more of our large hospitals for clinical instruction. We entirely approve of the scheme laid down in the Bill for establishing medical boards in the three divisions of the United Kingdom, and for providing that the final examination should be undertaken by examiners appointed by these boards. But we are convinced that the ordering and supervision of the educational and scientific tests, through which medical students must pass, had best be placed in the hands of the General Medical Council. Otherwise, not only will the Council be of minor importance, but we think that if the preliminary studies of students be left in their hands, a more uniform standard of education will be established than if these subjects be intrusted to the medical boards. We should much like to see stringent clauses introduced into the Bill, granting the General Medical Council the power to appoint one or more of their number to inspect the various scientific and practical examinations; and if, after remonstrating with authorities holding inadequate examinations they fail to reform their system, the Council should have the power to suspend the functions exercised by any such delinquents. Powers of this kind are granted to the Medical Boards in the present Bill, but it will be an invidious task for the members of these local boards to exercise salutary control over the educational authorities who have sent them up as their representatives to the Boards. A somewhat similar order of things exists in the General Medical Council, and its working has not been found to be effective. For these reasons, we believe it would be very much better to transfer these powers from the Medical Boards and to place them in the hands of a re-organised General Medical Council.

A letter from the Chairman of the Medical Reform Committee of the Association, with a form of petition, will be found on page 589

THE PATHOGENIC MICROCOCCUS OF ERYSIPELAS.

HOUGH English surgeons were the first to recognise the contagious ature of erysipelas, the further inquiries as to the causal agent of ne disease were chiefly conducted by continental observers; and it is ne merit of Fehleisen, assistant to Professor Bergmann, to have emonstrated, by a conclusive series of researches, that this disease ; due to a specific and pathogenic micrococcus. The presence of a nicrococcus in erysipelatous tissues, in the lymphatics, and in the apillaries, has been described by several observers; but opinions iffered very much as to the exact part which these organisms layed in the production of the affection. Thus, whilst the late 'rofessor Hüter maintained that they were the cause of erysielas, others, such as Billroth, Tillmanns, and Wolff, believed that hey were either present only in pyæmic erysipelas, or else that hey were only the carriers of an unorganised poison, which, without neir presence, and independent of them, could produce erysipelas. Many of the readers of the BRITISH MEDICAL JOURNAL will also emember the demonstration which Dr. Koch gave at the Interational Medical Congress in London, and the photograms which he howed of the micro-organisms seen at the periphery of erysipelaous tissue; but, though he inclined to look upon these organisms s pathogenic, the direct proof of their pathogenic nature has only ow been given by Fehleisen, who not only found them present in ll cases of erysipelas (thirteen in number) which he examined uring life, but also successfully cultivated them, and with equal uccess inoculated the cultivated organisms in animals and in ıan (*Die Aetiologie des Erysipels*, Berlin, 1883). In small portions f skin excised from the diseased part in patients suffering from rysipelas, Fehleisen found in all cases numerous micrococci rranged in chains. They were especially abundant in the most ecently affected part; and here they were found most markedly in he superficial layer of the corium and in the subcutaneous adipose issue, filling the lymphatics and the lymph-spaces, whilst the rest f the tissue showed cell-infiltration. Contrary to the older obervers, they were never found in the blood-vessels. To prove hat their presence was not merely accidental, Fehleisen cultivated ome small excised pieces of skin on gelatine, after having carefully isinfected the affected part, and succeeded, in the course of two ıonths, in producing fourteen generations. The cultivated microocci formed a whitish film, easily detached from the surface of the elatine, and consisted entirely of the specific micrococcus. Nine abbits were now inoculated on the ear with the pure and cultiated micro-organisms. In one, the effect was merely a slight elevaion of temperature; in all the others, after thirty-six to forty-eight ıours, the temperature rose, and a characteristic erysipelatous rash ppeared, and gradually extended to the root of the ear, and thence pread to the head and neck. In the course of six to eight days, he disease had run its course, and the animal recovered; not ne of the animals died. The light red colour of the affected part, he absence of œdema or suppuration, and the presence of the nicrococci in the lymphatics of the affected part (seen in one case, vhere the ear was amputated during the height of the disease), howed that the affection produced in the rabbit was true erysipelas, nd not septicæmia.

More valuable still to show the etiological importance of the nicroccoci in erysipelas are Fehleisen's inoculations on man. Such proceeding was perfectly justifiable, when we consider that many f the older and distinguished surgeons (Ricord, Desprès, Hebra, Busch, etc.), have quoted cases, showing the therapeutic and beneficial effect of erysipelas when occurring in cases of lupus, cancer, nd other malignant tumours. Fehleisen inoculated the pure and cultivated micrococci in seven cases. Of these, the first was a case of multiple fibro-sarcomata; the second a case of cancer of the mamma, which had already been operated on three times, and showed now several large tumours, adherent to the skin; the third, a case of intraorbital sarcoma, which had reappeared and grew rapidly after enucleation of the eyeball for a primary intra-ocular sarcoma; of the remaining four, two were cases of cancer of the mamma, and two cases of extensive lupus of the face. Six out of the seven cases showed, after a period of incubation varying from fifteen to sixty hours, typical erysipelas, setting in with rigors, high temperature, and running the characteristic course. In some, the symptoms were very severe; in the first there was threatening collapse, and the second was complicated with pleurisy, which, however, soon subsided. As regards the therapeutic effect, the inoculations are of some interest: one case of lupus was almost completely cured (in the second case of lupus the inoculation did not produce any erysipelas); in the second case the cancerous tumours completely disappeared, and there has been no recurrence so far; in the case of the orbital sarcoma, and in the other two cases of cancer, there was no marked effect produced; whilst in the first case the fibro-sarcomatous tumours at first diminished, but afterwards grew again in size.

As Fehleisen succeeded in successfully inoculating several cases twice after a period of a few months, it appears that, if there be an immunity against a second attack of erysipelas, that immunity is, in most cases, only of short duration.'

Fehleisen also tried the effect of antiseptics on the vitality of the micrococci. This portion of the researches might well bear extension, for only two substances were experimented with, carbolic acid and corrosive sublimate; a 3 per cent. solution of the former stopped the growth of the micrococci after a contact of forty-five seconds, whilst the same effect was produced in fifteen seconds with a 1 per cent. solution of the corrosive sublimate. From an etiological and pathological point of view, Fehleisen's researches are of great importance, and the list of diseases due to a specific micro-organism is thus enriched by one. As for the practical outcome, further researches in different directions are needed; and it is with the hope of inducing some English observers to take up this subject, that we have given to Fehleisen's observations the prominence which they justly deserve.

A REMARKABLE OUTBREAK OF INTERMITTENT FEVER.

IN the autumn of 1881 a remarkably virulent and fatal outbreak of fever occurred in the city of Amritsar, in the province of the Punjaub. So universally prevalent was the disease that, even at a comparatively early period of the outbreak, not a single individual, native or European, in the city and civil station, appears to have escaped its attacks; nine-tenths of the shops are said to have been closed, and the work of the Government offices was carried on with the utmost difficulty, owing to the general prostration with fever. Indeed, at one time the disease was so prevalent that as many as 10,000 cases were under treatment in one day. The type of the fever presented so many peculiarities that Dr. Bennett, a deputy sanitary commissioner, was directed to inquire into the circumstances of the outbreak, and his report, which has just appeared in an Indian parliamentary paper, contains many points of interest. In the vast majority of the attacks, the febrile symptoms intermitted after six to ten hours' duration, the paroxysms coming on at a certain time every day or every other day. The regular administration of antiperiodics, quinine, cinchona febrifuge, etc., was usually attended with successful results. The minimum death-rate was reached in July, thence it gradually rose in August, especially during the latter part of the month, when the epidemic may be said to have begun. From the end of August to the 20th September the death-rate rose by successive and rapid waves, until the daily number of casualties from fever was as high as 105. During the course of the following eleven days the number rose to 200, which was reached on the 27th September. It then fell to 175, rising again on the following day to 205, again to descend on October 1st to 185, from which number it rose to 220 on the 3rd of that month,

when the maximum point was attained. From the 3rd to the 5th of that month the rate fell rapidly to 165; and during the following week by successive and rapid falls to 105; from October 13th to the 31st a daily average number of 119 deaths was maintained, the maximum and minimum reached being 135 and 95 respectively. The mortality among children was excessively high. Of a total of 6,859 deaths, no fewer than 3,531, or more than one half, were recorded to have occurred amongst children under twelve years of age. It is well known that, when compared with adults, infants and children show a peculiarly marked susceptibility to malarious influences, as evinced by the more rapid supervention of dangerous symptoms, and the greater tendency to spleen affection, wasting of the tissues, and the other sequelæ which characterise the state known as malarious cachexia; and to this, no doubt, the excessive mortality amongst these cases is to be ascribed. Dr. Bennett believes, from the comparatively large number of young children seen to be ill with fever, many being in a state of great emaciation and weakness, that the death-rate amongst them must have been appallingly high. It would probably be no exaggeration to say that two-thirds of the infantile population have died since the commencement of the outbreak, and that the health of the remaining third has been so shattered that comparatively few, among the poorer classes especially, are likely to survive beyond their fifth year. The symptoms were chiefly those of intermittent fever, but two forms of the disease were met with, common intermittent fever and the dangerous remittent fever, to which so many of the city people succumbed; but between these two there were many gradations partaking of characters common to both. In the vast majority of cases examined by Dr. Bennett, the fever was undoubtedly intermittent, the febrile symptoms recurring and subsiding at regular intervals, varying in length according as the fever was of the quotidian, tertian, or quartan type, and presenting no essential difference from the symptoms which characterise the ordinary autumnal fever of the province. Not unfrequently at the commencement of the hot stage, there were violent bilious vomiting and purging, attended with pain and uneasiness in the regions of the stomach and liver, indicative of congestion of those organs; and in cases of long standing, diarrhœa was a common symptom; but in no case did Dr. Bennett see "choleraic" symptoms superadded to those of fever. During the attacks, the spleen, as a rule, became enlarged, afterwards returning to its normal size in the period of intermission. In some of the cases of remittent fever examined, the condition known as the typhoid state intervened: dry brown tongue, sordes on the teeth, frequent, weak, fluttering pulse, and other symptoms of prostration were observed.

Dr. Bennett unhesitatingly attributes the outbreak to an excessive rainfall, obstructed drainage, and waterlogging of the soil. During the months of July and August, a fall of thirty-eight inches was registered, being twenty-four inches above the average of the previous ten years; while that for September was under the usual average. In consequence of this excessive downpour, a large portion of the ground about the city was covered with water, and that in the city wells rose to about six feet from the surface. Indeed, in one portion, where both the drainage and outfall are extremely defective, the water in several of the wells actually rose to a level with the ground. After this inordinate rainfall, the atmosphere was heavy and moist to an unusual degree; while, from the damp soil, drying up under the influence of a hot sun—the ground-water at the same time beginning to subside—organic emanations from the decomposing animal and vegetable matter contained in it, must have been given off in great abundance. Many intelligent natives blamed the well-water as being one of the main causes of the outbreak. Analysis showed that the well-water must have been polluted with organic impurities; a fact, however, for the proof of which chemistry was hardly needed to any one acquainted with the character and surroundings of Indian compounds. No doubt, one of the chief causes influencing the mortality was the injurious effects of great alternations of temperature. In October, especially during the latter part of the month, cold dewy nights were superadded, when bronchitis, pneumonia, diarrhœa, and dysentery became frequent concomitants of the sequelæ, and not unfrequently proved fatal. Another cause which materially tended to swell the death-rate was unsuitable and deficient clothing; an evil much aggravated by the custom prevalent amongst the populace of sleeping on the ground with, as a rule, only a thin cotton sheet pulled over them, or a mat intervening between their bodies and the cold damp floor.

YELLOW FEVER AND QUARANTINE.

THAT quarantine measures against yellow fever in the United States have hitherto failed to prevent the recurrence of the disease in favourable localities, is admitted by their medical experts, and by all those who are interested in matters of public health. Some have attributed this failure to the variety in the local quarantine regulations of the several ports, and to their negligent administration. One port may fail to keep up quarantine, and thus destroy its effect in other places. It is alleged that in this manner the interior of Alabama has been infected through the Florida ports, and that Arkansas, Mississippi, and Tennessee, have suffered from the carelessness of New Orleans.

A National Board of Health, with power to enforce a national quarantine, is the obvious remedy for such laxity of service; and during the past decade numerous Bills have been introduced into Congress by different senators to establish a central sanitary organisation. But not all those who are in favour of a national board of health, are in favour of a national quarantine. Many think it a wasted labour to attempt to guard a city built on a swamp, from the fever of that swamp, by restrictions upon trade. When the inhabitants of the Mississippi Valley ascribe their yellow fever to importation from New Orleans, they point out the fact that Mobile and Galveston attribute their fever to the same source; and that New Orleans, in its turn, pretends that all its epidemics are imported from the West Indies; although it is well known that, while yellow fever prevails in the West Indies in March, April, and May, it never appears in the southern ports until the end of July, or later. And when a proposal is made to shut off all intercourse during certain seasons of the year with South America and the West Indies, the proof of the miasmatic and indigenous origin of the disease is held to be sufficient to show the uselessness of such a course. However, it has been admitted by all parties that a central organisation could do useful work in the registration of vital statistics, in the collection and diffusion of information as to the spread of epidemics in the States and their occurrence in foreign ports, and in advising the various State and port authorities with regard to quarantine. For the last four years, accordingly, a National Board of Health has been established; and its president, Mr. James Cabell, has recently given an interesting account, in the *Sanitarian*, of its proceedings and prospects. He deprecates the view of sanitarians, who hold that the powers of the Board should be so enlarged as to clothe it with supreme authority over the quarantine service of the entire maritime coast; and would rather trust to a harmonious co-operation between State and municipal boards, on the one hand, and the National Board, on the other. "The experience of near four years," says the annual report of 1882, "has satisfied the Board that it is neither necessary nor desirable to clothe the central authority with quarantine powers, in order to obtain a reasonable security against the invasion of foreign epidemics." The president doubts the competency of the general Government to supersede State authority in regard to quarantine; and thinks that the exercise of the power, if it be admitted, would embitter the opposition of the great commercial ports. Dr. Billings, in his address to the American Medical Association, has shown that the permanent existence of the National Board, in its present form, is improbable; and that it will

obably be replaced by a general council, in which all State boards e represented. In whatever form it may continue, it is to be hoped at further inquiry into the nature of the cause of yellow fever, d its methods of propagation, will be made. That it is a contaous disease has been completely disproved. That goods, ballast, c., may become infected, and carry the fever from port to port, s often been suspected, but never proved. The cargoes of West dian vessels are daily discharged in our British ports, yet no case yellow fever is ever seen. Its portability, therefore, is dependent on special conditions, and confined to narrow limits. The indinous origin of the disease, on the other hand, no one can doubt ho has read the able report of Dr. Woodhull on the sanitary contion of Savannah, and the method of "wet-culture" of rice in its burbs.

THE NEW COLLEGE CONCORDAT.

HE scheme as to which our correspondent—an eminent Fellow of e College of Physicians—last week asked pertinent questions, pears hardly to have been fully understood by those who framed it, it certainly was not by those who voted it. The authorities of e College of Physicians appear to have considered that it would ve the effect of completing an exclusive arrangement, by which the ondon College of Physicians would accept only the examination d licence of the London College of Surgeons in Surgery as a contion precedent to granting its own licence to those who had en examined by it in Medicine; and that the College of Surons would contract a like engagement. This corporate compact tween Pall Mall and Lincoln's Inn Fields, however inconnient and unjust to the candidates and to other bodies, would ave been logical and intelligible. It now appears—as we are inrmed on good authority—that the College of Surgeons by no means kes this view. It will continue to regard any other medical ence duly registered as adequate ground for giving its membership, after a surgical examination conducted by itself. There will, owever, be no medical examination in Lincoln's Inn Fields; no rgical examination in Pall Mall. The licence of the College of hysicians thus becomes once more a purely medical licence—spite its charter and its revived privilege of granting a double qualiation. That privilege is now abandoned; the Pall Mall licence at fteen guineas enters once more into competition with the six-guinea cence of the Apothecaries' Society, as a medical licence for general ractitioners; and all attempt at unifying and simplifying the inimum qualification for practice in England is cast to the winds. hat the College of Physicians gains, and what the profession can in, by this perverse introduction of a little obstacle to the progress medical reform, just after the report of the Royal Commission, and at e moment of the launching of the Government Bill, we are at a ss to see. The Apothecaries' Society profit by it; for the College Physicians' licence once more becomes a single qualification, like eirs, but a much dearer one, and with narrower privileges, for it nfers no right to dispense and charge for medicines. The policy the Pall Mall College appears to us as shortsighted as it is conary to public and professional interests and wishes. We heartily ope the scheme will die stillborn; at any rate, it is not worth conidering as an element of medical reform. To the poor student, it ffers only the prospect of increased fees; and to the public and the rofession a further complexity of examinations, and a new and, we ope, abortive attempt to create a further costly monopoly.

THE Library of the Royal Medical and Chirurgical Society will be losed from Good Friday to Easter Monday (inclusive).

THERE are now fifty-three cases of small-pox in the West Bromich Union, twenty-one fresh cases having been reported to the oard of guardians at their last meeting.

A PLYMOUTH tradesman named Lewin has been brought before the Stonehouse magistrates, charged with having carried on the business of a chemist without having duly qualified himself for that position by passing the pharmacy examinations, and for having, as an unqualified chemist, sold a scheduled poison. He was fined £10 and costs.

WE understand that the following gentlemen will probably take part in the debate on Diabetes at the Pathological Society on April 7th: Dr. Dreschfeld, Dr. Stephen Mackenzie, Dr. Frederick Taylor, Dr. Ralfe, Dr. Finlay, Dr. Hale White, and Dr. Seymour Taylor.

THE Russian Press notices a new step taken by General Tchernaieff, at Tashkend, in establishing a hospital for Mussulman women, presided over entirely by Russian female doctors. This, it seems, is the first time that Russian doctors of the fair sex have been admitted to separate and independent practice.

THERE is a vacancy for an Assistant-Physician to the Manchester Royal Infirmary, owing to the resignation of Dr. William Roberts, and his acceptance of the honour of Consulting Physician, and the promotion of Dr. Dreschfeld. There are two candidates mentioned, both men of excellent abilities; Dr. Steel, who has filled the post of Resident Medical Officer to the Infirmary for some years past, and who has won universal esteem; and Dr. Ashby, Physician to the Children's Hospital, Pendlebury.

THE CHEMICAL LUNG.

THERE will be a demonstration of Dr. Neale's chemical lung at the Hall, 77, Church Street, Lisson Grove, where a punkah has been in use for many months, on Thursday, the 29th instant, at 8.30 P.M. It is proposed to fill the room successively with heated air from the combustion of gas, and the emanations from burnt sulphur, sulphuretted hydrogen, burnt fats, etc., and then to purify the room by setting the punkah in action, as a means of showing its utility for purifying underground spaces, crowded places of meeting, sick rooms, etc. The presentation of an address card will secure admission for any lady or gentleman who desires to see the demonstration.

DEATH OF PROFESSOR VON BRUNS.

THIS distinguished German surgeon, Director of the Department of Clinical Surgery at the University of Tübingen, has recently died at that town. He was a native of Brunswick, where he was born in 1812. He is chiefly known to the profession for the prominent part he has played in connection with the surgery of diseases of the larnyx and the use of the laryngoscope. He contributed to medical literature a text-book on surgery, several papers and pamphlets on nasal polypus, and a valuable work on Laryngoscopy, embellished by an atlas. His health had been failing for some time before his death, ever since an attack of apoplexy in the autumn of 1881, which led to his retirement from the professorship of Surgery in the University.

LOCAL TEMPERATURE AFTER NERVE-STRETCHING.

ACCORDING to M. Redard, who has made a series of experiments on this subject, immediately after stretching the sciatic nerve, the temperature of the leg operated on fell from one to two degrees centigrade. If the nerve be only slightly distended occasionally, the temperature is a little increased, but is quickly followed by a fall in the temperature of the opposite limb. Decrease in the temperature of the leg operated on is observed during two or three months, but on the opposite side only two or three days. When there is suppuration, the temperature of the leg operated on is ten degrees higher than that of the healthy limb. Traction of a segment of nerve has the same effect on the local temperature as rapid distension more extended. The change in the temperature of the oppo-

site limb proves that, contrary to what Vogt maintained, nerve-stretching affects the central nervous system; and it also confirms the results of the experiments made by Tarchanoff, Scheving, and Brown-Séquard, who demonstrated that, when there is anæsthesia of the opposite side, sensibility returns and hyperæsthesia is manifested.

DIAGNOSIS OF FŒTAL POSITION.

M. BUDIN, in a communication made to the Biological Society concerning the position of the ova and fœtuses in multiple pregnancy, stated that in twin pregnancy the position of the fœtuses and their membranes may present three varieties. The first has been described in all the handbooks; the third has been mentioned by some authors; but the second has never been mentioned by any, although M. Budin states that it is by no means rare. If a vertical and transverse incision be made in a uterus from left to right, the two ova are seen placed side by side, one being in the right half, the other in the left half of the uterus; this is the first variety. In the second variety, observed in a similar preparation; the ova are placed one above the other; one occupies the inferior, the other the superior segment. In the third variety, the same method of preparation shows one fœtus occupying the ventral portion of the uterus, the other the dorsal portion; one is in front of the other. The first variety generally presents two placentæ, though sometimes only one; the membranes are always distinct. In the second variety, where the fœtuses are superposed, there may be either one or two placentæ. In the third variety there are generally two placentæ, very rarely only one. Diagnosis is very difficult in all three cases; in the second it is more difficult than in the first; in the third it is almost impossible.

THE PATHOLOGICAL SOCIETY.

AT the last meeting of the Pathological Society on Tuesday last, an important specimen of phlegmonous inflammation of the stomach after gastrostomy was exhibited by Mr. Herbert Page. A short notice of the case was published in our Hospital column last week, pp. 512, 513. The patient fared well after the operation, and the stomach was opened on the fifth day; he was subsequently fed through the gastric fistula, and his progress was most satisfactory for three weeks; then he, somewhat suddenly, began to complain of *malaise*, grew feverish, was seized with severe intractable vomiting, and died in about thirty hours. At the necropsy, some puriform fluid was found in the peritoneal cavity; but the most remarkable pathological change was in the stomach; the walls of this organ were enormously thickened, and yielded, when cut, a thick creamy fluid. Mr. Silcock, who made the necropsy, attributed death to this phlegmonous (parenchymatous) inflammation of the stomach, and stated that few other cases of a parenchymatous inflammation occurring after injury to the stomach were on record; he seemed inclined to account for the inflammation on the theory of digestion of the gastric walls, beginning at or near the wound; but we confess that another fact noted by him—that there were immense numbers of micrococci in the fluid which flowed from the cut surfaces of the stomach—seems to us of considerable importance, suggesting that the inflammation was of an infective nature.

ENDOWMENT OF SANITARY RESEARCH.

WE learn, from a circular forwarded to us by the Grocers' Company, that the question of the encouragement of original research in sanitary science has been before the court of the Company for a considerable period. The court has recently determined to found exhibitions, or otherwise encourage its study; and has sought the advice of accepted authorities on the subject. Mr. John Simon, C.B., F.R.S.; Professor Tyndall, F.R.S.; Dr. J. Burdon Sanderson, F.R.S.; and Dr. George Buchanan, F.R.S.; have most kindly given the Company the benefit of their knowledge and experience. In the administration of the scheme advocated by these authorities, so far as scientific considerations shall be involved, the court intends to act through a standing scientific Committee, or with the advice of such a Committee; and the gentlemen named above have kindly consented to form the first Committee. The scheme, as we are informed in the circular accompanying the letter forwarded by the Company, has the general object of encouraging original research in sanitary science. It consists of two forms of endowment: the one, meant as maintenance for work in progress, in fields of research to be chosen by the worker himself; the other, meant as reward for actual discovery, in fields of research to be specified from time to time by the Company. With the former intention, the Company establishes three research-scholarships, each of £250 a year; with the latter intention, they appoint a discovery-prize of £1,000, to be given once in every four years. Full particulars concerning candidature will be found in the circular issued by the Company, which is printed at p. 590.

MEDICAL VITAL STATISTICS.

AN examination of the obituary records, given in Churchill's *Medical Directory* for the present year, of the deaths of members of the profession occurring during 1882, furnishes some interesting and instructive data. The ages at death of 277 medical practitioners are given. Of these, 260, or 93 per cent., passed the age of 30 years; 230, or 83 per cent., passed 40 years; 214, or 77 per cent., passed 45 years; 196, or 70 per cent., passed 50 years; 179, or 64 per cent. passed 55 years; 151, or 54 per cent., passed 60 years; 121, or 43 per cent., passed 65 years; 80, or 28 per cent., passed 70 years; 52, or 18 per cent., passed 75 years; 25, or 9 per cent., passed 80 years; 9 or 3 per cent., passed 85 years; 3, or 1 per cent., passed 90 years. These figures give the high average age at death of 58.6 years, and show that the medical profession, in spite of its peculiar dangers to life, compares favorably in vital expectancy with other callings. In the statistics we have quoted the relatively large number of deaths beyond 70 years, namely 80, or 28 per cent., may be arranged as follows:—Over 70 years, 5; over 71 years, 7; over 72 years, 3; over 73 years, 4; over 74 years, 9; over 75 years, 4; over 76 years, 5; over 77 years, 5; over 78 years, 6; over 79 years, 7; over 80 years, 4; over 81 years, 3; over 82 years, 4; over 83 years, 2; over 84 years, 3; over 85 years, 1; over 86 years, 1; over 87 years, 3; over 88 years, 1; over 90 years, 1; over 91 years, 1; over 93 years, 1.

ELECTRIC LIGHTING AND VENTILATION.

WHILE the general adoption of electric lighting as a substitute for coal-gas is under consideration, the effect of the new light upon the ventilation of buildings, as compared with that of gas, must not be overlooked. The heat which arises from burning gas, although often regarded as an inconvenience, is sometimes a positive advantage; for, if the gas be burned near the ceiling of a room, the ventilation of the apartment is powerfully aided by the upward currents of air which the combustion of the gas produces, while the noxious products of such combustion in the main are carried off, if sufficient opening to the outer air exist in the upper portions of the room. Last week Dr. Morris, demonstrator of chemistry in Mason's College, read a paper before the Birmingham Philosophical Society entitled "Experiments and Observations on the air of the Birmingham Town Hall." He gave particulars of the results of his investigations as to the temperature and composition of the air in the hall when the building was lighted by gas and also when lighted by electricity. His conclusion was, that the lighting of public buildings by the electric light did not possess such superiority in ordinary cases over lighting by gas as might have been expected. That, he thought, was due to the fact that gas assisted in the ventilation by producing upward currents, which dragged up the lower strata of polluted air whilst the electric light in no respect assisted ventilation; on the other hand, he pointed out, there were the immediate products

e gas-combustion, but in a building like that in which his experi-ents were conducted, where the gas was near the ceiling, the purities were to a large extent carried off far above the heads of rsons assembled in the hall.

THE PERILS OF PEDESTRIANS.

the growing pressure of traffic and novel modes of conveyance ve increased the risks of the road to passengers on horseback and vehicles, pedestrians in the metropolis and in other large towns e also daily exposed to dangers which seem lately to have become ore frequent. In London alone, according to the reports of the lice, more than one hundred persons are annually killed in the reets, while two or three thousand individuals are more or less verely maimed every year in the thoroughfares, and conveyed to spitals. Under the causes of death or disablement are to be und records of injuries by wagons, carts, vans, cabs, cars, and nnibuses. But vehicular traffic is not responsible for all the perils life and limb to which foot-passengers are exposed when they averse the streets. During the prevalence of high winds, we hear injuries from the falling of sign-boards, chimneys, walls, slates, icks, scaffolding, and bill-stickers' hoardings, or from the coming wn of broken telegraph wires which have been stretched over reets. The placing of telegraph wires across streets is a source of nger which is rapidly on the increase, from the growth of tele-nonic communication in populous districts. Telegraph wires cut e a sword when they strike in falling from a considerable height. any cases of accidents to foot-passengers arise from blows from fall-g goods, which are either thrown from heavy railway vans or dropped om cranes overhanging public footpaths. All these various perils pear to be growing amongst us, from the increasing concentration population and commercial activity in the larger urban districts our country. To enumerate these dangers is to prompt the reflec-on that most of them are obviously avoidable, either by due wari-ss on the part of pedestrians or by due care on the part of those ho have charge of vehicles, of goods in transit, or of high erec-ons liable to demolition by storms. The sources of danger which e point out are in many instances capable of mitigation or preven-on by the employment of proper precautions; and they are risks hich the corporate and police authorities of towns would do well lequately to recognise and seriously to consider, with a view to eir being efficiently remedied.

MEDICAL PRACTITIONERS IN THE COLONIES.

N action for libel has recently been tried in New South Wales, hich well illustrates the defects of medical registration in the olonies. A Mr. or Dr. Jackson, a coroner, sued Dr. Goode, a Dis-ict Government Medical Officer, for alleged libellous letters ad-ressed to the Minister of Justice, stating that Mr. Jackson was not ualified for the office of coroner. Dr. Goode had also asserted that r. Jackson was not a surgeon, only a quack; and, again, that he as not a properly qualified surgeon. The evidence of the plaintiff owed that he had not learnt at school either Latin or Greek; that e had been a dispenser in England; and that he had attended lec-ures at "Apothecaries' Hall, Newcastle-on-Tyne," for twelve months. ubsequently, he went to Australia, where he was a druggist. He en went to the "Medical College of the Pacific," San Francisco, here, after a six months' course, he received the degree of M.D. ackson then returned to Australia, where, on showing his diploma nd making a declaration that he had studied for three years in a chool of medicine, he was granted a certificate as a duly qualified edical practitioner for the colony. Six months later, he was ap-ointed coroner by a local bench of magistrates. Our readers will ot be surprised to learn that the depositions of this learned medical oroner displayed great originality in spelling; thus, "yard" was pelt "yeard," and "recognise" appeared as "reconise." The jury gave a verdict for Dr. Goode on three counts, but against him on the count that he alleged that Jackson was not a properly qualified surgeon. They specially found that Jackson's certificate was obtained on an untrue declaration. The judge refused Jackson his costs, and ordered that the certificate of lectures at Apothecaries' Hall should be impounded, the plaintiff having admitted that one of the signatures thereto might have been written by himself. Evidently some better mode of admitting medical men to practise in Australia is greatly needed.

A PROVIDENT SYSTEM FOR SICK NURSES.

A DETACHED villa, which is situated close to the western boundary of Lord's cricket-ground, at the corner of St. John's Wood Road, has been taken by an association of ladies and gentlemen, and converted into a small home hospital for paying patients, under the title of "The St. Helena Home for Trained Nurses." The object of the undertaking, which has been registered, we understand, under license from the Board of Trade as an "Association not for profit," is threefold; it is designed to be a place where patients, who are in a position to pay a liberal scale of charges, may receive careful nursing; secondly, it is proposed to educate nurses, who have already been thoroughly trained in general hospitals, to the work of private nursing; and thirdly, it is further proposed to benefit the nurses, by finding those who have passed through their probation at the Home constant and regular employment, and assisting them in making a provision for the time when, from age or other causes, they are incapacitated from further labour. An influential list of subscribers, headed by his Grace the Duke of Bedford, Sir Nathaniel de Rothschild, Sir Edward Scott, Bart., and Mr. Charles Magniac, M.P., have furnished the funds necessary to set the undertaking on foot, but further help is asked for. All pecuniary profits will be devoted to the provident fund for the benefit of the nurses. We recently had an opportunity, in company with a large party of ladies and gentlemen interested in the Home, of inspecting the house; the rooms for the patients appear to be well arranged, light and airy, but the nurses' dormitories are, unfortunately, small and confined. The primary objects of the Home, to encourage providence among trained sick nurses, and to provide them, in the necessary intervals of rest from their arduous duties, with a comfortable home, where they may reside under proper superintendence, are most praiseworthy, and the names of the committee of management are a sufficient guarantee for the *bona fides* of the undertaking. We wish the St. Helena Home, but especially that part of the scheme which includes the provident fund, every success.

LARVÆ OF FLIES IN THE HUMAN INTESTINE.

IT has been long admitted that no insect, properly so called, has ever been proved to take up its abode in the human alimentary canal, either in the larval, pupal, or perfect state. When larvæ have been found in the intestine, or passed in a motion, their presence has ever been shown to be accidental, the parents never seeking for the admission of their ova into the human body by any of the remarkable stratagems common among insects. Flies lay their eggs on organic matter, which is capable of nourishing the larvæ when decomposing in the open air; the swallowing of such matter, together with the eggs, involves the destruction of the latter, together with the digestion of the former. No species of fly plays the same trick upon man as *Œstrus* plays upon the horse—depositing its eggs on any part of the horse's body that the animal can reach with his tongue. Still, isolated instances are recorded of larvæ giving considerable trouble. Dr. Wacker, of Landsberg, in Bavaria, has published, in the *Aerztliches Intelligenzblatt*, some clinical notes of the case of a farm-boy, aged 21, who consulted him for relief from colicky pains, a feeling of fulness in the hypogastrium, constipation,

and frequent fits of nausea and tendency to syncope, especially when in a close atmosphere, such as that of his cottage or a stable. Dr. Wacker prescribed one-eighth of a litre of Hunyadi János water, to be taken every morning on an empty stomach. On the third day, a vast mass (over two litres) of larvæ, partly alive and partly dead, was passed from the rectum. The patient at once recovered, feeling no more unpleasant symptoms, even when in a hot room. On examination, the grubs were found to be larvæ of a common dipterous insect, *Anthomyia cuniculina*, closely allied to the house-fly and blue-bottle. They resembled gentles; their bodies were divided into ten segments by nine oblique rings; their backs and sides bore minute spines, which appeared to have caused the irritation and pain felt by the patient. Dr. Wacker was led to believe that the *Anthomyia* was swallowed in the form of eggs, which actually hatched in the patient's intestine, the larvæ undergoing rapid destruction, not, however, complete when they were passed from the bowel, for many were alive. Among other species of insects that have been found in the motions or fæces of human subjects, in the larval state, are the common fly (*Musca domestica*); the blue-bottle (*M. vomitoria*); *Anthomyia scalaris*; and the lesser house-fly (*A. canicularis*). The caterpillar of the common tabby moth (*Aglossa pinguinalis*) has, in several instances, been found in fæces, after causing symptoms identical with those observed in Dr. Wacker's patient. This larva naturally lives in butter and suet, and on greasy horse-cloths in stables. Among the German peasantry, who delight in eating raw and imperfectly pickled articles of food, such accidents are to be expected.

FEMALE HALLUCINATIONS.

RECENT circumstances have directed attention to certain remarkable delusions to which females of unstable nervous equilibrium are subject, either through hysteria or through similar disorders of the nervous system. Charcot and Bourneville give instances of the extraordinary self-deceptions that are frequent amongst hysterical patients. Dr. Legrand du Saulle, physician to the Salpêtrière, Paris, describes in his standard work, *Les Hystériques*, some remarkable cases of hallucination, where females laboured under the belief that they have been struck or stabbed by others, even after having inflicted blows and wounds upon themselves. In one instance a young woman was found by her husband lying on the floor of her room in a fainting fit, her face covered with blood. On reviving from her swoon she stated that she had been attacked by armed men; the Paris newspapers related the case, and within three weeks two similar events occurred in the French metropolis. All these cases were proved to have been fabricated by the supposed victims. A young girl wounded herself slightly with a pistol. She gave the police authorities the most minute details about an imaginary assassin who, according to her account, fired the weapon, but she was found to be highly hysterical, and it was proved that she had wilfully wounded herself. In a third case in Dr. Du Saulle's experience, a young woman was found in a railway carriage, stabbed in the left side. The incident caused great excitement, but it was proved, contrary to her assertions, that she had inflicted the wound herself, and was a hysterical subject. A housemaid was found lying behind a door, bound, gagged and covered with bruises. She stated that she had been brutally attacked by two burglars with blackened faces, but she was a highly hysterical woman, and there appears to have been strong evidence that she had contrived to tie her own hands and to gag and bruise herself. Perhaps, the strangest case of all occurred in M. Tardieu's practice. A young lady, living at Courbevoie, wished to make herself an object of public interest by passing as a victim of a political conspiracy, which she pretended to have discovered. One night, she was found in a state of the greatest mental perturbation, at the door of her apartment. She could not talk; but stated, in writing, that she had been attacked outside her own house by a man, who had attempted to garrotte her, at the same time striking her twice with a dagger. Only the lady's clothing was injured, and the body of her dress and her corset were found to be cut through, but at different levels. She tried to make out that the attempt at strangulation had caused dumbness. M. Tardieu remarked, in her hearing, that this infirmity rapidly disappeared when produced under circumstances of this kind. She soon managed to regain her speech; and, in a short time, admitted that the whole narrative had been developed out of her inner consciousness. The constant fear of molestation from enemies, especially if based on reasonable grounds, is particularly liable to predispose nervous or excitable subjects to extraordinary delusions of this kind.

MEETING OF THE GERMAN MEDICAL ASSOCIATION.

DR. HERMAN WEBER has by request forwarded to us a circular, addressed to the members of the German Congress on Medicine. From this we learn that, at the first congress on the subject of internal medicine, which took place on April 20th, 21st, and 22nd, 1882, at Wiesbaden, Professors Gerhardt, Kussmaul, Leyden, and Seity, were elected to serve on the executive committee, in accordance with the statutes of the congress. Herr Kussmaul having declined to serve on the committee, the other three chose Herr Liebermeister in his place, and he kindly accepted the post. The executive committee thus constituted undertook the duties imposed by the statutes, section 12, and busied themselves with the preparations for the second congress, which it has been resolved is to take place at Wiesbaden in April 1883. Among the subjects submitted to the congress as suitable for discussion and report, the committee chose those which seemed to them to be at the present time the most important and interesting, and sought and found reporters for the same. Their proposals are as follows: 1. The second congress on internal medicine shall take place from April 17th to 23rd, 1883, at Wiesbaden. 2. The executive committee will be commissioned to ask Herr Frerichs again to accept the office of President. 3. The following subjects are to come under consideration. On the first day of session: On Tuberculosis; Influence of the Discovery of Tubercle-bacillus on the Pathology, Diagnosis, and Therapeutics of the Disease (Reporters, Herr Kühle of Bonn and Herr Lichtheim of Berne). On the second day: On Diphtheria; its Parasitical Nature, Relation of its Localisation to General Infection, Contagion, Therapeutics, Chirurgical and Prophylactic (Reporters, Herr Gerhardt of Würzburg and Herr Kleb of Zurich). On the third day: Upon the Abortive Treatment of Infectious Diseases (Reporters, Professor Binz of Bonn and Professor Rossbach of Jena). The following further proposals for papers have been submitted up to this time. Herr Seitz: The question of the Application of Medicinal Private Hygiene in the Outbreak of Contagious Epidemic Diseases. Herr Leube: Upon Diseases of the Stomach. Herr Mosler: Upon the Surgery of the Lungs. Herr Seifert of Würzburg: Upon the Entozoa.

SIR GEORGE JESSEL.

THE sudden decease of this most eminent judge has occurred in the prime of life, under circumstances of the most distressing character. Sir George Jessel had for some time been in more or less delicate health, and had endured, uncomplainingly, a good deal of suffering, of which he rarely spoke, and which, indeed, he concealed as far as possible from his family and friends. He was a man of remarkable vigour and firmness of character, entirely devoted to public duties and little disposed to consult his own convenience where the labour of the Bench, or the interests of the great public institutions with which he was connected, called for the exercise of his remarkable powers of judicial investigation. Sir George Jessel had borne about him for a long time the seeds of disease which, had he been able to allow himself longer holidays, and to relieve himself from the strain of mental exertion, might, perhaps, have been successfully held a

day. For several months he had shown marked symptoms of an affection of those organs which is most apt to occur in men who lead a sedentary life, accompanied with severe intellectual labour, and insufficiently relieved by out-door exercise and recreation. The symptoms with which he was affected were those connected with disease of the liver and of the kidney. The progress of the disease was very insidious and somewhat masked. Sir George Jessel had been in the habit of taking horse exercise, and had derived considerable benefit from it. At one time it was thought that he would be unable to continue his labours on the Bench throughout the session. An effusion of fluid into the tissues had set in during the last few months, and he suffered much from anasarca, and from debility and breathlessness. He continued his heavy duties, however, under circumstances of so much personal inconvenience and distress, that he would take his seat on the Bench even when his weakness was such that he had to be carried in a chair on to the Bench: and such was his extraordinary energy that, in spite of the advancing ravages of a disease which above all others saps the physical energy, and depresses the powers of life, the Master of the Rolls continued in his work until Saturday last. His weakness and breathlessness had then, however, reached a pitch which made it impossible for him to persist, and he perforce ceased to appear in court. He, however, had only been confined to bed for two days. He was attended by Dr. Quain and Dr. George Johnson. He died suddenly on Wednesday morning, having suffered greatly during the night from difficulty of breathing and abdominal pain. The final symptoms were those of syncope and collapse. It is not for us to say how deeply the loss of this eminent Judge will be felt at the Bar, by his colleagues on the Bench, and by the public generally. It would not, however, be right to omit saying how deeply the cause of medical education has benefited by the labours of Sir George Jessel on the Senate of the University of London, and how favourable his influence has always been felt in support of the progress of research and of science. His services to the University of London, to the medical faculty, have been great, and especially marked have been his courage, his judgment, and his interest in the progress of the Brown Institute, and in the maintenance and protection of scientific research in connection with that institution, and with the University of London. It will be remembered that Sir George Jessel was one of the founders of the association formed for the advancement and protection of physiological research, which was established under the auspices of Sir William Jenner, Sir James Paget, Professor Huxley, and all the leaders of medicine and biological science, at the College of Physicians last year. His speech on that occasion was marked by the sound judgment, keen common sense, and liberality of view, which have throughout been his distinguishing intellectual characters.

THE RIGHTS OF THE INSANE.

An important document has recently been issued, entitled "Report of the Permanent Commission of the (New York) Medico-Legal Society, in Answer to the Senate Resolutions of January 4th, 1882," dealing with the relations of the Government to the State Lunatic Asylums. The following are the most important of the recommendations of the Commission. 1. It is their unanimous opinion, that no person should be committed to an asylum upon the simple certificate of two physicians, under oath. 2. No physician should be allowed to either certify as to the insanity of an alleged lunatic, for the purpose of committing him to an asylum, or to testify as an expert on the question or fact of lunacy, who has not the requisite knowledge, skill, and experience, as to mental diseases, to entitle him to be called as an expert in such cases. 3. No judge should sign an order for the commitment of any person to an asylum, except after full, complete, and satisfactory evidence, by qualified and competent witnesses, that the person was insane at the time the order was signed, and then only on personal examination by the Court, unless the state of the lunatic forbids it. 5. Every person incarcerated in an asylum should have the right at all times to communicate, by letter, with counsel or any friend, with regard to *(a)* the methods and circumstances attending his commitment, or upon any subject connected with or relating to his discharge from an asylum; *(b)* upon other subjects, subject to the approval of the superintendent of the institution in which he is confined. 6. Every person confined as a lunatic should have the right at any time, without public expense, to have his mental state and condition examined by competent medical experts, entirely disconnected with the officers of the institution in which he is confined. 7. Provision by law should be made for the proper examination of every person confined in an asylum, compulsory at least once every six months, by competent experts appointed for the purpose, and entirely unconnected with the institution in which the person is confined. 8. An institution should be provided for persons permanently deprived of their liberty, whether criminals or not, who are subject to recurrent acute attacks of insanity, or who have lucid intervals. 9. No insane criminal, acquitted on the ground of insanity, should be suffered to go at large, unless fully and permanently restored to reason. Time of application should not be made the test, but complete restoration should be insisted upon—a restoration which, on adequate and careful examination, gives every assurance that it will be permanent.

EPILEPTIC VERTIGO.

On Friday, January 19th instant, Mr. W. J. Payne held an inquest at St. Bartholomew's Hospital into the circumstances attending the death of Frederick Glover, a greengrocer, aged 50, who destroyed himself in the Clerkenwell House of Detention on the 15th instant. It appeared that this man, who had been remanded for a week from the Marylebone Police Court on a charge of having stolen two pork chops, had conducted himself with propriety, and had been as cheerful as prisoners generally are during the first six days of his detention. On the 13th instant, however, when returning from exercising in the yard with a group of other prisoners, he suddenly put his legs over the iron handrail at the top of a staircase, which he had just ascended, lowered himself until he had hold of the lower cross-bar of the balustrade, and then dropped down the well of the staircase, a height of thirty feet, sustaining compound and comminuted fractures of the thighs, ankles, and knees, from the effects of which he died in a few hours. The jury returned a verdict of suicide whilst of unsound mind, believing that his painful position had preyed on his spirits and produced despondency; but there seem to be grounds for doubting the correctness of this conclusion. The unfortunate man, when questioned by Mr. Spark, the assistant-surgeon to the House of Detention, first said that he had fallen through the railings of the staircase, but he afterwards explained that he had been kicked downstairs three weeks previously, and that since then he had had fits of giddiness, during which he was not conscious of what he did. This explanation seems best to meet the facts of the case, for it is inconceivable that anyone intending suicide would have got over the railings in the deliberate and clumsy way which he adopted, when precipitation offered so much quicker and surer a way to self-destruction. The proceedings of Frederick Glover at the top of the staircase were just those confused, irrational acts which often follow an attack of epileptic vertigo, or a fit so slight and brief as scarcely to attract detection, and which have been described and analysed, with all his customary subtlety and perspicacity, by Dr. Hughlings Jackson. It appears that Frederick Glover was a quiet, inoffensive man, and a respectable tradesman; and it is not improbable, therefore, that the pork chops which he was accused of stealing, were taken during the mental trouble that followed an attack of epileptic vertigo, when his notions of *meum* and *tuum* were very hazy, or when, as he himself said, he was not conscious of what he did. If our supposition is correct, the case is a

sad one, and illustrates the necessity of great caution, even in dealing with cases of petty larceny. The coroner observed that it seemed a very hard and a very wrong thing to remand a man for a week for the small offence of stealing two pork chops.

PHYSIOLOGICAL INVESTIGATION.

DR. MCKENDRICK, Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology to the Royal Institution of Great Britain, will give, at the Institution, a course of ten lectures on Physiological Discovery, being a retrospect, historical, biographical, and critical, of the subject. The object of the course of lectures is to trace the progress of physiological research from about the beginning of the sixteenth century to recent times, and more especially along those lines that have led to great results. It will be their aim to show how physiology has gradually attempted to solve some problems by the methods of physic and of chemistry, and has thus become a branch of experimental science. The method followed by Dr. McKendrick will be to describe briefly the lives of the great discoverers, to indicate the influence of contemporary science on their ideas and opinions, and to show how their labours have brought us to our present position. As far as possible, the lecturer will show or illustrate the fundamental experiments of discoverers which will be compared with present methods. The first lecture, on Tuesday, April 3rd, will be on the Circulation of the Blood: a Problem in Hydrodynamics, as illustrated by Harvey, Borelli, Malpighi, Hales, Poiseuille, Ludwig, and Marey. The second lecture, on Tuesday, April 10th, 1883, will be on the Circulation of the Blood: the Controlling influence of Nervous System, as taught by Whytt, Cullen, John Hunter, Parfour du Petit, Dupuy, Brachet, John Reid, E. Weber, Claude Bernard, and Brown-Séquard. The third lecture, on April 17th, will be on Respiration: Relation of the Organism to the Air Breathed—External Breathing, as taught by Van Helmont, Boyle, Mayow, Priestley, Lavoisier, and Spallanzani. The fourth lecture, on Tuesday, April 24th, 1883, will be on Respiration: Relation of the Living Tissues to the Gases in the Blood, as taught by Magnus, Lothar Meyer, Ludwig, Pflüger, Stokes, Hoppe-Seyler, and Paul Bert. The fifth lecture, on Monday, April 30th, 1883, will be on Muscular Tissue: its Properties and Modes of Action, as taught by Borelli, Glisson, Haller, Whytt, John Hunter, Girtanner, Wollaston, Weber, Von Helmholtz, Du Bois-Reymond, Heidenhain, Kühne, and Hermann. The sixth lecture, on Tuesday, May 8th, on the Formation of the Blood, as investigated by Aselli, Pecquet, Jollyfe, Hunter, Hewson, Spallanzani, and Magendie. This process involves the digestion of food, the absorption of alimentary matters, and the action of special organs (blood-glands) in the production of blood-corpuscles. The seventh lecture, on Tuesday, May 15th, will be on the Mechanism of Secretion, as investigated by Malpighi, Johann Müller, Bowman, Goodsir, Ludwig, and Heidenhain. The eighth lecture, on Tuesday, May 22nd, will be on the Nervous System: Notions of Nervous Action Generally, as taught by Bauhin, Hoffmann, Schneider, Malpighi, Willis, Haller, Unzer, Charles Bell, Johann Müller, Waller, Von Helmholtz, and Du Bois-Reymond. The ninth lecture, on Tuesday, May 29th, will be on Nervous Actions: Reflex Acts and the Spinal Marrow, as investigated by Whytt, Prochaska, Marshall Hall, and Brown-Séquard. The tenth lecture will be on Tuesday, June 5th, on the Nervous Action: the Higher Centres and the Brain, as investigated by Flourens, Carpenter, Hitzig, Fritsch, and Ferrier. The conclusion of the lectures will show (1) that physiology collects evidence as to function from various sources, morphological, physical, chemical, experimental, and pathological; (2) that a sound physiology is the basis of the healing art; and (3) that, whilst physiology is the handmaid of medicine, she also claims recognition as a science, investigating problems so recondite as to demand the highest methods of physics for their solution. The subscription to these lectures for non-members of the Royal Institution is one guinea.

SCOTLAND.

WE understand that, at the recent meeting of the directors of the Crichton Royal Institution and Southern Counties Asylum, Dumfries, Dr. Rutherford of Woodilee was elected Medical Superintendent.

THE late Mr. Muirhead of Glasgow directed, by his trust, disposition, and settlement, that the sum of £80,000 should be paid to such benevolent aud charitable institutions in Glasgow as his trustees might select. The list of charities selected has just been selected, and numbers forty-nine, the Royal and Western Infirmaries heading the list with £1,500 each.

THE WEATHER IN SCOTLAND.

DURING the past ten days, the weather all over Scotland has been quite wintry, there having been frequent and heavy showers of snow while the cold has been very intense. Reports from the Highlands and far north state that the fall of snow has been considerable and that there has been serious interruption to the railway traffic.

ABERDEEN ROYAL INFIRMARY.

AT an usual quarterly meeting of the managers of this institution held a fortnight ago, it was intimated that the expenditure exceeded the income by £550, and, but for the liberal donation of £1,000 from Mr. Thompson, it would have been much greater. There is also a debt of £3,300 to be cleared off; and it was resolved to make a strong effort to do so, and also to obtain larger contributions from the public in order to meet the growing wants of so useful an institution as the Royal Infirmary. At the same meeting, it was resolved to postpone the appointment of a fourth physician.

THE SCOTTISH BRANCH OF THE DENTAL ASSOCIATION.

THE first annual meeting of this Branch was held in Edinburgh on the 13th instant. Among the papers read was one by Dr. Smith, in which he discussed the probable effects of prospective medical legislation on the Dentists Act of 1878; and the advice given was that, as regards the dental diploma, every effort should be made to obtain the establishment of the one-portal system, whereby there would be one central examining board for the three kingdoms. There seemed to be a very general feeling at the meeting that, as the present dental curriculum was ample for the purpose it was intended to serve, every opposition should be given to compelling dentists to go through a full medical curriculum. It was announced that a Dental Benevolent Fund would probably be instituted at the general meeting of the Association in Plymouth next year, and that the next annual meeting of the Scottish Branch would be held in Glasgow.

PROFESSOR FLEEMING JENKIN ON HOUSE-SANITATION.

IF Glasgow suffers from a want of knowledge on sanitary matters those interested in the public health are determined that the citizens shall have the importance of individual action brought fully before them. Recently there have been published the report of the Sanitary Association, and also that of Mr. Macleod, of the Sanitary Department, both of which were alluded to in the JOURNAL; while, on the evening of the 16th instant, a lecture was delivered in the Philosophical Society's Rooms, by Professor Fleeming Jenkin of Edinburgh, on house-sanitation. It was essentially a popular lecture, and its object was to bring home to the general public the necessity for house-inspection, its feasibilities and its advantages. The causes which give rise to unhealthy habitations are, in Professor Jenkin's opinion, the three following; first, that all architects are not specialists in the matter of sanitation; second, that houses are often built where there are no architects, or are built by speculative

uilders, and in both cases the designs are imperfect; and, thirdly, ıere is decay constantly going on, for although the work may be xtremely well done at the time, still chemical action does not stop, nd defects arise. No doubt such efforts as those of Professor Jen- in are beneficial in bringing clearly before the public the advant- ges of periodical inspection of their houses, and help to remove the pathy and indifference which are too prevalent on this important ranch of public health.

ROYAL INFIRMARY, EDINBURGH.

ıE managers of the Royal Infirmary recently resolved on taking a ep which will greatly increase the efficiency of the institution and rengthen its position as a teaching centre. The board recently etermined to institute a department for the ear, throat, and larynx. here were, we believe, more than one candidate of undoubted effi- ency and ability. At their last meeting, they appointed Dr. cBride, F.R.C.P.E., surgeon to the department. Dr. McBride has ted as surgeon to the Ear Dispensary for several years, and is a cturer on diseases of the ear in the School of Medicine. He is nown to British and Continental men of science as an author of luable papers, and acted as Secretary to the Section of Otology at ıe Worcester meeting of the British Medical Association.

REGISTRAR-GENERAL'S RETURNS.

ıE returns of the Registrar-General for the week ending March 10th ow that the death-rate in the eight principal towns during the eek was 26.4 per 1,000 of estimated population. This rate is 2.8 ove that for the corresponding week of last year, and 1.3 above at for the previous week of the present year. The lowest mor- lity was recorded in Edinburgh—viz., 19.2 per 1,000; and the high- t in Leith—viz., 32.0 per 1,000. The mortality from the seven most miliar zymotic diseases was at the rate of 4.7 per 1,000, or 0.3 above ıe rate for the previous week. The most fatal miasmatic diseases ere whooping-cough and measles in Glasgow, and whooping-cough Dundee. From acute diseases of the chest, 142 deaths were regis- red, or 2 less than in the previous week. The mean temperature as 37.5°, being 7.0° below that of the week immediately preced- g, and 7.0° above that of the corresponding week of last year.

HEALTH OF THE EIGHT PRINCIPAL SCOTCH TOWNS.

HERE were registered in the eight principal Scotch towns during nuary 1882, the deaths of 1,473 males and 1,516 females. The tal of 2,989 is 36 above the average for the same month during the ceding ten years. The respective death-rates were, per 1,000 of ıe population of each town; in Edinburgh, 22; in Leith, 23; in berdeen, 28; in Greenock, 30; in Perth and Paisley, 27; in Glas- w, 32, and in Dundee, 34. Of the entire mortality, no less than per cent. was of children under five years of age, and ıe percentage of each town was—in Perth, 28; in Edinburgh, 33; Aberdeen, 35; in Paisley, 34; in Glasgow, 46; in Greenock, 47; d in Dundee, 49 per cent. Zymotic diseases contributed 18.3 per nt. of the whole mortality—a rate that is considerably exceeded Glasgow, Dundee, and Paisley. As usual, whooping-cough was ıe most fatal epidemic, having caused 7.8 per cent. of the whole ortality; a rate that has been greatly exceeded in Dundee, where ıe percentage was 13.4. The deaths caused by fever were 38, a nsiderable reduction upon the number for the closing month of st year, when there were 62. Of the 38 deaths, 10 were regis- red as typhus; 25 as enteric, and three as simple continued fever. ıe great majority of deaths from typhus occurred in Glasgow and berdeen. Scarlet fever caused 56 deaths; diarrhœa, 47; measles, ; croup, 40; diphtheria, 37; metria, 12; dysentery, 6; and ritish cholera, 1. To apoplexy 63 deaths were attributed, exactly ıe same number as in last month; to paralysis, 75; to diseases of ıe heart, 190; to hydrocephalus, 63, and to premature birth de- bility, 86 deaths. Phthisis pulmonalis contributed 279 deaths, or 9.3 per cent. of the whole, whilst inflammatory affections of the respiratory organs, other than those referred to already, contributed 763, or 25.5 per cent. of the entire mortality. Of 272 deaths from violent causes, six were suicidal. One death resulted from delirium tremens, and 21 from the direct effect of intemperance. Three males and five females died over 90 years, the eldest female reach- ing 98. As to the meteorological conditions, the month of January was characterised by a high mean temperature, extra depth of rain- fall, extra force of wind, and small humidity of the air.

IRELAND.

A MEETING of the North of Ireland Branch of the Association was held last week in the board-room of the Armagh County Infirm- ary, presided over by Dr. Moore of Belfast. This is the first time the Branch has met in Armagh. The members were afterwards enter- tained at luncheon by Dr. Palmer.

THE COOMBE LYING-IN HOSPITAL.

HER EXCELLENCY THE COUNTESS SPENCER visited this hospital last week, and expressed herself as being much pleased with its excellent arrangements. She was received by the Master of the hospital, Dr. Kidd, and other members of the consulting and visiting staff.

TYPHUS FEVER IN DUBLIN.

THIS disease is rather prevalent in Dublin at present, but its type is not very bad. The Sanitary Association of Dublin have, however, very properly called attention to the increase of the fever in the city, and have published the following minute on its progress during the past two years. In the year 1881, there were 1,225 cases of typhus fever admitted into the Dublin hospitals. These were distri- buted through the four quarters of the year as follows: first quarter, 470; second, 362; third, 246; fourth, 147. Total, 1,225. In the year, 1882, the admissions fell to 591, distributed as follows: first quarter, 126; second, 96; third, 124; fourth, 245. Total, 591. In the ten weeks ending March 10th, 1883, the admissions numbered 254, which is in excess of the number admitted for the previous thirteen weeks.

THE PROFESSORSHIP OF PRACTICE OF MEDICINE IN THE ROYAL COLLEGE OF SURGEONS' SCHOOL.

DR. JAMES LITTLE has intimated his intention of resigning the chair, to which he was appointed in December 1872, on the resigna- tion of Dr. Benson. During the last few years, Dr. Little has risen to the foremost rank as a consultant physician in Dublin; and it was often wondered how he could discharge his professional lectures with that regularity and punctuality which always distinguished him. He never allowed any other engagement to interfere with his lecture- hour, and his success as a lecturer was marked. We can well under- stand that his loss will be much felt by his late colleagues in the school. Dr. John William Moore, Lecturer on Practice of Medicine in the Carmichael College, and Physician to the Meath Hospital, will be a candidate for the chair vacated by Dr. Little.

ZYMOTIC DISEASES IN PROVINCIAL TOWN DISTRICTS DURING 1882.

OF the 97 deaths from small-pox registered during last year, 82 occurred in Belfast, being 57 over the number for the preceding year, 12 in Waterford, 2 in Clonmel, and 1 in Londonderry. Measles caused 252 deaths, of which 111 took place in Belfast, 35 in London- derry, 28 in Dundalk, and 20 in Cork. Scarlet fever caused 195 deaths in Belfast, 33 in Limerick, and 28 in Newry; the deaths from this disease forming a total of 77 in the fifteen districts. Fever

caused 331 deaths, of which number 185 were due to typhus, 92 to enteric, and 54 to simple continued fever. The mortality from whooping-cough amounted to 125 deaths, being a decrease of 106 as compared with the preceding year. Four hundred and thirty-nine deaths from diarrhœa and dysentery were recorded, 218 of which occurred in Belfast, and 55 each in Cork and Limerick.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

As we anticipated last week, the Council of this College has, in as dignified a manner as was possible, corrected the error into which it fell in making the schedule it lately issued to candidates for its Letters Testimonial generally retrospective, by the adoption of the following resolution: "That, misapprehension having arisen in reference to the regulations of the College as to students about to present themselves for examination, the resolution of Council of June 29th, 1882, be published; and that students be informed, in accordance therewith, that those who commenced study before May 1882 may, in all other respects, present themselves under the arrangements previously existing." The gist of the resolution here referred to is, that the College will require from all students who commenced their medical study after July 1st, 1882, evidence that they have *bonâ fide* attended the required courses of lectures and their hospital. With this object, no lecture-certificate shall be received unless the number of attendances certified thereon be at least three-fourths of the course. And as regards the hospital certificates, the number of daily attendances certified must be not less than eighty for each winter session, and forty for each summer session. This regulation would seem to apply only to certificates from "the schools and medical and surgical hospitals in Ireland recognised by the College." The attendance of students is to be checked by certain methods suggested by the College, "or by some other method which may be considered by the Council sufficient."

REMOVAL OF LARGE OMENTAL TUMOUR BY ABDOMINAL SECTION.

ABDOMINAL section was performed last Saturday week at the Children's Hospital, Adelaide Road, Dublin, by Mr. Lambert H. Ormsby, Surgeon to Meath Hospital. The patient, an unmarried female aged 26, was admitted to the hospital a week previously, suffering from a large abdominal tumour of six years' standing. A very considerable sized internal tumour could be defined; but where it sprang from was a matter of doubt. She had never been tapped. The abdomen was enormously distended; and, although the girl was of short stature and small appearance, the girth of her body at the umbilicus measured fifty-four inches. Accordingly, on Saturday, March 10th, she was fully placed under the influence of ether by Dr. W. H. Dulton (the operator's inhaler being used). Mr. Ormsby proceeded to operate under the antiseptic spray by the usual median incision, as for ovariotomy, assisted by Messrs. W. Stokes, Atthill, Smyly, and Wharton. When the abdominal cavity was opened, an enormous quantity of ascitic fluid escaped, and the tumour then came into view, multilocular in consistence, made up of many cells, containing some thick fluid, but made up, for the most part, of brain-like semi-solid matter. The growth was not attached to the ovary or uterus, but appeared to spring from the great omentum. The pedicle or posterior inferior attachment was broad and well defined, and was secured by two stout catgut ligatures, and cut off short. The tumour was then removed in front of the ligatures. No cautery was used to the pedicle, which was allowed to drop back into the abdomen with the ligatures attached. The abdominal incision was then brought evenly together by means of catgut and silkworm-gut sutures, and dressed with the antiseptic gauze. The tumour, together with all the fluid removed, weighed 75 lbs. The patient has progressed most favourably since the operation, the temperature and pulse remaining perfectly normal.

THE MEDICAL ACT AMENDMENT BILL, 1883.

Subjoined is a *verbatim* reprint of the Medical Acts Amendment Bill now before the House of Lords. It is intituled an Act for the consolidation and amendment of the law relating to medical practitioners.

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Short Title.*—This Act may be cited for all purposes as the Medical Act, 1883.

PART I.—ADMISSION TO MEDICAL PRACTICE.—LAW AS TO MEDICAL PRACTITIONERS.

2. *Medical Register.*—On and after the appointed day, the medical register shall be continued in manner in this Act mentioned, and there shall be entered therein the names of all persons entitled, in pursuance of this Act, to have their names entered therein, and any person whose name is for the time being on such register, and no other person, is in this Act referred to as a registered medical practitioner.

3. *Title to Registry, 39 and 40 Vict., c. 41, s. 1.*—On and after the appointed day, a person, whether male or female, who has proved his or her competency in medicine, surgery, and midwifery, by passing such final examination as is in this Act mentioned, and with the exceptions and reservations hereinafter mentioned, no other person shall be entitled to have his or her name entered on the medical register as a registered medical practitioner.

4. *Registered Medical Practitioner entitled to recover Charges.*—On and after the appointed day, a registered medical practitioner may, save as hereinafter mentioned, practise the callings of medicine, surgery, and midwifery, or any of the said callings, in the United Kingdom, and (subject to any local law) in any other part of Her Majesty's dominions, and may recover in due course of law in respect of such practice any expenses, charges in respect of medicaments or other appliances or any fees to which he may be entitled, unless he is a member of a college of physicians, the members of which are prohibited by by-law from recovering at law their expenses, charges, or fees, in which case such prohibitory by-law, so long as it is in force, may be pleaded in bar of any legal proceeding instituted by such member for the recovery of expenses, charges, or fees.

5. *Registered Medical Practitioner exempted from serving in certain Offices.*—On and after the said appointed day, a registered medical practitioner shall be exempt, if he so desire, from serving on all juries and inquests, and from serving all corporate, parochial, ward, hundred, and township offices, and from serving in the militia; and the name of any such person shall not be returned in any list of persons liable to serve in the militia, or in any such office as aforesaid.

6. *Disqualification of Unregistered Medical Practitioner.*—On and after the said appointed day, a person shall not be entitled to recover in any court of law in the United Kingdom any expenses, charges, or fees for any medical or surgical advice or attendance, or for any operation, unless he proves upon the trial that he is a registered medical practitioner.

7. *Unregistered Medical Practitioner not to be recognised in Act of Parliament.*—On and after the said appointed day, the expression "medical practitioner," "legally qualified medical practitioner," "duly qualified medical practitioner," "physician," "surgeon," or any expressions importing a person recognised by law as a medical practitioner or member of the medical profession, when used in any Act of Parliament, shall be construed to mean a registered medical practitioner within the meaning of this Act.

8. *Unregistered Practitioners not to hold certain Appointments.*—On and after the said appointed day, a person who is not a registered medical practitioner shall not hold any appointment as a physician, surgeon, or other medical officer: *a.* In the military or naval service of Her Majesty; or *b.* In the United Kingdom in any hospital, infirmary, dispensary, or lying-in hospital, not supported wholly by voluntary contributions, or in any lunatic asylum, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poor-house, parish union, or other public establishment, body, or institution; or *c.* In the United Kingdom, to any friendly or other society for affording mutual relief in sickness, infirmity, or old age; or *d.* In the United Kingdom, as a medical officer of health; or *e.* In any emigrant or other vessel registered in the United Kingdom.

MEDICAL BOARDS.

9. *Establishment of Medical Boards.*—1. For the purpose of holding such examinations and for such other purposes as in this Act mentioned, there shall be established in each part of the United Kingdom a medical board, to be styled the medical board of that part of the United Kingdom to which it belongs. 2. The number of members of the medical board in each part of the United Kingdom shall be as follows, that is to say, in England fifteen persons, in Scotland eleven persons, in Ireland eleven persons. 3. The members of the medical board for England shall be chosen by the following authorities: two by the University of Oxford; two by the University of Cambridge; two by the University of London; one by the University of Durham; one by the Victoria University Manchester; three by the Royal College of Physicians of London; three by the Royal College of Surgeons of England; one by the Apothecaries' Society of London. 4. The members of the medical board for Scotland shall be chosen by the following authorities: three by the University of Edinburgh; two by the University of Glasgow; two by the University of Aberdeen; one by the University of St. Andrew's; one by the College of Physicians of Edinburgh; one by the College of Surgeons of Edinburgh; one by the Faculty of Physicians and Surgeons of Glasgow. 5. The members of the medical board for Ireland shall be chosen by the following authorities: two by the University of Dublin; two by the Royal University of Ireland; three by the King's and Queen's College of Physicians in Ireland; three by the Royal College of Surgeons in Ireland; one by the Apothecaries' Hall of Ireland. 6. A medical board shall be a body corporate by the name of the medical board of the part of the United Kingdom to which it belongs, having a perpetual succession and a common seal, with a power to acquire and hold lands for the purposes of its constitution without any licence in mortmain. 7. A medical board shall be renewed every five years by the whole of its members retiring, and (subject as in this Act mentioned) their places being filled up by the choice by the constituent authorities of a like number of members, but the corporate existence of a medical board shall continue, and the retiring members shall not vacate their offices until their successors have entered on the duties of their offices, and retiring member

all be eligible for re-election. 8. A casual vacancy in a medical board shall filled up by the choice of a fresh member on the part of the constituent thority which returned the member who caused the vacancy. In any case a casual vacancy, the member chosen to fill such vacancy shall retain his ice so long only as the vacating member would have retained the same if ch vacancy had not occurred. 9. Any person of full age shall be qualified to elected a member of a medical board. 10. A member dying between the ne of his being elected a member and the time of his entering on his office all be deemed to create a casual vacancy. 11. Any member of a medical ard may resign by giving notice of his intention so to do in writing to the ard. 12. The same person may be a member of more than one medical ard. 13. The Privy Council, on the report of the Medical Council hereinafter entioned, may at any time, as respects any medical board, increase the number authorities entitled to return a member or members to such board, also the mber of members of such board, by conferring on any medical authority ablished in the part of the United Kingdom to which such board belongs, d not being one of the constituted authorities for the time being of such ard, and being, in the opinion of the Medical Council and Privy Council, of fficient importance to be worthy of such a privilege, the power of returning member or members to such medical board. 14. The Privy Council, on the port of the Medical Council, may also, from time to time, deprive any constiut authority of the privilege of returning a member or members to a meal board if the Medical Council and Privy Council are of opinion that such thority has so diminished in importance as not to be entitled to such privire. 15. The Privy Council shall also, at the expiration of every ten years, te into consideration the number of members returned to a medical board by e constituent authorities returning members to such board, and may, where y such authority, in their opinion, deserves such a privilege, add to the mber of members returned thereby, or, in case a constituent authority urns more than one member, reduce the number of members returned by h board.

0. *Medical Board to Regulate Examinations Subject to Control of Medical Council d Privy Council.*—The medical board of each part of the United Kingdom all make (and, when made, they may from time to time, by a further scheme, oke, alter, or add to) a scheme or schemes providing for the following mats—1, the holding, at such times and places as may be most convenient, final minations for the admission of candidates to registration as medical practioners; and, 2, the appointment of examiners for such examinations; and, 3, e nature and conduct of such examinations, and the qualification of candites as to age, moral character, and any other matter necessary or expedient be determined by rules in relation to such examination; provided that—*a*, andidate shall not be required to adopt, or refrain from adopting, the prace of any particular theory of medicine or surgery; and, *b*, provision shall be de for the admission of women to the examinations, but such distinctions, ny, may be made as may be judged proper between the cases of men and men, so, however, that the examinations of men and women shall be, in all neral respects, equal as respects proficiency in medical knowledge and exience. So far as is practicable, a uniformity of standard shall be aimed at in final examinations held by the medical boards of the several parts of the ited Kingdom. At the conclusion of each final examination, the medical rd shall certify to the Medical Council the persons who have passed the final mination with such credit as may entitle them to be registered as medical etitioners. Any scheme, revocation or alteration of, or addition to, a scheme de by a medical board in pursuance of this section, shall be of no validity il it has been approved by the Medical Council, and confirmed by the Privy ncil.

1. *Committee of Medical Board.*—A medical board may delegate any of their vers except that of making, revoking, altering, or adding to schemes to a mittee consisting of such number of members of their body as they think but any committee so formed shall, in the exercise of the powers delegated, form to any regulations that may be imposed on them by the board.

2. *Election of Chairman and Vice-Chairman.*—Each medical board shall at ir first meeting, and afterwards from time to time at their first annual meet, elect one of their members to be chairman, and one other of their members be a vice-chairman for the year following such election. Any retiring chairn or vice-chairman shall be re-eligible. If any casual vacancy occurs in the ce of chairman or vice-chairman, the board shall, as soon as they conveniently after the occurrence of such vacancy, elect one of their members to fill such ancy; and every such chairman or vice-chairman so elected as last aforesaid ll continue in office so long only as the person in whose place he is so elected ld have been entitled to continue if such vacancy had not happened. The irman and vice-chairman of the board shall be *ex officio* members of any comtee of the board.

3. *Proceedings of Medical Boards in First Schedule.*—The rules contained in the st Schedule hereto with respect to the proceedings of medical boards and mittees of medical boards, and the other matters therein contained, shall of the same validity as if they were enacted in the body of this Act.

Medical Council.

4. *Establishment of Medical Council.*—For the purpose of exercising due con over the medical boards, and for the other purposes in this Act mentioned, re shall be established a medical council consisting of eighteen persons, to be sen as follows: Six shall be nominated by Her Majesty the Queen with the ice of her Privy Council, and such persons are in this Act referred to as wn nominees. Two shall be elected by the registered medical practitioners dent in England. One by the registered medical practitioners resident in land; one by the registered medical practitioners resident in Ireland; four he medical board of England; two by the medical board of Scotland; and by the medical board of Ireland. Any person of full age shall be qualified e a Crown nominee, or to be elected and to sit as a member of the Medical ncil whether he is or is not a member of the medical profession, and the e person may be a member of any medical board or boards, and also of the ical Council. The Medical Council shall be a body corporate by the name of Medical Council of the United Kingdom, having a perpetual succession and mmon seal, with a power to acquire and hold lands for the purposes of its stitution without any license in mortmain. The Medical Council shall be ewed every five years by the whole of its members retiring, and their places g filled up by the nomination by Her Majesty, and by the election in nner in this Act provided of a like number of members, in the places of the ring Crown nominees and retiring elected members, but the corporate exist e of the Medical Council shall continue, and the retiring members shall not ate their offices until their successors have entered on the duties of their offices, and any retiring member may be nominated again by the Crown or be elected again. A casual vacancy in the Medical Council, if it occurs amongst the Crown nominees, shall be filled up by Her Majesty the Queen, and if it occurs amongst the members elected by any medical board shall be filled up by the medical board by whom such member was elected, and if it occurs amongst the members elected by the registered medical practitioners of any part of the United Kingdom, shall be filled up by election by the registered medical practitioners of that part of the United Kingdom from whence the member who created the vacancy was returned. In any case of nomination by the Crown or of election to a casual vacancy, the Crown nominee nominated or person elected to fill the vacancy shall retain his office so long only as the vacating member would have retained the same if such vacancy had not occurred. Provided that a casual vacancy occurring amongst the members elected by the registered medical practitioners of any part of the United Kingdom, if it occurs during the fourth or fifth year after the first establishment of the Medical Council, or during the fourth or fifth year after any quinquennial renewal of the Medical Council, shall not be filled up unless the Medical Council so direct. A member of the Medical Council dying between the time of his being nominated by the Crown or being elected a member and the time of his entering his office, shall be deemed to create a casual vacancy. Any member of the Medical Council may resign by giving notice of his intention so to do, in the case of a Crown nominee to Her Majesty, and in the case of an elected member to the Medical Council.

15. *Duties of Medical Council.*—The Medical Council shall, in addition to any other duties imposed upon them by this Act, visit from time to time any examinations conducted or recognised for the purposes of this Act, and inquire into the sufficiency thereof. The Medical Council shall have power by order to regulate the performance of their duties by each medical board, and a medical board shall conform to any orders so given by the Medical Council, subject to this proviso, that any medical board aggrieved by any order made by the Medical Council under this section, may appeal therefrom to the Privy Council, and the Privy Council may reverse, modify, or confirm any order so appealed against.

16. *Committee of Medical Council.*—The Medical Council shall from time to time appoint a committee or committees of their own body, and may delegate any of their powers except that of making orders regulating a medical board to any such committee. Any committee so formed shall, in the exercise of the powers delegated, conform to any regulations that may be imposed on them by the council, and, save as is otherwise provided by this Act, any committee formed in pursuance of this section may consist of such number of members and have such a quorum as is directed by the Medical Council.

17. *Election of President and Vice-President.*—The Medical Council shall, at their first meeting, and afterwards from time to time at their first annual meeting, elect one of their members to be president, and one other of their members to be vice-president for the year following such election. If any casual vacancy occurs in the office of president or vice-president, the Medical Council shall, as soon as they conveniently can after the occurrence of such vacancy, elect one of their members to fill such vacancy; and every such president or vice-president so elected as last aforesaid shall continue in office so long only as the person in whose place he is so elected would have been entitled to continue if such vacancy had not happened. The president and vice-president of the Medical Council shall be *ex-officio* members of every committee of the council. Any retiring president or vice-president shall be re-eligible.

18. *Proceedings of Medical Council in Second Schedule.*—The rules contained in the Second Schedule hereto, with respect to proceedings of the Medical Council and committees of the Medical Council, and the other matters therein contained, shall be of the same validity as if enacted in this Act.

Part II.—Medical Education.

19. *Course of Medical Education.*—Every candidate, before being allowed to offer himself for final examination in any part of the United Kingdom, shall comply with the following requirements, that is to say—(1.) He must have passed such a preliminary examination in general knowledge, as may be deemed sufficient to qualify him for admission as a medical student, and (2.) he must have been admitted as a medical student, and (3.) he must have passed through a prescribed course of medical education, and such medical education shall comprise such experience in the practice of medicine, surgery, and midwifery, and the acquisition of such professional and scientific knowledge as may be necessary for the purpose of securing efficiency in his exercise of the profession of medicine, surgery, and midwifery. A correct register of all the persons admitted as medical students in each part of the United Kingdom shall be kept by the medical board of that part. Women as well as men shall be registrable as medical students.

20. *Medical Board to Regulate Course of Medical Education, subject to Control of Medical Council and Privy Council.*—It shall be the duty of each medical board to make (and when made they may from time to time by a further scheme revoke, alter, or add to) a scheme or schemes with respect to the following matters within the part of the United Kingdom to which such board belongs, that is to say—(1.) The preliminary examinations for the admission of persons applying to be admitted as medical students; and (2.) The course of medical education, in this Act referred to as the prescribed course. In defining the prescribed course of medical education the scheme shall describe—(*a*.) The schools in the United Kingdom or elsewhere (in this Act referred to as recognised medical schools), which are to be considered proper places of education for medical students, as respects the whole, or any part of their studies; and (*b*.) the times and places at which examinations are to be held for testing from time to time during the continuance of the prescribed course of medical education, the proficiency of the students in their various branches of study; and (*c*.) the authorities (in this Act referred to as recognised examining authorities), who are to be considered competent for conducting or for appointing examiners to conduct such examinations as are in this section mentioned, and such examining authorities may be all, or any of the following authorities, that is to say, the medical board themselves or any medical authority in the United Kingdom or elsewhere. Any scheme, revocation, or alteration of, or addition to a scheme made by a medical board in pursuance of this section, shall be of no validity until it has been approved by the Medical Council, and confirmed by the Privy Council.

21. *Medical Board to Visit Schools and Examinations.*—It shall be the duty of each medical board, to ascertain, by inspection, or otherwise, the sufficiency of the education provided by any schools, for the time being declared by any scheme of such board to be recognised medical schools, and from time to time by visitation, or otherwise, to inquire as to the examinations held by any recog

nised examining authority, and from time to time to take by revocation, or alteration of schemes, in manner provided by this Act, such steps as may be necessary for depriving any medical school of the privilege of being regarded as a recognised medical school, or any authority of the privilege of being a recognised examining authority, in cases where the medical board is satisfied of the insufficiency of the education in such school, or of the inadequacy of the examinations conducted by any such examining authority.

PART III.—COLONIAL AND FOREIGN PRACTITIONERS.

22. *Registration of Colonial Practitioner with recognised Diploma.*—On and after the appointed day, where a person shows that he holds some recognised colonial medical diploma or diplomas (as hereinafter defined) granted to him in a British possession, and that he is of good character, he shall, upon payment of the registration fee, and on application to the registrar, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the *Medical Register*, provided that he proves any of the following circumstances: (1) That he was practising medicine or surgery, or a branch of medicine or surgery, in the United Kingdom on the said appointed day, and that he has continuously practised the same either in the United Kingdom or elsewhere for a period of not less than ten years immediately preceding the said appointed day; or (2) That his diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom; or in the course of a period of not less than five years, during the whole of which he resided out of the United Kingdom.

23. *Registration of Foreign Practitioner with recognised Diploma.*—On and after the said appointed day, where a person shows that he holds some recognised foreign medical diploma or diplomas (as hereinafter defined) granted in a foreign country, and that he is of good character, he shall, upon payment of the registration fee, and on application to the registrar, be entitled, without examination in the United Kingdom, to be registered as a foreign practitioner in the *Medical Register*, provided that he proves any of the following circumstances: (1) That he is not a British subject; or (2) That, being a British subject, his diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or was or were granted to him in the course of a period of not less than five years, during the whole of which he resided out of the United Kingdom; or (3) That, being a British subject, he was practising medicine or surgery, or a branch of medicine or surgery, in the United Kingdom on the said appointed day, and that he has so continuously practised the same for a period of not less than ten years immediately preceding the said appointed day in the United Kingdom or elsewhere.

24. *Medical Diploma of Colonial or Foreign Practitioner when deemed to be recognised.*—The medical diploma or diplomas granted in a British possession or in a foreign country, which are to be deemed such recognised colonial or foreign medical diploma or diplomas as are required for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the Medical Council as furnishing a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of medicine, surgery, and midwifery, and as entitling the holder thereof to practise medicine, surgery, and midwifery in such British possession or foreign country. If a person is refused registration as a colonial practitioner or as a foreign practitioner, on the ground that the medical diploma or diplomas held or obtained by such person is or are not such recognised medical diploma or diplomas as above defined, or on any other ground whatever, the registrar shall, if required, state in writing the reason for such refusal, and the person so refused registration may appeal to the Privy Council, and the Privy Council, after communication with the Medical Council, may dismiss the appeal or may order the Medical Council to enter the name of the appellant on the *Register*; and further, if the refusal to register him has arisen from an unwillingness of the Medical Council to recognise such medical diploma or diplomas, or any of them, the Privy Council may order the Medical Council to recognise such diploma or diplomas, or any of them, and any order made by the Privy Council in pursuance of this section shall be duly obeyed. A person may, if so entitled under this Act, be registered both as a colonial and foreign practitioner.

25. *Privileges of Colonial Practitioner.*—Any person holding a medical diploma entitling him to practise medicine or surgery in a British possession, shall be entitled to hold an appointment as a medical officer in any vessel registered in that possession.

PART IV.—MEDICAL TITLES, MEDICAL REGISTER, AND MEDICAL AUTHORITIES.

26. *Statutory Title of Registered Medical Practitioner.*—On and after the appointed day, it shall be lawful for any registered medical practitioner who has passed a final examination, as in this Act mentioned, if he thinks fit so to do, to use after his name the title of Licentiate of the Medical Council in medicine, surgery, and midwifery, or any letters indicative of such title.

27. *Medical Qualifying Titles and Medical Higher Titles.*—On and after the said appointed day, medical titles shall be divided into two classes—*a*, medical qualifying titles, and *b*, medical higher titles, and any medical title which is not a qualifying title or a higher title within the meaning of this Act shall not be entered on the *Register*. "Medical qualifying title" in this Act means as respects a person whose first registration as a medical practitioner takes place on or after the said appointed day. *a*. In the case of a home practitioner, the title of "Licentiate of the Medical Council in medicine, surgery, and midwifery"; and *b*, in the case of a colonial or foreign practitioner, any title indicating or implying that he has obtained a recognised diploma. As respects a person whose first registration as a medical practitioner has taken place before the said appointed day; any title indicating or implying that a person has obtained a diploma whereby, before the said appointed day, he became qualified to be registered as a medical practitioner, also any other title which, before the said appointed day, he had a right to have entered on the *Medical Register* as a medical title. "Medical higher title" in this Act, means any title indicating or implying the grant of a diploma which may appear to the Medical Council to have been granted after examination in respect of a substantially higher degree of knowledge than is required to obtain a qualifying diploma under this Act, or a diploma which has been granted as a testimonial of special distinction, and appears to the Medical Council to deserve recognition as a higher medical diploma. If any authority, having power to grant medical diplomas, feels aggrieved by the refusal of the Medical Council to recognise any medical diploma granted by it as conferring a medical higher title within the meaning of this Act, such body may appeal to the Privy Council, and the Privy Council may, if it thinks fit, order the Medical Council to recognise such diploma as conferring a medical higher title within the meaning of this Act, and any order made by the Privy Council in pursuance of this section shall be duly obeyed. It shall be lawful for any registered medical practitioner who, on or after the said appointed day, may obtain any diploma authorising him to use a medical higher title, to cause a description of such diploma to be added to his name in a separate column of the *Medical Register*, and to take or use any medical title which such diploma authorises him to take or use. Where in the case of a person registered as a medical practitioner, before the said appointed day, a qualifying title may, in pursuance of this Act, be declared by the Medical Council or the Privy Council on appeal to be a higher title, such title shall be entered on the *Register* as a higher title as well as a qualifying title.

28. *Penalty on Misuser of Medical Titles.*—1. On and after the said appointed day, if any person, whether a registered medical practitioner or not, takes or uses a medical title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds. 2. On and after the aforesaid day, if any person, whether a registered medical practitioner or not, takes or uses a medical title which is, by this Act, not permitted to be entered on the *Register*, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds; provided that a person shall not be liable to such penalty in either of the following cases—First, if he shows that he holds a medical diploma which authorises him to use the medical title complained of, and that such diploma is an existing diploma granted by a medical authority authorised to return a member to a medical board under this Act; or, secondly, if he shows that he is not ordinarily resident in the United Kingdom, and that he holds a medical diploma which authorises him to use the medical title complained of, and also entitles him to practice in the country in which the diploma was granted. "An existing diploma" means a diploma capable of being granted at the time of the passing of this Act. 3. On and after the aforesaid day, if any person who is not a registered medical practitioner represents himself to be a registered medical practitioner, or uses any name, title, addition, or description implying that he is a registered medical practitioner, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds; provided that he shall not be liable to such penalty, if he shows that he has been registered and continues to be entitled to be registered in the *Medical Register* but that his name has been erased therefrom, on the ground only that he has ceased to practise, or been deemed to have ceased to practice. 4. On and after the aforesaid day, if any person who is not a registered medical practitioner, and who practices for gain, or professes to practice, or publishes his name as practising medicine, or surgery, or who receives any payment for practising medicine or surgery; *a*., uses the designation of, or represents himself to be a physician, surgeon, doctor, or apothecary; or *b*., uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds. 5, On and after the said appointed day, prosecutions for offences against this section may be undertaken by the persons hereinafter mentioned, but by no other person or bodies of persons; that is to say, 1, in any part of the United Kingdom, by any person authorised by the Medical Council; and 2, in England, by the Public Prosecutor, or by the Attorney-General, or Solicitor-General, or by any person authorised by the medical board of England, or any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Public Prosecutor, Attorney-General, or Solicitor-General; and 3, in Scotland, by the Procurator Fiscal, or by the Lord Advocate, or by any person authorised by the medical board for Scotland, or by any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Procurator Fiscal, or Lord Advocate; and 4, in Ireland by the Crown Prosecutor, or by the Attorney-General or Solicitor-General for Ireland, or by any person authorised by the medical board for Ireland, or by any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Crown Prosecutor, Attorney-General, or Solicitor-General. This section shall not prevent—1, a person from using the designation of midwife; or 2, a person lawfully holding from any of the medical authorities recognised by the Medical Council a license in midwifery or a certificate of fitness to practise as a midwife, from taking or using the designation of licentiate in midwifery or certified midwife; or 3, a person registered in the *Dentists' Register* under the Dentists Act, 1878, from taking or using any name, title, addition, or description which he is entitled to take or use under that Act.

MANAGEMENT OF REGISTER.

29. *Contents and Form of Medical Register.*—1. The *Medical Register*, as continued on and after the appointed day, in pursuance of this Act, shall contain the names and addresses—(*a*) of all existing home practitioners, that is to say, of all persons who, on the said appointed day, are registered medical practitioners according to the *Medical Register* then in force, and of all future home practitioners, that is to say, of all persons who, on or after the said appointed day, may become entitled to be registered by reason of their having passed a final examination under this Act; and (*b*) of such colonial and foreign medical practitioners as are entitled to be registered under this Act; and shall be in such form and contain such particulars as the Medical Council may, with the sanction of the Privy Council, from time to time direct. Provided as follows: The names shall be divided into three lists, of which lists the first shall contain the names of the medical practitioners other than the colonial and foreign practitioners, the second shall contain the names of the colonial practitioners, and the third shall contain the names of the foreign practitioners. Each list shall be made out alphabetically according to the surnames. Each list shall contain two columns, in one of which there shall be entered the qualifying titles, and in the other of which there shall be entered the higher medical titles, opposite the names of the several persons entitled to such titles. Subject as in this Act mentioned, applications for registration in the *Medical Register*, and for alterations to be entered in that *Register* of names and addresses, or of medical titles, shall be made in such manner and supported by such evidence as the Medical Council may from time to time determine. Copies of the *Medical Register* shall be annually printed and published, and offered for sale.

30. *Correction of Medical Register.*—1. On and after the said appointed day every registrar of deaths in the United Kingdom receiving notice of the death of any registered medical practitioner shall forthwith transmit by post to the registrar of the Medical Council a certificate under his hand of such death, with the particulars of the time and place of death, and may charge the cost of such certificate and transmission as an expense of his office; and on the receipt of such certificate, or on other sufficient evidence of death, the registrar of the Medical Council shall erase the name of a deceased medical practitioner from the *Register*. 2. On and after the day last aforesaid, the medical registrar [illegible]

erase from the *Medical Register* the name of a person who has ceased to practise, but not (save as hereinafter provided) without the consent of that person; and the medical registrar may send by post to a person registered in the *Medical Register* a notice inquiring whether or not he has ceased to practise, or has changed his residence; and if the registrar does not, within three months after sending the notice, receive any answer thereto from the said person, he may, within fourteen days after the expiration of the three months, send him by post, in a registered letter, another notice, referring to the first notice, and stating that no answer thereto has been received by the registrar; and if the registrar either within the said three months receives the first notice back from the dead letter office of the Postmaster-General, or receives the second notice back from that office, or does not, within three months after sending the second notice, receive any answer thereto from the said person, that person shall, for the purpose of this section, be deemed to have ceased to practise, and his name may be erased accordingly without his consent having been obtained. The name of any person erased (either before or after the said appointed day) from the *Medical Register*, at the request of such person, or with his consent, shall, subject to the provisions of this Act, as to the erasure of a name in case of misconduct, be restored to the *Register* on the application of the person whose name was erased, and on payment of such fee not exceeding the registration fee as the Medical Council from time to time fix.

31. *Erasure from Medical Register.*—On and after the said appointed day, the Medical Council shall cause to be erased from the *Medical Register* any entry which has been incorrectly or fraudulently made. Where a person registered in the *Medical Register* has, either before or after the passing of this Act, and either before or after the date at which his name was first entered on the *Medical Register*, been convicted, either in Her Majesty's dominions or elsewhere, of an offence which, if committed in England, would be a felony or misdemeanour, or been guilty of any infamous or disgraceful conduct in a professional respect, that person shall, on and after the said appointed day, be liable to have his name erased from the *Register*. On and after the said appointed day, the Medical Council may, of their own motion, and upon the application of any of the medical authorities for the time being authorised to return members to a medical board, shall cause inquiry to be made into the case of a person alleged to be liable to have his name erased under this section, and, on proof of such conviction or of such infamous or disgraceful conduct as is in this section mentioned as rendering a person liable to have his name erased from the *Register*, may cause the name of such person to be erased from the *Register*. Where the Medical Council is of opinion that the erasure of the name of a person from the *Register* will be too severe a punishment for the offence of such person, they may, instead of directing his name to be erased, declare that he is suspended, and thereupon direct the word "suspended" to be entered opposite his name in the *Register*. A registered medical practitioner, when suspended, shall not be deemed during such suspension to be a registered medical practitioner. Any person aggrieved by any determination or act of the Medical Council, in pursuance of this section, may appeal summarily to the High Court of Justice in such manner as may be determined by rules of court, and such court may confirm, reverse, or modify the decision of the Medical Council. Provided that the name of a person shall not be erased, nor shall a person be suspended under this section—(*a*) on account of his adopting or refraining from adopting the practice of any particular theory of medicine or surgery; nor (*b*) on account of a conviction for a politicai offence out of Her Majesty's dominions; nor (*c*) on account of a conviction for an offence which, though within the provisions of this section, does not, either from the trivial nature of the offence, or from the circumstances under which it was committed, or from the time which has elapsed since its commission, disqualify a person, in the opinion of the Medical Council, for practising medicine and surgery.

32. *Committee for Rectification of Register.*—The Medical Council shall, for the purpose of exercising in any case the powers of erasing from, and of restoring to, the *Medical Register* the name of a person or an entry, ascertain the facts of such case by a committee of their own body, not exceeding seven in number, of whom the quorum shall be not less than three; and a report of the committee shall be conclusive as to the facts for the purpose of the exercise of the said powers by the Medical Council. A committee acting under this section may, for the purpose of the execution of their duties under this Act, employ, at the expense of the Council, such legal or other assessor or assistants as the committee think necessary or proper.

33. *Penalty on Wilful Falsification of Register, 21 and 22 Vict., c. 90, s. 38.*—Any registrar who wilfully makes or causes to be made any falsification in any matters relating to the *Medical Register* shall be deemed guilty of a misdemeanour in England or Ireland, and in Scotland of a crime or offence punishable by fine or imprisonment, and shall, on conviction thereof, be liable to be imprisoned for any term not exceeding twelve months.

34. *Penalty for obtaining Registration by false Representations.*—Any person who wilfully procures or attempts to procure himself to be registered under this Act, by making or producing or causing to be made or produced any false or fraudulent representation or declaration, either verbally or in writing, and every person aiding and assisting him therein, shall be deemed guilty of a misdemeanour in England and Ireland, and in Scotland of a crime or offence punishable by fine or imprisonment, and shall, on conviction thereof, be liable to be imprisoned for any term not exceeding twelve months.

MEDICAL AUTHORITIES.

35. *Power of Medical Authorities to grant Diplomas to both Sexes.*—Any authority in the United Kingdom for the time being authorised to grant medical diplomas may, notwithstanding anything contained in any charter or Act of Parliament, grant medical diplomas to persons of both sexes, provided that—A woman who receives a medical diploma from a medical authority who at the date of the passing of this Act have not any obligation to grant a medical diploma to any woman, shall not, in respect of that diploma, except so far as the medical authority otherwise in their discretion provide, be entitled to any share in the government, management, or proceedings of that authority.

36. *Power of Medical Authorities to accept Certificates of Medical Board.*—Any authority in the United Kingdom for the time being authorised to grant medical diplomas may, if it thinks it expedient so to do, admit, without further examination, any person who has passed a final examination in pursuance of this Act to its lowest qualification.

37. *Power to Medical Authorities to conform to Act.*—Nothing in any Act or in any charter, statute, or by-law shall prevent any medical authority or any medical school in the United Kingdom from making any such changes in its constitution or practice as may be necessary to enable such authority or school to conform to any of the provisions of this Act, or of any rules made in pursuance of this Act.

PART V.—EXPENSES AND MEDICAL FUNDS.

38. *Expenses of Act and Funds to meet such Expenses.*—For the purpose of defraying the expenses of carrying this Act into execution, the three medical boards and the Medical Council shall respectively form funds, to be called "The Medical Board (England) Fund," "The Medical Board (Scotland) Fund," "The Medical Board (Ireland) Fund," and "The Medical Council Fund." All sums received by each of the said bodies shall be carried to the account of the fund belonging to such body. Each medical board fund shall be applicable to the payment of the expenses following, in the order of priority in which they are named, that is to say: 1. The expenses of examinations within the part of the United Kingdom to which such board belongs. 2. The reasonable expenses incurred by members of the medical board in attendance on such board, and the payment of a reasonable remuneration or compensation for attendance to such members. 3. Any expenses in respect of officers and rooms, and any expenses in respect of elections, visitations, or otherwise which the board may properly incur in the performance of their duties under this Act. An account of receipts and expenditure shall be rendered by each medical board to the Medical Council at such times and in such form as the Medical Council may direct, and any surplus appearing on such account to be remaining after leaving a sufficient balance for payment of current expenses shall be paid to the medical council fund. The medical council fund shall be applied in payment of the following expenses in the order of priority in which they are named: 1. The reasonable expenses incurred by members of the Medical Council in attending on such council, and the payment of a reasonable remuneration or compensation for attendance to the members. 2. Any expenses in respect of officers and rooms, and any expenses which the Medical Council may properly incur in the performance of their duties under this Act. 3. The expenses properly incurred by each medical board in or about the election of members to be returned to the Medical Council by the registered medical practitioners resident in the part of the United Kingdom to which each board belongs. 4. The expenses of maintaining any such medical museums and medical libraries belonging to any medical authority for the time being authorised to return a member to a medical board, as may before the passing of this Act have been ordinarily maintained for general public purposes by such authority in their capacity of grantors of qualifications for registration under the Medical Act, 1858, and have been so maintained out of fees paid by applicants for such qualifications, and may be of such importance to the promotion of knowledge in medicine or surgery as to deserve to be maintained out of the funds of the Medical Council. The amount of the remuneration or compensation to be paid for the attendance of members of a medical board shall be determined by that board with the assent of the Medical Council and the sanction of the Privy Council, and the amount of remuneration or compensation to be paid for the attendance of members of the Medical Council shall be determined by the Medical Council with the sanction of the Privy Council. An account of receipts and expenditure shall be rendered by the Medical Council to the Privy Council at such times and in such form as the Privy Council may direct, and any surplus appearing on such account to be remaining after leaving a sufficient balance for payment of current expenses shall be applied for the benefit of the medical profession, or in such manner as the Medical Council may with the sanction of the Privy Council determine. The Medical Council as respects the medical boards, and the Privy Council as respects the Medical Council may cause the accounts of such boards and council to be audited, and may direct to be disallowed any sums appearing to be improperly expended on the accounts rendered to them in pursuance of this Act. For the purpose of supplying moneys to form each medical fund, each medical board may charge such fees for its examinations and for the registration of medical students within its part of the United Kingdom as that board with the assent of the Medical Council and sanction of the Privy Council may determine. For the purpose of supplying moneys to form the medical council fund the Medical Council may, with the sanction of the Privy Council, charge—(*a.*) Such sums as they think fit for the sale of copies of the *Pharmacopœia* hereinafter mentioned, and of the *Medical Register*, and (*b.*) A fee for the registration of persons as medical practitioners, and (*c.*) An annual registration fee for keeping the name of each medical practitioner on the *Register;* and (*d.*) Fees of small amount for making entries on the *Register* by way of alteration of names or addresses, or of additions of medical titles, or of restoration of names, or otherwise howsoever. The annual registration fee shall be payable at such time after the appointed day as may be determined by the Medical Council. Every registered medical practitioner who has paid his annual registration fees shall be entitled, on application, to receive from the registrar, on payment of the cost of carriage, a copy of the *Medical Register* free.

39. *Accounts of Medical Boards and Medical Council to be laid before Parliament.*—The accounts of the Medical Council and of each medical board shall be published annually, and shall be laid before both Houses of Parliament at the commencement of the session of Parliament in each year, or as soon thereafter as may be practicable.

PART VI.—GENERAL PROVISIONS.—AS TO MEDICAL BOARDS, MEDICAL COUNCIL, AND PRIVY COUNCIL.

40. *Appointment of Officers by Medical Boards.*—Subject to the provisions in this Act contained with respect to the existing officers and servants of branch councils, each medical board may from time to time, with the assent of the Medical Council and sanction of the Privy Council as to the number of offices to be created and the salaries to be attached to each office, appoint and remove a secretary, treasurer, and such other officers and servants as the medical board may require for the purposes of this Act, but the same person may fill the offices of secretary and treasurer.

41. *Appointment of Officers by Medical Council.*—Subject to the provisions in this Act contained with respect to the existing officers and servants of the General Council, the Medical Council may from time to time, with the sanction of the Privy Council as to the number of offices to be created and the salaries to be attached to each office, appoint and remove a registrar, secretary, treasurer, and such other officers and servants as the Council may require for the purposes of this Act, but the same person may fill the offices of registrar, secretary, and treasurer, or any of such offices.

42. *Legal Status of Medical Board and Medical Council.*—1. No act or proceeding of a medical board, or of the Medical Council, or of a committee of a medical board or of a committee of the Medical Council, shall be questioned on account of any vacancy or vacancies in their body; 2, no defect in the qualification, nomination, choice, or election of any person or persons acting as member or members of a medical board or of the Medical Council, or of a committee of a medical board or of a committee of the Medical Council, shall be deemed to vitiate any proceedings of such board, Council, or committee in which he or

they have taken part, in cases where the majority of members parties to such proceedings are duly entitled to act. 3. Any minute made of proceedings at a meeting of a medical board, or of the Medical Council, or of a committee of a medical board, or of a committee of the Medical Council, if signed either at the meeting of the board, Council, or committee at which such proceedings took place, or at the next ensuing meeting of the board, Council, or committee, by any person purporting for the time being to be the chairman of the board, Council, or committee, shall be receivable in evidence of such proceedings in all legal proceedings without further proof; and, until the contrary is proved, every meeting of a medical board, or of the Medical Council, or of any committee of a medical board, or of any committee of the Medical Council where minutes have been so made of the proceedings, shall, until the contrary is proved, be deemed to have been duly convened and held, and all the members thereof to have been duly qualified. 4. No member of a medical board, or of the Medical Council, by being party to, or executing in his capacity of member, any contract or other instrument on behalf of the board or Council, or otherwise exercising any of the powers given to the board or Council, shall be subject individually to any action, suit, trial, prosecution, or other legal proceeding; and the board or Council may apply any moneys from time to time coming into their hands for the purpose of paying any costs of legal proceedings or damages they or any member of their body may incur, in execution of the powers granted to them. 5. Any instrument which, if made by private persons, would require to be under seal, shall, in the case of a medical board, be under the seal of the medical board, and signed by the proper officer of the board; and, in the case of the Medical Council, be under the seal of the Medical Council, and signed by the proper officer of the Council. Any notice issued by or on behalf of a medical board or of the Medical Council shall be deemed to be duly executed if signed by the proper officer of the board or of the Council; but, subject as aforesaid, any appointment made by a medical board, or by the Medical Council, and any contract, order, or other document made by or proceeding from a medical board, or from the Medical Council, shall be deemed to be duly executed, in the case of a medical board, either if sealed with the seal of the board, or if signed by two or more members of the board authorised to sign them by a resolution of the board; and, in the case of the Medical Council, either if sealed with the seal of the Medical Council, or signed by two or more members of the Medical Council authorised to sign them by a resolution of the Council; but it shall not be necessary in any legal proceeding to prove that the members signing any document in pursuance of this section were authorised to sign such document, and such authority shall be presumed until the contrary is proved. 6. The proper officer of a medical board shall be any officer authorised by the board to sign such documents as he is required to sign as aforesaid, and it shall not be necessary in any legal proceeding to prove his authority, and such authority shall be presumed until the contrary is proved; and the proper officer of the Medical Council shall be any officer authorised by the Council to sign such documents as he is required to sign as aforesaid, and it shall not be necessary in any legal proceedings to prove his authority, and such authority shall be presumed until the contrary is proved.

As to Approval and Confirmation of Schemes.

43. *Approval and Confirmation of Schemes.*—Where a scheme is required to be approved by the Medical Council and confirmed by the Privy Council, the following proceedings shall be taken. 1. The medical board shall, as soon as practicable after making the same, send a copy to the Medical Council. 2. On the receipt of such copy, the Medical Council may either annul or approve the same with or without modification made by the Council, or may remit the same to the medical board for modification by them, until it is brought into conformity with the views of the Medical Council. 3. It shall be the duty of the Medical Council to forward, as soon as practicable, to the Privy Council for confirmation any scheme approved by the Medical Council. 4. On the receipt of any such scheme, the Privy Council shall take the same into their consideration, and if dissatisfied therewith, they may either annul the same altogether, or may remit the same to the Medical Council for modification by them until it is brought into conformity with the views of the Privy Council. Any scheme requiring to be confirmed by the Privy Council under this section shall, when so confirmed, be deemed to have been duly made, and be of the same validity as if enacted in this Act. The Medical Council before approving, and the Privy Council before confirming, any scheme made in pursuance of this Act, shall hear any objections which may be made to the scheme by any person or body of persons.

44. *Default of Medical Board.*—If any medical board, in the opinion of the Medical Council, makes default in the performance of its duty under this Act, it shall be the duty of the Medical Council to notify to the medical board that it has made such default; and if the medical board fail to comply with any direction of the Medical Council in respect of such default, the Medical Council may by order suspend the medical board, or supersede such board, and direct a fresh election to be held; and any act or thing which by this Act is authorised to be done by a medical board may, during any suspension or supersession of a medical board, be done by the Medical Council. Any order made by the Medical Council in pursuance of this section shall be of no validity until it has been confirmed by the Privy Council.

45. *Default of Medical Council.*—If the Medical Council, in the opinion of the Privy Council, makes default in the performance of its duty under this Act, the Privy Council shall notify to the Medical Council that it has, in the opinion of the Privy Council, made such default; and if the Medical Council fail to comply with any directions of the Privy Council in respect of such default, the Privy Council may do any act or thing in respect of which it considers the Medical Council to have been in default, and such act or thing, when done by the Privy Council, shall be of the same validity as if it had been done by the Medical Council, and (where necessary) confirmed by the Privy Council.

46. *Exercise of Powers of Privy Council.*—All powers vested in the Privy Council by this Act may be exercised by any two or more of the Lords and others of Her Majesty's most honourable Privy Council. Any order made by the Privy Council under this Act, may be made conditionally or unconditionally, and may contain such terms and directions as to the Privy Council seem just. Any act of the Privy Council under this Act done otherwise than by Order in Council shall be sufficiently made, done, and signified by an instrument signed by the clerk of the council, and every order and act made, done, and signified by an instrument purporting to be signed by the clerk of the council shall be deemed to have been duly made and done by the Privy Council, and every instrument so signed shall be received in evidence in all courts and proceedings without proof of the authority or signature of the clerk of the council, or other proof. Subject to the provisions of this Act, the Privy Council may from time to time make such rules as it thinks fit as to the proceedings to be had in all cases where the sanction or confirmation of the Privy Council is required in respect of any matter or thing.

As to Colonial Legislature.

47. *Powers of Colonial Legislature.*—On and after the said appointed day any colonial legislature may make such regulations as it thinks fit with respect to the admission of registered medical practitioners under this Act to practice in such colony, subject to this qualification, that any registered medical practitioner who, at the date of such regulations being made is entitled to practise in such colony, shall not be prevented from practising by any such regulations. The term "colony" shall not include any place in the United Kingdom, Channel Islands, and the Isle of Man, but shall include all other of Her Majesty's possessions in which there exists a legislature as hereinafter defined. The term "colonial legislature" signifies the authority other than the Imperial Parliament or Her Majesty in Council competent to make laws for any colony.

As to Recovery of Penalties.

48. *Summary Procedure.*—On and after the said appointed day, any offence against this Act, punishable on summary conviction, may be prosecuted, and any penalty under this Act recoverable on summary conviction, may be recovered in manner provided by the Summary Jurisdiction Acts. The expression "Summary Jurisdiction Acts" means as follows, that is to say: As to England—the Summary Jurisdiction (English) Acts within the meaning of the Summary Jurisdiction Act, 1879. As to Scotland—the Summary Jurisdiction (Scotland) Acts, 1864 and 1881. As to Ireland—within the police district of Dublin Metropolis the Acts regulating the powers and duties of justices of the peace of such district, or of the police of such district; and elsewhere in Ireland—the Petty Sessions (Ireland) Act, 1851, and the Acts amending the same.

As to Evidence.

49. *Rules as to Evidence.*—The following copies of any schemes or orders made in pursuance of this Act shall be evidence, that is to say: 1, any copy purporting to be printed by the Queen's printer, or by any other printer, in pursuance of an authority given by the Medical Council; 2, any copy of a scheme or order certified by the registrar of the Medical Council, or by any other person appointed by the Medical Council, either in addition to or in exclusion of the registrar, to certify such schemes or order, to be a true copy. A copy of the medical register for the time being, purporting to be printed and published by the authority of the Medical Council, shall be evidence in all legal proceedings whatsoever, whether civil or criminal, of all matters by this Act authorised or required to be entered therein, and, in particular, that the persons whose names are therein specified as home, colonial, or foreign practitioners, are registered medical practitioners within the meaning of this Act, and the absence of the name of any person from such copy shall be evidence (until the contrary is made to appear) that such person is not a registered medical practitioner within the meaning of this Act; but in the case of any person whose name does not appear in such copy, a certified copy under the hand of the registrar of the Medical Council of the entry of the name of such person on the medical register, shall be evidence that such person is a registered medical practitioner within the meaning of this Act. The medical register shall be deemed to be in proper custody when in the custody of the medical registrar, and shall be of such a public nature as to be admissible as evidence of all matters therein on its mere production from that custody.

As to Election Offences.

50. *Appeal in Respect of Invalid Election.*—It shall be the duty of Her Majesty's High Court of Justice, in cases arising in England, and of the Court of Session, in cases arising in Scotland, and of the High Court of Justice in Ireland, in cases arising in Ireland, upon the application of any person who may be aggrieved by, or complain of, the election of any member of the Medical Council or of a medical board, or any proceeding, act, or matter touching the same (reasonable notice having been given by the adverse party to those affected thereby of such intended application) to proceed forthwith, and in a summary way to hear the affidavits, proofs, and allegations of the parties, or otherwise to inquire into the matter or cause of complaint, and either to confirm the election so complained of or to order a new election, or to make such order and give such relief in the premises as right and justice may appear to the court to require; but no such application as aforesaid shall be entertained by the court unless it is made within one month after the election has taken place in respect of which the complaint is made; and no such election shall be declared invalid by reason of any defect in the title of the returning officer.

51. *Penalty on Illegal Acts in respect of Election.*—Any person who personates any person entitled to vote at any election of a member of the Medical Council or of a medical board, or falsely assumes to act in the name or on behalf of any person so entitled to vote, shall be liable, on summary conviction, to a penalty not exceeding twenty pounds, or, in the discretion of the court by whom he is convicted, to imprisonment, with or without hard labour, for any period not exceeding three months.

Miscellaneous.

52. *Service of Notices by Post.*—All notices and documents required or authorised by or for the purposes of this Act to be sent may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and, in proving such sending, it shall be sufficient to prove that the letter containing the notice or document was prepaid, and properly addressed, and put into the post. Such notices and documents may be in writing or in print, or partly in writing and partly in print; and, when sent to the Medical Council, or a medical board, or medical authority, shall be deemed to be properly addressed, if addressed to the Medical Council, medical board, or medical authority, or to some officer of such Council, board, or authority, at the principal office or place of business of such Council, board, or authority at the principal office or place of business of such Council, board, or authority; and, when sent to a registered medical practitioner, shall be deemed to be properly addressed if addressed to him according to his address registered in the *Medical Register*.

53. *Publication of Proceedings.*—The Medical Council may cause any minutes or account of their proceedings or of the proceedings of their committees to be published; and it shall be their duty to record in their minutes the name of any registered medical practitioner whose name has been erased from the *Register* or who has been suspended for misconduct, together with their reasons for such erasure or suspension.

Part VII.—Transition from Old to New Law.

54. *Time of Election of Medical Board.*—The first election of a medical board

ach part of the United Kingdom shall take place in January one thousand eight undred and eighty-four. Subsequent elections of medical boards shall take lace in each part of the United Kingdom in the January of every succeeding fth year. The returning officer at every election of a medical board shall be uch person as the Privy Council may appoint in each part of the United King-om. The returning officer of each medical board shall, some time in the first ourteen days of January one thousand eight hundred and eighty-four, and in he first fourteen days of January in every succeeding fifth year, issue a precept o each constituent body, requiring such body, within ten days after the receipt f such precept, to hold an election of members for the medical board, and to ertify to the returning officer the names of the members elected as soon as may e after their election has taken place. Each of the medical authorities in each art required to return a member or members to a medical board shall return uch member or members in manner in which such authority is accustomed to eturn a member or members representing its body. The first medical board in ach part of the United Kingdom under this Act shall come into office on the irst day of February one thousand eight hundred and eighty-four. Subsequent nedical boards in each part of the United Kingdom shall come into office on the irst day of February succeeding the day of their election. The first meeting of he medical board in each part of the United Kingdom shall take place, in the ase of the first election, on such day during the first fortnight in February one housand eight hundred and eighty-four, and, in the case of any subsequent elec-ion, on such day during the first fortnight in February of the year of their elec-ion as may be determined by the Privy Council.

55. *Time of Nomination and Election of Medical Council*—The returning fficer, at the election of the Medical Council in the year one thousand eight undred and eighty-four, shall be such person as may be appointed by the rivy Council, and at subsequent elections shall be the registrar of the Medical ouncil, or such other person as may be appointed by the Medical Council. he Privy Council shall notify to the returning officer the six members of the edical Council nominated by Her Majesty on some day in the month of Feb-uary, one thousand eight hundred and eighty-four, and on some day in the onth of February in every succeeding fifth year. For the purpose of the lection of members to be elected by the medical boards, the returning officer of he Medical Council shall, some time in the first seven days of March, one housand eight hundred and eighty-four, and in the first seven days of March, n every succeeding fifth year, issue his precept to each of the medical boards equiring them within ten days after the receipt of such precept, to certify to im the names of the members elected by each such medical board. The nomi-ation and election of members to be returned by a medical board to the Medi-al Council shall be conducted in such manner as may be provided by regula-ions to be made by such board, and confirmed by the Privy Council. For the urpose of the election of members to be elected by the registered medical ractitioners resident in England, Scotland, and Ireland respectively, the ollowing steps shall be taken:—The returning officer of the Medical Council hall, some time in the first seven days of March, one thousand eight hundred nd eighty-four, and in the first seven days of March, in every succeeding fifth ear, issue his precept to each of the medical boards of England, Scotland, and reland, requiring such board to cause the proper number of members to be lected by the registered medical practitioners in the part of the United King-om, to which such board belongs, within fourteen days after the receipt of the ecept of the returning officer. The election of members to be returned by he registered medical practitioners in each part of the United Kingdom shall e conducted in such manner as may be provided by regulations to be made by he Privy Council, provided as follows—1. The nomination shall be in writing, nd the nomination paper of each candidate shall be signed by not fewer than welve registered medical practitioners; and 2, the election shall be conducted y voting papers, and it shall be the duty of the returning officer, to forward by ost to each registered medical practitioner, resident in any part of the United ingdom, at his registered address, a voting paper, but the election shall not e rendered void by reason of the omission of the returning officer to forward ch voting paper in any particular case or cases, and any registered medical ractitioner, to whom a voting paper has not been sent, in pursuance of this ct, may, on application to the registrar, obtain one from him. Each medical oard shall certify to the returning officer of the Medical Council, the members lected by the registered medical practitioners in the part of the United King-om, to which such medical board belongs. The first Medical Council under his Act shall come into office on the thirty-first day of March, one thousand ght hundred and eighty-four. Subsequent Medical Councils shall come into ffice on the thirty-first day of March succeeding the day of their election. The rst meeting of the Medical Council under this Act, shall take place in the case f the first election on such day during the first fortnight in April, one housand eight hundred and eighty-four, and in the case of any subsequent ection on such day during the first fortnight in April, of the year of their ection as may be determined by the Privy Council.

56. *Rules for Final Examination.*—Each medical board shall, on or before the rst day of May, one thousand eight hundred and eighty-four, submit to the edical Council a scheme or schemes (1) for the final examination of medical udents within its division, and (2) for the medical education of stu-nts within its division, care being taken that in the scheme or schemes for he medical education of students within its part of the United Kingdom, ecial provisions be made for the admission to the first final examination of edical students who may be undergoing their course of education at the time hen the scheme or schemes come into force. The scheme or schemes so sub-itted to the Medical Council, shall be settled by the Medical Council, and for-arded to the Privy Council for confirmation, on or before the first day of ptember, one thousand eight hundred and eighty-four. Any objections that ay be made to such scheme or schemes, shall be considered by the Privy uncil on or before the first day of November, one thousand eight hundred and ghty-four, on which day, at latest, the scheme or schemes for the first final amination, and for the admission of students to the first final examination all be deemed to come into force. The first final examination of medical stu-nts under this Act, in each part of the United Kingdom, shall be held on such y in the year one thousand eight hundred and eighty-five, not later than the st of March, as the Privy Council may direct.

57. *Continuation of Old System of Registration to the Appointed Day.*—Persons ay continue to be registered as medical practitioners in manner heretofore use up to the appointed day, but on and after that day no person shall be registered, except in pursuance of this Act. All persons whose names are on e *Medical Register* on the appointed day shall on that day have their names nsferred to the *Medical Register* as continued in manner provided by this Act without payment of any fees and without any application on their parts. Any person who on the said appointed day had acquired a title to have his name entered on the *Medical Register* may after that day have his name entered on the *Medical Register* as continued in manner provided by this Act, and for the purposes of this section a person shall be deemed to be included amongst the persons entitled to have their names entered on the *Medical Register* who was on or about the said appointed day passing a qualifying examination and completed the same after such day in such manner as would if this Act had not passed have qualified him to be registered as a medical practitioner.

58. *Transfer of Funds of Branch Councils to Medical Boards.*—On and after the day on which the medical board of any part of the United Kingdom comes into office, the branch council in that part of the United Kingdom shall cease to exist, and all funds and property belonging to such branch council shall, subject to all liabilities affecting the same, be transferred to and vest in the medical board of that part of the United Kingdom.

59. *Transfer of Medical Register from General Council to Medical Council.*—On and after the day on which the Medical Council comes into office the exclusive right of publishing the *Medical Register*, and the property in such *Register* when published shall vest in and belong to the Medical Council, but until the said appointed day such *Register* shall be kept in manner provided by the Medical Act, 1858, and any Act amending the same, and for the purpose of so keeping the *Medical Register* up to the beginning of such day as aforesaid, all the powers and obligations of the General Council in relation to such *Register* shall be exercised by and imposed upon the Medical Council, but on and after the said appointed day the *Medical Register* shall be continued in manner provided by this Act.

60. *Transfer of Funds of General Council to Medical Council.*—On and after the day on which the Medical Council comes into office the General Council shall cease to exist, and all funds and property belonging to the General Council and not vested in the Medical Council by any other provision of this Act shall, subject to all liabilities affecting the same, be transferred to and vest in the Medical Council.

61. *As to Officers and Servants of Branch Councils.*—The existing officers and servants of the branch council in each part of the United Kingdom shall, on and after the day on which the medical board in that part comes into office, become the officers and servants of the medical board at the same salaries and with the same tenure of office as they possessed under the branch council.

62. *As to Officers and Servants of General Council.*—The existing registrar officers and servants of the General Council shall, on after the day in which the Medical Council comes into office, become the registrar officers and servants of the Medical Council, at the same salaries and with the same tenure of office as they possessed under the General Council, and any notice required to be given or act to be done by or to the registrar or other officer of the General Council in pursuance of any Act for the time being in force shall, until such Act is repealed by this Act on the said appointed day, be given by or be done by or to such registrar or officer when acting in the capacity of registrar or officer of the Medical Council.

Part VIII.—Pharmacopœia, Saving Clauses, Definitions, Repeal.—

Pharmacopœia.

63. *British Pharmacopœia to be published.*—The Medical Council shall, from time to time, cause to be published under their direction a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matters and things relating thereto as the Medical Council think fit, to be called the *British Pharmacopœia.*

64. *Right of Printing Pharmacopœia vested in Council.*—The exclusive right of publishing, printing, and selling the said *Pharmacopœia* shall, on and after the day on which the Medical Council comes into office, vest in the Medical Council, subject to this proviso, that it shall be lawful for the Privy Council from time to time to fix the price at which copies of the said work are to be sold to the public.

65. *Notice to be given in Gazettes when British Pharmacopœia is published.*—The *British Pharmacopœia* shall for all purposes be deemed to be substituted throughout the United Kingdom for every other pharmacopœia; and any Act of Parliament, Order in Council, or custom relating to any other pharmacopœia shall be deemed to refer to the pharmacopœia for the time being published by the Medical Council. A copy of the said pharmacopœia purporting to be priuted by such person as may be named in any notice published in the *London*, *Edinburgh*, and *Dublin Gazettes*, as authorised by the Medical Council to print the said pharmacopœia, shall be admitted in evidence as being the *British Pharmacopœia.*

66. *Provision as to existing Pharmacopœia.*—The *Pharmacopœia* published by the General Council, and in force on the day on which the Medical Council comes into office, shall, for the purposes of this Act, be deemed to be the *British Pharmacopœia* mentioned in this Act, and to have been published by the Medical Council. and shall remain in force until altered or varied by the Medical Council.

Saving Clauses.

67. *Saving Clause as to Chemists.*—Nothing in this Act contained shall in any way prejudice or affect the lawful occupation or business of chemists or druggists, or, so far as relates to selling, compounding, or dispensing medicines, the rights, privileges, or employment of duly licensed apothecaries in Ireland.

68. *Saving as to Hospitals exclusively for Foreigners.*—Nothing in this Act contained shall prevent any person, not a British subject, who has obtained from any foreign university a degree or diploma of Doctor in Medicine, and who has passed the regular examinations entitling him to practise medicine, surgery, and midwifery in his own country, from being and acting as the resident physician or medical officer of any hospital established exclusively for the relief of foreigners in sickness, although he is not registered as a foreign practitioner under this Act; provided always, that such person is engaged in no medical practice except as such resident physician or medical officer.

69. *Saving as to Passengers Act*, 1855.—Nothing in this Act contained shall repeal or alter any of the provisions of the Passengers Act, 1855.

70. *Saving as to Practice of existing Practitioners.*—This Act shall not increase or diminish the privileges in respect of his practice of any person who, on the day preceding the appointed day, is a registered medical practitioner; and such person shall be entitled, on and after the said appointed day, to practise in medicine, surgery, and midwifery, or in any one or more of them, according as he was entitled to practise in such callings, or any one or more of them, before the said appointed day, but not further or otherwise.

71. *Saving as to Local Law.*—Any person who, at the time of the repeal of any enactment repealed by this Act, was, in pursuance of such enactment, legally

entitled to practise as a medical practitioner in any colony or part of Her Majesty's dominions other than the United Kingdom, shall, after the date of such repeal, continue to be so entitled if he would have been entitled if no such repeal had taken place.

DENTISTS.

72. *Provisions as to Dentists Act*, 1878.—There shall be repealed so much of Section 4 of the Dentists Act, 1878, as provides that a prosecution for any of the offences above in that Act mentioned shall not be instituted by a private person, except with the consent of the General Council or of a branch council, and a prosecution for any such offences may be instituted by a private person accordingly. It shall be lawful for Her Majesty, at any time after the said appointed day, to declare by Order in Council that Section 28 of the said Dentists Act, 1878, shall be in force on and after a day to be named in such Order; but, in the meantime, and until such order has been made, and before such day as last aforesaid, such section shall not be deemed to be in force. Any power given by the Dentists Act, 1878, to the General Council may, on and after such time as the Medical Council comes into office, be exercised by the Medical Council. Save as in this Act mentioned, the Dentists Act, 1878, shall not be affected by this Act.

DEFINITIONS.

73. *Definitions.*—In this Act, unless the context otherwise requires, the expression "person" includes a body of persons, corporate or unincorporate. The expression "General Council" means "the General Council of medical education and registration of the United Kingdom" established under the Medical Act. The expression "part of the United Kingdom" means, according to circumstances, England, Scotland, or Ireland. The expression "appointed day," means the first of January one thousand eight hundred and eighty-five, or such other day in January one thousand eight hundred and eighty-five as may be appointed by the Privy Council. The expression "diploma" means any diploma, degree, fellowship, membership, licence, authority to practise, letters testimonial, certificate, or other status or document granted by any university, corporation, college, or body, or by any departments of or persons acting under the authority of the Government of any country or place within or without Her Majesty's dominions. The expression "medical diploma" means a diploma granted in respect of medicine, surgery, and midwifery, or any branch of medicine, surgery, or midwifery. The expression "medical title" means the title of Licentiate of the Medical Council, also any addition to a name, designation, or description, whether expressed in words or by letters, or partly in one way and partly in the other, indicating or implying that a person has obtained a medical diploma.

REPEAL.

74. *Repeal of Acts.*—On and after the said appointed day, the Acts mentioned in the third schedule to this Act, shall be repealed to the extent in the third column of that schedule mentioned, provided that this repeal shall not affect anything done or suffered, or any right or title acquired or accrued, or any offence committed before such repeal takes effect, or any remedy or proceeding in respect thereof.

APPLICATION OF ACT.

75. *Application of Act to United Kingdom, Channel Islands, etc.*—This Act shall apply to the Isle of Man, and after registration to the Channel Islands, and the Royal Courts of the Channel Islands are hereby required and authorised to register this Act; and registered medical practitioners resident in the Isle of Man or the Channel Islands shall be entitled to return members to the Medical Council in the same manner as if they were resident in England.

FIRST SCHEDULE.

Proceedings of Medical Board and of Committees of Medical Board.

1. The board shall meet for the despatch of business, and shall from time to time make such regulations with respect to the summoning, notice, place, management, and adjournment of such meetings, and generally with respect to the transaction and management of business, including the quorum at meetings of the board, as they think fit, subject to the following conditions: *a.* An extraordinary meeting may be summoned at any time on the requisition of three members of the board addressed to the chairman of the board. *b.* The quorum to be fixed by the board shall consist of not less than three members. *c.* Every question shall be decided by a majority of votes of the members present and voting on that question. *d.* The names of the members present at a meeting, and upon a requisition made by any member or members voting on a question the names of the members voting on that question, shall be recorded.

2. In case of an equality of votes at any meeting, the chairman for the time being of such meeting shall have a second or casting vote.

3. A committee of a medical board may meet and adjourn as they think proper. Every question at a meeting shall be determined by a majority of votes of the members present and voting on that question; and in case of an equal division of votes the chairman for the time being of such meeting shall have a second or casting vote. If at any meeting of the board or committee of the board the chairman of the board is not present at the time appointed for holding the same, or within a quarter of an hour afterwards, the vice-chairman of the board shall be the chairman of the meeting; and if neither the chairman nor vice-chairman be present within a quarter of an hour after the time appointed for holding the meeting, then the members present shall choose some one of their number to be a chairman of such meeting.

SECOND SCHEDULE.

Proceedings of Medical Council and of Committees of Medical Council.

1. The Medical Council shall meet for the despatch of business, and shall from time to time make such regulations with respect to the summoning, notice, place, management, and adjournment of such meetings, and generally with respect to the transaction and management of business, including the quorum at meetings of the Council, as they think fit, subject to the following conditions. *a.* An extraordinary meeting may be summoned at any time on the requisition of three members of the Council, addressed to the President of the Council. *b.* The quorum to be fixed by the Council shall consist of not less than three members. *c.* Every question shall be decided by a majority of votes of the members present and voting on that question. *d.* The names of the members present at a meeting, and upon a requisition made by any member or members voting on a question the names of the members voting on that question, shall be recorded.

2. In case of an equality of votes at any meeting, the chairman for the time being of such meeting shall have a second or casting vote.

3. A committee may meet and adjourn as they think proper. Every question at a meeting shall be determined by a majority of votes of the members present and voting on that question; and in case of an equal division of votes, the chairman for the time being shall have a second or casting vote.

4. The President, if present, shall be chairman at any meeting of the Council or of any committee of the Council; but if, at any meeting of the Council or committee of the Council, the President is not present at the time appointed for holding the same, or within a quarter of an hour afterwards, the vice-president shall be the chairman of the meeting; and if neither the President nor Vice-president be present within a quarter of an hour after the time appointed for holding the meeting, then the members present shall choose some one of their number to be a chairman of such meeting.

THIRD SCHEDULE.—ACTS REPEALED.

3 Hen. 8. c. 11: An Act concerning Phesicions and Surgeons: The whole Act.

5 Hen. 8. c. 6: An Act that Surgeons be discharged of Constableships and other things: So much as is unrepealed.

14 and 15 Hen. 8. c. 5: An Act concerning Phisicions: Section three and so much of the residue as confers any privileges or enacts any restrictions inconsistent with this Act.

32 Hen. 8. c. 40: Concerning Physicians: The whole Act.

32 Hen. 8. c. 42: Concerning Barbers and Chirurgions: Sections two and three, and so much of section five as relates to Surgeons.

8 Geo. 2. c. 15: An Act for making the Surgeons of London and the Barbers of London two separate and distinct Corporations: Section eight from "and that they and all such" to end of section, and so much of the residue of the Act as confers any privileges or enacts any restrictions inconsistent with this Act.

55 Geo. 3. c. 194: An Act for better regulating the practice of apothecaries throughout England and Wales: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

21 and 22 Vict. c. 90: The Medical Act: The whole Act, with the exception of such portion thereof as respects grants to, and other privileges of, certain medical authorities, that is to say, with the exception of sections forty-seven, forty-eight, forty-nine, fifty, fifty-one, fifty-two, and fifty-three.

22 Vict. c. 21: An Act to amend the Medical Act (1858): The whole Act.

23 Vict. c. 7: An Act to amend the Medical Act: The whole Act.

25 and 26 Vict. c. 91: An Act to incorporate the General Council of Medical Education and Registration of the United Kingdom, and for other purposes: The whole Act.

31 Vict. c. 29: The Medical Act Amendment Act, 1868: The whole Act.

36 and 37 Vict. c. 55: The Medical Act (University of London), 1873: The whole Act.

37 and 38 Vict. c. 34: The Apothecaries' Act Amendment Act, 1874: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

38 and 39 Vict. c. 43: The Medical Act (Royal College of Surgeons of England) 1875: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

39 and 40 Vict. c. 40: The Medical Practitioners' Act, 1876: Section three.

39 and 40 Vict. c. 41: An Act to remove restriction on the granting of qualifications for registration under the Medical Act, on the ground of sex: The whole Act.

THE GOVERNMENT MEDICAL REFORM BILL.

The following letter has been addressed by the Chairman of the Medical Reform Committee to the presidents and secretaries of all the Branches of the United Kingdom:

Chester, March 21st, 1883.

DEAR SIR,—The Government have, in accordance with their promise to the deputation of the Association, which waited on the Lord President of the Privy Council in November last, introduced a Bill, intituled An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners—to be styled "The Medical Act, 1883."

This Act is based on the lines of the report of the Royal Commission on the Medical Acts, and embodies the great principles for which the Association has always contended.

The Government has been promised, and will require, all the support the Association and the profession can give it, and the Association is distinctly pledged to support the Government.

I venture to request you to take the necessary steps to redeem the pledge, and hope your Council will petition the House of Lords in favour of the Bill, and urge on all the members the importance of influencing the members of both Houses of Legislature to support it in the interest of the public as well as of the profession.—Yours faithfully,

EDWARD WATERS,

Chairman of the Medical Reform Committee of the British Medical Association.

FORM OF PETITION.

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Humble Petition of the Council of..... Branch of the British Medical Association—Sheweth, that a Bill has been brought into your honourable House intituled "An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners"—by the Right Honourable the Lord Privy Seal, and that provision is there-

ade for improvement in the examination of candidates for the edical profession, and for the introduction of representatives ected by the registered medical practitioners residing in the nited Kingdom of Great Britain and Ireland into the Medical ouncil.

Your Petitioners pray that the said Act may become Law. And ur Petitioners will ever pray, etc.,

(Signed)

The Bill is down for second reading the first Thursday after the aster recess, and petitions must therefore be presented on or before at day.

RESOLUTION OF LANCASHIRE AND CHESHIRE BRANCH IN FAVOUR OF THE BILL.

r a meeting of the Council of the Lancashire and Cheshire Branch the British Medical Association, held in Liverpool, March 20th, 83, a resolution was unanimously passed requesting the President id Secretary of the Branch to sign a petition in favour of the Bill, tituled, "The Medical Act, 1883," introduced in the House of ords by the Lord President of the Privy Council, the terms of the etition agreed on, and instructions given to communicate the inion of the Branch to the members of both Houses of Parliament nnected with the district embraced by the Branch.

RESOLUTION OF THE COUNCIL OF THE IRISH GRADUATES' ASSOCIATION.

r a meeting of the Council of the Irish Graduates' Association, ld in London, March 17th, 1883, a resolution to petition both ouses of Parliament in favour of the Medical Act, 1883, introduced the Lord President of the Privy Council, was passed unanimously, e form of petition agreed on, and the President and Secretaries the Association requested to sign it on behalf of the council.

PARLIAMENTARY BILLS COMMITTEE.

MEETING of the Parliamentary Bills Committeee of the British edical Association was held on Wednesday, March 14th, at the fices of the Association, 161A, Strand. There were present: Mr. RNEST HART, Chairman, in the chair; Mr. Wickham Barnes, Dr. lfred Carpenter, Surgeon-General J. Ewart, Dr. Forsyth, Dr. Grigg, r. Nelson Hardy, Mr. Reginald Harrison, Mr. Rogers Harrison, r. Norman Kerr, Dr. Nicolson, Dr. Orton, Dr. Phillips, Surgeon-eneral Partridge, Mr. Prankerd, Mr. Sibley, Mr. Spanton, Mr. Henry ear, Dr. Vinen, Dr. Whittle.

The minutes of the previous meeting were read and confirmed.

Midwives Bill.—The CHAIRMAN reported that the subcommittee hich had been appointed to draft this Bill had done so upon the nes laid down in the instructions handed over to them. That Bill was bmitted to the Privy Council, who received it with great favour, id forwarded it to the General Medical Council. It was received ith equal favour by that Council, who suggested some alterations detail to which the subcommittee saw no objection, and so in-rmed the Privy Council. This Bill, as approved, had been printed full in the JOURNAL, and copies of it had also been sent to all ie Branches. The secretary of one Branch had stated that all the embers of that Branch did not unanimously agree with some of ie provisions of the Bill. He was asked to furnish details of the bjections, but had not replied. The Dublin Branch had also ex-ressed objection to the Bill, so far as related to Ireland; as ie Bill related almost exclusively to England, and it was quite pen to Irish members to make suggestions of amendment, so far s it affected Ireland indirectly. As the matter at present stood, ie Government having itself approved it, and having ascertained iat it had been approved by the General Medical Council, had xpressed their intention of taking the matter in hand at an early ite after Easter.

Notification of Infectious Diseases.—The CHAIRMAN said the Committee had now come to the most important part of the business. In spect to the notification of infectious diseases, there were two anches of the subject: first of all, there was the question of private ill legislation. The profession generally had for many years had no portunity of knowing anything about the private Bills which were ought in, and he had consequently, during the last three or four ars, been in the habit of submitting a memorandum, stating what as the scope of these private Bills. These private Bills related not ly to infectious diseases, but to a great number of other subjects. he memorandum, of which copies were before them, had been rculated among the members of the Committee. In addition to ese private Bills, there was at the present time before Parliament Mr. Hastings's Bill; and in respect to that Bill, it might be convenient to remind the Committee that, at the last annual meeting of the Association, held at Worcester, the following resolution, proposed by Dr. Mahomed, and seconded by Mr. Husband, was carried, viz.: "That this meeting earnestly desires compulsory notification of infectious diseases, but it wishes to express its opinion that the compulsion to notify should be placed on the householder as his duty as a citizen, and not upon the doctor." Mr. Hastings's Bill, which was down for second reading, but could not come on till after Easter, did not conform to that principle.

He had communicated with Mr. Hastings on seeing that his Bill was down for reading, and pointed out to him that, unless he could modify his Bill in such a way as to meet the Worcester resolution, it would be the duty of this Committee to oppose that Bill, or to take such measures as to bring the Bill into conformity with that resolution; he had, as the great object of it was notification, suggested that it might be well that Mr. Hastings should so modify it as to bring it into accordance with the resolution passed by this Association at Worcester. To this letter Mr. Hastings had replied as follows:

"DEAR SIR,—My Bill of this year differs from that of last year, as it is framed on the precise precedent of the clauses adopted by the Select Committee of last session, after two and a half months' inquiry and deliberation; and which clauses were approved by the House, and inserted in seven Bills. They provide for a dual notification by the householder and the medical attendant. This does away with any supposition of breach of confidence on the part of the medical attendant, as, if he did not notify, another person would. Further than this I am not prepared to go.—Yours very truly,

"ERNEST HART, Esq. "G. W. HASTINGS."

Letters had also been written to Dr. Carter and Dr. FitzPatrick, of Liverpool, who took an active part in the discussion of the subject at the Worcester meeting, inviting them, though not members of this Committee, to attend and assist this meeting with their views.

Dr. Carter, after expressing his regret at being unable to attend, said: "Our views in this neighbourhood are pretty well known. We should oppose Mr. Hastings's Bill by every means in our power;" and added, "I think the majority would concur with the sanitary clauses of the Lord Advocate's Bill. I understand that the Lord Advocate is now revising the draft." The Bill here referred to was another Bill before Parliament for Scotland, which included clauses for the notification of infectious diseases, and which, so far as they had been advised, imposed compulsory powers only on the householder. Application had been made at Hansard's for copies of this Bill, which, however, were not yet ready.

Dr. FitzPatrick, who also was unable to attend, had sent a communication expressing strong opposition to any proposal to place a compulsion on the profession as regards the notification of disease.

The Chairman thought the course which the Committee should pursue was very clearly marked out by the resolution which the Association had passed at their annual meeting, and that they should approach the Government in accordance with the wording of that resolution, and express the strongest opinion in favour of the compulsory notification of disease; but also their equally strong opinion, that the notification should be made by the householder, and not by the medical man.

Dr. WHITTLE (Liverpool) doubted whether, as the resolution passed at Worcester was only an amendment not to accept the provisions of Mr. Hastings's Bill, they should approach the Government on the grounds laid down in that resolution, recommending compulsory powers.

Dr. ALFRED CARPENTER said the resolution which was adopted at that meeting did not commit the profession to compulsion, so far as the profession was concerned, but only compulsion upon the householder. That was a question which, perhaps, they need not debate, because it was a question with which they were not at present engaged. What they were engaged with was, the question of hanging that millstone about the neck of the profession which Mr. Hastings's Bill proposed to do; and it showed that they had not raised their voices one minute too soon, as those gentlemen whom they looked upon as their representatives in the House, had committed themselves to an opposite course, without knowing anything of the grounds on which their position was founded. They had been hoodwinked in respect to this Bill, and led to believe that it expressed the opinion of the majority of the profession, instead of which it was the opinion of only a small minority. Some points were mooted at Worcester, which went far to open the eyes of the profession as to the position in which they would be placed. There was, however, one point which was not dwelt upon to the extent which it ought to have been, and which was one of the chief motor

powers by which the antagonism was brought about. So long as medical officers were appointed (as a large proportion were) by local boards, and were men themselves in practice, it was not right and just and proper that other medical men, occupying a higher social position probably, and certainly a higher medical position, so to speak, should be compelled to report the particulars of their cases to them, and so give medical officers the opportunity of placing themselves between the patient and the doctor; they might endeavour to foist the doctor out of his position, and to place themselves in it. So long as this was rendered possible, so long would this antagonism exist; and, if ever they were to have dual notification, it would have to be accompanied with a provision limiting medical officers from going into private practice at all. They knew very well that, though there were some who had all the ardour, the acuteness, and the suavity of Dr. Littlejohn and others of his type, there were a considerable number who were rivals of medical men; and, so long as this was the case, the Committee ought to oppose to the utmost of its power the proposition to put a millstone about the necks of practitioners, and so enable their rivals to spring a mine upon them when they least expected it. He urged that they should take every opportunity of opposing Mr. Hastings's Bill, by sending petitions from the Branches of the Association, and by persuading members of the Association to communicate individually with those members of Parliament with whom they were acquainted. Dr. Carpenter was further of opinion that they should go to Sir Charles Dilke, and draw his attention to the position in which the medical profession would be placed if Mr. Hastings's Bill became law; and point out that there would follow an antagonism much greater than that shown by the antivaccinationists to vaccination. He was of opinion that the Select Committee of last year, to whom allusion had been made, went to their business with a foregone conclusion. They had determined, before they had taken evidence, that they would only take evidence of a certain kind, viz., that in support of the measure which was brought before them; and they would not take any outside evidence at all, because that was not the question which was put before them. He (Dr. Carpenter), as a representative to some extent of the feeling against this Bill in the profession, and as having heard evidence regarding it before the Commission on which he had the honour to sit, made an application to be heard before the committee, of which Mr. Hastings was one of the members (Mr. Hastings having previously promised that he should be heard). To this application he received the curt reply that they had no power of hearing outside evidence, because he (Dr. Carpenter) had no *locus standi* in respect to the Bill before them. Medical men were the promoters of this movement, and it was not to be supposed that there would be any collusion with their patients to smother up disease. Dr. Carpenter concluded by expressing the opinion that the Association should do everything in its power to oppose Mr. Hastings's Bill.

Dr. CARPENTER proposed, and Mr. NELSON HARDY seconded the following resolution: "That a suitable memorial be drawn, and that the President of the Local Government Board be requested to receive a deputation from the Parliamentary Bills Committee, for the purpose of presenting it, and of urging upon him that local authorities should not have the power of imposing the duty of compulsory notification on medical practitioners."

Dr. NORMAN KERR thought that the Committee, in going before Sir Charles Dilke with the resolution which had been passed, should be prepared to say in what way it recommended that notification should be carried out.

Mr. NELSON HARDY stated that the resolution passed at the annual meeting, simply bound them to oppose compulsory notification by the medical man; it did not instruct them to provide a plan.

Surgeon-General EWART said it was the duty and the practice of every medical man, the instant he came to the conclusion that he was treating a case of infectious disease, to acquaint the patient himself or the members of his family with the fact, and it was the business of the householder to act upon such information. Notification of disease after all was very like shutting the stable door after the horse had been stolen; what was really required in this country for the repression of these diseases was an improvement in the sanitary condition of towns and houses so as to prevent their origination. At present the onus of the sanitation of houses devolved upon the householder, who had only a temporary interest in the matter; there should be an enactment putting it on the house-owners, or, if on the tenants, they should be allowed compensation.

The resolution proposed by Dr. Carpenter and seconded by Mr. Nelson Hardy, on being put to the meeting, was unanimously carried.

A subcommittee, consisting of Dr. Carpenter, Mr. Nelson Hard Mr. Sibley, and the Chairman, was appointed to draft the memori and to make arrangements for the deputation.

Dr. NORMAN KERR proposed, and Mr. NICHOLSON seconded t following resolution, which was approved. "That petitions b drawn in the sense of the memorial, and that they be forwarded the secretaries of the several Branches, with a request that th should use their influence to get them presented by the members Parliament representing their several districts."

It was then resolved that the following memorandum on Loc Bills now before Parliament, which had been printed and circ lated among the Committee, be received and entered upon t minutes.

FURTHER REPORT TO THE PARLIAMENTARY BILLS COMMITTE BY THE CHAIRMAN OF THE COMMITTEE ON PRIVATE BILL LEGISLATION.

SINCE the task of promoting notification and registration of infe tious disease was first referred to the Parliamentary Bills Committ of the Association, at the instance of the Registration of Disea Committee of the Association, it has seemed to me convenient th I should present to this Committee an annual report, at the co mencement of each year, setting out the proposals of local authoriti for the forthcoming session, as well as the existing aspect of t question generally. During the last year, this subject has be actively dealt with in Parliament and in the Associations, and mu debated throughout the country.

(A) ACTION IN PARLIAMENT.

Deputation to Mr. Dodson.—It will be in the recollection of t Committee that a deputation, representing the Society of Medic Officers of Health, the Social Science Association, and other kindr scientific bodies, and in which the President of Council, Dr. A. C penter, and myself took part, waited, in May 1881, upon Mr. Dodso who was then head of the Local Government Board, to urge up the Government the necessity of introducing some general Bill whi should extend to the whole country, and on some accepted syste what is now done in a multitude of diverse ways in various tow that have chosen to go to the expense of a local Act for the purpo

At the same time, I took the opportunity of calling the attenti of the Board to the very various, and often very arbitrary and cessive powers taken under local Acts in excess of the provisions the common law, and urged the necessity of a more open and vig ous parliamentary control of such measures (BRITISH MEDIC JOURNAL, vol. i, 1881, p. 744). Mr. Dodson's answer did not prom any early or comprehensive plan for bringing the subject under p liamentary notice.

Appointment of Select Committee.—In the session of 1882, ho ever, a successful effort was made, by Mr. Hopwood, M.P., to sec more consideration of the sanitary clauses appearing in the lo Bills of that session. I believe my reports to this Committee ha the credit of having first directed public attention to the ext ordinary anomalies in our local and general statute law relating the public health that were growing up under the cover of lo Bills. These anomalies have certainly, for some time, offered a t tile subject for inquiry; and it was therefore not surprising that, matter having once been brought forward, a Select Committee the House of Commons should be appointed, with instructions consider "all private Bills promoted by municipal and other lo authorities, by which it is proposed to create powers relating police or sanitary regulations which deviate from, or are in ext sion of, or repugnant to, the general law." The Bills brought wit the purview of the Committee were those promoted by the lo authorities of Accrington, Blackburn, Bolton, Chadderton, Dunc Macclesfield, Manchester, and Newcastle-on-Tyne.

Limited Scope of Select Committee's Functions.—It is greatly to regretted that the instructions to the Committee should have bee so circumscribed, or that the Committee themselves should have ta so narrow a view of the questions referred to them. Their appo ment would have been an excellent opportunity for discussing whole question of the best method of attaining what is univers admitted to have now come, at last, "within the range of pract politics." But the Committee declined to do more than to hear dence by the local officers of health and selected medical men, a the merits of the particular clauses desired by their several corp tions; and, practically, all questions of general principle were le the background. An application, on behalf of this Committee give evidence as to the objections of the medical profession to m of the clauses existing and proposed, was negatived, on the gro that public committees and individuals had no *locus standi*. L

fts were, however, made upon the several reports which I have mitted to the Parliamentary Bills Committee, in the decisions of Committee as to the extent to which the several clauses were ified by precedent.

ecision of Select Committee as to Notification of Infectious Cases. he Committee appear to have been very capricious as to approval lisapproval of the particular clauses submitted to them. On the stion of the compulsory notification of infectious diseases, they but little difficulty. A return, obtained through the Local ernment Board, affirming the favourable working of that system he twenty-three towns in which it was in force, and the concur- t testimony of a number of medical witnesses in its favour, seem ave amply satisfied them of the necessity of some form of com- sory notification of infectious diseases. The Committee expressed mselves as being of opinion "that the time has arrived when visions of law on this subject may be sanctioned, at least in the e important urban sanitary districts." They recommended that, any future amendment of the Public Health Act, similar powers ld be extended to all urban sanitary authorities; or, at least, means should be devised for clothing them with such powers on lication." As to the method, however, of such notification, the mittee were apparently largely led by the speeches of counsel, represented, as unfounded in fact, the objections of medical to the onus of reporting being imposed upon themselves.

lethod of Notification approved by the Committee.—The method notification which the Committee have recommended is that ned by the Local Government Board for the Manchester Pro- nal Order Act, 1878. Its form is by this time tolerably familiar. rovides that when any person is suffering from infectious disease fined to include small-pox, cholera, typhus, typhoid, scarlet, psing, continued and puerperal fevers, scarlatina and diphtheria, such other diseases as the Corporation may from time to time lare to be infectious), the occupier or person in charge of the ding must give notice thereof to the medical officer of health. ry medical man attending on, or called in to visit a case of in- ious disease must send to the medical officer of health a ificate on a prescribed form, giving particulars of the case. For y such certificate a fee of half-a-crown will be paid by the Cor- tion, except as regards cases occurring in the practice of a lical officer to a public body or institution, the fee for reporting ch is to be a shilling. Wilful offence against the clause is ishable by a fine of forty shillings. Other diseases may either nanently or temporarily be included by the Corporation with the roval of the Local Government Board.

losing of Schools, Shops, Dairies, etc.—Power was desired by ral of the Corporations, whose Bills were referred to the Com- ee, to temporarily close public and private schools, as well as s, dairies, or places for the sale of any article liable to commu- te infectious disease, upon the appearance of infectious disease ein. The health-officer for Newcastle gave an instance within knowledge of 38 per cent. of the scholars of a large class ming infected, the one from the other. The Committee rted on this point, that such powers, "though plausibly urged," ned to them "objectionable and unnecessary; first, because the agers of public elementary schools (which form the vast ority of day schools within urban districts) ought to be held usively responsible for the exercise of a proper discretion on so ortant a matter; and secondly, because the managers have been ntly, under the 18th Article of the New Code, expressly required he Education Department (presumably as a condition of partici- on in the grant) to conform to any intimation that they may ive from the sanitary authority in regard to the necessity of closing or exclusion." No doubt the recent change in the atti- of the Education Department does away with much of the ssity for sanitary authorities having powers of school-closing.

egulations as to Infected Houses.—"The Jarrow Clauses." The mittee reported more especially of these clauses, that "they viewed with disfavour or with hesitating approval by the Local rnment Board in their reports on the several Bills, and were ob- ly in many cases premature, as the powers of providing hospital mmodation, and for the compilation of by-laws open to the pro- ng authorities under various Acts, had been inadequately ed of. Some of the powers appeared excessive and objection- , others in conflict with the general law." I have commented on clauses somewhat at length in my reports of 1880 and 1881, I do not propose now to further discuss the subject.

mpulsory Removal to Hospital.—In my report for 1881 (see i., 1881, p. 380), I drew attention to a legal difficulty as regards nterpretation to be put on the words "without proper lodging or accommodation" in the clause (124) of the Public Health Act dealing with compulsory removal to hospital. This section provides that "any person who is suffering from any dangerous infectious disorder, *and is without proper lodging or accommodation*, or lodged in a room occupied by more than one family, or is on board any ship or vessel, may, on a certificate signed by a legally qualified medical practitioner.....be removed by order of any justice" to any infectious hospital within a convenient distance from the district. The Local Government Board have, as I understand, been advised that the "proper lodging or accommodation" of the section is lodging or accommodation proper for the patient himself, and not for those surrounding him. In other words, so long as the patient can be treated without danger to himself, the law can take no cognisance (*quâ* compulsory isolation) of the danger of catching the disease incurred by those around him. Against this view it seems unnecessary to argue, beyond pointing out that Section 124 comes in a part of the Public Health Act headed "Provisions against infection," and that the limitation of the powers of the section to cases of "dangerous infectious disorders" implies that there is a special reason, beyond getting the person well, why his removal to hospital should be made compulsory. It is monstrous to limit the action of this clause to those cases only where the lodging is improper for the patient himself. Whatever the legal view of the clause may be, it is obvious that its real intention is to check the spread of disease by compulsorily removing and isolating, away from healthy people, a person suffering from a disease capable of indefinite multiplication among his neighbours. Legal subtlety having, however, cast doubts upon this reading of the clause, local authorities have of late been increasingly anxious to set the question at rest by an amended clause that shall be more definite in its wording. The first local Act that contained any reference to this power of compulsory removal was that of Warrington in 1879. Section 25 of the Warrington Act altered the procedure with regard to compulsory removal to hospital, the help of a justice's order being only called into requisition when the person to whom notice requiring the removal of the sufferer to hospital has been given definitely refuses to consent to such removal. But the real importance of the clause lies in the words defining the cases to which it is to apply, those namely, "without proper lodging or accommodation enabling the case to be properly isolated so as to prevent the spread of the disease, or to be properly treated"—which make clear just the point that the general Act of 1875 is alleged to leave doubtful. In the Warrington clause it may be noted as significant that the prevention of the spread of the disease is put first, and the proper treatment of the case second. The difficulty as to the working of Section 124 of the general Act is evidently no fanciful one, for Barrow-in-Furness, Birkenhead, Oldham, Reading, and Stafford have subsequently obtained in their local Acts powers similar to those in the Warrington Act; and last year Bolton, Halifax, and Macclesfield desired to follow their example. Looking to the real importance of this matter, it is to be deplored that the Committee should have dealt with it so curtly and summarily as they did. They seem not to have understood the object of the clause; at any rate they struck it promptly out.

Other Powers desired by the Bolton Corporation.—The Bolton Bill had a series of ingenious clauses, most of which did not find favour in the eyes of the Committee. Others, as will be seen later, were adopted as worthy of general application. The clauses struck out proposed to prohibit the selling or delivering, within a district, of any milk, provisions, or clothing, likely to communicate infectious disease, which had been brought from any place without the borough; the deposit of excreta from persons suffering from infectious diseases, and infectious rubbish in middens and ash-pits, unless previously disinfected; the sending of books from libraries to any house in which there had recently been, or was, any person suffering from infectious disease, unless such house had been disinfected; the sending to school of scholars from a house in which there is infectious disease, without the certificate of the medical officer of health; the assemblage of friends at a house where the dead body of a person dying of an infectious disease, other than typhoid, relapsing, or puerperal fever, is lying; and providing for the disinfection of the the body, and its being inclosed in a coffin not afterwards to be opened.

Clauses passed by the Committee.—The clauses which the Committee allowed to remain comprised: (1) One requiring cowkeepers and milk purveyors to furnish the local authority with lists of all their customers, when it is certified by the medical officer of health, or another medical practitioner, that the spread of infectious disease is attributable to the milk supplied by such dealer; (2) giving further powers in relation to the disinfection of premises (*see* my

report for 1881, section IV, vol. i, 1881, page 380); (3) imposing a penalty on persons ceasing to occupy houses where infectious disease has occurred, without previous disinfection, or without giving notice to the owner, or making false answers as to the existence of such disease; (4) prohibiting the retention of the bodies of persons dead of infectious disease for more than forty-eight hours, except in a mortuary; (5) requiring that the body of a person dying of infectious disease in a hospital shall not be removed therefrom, except for the purpose of being forthwith buried (*see* my Report, as above, vol. i, 1881, page 380); (6) empowering justices in certain cases, to order dead bodies to be removed from houses to the public mortuary, and to be buried within a time limited in the order; (7) prohibiting the carriage of corpses in public conveyances other than a hearse, without informing the owner or driver; (8) empowering the Corporation to provide temporary shelter or house accommodation for the members of any family in which infectious disease has appeared, and who have been compelled to leave their dwellings for the purpose of enabling such dwellings to be disinfected, and to provide nurses for attendance on persons suffering from such disease.

The Local Bills as amended by the Committee.—The effect of this report was that the sanitary clauses prepared locally were all expunged from the Bills referred to the Committee, and the clauses approved by the Committee substituted in their stead. Of the eleven Bills referred to in my report for 1882 (vol. i, 1882, p. 207), I find that, as they received the Royal Assent—*Accrington* (ch. CLXXIII), *Chadderton* (ch. CLXXIV), *Dundee* (ch. CLXXXV), *Halifax* (ch. CCXXXIV), *Macclesfield* (ch. CCXLIX), and *Newcastle* (ch. CLXXIX)—have copied *verbatim* the clauses recommended by the Committee. The *Hull*, *Liverpool*, and *Manchester* Acts contain no sanitary clauses, and the *Falmouth* Bill was not proceeded with. The *Blackburn* Act (ch. CCXLIII) was a consolidating Act; and as the powers for the compulsory notification of infectious diseases, the Jarrow powers as to closing schools, shops, etc., were obtained in 1879, the Committee seem to have hesitated about negativing their re-enactment (although the Bill was referred to them), and the clauses therefore reappear despite the Committee's objections. Bolton had already obtained powers so early as 1877 for the compulsory notification of infectious disease; and its new Act (ch. CCXLIV) omits, therefore, the clause dealing with the notification, but otherwise adopts all the clauses approved by the Committee.*

New Standing Order.—Not the least important outcome of the committee's labours was the passing of the following standing order, which secures what our committee have long contended for, viz., due publicity to the proposals of corporations in the local Bills. "No. 173A. In the case of any Bill promoted by, or conferring powers on a Municipal Corporation, or Local Board, Improvement Commissioners, Town Commissioners, or other local authority or public body having powers of local government or rating, the committee on the Bill shall consider the clauses of the Bill with reference to the following matters. (*a*) Whether the Bill gives powers relating to police or sanitary regulations in conflict with, deviation from, or excess of the provisions or powers of the general laws. (*b*) Whether the Bill gives powers which may be obtained by means of bye-laws, made subject to the restrictions of general Acts already existing. (*c*) Whether the Bill assigns a period for repayment of any loan under the Bill exceeding the term of sixty years, which term the committee shall not in any case allow to be exceeded, or any period disproportionate to the duration of the works to be executed, or other objects of the loan. (*d*) Whether the Bill gives borrowing powers for purposes for which such powers already exist, or may be obtained under general Acts without subjecting the exercise of the powers under the Bill to approval, from time to time, by the proper Government department. And the committee shall report specially to the House in what manner any clauses relating to the several matters aforesaid have been dealt with by the committee, and whether any report from any Government department relative to the Bill has been referred to the committee, and, if so, in what manner the recommendations in that report have been dealt with by the committee; and any other circumstances of which, in the opinion of the committee, it is desirable that the House should be informed; and the report of the committee shall be printed, and shall be circulated with the votes."

(B) Action within the Association.

The functions of the Parliamentary Bills Committee being ministerial only, it is not my province to enter upon any argumentative remarks with regard to the very important discussion of the subject of the notification of infectious cases that took place last August at the Worcester meeting of the Association. My account of the year's work would not, however, be complete without some reference to this matter. Whilst the discussion as to the proposals of local authorities was going on before the Select Committee, a feeling which had long been growing in the ranks of the profession, that it had not been properly consulted as to the method of such notification, was gaining coherency and strength. In order that the matter might be thoroughly sifted, I requested the Committee of Council to set apart a special time for its discussion at the Worcester meeting, feeling assured that this Committee would be anxious to receive full and deliberate instructions. A statement was prepared and printed in the JOURNAL (see vol. ii, 1881, p. 236), sketching the action which had been taken by the representative committees of the Association in obedience to the repeated mandates of the Association itself in general meeting. The result of the discussion at Worcester was that, after two able discussions, one in the Public Health Section and one in general meeting, a resolution, proposed by Dr. Mahomed, and seconded by Dr. Husband, was carried, to the effect "that this meeting earnestly desires compulsory notification of infectious diseases; but it wishes to express its opinion that the compulsion to notify should be placed upon the householder as his duty as citizen, and not upon the doctor." It is not improbable that Ministerial proposals of the forthcoming session may afford us the opportunity of pressing the Association's opinion upon the attention of Parliament, and meantime attention is directed to the announced local Bills relating to these subjects.

(C) Proposed Legislation Next Session.

Seven towns (Birmingham, Burnley, Hartlepool, Heywood, Leyton, Portsmouth, and Sheffield) have included in their local Bills clauses dealing with infectious disease. The phraseology of the clauses is in every case identical with the model clauses approved by the Select Committee. A curious selection of clauses is to be observed in several of the Bills. Thus, the compulsory notification of infectious diseases is accepted by Burnley, Hartlepool, Heywood, and Portsmouth only; whilst the clause as to cowkeepers furnishing lists of their customers is accepted by these towns, with the addition of Sheffield. All seven Bills contain the clauses giving further powers in relation to disinfection of premises, and imposing a penalty on persons ceasing to occupy infected houses without previous disinfection. Portsmouth omits the clauses (retained by the others) prohibiting the retention of bodies dead of infectious disease for more than 48 hours, enacting that bodies of persons dying in hospitals of infectious disease may only be removed therefrom for purposes of burial, and giving power to justices in certain cases to order dead bodies to be buried. Six seven authorities keep the clauses prohibiting corpses of persons dying of infectious disease from being conveyed in public conveyances other than a hearse; and all but Portsmouth ask for powers to provide temporary accommodation whilst houses are being disinfected, and to provide or contract for nurses to attend on persons suffering from infectious disease.

It is, I think, abundantly clear that the report of the Select Committee cannot be accepted as final. Their capricious selection of certain clauses for general adoption, while omitting or rejecting from insufficient knowledge, clauses equally desirable, stands in the way of an early and vigorous dealing with the whole subject by the Government. A general inquiry into the operation of the existing Health Acts, with special reference to the numerous additional provisions, extensively various, and arbitrarily included in the Local Acts of a great number of towns and districts, appears to be urgently called for. Domestic questions are, from all appearances, likely to come prominently to the front during the forthcoming session; and looking to the fact that a new President of the Local Government Board has been just appointed, I would suggest, as worthy of consideration, whether this Committee might not usefully appoint a deputation of its members to obtain an interview with Sir Charles Dilke, and point out to him the necessity for the whole question of the present condition of our national defences against disease receiving adequate consideration in the forthcoming legislative measures of the Government.

Since the above report was written, Mr. Hastings's Bill has been reintroduced, and will, of course, be opposed by the Committee until, or unless, its provisions are brought within strict conformity with the resolution of the Association at the last meeting. A measure has also been introduced, entitled the Scotch Police Bill, which will require the consideration of the Committee at its forthcoming meeting.

Scotch Sanitary Police Bill.—It was moved by Dr. WHITE-

* I may note, in passing, that at least four of these Acts (Accrington, Blackburn, Dundee, and Macclesfield) contain clauses regulating the minimum height of rooms—a subject of much hygienic importance, to which I drew attention at length in my report for 1881 (see vol. i, 1881, p. 381).

onded by Dr. GRIGG, and carried: "That a subcommittee, con-ng of Mr. Sibley, Mr. Nelson Hardy, Surgeon-major Ewart, Dr. tridge, Dr. Grigg, and the chairman *ex officio*, be requested to ch the Scotch Police Bill in respect to penalties under its clauses ting to notification of infectious diseases, and to act in respect it in the same sense as this committee has already resolved to in the matter of Mr. Hastings's Bill."

filitia-Surgeons.—The CHAIRMAN stated, since the last sitting of Committee he had been occupied, and the Association had n kept fully informed of what had been done by him on behalf he Committee, in concert with the militia-surgeons, to redress ir grievances. He had argued the matter very minutely with War Office officials, and had obtained the best legal advice that ld be had, and he had been advised that they had the best of the ument. If, however, the matter were taken into the Court of en's Bench, they might gain the end they had in view, or lose it would, moreover, be a costly proceeding, which he did not k he could recommend the Committee to entertain. It would, wever, still further help the case if they were to authorise that a morial be drawn in the sense of the one already approved by Committee, and if they were to ask Sir Eardley Wilmot to call ention to it in the House of Commons on the voting of the militia mates, and to put in his hands the materials which they had for purpose.

urgeon-General MACCORMACK explained the grievance from ich the militia-surgeons were at present suffering; that, by a rule blished in 1881, militia-surgeons were compelled to retire at the of 65 without pensions or remuneration of any kind. Legal nion had been obtained from Mr. Davy and Mr. Benjamin, two inent men at the bar, who were of opinion that, if they had no und as a petition of right, they had a clear claim on the ground equity. The only satisfaction they could get from the Govern-nt was that they were told they had their practices to fall back n.

he CHAIRMAN moved the following resolution, which was onded by Surgeon-Major ORTON, and carried:—"That Sir dley Wilmot be requested, in the name of this Committee, to port the claims of the militia-surgeons, and that he be furnished h the information in the hands of this Committee."

Honorary Queen's Cadetships.—This subject was brought before notice of the committee. It was stated that medical officers matter how long or distinguished their services, were, as n-combatants, denied the privilege of obtaining honorary en's cadetships for their sons. Ten of these nominations e allotted to combatants, and an invidious distinction was s drawn between the two classes of officer. To remedy this hard-p it would merely be necessary to grant to non-combatants a fair portion of these nominations, leaving to combatants their present wance of ten. Moreover, it was stated the public would not lose this boon, the recipients having to pay the full charge at Sand-st.

he CHAIRMAN proposed a resolution to the effect "that this mmittee use its influence with members of Parliament and others have the question of honorary Queen's cadetships ventilated on vote of the army estimates.

his was unanimously adopted.

hip-Surgeons.—Dr. IRWIN read the following memorial, which, at suggestion of Mr. Ernest Hart, and as the outcome of the recent cussion of the subject in the BRITISH MEDICAL JOURNAL and ewhere, he had prepared for presentation to the President of Board of Trade, calling attention to the present unsatisfactory e of things with regard to ship-surgeons.

THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

Memorial of the Parliamentary Bills Committee of the British Medical Association.

o the Right Honourable JOSEPH CHAMBERLAIN, M.P., President he Board of Trade.

his memorial respectfully showeth that the medical and sanitary inistration of ocean steamers, especially of those engaged in North Atlantic emigrant trade, is often seriously defective, reby many lives are annually sacrificed. The following reasons be assigned.

. The medical officers are appointed without due regard to age, lth, professional qualification, or character.

. They seldom retain the position for any considerable period, there is no organisation through which the results of their col-ive experience may be turned to practical account

3. The sanitary arrangements of passenger-ships are, without exception, far from what they should be; they are very often grossly defective.

4. The medical officer is denied such independent authority in sanitary matters as is essential to his efficiency as a sanitary officer.

5. His duty with reference to these matters is uncertain, and varies upon almost every vessel. His responsibility is entirely undefined, but he knows that any interference upon his part with existing customs or arrangements would be unwelcome to his employers, and would very likely bring him into unpleasant contact with more influential officials, thereby compromising his position while on board, and the tenure of his office at the conclusion of the voyage.

6. As a consequence, sanitary precautions are not unfrequently, sometimes habitually, neglected throughout the voyage.

7. The surgeon is not allowed adequate assistance for the proper care and treatment of the sick. He has no hospital-steward or sick-nurse, no dispenser, and no servant; and, consequently, miscellaneous duties devolve upon him, which he cannot possibly perform efficiently during the frequently recurring times of general sickness, and some of which are distinctly derogatory to his position as medical officer of the ship.

8. The hospitals are generally insufficient, often ill-placed and sometimes taken from the surgeon's control, and devoted to other purposes than the accommodation of the sick.

9. The medical officer is usually allotted quarters without regard to his health, personal comfort, or the possibility of efficiently discharging his professional duties.

10. His tenure of office is uncertain, often depending on the mere caprice of other officials.

11. His salary—never more than £10 per month, and usually on a par with that of the cook, steward, and fourth or fifth engineer—affords inadequate remuneration for competent and experienced medical services. There is no provision for retirement or superannuation; and, therefore, when, after years of laborious public service, the ship-surgeon loses his position from ill-health or otherwise, through no fault of his own, he finds himself without provision for the future, and, with reference to other chances of employment, in every respect worse off than when first he obtained his diploma.

Under these circumstances, it is not surprising that, as stated by a leading medical journal, "comparatively few surgeons in every way suitable can be found in the Mercantile Marine Service;" or that it should have been ascertained that the mortality among passengers is "far higher than is justified by the necessities of transit."

As a remedy for this unsatisfactory state of affairs, your memorialists respectfully propose:

1. That the Board of Trade should obtain powers to take this important branch of the public service under its own immediate direction.

2. That a regularly constituted "Marine Medical Service" should be formed; the members of which would be appointed under the direct supervision of the Board, and would be responsible to it for the efficient performance of their duties.

3. That the conditions of such appointment should be reasonably stringent, in view of the serious and difficult nature of the service required.

4. That the present disabilities with reference to unsuitable accommodation, want of assistance, and inadequate remuneration, should be amended under the direction of the Board; and that the position should be made sufficiently desirable to attract and retain the services of thoroughly competent and experienced medical men.

5. That the duties, responsibilities, status, and uniform of marine medical officers, should be distinctly determined, and made constant upon vessels carrying passengers under the supervision of the Board of Trade.

6. That the medical officer should have separate authority in sanitary matters, not involving the safety or general discipline of the ship.

7. That he should be assured of the full protection of the Board in the discharge of his duties, and in all cases of vexatious interference, or unfounded complaint.

8. That his tenure of office should be as permanent as in other public services, and not simply from voyage to voyage, as at present.

9. That the conditions of the service should include promotion, and provision for superannuation or retirement through ill-health.

10. That a junior or assistant-surgeon should be carried by every vessel having on board more than 600 persons; and that suitable arrangements should be made for his accommodation and remuneration.

11. That the medical officers should be required to frequently inspect the inhabited portions of the vessel, and to furnish at the conclusion of each voyage a suitable report upon the hygienic conditions of the voyage, and upon all matters likely to affect the health of the passengers. [Such reports, taken collectively, would be of great value in the public service.]

These points are elaborated in the accompanying pamphlet, to which your memorialists would respectfully direct attention; especially to pages 1, 2, 4, 6 and 7, with reference to the present condition of the medical department of these vessels; to page 10, with reference to the advantage of a "Marine Medical Service; and to page 12, upon which is proposed a scheme for the remuneration of marine medical officers.

ERNEST HART, Chairman of the Parliamentary Bills Committee, British Medical Association.
FRANCIS FOWKE, General Secretary to the British Medical Association.

March 17th, 1883.

Dr. Irwin stated that he had ascertained that, out of 140 medical officers, 46 were under twenty-five years of age, 19 were under twenty-five, and 8 had no qualifications to practise in Great Britain; 36 possessed but one qualification; and 65 would have been ineligible for Poor-law appointments.

The CHAIRMAN stated that he had gone very carefully through the memorial, and very strong evidence had been collected. The memorial would be accompanied by a pamphlet of evidence, and arguments supporting it. Dr. Irwin had behaved in this matter with the most remarkable public spirit, and had given a great amount of time to the subject.

It was proposed and carried, that a copy of this memorial on behalf of ship-surgeons be forwarded from this Committee to the President of the Board of Trade.

Pharmaceutical Draft Bill.— The CHAIRMAN stated that the draft Bill of the Pharmaceutical Society which had been circulated, was in many respects an extremely satisfactory Bill, and one which appeared to deserve the support of the Committee, in so far as it purposed to provide that, in future, all patent medicines which contained poisons should be labelled with the name and address of the first vendor, and with the word "poison." He thought this was a matter of the utmost importance, and deserving of the Committee's support. He (the Chairman) had been thinking whether it would be possible to take this opportunity of introducing a clause limiting the powers of prescribing druggists. This, however, was a matter which required consideration, and he submitted it to be dealt with by the Committee. The consideration of the subject was deferred, and the meeting adjourned.

SCHEME FOR ENCOURAGEMENT OF ORIGINAL RESEARCH IN SANITARY SCIENCE.

WE have received the following highly interesting details of the proposed scheme which the Grocers' Company, with singular munificence, intend carrying out for the encouragement of original research in sanitary science. We need not say with how great satisfaction we make this announcement, and how earnestly we hope that the admirable example which has been set by this Company will be imitated by others, and that it will bear rich fruit in the promotion of sanitary science in this country, and in furthering the great objects involved in that progress. The scheme has the general object of encouraging original research in sanitary science. It consists of two forms of endowment: the one, meant as maintenance for work in progress, in fields of research to be chosen by the worker himself; the other, meant as reward for actual discovery, in fields of research to be specified from time to time by the Company. With the former intention, the Company establishes three Research Scholarships, each of £250 a year; with the latter intention, they appoint a Discovery Prize of £1,000, to be given once in every four years.

Research-Scholarships.—The Research-Scholarships are intended as stipends for persons engaged in making exact researches into the causes of important diseases, and into the means by which the respective causes may be prevented or obviated. The Court of the Company propose to appoint to two of the scholarships in May 1883, and to a third in May 1884; after which the vacancies which occur will be filled in each succeeding May. Subject to the conditions of tenure, each appointment will be for one year; and the holder will be eligible for reappointment (see Sections 11 and 12).

Candidature for Scholarships.—Applications for appointments to scholarships must be made during the month of April in each year, by letter addressed to the Clerk of the Grocers' Company, Grocers' Hall, London, E.C. Candidates must be British subjects, and, when competing fo a first appointment, must be under the age of thirty-five. Each candi date, in his application, must make an exact statement of the researcl or researches which he proposes to undertake, and must declare that, i appointed, he will conform to the conditions under which the scholar ships are held. His application must be accompanied by first-clas testimonials: both general, as to his personal and scientific cha racter, and special, as to his qualifications for the research or re searches which he proposes to undertake; and he may, if h pleases, also adduce, in support of his application, the evidence c any work which he has in progress, or has already published, in th same, or in any kindred, field of study. Candidates may be require to wait upon the Court; or upon the Scientific Committee appointe by the Court, at some time in the month of May.

Appointment to Scholarships.—The Court reserve to themselve full discretion as to appointing from among the candidates wh shall apply, or withholding a scholarship if there is no candidate sufficient merit; and the Company is not to be under any leg responsibility with regard to the same. Pains will be taken to est mate the relative importance of the subjects of research which th different candidates propose, and the relative degrees of probabilit that those researches would result in the desired increase of know ledge. The general intention will be, that, as between candidat whose evidences of character and qualification are considered ad quate, preference shall be given to the candidate whose applicatio proposes the more important research; and that researches shall considered important in proportion as they are judged likely throw new light on the causation or preventability of some impor ant disease or diseases.

Renewal of Scholarships.—In appointments to scholarships, pr ference will, within certain limits, be given to a first year's schol who desires to continue for a second year, or to a second yea scholar who desires to continue for a third year, the research researches on which he has been engaged, and which he has not y completed. That is to say, a second year's appointment will general be granted to any scholar who during the first year h made adequate progress in his work; and a third year's appointme will in general be granted to any scholar who during his first a second years has done work of distinguished merit. Applicatio for any such renewals of appointment must (like original appli tions) be made in the month of April, by letter addressed to t Clerk of the Company. Scholars who may desire to continue lon than for a third year any research or researches on which they h been engaged, and scholars who may desire to be reappointed w a view to some line of research different from that of their origi appointment, will not be privileged as against new candidates, will be at liberty to compete with them on equal terms, under t rules which apply to candidates in general. Any person w having at any time been a scholar, is a candidate for fresh appoi ment, may refer (as for testimonial) to whatever work he has d as scholar.

Conditions of Tenure of Scholarships.—The year of scholars shall begin on the first day of June, and shall end with the last of the succeeding May, The stipend of each scholar shall be p able to him in instalments, quarterly or monthly as he may pre The scholar shall diligently follow the research or researches wh in his application, he has proposed to undertake. The scho shall defray all expenses of whatever research he has undertak All researches shall be conducted under conditions of place and t satisfactory to the Court. The scholar shall afford all reasona facilities which the Court may desire, for themselves or for pers on their behalf, to observe his progress in any research in which is engaged; and he shall, if the Court desire, make written repor them on its progress. At or before the end of each year of scho ship, or in particular cases at such later time as the Court approve, the scholar shall publish the result of his research or searches, either in print or, if desired by the Court, by a lectur lectures to be delivered at Grocers' Hall, or elsewhere as the C may appoint. The Court are at liberty to annul at any time appointment if in their uncontrolled discretion they consid scholar as neglecting his engagement, or as guilty of any ser misconduct.

Quadrennial Discovery-Prize.—The quadrennial discovery-p is intended to reward original investigations which shall hav sulted in important additions to exact knowledge in partic (previously defined) sections of sanitary subject-matter. The C will, once in four years, propose some subject for investigation; a period of at least three and a half years will on each occasio allowed for the investigation of the subject that has been prop

letermining, on each occasion, what particular subject shall be osed for the prize, careful regard will be had to all the scientific mstances of the time; both as to the urgency of existing needs particular kinds of knowledge, and as to the expectations which reasonably be held that discovery in the needed kinds of know- e can be made within the allowed period.

ie subject for the first discovery-prize will be announced in 1883, and the period for investigation will extend to the last of December 1886. The Court will announce the award in May ; when also (as at present advised) they will propose a further ect for investigation. The general conditions of candidature award will be as below stated, but with liability to amendment time to time; and on each occasion when a subject for the overy-prize is announced, special conditions referring to the par- ar subject may also have to be laid down. All the conditions h at any particular time shall be in force will be obtainable the clerk of the company.

ndidature for Discovery-Prize.—The discovery-prize will be to universal competition, British and foreign. The period lved for the competition will begin with the day of announce- t of the subject for investigation, and will end with the last day ie fourth following December. Any person who desires to be rded as a candidate for the prize, must deliver or cause to be deli- l at the hall of the company, within the allowed period, a letter in h he declares himself to be a candidate for the prize, and the treatise hich he bases his candidature: such letter, and such treatise, to be essed to the clerk of the company, who will give a dated receipt for ame. The competition-treatise of a candidate may, if the candidate refer, be delivered in successive parts, each bearing its proper . Each treatise in competition for the discovery-prize must be riginal work by the candidate who sends it in. It may be a ise which he has published at any time within the allowed d, or may be a treatise which he has not previously published. ough candidature is not restricted to any one nationality, all ises, and all communications with the Company in relation to , must be in the English language. Translations into English mpetition-treatises published (within the allowed period) in a ign language will be received on a like footing with treatises nally in English. All treatises must be in print. Each treatise bear the name of its author. Any particular candidate may be red to demonstrate practically to the Court or the Scientific Com- ee any fact or result which he claims to have discovered. idature will be held to imply that the candidate undertakes cept as regards himself the award which the Court shall e.

ward of Prize.—The Discovery-Prize being intended to promote fullest possible elucidation of the given subject, the respective ts of candidates will be rated by that standard; and, if the be advised that the most meritorious candidate has produced riginal solution of the main scientific problem or problems in- d in the matter of the competition, the Court will award to him ntire prize. Should the Court be advised that no candidate solved the main scientific problem or problems, but that able progress towards the object has been made by one or of the candidates, or that collateral discovery valuable to sani- science has been incidentally made by some candidate in his ecution of the main research, the Court may apply such portion e prize as they may see fit in recognition of merits thus brought eir notice. In estimating the originality of treatises, the Court have regard not only to the state of knowledge which existed e time when the subject for investigation was announced, but o such later advances of knowledge as may have been made up e time when the treatises were sent in. When two or more idates equally claim to have made discovery in the subject- er of the prize, further information may be required of them in rt of their respective claims, and the Court will judge between laims as they shall think right. Each candidate will have been erty to notify to the Court at his own time any discovery he believes himself to have made. (See Section 28.) Neither rize, nor any portion of it, will be awardable to any person who not formally declared himself a candidate for the prize. (See on 28.) The awarding or withholding of the discovery prize is entirely in the discretion of the Court, and the company is not under any legal responsibility with regard to the same.

neral.—Except as to scholarships and discovery prizes already led or advertised, this scheme shall have effect only during leasure of the Court, and the Court reserve to themselves ight of altering the scheme in any way they may think

OPHTHALMOLOGICAL SOCIETY.

It has been decided by the Council of this Society to devote the meeting on June 7th to the consideration of the ocular symptoms which are associated with diseases of the spinal cord. At the request of the Council, Dr. Gowers has undertaken to introduce the subject, and has prepared the accompanying statement of the points to which it is desired that members should chiefly direct their communications.

Memoranda on Eye-Symptoms in Spinal Disease. Prepared for the Ophthalmological Society. By W. R. Gowers, M.D., F.R.C.P.—Of the ocular symptoms associated with spinal disease, two are of especial importance on account of their frequency—atrophy of the optic nerve, and the states of the pupil.

Modern pathological investigation has rendered it improbable that these ocular symptoms are the *result* of the disease of the cord. They are associated almost exclusively with degenerative diseases, and probably depend on a degeneration which is not structurally continuous with that in the cord. They are almost unknown in acute diseases of the cord, except when these follow, or are followed by, degeneration which runs a practically independent course. Considerable interest will therefore attach to any cases that can be brought forward in which these symptoms were distinctly consecutive to an acute lesion of the cord.

Optic nerve atrophy is associated especially with locomotor ataxy, and the association may be considered from the side of the ocular and of the spinal affection.

In what proportion of cases of atrophy of the optic nerves can the signs of locomotor ataxy be detected? As the earliest and most constant of these signs, the loss of the knee-jerk may be conveniently taken as a criterion.

In what proportion of cases of locomotor ataxy do the optic nerves undergo atrophy? It is not probable that a definite answer can be given to this question, because few cases of ataxy are followed to the end, so that the occurrence of atrophy cannot be excluded. But an approximate answer can be secured if the next question can be decided.

When does atrophy of the optic nerves usually commence in the course of ataxy? The course of tabes may, for this purpose, be conveniently divided into three stages—(1) before there is any alteration in gait; (2) when the gait is distinctly ataxic, but the patient is still able to walk alone or with the aid of a stick; (3) when the patient is unable to walk without the help of another person. It is very important to know in what proportion of the cases of tabetic atrophy the change in the optic nerve commences in each of these stages. If the proportion of cases in which atrophy commences in the first stage is known, an approximate estimate of its total frequency can be formed from the number of cases in the second stage with and without signs of atrophy.

Can any relation be traced, in a series of cases, between the occurrence of atrophy and the character of the spinal symptoms (pains, anæsthesia, etc.)?

In what proportion of cases does tabetic atrophy affect one eye before and more than the other, and which eye is most frequently affected first?

Does concentric limitation of the field always precede, or preponderate over, central amblyopia in tabetic atrophy? In rare cases, there are unusual changes in the field of vision (*e.g.*, temporal hemiopia). Observations on such cases are of especial importance, and so also are facts regarding acute failure of sight in this affection.

Does the atrophy always progress to total blindness, or does it sometimes become arrested, and remain stationary for an indefinite time, as does the spinal affection?

Can any instances of considerable and permanent improvement of sight in tabetic atrophy be brought forward?

Observations and microscopical sections illustrating the pathological anatomy of tabetic and other allied atrophies are desirable, especially those which show the condition of the optic chiasma and optic tracts.

In what respects does the optic atrophy of tabes differ from the optic atrophy sometimes associated with other forms of chronic spinal cord disease?

When eye-symptoms occur in general paralysis of the insane, is the case more likely to be complicated with spinal symptoms?

States of Pupil.—The most frequent condition of the pupil associated with spinal disease is the loss of contraction to light, the pupil still contracting on accommodation (reflex iridoplegia, reflex rigidity of the pupil, Argyll-Robertson symptom). Erb has pointed out that, in these cases, the pupil no longer dilates on a painful

cutaneous stimulation (*e.g.*, of the skin of the neck by a faradic brush). Regarding this condition, information is needed on several points.

Can this reflex dilatation be always obtained under normal circumstances?

What is the most convenient and efficient means of obtaining it in regard to (*a*) place and (*b*) form of cutaneous stimulation?

Is it true that there is always loss of reflex dilatation when there is loss of reflex contraction?

The pupils are usually small in this condition, but not invariably, and are sometimes not circular. It is desirable to know whether any relation can be traced between the size and shape of the pupils and other symptoms.

It is not uncommon to find, under the conditions in which reflex iridoplegia occurs, that the pupils contract under the influence of light; but immediately, the exposure continuing, dilate again to their former size, often with slight oscillations. Does this condition go on to loss of reflex contraction?

In total paralysis of the internal muscles—ophthalmoplegia interna (Hutchinson)—the pupils are not usually small. What variations in the size of the pupils are met with in this condition?

Regarding the association of these symptoms with spinal disease, it is desirable to know how frequently they are met with in locomotor ataxy and general paralysis of the insane, and in what other spinal diseases they occur.

Both symptoms occur apart from spinal disease, and facts are needed as to the other conditions with which they are associated, and as to their relation to constitutional syphilis. Does ophthalmoplegia interna begin as reflex iridoplegia?

Ophthalmoplegia externa has been shown to depend on nuclear degeneration. There is some reason to believe that reflex iridoplegia and ophthalmoplegia interna depend on a similar degeneration. Pathological observations on the nature of the lesion in these cases are much needed.

ROYAL COLLEGE OF PHYSICIANS.

AT a special meeting of the College held on March 19th, 1883, the use of the College Library was granted to the Medico-Psychological Association for their annual meeting on July 27th. The President, Sir WILLIAM JENNER, addressed the College on laying down his office, and was requested to allow the address to be printed. He was then re-elected. A committee was appointed to watch the progress of the Medical Act Amendment Bill, to take such steps as they may think necessary, and to report from time to time to the College. It was resolved that a Financial Committee be appointed annually, and that they report quarterly to the College on all financial matters.

The following report was adopted.

"The Council, having considered the subject of the investment of the Lambert legacy referred to them by the College, recommend that the proceeds of the legacy, amounting to £1,447 14s. 6d., be invested, together with the interest accruing thereon, in such English Railway Debenture Stock as the bankers of the College may advise. With reference to the other question referred to the Council for their consideration, namely, that 'of explaining the reasons for nominating members for election to the Fellowship,' the Council beg leave to report that they are of opinion that it is not necessary to modify the existing practice, as the claims of every member of the College are always carefully considered in detail before any re-election is made.—WILLIAM JENNER."

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., May 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acu Pneumonia, Chorea, and Acute Rheumatism, can be had by applic tion to the Honorary Secretaries of the Local Committees appointe by the Branches, or to the Secretary of the Collective Investigatio Committee. Of these diseases, each member of the Association earnestly requested to record at least *one ordinary case* coming und observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepare and can be had on application by those willing to contribute infor ation on these subjects. There are two cards on Diphtheria, o containing clinical, the other etiological inquiries, together with explanatory memorandum. One of these cards is intended to ser as a guide to the systematic examination of a house or district sanitary purposes. There are also two sets of inquiries concerni Syphilis, one for acquired, the other for inherited, disease. The are accompanied by an explanatory memorandum giving informati concerning the most recently observed symptoms of the inherit disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meet will be held at Bridgend, on Wednesday, April 18th. Members desiring to papers, etc., are requested to send titles to either of the undersigned by the of March.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Ho ary Secretaries.

NORTH WALES BRANCH.—The thirty-third intermediate meeting will be at the Castle Hotel, Conway, on Thursday, March 29th, at 12 o'clock (no After the meeting, the members and guests will dine together. Notice of pa to be read should be sent to the Honorary Secretary. Agenda—The subjec the President's Address at the annual meeting will be continued and discu (viz., Counter-irritation). Paper: Compound Fracture of Skull, etc., by Griffith, Pen-y-groes. Notice of Motion: "That the subject of Working M Clubs be discussed at the Intermediate Meeting."—J. LLOYD ROBERTS, Hono Secretary.—Denbigh, March 9th, 1883.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting be held at the Bush Hotel, Farnham, on Thursday, March 29th, 1883. Busi Discussion on Collective Investigation of Disease. Elect Secretary for Colle Investigation Committee. Dr. Pearse: Medical Ethics and Fees. Dr. Bo Antiseptics in General Practice. Mr. Napper: A Case of Compound Commi Fracture of the Skull.—A. ARTHUR NAPPER, Honorary Secretary, Broad Cranleigh, Surrey.

SHROPSHIRE AND MID-WALES BRANCH.—The next meeting of the abov trict will be held at the Working Men's Hall, Whitchurch, on March 29t 3.30 p.m. Dr. Gwynn of Whitchurch kindly invites members to lunche the Working Men's Hall prior to the meeting.—EDWARD CURETON, AR STRANGE, Honorary Secretaries.—Shrewsbury, March 19th, 1883.

CORRESPONDENCE.

MEDICAL PROVIDENT SOCIETY.

SIR,—I shall be most happy to enrol myself among the suppo of the proposed Medical Benefit Association. Permit me, hov to invite attention to some important points which appe have escaped the notice of the projectors of this most exc institution. That sudden death or accident may unexpectedl short the career of a deserving and prosperous practitioner, le his wife and children utterly destitute, is unhappily but fa common; such sad cases being almost of daily occurrence; m men, as a rule, live up to their income (usually a modest one really cannot, as a class, be fairly taxed with improvidenc course, this contingency may hang over the heads of all, wh members of the British Medical Association or otherwise; venture to submit that the very object contemplated by th posed Medical Provident Society (viz., of offering to the who dical brotherhood a participation in the benefits arising fro a society) would not be attained were the benefits extended t but members of the British Medical Association alone. Let be misunderstood. I would not, for a moment, suggest th management of the Society should be taken out of the hands British Medical Association; but while leaving, for obvious r its exclusive direction to the Association's members alone, fe

nt that they will be only too glad to see this omission repaired favour of the interests of the profession generally. Another nt, I think, deserves no less serious consideration, and has not been ventilated, with respect to the examination of candidates participation in the Society's benefits, etc. Let there be no set dical examiners appointed, remunerative fees to whom would drag so ıvily on the society's resources; let each candidate select his ı examiner, of sufficiently satisfactory professional status to ırantee full reliance on his written report; and let the candidate ıself be made to sign a declaration that he has never suffered m any serious disease tending to materially shorten life, or to der him a constant claimant on the Society's services.

Trusting these suggestions may prove of some service towards tha ıpilation of the Society's rules, etc., I remain, sir, yours truly,

J. BRINDLEY JAMES, Medical Officer to the London Friendly Society, etc.

Brindley House, Jamaica Road, S.E., March 19th, 1883.

SIR,—Kindly add my name to the list of adherents to the proposed dical Provident Society. It seems to me this subject should uire very little canvassing, as medical men have frequent opportities of observing, and of being thankful for, the advantages of ilar provident habits among their patients. Let us remember—

"When sorrows come, they come not single spies,
But in battalions!"

shing the proposal every success.—I am, yours truly,

Pembroke, South Wales, March 19th, 1883. W. B. WALL.

SEVENTH LIST.

RTHER letters of adhesion have been received from the following ntlemen:—

Mr. Edward Bartlett, London; Mr. T. Garrett Horder, Cardiff; Henry Stubbs, Madeley, Shropshire; Dr. Andrew S. Currie, dney, Gloucester; Dr. George H. Batterbury, Wimborne, Dorset; Clement Walter, Dover; Mr. R. Ellery, Plympton; Mr. L. Eastod, Darlington; and Mr. Arthur Goodwin, Hanley.

** The list is rapidly gaining in numbers; but several hundred nesions should, we think, be enrolled as a preliminary to practical ion, and we shall be glad to continue to receive names.

ALBUMINURIA AND BRIGHT'S DISEASE.

SIR,—I fear that the report of my observations in the discussion ich took place at the Clinical Society on March 9th, upon Dr. nson's communication concerning the picric acid test for sugar l albumen, may not only discredit my accuracy, but, if Dr. John-'s final remarks are left unanswered, they may greatly mislead mind of the profession upon an important subject.

With your permission, I would, therefore, state my question a le more fully than your necessarily condensed report is able to I referred to a demonstration by Dr. Ralfe at the Pathological iety, in which he showed that picric acid produced a precipitate ırine containing peptones, and that it failed to distinguish be-en a comparatively harmless peptonuria and the more dangerous ıptom of serum-albumen in the urine, or true albuminuria. Since ploying the picric acid test, I have come across similar misleading ults. It was on this ground that I ventured to disparage the use these so-called "more delicate tests for albumen."

In his reply, Dr. Johnson is reported to have said that "Dr. homed's reliance upon untrustworthy tests ror small quantities of umen accounted for his published statements that granular kidwas often unassociated with albuminuria."

In defence of my paper on Bright's Disease without Albuminuria, ıay mention that every urine stated in that paper to be free from umen was most carefully tested by what is known as "Heller's thod," *i.e.*, allowing the urine to rest upon a substratum of nitric d; a method which is generally admitted to be by far the most icate form of the nitric acid test; in all cases, heat was also emyed; in some, this was used in the manner advocated so strongly Dr. Saundby, namely, by boiling the upper stratum of a test-tube ee parts full, and adding a drop or two of acetic acid if the urine alkaline, or phosphates are present; this test I have since emyed largely, and always use in doubtful cases; it undoubtedly licates the presence of albumen in some cases in which nitric acid ls, though in others the reverse obtains, and nitric acid gives a ult when heat fails.

I think if Dr. Johnson had any personal knowledge whatever of method and manner of examining the urine, he would not have pugned the reliability of my observations. It is true that I did not employ the picric acid test in the cases I recorded; I was not at the time acquainted with it, nor, I believe, was Dr. Johnson, so that we at least stood, up to that period, on common ground.

So long as anybody regards chronic Bright's disease as a disease of the kidney alone, and trusts to the urine to demonstrate its existence in all cases, so long, I am convinced, he will continue to overlook a very considerable proportion of cases that come before his notice. Anybody who has carefully watched many cases of chronic Bright's disease, must have seen some in which the quantity of albumen has been variable; some in which it has steadily diminished while the patient has been under observation, and has finally entirely disappeared; it may have been absent for days, weeks, months, or even years, and has again returned. Supposing it were only absent for a week or so, as it often is, surely nobody would suppose that the kidney during that week had become a healthy one; yet, if a diseased kidney can for one week secrete normal urine, why should it not do so for a longer period? If, during such a period of remission, the urine alone were relied upon for the diagnosis of Bright's disease, the disease would be overlooked. This, however, is only one small point in a much wider subject; my observations do not rest on clinical evidence alone, but are supported by the changes found after death. For further evidence, I must refer your readers to the *Guy's Hospital Reports* for 1880 and 1882, and to other writers on the subject. I follow Sir William Gull and Dr. Sutton in the contention that, if we retain the name of Bright's disease for diseases of the kidney only, then we must employ another term, such as arterio-capillary fibrosis, for cases in which the cardio-vascular changes are present, and the kidneys but little diseased; but I believe it is impossible to separate the two conditions, and that we should rather extend our too narrow notions of Bright's disease, and recognise it as one in which many organs are involved in allied changes, the evidence of the disease being of varying gravity in one or other organs.—Yours faithfully, F. A. MAHOMED.

March 17th, 1883.

SMALL-POX HOSPITAL REPORTS.

SIR,—I am sure you will excuse my saying that I do not "doubt the good faith and accuracy" of the Small-pox Hospital statistics, in themselves. What we complain of are the rules by which they are compiled. We maintain that these rules actually prohibit accuracy. Take Dr. Welch's more than once repeated statement, "the rule which we have adopted to aid us in making a differential diagnosis between variola and varioloid, is to classify as variola all unvaccinated cases, no matter how mild, all malignant cases, and all the vaccinated cases in which the eruption does not reach maturity until after the sixth or seventh day from its first appearance. All others have been classified as varioloid." Why should there be this classification? Only because it is assumed that vaccination has altered the type of the disease. But that is the very bone of contention. We maintain that small-pox is unaltered. The disease so graphically described by Sydenham and others before Jenner, is the very same disease in every feature which is being treated in London hospitals to-day. Sydenham's mild cases were as mild, his confluent were similar, and he, too, had cases to which Dr. Strugnell's words, in describing malignant cases in the wards, would equally apply. There were "some a nurse could not kill, and others no doctor could cure" (Wagstaffe). But the bias of education induces, now, a habit which is unfortunately cultivated, of regarding all mild cases as vaccinated, and all bad cases as unvaccinated. So much so, that opening the tables of recent reports, you find nearly all the confluent and hæmorrhagic classed as unvaccinated. As Dr. Strugnell says: "According to the degree of goodness of the vaccination, so is the modification of the attack of small-pox;" assuming boldly the point at issue. Then comes the question of quality. The same authority talks of "thorough" vaccination, himself being judge and jury as to the thoroughness. Yet, as the Fulham report for 1878 says: "What one will call an indifferent mark, another will call fair, a third moderate, and a fourth bad, and so on." It may safely be averred that the standard of quality is exceedingly various. Thus "good," "imperfect," etc., convey no meaning as regards the disease. The only safe, sure, and unvarying guide is the eruption.

But after you have laid down rules on which to tabulate, what do you find? You find patients (Glasgow 1870-72) recovering, who were classed as unvaccinated, showing "good marks;" "quite a large number of patients" among the "unvaccinated class" (Philadelphia, 1873), who believed themselves vaccinated in infancy;" a refusal to "take hearsay and circumstantial evidence from the patients in proof of vaccination" (Fulham, 1878); and "the mere assertion of patients, or their friends, that they were vaccinated, counted for nothing"

(Birkenhead, 1877). Now let me appeal to you? Can you believe that it is possible that we should agree that, "by this mode of classification, the possibility of error is reduced to a minimum? You cannot conceive a more perfectly scientific manner of grouping cases. If that is so, we must disagree. We affirm the absolute necessity of an appeal to the register of successful vaccinations. By no other means can you be positive; and if all you will accept is the appearance of the arm in the worst eruptive fever, then you must continue to show us results impossible of acceptance by us.

Let me say before closing, that my pre-Jennerian statistics are, as regards Rees, Lambert, and the London Small-pox Hospital, certainly as proper for comparison as is possible. They are hospital statistics. And, as regards Jurin's cases, let us not forget that he was endeavouring to establish the great fatality of natural small-pox, in favour of the artificial. So that he would not be likely to make the disease too mild.

Compulsory vaccination imposes upon us the unpleasant necessity of studying this case; if compulsion was abolished, we would gladly abandon it.—Yours truly, ALEX. WHEELER.

Darlington, March 12th, 1883.

*** Our correspondent has strayed from the main point at issue. We did not assert, and are not prepared to assert, that the statistics of all small-pox hospitals are accurately and scientifically drawn up; but we did and do assert that the more recent statistics of the metropolitan small-pox hospitals (on which alone, as we have pointed out, our figures were based) are so compiled. Our contention may be briefly summed up thus: 1. The two classes, "vaccinated" and "unvaccinated" are in these statistics absolutely exclusive each of the other; 2. All cases of any doubt are classed as "doubtful;" 3. The statistics show that the mortality is enormously greater among the "vaccinated" alone, or among the "vaccinated" and the "doubtful" combined, than among the "unvaccinated" alone, and among the "vaccinated" alone than among the "unvaccinated" and the "doubtful" combined; 4. It follows, therefore, either that these statistics are not *bonâ fide* (as we are convinced they are), or that vaccination has a real protective influence against small-pox.

SHIP-SURGEONS.

SIR,—From a recently published Parliamentary Report may be learned the following facts. No less than 140 medical officers, approved by the emigration officer at the port of clearance, were intrusted, on different voyages, with the sole "medical charge" of 108 steamships, which, during the six months ending June 30th, 1882, carried emigrants from Great Britain to the United States and Canada. Of these gentlemen, 8 possessed no qualification which would entitle them to practise in the United Kingdom; while, of 132 remaining, 35 held but a single diploma—29 as surgeon alone, 3 as physician alone, and 3 as apothecary alone. Forty-six are reported as being twenty-five years of age or under, and 19 as being twenty-three years of age or under. Of the latter, 11 possessed but a single qualification. Of these 132 medical officers, *but twenty-four possessing any qualifications as a physician and surgeon had reached their thirtieth year.* Such facts need no comment. Certainly they go far to prove—there being nothing exceptional during the period named—that these officers "are appointed without due regard to age, qualification, or experience;" and that "comparatively few medical officers in every way suitable can be found in the mercantile marine medical service."—Your obedient servant,

March 14th, 1883. J. A. IRWIN, M.A.Cantab., M.D.Dub.

THE FEEDING OF INFANTS.

SIR,—Allow me to add my feeble testimony against the use of condensed milk as a food for infants. At times, given medicinally, it is of great value; but, as a food, it is unnatural, and sooner or later the infant must suffer if thus fed. I have in so many instances seen the fatal results of bringing up infants on the condensed milk, that I invariably warn patients against its continuous use. The most robust-looking child thus fed has no vitality, and is frequently cut off by an illness that, under other circumstances, would have proved very trivial. A reference to the *Medical Digest*, Section 540:1 will show that those against the use of condensed milk, in feeding infants, greatly exceed the advocates of this plan.—Obediently yours, RICHARD NEALE, M.D.Lond.

60, Boundary Road, South Hampstead, N.W., January 19th, 1883.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, March 15th.

Sudden Deaths in Scotland.—Mr. BROADHURST asked the Lord-Advocate whether he is in a position to state if any progress has been made towards the establishment in Scotland of a public inquiry into all cases of sudden death.—The LORD-ADVOCATE: Public inquiries are frequently held under special statutory provisions into certain classes of accidents, viz., accidents in mines, shipwrecks, railway accidents, and boiler explosions, but sudden deaths generally, and fires, are investigated by the Procurator-Fiscal, and the results reported to the Crown Office. Greater publicity is, however, now given to sudden deaths by the returns which are published monthly in the localities, according to instructions given about a year ago. There is no present intention to make legislative provision for public investigation regarding all sudden deaths and fires in Scotland, as there does not seem to be any prevalent demand for so large a change in the law—a change which could only be carried out by the creation of a new staff of officials, who would be substantially coroners, throughout the country, at great cost.

The Ventilators on the Embankment.—Sir J. M'GAREL-HOGG, in answer to a question from Mr. James, stated that the Metropolitan Board of Works is about to consider whether, notwithstanding the difficulties in the way, any steps can be taken, by introducing a Bill, or otherwise, to remove the "ventilators" now being erected in Victoria Street and on the Embankment.

Friday, March 16th.

Public Health (Ireland) Act, 1878.—Mr. W. CORBET asked the Chief Secretary to the Lord Lieutenant of Ireland whether, under the Public Health (Ireland) Act, 1878, 41 and 42 Vic., c. 52, s. 149, it was the duty of the Local Government Board to make regulations for the prevention of the spread of infectious diseases, and for the speedy interment of the dead; whether the Board fulfilled the requirements of the Act in the case of Bartholomew Roe, who died recently in Dublin of malignant fever, and over whose remains a wake was held for two days and two nights.—Mr. TREVELYAN: Section 149 of the Public Health Act gives the Local Government Board the powers mentioned only in case of the existence or apprehension of any formidable epidemic or outbreak of infectious disease. Its provisions are not applicable in a case like that under consideration. This case has been specially inquired into by a medical inspector of the Local Government Board, and his report shows that the propagation of the fever appears to have been mainly caused by the concealment of the disease by the first families attacked. There is no evidence to show that any cases were attributable to the wake. Seventeen cases occurred in the court where Roe lived; there were three deaths, and twelve children had been left orphans.

Murder at Dundrum Asylum.—Mr. W. CORBET asked the Chief Secretary to the Lord Lieutenant of Ireland whether his attention had been called to the murder of a lunatic in the Central Criminal Asylum at Dundrum by a fellow-patient, and whether he would lay the report of the inquest and the finding of the jury upon the table of the House.—Mr. TREVELYAN: This matter is at present the subject of official investigation; but the facts are not fully before me, and I cannot say whether I shall be prepared to lay the papers on the table of the House.

HOSPITAL AND DISPENSARY MANAGEMENT.

FARRINGDON GENERAL DISPENSARY.

THE annual meeting of the Farringdon Dispensary and Lying-in Charity took place on February 20th, at 17, Bartlett's Building, Holborn. Mr. C. J. Lacy occupied the chair, and there were present the Rev. J. Jackson, M.A., Mr. Noble Smith, Mr. Slater, Mr. Ellis, Mr. James Lewis (Honorary Secretary). The report was read by the Chairman. It stated that the number of attendances had increased during the year to 37,244, from 32,746 in the previous year; this proved not only the usefulness of the institution, but the estimation in which it was held by the poorer classes. Two hundred pounds was added to the funds of the institution by the dinner over which Alderman Sir J. W. Ellis (the Lord Mayor) presided; and £50 resulted from a theatrical performance at St. George's Hall, Langham Place. The medical re

as of a most satisfactory character. The Chairman, in moving the doption of the report, said that they had greatly increased in use-lness, and their Dispensary would compare favourably with any London. This, to a great extent, was owing to the popularity of e medical staff. Mr. Slater seconded the proposition, and the port was adopted. Votes of thanks having been presented, Mr. acy was re-elected Treasurer, and Mr. Lewis Honorary Secretary. r. Noble Smith acknowledged the vote of thanks to the medical ficers. A vote of thanks was presented to the Chairman, and the oceedings closed.

THE WOLVERHAMPTON GENERAL HOSPITAL.

HE thirty-fourth annual report, for 1882, shows that, during the ar, there had been 1,238 in-patients, 716 of whom, as accidents or ry urgent cases, were admitted without tickets. The number dis-arged cured or convalescent was 1,018; 42 were incurable, or left r special reasons; 84 died; and there were 94 remaining at the end the year. Among these were 54 cases of fever, or other infec-ous diseases; 38 cases had been admitted to the women's ward, d 155 to the children's ward, which was used for all patients under n years of age. The out-patients for the year numbered 10,526, of hom 3,461 were treated without tickets. The following statement ve a comparison of the average cost per head and per bed occu-ed during the past three years, the figures relating respectively to e average daily number of in-patients, the cost per head, the cost r bed occupied, and average stay in the hospital: 1880, 114, 4 7s., £52 5s. 9d., 33 days; 1881, 114, £4 2s. 2d., £50 1s. 1d., 33¾; 82, 105, £4 16s., £56 13s. 3d., 32¼. The cost per out-patient in 80 was 2s. 3d.; in 1881, 1s. 10d.; and in 1882, 2s. The expendi-re of the year had been more than usually heavy, owing to the cessity for a special outlay of £330 upon the painting and reno-tion of the interior of the hospital. The year's receipts were £143 low those of the previous year. The two chief sources showing e greatest diminution were extra tickets and donations. These re, respectively, in 1880, £232 and £193; in 1881, £185 and £190; 1882, £96 and £78. The subscription-list showed a decrease of 0, and the amount of the Hospital Sunday collection was lower an that of any previous year. The Hospital Saturday contribu-ns amounted to £2,113 19s., as against £2,152 7s. last year. The tal receipts, including a small balance from 1881, had been £6,774, d the expenditure £6,901, leaving an adverse balance of £126 18s. e report further stated, that a legacy of £1,000 had been paid, as bequest, from the estate of the late Mr. Pugh. Almost the last act Mr. Pugh's life was the foundation of the Edward Pugh Convalescent Charity, in connection with the hospital, for sending convalescent patients to a sanitarium at Rhyl; he also gave to the stitution the building which contained the Bell Medical Reference brary. The work of the out-patient department, which gave rise much anxious consideration in the early part of last year, is now soothly and satisfactorily carried on, under the supervision of Dr. nry Malet, who was selected to fill the newly created office of ysician to out-patients, with an annual honorarium of £100.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

We have been much impressed by events which, unhappily, have been forced upon our notice of late, and which, unless the apparently increasing tendency to them is promptly checked, will not only be the occasion of much mischief to the profession as a whole, but will more than anything else stand in the way of the attainment of that general consensus of professional opinion as to the principles on which an amended Public Health Act should be based, without which such an Act would be of little practical value. We allude to the practice indulged in by some medical officers of health of imputing to their published reports or otherwise, unworthy motives to the medical men of their own or other districts, or to individual members of the profession whom they single out by name, if the opinions of such happen to be obnoxious to them.

We are fully alive to the delicate nature of the important duties of the medical officer of health, and to the need which he has for the sympathy and support of the profession at large in his efforts efficiently to discharge them. But the more delicate and difficult his duties the greater should be the incentive to the exercise of tact and patience, and, whatever the difficulties naturally incident to the office may be, they must surely be vastly increased by the rash imputation of motives to, or laying of charges against those of his professional brethren who are unable to see eye to eye with him on serious questions affecting the public health.

The whole profession of medicine should be one and undivided, and anything which tends to promote schism within, and to set class at variance with class, is deeply to be deprecated.

In our number for January 20th, we published a long correspondence between Drs. Davidson of Liverpool, and Littlejohn of Edinburgh, arising out of statements published by the latter gentleman, which reflected injuriously on the motives of the members of the profession in Liverpool and Dublin for their opposition to the compulsory notification of infectious diseases by medical men. A little later Dr. Littlejohn expressed his regret for having used the words, and we trusted that the mere publication of the correspondence, without note or comment of any kind, would in itself be sufficient to prevent other medical officers of health from allowing themselves to be betrayed into similar errors. Such, unfortunately, has not been the case, and two conspicuous instances of departure from the safe rule of courteous respect for the motives of opposition having recently been before us, we feel bound to notice them and to point out how injurious to the interests of the public health service of the country they must prove if generally followed, and how detrimental they also are to those of the very men who indulge in them.

The first of these relates to Liverpool. "Pursuant to the resolution of the Health Committee of January 11th, 1883," as we learn from a copy of the report in our hands, "that the medical officer of health report to the special meeting of the committee upon the whole subject of dealing with infectious disease, and that he submit any suggestions he may have to offer on the matter;" that gentleman drew up a somewhat lengthy report, which was printed early in February, and which, so soon as its contents were known, excited a good deal of not unjust indignation in the minds of the profession of the city to which it referred, and we are not surprised to learn that that feeling of indignation found expression in the following protest which was submitted as a resolution, and passed at a largely attended meeting of the Medical Institution on the 8th inst.

"The Medical Institution having had under its consideration the following words, which form a portion of a recently printed report, by the medical officer of health, on the subject of dealing with infectious diseases—viz.: 'There must surely be some strange misunderstanding or influence at work to render them'—*i.e.*, the medical men of Liverpool—'deaf to the cries of their suffering fellow-creatures, and forgetful of the dignity of their noble calling,' declares that it is entirely unwarrantable, and without excuse, that, because the medical profession of this city has taken a different view from the medical officer of health, as to the most efficient means of preventing the spread of infectious diseases, he should publicly brand them in such terms; and it states, that language of this kind, especially when employed by the chief public officer of a sanitary authority, must tend to interfere with those harmonious relations between medical men and that authority, which, in the interests of the public health, it is most desirable to maintain unbroken."

As was stated, in a letter from Dr. Davidson to Dr. Littlejohn, which we published on January 20th, "the protest of the medical profession of Liverpool against the proposed compulsory notification of infectious diseases was almost unanimous, and was based on grounds of public policy. The protest emanated from the Medical Society of the town, and was supported not only by those who were engaged in family practice, but by nearly every hospital physician and surgeon." In view of these facts, which must of course have been known to Dr. Taylor, we cannot help thinking it a matter for the deepest regret that he should have allowed himself to employ expressions so justly capable of exciting irritation and indignation as those to which the protest of the Medical Institution refers, and we fully believe that he himself, like Dr. Littlejohn, will share our regret when he reflects on the full significance of his language. It is much better, however, to avoid all occasions of offence than to indulge in regret after they have arisen, and no class of men should bear this more constantly and strongly in mind than medical officers of health.

The second of the two instances to which we referred, as having come to our notice, occurs in a Report by the Medical Officer of Health for Nottingham. This report is on the subject of the notification of

infectious diseases, concerning which there is so much difference of opinion in the profession—a difference which appears to be very strongly manifested in Nottingham, as well as in many other towns. At page 6, the medical officer of health, referring to the volume of evidence collected by deputations from the Liverpool Health Committee, uses the following words: "I have read this through carefully; and, setting aside statements which are without foundation, beside the mark, and calculated to be misleading, and also those which are obviously untrue (as, for instance, that of Dr. Brookhouse, who said that the fatality of the present epidemic of small-pox was greater than that ten or eleven years ago, when it was, in reality, only about one-tenth as great)," etc.

Even if the ground for such a charge as that conveyed in the above words had been plain and unmistakable, we should have considered any medical officer of health to be very ill-advised, and greatly lacking in discretion, who should use them in a public report, or even privately. But, so far as we are able to see from Dr. Seaton's own attempted justification of them, they are wholly inexcusable. In a foot-note, he says: "The following are the exact words used"—*i.e.*, by Dr. Brookhouse—"I think I am correct in saying, that this epidemic of small-pox was greater than the one which occurred in 1871, when we had not the same facilities. I think this has been a more extensive and severe epidemic than that of 1871-72, which was just the time of the appointment of the medical officer of health." (Page 217, Question 877, City of Liverpool Notification of Infectious Diseases Evidence.)

But, surely, there is nothing whatever in this reply to warrant the serious accusation of "obvious untruth" being founded on it. At most, it is but the expression—and, as it seems to us, the somewhat cautious and qualified expression—of an opinion; and the word "fatality," on which the medical officer of health lays so much stress, does not even so much as occur in it. Publicly, therefore, to charge any one whatever, and much more one who, like Dr. Brookhouse, holds the honourable position of physician to the infirmary of his town, with being guilty of "obvious untruth," on such insufficient grounds, is calculated to give just and serious offence—not only to the gentleman more immediately interested, but to the profession generally; and we venture to hope that the result of our having noticed these official indiscretions may be, that the medical officer in question may follow the example of Dr. Littlejohn, and offer an apology, which, we believe, would be generously accepted; and that the united profession, sinking all class differences, may work with one mind and will, to make our country occupy the foremost place sanitarily, of all countries in the world.

THE HEALTH OF DUMFRIES.

SIR,—The somewhat bald contradiction given by Dr. Thompson* to the statements on this subject, contained in a paragraph in your issue of the 17th ultimo, can scarcely be regarded as altogether satisfactory. No doubt he is correct in stating that, at the date of publication of the paragraph referred to, there was not a single case of fever in the infectious wards of the Dumfries and Galloway Royal Infirmary or in the town; but it is certain, if public rumour may be trusted—and there is nothing else to trust to, when authoritative returns are not published—that the number of cases which you mention were under treatment very shortly before that date. It would be interesting and instructive to have a complete enumeration of the cases that have occurred during the epidemic of typhoid fever in Dumfries, if, indeed, it be permissible to say that there has been any epidemic there; for a local paper which is very indignant with you for your remarks, flatly denies that there has been any epidemic, but only "numerous instances of both typhoid and typhus fever" during the last twelve months.

Dr. Thompson says that the Dumfries epidemic has been traced to its source, but he does not indicate that source. From the local papers, however, we learn that the medical officer of health attributes the fever to overcrowding and unsuitable habitations, which, it need scarcely be pointed out, are not commonly recognised as sources of typhoid fever.

It is not denied that the sewage of a village flows directly into Lochrutton, from which the Dumfries water-supply is drawn; but it is explained that there is a bywash between the inlet of sewage and the rose where the water for the town is drawn off, and that the water is subjected to filtration. A bywash is, however, a treacherous protection in a reservoir in which the water is subject to constant and considerable fluctuations in height; and experience clearly shows that filtration through simple sand (and that is the process adopted at Dumfries) will not make impure water safe to drink. If I read your paragraph aright, however, you only suggested the water-supply as a possible vehicle for the dissemination of the typhoid poison, and did not affirm that that might not have been distributed in other ways.

Few medical men will differ from the practical lessons which your paragraph enforced; 1. That a full history of the Dumfries epidemic should be published; 2. That its origin should be inquired into by someone skilled in sanitarian research; and, 3. That sewage should not be allowed to flow into the small lake from which the town's water-supply is drawn.—I am, etc., A GALLOVIDIAN.

* Dr. Thompson's name was by error printed as "Dr. Thompson Mott" in the article referred to.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES, WEST DERBY.

DR. W. CARTER, the Medical Officer of Health for West Derby, in his last report, after giving details regarding the infectious diseases which occurred in the district, adds—"I have to again express my belief that the medical men practising in the district are in all cases eager to avail themselves of the facilities for disinfection offered to them by the Local Board through its officers and stoves. They—that is, the medical men—are ever ready to send intimation so soon as, in their judgment, an inspector's services can be of advantage to them in limiting the spread of disease. And I again desire to express my deliberate conviction that any change in the law, in the direction of making early notification compulsory on medical men, would, by disturbing the harmonious relations at present existing between them and the medical officers of health, and by causing the poorer classes of people to delay applying for medical aid, tend to promote the spread of disease."

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BLACKPOOL.—It is not easy to understand why the authority of this district should choose to have their health-officer's report elaborately lithographed, when it might have been issued at less cost in the far less cumbrous shape of a printed pamphlet. If their object be to deter any one from perusing the report, they may rest assured that their object has been abundantly accomplished. Dr. Lesli Jones, the health-officer, has apparently done his best under the very special circumstances of Blackpool, which is annually visited by thousands of pleasure and health seekers from the teeming towns of Lancashire. The place has compulsory notification of infectious disease, but its sanitary hospital is quite insufficient, and it has no disinfecting apparatus. Under these circumstances it is small wonder if the combat with infectious disease is carried on by the health-officials at very serious odds. Dr. Jones reports that in 18[illegible] there were 265 deaths registered in Blackpool. Deducting, however, the deaths not properly due to the district, the mortality rate represents 15.8 per 1,000 living. Amongst zymotic disorders, which were fatal to 21 persons, whooping-cough was very prevalent, its spread being attributed to the fact that many children were brought there while in an infectious state, in the hope that the change of air would secure a speedy cure. Seven deaths were certified from diarrhœa, all occurring in infants under one year of age. To phthisis 25 deaths are referred, while chest diseases account for 45, and heart disease for 23. The sanatorium already mentioned is limited to the reception of only one kind of infectious disease at one and the same time, and its construction and situation are both unfavourable. Having regard to this, the health-officer recommends that the present sanatorium should be kept for a small-pox hospital only, and that a proper hospital, built on a suitable site, should be constructed without delay for the reception of other infectious diseases. It is to be hoped that the authority will see fit to adopt Dr. Jones's excellent suggestion, inasmuch as health-resorts are peculiarly liable to the importation of infectious disease. A special word of commendation is due to Dr. Jones for the diagram illustrating the mortality from diarrhœa, and the meteorology registered during 1881.

BENWELL AND FENHAM.—During 1881 there were 88 deaths registered in this district, which, based upon a population of 4,[illegible] represents a death-rate of 18.0 per 1,000. No fewer than 30, or [illegible] per cent. of the whole, were children under one year of age, a mortality which the health-officer attributes partly to the difficulties and trials which the children of a labouring population have to undergo. Thirteen deaths were caused by zymotic diseases, including two from typhus, two from scarlatina, five from whooping-cough, three from diarrhœa, and one from diphtheria, the total representing a zymotic death-rate of 2.7 per 1,000. An outbreak of typhus visited the district; eight cases out of ten occurred in one house. The absence of any hospital accommodation for isolating initial cases of infectious disease was sorely felt during the outbreak, and as the subject has been amply discussed and admitted by the sanitary authority, it is to be hoped that they will no longer hesitate to [illegible] this important provision.

LIBRARY OF THE UNIVERSITY OF ILLINOIS

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 15th, 1883.

Smith, John Charles, Gillingham Street, Pimlico, S.W.
Williamson, Herbert Holdrich, Mildmay Park, N.

MEDICAL VACANCIES.

The following vacancies are announced:

THLEM HOSPITAL.—Two Resident Medical Students. Applications by April 7th.

MINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Assistant Physician. Applications by April 6th.

B COPPER MINING COMPANY.—Assistant Surgeon. Earnings guaranteed, £225 per annum. Applications to the Secretary, 6, Queen Street Place, E.C.

ARING CROSS HOSPITAL.—Assistant Physician. Applications to the Medical Committee by March 24th.

ARING CROSS HOSPITAL.—Assistant Physician-Accoucheur. Applications to the Medical Committee by March 24th.

CHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by April 7th.

NTY LUNATIC ASYLUM, Burntwood, near Lichfield.—Assistant Medical Officer. Salary, £120 per annum. Applications at once.

RLINGTON HOSPITAL.—Junior House Surgeon. Salary, £100 per annum. Applications to C. I'Anson, Esq., Fairfield House, Darlington.

NERAL INFIRMARY, Hertford.—House-Surgeon and Secretary. Salary £100 per annum. Applications to the Secretary.

LLOWAY AND NORTH ISLINGTON DISPENSARY.—Surgeon. Applications to the Honorary-Secretary, care of Resident Medical Officer, Dispensary, Palmer Road, Holloway, N.

NT COUNTIES ASYLUM, Carmarthen.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications to the Medical Superintendent by March 30th.

ERPOOL INFIRMARY FOR CHILDREN, Myrtle Street.—Assistant House Surgeon.

ERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum. Applications by March 31st.

NCHESTER ROYAL INFIRMARY, DISPENSARY, AND LUNATIC HOSPITAL OR ASYLUM.—Honorary Assistant-Physician. Applications by March 31st.

YAL ACADEMY OF ARTS.—Professor of Anatomy. Applications to the Secretary, Piccadilly, by March 24th.

ST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, Welbeck Street, W. Assistant Physician. Applications to P. F. Proctor, Secretary.

MEDICAL APPOINTMENTS.

EY, Other Windsor, M.R.C.S.Eng., L.S.A., appointed Surgeon to the V Division of the Metropolitan Police, *vice* Walter Chapman, F.R.C.S., resigned.

H, J. Paul, M.R.C.S.Eng., appointed House-Surgeon to the Bristol Royal Infirmary.

, R. F., M.R.C.S., appointed Resident Medical Officer to the Westminster General Dispensary.

ACK, R., L.R.C.S.I., appointed Medical Officer to the Cashel Union.

NS, J. Fenton, M.B., appointed House-Physician to the Bristol Royal Infirmary, *vice* J. P. Bush, M.R.C.S.Eng.

OBRYAN, H. C., appointed Assistant Medical Officer to the Middlesex County Lunatic Asylum.

RRISON, J. T. J., B.A.Cantab., M.R.C.S.Eng., appointed House-Surgeon to Guy's Hospital.

YNAN, W. M.D., appointed Assistant Medical Officer to the Wonford House Hospital for the Insane, *vice* S. S. Noakes, L.R.C.P., resigned.

RRAY, H. M., M.B., appointed Medical Registrar to the Charing Cross Hospital.

E, C. J., M.R.C.S., appointed Administrator of Anæsthetics to the Metropolitan Free Hospital.

ORD, J., M.R.C.S., L.R.C.P.Lond., L.S.A., appointed Senior House-Surgeon to the Metropolitan Free Hospital, *vice* W. Alpin, M.R.C.S., L.R.C.P., resigned.

N, R., L.R.C.S., appointed Resident Assistant Medical Officer to the West Derby Union.

ER, J. C., M.B.Camb., M.R.C.S., L.R.C.P.Lond., appointed Assistant House Surgeon to the Metropolitan Free Hospital, *vice* S. Butterworth, M.R.C.S. Eng., M.R.C.P.Edin.

NLEY, L. P., L.R.C.S., appointed Medical Officer to the Athlone No. 2 Dispensary District, *vice* H. H. Langstaff, M.B., deceased.

RAR, W. M., L.R.C.S., appointed Junior House-Surgeon to Carlisle Dispensary, *vice* F. Shearer, M.B., resigned.

ALL, J. J., L.R.C.S., appointed Resident Assistant Medical Officer to the West Derby Union.

TLOCK, A. W. F., L.R.C.S., appointed Medical Officer to the Walsingham Union, *vice* R. H. Foot, M.D.

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's return, for the week ending the 10th instant, that the death-rate recently averaged 36.3 per 1000 in the three principal Indian cities; it was 33.2 in Bombay, 36.0 in Calcutta, and 39.4 in Madras. Small-pox caused 88 deaths in Bombay and 8 in Madras, while 38 fatal cases of cholera were recorded in Calcutta; "fever" showed the largest proportional fatality in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-two of the largest European cities, was 28.9, and was no less than 5.9 above the mean rate in the twenty-eight large English towns during the week. The death-rate in St. Petersburg was 40.3, and showed an increase upon the high rate in the previous week; the 718 deaths included 33 from diphtheria, 23 from enteric fever, and 14 from small-pox. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 25.9, ranging from 18.3 in Christiania to 28.4 in Copenhagen; measles caused 14 more deaths in Stockholm, and whooping-cough 6 in Copenhagen. The death-rate in Paris was equal to 26.5, and showed a further decline from the rates in recent weeks; the deaths included 46 from diphtheria and croup, 29 from typhoid fever, and 10 from small-pox. The return from Brussels showed a death-rate of 25.0, the deaths including 5 fatal cases both of small-pox and "fever." The rate in Geneva did not exceed 20.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.5, the highest rate being 29.8 in Rotterdam; small-pox caused 3 deaths in Rotterdam, and diphtheria 6 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.3, and ranged from 23.1 and 24.7 in Dresden and Berlin, to 32.7 and 34.8 in Munich and Prague. Small-pox caused 3 deaths both in Vienna and Buda-Pesth; diphtheria showed fatal prevalence in most of these German cities. In three of the principal Italian cities, the death-rate averaged 30.6, and ranged from 28.3 in Turin to 33.3 in Venice, Small-pox caused 2 deaths in Turin, and diphtheria 6 in Rome. The death-rate was equal to 21.2 in Philadelphia, and 26.1 in Baltimore. Small-pox caused 51 deaths in Baltimore, and typhoid fever 11 in Philadelphia. Diphtheria showed fatal prevalence in both these American cities.—The statistics for the week ending March 17th, show that the death-rate recently averaged 35.9 per 1000 in the three principal Indian cities; it was equal to 34.9 in Bombay and 39.9 in Madras. Small-pox caused 94 deaths in Bombay and 7 in Madras; "fevers" were most fatal in Madras. According to the most recent weekly returns, the average annual death-rate, per 1000 persons estimated to be living in twenty-three of the largest European cities, was 29.9, and was no less than 5.4 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 41.8; the 744 deaths included 14 fatal cases of small-pox and 19 of scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 23.7, and ranged from 9.4 in Christiania to 28.6 in Stockholm; measles and scarlet fever each caused 5 of the 96 deaths in Stockholm. The death-rate in Paris was equal to 28.1, and the deaths included 38 from diphtheria and croup, 30 from typhoid fever, and 13 from small-pox. The 205 deaths in Brussels included 5 fatal cases of small-pox, and were equal to a rate of 25.2. The rate in Geneva did not exceed 19.3. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the death-rate ranged from 15.9 in the Hague to 34.9 in Rotterdam, and averaged 27.1; small-pox caused 6 deaths in Rotterdam, and diphtheria 4 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.8, ranging from 24.9 and 25.6 in Dresden and Berlin, to 37.6 both in Prague and Trieste. Diphtheria showed fatal prevalence in most of these German cities, especially in Dresden and Berlin. The mean death-rate in three of the principal Italian cities was equal to 30.5, the highest rate being 31.0 in Rome; scarlet fever caused 3 deaths in Turin. In four of the largest American cities, the mean death-rate was 24.4; the rate ranged from 20.7 in Philadelphia to 25.3 in New York. Small-pox caused 25 deaths in Baltimore and 6 in Philadelphia. Scarlet fever and diphtheria showed fatal prevalence in most of these American cities.

MR. JESSE GOULDSMITH, of Rowell Hall, has offered to give £1,000 in cash to the Trowbridge Cottage Hospital, or to erect a new building. The committee have gratefully accepted the latter offer, and plans are to be prepared immediately.

MEDICAL MAGISTRATES.—Dr. James Yates has been placed on the commission of the peace for Oldham, and Mr. William Berry for Wigan.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Herbert Page On Subperiosteal Hæmorrhage, probably Scorbutic, of Three Long Bones in a Rickety Infant. Dr. T. Barlow: Cases of So-called Acute Rickets in Children. Combination of Rickets and Scurvy.

WEDNESDAY.—Hunterian Society, 8 P.M. Mr. Rivington: Case of Removal of Loose Cartilage from the Knee-Joint. Mr. Charters J. Symonds: On the Use of Martin's Bandage in the Treatment of Synovitis; and Case of Peculiar Eruption on Sole of Foot, probably due to Congenital Syphilis. Dr. Port: Case of Mediastinal Tumour.

FRIDAY.—Clinical Society of London. Mr. R. W. Parker: Contused Wound of the Thigh and Leg; Gangrene of the Limb; Death. Mr. Spencer Watson: On a Case of Tetanus. Mr. Howard Marsh: Tetanus following Laceration of the Toes, and persisting Forty Days; Recovery after Syme's Amputation. Mr. Barwell: On the Removal of Large Portions of the Upper Lip, without Deformity of the Face. Mr. H. Marsh will exhibit a Case of Osteitis Deformans.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE PROPOSED TESTIMONIAL TO DR. A. H. JACOB.

SIR,—It has recently been suggested in your columns, as well as by direct communications with myself, that the profession—especially the Poor-law medical officers of Ireland—should offer to me some substantial expression of their appreciation of the services which, in years past, I have been able to render to defence of their interests. I have, hitherto, thought it best to abstain from public notice of this very kind suggestion; but, as it is again renewed, I feel that I ought to interpose before further action is taken.

I am greatly gratified with the assurances which I have received that my public work is considered worthy of recognition; and this appreciation of my humble efforts is an encouragement to perseverance, for which I warmly thank those who have spoken so kindly of me; but I must, nevertheless, deprecate (at least for the present) any further movement in the direction of a testimonial to me. I feel that I have not yet legitimately earned the esteem or gratitude of my profession, and that my work in their behalf is not yet nearly complete. If I should be able to continue, for some years to come, to do battle for their rights as public servants, and to labour with success towards raising the educational and social status of the profession in Ireland, I may some day, hope to deserve the thanks of my brethren; but, as yet, I am too young, both in years and in service, for any public recognition of my work.

The success of the movement for securing adequate pensions for Poor-law medical officers, to which I have gladly devoted myself, is, I am glad to think, not far distant; and I have every hope that other objects, almost as important for which my co-agitators have worked with me in years past, are likely to follow. Until the campaign is over, it is too soon to think of rewards.—Yours etc.,

ARCHIBALD H. JACOB, M.D., F.R.C.S.I.

23, Ely Place, Dublin, February 28th, 1883.

SAD CASE OF A SURGEON'S WIDOW.

SIR,—In closing my appeal fund on behalf of Mrs. Stephens, may I acknowledge the receipt of the following sums: Dr. Gardiner, £1; T. Smith, Esq., £2 2s. "Beta," £1 1s.; Mr. and Mrs. Corban, £2 2s., and warm cloak from Mr. Ireland. Mrs. Stephens desires to express with me her sincere thanks to all those who so kindly have assisted her in her afflicted state.—I am, sir, your obedient servant,

R. G. SALMOND, Secretary.

Clapham Rise, S.W., February 21st, 1883.

A CAUTION.

SIR,—The other evening, a man came to my surgery, stating that he was the agent for a local directory, and that, in the coming issue of it, a list of medical men practising in the district was being made. On my telling him that I supposed my name would be in it, he informed me that a charge was made for inserting names. I replied that I was prevented from paying for anything of the sort, by the unwritten law of the profession. He suggested that I should subscribe for two or three copies of the directory, and then my name would be inserted. I immediately showed him the door.

May I ask you whether I was right? for I find that all the medical men in the neighbourhood have done as the man suggested—viz., either paid, or subscribed for copies.—I am, sir, yours truly,

ETIQUETTE.

CRAMP.

SIR,—In answer to "Query," I would suggest raising the head of his patient bed seven or eight inches; not by multiplying pillows, for this is useless, but by placing a large book under the top part of the bed, so as to make the whole an inclined plane, the object being to give fuller play to the circulating fluid. Doubtless, the reason why women suffer so much more from cramp than men is because their daily lives are much more sedentary. When men rest they throw themselves into an arm-chair, and stretch their limbs out to the fullest extent. Women, on the other hand, almost invariably sit with their bodies in a series of right angles, thus checking in a measure the circulation through the vessels of their system, congesting the portal veins, and causing general nerve-irritation. I find a pill at bedtime of soda, henbane, and camphor, useful after the digestive organs have been attended to; but I should like to have a few hints myself as to the more permanent relief of hereditary cramp, for this is a complaint for the cure of which one can get but little "kudos" from grandmothers, mothers, and daughters.—I remain, sir, yours faithfully,

HARVEY J. PHILPOT

14, Finsbury Circus, E.C.

THE SALICYLATES IN PNEUMONIA.

SIR,—In the treatment of pneumonia, I have found the salicylate of soda very useful. I have used it in all the stages, and have found that the powerful diaphoresis which it produces relieves the breathing, cleans the tongue, restores the secretion of the nasal mucous membrane, and promotes sleep. In some cases the inflammation rapidly subsides under its influence. It is sometimes necessary to combine a little digitalis and ammonia with the salicylate, owing to its depressing action upon the heart.—I am, sir, yours faithfully,

C. R. ILLINGWORTH, M.D.

Clayton-le-Moors, Lancashire, February 23rd, 1883.

The Prevalence of Syphilis.

,—My attention has been drawn to a letter in the British Medical Journal f February 24th, from Dr. Patterson, surgeon to the Lock Hospital at Glas-ow, in which, after referring to some points in the evidence I gave before the arliamentary Committee on the Contagious Diseases Acts, he inquires: Now, after reading the evidence, I should like some one to say who the par-es are who are protected by the Contagious Diseases Acts? Clearly it is not ie soldier, and still less is it the prostitute." Now, sir, I do not object to my vidence being criticised, and my inferences from it being tested, provided he references to the former give my meaning fairly, and the conclusions be orrectly wrought out. In the present instance, Dr. Patterson has done either. He has given Question 1800, put by Dr. Cameron, and 1804, put by fr. Fowler, with the replies, and following the last, the reply to Question 803, but without the question itself, which was by Mr. Osborn Morgan; it as—1803. "You mean that there is a slightly greater chance of catching the rue syphilis as opposed to pseudo-syphilis in the protected stations than in he unprotected?" Answer: "Yes; that in 100 cases you have 36 cases of pri-nary syphilis at subjected stations, instead of 33 at unsubjected stations." he "candid reader" to whom Dr. Patterson appeals, will perceive that this uestion and answer define exactly what was meant, and shut out the infer-nce Dr. Patterson wishes to be drawn from his quotation; and, like myself, fancy he will be curious to learn what reason Dr. Patterson can assign for mitting so essential a piece of evidence. As to the practical application of his fact, in the four years 1870-73, when the Act was enforced at all the sta-ons which came under it, the admissions for primary venereal sores at the rotected stations were 52.5 per 1,000, 36 per cent. of which is 19.0; and at the nprotected stations the admissions were 86.0 per 1,000, 33 per cent. of which s 28.4, or 50 per cent. more than at the protected stations; showing that the hances of contracting true syphilis at the protected and unprotected stations, espectively, were directly the opposite to Dr. Patterson's statement.

Dr. Patterson then alludes to the increase of secondaries to primaries in the tations under the Acts, and those not under them, as shown by comparing he period 1867-72 with 1873-78, and writes as follows: "Question 1817: 'In-rease in the subjected districts 18.6.' Question 1818: 'In the unsubjected dis-ricts it is only 11?' Inspector-General Lanson answers, 'That is so.'" Had Dr. Patterson read questions 1819 to 1821 with the replies to them, he must have een that those numbers contained a fallacy, partly arising from concealment of he primary disease under Lord Cardwell's order stopping men's pay while under reatment for that, and partly from importation of secondary cases due to pri-nary disease contracted in stations not under the Acts to those under them, in reater numbers than were returned from the latter to the former. A question ut by Mr. Stansfeld bears directly on this point; it was 1820, "Almost every one f these figures is affected by this question of importation?" Answer: "That s a most important point to bear in mind in this case. It does not prevent our looking at these returns, but it qualifies every inference that you draw rom them." If now, Dr. Patterson's inference that the evidence shows an ncrease of secondary syphilis at the stations under the Acts be examined into, he numbers indicating the percentage of secondary cases to primary sores, rom which the differences he employs were obtained, are to be found in Re-urn 6B, p. 451 of the evidence of 1881, and in the next column and on the ame line with them, the actual ratios per 1,000 of secondary syphilis to which hey refer. These show that at the protected stations the ratio of admissions or secondary syphilis in 1867-72 was 24.6, and in 1873-78 22.0, a fall of 11 per ent.; while at the unprotected stations, the ratio for the former period was 9.2, and for the latter 30.2, or a rise of 3 per cent. These results, I need carcely point out to the "candid reader," show a reduction of constitutional yphilis (notwithstanding the importation mentioned above), and conse-uently of the infecting sores on which it followed at the protected stations, nd an increase at the unprotected stations; facts altogether irreconcilable ith Dr. Patterson's conclusions.

Robert Lawson, Inspector-General of Hospitals.

London, February 27th, 1883.

A Prescription.

,—Will you, or any member, be so kind as to express an opinion on the ollowing prescription:—℞ Liq. ammon. acetatis ʒi; vini ipecac. ʒjs; liq. mor-hiæ hydrochlor. ʒjs; syrupi acaciae ʒi; aquæ, ad ʒi. What I want to know , was I wrong in placing the "ad" before the ʒi of water? I wished the ruggist to make a two-ounce mixture. If he had put into the two-ounce ottle one ounce of the syrup, and one ounce of the water, then, when he ame to add the two drachms of the other medicines, he would have found hat the two-ounce bottle was already full. Therefore I wrote the prescrip-ion, wishing the druggist to put the one ounce and two drachms of medi-ine first into the bottle, and then fill up with water. I particularly wish an nswer to my question, as when I visited my patient (the young son of an I.A. Cantab.), and asked for this prescription, I found that the druggist had rawn a black ink line through the "ad." If I am wrong, I pray Heaven that he examiners who allowed me to obtain my diplomas, will try to find out if ien know how to write a prescription accurately before giving a degree, and o save them from the reproof of druggists.—Yours etc. A.B.C.

[*,* The active ingredients amount to more than one ounce, and yet the rescriber orders it to be made up to an ounce, which is impossible. If, as ppears from his communication, he wanted it made up to two ounces, he hould have written:—"Aquam ad ʒii." Again, our correspondent's Latinity open to question. The names of the drugs are generally put in the genitive se, for example "℞ zinci sulphatis gr. vi;" take "six grains of sulphate of nc." But when it is wished to order water to make up to so much, the form is Aquam ad ʒj" *i.e.*, "take water (accusative) to one ounce." It is true, in me of the older writers we may find "℞ Aquæ ad ʒj;" but then "quantum fficiat" is supposed to be understood, and the translation would be "take of ater a sufficient quantity to an ounce." But this is a form now very rarely sed. A druggist certainly should not alter or make a prescription; but in is case the prescriber was undoubtedly to blame.

Eruption following the Subcutaneous Injection of Morphia.

—I think "J. M.'s" explanation will prove the correct one. Perhaps "J. M." who must be looked upon as an authority) will state who supply the finest eedles, and also the best places to inject.—I am, etc., A Member.

The Edinburgh Double Qualification.

Sir,—It seems hard to believe that any gentleman belonging to the profession could have written the letter signed "M.D., M.R.C.S.," which appeared in the Journal of February 24th, for in the last paragraph of the letter he says, "I do not wish to run down this diploma"; whereas he not only runs it down, but casts upon it the vilest calumny, and the most culpable insinuations I have almost ever seen written *re* two respectable colleges. Surely he does not for a moment think that any sensible member of the profession would believe that such sterling and upright men as Patrick Watson, Joseph Bell, Henry D. Littlejohn, John Duncan, G. W. Balfour, Claude Muirhead, and D. J. Brakenridge, who are the examiners for the double qualification, would allow men to pass unless they were men fit to practise their profession.

If "M.D., M.R.C.S." were a careful reader of the Journal, he would have seen a table giving the percentage of rejections for the double qualifications, and all the other examinations. A short time since, he would also have seen an answer, signed "M.B.," in the Journal of April 29th, 1882, which would have answered his question and saved the valuable space of this Journal, and also prevented a most uncalled for hostility against two colleges, which every honest member of the profession respects. Doubtless, the reason why many men go to Edinburgh for the double qualification is, that the colleges accept the "primary" of all examining boards, and poor students can get a double qualification at one examination for a fee of £21. If there were joint boards in England and in Ireland, students would not flock to Edinburgh. Because the Scotch colleges have been wise in their generations, it is no reason why "M.D., M.R.C.S." should cast such reflections upon them as "selling their diplomas." Was his examination merely a farce? Is he sure that, when applying for the appointments, the authorities did not wish to be rude to him, and so cast the blame on his qualifications?

I have found through life that it is to the man, not his qualifications, that people look. Of course, there are some prejudiced bodies who do not acknowledge Scotch qualifications, as there are others who make it compulsory for a man to be an apothecary.—I am, sir, yours very faithfully, M.D.Eng.

Sir,—The letter signed "M.D., M.R.C.S.," in your issue of February 24th, has recalled to my mind some other letters and passages in the British Medical Journal, reflecting in scornful terms upon the examiners for the double qualification at Edinburgh. Your correspondent seems much distressed at "this perpetual rushing of plucked students from almost all the quarters of the globe to Edinburgh; there gaining a qualification immediately, after having failed a few days previously at their own college or university."

Your correspondent writes that he holds that those "who have studied diligently at Edinburgh for their four years, and who take the double qualification, are fair practical men;" but he intimates his belief that the examination of those who have already been rejected elsewhere, and "can afford to run up to Edinburgh," is a farce. He does not know how many are rejected; though, without knowing this, it is somewhat rash to call the examination at Edinburgh a farce. Apparently, he holds that a student rejected before one board should be rejected by any other board of examiners; and that the mere fact that, in Edinburgh, some students succeed in getting a licence who have failed at London or elsewhere, is conclusive evidence that the Edinburgh examiners have failed in their duty. In all probability, the majority of the students who are rejected do not deserve a better fortune; but, as one of the sides of the question is likely to escape attention, I shall ask your readers to consider it a little.

Are the examiners whom your correspondent delights to honour so infallible that there is no chance of them ever making a mistake? If the student, in place of going to Edinburgh, could so transform his appearance as at once to go again before the same examiners, might he not get questions which he could successfully answer? In general, the field of examination is so wide, that no man can mass every part of it in his memory, and the most proficient are thus liable to be taken at a point which they have neglected. Examiners are fallible men; and their claim to test the knowledge which a candidate has gained during years of study by a few minutes' questioning, is not, perhaps, the unfailing method of assaying they would have us to believe. Examiners are quite irresponsible; and it is difficult to see how they could be made responsible without doing more harm than good. But is it expedient that there should be no appeal? Apparently, this is what is desired. A student, thinking that he has met with injustice at a medical examination, goes to Edinburgh, perhaps contenting himself with a less honoured diploma, though equal in the eye of the law, and he is successful. The new licentiate returns jubilant; the old examiner is wroth with a disinterested indignation that an unfit man has a licence for killing with impunity, and possibly with a secret feeling that the justice of his own verdict is exposed to suspicion. I myself do not hold the double qualification of Edinburgh, being a graduate of its University, and never was an examiner; but I have heard it said that the examination for the double qualification of the Colleges of Physicians and Surgeons is a good practical test of a man's knowledge of medicine, and that candidates are not unfrequently rejected. The examiners are generally well known medical men, and are, as far as I know, as likely to do their duty as any others. It is understood that they are more inclined to confine their questions within subjects which have a near bearing upon the healing art, and on anatomy and physiology; and until it can be proved that their examination is so lax that it does not fairly provide against the entry of men who would be unsafe practitioners, I think your correspondents might find something better to do than trying to depreciate a diploma which is held by many worthy medical men. Perhaps, too, the view acted upon by the Edinburgh medical colleges may be the most judicious one. There is a widely diffused feeling that serious defects exist in the present system of examination for degrees and diplomas; that in many schools the time and labour of the student is wasted in committing to memory a load of useless formulæ or facts, which have no real bearing either upon his mental cultivation or his future career. Before he is allowed to approach the study of medicine, his ardour is spent, and his memory sickened by the dreary amount of cramming which he has to go through; and he soon sees that he must cram; for, on looking over what is demanded of him, it seems clear that not the intellect of Aristotle himself could gain a real, as distinguished from a book knowledge of many of the subjects prescribed, in the time generally allowed for them. I think that a little criticism of the medical curricula drawn up by the Universities and Colleges, might be now and then useful in the interests of common sense, and that an occasional examination of the examiners might, perhaps, help them better to discharge their important duties to the public.—I am, etc.,

Cornelius.

How Infection is Spread.

SIR,—At the meeting of the Westminster Sanitary Association, Mr. Ernest Hart, and also, I believe, other speakers, alluded to the practice of allowing healthy children to be exposed to infection from measles, scarlatina, whooping-cough, etc., where the actual patient had only a mild attack. This practice was spoken of as being one followed by ignorant people of the Mrs. Gamp order, who were under the impression that, it being a necessity for all children to have such complaints, they had better catch a "good sort." I should like to say that Mrs. Gamp's is not the only class that still holds this opinion; for I know of a case during the past year in which, one child out of five having a slight attack of scarlatina, the medical attendant advised that they "might as well all have it, and get it over." Not only was this done, but two gentlemen in the house who were with the sick children, nursing and playing with them, went to town daily by train, and even to places of public amusement, while the fever was in the house. The medical man in this case is the local officer of health; so, of course, he cannot be an ignorant person; and no harm followed in that house.

I fear Mr. Hart might find fault with the notion of taking a family of children for their first airing after an attack of measles into Whiteley's, at the busiest part of the day; but it has been done, and not by an ignorant person.—I am, sir, yours obediently, M. A.

London, S.W., February 26th, 1883.

The Doctor's Carriage.

SIR,—Having had a somewhat unpleasant experience of the mode of carriage-keeping mentioned by a member, I would give him the same advice as *Punch* gave to persons about to marry—"Don't!" Rather sell the carriage, and hire the whole from a jobmaster; but, if a member be unwilling to sacrifice so much, I would earnestly advise him to procure from the jobmaster an undertaking, *in writing*, of all responsibility with regard to accidents; also on no account to employ the same coachbuilder as the jobmaster employs; and, lastly, to give a written intimation to the coachbuilder that he (the member) will not be responsible for any repairs, unless he sends a written order for them to be done. If "A Member" would care for my reasons for this advice, I should be pleased to give them in a private letter to him.—Yours obediently, C. A.

Guide to the Medical Service.

SIR,—Will you allow me to inquire, through your columns, if there be any guide to the public services, other than the Army, Navy, and Indian Medical Services? I allude to the Insane Asylum Service, the Colonial Medical, and Emigration Medical Service; the Local Government Medical, and Sanitary Medical Service; service with the P. and O., and the various shipping companies; mining appointments, etc. The information may, of course, be obtained by applying to the several offices concerned; and, some of it, by looking into Churchill's *Medical Directory*. But, if there be no special guide to them all, I venture to think that one, to include the Army, Navy, and Indian Services, might be prepared, with advantage to the medical public.—Yours faithfully, CHAS. R. FRANCIS.

Clapham Common, S.W., February 24th, 1883.

*** We are not aware that there is any such guide.

Vegetarian Cooking.

SIR,—In reply to "F.R.S.E." in your last issue, I shall be glad to forward him or any other gentleman one of our penny cookery-books on receipt of a couple of postage stamps. It contains over ninety receipts, and is very useful to ordinary mixed feeders, since it shows how many tasty dishes can be prepared without meat. There is a large book on the subject, called *Vegetarian Cookery*, by a lady, price 3s. 6d., which can be got from the Secretary, Vegetarian Society, 56, Peter Street, Manchester.

I should be very glad if any brother medicals who have tried vegetarianism will write me and give me the results of their experiments.—Yours truly,

2, Kingsland Road, E., March 9th, 1883. T. R. ALLINSON, L.R.C.P.Ed.

Spermatorrhœa.

WE have received several replies to the question asked by "Adrift."

Dr. W. J. ADAM (Biggar) recommends the following prescription, which he learnt from the late Dr. Warburton Begbie. R Liquoris strychniæ 3i; acidi phosphorici dil. 3iv; tinct. cardam. comp. 3vi; infusum calumbæ ad 3viii. Half an ounce morning and evening, in a little water, before food.

Dr. W. SMYTH (Banbridge) suggests dilute phosphoric acid, 20 minims; succus belladonnæ, 5 minims; liquor strychniæ 5 minims; infusion of calumba or of gentian one ounce. To be taken morning and midday, and one-fiftieth of a grain of atropia every night at bedtime. The latter he administers in the form of pill, as manufactured by Richardson and Co. of Leicester. As aids to success, he recommends sponging the body with tepid water night and morning, and afterwards rubbing well with a soft fluffy towel. The patient should lie on a hard mattress, with the head high; avoid lying on the back; rise early in the morning, and empty his bladder; and take a fair amount of walking exercise every day. The bowels must be kept regular with two drachms of Rochelle salts in a tumblerful of water, two or three times a week.

Registered Rights.

SIR,—Mr. Rhodes has been made to pay the penalty of his audacity, and will probably find it a powerful stimulus towards obtaining a diploma giving him the "right" to practise. It is hard upon the poor that they should have to submit to treatment from unskilled hands; and, as the Act professes to protect the public as well as the registered practitioners, I think that the latter, who employ the unqualified assistant, exceed their "right," and ought, also, to be made to sing *peccavi*.—Your obedient servant, O.

Condensed Milk and Operations on the Eye.

SIR,—How Mr. Adams could have arrived at the idea that I "attribute cataract in children to excess of sugar," I should be glad if he would explain; for what I stated in my letter of February 17th was, "for this (the condensed milk) was undoubtedly the cause (not of cataract) but of failure (of the operation) in this poor child." It is Mr. Adams that makes "unfounded assertions," when he puts things forward that I have not stated.

In answer to Dr. Lees, there was no rickets or congenital syphilis, and the child was apparently well nourished, and fit in every way for operation.—Yours obediently, EDWARD M. OWENS.

The Hydropathic Establishment, Leamington.

Hyperidrosis.

SIR,—Your correspondent "M.D." will, I think, find the following pill efficacious: Atropiæ sulph. gr. $\frac{1}{120}$; camphor gr. $\frac{1}{4}$; zinc oxidi gr. j; to be taken twice or thrice daily.—I am, etc., H. A. L.

Flatulence.

SIR,—I have found the sulpho-carbolate of soda, in twenty-grain doses, give relief in some cases. Ten minims of tincture of nux vomica may be added, twice or three times a day.—I am, etc., A MEMBER.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. H. Gillam, Bromyard; Mr. W. B. Wall, Pembroke; Dr. G. H. Batterbury, Wimborne Minster; Dr. R. Kirk, Glasgow; Dr. S. Coupland, London; A Member; Mr. C. F. Jennings, London; Dr. W. A. Greenhill, Hastings; Mr. J. Milne Bramwell, Goole; Dr. Carter, Liverpool; The Secretary of the Harveian Society, London; Mr. E. A. Schäfer, London; Mr. J. Laurence Hamilton, London; Mr. E. Fowler Scougal, Huddersfield; Dr. J. L. Carson, Coleraine; Mr. J. Sumner, Sheffield; Mr. Alex. McC. Weir, Nottingham; Dr. R. Reaves M'Cosh, Dundee; Messrs. Loeflund and Co., London; Dr. M. Wilson, London; Mr. B. Strachan, Sunderland; Mr. Robert Hamilton, Liverpool; Mr. W. B. Kilburn, West Auckland, Durham; Dr. A. T. Brett, Watford; Dr. Coleman, Surbiton; Mr. H. Turner, Norwich; Mr. G. Hunn, Willenhall; Mr. Jordan Lloyd, Birmingham; Dr. A. Emrys Jones, Manchester; Mr. Wheelhouse, Leeds; Mr. W. Young, London; Mr. Rhys, London; Mr. George Croxton, London; M.D.; Mr. Edward Bartlett, London; Mr. J. Walter Savage, Hastings; Mr. E. Scudamore Angove, Camborne; Mr. W. Kitto Giddings, Calverley, near Leeds; Dr. Edward Leslie, Alton, Hants; Dr. John Johnston, Bolton; Dr. J. G. Parsons, Bristol; Dr. W. A. Bonney, London; Dr. J. W. Langmore, London; Dr. Thomas Sanctuary, Salisbury; Mr. Headley Gabb, Hastings; Mr. W. Ffennell MacCarthy, Worcester; Mr. Henry Stear, Saffron Walden; Dr. John McKendrick, London; Dr. Mahomed, London; Dr. Leech, Manchester; Dr. Jacob, Dublin; Mr. J. Milward, Cardiff; Dr. Andrew S. Currie, Lydney, Gloucester; Dr. Herbert L Snow, London; Mr. William Fearnley, London; Dr. Kelly, Taunton; Dr. Casey, Windsor; Mr. J. H. Gornall, Warrington; Dr. C. Swaby Smith, London; Mr. G. J. Mahomed, Bournemouth; Mr. T. F. Naven, Broadstairs; Mr. J. E. Wakefield, London; Mr. Septimus Farmer, Hayle; Mr. T. Garrett Horder, Cardiff; Mr. J. Higham Hill, Royton, Manchester; Dr. Manson Fraser, London; Mr. J. H. Fraser, Birmingham; Dr. Oliver, Newcastle Infirmary; Dr. Robert Renton, Liverpool; Mr. John Kennedy, Elie; Mr. Henry Stubbs, Madeley; Dr. G. erbert Lilley, Portland; Our Aberdeen Correspondent; Dr. Cocks, Ross; Dr. J. Rogers, London; Mr. J. M. Cotterill, Edinburgh; Dr. G. Beatson, Glasgow; Mr. B. L. Powne, Chard, Somerset; Mr. J. E. Peirce, Redditch; Dr. W. S. Paget, Liverpool; Mr. C. L. Drew, London; Mr. T. R. H. Clunn, Prestwitch; Mr. T. Wheeler, Darlington; Mr. J. B. Unwin, Dunchurch; Mr. W. E. Green, Sandown, Isle of Wight; Dr. Fletcher Beach, Darenth; G. C. M. D.; Mr. J. T. Elliott, Smithborough, Monaghan; Mr. G. Eastes, London; Mr. G. W. Isaac, Clifton; Mr. A. Carr, London; Mr. John Kennedy, Elie, Fifeshire; Dr. George Wills, Monmouth; Messrs. D. Radclyffe and Co., London; Mr. Talfourd Ely, London; Dr. Parsons, Dover; Mr. J. Langton, London; etc.

BOOKS, ETC., RECEIVED.

Auscultation and Percussion, Together With the Other Methods of Physical Examination of the Chest. By Samuel Gee, M.D. Third Edition. London: Smith, Elder, and Co. 1883.

How to Examine the Chest: a Practical Guide for the Use of Students. By Samuel West, M.D.Oxon, M.R.C.P. London: J. and A. Churchill. 1883.

A Practical Treatise on the Diseases of the Skin, for the Use of Students and Practitioners. By Jamis Nevins Hyde, A.M., M.D., London: J. and A. Churchill. 1883.

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THE LUMLEIAN LECTURES

ON

IC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

ALFRED BARING GARROD, M.D., F.R.C.P., F.R.S., ETC.,
Consulting Physician to King's College Hospital.

LECTURE II.

ING stated to you, in the former lecture, my views as to the pro-ion of uric acid in the animal economy, reserving only certain its to be discussed as we proceed; and having shown that the ulties which beset the theory that the kidneys are nothing more the strainers-off of this principle are extremely great, if not perable, and that, therefore, there is no little probability that acid is a true product of the renal organs themselves; I will at proceed to draw your attention to the subject of human urine the alterations which it undergoes, under certain conditions, h lead to the production of those morbid formations which are nonly called gravel and calculi.

will be quite unnecessary for me, in lecturing to such an audi-, to detail the characters and composition of healthy human e; still, there are two or three points in relation to it which I very briefly allude to. In the first place, healthy urine, omit-the trace of mucoid matter contained in it, which consists of *débris* or washings from the mucous membrane of the urinary , is a perfectly clear fluid. Its weight varies much within the s of health, according to the ratio between the dissolved solids the water; a specific gravity of 1,020 may be taken as the age. Its reaction is decidedly acid, but the amount of its acidity nds on the time of its excretion, especially in relation to food; mes the urine may, for a short period, become neutral or even line. Healthy human urine consists of water, holding in solu both organic and inorganic principles; the former are, urea, and hippuric acid; the latter, chlorides of different metals, cially sodium, and phosphates of sodium, magnesium and um. In Table I are shown the relative quantities of the prin-l organic ingredients; also the amount of those ingredients h are thrown out for each pound (avoirdupois) of the body ht.

TABLE I.—*Mean of Many Observations.*

	Fl. ozs.
Quantity of water daily excreted by kidneys.....	55.5
„ „ hourly „ „	2.1
	Grains.
Quantity of urea daily excreted by kidneys.....	512.0
„ „ hourly „ „	21.0
Quantity of uric acid daily excreted by kidneys	8.67
„ „ hourly „ „	0.361
Hippuric acid	(?)

nounts thrown out in twenty-four hours for each pound (avoir-is) of body weight:

	Minims.
Of water	129
	Grains.
Urea	3.53
Uric acid	0.06
Hippuric acid	(?)

is to uric acid that we must chiefly direct our attention; and ist endeavour to show you (1) in what state of chemical com-tion it exists in the urine; (2) why it is held in solution in an fluid; (3) what are the causes which lead to its precipitation the urine; and (4) what are the different shapes which it mes when it is thus precipitated from its state of solution.

About fifty or sixty years ago, when Berzelius and Prout were stigating the subject, there was much discussion as to the con-n of the uric acid when in solution in the urine—whether it is or combined with a base, whether it is held in solution by the uring matter of the urine, and so forth. For the details of such ussion, if still interesting, I will refer you to Dr. Prout's well wn work.

At the present day, I believe that the subject is fully cleared up; and it may be asserted that uric acid, when in solution, is combined chiefly with sodium, but that there are also varying quantities of other bases present, depending on the amounts of different salts contained in the urine. I have already shown you, in my first lecture, that when urate of ammonium is dissolved in blood-serum in which the soda salts are present, it is converted into urate of sodium; and, bearing this fact in mind, we can explain the discrepancies which are found in the different analyses of urate deposits, both in health and disease. I may, however, say that the deposit, which, until recently, was commonly called lithate of ammonia, is composed almost entirely, in healthy urine, of urate of sodium. If, however, the urine, at any time, becomes ammoniacal from the decomposition of the contained urea, then the uric acid, meeting with a large excess of the new-formed base, gets deposited as urate of ammonium, a salt which is very insoluble.

2. The next point to be considered is the reason of its existence as urate of sodium in a fluid having such a well-marked acid reaction as healthy urine. This fact was for a long time difficult of explanation; but Liebig showed that, if to a warm solution of the common phosphate of sodium, which has an alkaline reaction, uric acid be added till it no longer dissolves, the solution becomes strongly acid, and there is contained in it urate of sodium and the acid phosphate of sodium, which latter salt exhibits a full acid reaction, but does not possess the power of precipitating the uric acid. This phenomenon solely depends on the tribasic character of phosphoric acid, which allows of a solution of phosphates, which reddens litmus powerfully without containing any free acid.

3. When, however, the least trace of a free acid, even acetic, exists in the urine, the whole of the uric acid is rapidly precipitated; a fact of considerable importance in the study of diseased conditions of the urinary excretion. If our attention is directed to the subject, we see, almost daily, that, when an urine is kept for a time, perhaps only a few hours, the uric acid, which at first was in complete solution, becomes gradually deposited in the crystalline form—a change due to the generation of a free acid in the urine by the occurrence of what is called the acid fermentation.

4. Our last point is to ascertain what shape the uric acid assumes when it becomes insoluble, and is precipitated from the urine. It may be thrown down either in combination with a base, that is, in the form of an urate, or as free uric acid. When, as an urate, it is often, from simple concentration, or from the presence of too small a quantity of water in the urine, and it seldom happens that such deposition takes place in the urinary organs themselves, unless there is a something present, such as a foreign body or the nucleus of a calculus, which greatly facilitates it. When, however, such urine is removed from the body, and cooled down to the temperature of the air, more especially in cold weather, the appearance of turbidity is extremely common, and often becomes, though most unnecessarily, a source of great mental disquiet to patients.

The simple evaporation of healthy urine *in vacuo* will usually cause, at a certain point in its concentration, the deposition of the same urate of sodium, and produce a similar appearance. When the urine, either concentrated or not, becomes abnormally acid, it at first causes the urate existing in it to be less soluble; but soon afterwards the acid itself is separated and deposited in the crystalline condition, forming what is commonly known by the name of cayenne pepper-gravel, so called from its resemblance to that condiment. We have been so accustomed, even from our student-days, to see the numerous forms which uric acid assumes, that we may feel little or no surprise that a body of so definite a composition and character as uric acid should be found under so many shapes, and perhaps most of us have paid little or no attention to the subject. Dr. W Ord, however, has given no little thought to it, and has made a great number of observations and experiments which throw much light on the changes which the crystals of uric acid experience when acted upon by the various colloid substances, some of which are present in healthy urine, and others as the result of disease. Let us take what may be looked upon as pure uric acid, dissolve it in boiling water, and then allow it to cool and crystallise; it will be found in oblong tabular crystals, which are both homogeneous and transparent.

When uric acid crystallises out from urine, it is more or less coloured, from yellow to brown, and in the form of thin rhomboidal prisms, showing that there must exist in the urine something which causes an alteration not merely in the colour, but also in the crystalline form. Dr. Ord makes the foliowing remarks, which I cannot do better than quote, as they express the character of the changes to which I wish to allude. He says: "It follows from this com-

parison of the pure and urinary acids, that there must exist in the urine causes leading to a complete turning away of the substance from its proper crystalline form. The change is also in a definite direction. The faces and angles of a crystal from urine are almost always, some or all of them, curved and rounded. Such a crystal is a resultant of the operation of two distinct influences—of crystalline polarity, under which the flat surfaces and sharp angles are determined; and of 'molecular coalescence,' in which polarity is lost and particles become arranged in spherical masses, by virtue of their unhindered mutual attractions. Furthermore, in urine the crystals are very frequently gathered into large glomeruli, to which such names as 'gravel' and 'cayenne pepper-grains' are given. These, on examination, are found to be regularly constructed of rhombs or prisms."

Dr. Miller, Dr. Beale, and other writers on micrology and chemistry, have suggested that the substances associated with uric acid in urine are the determining causes of the several differences; and the researches of Mr. Rainey have pointed the way to a solution of the problem.

Dr. Ord, in his work on *The Influence of Colloids upon Crystalline Form and Cohesion*, from which I have just quoted, and to which I would refer you for much valuable information, gives the results which he has obtained from the crystallisation of uric acid under the influence of urea, colouring matters, mucus, albumen, cane and grape sugar, gum arabic, starch, gelatine and glycogen.

It appears to me, that the researches of Dr. Ord and Mr. Rainey are not only valuable, but also seem to throw a ray of light—dim, it is true, at present—upon those phenomena which, as it were, connect true chemical changes with those we are accustomed to look upon as due to the agency of life.

The result of our inquiries, as far as they go, may be summed up in a few words. Perfectly healthy urine should show no appreciable deposit; when, however, it becomes concentrated from deficiency of the watery excretion, then the uric acid is thrown down in the form of an urate. This may occasionally occur within the body, but far more frequently after the urine has been voided; sometimes, however, this change ensues so rapidly, that the urine is erroneously supposed to have been passed in that condition. The presence of a solid body in any part of the urinary tract favours deposition very much, and hence urine, which would otherwise remain clear, may yield a deposit to any substance previously present in the same tract, and may thus add considerably to an already existing calculus. The appearance of the numerous layers so frequently seen around a central nucleus, both in renal and vesical calculi, is thus easily explained. When, however, the urine becomes further altered in composition—if, for example, a free acid is either excreted with the urine, or rapidly generated in it through the setting up of the lactic fermentation, the uric acid becomes liberated from its state of combination, and, in a form more or less altered by the presence of colloid matters, is deposited on a previously existing calculus, or is passed as separate rhomboidal crystals or in aggregated masses, constituting gravel or sand. I should feel disposed to confine the name of "sand" or "gravel" exclusively to such deposits, which, I believe, seldom form the nucleus or become the starting-point of any calculus. I may add, that urine possessing these characters is frequently voided for months and years, without the occurrence of any appreciable inconvenience to the patient. It is true, that a calculus may be augmented by contact with such an urine; but, as I have said, it seldom originates in this way.

According to this view, which I feel inclined to adopt, gravel or sand consists of uric acid previously in a state of solution, which has become precipitated by the occurrence of some change in the urinary excretion.

It is a fact, ascertained by repeated analytic observations, that some individuals pass a larger daily quantity of uric acid than others; but, at the same time, those who pass the largest quantity may have a urine little disposed to deposit the principle; and it will be found, as a result of experience, that changes in the urinary excretion, leading to the crystallisation of its contained uric acid, are much more potent factors in the production of sand or gravel than the mere quantity of this acid which is eliminated. If there is a simultaneous occurrence of the two conditions—that is, of increased quantity of the acid and altered state of the urine—this facilitates still more the production of the morbid appearances.

Before we proceed further in the pathology of our subject, it will be necessary that some investigation be made into the physical properties of the uric acid excretion, when it exists in a form which is visible to the eye—that is to say, in a semi-solid state; and this investigation will bring to light facts which are somewhat striking and full of interest. We have already assumed that the excretion of reptiles and birds consists of uric acid, united with ammonia, and is usually regarded as being urate of ammonium; under these circumstances, it would be expected to behave like such a salt when acted upon by different reagents. We will now see whether it does so.

Let us take two graduated tubes, divided into one hundred parts, and put into one the ordinary salt, the acid urate of ammonium, as to stand to the height of five divisions. Into the second tube, let us put the dry and powdered white excretion of some large reptile such as the python or boa, and fill each tube with a one per cent. solution of carbonate of lithium, up to the one hundredth division. Let us place the tubes upright in a stand, and shake them from time to time. On examining the contents of the first tube after the lapse of hours, days, or even weeks, no change will be perceptible; the artificial urate will still occupy the same space, five divisions, and no more. In the second tube, very different appearances will be exhibited—a change occurring, to some extent even after a few minutes, with some slight puffing and some little translucency of the substance; while, in the course of an hour or two, the swelling will become very great, and go on increasing for twenty-four hours or more, till at last a solid magma will be formed, occupying 80 to 90 divisions of the tube; so that the natural urate which, in powder, originally occupied a given space, under the influence of a weak alkaline solution, will fill up, as a solid mass, a space seventeen or eighteen times larger than its original room.

If distilled water be substituted for the solution of carbonate of lithium, a similar puffing takes place, though to a much slighter extent; and the reason of this is not difficult to understand, for the urinary excretion is acid in character, and when water alone is added, a crystallisation out of some free uric acid is apt to ensue. Solutions of carbonate of potassium and sodium, corresponding in strength to those of lithium, cause similar results; still, in some respects, they differ from each other, especially as regards the amount of swelling or turgescence, by reason, apparently, of the varying action of the different carbonates upon the organic matter contained in the natural urate.

When rectified spirit, containing about 16 per cent. of water, is substituted for the alkaline solution, the change which ensues is very slow indeed; in fact, scarcely perceptible for a day or two; still, the substance gradually increases, and at last attains a bulk of seven times its original dimensions.

If absolute alcohol—that is, a spirit devoid of water—be employed, no increase takes place, even after the lapse of a week or more; when, however, after the alcohol has been poured off, a solution of carbonate of lithium is subsequently added, the swelling of the urate goes on in the same way as when no spirit has been previously used.

If small masses of the excretion be digested in a strong solution of ammonia for a few hours, and afterwards dried and lightly powdered, it will be found that the property of puffing-up is entirely gone, and the same result ensues when caustic soda or potash is used instead of ammonia.

When the solid urinary excretion is reduced to a very fine powder, as by long-continued and hard friction in an agate mortar, there appears to be some diminution of its puffing-up power; but when the magma which has been produced by the long-continued action of the lithia is washed, dried, and then subsequently powdered, all the power of swelling up appears to be lost.

I may here mention that I have examined the excretion in a large number of different reptiles and birds, and always with the same results whenever the specimens have been in a fairly fresh condition.

Having determined the physical condition of the excretion in animals whose urine is too deficient in water to hold the urates in solution, it appeared to me to be a matter of great importance to arrive at its chemical composition. The common idea, as I have already said, that it consists of urate of ammonium; and in the early analyses, ammonia was always found in it, but in small quantities only. This is shown by the analyses of M. Schriebers, Prout, Dr. John Davy, and others, in which the amount varied from about 1½ to 4 per cent.

There is no doubt as to the presence of ammonia in the urinary excretion of birds and reptiles, for we have only to add a caustic alkali, and the characteristic odour is at once developed; but it is important to go a step further, and to ascertain whether the uric acid, as it exists in the fresh excretion, is so combined as to form true urate of ammonium. To effect this, I had many experiments made on the excretion of different birds and reptiles (the results

ch are shown in Table II). From these, the following conclu- s may be drawn: first, that the uric acid in the pure substance ot combined with any fixed base, such as soda, potash, or lime, that it is combined either with ammonia itself, or some organic e which readily yields ammonia.

LE II.—*Exhibiting the Results of the Analyses of the Urinary Excretion of Reptiles and Birds, in relation to Uric Acid and Ammonia.*

	Percentage, Bi-urate of Ammonium.	Percentage, Excess of Uric Acid.
te of ammonium (dried over lime) ...	99.7 ...	0.3
nary excretion of Python Regius ...	100.0 ...	—
nary excretion of Australian monitor ...	92.0 ...	8.0
nary excretion of Python Molaris (probably old)	49.0 ...	50.9
nary excretion of Python Reticulatus (rather fresh)	32.9 ...	67.1
nary excretion of Madagascar Boa (fresh)	32.0 ...	68.0
nary excretion of Diamond Snake ...	24.9 ...	75.1

o amount of any fixed base was found (such as soda, potash, or e), though carefully sought for; but, in the ostrich, there was e phosphate of calcium.

will be seen from the table that the amount of ammonia varied considerably in the different specimens which were examined; , contrary to what I had anticipated, the specimens which were t perfect and exhibited least of all the appearance of disintegra- were not those which yielded the most ammonia. It was also hd that the swelling or puffing-up peculiarity was almost or rely absent from those specimens in which the quantity of am- nia was greatest. This was well shown in the excretion of the l python and of the Australian monitor (lizard), both of which cimens were much injured by decomposition.

t would appear, therefore, that beyond a certain percentage, which ms to be equivalent to the formation of about 25 to 32 per cent. urate of ammonium, the extra amount of ammonia results from ne change which has taken place after the excretion has been psed. A close examination by the unassisted eye enables us to see t there has been some disintegration in the substance.

t will also be seen, on reference to the table, that, with the ex- tion of those excreta in which decomposition has occurred, the ount of ammonia is far short of that which is necessary to the mation of the true diurate of ammonium. May it not be possible t the uric acid, when first formed, is in combination with some rogenised organic base, such as urea? If so, this would account the results obtained. Or, again, may not an organic compound first formed in the renal cells, which readily breaks up, yielding, ong its chief products, uric acid and ammonia? This is a subject ich I have not had leisure to investigate with sufficient thorough- s to be warranted in giving a decided opinion upon it. We have nd, therefore, that the natural urate differs completely from the ificial in its physical properties, at least, in so far as regards its ver of becoming distended under the influence of water or car- nated alkaline solutions. It now becomes necessary to examine efully its microscopic structure.

A paper of mine, published in the *Medico-Chirurgical Trans- tions*, 1848 (vol. xxxi), under the title of "Observations on rtain Pathological Conditions of the Blood and Urine in Gout, eumatism, and Bright's Disease," was illustrated by a plate, which ntained, among other drawings, one which exhibited the micro- pic appearance of the urinary excretion of the pigeon. This was e first time, I believe, that the minute characters of such excre- ns had been shown. The results of a re-investigation of this sub- t, which I have recently made, will now occupy us for a few nutes, as it bears closely on the subject of renal calculi. I have amined the excretion of a large number of reptiles, birds, and vertebrate animals; and the drawings upon the screen, which are lected from a great many others, will give an idea of the appear- ces presented.

There is a great uniformity of appearance in the different speci- ns; in fact, it would be difficult or impossible to separate by roscopic characters, the urine of a reptile from that of a bird, e only variation in the different drawings is that which appears in e size and prevalence of the larger spherules; for it will be ticed that there are many more of these in the large birds and ptiles than in the smaller birds, while the small spherules are of out the same size in all specimens depicted. No spherule in the excretion of the canary-bird approaches in size many which are to be seen in that of the rhea. The measurement of the largest spherules is 0.00072 inch, and the smallest about 0.00008 inch.

It seems to me that we should be ignoring all physiological principles if we did not assume that uric acid is originally excreted in the same way by all animals, be they reptiles, birds, or mammals, including man—that, if, as we have shown by fair evidence, it is formed in the cells of the kidney in one animal, it is so formed in another, although the different influences to which it may be subsequently subjected may cause an entire change from its original physical condition.

In reptiles and birds we see that the uric acid, in combination with some base, is contained in the kidneys in the form of larger and smaller spherules, and we also see that these have a tendency to aggregate and form larger and larger balls or spherules, which are ultimately eliminated from the body. We see, in fact, that these animals are perpetually voiding renal calculi, which, although small in size, are yet perfect in form and constitution. Their urinary tract is so constructed that no inconvenience ensues; but, were such urine excreted by the mammal it might at once lead to serious mischief.

May we not, however, get a lesson in pathology from reflecting on these facts which I have now brought before you? May not these spherules, which, as a rule, are soon dissolved in the watery urine of the mammal, occasionally escape solution, and become the nuclei of renal calculi? This idea is one which, up to the present time, I have never seen suggested, but it is at least worthy of some further thought.

I believe that I am correct when I say that hitherto it has been usual to regard both gravel and calculi as arising always from the precipitation of urinary principles which have been in the urine in a state of solution—a view, which, as I have already shown, has some truth in it, though I think that, before I shall have finished the present lecture, I shall be able to lay before you facts which may cause some modification in the opinions which have been commonly held. Dr. Vandyke Carter has made some interesting observations on the structure of calculi, and has come to the conclusion that, in almost all calculi, the nucleus contains uric acid or urates in the spherical or globular form and not in the ordinary crystalline condition; and that, when oxalate of calcium is present, it is in the shape of dumb-bells and not in the characteristic octahedral crystals.

In his work on urinary diseases, Dr. William Roberts makes the following observations, which appear to me to sum up all that is at present known on this subject. He says:—"Considerable light has been thrown on the mode of origin of urinary calculi, by an examination of the microscopic structure of the nuclei. Dr. V. Carter found that the actual nucleus consisted nearly always of urates and oxalate of lime (dumb-bells and spheroids), and not of ordinary crystals of these substances. The researches of Rainey and Ord have shown that these globular forms are only produced when precipitation takes place slowly in a colloid medium; and Carter found that a colloid matrix always exists in the nuclear formations of urinary calculi; It would therefore appear probable that the initial step in the formation of a calculus, is the exudation of some colloid—mucus, or some other albuminoid substance—into the urinary passages. Into this colloid, urates or oxalate of lime, or both, are precipitated, and, combining with it, form molecular aggregations of a globular character, which constitute the foundation of the subsequent growth. Under what conditions the colloid is exuded, cannot be with certainty explained; but the probability is that congestive or sub-inflammatory states of the kidneys, such as occur in the febrile state, give occasion to such an exudation, and supply a starting-point to a process which does not attract attention until after a long lapse of time."

Dr. Roberts, in this passage, thinks that the colloid exudation is the result of subinflammatory disease of the kidney; but, as far as my own experience goes, I have, in most cases of renal calculi, failed to find evidence of any inflammatory renal affection; the patients have, at any rate, been free from all febrile disturbance.

In examining several different calculi which had been passed soon after their descent into the bladder, I have found that some are apparently simple, that is, when cut they exhibit an uniform structure throughout; such calculi, however, are generally very small, the largest not exceeding in size a pin's-head. Others are evidently compound in their structure, containing a central nucleus surrounded by layers which may be more or less numerous in different calculi; in fact they resemble, when seen through a glass, the larger form of the vesical calculus.

[*To be continued.*]

THE GULSTONIAN LECTURES,
ON
THE STERILITY OF WOMEN.

Delivered at the Royal College of Physicians, February 1883.

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Lecture II, Part IV.—Its Theory or Causation.

Excluding some remarks as to the influence of marriage in causing sterility in woman, we have shown chiefly the influence of age in its production. Marking out, by statistical evidence, certain ages as peculiarly affected with sterility, we find at these same ages, in a proportion above the average, excessive families, pluriparity, weakly or idiotic children, etc., and not only in exaggerated proportion, but combined one with another. It is therefore reasonable to describe the sterile ages as ages of imperfect reproduction, and to associate or identify with sterility the conditions of excessive production, pluriparity, etc., which are demonstrated to have alliance with it. In other words, sterility, excessive families, and pluriparity are alternatives one of another, and almost certainly own the same general causes.

I know no cause of sterility or of its allies, excessive production, pluriparity, abortion, etc., that can be compared with age in extent and power. In discussing the cure of sterility, I shall allude to various minor causes which may operate in individual cases, but have no extensive influence. But there are causes which probably have a great place in the production of this condition whose action is only believed, not demonstrated. Such are bad general health, cold, and heat. The influence of bad general health is well observed in plants, but I know no good evidence of it in woman other than the testimony of medical practitioners. The influence of cold and of heat on sterility has been much studied, and attempts have been made to get additional light on the matter by collecting observations of their influence on the age of commencement and cessation of menstruation. The subject divides itself into two portions:—First, the influence of cold and heat on women breeding in their native lands; second, the same influence as exerted on women born in cold climates and transported to hot, or born in hot climates and transported to cold. But the data obtained are, in my opinion, quite insufficient for any reasoning being securely based. The hearsay evidence also requires scrutiny. We often hear, for example, of a girl, say of eleven, bearing a child in India, and this is held as proof of early fecundity there. We rarely hear of the same occurrence in this country; and the reason of this alleged greater frequency in India may be not earlier fecundity there, but earlier exposure of a large number of girls to the risk of becoming pregnant.

There are several important subjects, more or less closely bearing on our inquiry, which I pass by with mention only. Among these is the influence of cold and of heat on the commencement and stoppage of menstruation, an influence regarding which it is scarcely, by the statistical evidence, made probable that cold retards the appearance and hastens the stoppage, though many considerations support this view. Another is the generally accredited influence of nursing in delaying the return of menstruation and the recurrence of pregnancy. Regarding these matters, Robertson has made valuable remarks, and collected many, though insufficient, observations. The great subject of interbreeding in its production of sterility I also pass over. The evidence regarding it is very bulky, and requires most careful sifting. In plants and animals the demonstration of this injurious influence of interbreeding in producing imperfection of offspring and sterility is copiously illustrated, and may be said to be well made out; but it is not so in the case of man. Yet, in the case of man, there is a most extensive, though not universal, consensus of intelligent opinion that interbreeding has the same general influence as in plants and animals, and to the entertainment of this view the strong analogy of plants and animals lends powerful encouragement. The injurious influence in man, indeed, probably acts after birth, for there is accumulating evidence that peculiar diseases, specially of the eyes, affect, by preference, the offspring of near relations.

"The evil consequences," says Darwin, "of long-continued close interbreeding are not so easily recognised as the good effects from crossing, for the deterioration is gradual. Nevertheless, it is the general opinion of those who have had most experience, especially with animals which propagate quickly, that evil does inevitably follow sooner or later, but at different rates with different animals. No doubt a false belief may unduly prevail, like a supposition; yet it is difficult to suppose that so many acute and original observers have all been deceived at the expense of much cost and trouble..... The loss of fertility, when it occurs, seems never to be absolute, but only relative, to animals of the same blood; so that this sterility is, to a certain extent, analogous with that of self-impotent plants which cannot be fertilised by their own pollen, but are perfectly fertile with pollen of any other plant of the same species. The fact of infertility of this peculiar nature being one of the results of long-continued interbreeding, shows that interbreeding does not act merely by combining and augmenting various morbid tendencies common to both parents; for animals with such tendencies, if not at the time actually ill, can generally propagate their kind. Although offspring descended from the nearest blood relations are not necessarily deteriorated in structure, yet some authors believe that they are eminently liable to malformations; and this is not improbable, as everything which lessens the vital powers acts in this manner. Instances of this kind have been recorded in the case of pigs, bloodhounds, and some other animals." "In the case of man," he elsewhere remarks, "the question whether evil follows from close interbreeding will probably never be answered by direct evidence as he propagates his kind so slowly, and cannot be subjected to experiment; but the almost universal practice of all races at all times of avoiding closely related marriages is an argument of considerable weight, and whatever conclusion we arrive at in regard to the higher animals may be safely extended to man."

Leaving several minor or little known causes of sterility to be mentioned in the next lecture, I now turn to other matters in its history which throw light on its theory, and there are two worthy of great consideration. These are the well-known association of dysmenorrhœa with sterility, and the state of sexual appetite and sexual pleasure in sterile women.

Menstruation, when natural or healthy, is attended with no pain and with little or no disturbance of general health. When there is pain or considerable disturbance of health, the condition is called dysmenorrhœa; and it is plain that the term covers a wide and ill defined field of disorder and disease. It is with dysmenorrhœa, as thus vaguely defined, that sterility is prevalently believed to be very frequently associated; and there can, in my opinion, be no doubt of the truth of the general belief.

There is a kind of dysmenorrhœa regarding which I would enter into more details. It is called spasmodic, being regarded as a neurosis characterised by painful uterine spasms, which may be described as having no known object in view. It is often called mechanical or obstructive, terms implying a theory of its cause, and implying also that the spasms are, so to speak, intended for the expulsion of the menstrual fluid accumulating in the uterine cavity and distending it. There is no good evidence of the mechanical obstruction, nor of the accumulation of menstrual fluid, nor of the dilatation of the uterine cavity, nor of the use of the painful uterine contractions; and, as all admit the presence of these contractions or painful spasms, I shall call this kind of dysmenorrhœa spasmodic. It is a kind of dysmenorrhœa that is gradually, and I think justly, restricting to itself alone this term—the only real, positive, recognisable uterine dysmenorrhœa, or the dysmenorrhœa proper.

It is of this dysmenorrhœa proper that I am now to speak, and it is known by the following characters. It may occur at any time during the flow of menses, sometimes even before it begins; and, in cases of amenorrhœa, it may occur at the time of the menstrual molimen. In the very great majority of cases, it occurs on the first or second day of the flow, it is generally severer when the flow is scanty than when it is copious. The pain is constant or in pangs, and the pangs may be more or less distinct—in other words, the intermissions of the pain may be more or less complete. The frequency of the pangs varies, five to ten in an hour being common. The pain is rarely accompanied by bearing down, strangury, or tenesmus. It varies in severity, rising occasionally to the intensest agony, with cold sweats, vomiting, and other symptoms of prostration or collapse. Suffering from it, the patient rolls about and groans, and the restlessness is not that of fever, but of griping pain. It may last only a few minutes, but generally it goes on for hours, the number of hours rarely exceeding four or five. It rarely returns during the current menstrual period. It is generally aggravated by marriage. In women who suffer from this disease, there is a sup

ensitive condition of the interior of the body of the uterus, and, think, especially of the internal os uteri, this condition being ested by the contact of an uterine probe or sound.

In making inquiries as to the connection of this dysmenorrhœa roper with sterility, I have frequently, but not always, satisfied nyself of the presence of all of these characters. Particularly, I ave not classed with this dysmenorrhœa any case in which the evere pain lasted more than a day. In all inquiries as to pain, here is, owing to the indefiniteness of language and the tendency f patients to exaggerate or make light of their troubles, extreme nsecurity of statistical statements. I have tried to avoid being nisled in 332 cases which I have, during the last five years, taken lown in my notes. These 332 cases were all absolutely sterile—that s, all women who had had an abortion or a child are excluded. Of hese 332 married women, 159 suffered from spasmodic dysmenorhœa, or nearly half. It is a most grave fault in my argument, that unfortunately cannot give the frequency of dysmenorrhœa among he fertile. But I can, meantime, only declare the importance of he omission, and express my belief, in accord with universal proessional opinion, that, among the fertile, dysmenorrhœa is comaratively uncommon. The connection of a neurosis of this kind vith sterility cannot be unimportant, and I cannot leave the subject vithout expressing my belief of the association of it with abortion nd miscarriage also.

Other mutually allied neurotic conditions demand full considerain—namely, sexual appetite or desire, and sexual pleasure or satisaction of the appetite by coitus. In investigating the matter, reat difficulties are met with from the delicate nature of the nquiry, the difficulty of making sure that the patient understands learly what is the question to be answered, and the impossibility f finding words of well defined meaning, or of the same meaning n different mouths. But these difficulties are not insuperable, nd error is lessened by relying on a large number of concurring bservations.

Sexual desire and pleasure have to be considered separately, beause, though they are naturally found combined in the same case, hey are far from being invariably so. A woman, with healthy exual organs, may have sexual desire and no pleasure, or even the everse, and she may have no desire and yet have pleasure. Although pregnancy and childbearing are natural consequences of exual desire and pleasure, there is little or no connection between he latter and the wish to bear children. The desire for offspring nay be intense, while there is neither desire nor pleasure, and the lesire to avoid pregnancy may be intense while there is desire and leasure. Desire and pleasure may be excessive, furious, overpowerng, without bringing the female into the class of maniacs. They may be temporary, healthy, and moderate; they may be absent or null. Instead of sexual desire there may be sexual aversion; and instead of sexual pleasure, there may be only feelings of disturbance or pain. Instead of sexual desire there may be intense sexual antipathy, and instead of sexual pleasure there may be severe suffering, even agony, in coitus.

The variations of desire are chiefly on the positive side, greater or less. Desire may be absent. From the zero or indifferent condition there is, however, not rarely observed a rise into aversion or antipathy, and this, in married women, without any feeling regarding the husband other than affectionate. It is well known that desire may be fostered at special times by various stimulants of passion; but, apart from such occasions, it may be increased, or diminished, or annihilated. This is a general belief, and I have frequently had spontaneous testimony of individuals to the same effect. The influence of society and its amusements, of diet, of special kinds of reading, of association with males, is well known and recognised in the increase of sexual desire; and the influence of the opposite conditions, of a truly ascetic life, is equally certain. Desire may, during the childbearing period of life, undergo great changes without any apparent cause; at one time, and it may be for years, being positive, at another time absent or negative.

Sexual pleasure must not be regarded as, in all respects, like sexual desire, and requires separate description. Its variations are chiefly on the positive side; it may be absent. Its variations on the negative side are, however, most remarkable. There may be slight or very great suffering, or the intensest agony; and this is often accompanied by more or less active involuntary local sphincteric resistance to penetration, called vaginismus. But the words pain and agony are here used in a quite extraordinary and misleading way. There is no pain, such as that of the infliction of a wound or contusion, or that of toothache or neuralgia. There may, indeed, be, in cases of diseased sexual organs, common pain of the kinds mentioned, caused by sexual congress, but of such pain we are not here speaking.

All kinds of pain or discomfort in coitus are often, nowaday, classed as dyspareunia, but I think the word may be well restricted to the condition I am describing; or the condition may be called simple dyspareunia, and there is no common pain in simple dyspareunia. It has an analogue in disgust, but dyspareunia rises to far higher degrees than disgust. As sexual pleasure rises in intensity above all other kinds of pleasure, so dyspareunia reaches degrees exceeding those of the intensest disgust. The disgust of a child is often painfully intense, its resistance to tasting and swallowing involuntary and powerful, and often followed by vomiting the matter whether tasted or not; and as this is not all common pain in tasting and swallowing, so dyspareunia is not pain in sexual connection. Sexual pleasure and dyspareunia differ from gustatory pleasure and disgust in this, that while the former are one in kind and in all degrees excited by the same cause, the latter are various in kind, and elicited by different substances in each case. Pleasure, then, may vary from the intensest to mere indifference; and simple dyspareunia may rise from mere indifference to the highest degree, with sphincteric resistance to penetration, opisthotonos, and a state almost of insensibility.

Pleasure is probably not directly increased by the causes of increase of desire, but the increase of desire is probably a cause of increase of pleasure, as hunger enhances the pleasures of taste. Pleasure is increased by continence, and diminished, or annulled, or converted into slight dyspareunia by over-indulgence. Sexual pleasure may vary without apparent cause, disappearing for short periods or for years, and reappearing with the same appearance of caprice. Pleasure is frequently absent at marriage, and gradually developed during the continuance of that state. If it is slight at marriage, then coitus will be painful, the common and not simple dyspareunic pain overpowering the pleasure and preventing it.

Describing the lower animals in this respect, we guess by aid of analogy, but the analogy is so strong as to endow the guess with a high degree of assurance, reaching nearly to certainty. We may be sure that animals, generally, feel sexual desire, and that this sexual desire occurs normally or naturally only in connection with fecundity. In many domestic, or otherwise well-known animals, there is sexual desire only in the rutting season, and at other times not only an absence of sexual desire, but a positive sexual antipathy. A bitch not in heat will angrily resist any attempt at sexual approach by the male, while quite ready for any other kind of play. Of sexual pleasure in female lower animals we know very little, but we may be sure it exists. Of its existence in males we have abundant evidence, and we may thence argue that it exists in females. Nothing is commoner in dogs than what may be called masturbation. This kind of sexual pleasure is generally believed to be increased by confinement, and the evidence afforded by zoological collections is held to be good.

I know nothing regarding the connection of sexual pleasure in animals with fertility or sterility, but we have the testimony of Darwin to the presence, in animals that are confined, of sexual desire, sometimes in excessive degree; sexual indulgence being held as evidence of sexual desire; and the sexual excess is often connected with sterility. "Monkeys," says he, in the Nine-Year Report from the Zoological Gardens, "are stated to unite most freely, but during this period, though many individuals were kept, there were only seven births." Elsewhere he says, that "although many of the felidæ breed readily in the Zoological Gardens, yet conception by no means always follows union. In the Nine-Year Report, various species are specified which were observed to couple seventy-three times, and no doubt this must have passed many times unnoticed; yet from the seventy-three unions only fifteen births ensued." In many animals under confinement there is no coupling, and this may be assumed to indicate absence of desire in female as well as male.

It is an almost universal opinion that, in woman, desire and pleasure are in every case present, or are in every case called forth by the proper stimulants. The opinion is founded on experience, and it is, no doubt, nearly true; but the exceptions to the rule are numerous and important. It is also a popular opinion that desire and pleasure are essential elements in fecundity; and, in cases of rape followed by pregnancy, that consequence has been made ground of defence against the charge. Great authors, among whom is Ambroise Paré, recommend the excitement by dalliance of great desire, as a remedy of sterility.

I think it very nearly certain that desire and pleasure, in due or moderate degree, are very important aids to, or predisposing causes of, fecundity, not on account of their own proper attractiveness, but on account of some connection between them and the perfection of other parts of the complicated proceedings which result in fecundation. But this is only a firmly held opinion, for I can give no conclusive evidence or proof of it; and this absence of proof diminishes greatly the value of my observations on the absence of desire and pleasure in the sterile. The want most acutely felt here is a knowledge of the state, in this respect, of the fertile. In producing evidence as to the sterile, I shall assume that sexual desire and pleasure are very rarely absent in the fertile. Excess of sexual desire is probably unfavourable to fertility. It is recognised chiefly by excessive indulgence in sexual pleasure, and is observed in the weak and ill-conditioned, in imbeciles and idiots, as it is also in animals under confinement. Excessive indulgence in sexual pleasure is also probably unfavourable to fertility, or a cause of sterility; and it probably is specially influential in the young, as it may also be in prostitutes. In these circumstances, the births of females are, on good grounds, believed to be far above the ordinary average, in proportion to males.

Masturbation in females is an unnatural and generally excessive indulgence in artificial sexual pleasure. It has always appeared to me to affect especially children and young women of weak mind. I have often been struck by the smallness or imperfect development of the external parts in young women who masturbate, and I have not rarely observed what appeared excessively high development of sexual desire in women who had imperfection or absence of internal genital organs. In one, dissection revealed the presence of ovaries and Fallopian tubes only. Some confirmation of these views may be found in cases such as that of Campbell,* in which a woman addicted to masturbation had never menstruated, and had imperfectly developed genital organs; she had, however, also a dermoid cyst of the ovary. Aran† has a case of what he describes as frightful excess of masturbation in a young woman dying of phthisis, whose uterus and appendages were found to be very imperfectly developed. Kussmaul‡ mentions the concurrence of masurbation and nymphomania with imperfect development of the uterus and the genital organs; and Joulin§ refers to a case of Vaddington's where absence of uterus and exaggerated sexual appetite were combined.

Entire absence of desire and pleasure, or of one of them, or the presence of intense sexual antipathy and dyspareunia, are not necessarily causes of sterility. It is not at all rare for women to be pregnant and bear healthy children who aver in the distinctest manner not only absence of desire and pleasure, but presence of the opposite conditions. But the following statistics make it highly probable that absence of desire and pleasure, and the presence of their opposites, are powerful influences favourable to sterility. The statistics do not indicate what was occasionally found, namely, that desire was present while pleasure was absent; or, in other cases, that desire was absent while pleasure was present. The cases observed were all in women absolutely sterile, of whom the great majority consulted me regarding the sterility. Among 191 sterile wives, desire was absent in 39, or in about 1 in 4. Among 196 of the same sterile wives, pleasure was absent in 61, or in about 1 in 3. The figures show that many sterile wives had desire but no pleasure. They do not show, what nevertheless is true, that some had pleasure who had no desire.

TABLE XXIII.—*Case-book Table of Desire and Pleasure in Sterile Women.*

Age at Marriage.	Number.	Desire.			Pleasure.		
		Present.	Absent.	No Note.	Present.	Absent.	No Note.
Fifteen to nineteen	59	18	4	37	15	8	36
Twenty to twenty-four ...	220	78	18	124	69	27	124
Twenty-five to twenty-nine ...	134	35	12	87	31	18	85
Thirty to thirty-four	59	16	3	40	14	5	40
Thirty-five to thirty-nine ...	23	3	1	19	3	3	17
Forty to forty-five	9	2	1	6	2	1	6

I have a strong impression, derived from all I know and have observed, which I may express theoretically, that while, in healthy normal women, there is abundance of sexual or reproductive energy for fertility and all its accompaniments, in many sterile, or relatively sterile, women, there is deficiency which may be exhibited in one or another, or in all the ordinary evidences of reproductive energy, and that excess or deficiency in one department may be associated with deficiency or excess in another. It would seem that, in women of deficient reproductive energy, excess in one department might be compensated by deficiency in another, and *vice versâ*, there being only a limited store of the original energy. In illustration, a remarkable class of cases may be cited, which I shall sufficiently describe by stating generally the chief points in one: A robust healthy woman is married at eighteen; she bears three children and has four miscarriages before she has passed twenty-three years of age. Up to the birth of her last child, and for five years subsequently she experiences no sexual desire, and has no pleasure. Five years after her last pregnancy, she almost suddenly comes to have intense desire and pleasure, but remains sterile for four additional years before she seeks a cure for her sterility. Fertility present, while desire and pleasure are absent; sterility present, while desire and pleasure are present.

* *Memoir on Extra-uterine Gestation*, p. 30.
† *Leçons Cliniques sur les Maladies de l'Utérus*, p. 89.
‡ *Von dem Mangel, etc., der Gebärmutter*, S. 74.
§ *Accouchements*, p. 138.

CLINICAL LECTURE
ON
ACCENTUATION OF THE PULMONARY SECOND SOUND OF THE HEART.

Delivered in the Queen's Hospital, Birmingham.

BY JAMES SAWYER, M.D.Lond., M.R.C.P.,
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ACCENTUATION of the pulmonary second sound, or, to speak more precisely, accentuation of that portion of the second sound of the heart which is produced at the orifice of the pulmonary artery, and is especially heard in the "pulmonary," as distinguished from the "aortic," area, although discovered and taught by the great Skoda in the earlier days of cardiac auscultation, is not generally recognised, if I may judge from the scanty references to it in text-books and from my observations of its frequent neglect in the practice of stethoscopists, as one of the most striking and one of the most significant of the physical signs of disturbance in the mechanism and dynamics of the heart. It is a sign which is to be found in association, in causal relations which are tolerably clear, and approximately constant, with the commonest of the organic defects of cardiac orifices and valves, and with the commonest consequences and complications of embarrassed cardiac action. Rightly interpreted, it is a sign which traverses the whole domain of practice, for it conveys reliable indications in the three chief divisions of our relations with a patient, inasmuch as it is significant alike in diagnosis, in prognosis, and in therapeusis. Skoda, with his usual tendency to over-refinement, that frequent fault of physicians, did not grasp the simplicity and singleness of the significance of accentuation of the pulmonary second sound. He observed the physical fact, but he went too far, and in one line in a wrong direction, in his speculations upon its import. He was wrong in his teaching for example, as Dr. Walshe has pointed out,* that the presence of reinforcement of the second sound in the pulmonary artery will distinguish a systolic murmur at the left apex, caused by mitral regurgitation, from a murmur, of like time and site, caused by friction of the blood against roughnesses on the inner surface of the ventricle. The essence of the matter is this: accentuation of the cardiac second sound, as heard over the origin of the pulmonary artery, is an unfailing indication of increased tension in the blood current in that vessel. In that it is this, it is a trustworthy sign which a little consideration will enable you to understand, of grave pathological condition; it is an unmistakable physical accompaniment of a portentous change in an area of the blood-circulation which is vital, and which is removed beyond the reach of those tactile and metric methods of exploration which are applicable in variations of tension in the systemic arteries.

In health, the aortic portion of the second sound of the heart predominates over that produced at the valves of the pulmonary

* *Diseases of the Heart and Great Vessels.* By W. H. Walshe, M.D., etc. Second Edition, 1862. Page 100.

rtery. That is, the second sound is louder in the "aortic" than it s in the "pulmonary" area. By this statement I mean that the econd sound is louder close to the right edge of the sternum, over ne lower portion of the second right costal interspace, than it is lose to the left edge of the sternum, over the upper portion of he second left interspace. The blood-tension may be raised in athological states, either in the systemic circulation, of which ne aorta is at the commencement, or in the lesser circulation, which asses from the right to the left sides of the heart, through the ngs, and at the commencement of which is the pulmonary artery.

Whatever raises the blood-tension in the aorta intensifies the ortic second sound; whatever raises the blood-tension in the pulonary artery intensifies the pulmonary second sound.

What, then, is the clinical import of the variety of abnormal oudness of the second sound of the heart, to which I am directing our attention? Answering the question broadly, I say, it is beyond ispute that an increased intensity of the pulmonary second sound due to an increase in the blood-tension in the pulmonary artery, nd that this heightened tension is due to some obstruction in the ulmonary or lesser circulation. The sign is clinically associated ith organic and permanent lesions of the mitral valves and of the itral orifice. Either insufficiency of the mitral valves, or narrowg of the mitral orifice, adds a distinct and new physical obstacle the flow of blood through the lesser circulation. In so far as ch an obstacle elicits increased force in the contraction of the ght ventricle, by so much does it raise blood-tension in the pulonary artery, and consequently accentuate the pulmonary second und. But, while this statement is strictly true as a generalisation, ou must remember certain qualifying circumstances which may old good in particular instances. Advanced mitral regurgitation, advanced mitral stenosis, or both, may be present, and the pulonary second sound may not be accentuated, but may even be less ud and clear than in health. This may arise from one of two causes, from a frequent combination of them, namely, from failure in the wer of the right ventricle, or from the appearance of tricuspid regurgitation. In the course of mitral disease, when the force of the ght ventricle at last fails to compensate for the obstacle on the ft side of the heart, the blood-tension in the pulmonary artery initably fails and falls, and with it the loudness of the pulmonary und inevitably declines and disappears. When, also, in the course mitral disease, the tricuspid valves, as so often happens near the id, give way, the pulmonary tension is at once lowered, and its ysical sign disappears. Let me emphasise these important points r quoting some words of Rosenstein. He writes—"When the nsion decreases in the pulmonary artery, the intensity of the cond sound ceases; this takes place either when the right ventrie's force has been impaired by disease in the performance of its creased work, or when the right side of the heart is so filled by e increased stagnation that the ring of insertion of the tricuspid lve is widened, and the valve is no longer able to close the ifice."* I must also point out to you that, in comparing the pulonary second sound with the aortic sound in cases of mitral sease, you must remember that the aortic second sound is likely be relatively weakened by reason of the reduced systemic tension hich mitral defects entail. As Dr. Walshe points out, there is a pseudo-accentuation of the pulmonary second sound, from real eakening of the aortic second sound, through the lessened current and minished calibre of that vessel, that follow on long continued mitral gurgitation."† You must not fall into the error of mistaking a pulonary second sound of normal loudness for an accentuated sound, ecause it coexists with a feeble aortic sound. On this point, which doubtedly is sometimes a difficult one in practice, you must look an extended experience of cardiac auscultation to aid you. The cognition of variations in the tone and loudness of the heart's unds is a refinement of stethoscopy, which only long practice can velope. It is only when, by patient clinical work, you have quired in your minds a sure standard of the characters of cardiac unds, that you can readily detect deviations from their normal tensity.

So far as I have been able to judge from my own observations at ne bedside, the presence or the absence of accentuation of the pulonary second sound, or the presence of a high or of a low degree such accentuation, is valueless as a differential sign in itself in ne diagnosis of mitral stenosis from mitral insufficiency. I know is statement is opposed to the teaching of some physicians and of some writers of acknowledged authority in cardiac diagnosis. Both varieties of mitral disease, whether they exist singly and pure, or howsoever they may be combined, impose a morbid obstacle to the passage of blood from the right to the left side of the heart, and tend, *pro tanto*, to increase the blood-tension in the pulmonary artery. So long as this obstacle is met by a compensating increase of force in the contraction of the right ventricle, so long is the pulmonary second sound of more intensity than in health. The presence of such accentuation is not a sign which distinguishes one form of mitral disease from another, but it is a sign common to mitral lesions in general, which rises and falls in direct proportion to the vigour of the right ventricular systole. When, in the backward march of the results of a mitral lesion, the saving force of the right ventricle becomes impaired, by dilatation of its cavity or by degeneration of its walls, the pulmonary second sound loses its accentuation and may become almost or quite inaudible.

You will now be able to appreciate the help which may be gained in the diagnosis, prognosis, and treatment of a given case of organic disease of the mitral orifice or valves, from observation of the condition of the second sound in the pulmonary artery. Stating the case broadly, it may be said mitral valvular defects are generally the practically immediate and permanent results of acute endocarditis. Once established, the affection of the valves or orifice becomes a permanent defect, which never grows less, but which rather tends, by the organisation and contraction of inflammatory exudations, and by other well-known consecutive changes, to become more and more pronounced as time goes on. From the date of the endocarditis which first damaged the heart, there occurs a variable period of practically good health, or of quasi-health, but slightly impaired by certain of the less pressing signs of cardiac embarrassment. This period may vary in length from a few weeks or months to a few or many years, being determined by a variety of variously combined circumstances, such as the extent of original mitral damage, and the degree of subsequent compensation, and the age, mode of life, social position, and habits, of the patient. But, whether this period be short or long, there surely comes, sooner or later, an ultimate or penultimate stage, marked by failure of compensation, and by dropsical complications, leading on to death.

Accepting this brief outline as a rapid sketch of the usual progress of mitral affections, let us answer this question: What is the usual state of the pulmonary second sound in the progress of such a case? When the mitral disease arises, that is, from the time acute endocarditis so affects the mitral orifice or valves as to set up a physical obstacle there to the normal progress of blood through the heart, the pulmonary second sound becomes accentuated, but only slightly so, for the most part, at this early stage. During the second period of quasi-health, that is to say, from the time of convalescence from the acute endocarditis until the onset of the later secondary complications consecutive to the mitral defect, the pulmonary second sound remains only slightly reinforced. You will generally find it as loud as the aortic sound, or a little louder, but not very markedly intensified. But towards the end of this second period, when the pulmonary tension is nearing the point when it shall overcome the compensating force of the right ventricle, the pulmonary second sound becomes very distinctly accentuated, and attains its maximum development. The sign is at this time of grave portent, for it is the sure index of an extremely heightened tension in the pulmonary circulation, which is not likely to be borne long; it is an unfailing sign that the pulmonary circulation is only maintained by an increased expenditure of force by the right ventricle, which cannot long be kept up. At this point, a straw breaks the back of the labouring camel. A little added difficulty to the circulation through the lungs, which usually comes as a bronchial catarrh, which would be trivial under some other circumstances, and the next, the ultimate or penultimate, stage of mitral troubles is ushered in. Compensation fails, and with it falls, *pari passu*, the accentuation of the pulmonary arterial sound. With failing compensation, viscera and surface become engorged with blood, anasarca gradually develops, and dropsical exudations begin to gather in the serous cavities.

This is the stage at which you often see patients admitted to my wards. With rest, good and carefully adjusted food, evacuants, and, above all, with digitalis, our great heart-restorer, many improve, lose the later complications of their mitral disease, revert to the second stage of quasi-health which I have been describing, and return to their occupations. As they improve, as rest, suitable food, evacuants, and digitalis, do good, you may notice the pulmonary second sound, which had waned before, wax strong again, surely marking the recovery of compensation in the propulsive power of

* Rosenstein. Ziemssen's *Cyclopædia of Medicine*. English translation. ol. vi, page 129.
† *Op. cit.*, page 100.

the right ventricle, which is the essential factor in the patients' relief. Here observation of the pulmonary second sound is of inestimable service. With a rising sound, our treatment is doing good, and our patient is making progress towards recovery. But the complications of this later stage of mitral disease, unhappily, cannot always be removed even once; and if removed once, or twice, or thrice, or oftener, there surely comes a time when all our remedies are at last of little or no avail. Be our treatment never so patient and skilful, the patient's condition remains stationary, or goes on from bad to worse. Here the compensating power of the right ventricle is finally and irretrievably exhausted; it is past all repair. Here the pulmonary second sound never rises under our treatment, but remains feeble to the end. Its continued feebleness, in the presence of dropsical complications, and in spite of our best therapeutic efforts, is a sure sign that the end is not far off, and that the patient is suffering his last illness.

ABSTRACT OF TWO CLINICAL LECTURES

ON THE

PLEURITIC EFFUSIONS AND PARACENTESIS.*

By W. H. A. JACOBSON, B.A.Oxon., F.R.C.S.,

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Outline of Case; Varieties of Pleurisy.—I. *Dry.*—Common in phthisis. Pleuritic adhesions usually corresponding to site of lung-mischief. Purpose. Site, cap-like over apex.—II. *Acute Fibrino-Serous Effusions.* Usually of an actively inflammatory kind. Onset of attack. Pyrexia. Rigors. Pain. Character of respiration. Side early fixed. Course. Prognosis good; little tendency to pus. Treatment local and general. Medical usually sufficient, as these effusions quickly reach their height and subside. Morphia, subcutaneously. Fomentation. Leeches. Drugs, simple febrifuges, hyd. cum cretâ and Pulv. Doveri. No cupping or blisters at this stage. Surgical treatment only when patient becomes uneasy, and the entrance of blood into the right heart is impeded. Paracentesis trocar not too small. Large needles of aspirator. Little danger if air do enter (C. Allbutt),† as these fibrinous effusions, poor in cells, do not tend to suppurate? Two varieties of inflammatory effusions (Paget).‡ (*a*). *Fibrinous.*—(*b*). *Corpuscular*—Existence of one or another of these determined by three conditions. 1. Condition of the blood; *e.g.*, effect of blisters. "The highest health is marked by an exudation containing the most perfect and unmixed fibrine; the lowest, by the production of the most abundant corpuscles." 2. Site of inflammation; *e.g.*, skin, exudation corpuscular, as in herpes, eczema; mucous surface, exudation corpuscular, *e.g.*, gonorrhœa; serous membrane, exudation fibrinous. 3. Degree of the inflammation. The less the inflammation, the more the exudation resembles that natural to the part.—III. *Quiet Serous Effusions.*—Onset. Insidiousness. Symptoms little marked. Dyspnœa. Character often slight and thus misleading. Slight cough. Temperature perhaps a slight evening rise. These cases liable to be taken for debility and anæmia. (C. Allbutt)§. Occasionally Secondly; *e.g.*, after typhoid fever convalescence may be prolonged or irregular, c dyspnœa, etc. Such effusions often corpuscular.—IV. *Intermediate Forms between* II and III.—V. *Empyema.*—VI. *Dropsy of Pleura-Hydrothorax.* Often double. Cardiac or renal disease. No surgical treatment unless great urgency be present.

Diagnosis.—Twofold. I. Diagnosis of fluid. II. Diagnosis between non-purulent and purulent effusions. I. *Diagnosis of fluid. a. Exploratory puncture.*—A matter of routine in all doubtful cases. Hypodermic syringe; never grooved needle. Precautions as to needle; clean, pervious, not too flexible, length two inches, and stouter than the ordinary ones. *b. Percussion.*—Character of dulness. Varies occasionally with position. Fallacies. Lung more or less solid and adherent. Pleura much thickened. Chronic strumous deposits in mediastina. Adhesions. Fluid may be localised by adhesions, or too thick to move freely. New growths. *c. Diminished movement and expansion. d. Breath-sounds feeble or absent.*—Fallacies. Lung partly solidified, and adherent with very thickened pleura. Bronchial breathing is often heard over effusions, especially in children. Sounds may be conducted from opposite side, whose action is increased. *e. Absence of tactile or vocal vibrations.*—Fallacies. 1. This may be present over collections of fluid when strong adhesions run between the lung and chest-wall, and when the lung is not extremely compressed. 2. It may be absent when the voice is weak, or absent, especially in children, or where tubes are at all occluded. *f. Enlargement of chest.*—Fallacies. Only in very large effusions, and in young subjects. In long-standing cases, affected side may be smaller from shrinking, or from opposite side being overdistended from increased action. *g. Obliteration of spaces.*—Fallacies. Only in large effusions and in young subjects. *h. Displacement of viscera: e.g.*, heart to right; liver downwards.—Fallacies. 1. Displacement of liver may occur in lobar pneumonia or new growths in chest. 2. Where effusion is undoubtedly present, heart may not be displaced, owing to adhesions or to shrinking or collapse of lung. II. *Diagnosis of pus from serum.*—Importance. Pus is very rarely absorbed; may burst into lung, cause hectic, etc. *a. Needle. b. Hectic.*—Not always reliable. May be little marked or absent in empyema; may be present in serous effusions; *e. g.*, in these, evening temperature may reach 101°. Explanation of absence of hectic in empyema; perhaps alteration or tension of pleura prevents absorption. *c. Aspect of Patient.*—Anæmic, earthy tint, clubbing of finger-ends. Dr. Barlow's dictum:* "If a child be seen with general pallor and finger-clubbing, one ought to think of empyema rather than of the other causes of clubbing—viz., chronic bone-disease, bronchiectasis, and congenital heart-disease." *d. Age.*—Common in children and young adults. In children, pleura seems to have a tendency to form pus (Goodhart).† *e. Rigors,*—Slight, irregular, especially towards night. Often absent in children. *f. Preceding disease.*—Measles. Scarlet fever. Childbirth. Pyæmia. Small-pox. *g. Power of transmitting vibrations.*—Professor Bacelli's dictum that a thin homogeneous fluid (*e.g.*, simple serous effusion) conducts sounds more intensely, though more slowly, than a more compound fluid;‡ (*e. g.*, serous with flakes of lymph, or especially an empyema). *h. Œdema.*—Often absent.

Question of Treatment of Non-Purulent, especially the Serous, Effusions.—As a rule, treatment medical. "Mortality in uncomplicated pleurisy is exceedingly small" (Watson). These effusions are not like ascites, requiring mechanical aid; they are more or less inflammatory, and tend to be reabsorbed. Drugs. Iodide of potassium, syrup of iodide of iron, etc. Laxatives. Dry, nutritious diet.

Question of Operation.—If the above treatment fail, two questions arise. A. What is the danger of leaving the fluid? B. What is the risk of paracentesis?

A. *Danger of Leaving the Effusion.*—1. Risk of sudden death in large quiet effusions with persistence. Risk greatest in left-sided effusions, which displace the heart, and cause twisting of the inferior vena cava. Effect of sudden exertion. Risk of formation of thrombi. 2. Risk of lung being more and more tied down by adhesions. Not probable in sero-fibrinous effusions. 3. Risk of tuberculosis. Exaggerated in sero-fibrinous effusions. 4. Risk of slow purulent transformation. Only in a limited number of cases. If patient be weakly or pulled down by previous illness. Effect of chill.

B. *Danger of Paracentesis.*—1. Shock. 2. Syncope from alteration of position of heart or large vessels, by removal of supporting fluid. 3. Embolism from detachment of clots from pulmonary veins. To prevent 2 and 3, draw off slowly, and not all the fluid. 4. Œdema of lungs; an undoubted risk. Symptoms. Shortly after tapping (usually large effusions), urgent dyspnœa comes on, with frothy serous expectoration rich in albumen. Death often in 24-48 hours. Probable explanation. Compressed lung after removal of a large effusion = limb after use of Esmarch's bandage, *i.e.*, vaso-motor nerves are paralysed, with expansion of long sudden stress thrown on tone less vessels; and hence the transudation of sero-albuminous fluids which = oozing after removal of the bandage (Dr. Duffin, British Medical Journal, 1874, vol. ii, p. 372).

Indications for Paracentesis in Non-Purulent Effusions.—1. Threatened failure of cardiac action. Signs. Pulse extremities etc. Overloading of right heart. Signs. 2. In all cases, and at any date, when the fluid is so copious as to compress the opposite lung. Dangers. Signs. 3. In all cases where, with a large effusion there have been one or more fits of orthopnœa. Emphatically required in some cases. Age. Coexisting lung-trouble. Distance of patient from medical man. 4. In all cases where a pleuritic effu

* These abstracts were given out previously to the Lecture. See the remarks in the Journal for January 20th, 1883.

† Brit. Med. Journ., 1877, vol. i; p. 726.

‡ *Surg. Pathology*, p. 245.

§ *Loc. supra cit.*, and *Med. Times and Gaz.*, 1874, vol. i, p. 497.

* British Medical Journal, 1877, vol. i, p. 759.

† *Ib.*, p. 797.

‡ *Medical Times and Gazette*, 1876, vol. i, p. 306.

ion, occupying half one pleural cavity, has existed three or four weeks, and shows no signs of progressive absorption.

PERFORMANCE OF PARACENTESIS.—Site of puncture. Low down. Reasons. Dr. Bowditch's rule. Find inferior limit of sound lung behind, and tap two inches higher than this on side of effusion, in a line perpendicular from the inferior angle of the scapula. Position of patient, supported by assistants so as to be easily lowered into a horizontal position. Precautions in withdrawing fluid. Not too quickly, nor completely. Warn patient as to deep inspiration. Indications for stopping: if the stream flag, if there be any sucking noise, or much cough.

EMPYEMA.—Frequency in children, *e.g.*, of 44 and 16 consecutive cases of pleurisy, 27 and 14 were empyemata (Dr. Barlow).* Prognosis good in children, save in those of very tender years. Formation occasionally very rapid: *e.g.*, pus present on 4th, 5th, and 7th day. Importance. Pus frequently localised or encysted, *e.g.*, not uncommon in middle third of thorax, limited above by adhesions, and below by fixing of lower lobe of lung to chest-wall; at this spot loud bronchial breathing, resonance, etc. Diaphragm to empyema. Pain intense. Physical signs comparatively slight. Disease often referred to other parts, *e.g.*, stomach and liver. Pus always to be withdrawn. Risks of leaving—*a*. External perforation; usual site, in the 5th space in the inframammary line, according to Mr. Marshall.† His explanation that this is a relatively unprotected part of the chest-wall and pleura, the pus here being only covered in by the internal intercostal, the intercostal fascia, and the weakest parts of the pectoralis major, and the external oblique. External perforations may lead to caries, amyloid disease, etc. *b*. Lung-perforation. Gangrene. Sloughing, hectic, etc. *c*. Tuberculosis. An empyema, even if caseating and inspissated, may be infective. View of Nieyer, degenerating particles taken up from any caseous relic may be distributed by the blood and set up tubercle, by depositing local foci of irritation. *d*. Risk of lardaceous disease. Spontaneous absorption of empyema. Very occasional, and risking tuberculosis.

DIAGNOSIS OF EMPYEMA.—*(Vide supra.)*

TREATMENT OF EMPYEMA.—A. *Simple puncture by needle of hypodermic syringe or aspirator.* May be used, and repeated, under few conditions. *a*. If patient be very timid. *b*. Where collections are very small or multiple. *c*. Where pus is sweet, the patient healthy, the illness of short duration, and when refilling does not take place quickly. In the above cases, repeated puncture may be successful in empyema, sometimes; but, as a rule, it affords relief, not cure. Patients thus treated should be watched for some time. Puncture may coax pus to surface (Goodhart).‡ Disadvantages of puncture. Plugging. Loss of time. Risks. Mode of using aspirator. Previous incision in an adult, or where much fat or œdema is present. Puncture through thickened pleura must be quick and certain. Site of puncture. Depends on the amount of pus. 1. If slight or multiple. 2. If large, where subsequent drainage will be easiest, in eighth or ninth interspace behind, in line of scapula. Amount to be drawn off, about eight to sixteen ounces in a child, and twelve to twenty-four in an adult (Marshall).§ Rules for stopping, constricting pain, urgent dyspnœa or cough, syncope. Aspiration to be gentle and limited, rather than violent and complete; the latter risking fresh effusion and suppuration, hæmorrhage, and injury of lung. Importance of all subsequent avoidance of chills.—B. *Subaqueous drainage.* Mode of using. (Apparatus shown.) *Advantages.* 1. Simple. 2. Tube well tolerated, and (if secured) follows movements of chest. 3. Drainage can be made gradual, and adapted to expansion of lung. 4. Readily converted into a siphon for washing out chest. This last of doubtful advantage. If pus be fœtid, make a free opening; if pus remain sweet, washing out is meddlesome (*vide infra*). *Disadvantages.* 1. Tube, necessarily small, is easily blocked. 2. Ulceration usually soon takes place by side of tube, and air enters. Risk. Favourable cases. In children, where the collection is not great, nor of long standing, the lung thus expanding as the fluid runs out.—C. *Incision.* Free drainage. Admits of washing out of pleural cavity, if required. Disadvantages. Severity. Tendency to close. *a*. Single opening. Successful in children. Not so often in adults. Why? Expansion of lung, falling-in of chest, etc., less probable in these cases. Position in ninth interspace in scapula line. In the ninth space, at the angle of rib, or just in front of it (Goodhart). *b*. Double opening. Required often in adults, in long-standing cases, or with very fœtid pus. Site of openings, lowest in ninth interspace, upper one in sixth axillary line. Question of anæsthetic. Chloroform usually well borne by children. Not required in adults with a single opening, and not needed in either case if opening be made quickly either by incision down to pleura, and then by use of dressing forceps and director, or by one incision with curved bistoury, this latter being quite safe in large collections of pus. Local anæsthesia in very nervous patients. Strict antiseptic precautions advisable; where these are impossible, the use of carbolised oil or lint and iodoform.* Question of washing out the cavity. Risks. 1. Shock. 2. Embolism. 3. Absorption. If used, diluted, and very gently. Closure of openings. Long period of drainage often needed. Metal tubes useful in this stage, not in earlier ones. Use of tents. Resection of one or more ribs. Purpose to facilitate drainage and falling-in of chest. Indications. Obstinate suppuration. Hectic on withdrawal of tube. Mr. Marshall's belief that an empyema is not drained most effectually by an incision at the lowest point behind, but by one at the point to which the sides of the pleural abscess most naturally tend to collapse. In most cases, the fifth interspace below the nipple is, approximately, this point; and to it the ribs heart, lungs, and diaphragm all tend to move.

From cases treated at Great Ormond Street Hospital (BRITISH MEDICAL JOURNAL, 1877, vol. ii, p. 759).

Lancet, 1882, vol. i, p. 337.

Guy's Hospital Reports, 1877, p. 200.

In a case in which I opened an empyema lately for my friend Dr. Goodhart, the pus was most intensely fœtid, and one or more communications probably existed with the lung. Iodoform was used as suggested above; after the first few hours, the dressings were uniformly sweet, and the patient made an uninterrupted recovery.

PENETRATING GUNSHOT-WOUND OF THE ABDOMEN: EXCISION OF THE BULLET FROM THE ERECTOR SPINÆ MUSCLE: RECOVERY.

BY GEORGE BUCHANAN,

Professor of Clinical Surgery in the University of Glasgow.

THE following is one of those rare cases, of which examples have occasionally been recorded, of a man's body having been penetrated by a bullet, with subsequent recovery.

On the afternoon of June 11th, 1882, Mr. M., aged 25, a healthy vigorous young gentleman, volunteer, athlete, cricketer, etc., was visiting a steamship in the harbour, in which he had been engaged in assisting to fit up the engines, that being the business for which he was preparing. The captain of the ship showed his visitor and a companion a revolver, and, while the companion was holding the pistol, it accidentally went off, and the contents of the barrel were lodged in Mr. M.'s body. The companion was standing in front and a little to the right of Mr. M., and the barrels of the pistol were directed towards him. Mr. M. fell down immediately when struck, and at once became faint. He was placed on a sofa, and Dr. Renton was sent for, being a friend of Mr. M. Finding that no hæmorrhage was going on, and that Mr. M. could be moved without causing him much pain, Dr. Renton sent a message for the ambulance wagon, and had the patient removed to a private room in the Western Infirmary under my care, and I was sent for.

I arrived at the hospital about 7 P.M., and found Mr. M. in bed in the following condition. His countenance was pale, almost livid, and anxious; his skin cold and clammy; pulse almost imperceptible, so small that it could not be counted. The patient was inclined to vomit, and had vomited several times the small quantities of brandy and hot water which had been given. He was quite conscious, and could give an intelligent account of what had happened, specially insisting that the accident was most certainly fortuitous, and that no blame was attachable to the young gentleman who held the pistol; but he was not allowed to speak much.

On examining the abdomen, a small ragged wound was seen, three and a half inches above the umbilicus, and an inch to the left of the middle line. It was not so big as a threepenny-piece; its edges were dry and inverted, those of two sides resting against each other, so that it was practically closed by the contraction. On putting my finger-tip into the wound, I found its entrance was resisted; and, on gently insinuating a probe into it in the direction in which the bullet must have entered, it went a little way outwards and downwards, and backwards, and then it was resisted, showing that the opening had become valvular and practically closed. There was no hæmorrhage, and little or no pain in the site of the wound, but a good deal of pain in the back, opposite to it, and in the left thigh in front.

* Dr. F. Taylor and Mr. Howse, *Clin. Soc. Transactions*, vol. xiii, p. 19. Mr. Marshall, *loc. supr. cit.*, p. 38. Peitavy, *Berl. Klin. Woch.*, May 1876, and *London Medical Record*, August 1876.

The most careful manipulation failed to detect any evidence of the presence of the bullet, or any bits of clothing, in the abdominal wall around the wound; and an equally careful examination of the parietes failed to give any indication that the bullet might have, by some curious torsion or oblique movement, travelled round among the layers of the abdominal walls out of reach at the back.

I, therefore, believed that the bullet had passed through the abdominal cavity, and was lodged somewhere in the back, although I could not find any evidence of its presence there; and that, probably, some internal viscus was wounded, thus giving rise to the collapse which is so frequent a sign of perforation of the bowel. I formed a most unfavourable opinion of the patient's state, and asked one of his friends to telegraph to his father and brother, who resided near Dublin, to come to Glasgow next day, but stated my fear that a fatal result would take place before they arrived.

I ordered hot applications to be continued, and as every attempt to administer small quantities of stimulants had been attended with vomiting, I ordered the subcutaneous injection of a few drops of ether from time to time, which was suggested to me by Dr. W. L. Reid, who was in the hospital at the time, to be followed by a renewal of the drops of brandy towards the morning, if he should survive till that time, and the tendency to vomit should cease. A small enema of beef tea and a little brandy had been given also. The ether, to the extent of ten drops, was given subcutaneously every hour; and, by midnight, some reaction of the circulation had taken place, the pulse having become better, though very feeble; but, along with this, some restlessness and irritability, for which one third of a grain of morphia was given by subcutaneous injection. This, along with a continuation of the ether, seemed to be productive of good results.

June 12th, 9 A.M.; pulse 84; soft and feeble; temperature 98°; vomiting had ceased. There was no abdominal pain, no tympanites. He had pain in the lumbar region of the spine, and a great deal of shooting pain in the anterior part of the left thigh, relieved on flexion. I now felt certain that the bullet was lodged somewhere in the lumbar region of the back, but the most careful examination failed to detect the spot.

June 14th.—The patient had been gradually improving, being nourished on very small quantities of iced beef essence and a few drops of brandy given frequently. Vomiting now ceased, but to-day there was some flatulent distention of the abdomen, and frequent eructations of gas. I ordered the discontinuance of fluid, except a few drops of iced water to moisten the lips, and, instead, requested the patient to chew and swallow at intervals a little dry toast or hard biscuit. This acted, as I have often found in cases of gastric debility, almost like a charm. The irritability, eructations, and flatus disappeared as soon as the digestive function had something to act on. In the evening, a soap and water enema still further relieved the abdomen, by producing a free passage of fæces.

The wound, which never gave any trouble, was dressed with simple water dressing. No inflammation or suppuration occurred. From this time, for some days, the improvement was gradual, but continuous, giving rise to a certainty that no internal organ had been injured.

June 23rd. The wound was now completely healed. But, while the patient's state had, in some respects, improved, a change for the worse had taken place in others. For the last few days, there had been a distinctly febrile condition. The patient was fairly well during the day; in the evenings, there was a restless state, followed by slight coldness, even approaching to rigor. This was soon followed by rise in temperature, to even 102°, which lasted for several hours; then the patient usually fell asleep, and awoke in a state of perspiration. By the morning visit, he was more comfortable again. This state reminded me much of the remitting fever of the Mediterranean, and of the fever common in the Crimea after any illness, or the sequela of most of the gunshot-wounds. Its occurrence made me daily search for local complications, and for evidence of the presence of abscess.

Repeated careful examinations of the abdominal parietes failed to detect any mark, or weal, or discoloration, or tenderness, which could indicate the existence of a track made by the bullet. I was daily more satisfied that the missile had penetrated the abdomen, and was lodged in the back, but hitherto I had not been able to localise the spot. At length, on the morning of June 25th, I detected a distinct fulness in the left lumbar region, close to the spine, with an obscure boggy feeling, and some tenderness, which sufficiently indicated where the search should be made.

I put the patient under chloroform, and made a free incision an inch deep, parallel to the spinal column, giving exit to a quantity of dark-brown, semi-purulent, putrid fluid. I introduced my forefinger, which passed between the transverse processes of the first and second lumbar vertebræ, into a little circumscribed cavity in front, but could not find the bullet. I, however, detected that the top of the second transverse process had been chipped off; and, on groping about, I felt a foreign body lying behind and below the broken tip, in the substance of the posterior muscles. This I removed with a pair of curved sequestrum-forceps; and it proved to be the bullet, which had been crushed and grooved by its striking against the bone. It was an ordinary lead conical bullet, weighing half an ounce. It had evidently come straight through the abdomen, struck against and broken the tip of the transverse process of the second lumbar vertebra, had become deflected from its course and turned sharp down behind the process, where it remained lodged. After the removal of the bullet, I again explored the little abscess-cavity, and that behind the process, with the view of finding if any bits of clothing or foreign substances had been carried in with the missile. I satisfied myself that there was nothing of the kind, and also that were was no communication between the abscess and the abdominal cavity. I now washed out the wound to its bottom with strong carbolic solution, put in a drainage-tube, and dressed the wound antiseptically.

June 24th. I dressed the wound, and was not surprised to find, by the putridity of the discharge, that I had not succeeded in rendering aseptic the abscess-cavity in front of the transverse process which had, at the operation, yielded the fœtid pus. But to-day I took pains, with bits of lint dipped in strong solution of chloride of zinc, to mop out every part of the cavity, and thereafter to wash it out with a douche of strong carbolic solution, and to dress it with antiseptic precautions, using a large drainage-tube. After this, the discharge, which was never copious, remained quite sweet, and the patient continued to improve daily till June 30th, when I dressed the wound in the surgical theatre, in presence of the members of the West of Scotland Branch of the British Medical Association, of which I was President. I thought the case sufficiently important to relate it shortly, and show the patient, with his own consent.

A week afterwards, as the discharge had practically ceased, I removed the tube; but, a few days after this, the former febrile symptoms recurred, the temperature being as high as 104°. Fearing there might be some retained substance, I reopened the wound with a dressing-forceps, and found the top of the transverse process still bare, and around it a small quantity of pus, which I syringed away and reintroduced the tube. After this, things went on better for a few days; but again he was seized with a rigor, followed shortly by the febrile symptoms; temperature 104°; and, after that, most profuse perspiration. The remitting febrile state continued all July. Quinine in large doses was tried without effect. In the middle of July, there was distinct rheumatic or other pain, and effusion into the right knee and ankle, giving me the gravest fears as to the existence of pyæmia; but these in the end passed off.

August 8th. While the general state of the patient had been better, there was again a slight bulging at the site of the incision which was opened up, giving vent to a little offensive pus.

After this, the patient gradually became stronger; and on August 18th he left the hospital for a short residence in the country, before going home to Ireland. Since his going home, he has continued slowly to regain his strength; but for a long time he was subject to occasional attacks of the remitting febrile state, and to more or less rheumatic pain in several of his joints. Now, however, he has become strong and well.

REMARKS.—The principal point of interest in this case, from the very first, was the determining the track of the bullet. That a bullet or other foreign body may penetrate through the abdomen without fatal result is well known, from the record of cases in the annals of military surgery. In a few of the cases, there is no doubt whatever that the abdominal cavity had been traversed; in others, it is a question whether the bullet, entering obliquely where the walls are fleshy, had not passed round between the muscular layers, or, where principally aponeurotic, had not passed along subcutaneously. But that recovery has taken place, in some cases, after perforating wounds of the abdomen is quite established.

That the abdomen can be impaled without injury to any important organ, is demonstrated by an experiment of Mr. E. Maylard who attended my operations during the summer session, and took great interest in the case here detailed. A note of the experiment is as follows.

"With the kind permission of Dr. Coats (the pathologist), I did the following little *post mortem* operation this morning, the result of which I think may interest you. Having first marked the exact

point of entrance of the bullet on the abdomen of a male body, and the opening behind at which it was extracted, I passed a sharp-pointed weaver's spindle directly through the cavity of the abdomen, causing it to enter and emerge at the points indicated. On opening the abdomen, the following points were observed. The instrument, after passing through the parietes, had entered the cavity of the omentum, just below the curvature of the stomach, and at some little distance above the transverse colon. Passing through the posterior wall of the cavity, it transfixed the coats of the bowel just above the junction of the duodenum and the jejunum; but the cavity of the bowel was not opened. The slightest deviation to the right would have perfectly avoided the viscus. It then entered the psoas, escaping the pancreas, which was some little distance above, and the kidney, which was situated to the left. Since the ball struck a transverse process, and lay—I think you said—a little internal to your incision, the duodenum would have completely escaped. This investigation may not go for much; for one cannot assume that the position of the parts as found after death—flexed and non-distended—are in any way a representation of the structures as existing in life. Still, I think the fact interesting, that the spindle should have passed right through the cavity of the abdomen without penetrating the interior of any viscus or injuring any important organ. It at least demonstrates the *practical* possibility of such an event taking place during life, and no doubt supports what you have suggested as the probable course of the bullet."

Almost all writers on gunshot-wounds assert that, in many instances, a projectile perforating the skin of the abdomen has been deflected and has pursued a circuitous route to its place of exit or lodgment; and also that the track can be made out by certain signs, as tenderness, swelling, discoloration, and prolonged discharge, which frequently follows gunshot-wounds, although these may at times be trifling; also that occasionally the distance travelled has been half the circuit of the body. The records of the American and Franco-Prussian wars re-establish the statement; yet I can find few well authenticated examples of it. And I have not found one of a bullet entering near the umbilicus and making the half circuit of the trunk. I believe it to be possible that a bullet may perforate the skin near the umbilicus, and, if very oblique in direction, may be deflected, and pursue a course round the body subcutaneously; I also believe it possible that a bullet coming very obliquely might perforate the sheath of the rectus, enter the substance of the muscle, again perforate the sheath anterior to the plane of the abdominal aponeurosis at the linea semilunaris, and, as before, travel round in the abdominal wall. But, in both of these instances, the superficial track of the bullet must be evidenced by some of the signs indicated by those who have mentioned the subject.

In the case here recorded, I think there can be no doubt that it is an example of a direct penetrating wound of the abdomen, without injury to any of the viscera.

I believe that the bullet, having traversed the abdomen, perforated the psoas muscle, just above the transverse process of the second lumbar vertebra. The immediate and continued pain in the front of the left thigh, causing the patient to draw it up, indicates injury to the anterior lumbar nerves, which are imbedded in the psoas muscle; and the small putrid abscess, which was found just in front of the transverse process, almost certainly proves this.

The whole of the symptoms are very similar to those described by Bell, in his *Discourse on Wounds* (part ii, page 630), in reference to penetrating wounds of the abdomen, when the ball injures the psoas muscles.

Having struck the tip of the transverse process, it was suddenly turned on itself and deflected over, and lodged close behind the transverse process, with its point downwards, its base up. That this was its course was manifest to me, because my finger easily slipped through a hole, above the tip of the transverse process, into a small abscess cavity in the substance of the psoas.

I did not feel, and never noticed, in the discharge, any crumbs of broken bone; but the bare bit of bone at the tip indicated that some minute fragment had been chipped off; and this was sufficient to account for the occasional little suppurations at the bottom of the wound, which, I have no doubt, were the cause of the long-continued and remitting febrile symptoms. Several times, during the first two months, there was some gastric and intestinal disturbance, which gave me some anxiety as to the possibility of peritoneal complications; but I now believe them to be due to the suppurations referred to, which occurred after the removal of the drainage-tube, when all discharge seemed to have ceased.

SEQUEL. February 23rd, 1883.

Mr. M. having returned to Glasgow, this morning, with his cordial assent, I examined him in presence of my clinical class. He is in robust health, and has all the appearance of a vigorous, active young man. Not a trace remains of the various symptoms which troubled him during his tedious convalescence. I carefully examined him, by questioning, as to all the points previously detailed; and, these being now corroborated by the evidence of the patient, I was confirmed in my opinion as to the course of the ball. The aperture of entrance is now a flat, circular cicatrix, exactly three and a half inches above the umbilicus, and one inch to the right of the middle line. The incision by which I excised the bullet is now a cicatrix, about two and a half inches in length, and about two inches to the left of the spine of the second lumbar vertebra. It is much depressed in the centre, and fixed down by strong cicatricial tissue.

Reverting to the whole of the circumstances, as elicited by narrative and cross-questioning in presence of the students, I have no doubt whatever that the bullet penetrated directly through the abdomen.

CASE OF GUNSHOT-WOUND OF NECK, WITH PERFORATION OF ŒSOPHAGUS: RECOVERY.*

BY D. ALLEN CHARLES, M.D., Bellaghy, co. Londonderry.

JOHN M., aged 18, weaver, became a patient of mine under the following circumstances. On the evening of April 7th, 1881, he was sitting before the fire with a pistol in his hand. The pistol was loaded with two slugs, which he had made by hammering the lead into solid pellets. Thinking something was wrong with the percussion-cap, he attempted to fix it with the point of a scissors, the muzzle happening to be directed towards his face. The weapon suddenly exploded, and, feeling a sharp sting in the neck, he fell on his back. He was able, however, to rise immediately, and, a neighbour having come to his assistance, I was sent for. Not being at home when the messenger arrived, three hours at least elapsed before I saw the patient. I found him calm and collected, and able to give the above history of his case.

He complained much of pain between the scapulæ, and at the epigastrium, especially if he attempted to swallow. He had no cough or vomiting, but immediately after the accident he spat up a few mouthfuls of blood. His respiration was regular, and his pulse 80. On examination, I found his face and neck much blackened with powder, and there was some slight œdema of the neck, with two wounds at the base antero-inferiorly. One of these wounds was a simple contusion of the skin over the junction of the lower and middle thirds of the left sterno-mastoid, while the other was a perforating one, situated at the apex of the left anterior triangle, about one inch and a half above the sternum—the latter barely admitted the tip of my little finger. There was a little blood trickling from it, but the hæmorrhage seemed to have been small. Having enlarged the opening, I explored the wound with my finger, and found that the slug had entered between the tendon of the sterno-mastoid muscle and the trachea, but without injuring either, and had then taken a direction downwards and backwards. I could trace its course with my finger for about an inch, but, by means of a probe, for upwards of three inches. I explored gently for some time, but without discovering any trace of the bullet; I, therefore, gave over any further attempts; but that the œsophagus was perforated, I was led to believe from the spitting of blood after the accident, and the subsequent difficulty in swallowing. I had no alternative, therefore, but to watch the case, and let nature take its course. Accordingly I dressed the wound with carbolic oil, covered all with a pad of fine oakum, and gave a draught of ammonia and henbane. Next morning I found he had passed a fair night, but he was still complaining of pain in his shoulders, and of difficulty in swallowing. Pulse 104, temperature 101.5°, respiration 28. I made a further and last attempt to trace the bullet, using a silver catheter for a probe, but without success. I determined, therefore, to keep the wound clean, and to put the patient on milk diet.

April 11th.—He felt much easier; pain in the shoulder and difficulty in swallowing were still present. He had some substernal pain. Pulse 116, temperature 102°, respiration 28. The tongue was furred, the bowels were confined.

April 14th.—He felt well until yesterday, when he began to have pain in his jaws and neck. He could swallow better; pulse 100, temperature 104°, respiration 28; tongue moist; the bowels were open yesterday; the motion was black and tarry. The wound was

* Read before the Annual Meeting of the North of Ireland Branch.

clean and almost closed; there was no discharge, no œdema; he had darting pain in the left ear, and much thirst.

April 17th.—He had a severe rigor last night, which lasted for a considerable time, and was followed by profuse perspiration. Pulse 100, temperature 99.4°. The tongue was furred; the wound was discharging thin fœtid pus. Enlarging the opening, I syringed the wound with carbolic lotion, and put the patient on sulphate of quinine, and tincture of the perchloride of iron.

April 19th.—He had had no rigor since the 17th; pulse 82, temperature 100°, respiration 26. On the evening of the 17th (tenth day after the accident), the patient noticed that the discharge from the wound began to increase, especially when he was swallowing his milk. The wound looked clean, but the dressings were soaked with discharge, and a creamy-looking fluid was coming away. I gave the patient a drink of milk, and found that pure milk came away from the wound. I then tried water, with the result that the discharge became clear. There could, therefore, no longer be a doubt as to the existence of an opening into the œsophagus. The patient had no pain in his shoulder unless when lying on his back. I determined to continue the dressings as before, but to change them more frequently.

April 22nd.—He had, unfortunately, got an attack of bronchitis, the cough being very hard and troublesome; pulse 84, temperature 100°. The discharge from the wound was considerable. There was much exuberant granulation around the orifice. I prescribed ammonia, squill, and bark.

April 26th.—He was feeling better. The cough was not so troublesome. His appetite was improving; bowels regular, tongue clean. He had copious perspirations. He slept well; had no pain unless when lying on the left side. The wound was clean, with little discharge, and this not increased by drinking. He had no difficulty in swallowing; pulse 84, temperature 99°. I prescribed dilute sulphuric acid with quinine.

April 30th.—He was much better; the copious perspirations had ceased, and there was no discharge from the wound. I touched the granulations with nitrate of silver. The patient could not yet swallow solids without experiencing pain. He had some pain in the dorsal region of the spinal column on the 27th, but this had now disappeared; pulse 100, temperature 98.6°. After this date, the patient walked on two occasions into the dispensary for examination, a distance of six miles. The granulations formed a kind of bag or cyst, two inches long: but, after being ligatured at its base, it dropped off, leaving the wound quite healed. I have seen the patient frequently since, and he is now pursuing his usual occupation of weaving, suffers no pain, and has not the slightest difficulty in swallowing solids or fluids.

Remarks.—The points of interest in the case are many. I shall particularly refer to a few of them: for example: 1, the readiness with which the wound of the œsophagus healed, even under the disadvantageous circumstances in which the patient was placed; 2, the probable fate of the slug; 3, the comparative safety of such injuries, notwithstanding the rich supply of large blood-vessels in the part; and 4, the possibility of a subsequent stricture of the œsophagus.

1. That there was an opening into the œsophagus, I think there is every reason to believe; and, also, that this was caused by the direct entry of the slug, and not by any subsequent ulceration. There was hæmorrhage from the œsophageal wound, as indicated by the vomiting of blood immediately after the accident, and the subsequent discharge of blood by the bowel. The original opening was evidently a small one, as it was not until the tenth day after the accident that any food was noticed to escape by it; so it is probable that the original opening was in some way increased in extent, possibly from slight softening or ulceration. This opening closed up about the nineteenth day.

Longmore, in Holmes's *System of Surgery*, refers to similar cases, in which recovery occurred after five days in one, and twenty-six days in another. In such injuries, there is a liability to concussion of the vertebral column, and to injury of the deep-seated nerves, attended sometimes with loss of power in the arm; extensive paralysis even may set in after some time. But our patient fortunately escaped these risks, and I ascribe this to the comparative slightness of the shock caused by the slug—it being light, and of small size.

Care, however, should always be taken to allow the wound to heal from below. The advantages of this plan of treatment are obvious. It is the course to be followed in all penetrating gunshot-wounds, and much more is the same plan to be pursued in such a case as the present, where we have a hollow organ like the œsophagus wounded, from which food, in its passage along that canal, is so liable to be extruded.

Wounds of the œsophagus from within, such as rupture and the like, without any communication with the exterior, are often very dangerous, sometimes even fatal in their consequences. But, on the other hand, wounds from without belong to a different class entirely. Our object, therefore, must be to prevent a case of the second class from being converted into one of the first; that is, the orifice into the œsophagus must be closed before the rest of the wound is allowed to heal by granulation.

2. One of two things must have occurred to the slug: it may either have penetrated into the œsophagus, and then have been discharged through the intestine; or it may still be lodged somewhere deep in the tissues of the neck. We know that it is possible for foreign bodies to become so invested by organised lymph as to give rise to little or no irritation in the living tissues in the neighbourhood, and so cause no inconvenience. At any rate, the slug was never discovered, nor have there been any indications hitherto pointing to its lodgment.

3. Longmore points out that, during the Crimean War, the mortality of wounds of the neck among the English soldiers only amounted to 4.08 per cent., while among the French it amounted to 26 per cent. In the American War, it was 14 per cent. Even 26 per cent, is not such a high mortality if we take into consideration the important organs and vessels that are so superficially placed in the neck, and accordingly so exposed to injury. As Longmore, however, remarks: "In no region are so many examples offered of large vessels meeting, but escaping from balls in their passage, as in this, because the cause which operates elsewhere—ready mobility among long and yielding structures—exists in a greater degree in the neck than in any other part."

4. I cannot find any records as to the occurrence of stricture after gunshot-wounds of the œsophagus; but, so far, my patient has made no complaint of any kind pointing in this direction, and it is now over twelve months since the accident happened. The possibility, however, of such an occurrence, I should say, would greatly depend on the extent of the injury. Where the wound is extensive I should be disposed to regard stricture as a likely occurrence; but where the extent of the injury appears to be slight, as in the case in question, I should be inclined to regard its appearance as very unlikely.

NOTES OF CASES OF DILATED STOMACH: WITH REMARKS.

By T. SANCTUARY, M.D., Hayle, Cornwall.

Case I.—The patient was a spirit merchant, aged 40, who, according to his own account, had enjoyed good health up to August 1879. He consulted me in February 1880, for "wind in the stomach and sickness after eating." The general and family histories were good. He had been a full liver, and a regular and moderate drinker of stimulants, taking his glass of toddy at night and a couple of wineglasses of sherry for dinner. He had a pale, flabby tongue, indented at the edges, and a good deal furred at the back part; his teeth were much decayed, his expression careworn, and his complexion withered and sallow; his bowels were constipated, the nervous system greatly depressed, and general nutrition poor. He told me that he noticed his appetite fail him first about the end of July 1879, and he then began to feel "a fulness" at the pit of the stomach. Of late his appetite had become very capricious: sometimes he felt a craving for food, at others the thought of it produced a feeling of nausea; but invariably, an hour or so after eating, he was seized with a violent attack of vomiting, and pain in the stomach, and all he had eaten was rejected, together with more or less sticky phlegm. The vomiting was not altogether dependent on the ingestion of food, as it sometimes occurred when no food had been taken previously. He had lived for the last six months chiefly on raw eggs, milk, and cream, with some iced water or claret to allay the excessive thirst from which he suffered. His height was 5 ft. 11 in.; weight 130 lbs. He said that he weighed 170 lbs. in June 1879, and he was now feeling the diminution a good deal, and was fully conscious of his emaciated appearance.

From his appearance and symptoms, malignant disease of the pylorus at once suggested itself to me. I examined him carefully, and fancied I could feel a hard lump in the epigastrium; there was a diffused tenderness in the stomach and adjacent parts, but no specially painful spot anywhere. On percussion and auscultation, I discovered that the stomach presented a very curious phenomenon. The patient

as eructating quantities of gas every few minutes, and immediately er each eructation I could perceive a sensible diminution in size of ıe distended stomach; whilst, at the termination of the interval, ıat organ reached to within half an inch of the navel. On shaking im gently from side to side, I could plainly hear a splashing sound, ıch as water makes when shaken in a churn. I therefore added, to ıy previous diagnosis, that of dilated stomach. I suggested the use f the siphon-tube to wash out his stomach, but he declined, and ished to try what medicine would do to relieve him. I therefore ut him on milk-diet, as he would not hear of enemata, and recom- ended him not to take more than two or three ounces at a time; ıd ordered him a mixture containing bismuth, hydrocyanic acid, ıd creasote, with three-minim doses of tincture of opium, *B.P.*, ıd advised him to keep a supply of ice constantly by him to check ıe vomiting.*

He returned to me in three days' time, saying he felt worse; that e could retain very little milk, and that the pain was increasing. again advised the siphon-tube and nourishing enemata, and, ıther reluctantly, he consented. I introduced the tube (for full irections as to the mode of using this instrument, *vide* Appendix, ote 1), with the usual result of producing severe coughing and ɔmiting of stringy mucus, but no blood, and washed out the stomach ith a weak solution of Condy's fluid (two drachms to one pint of ater) distinctly feeling the point of the tube through the abdominal all about the region of the navel.

He felt relieved, after the operation, though much exhausted, on :count of the violent vomiting. I repeated the process next morn- g, and afterwards twice daily for a month, keeping him alive, in ıe meantime, principally by enemata of beef-tea, but allowing him .so small quantities of milk, and Brand's essence of meat, by the .outh. The pain, by this time, was much lessened, and he had ıined two pounds in weight; but there was still some vomiting at mes, which was always increased by a larger meal than usual, ıd there did not appear to be any real gain in strength. The sease seemed at a standstill, and the stomach presented more nearly s normal dimensions.

As he was particularly anxious to discontinue the enemata, I dered him, in addition to his former mixture (which he was still king at intervals), twenty grains of sulphite of magnesia in one and half ounces of water every three hours, and recommended unfer- ented bread, with milk-diet, and charcoal biscuits. I saw nothing ore of him till July, when he sent for me, saying he thought he ıould not live long. I found him in bed, terribly emaciated, his ıuntenance presenting the peculiar cachectic hue and expression ıaracteristic of the cancerous diathesis; and he told me that s weight in the previous week was only 116 lbs., that he felt much eaker, and that the pain and vomiting were worse, and that he ıuld get but little sleep. I did not, at this juncture, advise the phon-tube again, as it was evident that the end was not far off. could now, on careful palpation, make out a hard tumour, about :e size of a bantam's egg, an inch and a half above, and rather to :e right of the navel. From this time his downward course was :ry rapid, and treatment was almost exclusively confined to e, opium, and nutrient enemata. Finally, he sank, and died on ugust 3rd.

I was fortunate enough to obtain a *post mortem* examination, ıd the appearances fully confirmed the diagnosis. At the necropsy, found the stomach enlarged to about twice its natural size, and ıntaining a considerable amount of yeasty fluid. The pyloric por- ɔn was hard and enlarged, and felt gristly and elastic when ueezed; the serous coat was milky and clouded, as if with a sub- ıte peritonitis; the tube of the pylorus was so contracted, that I ıuld only just pass the small end of a tobacco-pipe stem through ; the mucous membrane was not eroded, but appeared as if had been entirely absorbed, and replaced by a nodular ring of :eyish white cartilage. The colon was much displaced; it was ırtially overlaid by the stomach, and occupied the lower hypogastric gion. I could not find any secondary deposits in the pancreas, ver, transverse colon, or omentum, and the malignant disease seemed have confined itself exclusively to the pyloric orifice, which, on icroscopic examination, showed the usual characteristics of scir- ıus. The mucous membrane of the rest of the stomach was tenuated; and, with a quarter-inch object glass, I could find mparatively few gastric tubes remaining, these few being inter- ɔven with fibrous bands, and appearing to be full of a fatty *bris*. It was evident that the dilatation was secondary to the scirrhus; also, that the washing out of the organ with Condy's Fluid materially relieved the fermentation so long as it was persevered in, and would, I believe have completely cured it, had no malignant complication been present. Moreover, I see no reason why removal of the tumour might not have been attended with a reasonable probability of recovery, as there was no erosion or secondary infiltration, and the cancer was distinctly localised.

CASE II.—This patient was a dressmaker, aged 48. She suffered from heartburn, vomiting, and violent pain in the stomach; this latter being most severe in the right of the epigastric region. She told me these symptoms had been coming on for about six months, and growing worse every week. She was quite prostrate with the attack when I saw her first, in June 1879; she had twice vomited blood, and had been losing flesh for four months; she suffered pain if she fasted, and it was increased by taking food, and only relieved by vomiting. The vomiting generally came on immediately after a meal, but had occasionally been delayed some hours; together with her food, she vomited large quantities of a greenish sour liquid, with a good deal of gas; the bowels were obstinately constipated, and the urine scanty. Her chest was healthy, tongue moist and slightly furred, the abdomen soft and contracted, the skin dry; and the peristaltic movements of the stomach were easily observed through the wasted abdominal wall, the stomach-note being recognisable down to the navel. I ordered her a scruple of bicarbonate of magnesia, with fifteen grains of trisnitrate of bismuth in half an ounce of aqua calcis three times a day, and a soap enema; also five-grain doses of Morson's pepsin-powder, with two ounces of milk every hour, for she steadily refused to allow me to use the siphon-tube or nutrient enemata. The treatment seemed to have no effect in stopping the vomiting, though she thought the pain was less severe. The sulphites, hyposulphites, sulphurous acid, opium, and binoxide of manganese were tried, but with no benefit. The microscope showed quantities of sarcinous fungi in the vomited matters. I urged her again to let me try the siphon-tube, and succeeded in persuading her, and treated her in this manner for eighteen days, giving her no medicine, and feeding her meanwhile by enemata of beef-tea and chicken-broth. She experienced a good deal of pain at first in the stomach, when the tube was introduced, but gradually became able to bear it without much inconvenience. The vomiting was completely checked, and, by degrees, I got her back to a liquid stomach-diet alone. Nevertheless, she gained no strength, but rather emaciated; the vomiting returned again, and continued very severe; she became increasingly prostrate, hiccough supervened, and coffee-ground vomiting, and she gradually sank four months after she consulted me.

I performed a *post mortem* examination twelve hours after death. The body was much emaciated; the lungs and heart were quite healthy; the omentum was puckered. The characteristic changes were in the stomach, which was double its ordinary size, and its walls were thin and atrophied. Near the pylorus, was a contraction of semi-cartilaginous hardness. On opening the stomach, an ovoid ulcer, two inches and a half by one inch, was seen to surround the constriction; its edges were round and elevated, and its base smooth. On section, the mucous membrane appeared to be continuous with the upper layer of the ulcer; its deeper layers were very firm, white, and fibrous. Around the ulcer and its contraction was a portion of healthy mucous membrane, which extended to a perfectly healthy pylorus; so that the obstruction of the onward passage of food lay not in the pylorus, but in the irritability of the ulcer, which caused the food to be rejected before it got into the pyloric grasp. In the omentum were several hard tumours, and the omentum itself formed a firm contracted mass about the size of two fingers. On section, these tumours were tough, containing a milky juice, and, when magnified two hundred diameters, showed large cells with distinct nuclei, evidently cancerous. All the stomach-follicles had disappeared over the smooth surface of the ulcer; in the deeper structures of which no cancer-cells were observable, but only bands of fibrous tissue. The intestines, liver, spleen, and kidneys were healthy.

There was no doubt that this patient had suffered from ulcer of the stomach for a long time, and that the malignant disease was probably secondary. There was not any trace of cancerous deposit at the ulcer itself, but the omental cancer may have been set up by the chronic irritation induced in the adjoining glands and structures.

With regard to the treatment, in the present state of our knowledge of malignant disease, nothing but temporary improvement was possible; and this did follow, not, however, on the use of the antiseptic drugs, but on the more direct and heroic method of washing out the stomach with the long siphon-tube.

CASE III.—A messenger, aged 43, single, consulted me in November 1879, for pain in the stomach, and vomiting after food. Sh

* At my request, he sent me some of the vomited mucus, which, on examination, I found to be intensely acid, containing large quantities of sarcinæ and me yeast-fungus also.

was a pale, unhealthy-looking woman, with decayed and inefficient teeth, and a flabby, indented tongue. She menstruated profusely every three weeks, her bowels were obstinately constipated, and she passed less urine than before this illness came upon her. She could only get her meals at long intervals, as her occupation kept her walking for five or six hours at a time. When she did get them she was accustomed to eat heartily, her favourite food being hot heavy cake, pastry, and weak tea. She owned to drinking nine or ten cups of this beverage daily. Her family history was unimportant. After careful examination, I could find nothing amiss except in the stomach, where the gastric resonance extended from the fourth intercostal space to an inch below the level of the navel in the left nipple line, *i.e.*, about seven and a half inches, and the stomach caused a visible prominence in the abdominal wall. At intervals she would eructate offensive gas, and be greatly relieved by this proceeding; and after each eructation the abdominal swelling would grow less, until the gas had collected again. The pain was not limited to a small spot, but extended over the epigastric and umbilical regions, and was also felt in the interscapular space. Consequent on the vomiting, she suffered from severe headache; and complained of great weakness in the legs. When her abdomen was shaken, and auscultated at the same time, the splashings in the stomach were plainly audible. I attributed her symptoms to impaired digestion, caused by large and unwholesome meals, resulting in enlargement of the stomach cavity, and weakening of its walls; the pain being caused probably by stretching of the gastric nerves from over distension of the stomach by the gas which was formed in greater abundance after food had been taken, and also by the muscular soreness a result of the incessant vomiting. I ordered her a milk-diet, and an aromatic mixture, containing bismuth, strychnia, and hydrocyanic acid, three times a day, and a drachm and a half of Carlsbad salt every morning. A week after (November 24th) she came again, and reported herself no better, but suffering from an attack of diarrhœa as well. I prescribed some astringent powders, and a mixture with nitro-hydrochloric acid and quassia, and Morson's pepsin-powder. The diarrhœa continued till the 26th, when it stopped, leaving her much weaker, and her stomach still unable to take more than small quantities of milk. I advised her to rest in bed for an indefinite time, and to continue the mixture. On December 3rd the diarrhœa returned, but was soon checked by chlorodyne. She went on pretty well till January 8th, resting in bed, and limiting herself strictly to a diet of milk, varied at times with barley-water and a raw egg. On January 8th she complained that the pain in her stomach was worse, and she was ordered opium and belladonna liniment, which gave great relief. At her urgent request, I permitted her to get up on January 29th; but this experiment was followed by a sharp attack of vomiting and diarrhœa, with menorrhagia, which sent her to bed again, and the pain and sickness, which had been partially in abeyance, returned as severely as ever. I had suggested a trial of the siphon-tube previously on two occasions; but she had been dissuaded, by the solicitations of anxious friends, and also by a medical man of many years' standing, who assured her it would be "the death of her," and averred that such a mode of proceeding was altogether preposterous and unprecedented. At last, on February 5th, 1880, I got the better of her fears, and introduced the tube, with the usual consequences of nausea, retching, and vomiting of tough, gluey mucus, but no blood. I used a pint of a weak solution of Condy's fluid; and after the operation, in spite of the violent straining and vomiting, she said she felt better. I continued this on the 6th and 7th, when she felt so much relieved that she thought she would try to do without the washing out for the next day. I therefore ordered her to take fifteen-grain doses of hyposulphite of soda every four hours, and to adhere, as before, to her simple diet. I may say here that I had prohibited the use of tea, coffee, and alcohol, from the commencement. On the 8th the medicine seemed to exert no salutary effect whatever; therefore, at her urgent request, I resumed the tube on the 9th, and discontinued the medicine.

The disturbance on the introduction of the tube gradually lessened, and, by the 15th, she was able to walk half a mile to my house, to have the operation performed there. On February 22nd, she seemed much better, and could take food with little pain and no vomiting, and the formation of gas was now reduced to a minimum; therefore, on February 23rd, I did not use the tube. It had, however, to be resumed on the 24th, no disturbance being now caused by its use, and was continued once daily until March 3rd, when I intensified the treatment by siphoning the stomach morning and evening, instead of in the morning only as heretofore; and at each sitting I used two solutions: the first being always either a weak solution of sulphurous acid, *B. P.* (half a fluid-ounce to a pint of water), or of salicylic acid (two drachms to a pint of water); and the second pure spring water. She also took a mixture containing Carlsbad salt every morning before breakfast. She gradually improved in health and appearance, and by April 7th had gained five pounds in weight. She weighed 125 lbs. on November 17th, 1879, and 130 lbs. on April 7th, 1880. I now discontinued the evening washing, and, on April 16th, provided her with a tube to use herself, and altered the lotion to the original one of Condy's fluid. She persevered in this treatment until May 22nd, then used the tube only every other day, and finally discontinued it entirely on June 2nd, being now free from pain, flatulence, and vomiting, and able to eat a plain simple meal without annoyance to herself or her friends. On June 24th, 1881, she was enjoying capital health, walking on an average ten miles a day, weighing 137 lbs., and stating that she had not felt so well for twenty years. No nutrient enemata were used in this case.

[*To be continued.*]

ON PICRIC ACID AS A MEANS OF DISTINGUISHING ALBUMEN FROM PEPTONE.

By GEORGE JOHNSON, M.D., F.R.S.,
Professor of Clinical Medicine, Senior Physician to King's College Hospital.

Amongst the few objections which have been raised to the use of picric acid as a test for albumen in the urine, is the statement that it forms a precipitate or coagulum with peptone, which is indistinguishable from that which it gives with albumen. If this statement were in accordance with facts, and if peptone be ever found in the urine, the use of picric acid as a test might be a source of confusion. The attention of my son and myself having been directed to this subject, we find that nothing can well be easier than to distinguish the precipitate which picric acid forms with albumen from that which it gives with peptone. We have experimented in the usual way, both on peptonised white of egg and on fibre of meat. The white of egg and meat fibre respectively were digested for some hours at a temperature of from 90° to 100° Fahr. in water acidulated with hydrochloric acid, and mixed with Bullock's pepsina porci. The liquid was filtered, and freed from the small amount of albumen which it was found to contain by boiling and a second filtration. We thus obtained a clear liquid peptone, which was coagulable neither by heat nor by nitric acid. On the addition of a saturated solution of picric acid there was an abundant gelatinous precipitate of peptone, *but this precipitate was immediately and completely redissolved by heat below the boiling point, and reformed on cooling.* Further, we found that the peptone precipitated by picric acid, was completely dissolved by the addition of a few drops of nitric acid. Here, then, we have two simple and certain tests, by means of which albumen may be distinguished from peptone. The coagulated albumen, which is thrown down by picric acid, is always rendered more opaque and coherent by heat, and is insoluble in nitric acid; on the contrary, peptone, which is thus coagulated, is readily dissolved, both by heat and by nitric acid. The use of picric acid as a test, therefore, so far from tending to the confusion of albumen with peptone, will be found to be the simplest and most effectual means of distinguishing these two compounds and even of separating them from each other when they co-exist in the same liquid. If the mixed precipitates, formed with picric acid, are heated, and then placed on a warm filter, the dissolved peptone will pass through, while the coagulated albumen remains on the filter.

Another means of separating dissolved albumen from peptone is that before referred to—viz., coagulating the albumen by heat, and then separating it by filtration.

It has been asserted that peptones occur in the urine. This may be a fact, but with our present knowledge of this subject I feel some doubt as to the truth of the statement. My conviction is that if it ever occurs it must be a rare and exceptional phenomenon. Within the last two years, during which, at the suggestion of my son, I have used picric acid as a test for albumen, I have tested with it some hundreds of specimens of albuminous urine, and although I have not always applied heat to the urine after adding the picric acid solution I have done so in a large proportion of cases, and in not one single instance have I found that the precipitate formed by picric acid has been either wholly or partially redissolved by the application of heat; but, on the contrary, it has invariably been rendered more dense and opaque. In almost every instance, when I have not heated the specimen after coagulation by picric acid, I have added nitric acid to another portion of the same urine, and have thus shown the presence

albumen, except when the amount of albumen present had been o small to be detected by the nitric acid test—most of these being e urines of convalescents from acute albuminuria in which, shortly fore, the presence of albumen has been indicated by heat and tric acid. Now since peptone is not coagulable by nitric acid, it clear that when the urine is found equally coagulable by nitric and picric acid, the case is not one of peptonuria. And I infer that nongst these numerous cases there has not been one in which the ine has contained peptone.

It would seem *à priori* probable that peptonuria would be as rare phenomenon as the so-called chyluria. This, however, is certain at, with the modifications of the picric acid test, to which I have ferred, there can in future be no difficulty in detecting peptonuria hen or if it does occur, or of distinguishing it from the far more mmon condition, albuminuria.

It has been customary of late to speak of various kinds of albumen, at this surely is not the language of scientific chemistry. There are arious albuminoid bodies—such as, for instance, fibrine, casein, etc. -but, of albumen, there is but one kind, whatever may be its source. he albumen which is found in the urine is a derivative of blood-erum, and is always one and the same, although its behaviour with eagents will differ in accordance with the state of combination and f admixture in which it exists. Thus, albumen in alkaline, or in some eutral urines, is not coagulable by heat; and, again, the presence of small quantity of a mineral acid, or a larger quantity of a vege-able acid, results in the formation of an acid compound of albumen, which no amount of boiling will cause coagulation. The common ractice of adding acetic acid to urine before applying heat, is likely mislead by the formation of such an acid compound, not oagulable by heat. A small quantity of albumen, therefore, often scapes detection by this fashionable but fallacious method of test-ng. On the other hand, picric acid has not only the advantage ver heat and nitric acid of being so sensitive that it will indicate he presence of albumen in a specimen experimentally diluted be-ond the point where the other tests fail to detect it, but it acts qually well in acid, neutral, and even in alkaline urines; for, lthough the coagulation of albumen by picric acid is prevented by austic alkalies, I have not once, in examining some hundreds of pecimens, found it necessary to acidulate the urine before adding he picric acid. Another advantage of the test is, that it consists of single cheap substance, which is not liable to undergo chemical hange by being kept either in a solid form or in solution; and, vithout making seemingly invidious comparisons with other tests vhich have recently been recommended, this, at any rate, may be aid of picric acid, that, in its action, it is singularly free from ources of fallacy. In fact, my estimate of the value of picric acid as a simple, certain, and most delicate test for albumen in the urine, as risen in proportion to my increasing experience of its efficacy. confidently predict that it will soon come into general use; nd one good result of the common employment of so trust-worthy a test will be, that the next generation of practitioners will see fewer cases of incurable degeneration of the kidneys than laily come under our notice at the present time. For the history of a large proportion of these cases is, that some ten, fifteen, or it may e twenty years ago, there was an acute affection of the kidneys with albuminuria, which was supposed to have passed away; but he complete freedom of the urine from albumen was not ascer-tained by trustworthy, and frequently repeated, tests. The recovery was incomplete; an unsuspected latent disease has been insidiously making progress, until at length some of the many distressing re-sults of degeneration of the kidneys bring the patient again under medical observation, when it is only too obvious that, not only have the kidneys in the course of years become incurably diseased, but that many other organs and tissues have become involved in the morbid process. There is, then, little more to be done than to watch the progress of the disease to its inevitably fatal result.

The calamitous results to which I have referred may, in a large proportion of cases, be prevented by the careful watching and treat-ment of recent cases of albuminuria, with a determination on the part of the practitioner that the patient shall not be declared con-valescent until the most delicate available test fails to detect the smallest trace of albumen in the urine at any period of the twenty-four hours, and for many successive days.

It cannot, in my opinion, be too emphatically declared or too generally known that, while a fraction of a grain of saccharine matter per ounce is a normal constituent of all urines, the smallest trace of albumen is abnormal and pathological: and, if permanent, it has in it the germ of future trouble, and, it may be, of irreparable disaster.

ERYSIPELAS AND ECZEMA IN A NEW-BORN INFANT.

By HERBERT J. ILOTT, M.D., Bromley, Kent.

Mrs. S., aged 28, was attended by me in her second confinement on December 8th. The labour was natural, and conducted, as far as possible, with antiseptic precautions. The hands were washed before and after each examination with carbolic solution, and the examining finger lubricated with thymol jelly (Richardson's). The placenta was removed by expression, and the vagina syringed out with warm carbolic solution. The external parts were washed with the same, and Southall's absorbent pads applied to receive the discharges. The after-progress of the mother was in every respect satisfactory, the discharge being small in amount, thin and free from odour. The infant (a male) when born was small, but well formed and nourished. Nothing abnormal was noticed with regard to it until the 14th, when it was shown to me by the nurse, and found to have a slight degree of purulent ophthalmia. The nurse was directed to bathe the eyes frequently with tepid water, and to apply at short intervals a tannin lotion. The ophthalmia quickly improved under this treatment. On the 18th, the infant cried a great deal, and a redness of the skin was noticed which, commencing near the umbilicus, spread over the abdomen and thorax. By the next day, nearly the whole surface of the body was covered with a deep redness. On the trunk, especially on the sides of the thorax, were numerous vesicles and bullæ filled with a clear fluid. Several of the bullæ had coalesced. The fluid soon became thick and yellow, and the bullæ, rupturing, left large flakes of epidermis on the skin. The redness subsided, leaving the surface of a yellowish red hue. The epidermis peeled off in large flakes over the body, except on the head and the penis and scrotum, which parts were very slightly affected. The treatment adopted was bran baths, with a lotion of zinc oxide, liquor plumbi, and glycerine. Internally, a saline mixture, with carbonate of magnesia, was given. During desquamation, vaseline was applied with a large camel's hair brush. By December 31st the desquamation had almost ceased, and the surface was healthy, with a few papules here and there. On the evening of the 31st, the infant was taken down stairs, and it is supposed that he caught a chill, for he screamed violently during the night, and next morning the skin was again bright red, the face being much more inflamed than during the first attack. There was soon oozing of fluid from the face, forming yellow crusts and bullæ, and vesicles, discharging a yellow fluid, formed on the body.

The same treatment as before was ordered, with the addition of small doses of quinine; as this, however, caused vomiting, and the child cried very much, a mixture of bismuth and soda, with aromatics, was substituted. On January 8th, the surface was in a general state of desquamation, the scales of a yellowish white, colour, resembling bran. The eyes were quite clear and bright; the child slept well, and took nourishment freely. The mother's milk being very scanty, he was given in addition Swiss milk and white wine whey, which was taken freely.

On the 10th the face was clear, but desquamation was going on over the scalp and back. The bowels were regular, motions healthy. The surface, from which scales had separated, was of a bright pink hue.

On inquiry I found that the mother who, as a rule, enjoys good health, but is not strong, had suffered during pregnancy from leucorrhea with a yellowish white discharge. She had never had any skin-disease; nor had the father. The father's aunt, who was staying in the house, told me this history. About thirty years ago, while standing at a cottage-door in June, the weather being cold and snow falling, she felt a sense of swelling and irritation of face and head. After reaching home she was laid up with erysipelas of the head and face, extending to the arms and trunk. The attack was very severe, and she was ill from it for ten months. About two years after this she again got a chill, and was laid up with a similar attack for a like period. Although she has never had a recurrence of erysipelas, she is very subject to irritation of the skin from the effects of extreme heat or cold. She is also subject to urticaria, more especially if she venture to eat salmon. As a child, she suffered from redness and oozing of watery fluid from the bends of the joints.

The infant's grandmother, on the mother's side, has had more than one attack of facial erysipelas, the first occurring at the age of 52. His aunt (mother's sister) has had several attacks of eczema, which seems to be provoked by the effects of heat or cold winds.

I may add that I attended the eldest child, a boy, in August, 1880, when eighteen months old, for erythema of the fugacious type,

chiefly appearing on the trunk and upper extremities, which seemed to be connected with gastric derangement, and which rather abruptly disappeared on the child being taken to the seaside. It was rather fortunate, especially viewed in the light of the family history, that no ill-result followed on vaccination, which was successfully done. This case seems worthy of record, as illustrating the strong tendency to skin-inflammations existing in the relatives of these children on both sides, though it is curious that neither father nor mother have hitherto suffered. They are both individuals of slight physique, nervous temperaments, with remarkably clear, red-and-white complexions. The attack that I have described was evidently related to both erysipelas and eczema, the first phase more resembling the former in its characters, the second the latter.

OBSTETRIC MEMORANDA.

CASE OF HYDRAMNIOS.

On February 7th, 1883, I was called in consultation to see a patient said to be pregnant. She was the mother of several children, all her labours being natural. I noticed her peculiarly anxious countenance, and she was evidently suffering from extreme dyspnœa. I found the abdomen enormously distended and tense, dulness on percussion, and well marked impulse on palpation; the lower extremities were highly œdematous. Fœtus-like movements could be detected through the thinned abdominal walls. I found the os dilated, and the membranes protruding and tense, these were ruptured, and sixteen quarts of glairy yellow fluid drawn off; subsequently, a full-grown fœtus was expelled, the occipital bone and part of the cerebellum being absent. The patient made a rapid and perfect recovery without any untoward symptoms.

Kidderminster. SAMUEL STRETTON.

THE PREVENTION OF LACERATION OF THE PERINÆUM.

In a paper read before the Obstetrical Society of London in 1875, entitled "The Treatment of Rigid Perinæum and the Avoidance of its Rupture," published in their *Transactions* for that year, page 61, and also in the BRITISH MEDICAL JOURNAL, I recommended what Dr. Alexander Duke now suggests. The following is a quotation from my paper. "We meet with ample instructions in many of our standard works for the dilatation of the os uteri; but, so far as I am aware, the same line of treatment has not been applied to the perinæum, to which, however, I find it peculiarly applicable. This probably arises from the long-established idea that the perinæum needs *support*."

After describing a case in which this treatment was most successful, I proceeded: "In my way of thinking, the only justifiable course was first to remove the obstacle, and then to arouse and assist the uterus. With this view, I hitched three fingers into the posterior commissure, and kept up pretty firm *continuous* extension, first with one hand and then with the other; in less than half an hour, the outlet was very considerably dilated. I then gave a dose of ergot, applied a bandage firmly around the abdomen, and assisted by pressing the hand over the uterus, and in a short time had the pleasure of seeing a fine boy, and of knowing that my patient was in no way lacerated."

I must add that, since recommending this treatment, I have applied it in about a thousand labours; nor do I now confine it to cases of rigid perinæum, for I find that, first, it not only avoids any rupture of the perinæum, but, secondly, it materially shortens labour by performing the dilatation usually done by the child's head; thirdly, it stimulates the uterus to action; and, fourthly, it very frequently terminates a labour which would otherwise have necessitated the use of the forceps, with the probability of a ruptured perinæum.

My object in this communication is not so much to claim originality as to insist upon dilatation of the perinæum being made a rule of practice, instead of the mischievous and useless support of that part so frequently practised. Any aid which facilitates and shortens labour, and at the same time renders it more safe, is worthy of our attention; and every obstetric physician must have seen cases where the surfaces of a lacerated perinæum appeared to have been the place of septic absorption.

The dilatation during a pain is not noticed by the patient; but, in urgent cases, continuous steady traction is far more expeditious. In cases where forceps have to be used for obstruction at the brim of the pelvis, dilatation not only prevents laceration, but saves much time, and the delivery is far less painful.

H. ERNEST TRESTRAIL, M.R.C.P., F.R.C.S., Aldershot.

In the BRITISH MEDICAL JOURNAL of March 10th, page 454, Dr. Duke brings out some interesting and original facts with regard to the prevention of laceration of the female perinæum. His plan, however, of pushing the head forward with the finger in the rectum seems to me to be of questionable value. Before the head has descended low down to the outlet of the pelvis, in cases where the pubic arch is narrow, no amount of pressure from behind will make the head travel forwards, for the simple reason that the arch presents a barrier to such a movement. In occipito-anterior cases, when the head is low down, and the occiput has become as much fixed as it can under the pubic arch, the movement of "extension" takes place. When this has begun, any pressure from behind the rectum at once favours the movement, because the force is applied at the end of the lever, represented by the head; this lever's fulcrum being at the occiput, fixed under the pubic arch. And, further, the same amount of force will have a proportionally greater effect according as the movement of "extension" has taken place in a lesser or greater degree.

Thus, the uterine contraction, acting through the child on the base of the skull, at the point where the spinal column joins the foramen magnum, would be reinforced by another (though a much smaller) force, acting further away from the fulcrum, both tending to produce "extension" of the head, and consequent stretching of the perinæum. Now, it must be remembered that, where there is a rigid perinæum, this small increment of force may produce the results we wish to avoid. In cases where the perinæum is much stretched, and is in danger of being ruptured, counterpressure on the presenting part of the head will prevent the movement of "extension" taking place too rapidly; and thus give the time, Dr. Duke aptly remarks, ought to be given for dilatation of the perinæum.

Probably, in cases of occipito-posterior presentation, the finger in the rectum would be of great service; for the ruptured perinæum is often the result of insufficient "over-flexion" of the head, the uterine contractions forcing the head itself on to the perinæum, the element of rapidity of delivery of the head being generally subordinate.

ALFRED CARR, M.R.C.S., late Obstetric Assistant, University College Hospital.

FACE PRESENTATION.

A. W., AGED 22, primipara, at full period, was first seen after slight dilatation of the os had taken place, the face having barely engaged the pelvis, although the membranes were ruptured, and the liquor amnii was escaping. The finger touched the right malar bone and orbit. The pains were frequent but not strong, and the patient was hysterical. I gave opium, and left her, and was sent for twelve hours later, when the os was fully dilated, and the face, which had now descended to about the middle plane of the pelvis, was found presenting, in the first position, the right oblique diameter, with the chin backwards towards right sacro-iliac-synchondrosis. As the forehead seemed decidedly to take precedence, I tried gently to make the head rotate on its transverse axis into the first cranial position, with the occiput towards the left ilio-pectineal eminence, but did not succeed. This method was recommended by the late Dr. J. Clark, but is now abandoned. Next, introducing my finger into the mouth, I endeavoured to bring down the chin—the proper analogue of the occiput; at the same time assisting the natural rotation into the fourth facial position—the left oblique diameter, with the chin forwards. But all my efforts seemed fruitless to move the head in any way, especially as the pains were weak. Therefore, after waiting two or three hours longer to see what course nature intended to adopt, and as the fronto-mental diameter still remained impacted in the same position, I gave chloroform, and applied the long forceps with double curve; the upper blade, which had to be introduced first, being rather difficult of introduction between the prominences of the face and the maternal parts, so as to avoid injuring either. The long straight forceps is recommended in these cases with the view of better assisting rotation, but in this instance the double-curved one answered remarkably well, as, under rather powerful traction, accompanied by a gentle twist in the desired direction, rotation took place into the fourth position, and the face was born chin forwards, the hollow of the forceps pointing backwards. Had rotation not taken place, the case would most likely have ended in craniotomy. The child was born alive, and, although slightly disfigured at the time, with the caput succedaneum

er the right cheek and orbit, which were both considerably ollen, it has done well; the mother has also made a good covery.

B. STRACHAN, M.B., Sunderland.

OCCIPITO-POSTERIOR PRESENTATIONS.

E perusal of last week's Obstetric Memorandum, by Mr. Patmore eehy, induced me to refer to my midwifery notes with respect to e above subject. I find that, in 1,400 consecutive cases, the cipito-posterior presentations has occurred to me in twenty-six stances, ten being primiparæ and sixteen multiparæ. Of these I livered twenty-four by the aid of the forceps, and *two* by manipu-ion alone. In no case was the infant still-born or injured in any y, nor was the perinæum lacerated in any instance. For some ars past I have been in the habit of endeavouring to convert a ird or fourth position into a first or second by manipulation, but ve not often succeeded. On many occasions, however, I have been le to manage it with the forceps. But rotation is not always the siest way to deliver. In cases where there have been strong pains r several hours, the head may be so moulded as to render delivery th the face to the pubis the best and shortest course to pursue. I ich prefer a straight forceps in these cases, as with it rotation can performed in either direction without resorting to the somewhat kward expedient suggested by Mr. Sheehy, with the double rved instrument, of putting it on the "reverse way;" a proceeding, oreover, which would be impossible unless the head were very low wn in the pelvis.

W. E. WYLLYS, Great Yarmouth.

SURGICAL MEMORANDA.

THE TREATMENT OF SPINAL CURVATURE BY THE PERFORATED FELT JACKET.

r friend Mr. Noble Smith appears to have missed the exact point which I was anxious to direct attention, in referring to his remarks felt jackets. I said he declared their porosity to be "a myth," d perhaps it is as well that I should quote the passage in which at expression occurs. "Many of the objections," he writes, aised against the plaster-of-Paris also apply to the felt jackets. eir supposed porosity is a myth. I formed a cup out of this terial, and kept water in it for ten days. At the end of that time, ound that no moisture had penetrated beyond the surface." I ink it is quite clear that these remarks cannot apply to the per-ated felt, in a cup formed out of which water could scarcely be pt for ten seconds, as any surgeon may satisfy himself by applying the manufacturer for a specimen.

In the new list of objections to felt jackets given by Mr. Noble nith in the JOURNAL of March 10th, I find that the first four ged in his pamphlet against plaster-of-Paris are conspicuous by eir absence, from which I am led to hope that Mr. Smith agrees th me in considering the felt a distinct advance on the plaster kets. I cannot, of course, hope that he will also agree with me considering these latter an advance upon all the steel supports, ether with or without crutches, that were in use for half a century eviously; but having now tried the felt in cases of adults, children, d infants, I should be sorry to have to return to steel supports, en when adapted with the greatest ingenuity and surgical know-lge.

H. NELSON HARDY, F.R.C.S.Ed.

THE library of the College of Physicians of Philadelphia contains 653 volumes. The additions during 1882 amounted to 1,234 umes. The library of the late Dr. H. L. Hodge is deposited with e college in trust. Next to the library of the Surgeon-General's ce, that of the College of Physicians of Philadelphia is said to be e largest in the United States.

THE Helston Guardians and Rural Sanitary Authority at their last eting had under consideration a letter from the Local Govern-nt Board declining to sanction the appointment of the Poor-law trict medical officers as medical officers of health. The chairman ted that the Local Government Board had suggested that the druth and Helston Rural and Urban Sanitary Authorities should nbine and appoint a medical officer of health at about £600 a ar; but this was declined by all of them. After a very long dis-sion (in the course of which one of the guardians proposed that y should reappoint the Poor-law district medical officers as before, spite the board above), it was decided that all the correspondence on the subject be considered by the sanitary committee, and that y report thereon at the next meeting of the board.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CANCEROUS STRICTURE OF THE ŒSOPHAGUS: GASTROSTOMY: DEATH BY EXTENSION OF THE DISEASE EIGHT WEEKS AFTER THE OPERATION, WITH REMARKS.

By HOWARD MARSH, Senior Assistant-Surgeon to the Hospital.

EDWARD C., aged 60, was admitted on April 22nd, 1882. For six months he had been losing flesh; and for five months had felt pain and gradually increasing difficulty in swallowing; he had also been troubled with spasmodic cough, attended with the expectoration of much frothy mucus, occasionally streaked with blood. On examination, nothing abnormal could be detected in the pharynx or neck. A tablespoonful of milk which he tried to swallow was nearly all at once returned, and produced severe spasmodic cough. A medium-sized œsophageal bougie could not be passed beyond the level of about the sixth cervical vertebra, and even a No. 6 catheter was stopped at this point. Instruments caused violent suffocative cough, and a profuse expectoration of frothy mucus.

For a few weeks, while in the hospital, he improved on a diet entirely of fluids; but then he flagged again, and daily weighing showed that he was rapidly losing flesh. It was, therefore, agreed that gastrostomy ought to be performed; and, on July 22nd, the first stage of this operation was carried out. The carbolic spray being used, the abdominal cavity was opened by an incision three inches long, commencing two inches to the left of the middle line, and two inches below the edge of the costal cartilages, and passing downwards and outwards. The stomach was easily found; but it was lying high under the liver and diaphragm, for the part that was seized was the greater curvature of the organ. It was drawn down so that I reached, as I thought, the middle of its anterior or upper surface towards the cardiac end, and this I fastened to the abdominal wall by an outer and an inner row of sutures, passed through the serous and muscular coats only, in the manner described by Mr. Howse; the wound was dressed with carbolic gauze. He was fed after the operation with enemata of milk, milk and egg, and beef-tea and brandy. Small hypodermic injections of morphia were occasionally administered.

July 25th. He was making favourable progress. The pulse was 75, and of good volume. He was fed entirely by enemata.

July 29th. He took some brandy and beef-tea by the mouth, swallowing it easily.

The stomach was opened on July 30th with a tendon knife, by an incision just large enough to admit an India-rubber tube of the size of a No. 10 catheter. As he lived well on enemata, and could swallow fluids without discomfort or cough, no food was introduced.

August 2nd. He took two ounces of milk by the tube in the stomach, to which a funnel was adjusted.

August 6th. He was able to take milk, egg and milk, and beef-tea freely by the tube.

August 18th. A large-sized flexible tracheotomy-tube was introduced into the stomach by the wound, and through it some finely pounded meat, mixed with beef-tea, was given; but there was so much difficulty in passing the food into the stomach, that he was ordered to be fed, as before, entirely on fluids.

August 25th. For some days his cough had been very troublesome, and he had brought up with great difficulty a large quantity of viscid tenacious mucus. He was very weak.

August 26th. He had two severe attacks of dyspnœa this morning. These showed that the disease either compressed, or had perforated the trachea, for Mr. Butlin found, with the laryngoscope, that air passed freely through the larynx. The left thyro-arytenoid muscle, however, was paralysed.

August 30th. There was much dyspnœa, and he had a harassing cough. He could not lie down.

September 6th. Cough was less troublesome, and there was no urgent dyspnœa. He sat up in a chair for an hour every day, but he was much weaker.

September 14th. He gradually became much more feeble, and was much harassed by cough. He died quietly this morning.

Post mortem Examination.—At the lower margin of the opening

into the stomach, and close beneath the skin, was a nodular mass of cancer, as large as a horse-chestnut. The borders of the fistula were firmly adherent to the abdominal wall for about half an inch in all directions. The left lobe of the liver was adherent to the wound. About half a pint of brown purulent fluid lay encysted between the cardiac end of the stomach, the splenic flexure of the colon, the omentum, and the left leaflet of the diaphragm; there was no fluid in the peritoneal cavity, and no general peritonitis. The opening in the stomach was found to be near the lower border, and about half way between the cardiac and pyloric ends. The œsophagus was infiltrated with hard cancer from the cricoid cartilage downwards for seven inches; and below this were many nodules of cancer lying in its wall as far as its juncture with the stomach. The upper seven inches consisted of a complete tube of cancer, the walls being half an inch thick. From the upper and back part of the tube sprang a large flattened mass of cancer, which had pushed the œsophagus and trachea forward. The disease appeared to have originated in the posterior wall of the œsophagus, and to have then grown so as to entirely encircle the canal. The bodies of the second and third dorsal vertebræ were partially infiltrated by the new growth. The left recurrent nerve was imbedded in the cancerous mass, and the right was surrounded by nodules that had not yet coalesced.

REMARKS.—Many points in this case might be discussed, but I will refer only to those which bear upon it as an example of gastrostomy. Although the patient was sixty years of age, and much enfeebled by prolonged loss of food and rest, he bore the operation without a trace of any ill effect. The case constitutes strong evidence, I think, that, though many patients die after it, gastrostomy is not in itself so dangerous as many believe. Like many of the operations that have been performed on the abdominal organs, it has too often been delayed till a fatal result has been inevitable. Upon the point of danger, one recovery may be allowed to outweigh many failures. Recovery is positive evidence that the end aimed at can be reached; while failure is negative, and merely shows that the end has been missed. Failure teaches us nothing till we have ascertained its cause. It may arise out of conditions that have no necessary connection with the case in hand, and that are easily removed. There was a time when amputation of the thigh was almost always fatal; but that was not because the operation is essentially incompatible with life, but because the powers of nature, though ample for repair, were frustrated by external conditions—by a poisonous atmosphere, by defective management of the divided arteries, or by unfit methods of dressing the wound. These sources of failure have now been so far removed, that death after amputation of the thigh is by no means a common event. The same uphill progress has awaited every operation large enough to carry the idea of failure. Each has had its stages, and the first stage has always been the most trying. As the German proverb says, all beginnings are difficult. A new operation is almost necessarily placed at this great disadvantage. It must establish itself by showing what it can do in unfavourable instances; for it is resorted to at first only when every other means has been tried and has failed, and when the remaining chances of success are very small. In spite of this, however, operations on the abdomen have steadily made their way. At the present day, surgeons are led by the evidence of facts to resort to abdominal section in some cases of intestinal obstruction, although such a practice is wholly opposed to previous belief. But how can they refuse? For, on the one hand, we often see at *post mortem* examinations that, in a person in every other respect perfectly healthy, death has resulted from the slipping of a piece of intestine under a small band or through a hole in the omentum—conditions admitting of remedy by direct surgical interference, but otherwise entirely beyond our reach; while, on the other hand, it has been established on clear evidence that the abdomen may be opened, and made the field of extensive and prolonged operations, with a mortality less than that which, only a few years ago, attended lithotomy or amputation of the thigh. Some maintain that the success of ovariotomy is exceptional, and must not be taken as an index to the risks of other abdominal operations. But is it not true that ovariotomy has been successfully performed when the peritoneum has been in every conceivable condition between that of perfect health and that of acute inflammation, which has steeped its surface in fœtid pus; that sometimes adhesions have been so nearly universal, that whatever remained of the peritoneum has been extensively torn away; that, at others, patients have recovered from the operation when the surface of the peritoneum has been thickly studded with malignant disease? What condition has been wanting to render the demonstration of tolerance of the peritoneum complete? And, in the course of ovariotomy, has not every test to which the capacity of the viscera to bear operative interference can be subjected been time after time applied, and been followed by recovery? The abdominal cavity has been widely opened and long exposed; extensive adhesions have been separated; various portions of the intestines have been lacerated and united by suture; large portions of omentum have been removed; and every organ has in its turn been freely handled. How can we maintain that all these proceedings, even though they have been mere incidents in ovariotomy, are doubtful evidence as to the safety of making an incision four or six inches long through the abdominal wall, and dividing a band no larger than a piece of whipcord, or withdrawing an intussusception, or pulling a loop of intestine out of a hole in the omentum? Can we reasonably say that what may be safely done in the course of ovariotomy cannot be done just as safely for the relief of intestinal obstruction? Nor are we without practical demonstration of the safety with which, in carefully selected cases, abdominal section for intestinal obstruction may be attended. When, in a case in which urgent symptoms are present, we see the abdominal cavity opened, and the obstruction easily relieved, and when we afterwards learn that all the symptoms at once ceased, and that within a week the wound was healed and all the sutures removed, and that the operation was followed by no rise either in the temperature or the pulse; when, in short, the operation proved in all respects an unqualified success, we seem to stand on solid, though it be new, ground. We feel justified in believing that to-day is not as yesterday; that it is safer now, in selected cases, to explore the abdominal cavity than it used to be to operate on the more grave forms of hernia in the groin.

But in respect to the operation of gastrostomy, there is a further point which it is important to mention. It has been supposed that there is a close connection between the physiological importance of an organ and its tolerance of operative interference; that such an organ as the stomach, with its elaborate structure, its complicated functions, and its intimate associations with the nervous system, would resent interference; that it would be disastrous to resort to any active proceedings involving the tissue of the kidney, or of the liver. These anticipations, however, have not been confirmed by experience. These organs are placed deep in the interior of the body, so that they can be reached only through wounds, which must be considerable, and which in themselves are not unimportant; so that in this respect an operation on the stomach is more formidable than an operation on the face. And the chance of some dangerous oversight, or error in practice, is greater in the one case than in the others. But, so far as we can at present see, the tissues composing the stomach, the kidney, the liver, the intestine, and the urinary bladder, tolerate interference, and heal after injury just as readily as do those of external parts. This observation was borne out in the present instance. Not only did the stomach acquire secure adhesion to the abdominal wall, but the liver became firmly united to the edge of the wound, while the surrounding part tolerated the presence of a large abscess, which lay between them, as securely encysted as it might have been among the muscles of the thigh. There are now several cases on record in which the structure of the kidney has been divided in the removal of calculi without bad result of any kind; there have been others in which lacerations of the tissue of the liver, produced by external injury, have safely healed; and others again in which firm union of the greater part of a lacerated wound of the bladder has occurred in a few hours after the edges have been brought together with sutures; while the recovery of the intestine from the injury it frequently sustains in strangulated hernia indicates that its reparative power is hardly, if at all, inferior to that of external parts, with whose behaviour after severe contusions we are so familiar.

But if this is the position in which we find ourselves, if we have come into the possession of these new powers, our first duty is to consider how they shall be used. The fact that a thing can be done without catastrophe is not in itself enough to warrant its performance. The power to do an act is one thing, the reason for doing it is another. Although many operations may be grouped under the same heading that they are free from any large risk, they must be classified from quite another point of view—that, namely, of the advantage they confer on the patient. Operations that resemble each other as to their degree of safety may differ widely in their value as means to an end. Many of the forms of intestinal obstruction are strictly analagous to strangulated hernia. In both alike it is as if a piece of twine were tied round the gut; and in both, the principle of treatment must be—as when we loosen a knot—that of direct manipulative interference. If, therefore, we can ascertain that such obstr-

ion exists, there is the same necessity for operation in the one case s in the other. An objection to abdominal section for the relief of bstruction, I am aware, in the minds of many very able judges, is hat we cannot trust our diagnosis—that cases are met with in which, lthough the signs of constriction of the gut were present, the atients have unexpectedly recovered without operation. But, so far s I have been able to observe, these fortunate cases bear but a very mall proportion to those in which the patients die, and n which subsequent examination shows that recovery without nterference was, in ordinary language, impossible. By re- rting to abdominal section, therefore, in certain cases of bstruction, we have the prospect of saving from a painful and pidly approaching death, which nothing else can avert, a patient ho, but for the accident which has suddenly overtaken him, would e in sound health and in the expectation of many years of life. ow there are very few occasions such as these to be met with in rgery. No member or organ is removed, no important structures e divided, no blood is lost; and if the patient survive, his cure is al and complete; within a month he may be restored from the ink of the grave to unimpaired good health. Under these circum- ances, abdominal section is almost unrivalled in the boon it con- rs. And I believe its true position will very soon be accorded to

But further; there is so little to be lost, and possibly so much be gained by an operation in obscure yet urgent cases, that abdo- inal section is likely, in the future, to be often resorted to as an ploratory operation. Are we not as fully justified in exploring the domen in a case in which speedy death is threatened by intestinal struction as we are in a doubtful case of abdominal tumour? As agnosis improves, the nature of the obstruction will probably, in e majority of cases, be ascertained by a careful study of the sym- oms, while in the remainder an exploratory operation, not too long layed, will be the means of saving life in cases in which it must herwise be sacrificed.

But the case is different in respect to gastrostomy for cancer the œsophagus. The picture is far less hopeful. The prin- ple of this operation is the same as that of colotomy for cancer the large intestine. Neither of these operations touches e disease from which the patient is suffering; this, in both in- nces, is left free to pursue its inevitable course; they simply ert death in one form till it overtakes the patient in another. strostomy, however, ranks very far below colotomy, not only cause it is more dangerous, but because, while colotomy sometimes sures to the patient a long period of tolerable health and comfort, e most that gastrostomy can purchase in many cases is scarcely rth living for. The reprieve is short, and the period over which it cends must be spent in ever increasing weakness and distress. the case now recorded, though the operation was successful, e patient died within two months of cancer in a situation ich involved him in an amount of suffering from which it is not much to say death was a happy release. Some cases doubtless vive longer; but this depends on the rate at which the local ease progresses, and is both uncertain, and a matter in which the ration can render the patient no material assistance. I have ently perfermed gastrostomy in a second case, for cancer of the phagus. The patient had been unable to swallow even liquids some days, and enemata were not retained. He was much ex- usted before the operation was performed. He sank on the fol- ing day.

BRITISH LYING-IN HOSPITAL.

CONTRACTED PELVIS: CRANIOTOMY.

(Under the care of Dr. FANCOURT BARNES.)

(Reported by Dr. JOHN PHILLIPS.)

W., AGED 22 years, a secundipara, was admitted on December d 1882. She had been delivered twelve months before, by ceps, of a dead fœtus, having been two days in labour.

ter lying-in on that occasion was complicated fourteen days after very by an attack of acute mania. Beyond a sense of continuous ring-down pain in the back, her second pregnancy was unaccom- ied by any abnormal symptom. Her labour commenced at 8 P.M., ember 22nd. The membranes ruptured at midnight. Although uterine contractions were powerful and regular, and the os uteri speedily obliterated, the head remained mobile above the brim he pelvis. As no progress was made during several hours, Dr. nes was sent for. On examination, he found the promontory of sacrum projecting forwards and downwards into the cavity of pelvis. The fœtal head was lying over the symphysis pubis, upon h it could easily be moved by the examining finger.

he head of the fœtus, having been steadied over the pelvic brim by pressure on the fundus uteri, the cranial vault was perforated. Delivery was then effected by means of the craniotomy forceps at 6 A.M. The child was a male, weighing 8½ lbs.

The lying-in was unattended by any symptom whatever. On the day after delivery, the evening temperature was 100° Fahr. The following morning it was normal, and remained so. The patient left the hospital in good health on January 3rd 1883.

REMARKS BY DR. FANCOURT BARNES.—Had the operation of craniotomy, in this case, been delayed for a few hours, there can be little doubt that the strong uterine contractions, continuing to act over a contracted brim, would have ended in pushing the fœtal head into one or other iliac fossa, and thus have substituted the shoulder for the head. Uterine action, continuing, would have forced the arm down into the vagina and jammed the thorax into the pelvis, when a difficult and tedious case of turning would have presented itself to the operator.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 27TH, 1883.

W. S. SAVORY, F.R.S., in the Chair.

Cases described as "Acute Rickets" (Combination of Rickets and Scurvy). By THOMAS BARLOW, M.D.—The paper was a contribution to the study of a disease occurring in young children, of which several cases had been recorded in recent German and English medical literature, but of which, with one exception, no account of the morbid anatomy had hitherto been given. A typical case was given in full detail. The boy, aged fifteen months, was of a pale, sallow complexion, fat, but flabby. His rectal temperature was 101°; there was no nervous nor visceral disease, except that the liver was larger than normal. He was continually moaning, and screamed violently when approached and touched. The dominant symptoms were in the limbs; the right wrist was dropped, and the left thigh continually drawn up; the ribs were beaded, but there was no grooving of the thorax; the left thigh and leg were tightly swollen, assuming a cylindrical shape; the epiphyses of the knees were enlarged, and there was a tendency to knock-knee. There was profuse sweating about the head. The boy was a first child, born slightly before term, and seemed vigorous for the first six weeks, during which time he had his mother's milk; but, since its failing, he had been deprived of fresh food, his diet consisting of the various infant foods of Nestlé, Robb, etc. The child sat up well, and stood, with assistance, at thirteen months old; but, five weeks ago, he ceased to do either, the left leg and ankle being swollen, and the child shrieking if approached. The child was taken to a bone-setter, who said that one of the bones of the spine was out, and a presumed operation to set it right was performed; but as no explanation was given of the swollen wrist, dropped right hand, and condition of the left thigh, further opinion was taken. The child was obviously the subject of moderate rickets; and the opinion was formed that, under the periosteum of the left femur and tibia, there was an effusion of blood, and that the extreme tenseness of the limb was due to blood-extravasation in the deeper muscular layers, with the serum filtered out into the more superficial parts of the limb; and the view was held that the boy was suffering from the supervention of scurvy on rickets, though with no sponginess of the gums. The treatment suggested was to surround the whole of the left lower limb and the right leg with wet compresses, which had been thoroughly wrung out, surrounded with dry cloths closely applied. A complete change in diet was made, to the juice of raw beef sweetened a little, cow's milk, strained gruel, barley-water, and orange-juice. It was ordered that the boy's crib should be placed near the fire, and the window opened wide for free play of fresh air. A great change occurred during the treatment. He became quieter, took his fresh food greedily, and had healthy evacuations: the tension of the left lower limb was less. The improvement was progressive. The urine became clear, and free from albumen and from excess of phosphates. The swellings of the wrist and lower limbs subsided; and at the end of a fortnight, he made slight efforts to raise himself and move his limbs about. At the end of a month, gentle shampooing with oil, and douches of tepid and then cold water, were commenced. No change was made in diet, except substitution of beef-tea for raw meat juice, and a small piece of underdone meat in muslin to suck. His medicine was one, and then two, teaspoonfuls of cod-liver oil daily, and an occasional powder of rhubarb and soda. Within eight weeks, he got on his knees, and could stand with a little support.

He was of a ruddy colour, and his skin and muscles felt firm. The author then gave an analysis of the principal symptoms in thirty cases, of which nineteen had been published (principally in Germany), the majority under the name of "acute rickets," and one under that of "infantile scurvy." The first English case was under the care of Mr. Thomas Smith at the Hospital for Sick Children, described under the provisional title of "hæmorrhagic periostitis." Other cases had been described by Dr. Gee, in 1881, as "osteal or periosteal cachexia," and two by Dr. Cheadle, in which spongy gums were a marked feature, for which and other reasons Dr. Cheadle held them to be a combination of rickets and scurvy. The ten cases of the author led him substantially to the same conclusion. The author then gave an analysis of the important symptoms, the *post mortem* appearances, the etiology and affinities of the disease with the ordinary form of rickets, congenital syphilis, etc. The evidence showed the ordinary form of rickets to be present in a considerable number of the cases, though in some the symptoms were very slight. It showed, also, that there was no affinity with acute periostitis, hæmophilia, or purpura. The parallelism of the disease with scurvy was shown both on anatomical and on clinical grounds; and after giving a summary of the diet adopted in the recorded cases, the author came to the conclusion that the characteristic features of the so-called acute rickets were really due to "scurvy." In illustration of the cases which Dr. Barlow brought before the Society were several specimens of hæmorrhage below the periosteum of the tibia, femur, and scapula; and also an instance of slight hæmorrhage round the blood-vessels in the lungs in a case of scurvy exhibited by Dr. Stephen Mackenzie.

Subperiosteal Hæmorrhage, probably Scorbutic, of Three Long Bones in a Rickety Infant. By HERBERT W. PAGE, M.A., F.R.C.S.Eng.—The author recorded the case of an infant, aged nine months, extremely wasted, pale and ill, who was sent to him by Dr. Taylor, of Willesden, and who presented enormous enlargement of the shafts of the left femur and tibia, and of the upper third of the right tibia also. The swelling had been coming on and gradually increasing for about a month. The neighbouring joints were not affected, and there was no superficial sign of inflammation. Beading of the ribs and rickety enlargement of one radius led to the belief that the condition was in some way due to rickets, and this supposition was also based on the fact that the child had from birth been fed for three weeks on Swiss milk, and after that almost entirely on Nestlé's and Savory's foods. There was no history of syphilis, and in the absence of general fluctuation, no certain diagnosis was made. A trocar and cannula passed at one point in the thigh, where there was doubtful fluctuation, gave exit to a few drops of sanguineous fluid, the bone being found bare. Incisions were therefore made through the periosteum of both thigh and leg, and large blood-clots, which had to be broken up with the finger before any part of them could be removed, were found lying around the shafts, the periosteum being stripped up therefrom throughout their entire lengths. Being now properly fed, the child, whose recovery had seemed well-nigh hopeless, began at once to improve; the blood-clots were gradually expelled; there was little or no suppuration, the wounds healed, and when seen three months afterwards the affected bones had resumed their normal size, and the periosteum its natural position in contact with the shafts. There was no hæmorrhagic diathesis in the family. The author referred to the difficulties in diagnosis presented by this case, especially in the absence of fluctuation, which was doubtless due to blood-clot being tightly packed between periosteum and bone. He was now inclined to regard the disease as scorbutic rather than rickety, and the hæmorrhage as the more essential element of the pathological condition than inflammation of the periosteum. The child had been reared on scurvy-diet. Periostitis was almost unknown, even in the worst cases of rickets. There was no sign of inflammation either in the neighbouring joints or in the skin, and it was moreover noteworthy that both periosteum and bones had survived the attack. Such could hardly have been the issue of an acute hæmorrhagic periostitis, even though the hæmorrhage, as a local blood-letting, might have conduced to the safety of the periosteum. He referred to other cases, of which, indeed, there was only one definite example on record, in support of this doctrine. A case was recorded by Mr. Thomas Smith, in vol. xxvii (1876) of the Pathological Society's *Transactions*, as "Hæmorrhagic Periostitis of the Shafts of several Long Bones, with separation of Epiphyses," where after death the shafts were found surrounded by blood-clots underneath the periosteum, and in which there were numerous hæmorrhages in the muscles also, with a large hæmorrhage in one lung; hæmorrhages, in fact, like those ordinarily seen in scurvy. In one of three cases recorded by Dr. Cheadle (*Lancet*, 1878, p. 685) of "Scurvy Supervening on Rickets in Young Children," in addition to bleeding gums and other usual signs of scurvy, there were "hard swellings deeply seated in the flesh of each thigh, and the shafts of the long bones felt enlarged and swollen." The author had little doubt that in that case also the enlargement was due to subperiosteal hæmorrhage. The child had been fed on a scurvy diet, and the state of the gums very clearly told what unnatural agents had been at work. In his own case the diet was a distinctly scurvy diet, lacking every kind of fresh food, and he trusted that the record of it might lead to a surer diagnosis and better treatment in other cases where the absence of swollen and bleeding gums deprived us of an all-important clue to the nature of the malady.

The SECRETARY read a short abstract of a case of scurvy, with dilatation of the heart and retinal hæmorrhages, which had been brought forward by Dr. W. Hale White, at the previous discussion on scurvy, before the Society, February 27th. It was a case where scurvy had come on in a voyage of four and a half months from Calcutta, which was the only one out of twenty cases examined at the Dreadnought Hospital in which retinal hæmorrhage occurred. The increase of cardiac dulness and arterial murmurs in the neck showed dilatation of the heart; and the blood contained only 40.5 per cent. of the normal number of white corpuscles, and only 20 per cent. of the normal amount of hæmoglobin. Under treatment, their percentages increased to 63 and 35 respectively. The retinal hæmorrhage was explained as a rare accident, due to the severity of the scurvy, and the dilatation of the heart was attributed to its fatty degeneration.—Dr. STEPHEN MACKENZIE observed that the subject was one of great interest, but presented many difficult problems, whose solution might lead to a treatment such as would obviate the diseases put before them. He narrated two cases in young children, in which, owing to the kindness of Mr. Waren Tay, he had recently had the opportunity of making *post mortem* examinations. They were both very badly fed on artificial food. In the first there was hæmorrhage under the periosteum of the long bones and of the ribs. The gums were not spongy, but there were in them black dots of extravasated blood, and some slighter extravasations beneath the eyes and in the skin of the arms. In the second case there was swelling of the knee-joint, and enlargement of the lower epiphysis of the femur, which it was thought might be a syphilitic lesion such as Parrot had described. Potassium iodide was given on this hypothesis; effusion of blood about the orbit appeared, and it became a question whether this was due to the action of the drug. It did not increase, however, with continued administration of the iodide, and it was concluded that it was not due to it. The child developed several other swellings, fell into a state of marasmus, and died. On laying open the thorax and removing its contents, black streaks were seen running along the interior surface of its walls, from which the ribs were very easily detached, and which proved to be hæmorrhages below the periosteum of the ribs. There were further minute hæmorrhages in the lung (of which a microscopical specimen was exhibited), in the kidney and beneath the peritoneum. There were also appearances which resembled those of commencing tuberculosis in the peritoneum, but these he considered a subsidiary accident. These observations lent support to the remarks of Dr. Barlow and Mr. Page. He further agreed with Dr. Hale White's remark that the reason for the rarity of retinal hæmorrhage in scurvy (with which he had become familiar from visits to the *Dreadnought*) was that the anæmia of the cases seen there was not sufficiently profound. It was very uncommon to get any internal hæmorrhage unless the corpuscular deficiency in the blood was more than 50 per cent.; but if the blood were decidedly poorer than that, as in Dr. Hale White's case, internal hæmorrhage was likely to occur whatever was the origin of the anæmia.—Mr. MACNAMARA pointed out that retinal hæmorrhages were more common in India than in England; and were, indeed, frequent there in the natives after fever, along with a severe scorbutic condition, in which there were scorbutic hæmorrhages in the intestine similar to what Dr. Mackenzie had described in the gums. He felt no doubt at all that Dr. Barlow's cases were scorbutic. It was possible, he thought, that in some cases the subperiosteal hæmorrhages described might lead to the acute suppurative periostitis seen in children, though he was not inclined to suppose that they were the origin of all such cases. The question had incidentally been raised as to whether inherited syphilis conduced to rickets, and he felt no doubt that inherited syphilis, being a disease which led to digestive incapacity, was one of the many causes of malnutrition which contributed to rickets.—Mr. R. W. PARKER said that one of the greatest difficulties of the subject was that these scorbutic

sults were very rare, whilst the bad diet to which they were attributed was the common diet of nearly half the children in London. If that were their true origin, why should they not be very much more frequent? It seemed true that children escaped scurvy under conditions in which it was developed in their elders; that might possibly tend to explain it. He was surprised that bone lesions should occur as early as they had done in Dr. Barlow's cases, for most authors said they came late in the disease; also that there should have been apparently an absence of the peculiar putrescence so generally noticed in bone disease; and that in Mr. Page's case the blood should have formed firm clots which he considered as almost unknown in scurvy.—Mr. J. H. MORGAN was glad to be able to testify to the essential similarity of the case under Mr. Thomas Smith (which he had an opportunity of seeing in 1876) at the Hospital for Sick Children to those brought forward by Dr. Barlow. There was a fracture in the bone which was interesting, inasmuch as it was not at the junction of the epiphysis with the shaft, but just below it; that, perhaps, was due to hæmorrhage in the medulla of the bone. He could not consider these cases as due to syphilis, for such cases were symmetrical, but these were not.—Dr. F. D. DREWITT urged that they were all agreed on the antiscorbutic properties of milk; and that, further, it was a point that deserved attention that such a large proportion of children in London were fed on condensed milk and throve on it. He would be glad to learn how far condensed milk had proved itself of value in preventing scurvy on board-ship.—Mr. SAVORY wished to call attention to the important nature of the experiment which disease had made in Mr. Page's case. The question was often raised, whether a periostitis was competent by itself to kill all the shaft of a bone. It was held by some that it was; it was held by others that the disease which produces acute necrosis is an ostitis rather than a periostitis, that it involves in its inflammation a part, at least, of the bone below the periosteum. In Mr. Page's case, the bone had been completely stripped of its periosteum and yet had lived, and that, he considered, an important piece of evidence in the matter.—Dr. BARLOW, commenting on Dr. Mackenzie's remarks, admitted the importance of the ecchymoses in the gums (as contrasted with sponginess) as a sign of the disease; he had found them himself also under the conjunctivæ. He welcomed Dr. Mackenzie's specimen of minute hæmorrhage round the vessels in the lungs as an important addition to the subject. The suggestion of Mr. Macnamara that the subperiosteal hæmorrhage might be the exciting cause of suppurative periostitis he was inclined to consider improbable; he had, at all events, no experience of such a thing. To Mr. Parker's question, why it was that infantile scurvy, if due to the causes he had described, was not more common, he confessed a complete answer could not at present be given; the question was one which he had touched on at some length in his paper. It was very probable that a slight scorbutic taint occured more often than is expected; for example, in slight stomatitis, which was practically found to recover better under treatment with lime-juice than with chlorate of potash; and, also, he thought it likely that some cases which were called rickety, in which there was much tenderness and feverishness, and which escaped accurate examination on that account, were more properly to be called scorbutic; and, possibly, the same might be true in some of Sir W. Jenner's cases of rickets with acute onset. He could not agree with Mr. Parker that children were rarely exempt from scurvy, nor that bone-lesions in scurvy occurred later in the disease. After a leaden pallor, he was inclined to put deep aching in the limbs as the symptom next occurring. In the matter of clotting, too, he had not found the blood in scurvy behave so differently from healthy blood as Mr. Parker supposed; it certainly sometimes clotted as normally as in Mr. Page's case. A diet of bread and butter was scorbutic, but potatoes were strongly antiscorbutic, and their wide-spread use in London prevented much disease. In two of his cases there was extreme repugnance to vegetables, and the children had never been obliged to take them till they came under his care with scorbutic symptoms. The complete explanation, however, of the rarity of infantile scurvy, considering the conditions of nutrition, he admitted was not yet clear, as the individual constitutional conditions which predisposed to adult scurvy were also not understood. He quite agreed with Mr. Morgan that bone diseases from inherent syphilis were symmetrical, and that the conditions he had described were not so usually, though they were sometimes. The enlargements of the heads of bones which Parrot had shown in syphilitic cases, came on sometimes whilst the child was being fed at the breast, and their tenderness was trifling; and in both those points they were different from the results of scorbutus or rickets. Milk was certainly antiscorbutic, in tolerably large quantities; condensed milk he also considered very valuable food if used with caution, but had not found that it prevented scurvy; for that purpose, it was necessary to have some absolutely fresh food.—Mr. H. W. PAGE felt indebted to Dr. Barlow's very interesting paper for the confirmation of his own case. The incision, in that case, was made to satisfy the desire of the friends for operative interference, and, looking back on the case, he thought it very possible it might have been dispensed with. But it certainly did no harm, and he was not sorry to have made it. The sequel showed he thought, as Mr. Savory had pointed out, the favourable results that may be obtained in the absence of inflammation of the bone substance.—Dr. HALE WHITE asked to be allowed to correct a slight mistake in his paper, in which he had said that he believed that his case was the only one on record of dilatation of the heart in scurvy, whereas he had since found a similar case recorded by Dr. Buzzard.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 20TH, 1883.

J. W. HULKE, F.R.S., F.R.C.S., President, in the Chair.

Report of the Morbid Growth Committee on Dr. Sharkey's Specimen of Syphilitic Disease of the Liver.—The committee, which consisted of Dr. COUPLAND and Dr. PAYNE, was of opinion that there were distinct evidences of syphilitic disease in the microscopical specimens submitted to them.

Epithelioma of Stomach, and Secondary Nodules in the Subcutaneous Tissue.—Dr. FINLAY showed macroscopical and microscopical specimens from a case of epithelioma of the stomach, which had become generalised. The patient was a man who died in the Middlesex Hospital. During life, no internal tumour could be detected; but numerous nodules, which were found to be of an epitheliomatous nature, were present on admission, and increased in number subsequently. At the necropsy, an alveolar growth was found at the cardiac end of the stomach, with secondary growths in the lungs, liver, and suprarenal capsules, as well as in the subcutaneous tissues. All the growths presented the same microscopical appearances, namely, large oval or circular alveoli, lined by well-formed epithelial cells. The growth in the stomach contained the smallest quantity of fibroid tissue, and was evidently the primary growth.—The PRESIDENT said that he could not remember any case where such a multiplicity of secondary growths, in tissues differing so widely in structure from that which was the seat of the primary growth, occurred.—Dr. COUPLAND recalled one case of cancer in the sigmoid flexure, where a tumour formed in the neighbourhood of the umbilicus in the subcutaneous tissue.

Lymphatic Cysts.—Mr. A. E. BARKER exhibited certain cystic structures which he believed to be connected with the lymphatic system. The cysts, which were small, occurred in the case of a child who had an enormous nævoid lipoma of the right thigh. At the right side of the brim of the true pelvis was a cyst about the size of a small walnut; the sac was not tense. A much larger cyst lay in the neighbourhood of the kidney; this sac was somewhat loculated, with very thin walls. Near the root of the penis was another small loculated cyst. All the three cysts lay on the left side of the body. Though the cysts were thought to be lymphatic, it was not possible to inject them from the lymphatic system. The cysts had an epithelioid lining.

Prolapse of the Uterus and Bladder, producing Obstruction of the Ureters.—This specimen was also brought forward by Mr. A. E. BARKER. The ureters, vagina, and bladder were prolapsed, forming an external tumour. The ureters were dragged down and markedly dilated; the pelvis of the kidney was also dilated; and there were signs of interstitial nephritis in the kidneys. He did not think that production of pelvic dilatation and kidney-disease in this way had before been noticed; and he thought it an important point, as showing one of the dangers to which patients with severe uterine prolapse were liable.

Tumour of the Skull and Bladder.—The skull and scalp, together with the bladder from a case of simultaneous malignant growth in the scalp and bladder, were shown by Mr. CLUTTON, who also exhibited some microscopical sections. The patient came under treatment with a tumour, which was distinctly attached to the surface of the skull; and when incised, it was found that the skull was perforated, the dura mater being exposed; a fungating ulcer formed, and the patient died about a year after the tumour was first noticed. At a late period the dura mater became involved. After death, the brain was found to be softened, and apparently about to undergo hernia. The only growth found after death, beyond the tumour of the skull,

was situated in the bladder, though during life no symptoms of disease of that organ were noticed. The tumour was about the size of an orange. The growth in the scalp had an alveolar structure in part, with large epithelioid cells; in other parts the cells were few, but young soft connective tissue was abundant; and in some places there was a retiform structure with many small cells in their meshes; the tumour of the bladder also presented an alveolar structure.—Mr. BUTLIN was decidedly of opinion that the tumour of the skull was an epithelioma—a squamous-celled carcinoma. He thought the tumour of the bladder was the primary tumour, for, as it gave no symptoms, it was impossible to say how long it had existed.—Dr. THIN said that there were now on record a considerable number of cases where tumours, apparently epitheliomatous in structure, took their origin in the subcutaneous tissues, probably from the cutaneous glands, and in their growth led to destruction of the skull. He thought that an examination of the nodules in the skin in the neighbourhood of the ulcer might throw some light on the nature of the tumour, and the character of the epithelial cells.—Mr. ROGER WILLIAMS suggested that the growths were coincident, but stood in no causative relation to each other.—The PRESIDENT said that the case was another instance of one important clinical point, that tumours of the skull might exist and lead to extensive mischief without producing any symptoms.—Mr. CLUTTON said that his opinion was based on a careful examination of the whole tumour; though in some parts it certainly bore a strong resemblance to epithelioma, the more widely spread appearances agreed better with the supposition that the growth was a sarcoma.

Rheumatic Nodules.—Three communications were made on this subject. The first was by Dr. ANGEL MONEY, who showed sections and drawings of some models from a case in which he had had an opportunity of making a *post mortem* examination. The patient was a female aged 10 years, who had had scarlet fever, followed by rheumatism three years previously, from which time the cardiac disease probably dated. She had had frequent attacks of rheumatism, and some choreic movements. There was a history of rheumatic fever in the father, and of chorea in a sister. There were signs of great hypertrophy of the heart. The rheumatic nodules had been noted by the patient for some time, possibly months; they were found on the right and left elbows, and on the right patella. The clinical history, whilst under treatment, was of fluctuating sort, dyspnœa and œdema coming and going without much apparent reason; the patient died rather unexpectedly. At the necropsy, the heart was found to be hypertrophied and dilated; the pericardium universally, but not firmly, adherent. Some nodules, about the size of a millet-seed, were to be felt in the wall of the right ventricle. There were some slight valvular changes. The liver, spleen, and kidneys, showed some of the usual changes, probably secondary to the cardiac mischief. Sections from a nodule on the back of the right elbow were interpreted to consist of fibro-cartilaginous tissue. A section of a nodule from the pericardium looked something like connective tissue from a tendon of a mouse's tail. There were the signs of a chronic diffuse pericarditis and myocarditis.—The second communication on this subject was made by Dr. CAVAFY, who said that he had had an opportunity of submitting some of these so-called rheumatic nodules to microscopical examination. The patient was a boy who had a severe attack of acute rheumatism seven years before he was admitted into St. George's Hospital; he was, when admitted, suffering from heart-disease, which had led to extensive dropsy. On the backs of both hands, on the elbows, and in the neighbourhood of the patellæ, were many small subcutaneous nodules, about sixteen in all; they were distributed symmetrically, and varied in size from a hemp-seed to a hazel-nut; they were not painful or tender; they were movable beneath the skin, and varied slightly in consistency, the smaller being the harder and more resilient. The pericardium was universally adherent, the mitral valve was greatly contracted, and presented some vegetations; and the aortic valves were thickened and studded with vegetations on their margins. The microscopic sections of the nodules, which were distinctly attached to the deep fascias or tendons, presented essentially the same structures in both the large and small. In the small nodules, the texture of the fibrous tissue of which they were made up was condensed; while, in the larger nodules, the fibrillar bundles were loosely arranged, and lymphoid cells were more numerous. A peculiar reticular tissue, with strikingly rectangular meshes, was to be found in some parts; this peculiar substance was, in Dr. Cavafy's opinion, fibrinous. Both nodules were extremely vascular; and the inner coat of the arteries was enormously thickened, so as to nearly obliterate the lumen of the vessels in places; the adventitia of the vessels was blended with the fibrous tissue. In the large nodules, some of the vessels were similarly thickened, but there appeared to be, in the majority of vessels, a proliferation of the endothelial cells. Altogether, the inflammatory changes were more advanced and more definite in the larger nodules than in the smaller.—The third communication was made by Dr. F. D. DREWITT, who exhibited to the Society a boy aged 7, who had lately had an extensive crop of subcutaneous nodules, casts of which he also exhibited; and the other, a boy aged 8, who now had abundant nodules on his elbows, knees, ankles, and knuckles. Dr. Barlow and Dr. Warner, in their important paper read before the International Medical Congress, stated that "these nodules were, in their nature, probably homologous with the inflammatory exudation which forms a vegetation on a cardiac valve." Dr. Drewitt thought that they might possibly be related in their origin as well as in their nature. They occurred immediately over those bony prominences of the body which were most exposed to friction, namely, the knees, elbows, ankles, knuckles, and the backs of the hands; and on these parts they were found on the most prominent elevations; for, on the knee, they chose the patella; on the elbow, the olecranon and external and internal condyles of the humerus; on the ankles, the malleoli; and if the patient were kept much in bed on his back, they were found on the occiput and spinous processes of the vertebræ. This seemed to establish another important relation to the corresponding growth on a cardiac valve. The valves of the heart were, perhaps, more exposed to continuous friction than any other part of the body, friction from the blood-current, and, when inflamed, friction from each other as well; it was the most prominent part of the valve which was the most exposed to this friction, and it was there that the vegetations formed. In Dr. Cavafy's case, in all Dr. Barlow's cases, and in all those he had seen, these nodules accompanied heart-disease, generally of a severe and progressive form; and he believed that the existence of nodules in a case of rheumatism might have an important bearing upon diagnosis, prognosis, and treatment. In the case of the child he exhibited, the mitral murmur had become considerably less as the nodules disappeared.—Dr. PAYNE pointed out that similar nodules were frequently seen in chronic rheumatoid arthritis; he had seen many cases in which these subcutaneous nodules were present in considerable numbers; they were larger than those described as occurring in children. In cases of rheumatoid arthritis where there was a symmetrical affection of hands, wrists, and elbows, he had frequently seen a small nodule just above the lower end of the radius. He would suggest, as a point demanding investigation, to inquire whether these nodules occurred except in the neighbourhood of inflamed joints.—Mr. R. W. PARKER had examined nodules from four cases, but in none had he met with such a grade of organisation as had been described by Dr. Money and Dr. Cavafy, and he had seen no such thickening of arteries. The nodules he had examined seemed to consist of a coarse fibrous tissue highly vascularised, but varying in the amount of cellular elements. They appeared to consist of white fibrous tissue, and agreed thus with other lesions of rheumatic fever. He referred to a case of chorea, where the history of rheumatism was very obscure, where the patient grew gradually worse, and eventually died, and in which these nodules developed over the spinous processes. The clinical importance of the nodules was illustrated by such a case.—Dr. STEPHEN MACKENZIE said that a thickening of the intima was seen in other processes in which the blood-vessels took an active part; for instance in scarlet fever, and in pyæmia, as Dr. Klein had showed.—Dr MAHOMED said that he had recently seen a woman who was suffering from subacute rheumatism, and who presented large subcutaneous nodules over which the skin was inflamed. He wished to inquire whether their occurrence in the adult, and the inflammation of the skin, had been before noticed. He had seen nodules of the kind described by Dr. Payne in chronic rheumatic arthritis, but they were not identical.—Mr. EVE referred to a case recorded by Dr Gilbart Smith, of nodules in xanthelasma, in which a similar thickening of the coats of the arterioles was noticed.—Mr. HUTCHINSON said that he had long been familiar with nodules which occurred in the skin in chronic rheumatism, and had shown one case at the International Congress in 1881.

Phlegmonous Inflammation of the Stomach Three Weeks after Gastrostomy.—The stomach from a patient who had succumbed three weeks after the operation of gastrostomy was shown by Mr. HERBERT PAGE, who stated that the operation was performed in the usual way. The stomach was opened on the fifth day, and, after that, the patient was fed by the stomach, and gained flesh. All went well for three weeks, but, after a severe attack of retching and vomiting, which was accompanied by fever, he became collapsed

d speedily died. The *post mortem* appearances seemed to indite a parenchymatous inflammation of the walls of the stomach, arting from the wound.—Dr. A. Q. SILCOCK, who had made the *post rtem* examination said that the walls of the stomach were much thicked, especially in the neighbourhood of the fundus, where they re fully one-third of an inch to half an inch in thickness, the ickening gradually shading off towards the cardia and pylorus. e cut surface everywhere exuded a creamy purulent fluid, which emed to flow chiefly from the submucous and muscular coats, to e swelling and infiltration of which the thickening was mostly e. The mucous membrane, which appeared to be swollen, was of opaque yellowish-white colour, with here and there a few patches injected venules; its surface was smooth, the rugæ having disppeared; but it was nowhere eroded or ulcerated. Lymph had en effused beneath the peritoneal coat of the viscus, especially on e posterior surface near the greater curvature and fundus, ging rise to an opaque yellowish discoloration. A large amount gelatinous lymph had been effused into the meshes of the subritoneal tissues in the neighbourhood of the stomach, in greatest mount around the œsophagus, beneath the posterior layer of the all omentum, and about the left kidney. There was a considerle quantity of liquid effusion in the peritoneal cavity resembling lted butter in colour and consistency, but no plastic deposits or hesions, except on the outer surface of the spleen, where there re a few flecks of lymph; the coils of intestine, however, were fected, greasy to the touch, and their coats easily lacerable. As causation, this form of gastritis had been met with in malignant fer, such as typhus, variola, puerperal septicæmia, and pyæmia; so in alcoholic stomachs, it being supposed that the submucous sue had been opened up by a follicular erosion, so giving rise to spreading phlegmonous inflammation. Twenty-two cases had been llected by Auvray, some of which were put down to injuries and unds of the viscus; but the original memoir could not be obtained. In the present instance, it was conceivable that the subcous tissues, being laid open by the wound, or by a digestion of margin of the orifice (of which there appeared to be traces), inflammatory products had found their way into its meshes, giving rise to the present condition. The fluid exuded by the cut surfaces the coats contained large numbers of micrococci, granular pus, al epithelial cells, with a few muscular fibres. The presence of crococci was interesting, in reference to the fact that they had been found in the margins of acute gastric and duodenal ulcers by me German authorities.

Symmetrical Fatty Tumour of the Neck.—Mr. HUTCHINSON showed mass of fatty tissue which he had removed from the back of the ck in a man who had large masses in that situation quite symtrically arranged. The patient also had tumours symmetrically ced on both arms; and he appeared to have symmetrical hypertophy of the parotid glands, or the appearances might be due to all masses lying over the glands. On March 19th he had attempted remove one of the masses, but had not found any distinct limit to mass, which appeared to be a hypertrophy of the subcutaneous not at all encapsulated, and not therefore to be removed. The ss consisted of very firm fatty tissue, with firm fibrous meshes. also showed a photograph of another case, exhibiting, in addition these fatty tumours, proptosis, which had led to destruction of eye.

Acute Atrophy of the Liver.—Dr. CAYLEY showed a recent specimen of acute atrophy of the liver, in which there was a distinct demarcation between the atrophied and non-atrophied portions. The liver was much reduced in size, weighing 32 oz. Almost the whole of the left lobe, and a considerable part of the right, was converted into a pale red flaccid tissue, the capsule over which was wrinkled and the edges winged. From this the non-atrophied parts projected in the form of large rounded bosses stained with bile. Besides these larger masses, small islands of liver-tissue were scattered here and there through the pale red portions. On microscopical examination, the red portions were found to consist of retiform connective tissue with tracts of leucocytes, but without any trace of liver cells. In the yellow prominent parts the liver cells were found swollen and highly granular and bile-stained. The symptoms during life were those usually associated with acute yellow atrophy. The patient was a man aged 30, a tailor, who died in the Middlesex Hospital on March 17th. About the middle of February he began to suffer from symptoms of indigestion, pain and weight after food, and his complexion became sallow. He was admitted into the hospital on March 8th. The patient was well nourished and of good muscular development, but was very prostrate; he was moderately jaundiced, temperature subnormal, pulse weak. There was slight œdema of the lower extremities and depending parts of the body, with evidence of a little fluid in the belly. There were a few petechial spots on the legs; the motions, though rather pale, were not devoid of bile. There was no distinct history of syphilis, but he had twice had gonorrhœa, and last October his hair had come off. This had partly grown again, and the appearances were those of alopecia areata. The area of liver-dulness was found to be much diminished. The prostration increased, he became delirious, passed his motions in the bed, vomited everything he took, and at the last considerable quantities of altered blood, and died on March 17th. The temperature throughout was subnormal. The urine was free from albumen, and contained neither leucine or tyrosine, but the urea was deficient in quantity.

Card Specimen.—Mr. GEO. LAWSON exhibited a stone which he had removed from a man aged 48, at the Middlesex Hospital, by lithotomy, on March 10th. The stone was felt to be very hard and large, and lithotomy afforded a better prospect of success than a "Bigelow's operation." When removed, the stone was found to measure two and a half inches in length, two inches in width, and one and a half inches in depth; it weighed four ounces, all but sixty grains. Its surface was nearly smooth, of a yellowish white colour, and when washed was inodorous. On making a section of the stone, about a drachm of a reddish brown stinking ammoniacal fluid escaped. The nucleus of the stone was a mulberry calculus, very rugged in outline, and measuring seven-eighths of an inch in each of the two principal diameters. The bed in which the calculus lay was loo large for it, so that there was a free space around it, and this space was filled up with the reddish brown fluid. Mr. Lawson thought that the explanation of the manner in which this collection of ammoniacal fluid was incarcerated within the stone was the following. At the period of the growth of the stone, when the mulberry calculus was free in the bladder, there had been cystitis, and the interstices between the nodules had become filled up with mucus and muco-pus mingled with ammoniacal urine. The irregularities of the stone being thus obliterated, it presented a tolerably smooth surface, upon which the salts of the urine were deposited in concentric lamellæ, as seen in the specimen. A quantity of ammoniacal and tenacious matter was thus built up within the stone, and this undergoing decomposition, and becoming stained with the colour of the oxalate of lime calculus, with which it was in contact, produced the reddish brown ammoniacal fluid which escaped when the section of the stone was made.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 8TH, 1883.

H. GERVIS, M.D., President, in the Chair.

Cast of Female Bladder.—Dr. AVELING exhibited this specimen. The patient suffered from retention of urine for four days after delivery. This was relieved by the catheter, and the bladder was subsequently washed out. Three weeks after delivery the cast exhibited, which was formed by exfoliation of the vesical mucous membrane, was passed. Fifteen months afterwards the patient still suffered from incontinence of urine, but except for this, and a recto-vaginal fistula, was well.—Mr. HOPKINS WALTERS had seen a similar case, due to retention, which had lasted four days, from retroversion of the gravid uterus. The cast was passed the sixth day after relief of the retention. The patient recovered without further vesical trouble.

Fibroma of Ovary.—Dr. JOHN WILLIAMS exhibited a solid ovarian tumour removed by him. It was pear-shaped, about three inches in diameter at its widest part, and consisted of white fibrous tissue, with areas of mucoid degeneration, and in the centre extensive calcareous change.—The PRESIDENT remarked on the rarity of such tumours.

Tumours removed by Abdominal Section.—Dr. BANTOCK showed a dermoid ovarian cyst, a specimen of double hydro-salpinx, and five uterine fibroids, which he had removed by abdominal section. In three of the cases the tumours, weighing upwards of seven pounds, four pounds, and two pounds respectively, were removed on account of pain, there not being much hæmorrhage. In one, on account of hæmorrhage, he removed the ovaries. This was followed by metrostaxis, lasting four weeks, and, at first, diminution in the size of the tumour. Three months after operation, the uterus had regained its former size; the hæmorrhage recurred, and gradually increased, and therefore he removed the tumour, which weighed three pounds, and presented cystiform degeneration. In the remaining case, the ovaries had been removed about a year previously by another surgeon; but this had been followed by increase in the hæmorrhage,

and no diminution in the size of the tumour. He (Dr. Bantock) therefore removed it. In cases such as these he thought oöphorectomy could not come into competition with hysterectomy, for cystiform degeneration of uterine fibroids was as surely fatal as ovarian cystoma. He could not concur in the opinion that hysterectomy should not only be done when öophorectomy had been tried and had failed. He did not think much was gained by ligature of the uterine arteries; the collateral circulation was too efficient. He had now performed twenty-two hysterectomies, of which twenty had recovered, in none of which had "full antiseptic precautions" been used.—Mr. KNOWSLEY THORNTON thought Dr. Bantock's cases illustrated the value of oöphorectomy. Removal of the uterine appendages had, in each case, been only imperfectly accomplished, and this accounted for the persistence of hæmorrhage. Moreover, the tumours were undergoing atrophy, the cyst formation being part of the degenerative process. He had seen these patients when hysterectomy was performed, and their condition of health seemed to him so good, that without further information he did not understand the reason for the operations. He thought that the condition of patients was not so good after hysterectomy as after oöphorectomy; after the former there was a possibility of a permanent fistula, or of a ventral hernia.—Dr. SAVAGE said the condition of Dr. Bantock's patients was such as to justify the operation. The mortality was 1 in 11, not greater than that of ovariotomy. Battey's operation he thought detestable.—Mr. DORAN thought long series of after-histories were needed, before the profession could judge between the two operations.—Dr. ROUTH disapproved of oöphorectomy (except as a last resource). He thought evidence was required in support of Mr. Thornton's assertion that the operations were imperfectly done. The atrophy of the tumours might be due as much to the age of the patients as to the oöphorectomy. The ill-health of the patients was such as to justify the operations in Dr. Bantock's case.—Dr. WYNN WILLIAMS had sent two of Dr. Bantock's patients to him, and thought the operation was thoroughly justified in each.—Dr. BANTOCK said the amount of hæmorrhage was such as to make the patients hopeless invalids, and he thought this justified the operation. Examination of the specimens showed that the ovaries had been thoroughly removed.

Uterine Polypi.—Dr. WYNN WILLIAMS exhibited two polypi, one fibroid, the other of mucous, intermixed with fibrous, tissue.—Dr. ROUTH mentioned that the tumour in the second case had at one time been taken for an inverted uterus. It was referred to a committee for examination and report.

President's Address.—The PRESIDENT then delivered an address, for which a vote of thanks was moved by Dr. R. BARNES, and seconded by Dr. GRAILY HEWITT.

Turning in Cases of Contracted Brim.—A short paper on this subject, by Dr. BURCHELL, was read. The author described a class of cases, in which, after several easy deliveries, the birth of later children became difficult. Out of 8,000 deliveries, he had met with 45 such cases. He attributed the progressive difficulty of labour to deposit of bone on the sacral promontory. In these cases attempts at forceps delivery often failed, and then perforation was resorted to. He believed they were better treated by turning. Out of 45 cases so delivered by him, he had saved the children in 38. He thought this practice was new when he first adopted it, and that still its advantages were insufficiently recognised.—Dr. ROBERT BARNES had largely practised turning in cases of minor degrees of contraction of the pelvic brim, and formerly placed it between the forceps and craniotomy. He now thought there were few cases in which Tarnier's forceps was not superior.—Dr. CHAMPNEYS said increasing difficulty of successive labours was accounted for by increasing size of the children, and diminished power in the mother. Progressive diminution in the size of the pelvis had never been verified by measurement. Either forceps or turning, if applied to all children, would show a large percentage of success, although not really beneficial.

HARVEIAN SOCIETY.

THURSDAY, MARCH 15TH, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Excision of Upper Jaw.—Mr. PEPPER showed, with Mr. HOWARD HAYWARD, a patient whose upper jaw he had excised. The patient was admitted into St. Mary's Hospital with a soft, painful, and rapidly increasing enlargement of the left upper jaw; an exploratory incision showed that the swelling was caused by some solid or semi-solid growth. The upper jaw was removed by the usual method, the arch of the soft palate being left entire by means of a horizontal incision in front of its structure, the hard palate having been previously divided down the middle line. As the growth involved the floor of the orbit, and reached to the opposite side through the septum nasi, the removal of bone was necessarily extensive. The patient recovered, nevertheless, without any unfavorable symptom. The growth was sarcomatous, with round and spindle cells intermixed. On her departure from the hospital, the patient was almost toothless and speechless, and much disfigured; but since that time an apparatus had been devised for her by Mr. Howard Hayward, which had greatly improved her appearance, her articulation, and her masticatory powers.—Mr. HOWARD HAYWARD exhibited the plate worn by this patient, and also plaster casts which he had taken, showing the very large cavity left from the operation.—Mr. GANT congratulated the authors on the success of their case. He had thought that great deformity and difficulty of articulation were the unavoidable result of this operation, but was very glad to find that this was not so.

Lupus.—Mr. MALCOLM MORRIS exhibited some cases of this disease. The first was a typical case of lupus erythematosus of 7½ years' standing; the feature of interest was that since the treatment by free scarification of its margins had been adopted, there had been no further extension of the disease. The next was a case of lupus erythematosus of 20 years' duration; the disease had attacked both the arms and legs, before the case was under the author's observation. The third case, in a boy aged 15, showed a very curious condition of the skin, which had existed since the age of three months, and which the author considered to be of the nature of lupus erythematosus. The disease, which existed on both sides of the face and on one arm, commenced as a small red spot, which gradually spread, leaving atrophy of the skin in the centre of the patch, while round the margin was a curious raising of the surrounding skin, which seemed to be of a warty nature, and which had been considered by some observers to be ichthyosis. A remarkable feature of the case was that the warty margin of the patches varied with the season of the year, being well marked in the late spring and summer, but almost disappearing in the autumn and winter. There was a long line of the eruption on the left arm, which might be of a neurotic nature, or might be connected with the distribution of lymphatics. The boy had five years ago been under the care of Mr. Hutchinson, who had made drawings of his condition; these were shown to the meeting, and Mr. Malcolm Morris pointed out that, since then, there had been no extension of the disease; Mr. Hutchinson had called it lupus marginatus, while other observers considered it to be ichthyosis.—Dr. STEPHEN MACKENZIE could not accept the third case as one of lupus; he thought it was of a papillary nature, and of nervous origin. It was not, in his opinion, connected with lymphatics; there was no destructive lesion, as in lupus. He had seen two similar cases, in one of which the region of distribution of the great sciatic nerve was markedly involved.—Mr. PEPPER thought it remarkable that, if the disease were of neurotic origin, there should be an absence of neuralgic pains, and pointed out its irregular distribution on the face as against that theory.—Mr. JULER and the PRESIDENT also spoke, and Mr. MALCOLM MORRIS, in reply, suggested that it might be a case of lupus, which had affected the papillary more than the sebaceous layer of the skin.

Suspected Hystero-Epilepsy.—Dr. WILLIAM EWART exhibited a girl, aged 8, who had been for the space of one month the subject of severe convulsive attacks, presenting some of the features of hysteric epilepsy. There was no hereditary history of insanity, epilepsy, or hysteria. The exciting cause appeared to have been a fright; but a predisposing influence was also noted in the shape of a recent attack of diphtheria. A strongly hysterical element was traceable; both the violence of the co-ordinated spasms, their extraordinary character (tendency to stand on her head, to burrow under the bed-clothes, and occasionally to bite), and the fact that they frequently began during sleep, showed a connection with the epileptic state. An interesting aspect of this case consisted in religious visions, with the assumption of the attitude of the Crucifixion, etc. The admission of the patient into the Belgrave Hospital for Children was followed by rapid improvement, the attacks diminishing in number and in severity. Moral management, and the administration of bromide of potassium, were the chief methods of treatment.—Dr. BROADBENT doubted whether the case was comparable to the hystero-epileptic attacks described by French observers, but inclined to the view that the symptoms depended more largely upon hysteria than upon epilepsy.—A similar opinion was expressed by Dr. STEPHEN MACKENZIE.—Instances of the remarkable power which is possessed by hysterical patients, of assuming the features of various diseases, were related by Dr. ALDERSON and Mr. PEPPER.—Dr. EWART replied.

REVIEWS AND NOTICES.

HE MEDICAL LANGUAGE OF ST. LUKE: a Proof from Internal Evidence that the Gospel according to St. Luke and the Acts of the Apostles were written by the Same Person, and that that Person was a Medical Man. By the Rev. WILLIAM KIRK HOBART, LL.D., Ex-Scholar, Trinity College, Dublin. Pp. 305. Dublin: Hodges, Figgis, and Co. London: Longmans and Co. 1882.

VERY student of biblical literature is aware that from very early times tradition has prevailed that St. Luke was a physician; and that is generally believed that, besides the Gospel which bears his ame, he was the author of the *Acts of the Apostles*. The task of roving the truth of this tradition from internal evidence seems, owever, to have been undertaken only in recent years. The author the work before us says, in his introductory remarks, that the ly notice of the subject of which he is aware, is one contained the *Gentleman's Magazine* in 1841. He is apparently unac- uainted with the fact that Dr. Plumptre, in the *Expositor* (No. xx, 376), has collected many traces of St. Luke's medical knowledge, id has even hinted at its possible influence on the language of St. aul. No one, however, so far as we are aware, has investigated ie matter so thoroughly as the Reverend Dr. HOBART; and, if there e any value in the indication to be derived from an author's writings ith regard to his calling, the evidence now brought forward by the uthor of the book before us confirms the belief that St. Luke was a ledical man.

In the pursuit of his task, Dr. Hobart has made an elaborate com- arison of St. Luke's writings with those of the other evangelists, specially with regard to the passages in which the miracles of heal- ig are described, or in which reference is made to conditions of dis- ase. He has also very elaborately collated the language of St. uke with that of the Greek medical writers of the period, from Hip- ocrates downwards; quoting, in connection with a large number f passages from the Gospel and the Acts, some hundreds of ex- acts from their writings, in illustration of the cognate use of ords or phrases. The result of the investigation is given in a eries of conclusions, which may be thus condensed from the uthor's statement. 1. We find running through the history a umber of words which were either distinctly technical medical erms or commonly employed in medical language; *e.g.*, ἴασις, θερα- εία, ἀνάληψις, διάγνωσις, etc. 2. St. Luke uses the same compounds f simple words which the medical writers employ; and these words re either peculiar to him, or are used more frequently by him than y other New Testament writers. 3. He uses certain classes of words hich were used in medical language in a special relation; thus he lone uses the terms to denote an intermittent or failing pulse (δια- είπειν and ἐκλείπειν). 4. We meet with the same combinations of ords as in medical writers; *e.g.*, θρόμβοι αἵματος = great drops of lood. 5. Some words are confined to St. Luke and the medical riters in the sense which they bear in his writings; for instance, ισχύειν, to impart physical strength. 6. Other words are very arely used except by medical writers in the sense which they bear n St. Luke's writings; *e.g.*, ἐκψύχειν, to expire. 7. Apart from the ortions of his writings where medical language might be most xpected, St. Luke frequently used words habitually employed in the ocabulary of a physician; that is to say, he, either alone, or nore frequently than the writers in the rest of the New Testament, abitually employed words which were in common use among Greek hysicians.

The book concludes with an interesting appendix on the relations xisting between St. Paul and St. Luke. Dr. Hobart discusses arefully the circumstances of the three occasions on which, as arrated in the *Acts of the Apostles*, St. Paul and St. Luke met and ravelled in company; and argues from the expressions used, both n the *Acts* and in certain portions of St. Paul's Epistles, that St. uke was the medical adviser of the Great Apostle during several ttacks of illness from which he suffered, in addition to being his olleague in apostolic labours.

Dr. Hobart has produced a work which cannot fail to be interest- ng to students both of biblical literature and of the history of he medical profession. The book has received special approval rom the authorities of Trinity College, who have admitted it into he "Dublin University Press Series," and have borne a share of the xpenses of publication.

NOTES ON BOOKS.

Gray's Anatomy: Descriptive and Surgical (Longmans), of which we have received the tenth edition, edited by Mr. Pick, has attained the position of a classic. Mr. Pick has been at pains, by additional illustrations, and the investigation of points of anatomy as to which differences of opinion exist, to bring this edition into harmony with the latest anatomical researches.

Heitzmann's Microscopical Morphology of the Animal Body in Health and Disease. (J. H. Vail and Co., New York).—This is a book which it were idle to criticise in detail, and which we cannot recommend to students. It is full of fantastic observations, unacceptable theories, and delusive conclusions. It is chiefly interesting to histologists, as showing the errors into which an intelligent, but eccentric observer, may be led; the tenacity with which he may adhere to them; and the development which he may assign to his own fancies, regardless of the strange conclusions to which they lead him. All the well-known fallacies of Dr. Heitzmann's earlier observations are here recorded with as much gravity as if they were accepted facts in science. His suggestions, as to the examination of the blood as a means of determining the marriageable qualities of candidates for matrimony, are once more gravely recited. If anything could (but, fortunately, nothing can) bring histological research into disrepute among serious men, it might be the publication of such a volume as this.

Legion; or, The Modern Demoniac. By William Gilbert. Pp. 270. (Tinsley Brothers, 1882.)—Mr. Gilbert's book may be described in the terms of Bolingbroke's definition of history as "philosophy teaching by examples;" for fully three-fourths of the work consist of more or less impressive, but occasionally somewhat devious narrative. His thesis—hinted at, however, rather than positively affirmed—appears to be that drunkenness is a form of demoniacal possession; in other words, that the evil spirit, alcohol, claims a place in the host of sulphurous Belials and Belphegors that were wont, according to pious chronicles, to take unwarrantable liberties with the souls and bodies of unfortunate sinners. Mr. Gilbert, in fact, says with Cassio, though less figuratively, "O thou invisible spirit of wine..... let us call thee Devil!" The theory is enforced by innumerable "modern instances" drawn mostly from the grimy records of the police-court, and all showing that the strong liquors of the tavern have by no means so soothing an effect on human nature as the waters of the Pierian spring. We must, however, leave theologians, or rather demonologists, to decide whether Mr. Gilbert has succeeded in proving his technical point. In any case, we think there is just reason to complain that no form of exorcism is suggested by which the fiend is to be cast out. This is, perhaps, due to the fact insisted on by Mr. Gilbert, that bad as the effects of the demon's presence may be, the consequences of his giving up possession are often much worse—on the ground presumably that he is likely to be followed by "seven devils worse than himself." Though medical men will find little that can tend to their edification in the book, they will welcome the author as an ally, fighting, with weapons of his own, what is undoubtedly a terrible *physical* evil. Temperance lecturers should be grateful for the rich store of "awful examples" here gathered ready for their use, and the amateur of the "sensational" must be difficult to please if his appetite be not sated with the banquet of horrors which Mr. Gilbert sets before him.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

KNIVES FOR REMOVING PLASTER-OF-PARIS BANDAGES.

SIR,—In your issue of the 10th inst., we notice a description of a "New Saw and Knife for Removing Plaster-of-Paris Bandages," by Dr. R. J. Garden of the Royal Aberdeen Infirmary. We beg to inform you that we have made a combined saw and knife for the same purpose for upwards of three years—the first one for Mr. Richard Davy, Surgeon to the Westminster Hospital, to whom credit should be given for the introduction to the profession of this means of easily removing plaster-of-Paris jackets, splints, etc.—We are, sir, yours obediently,

C. WRIGHT AND CO.

108, New Bond Street, W., March 13th, 1883.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 31st, 1883.

MEDICAL REFORM.

A COPY of the petition in favour of the Medical Bill, 1883, suggested by the chairman of the Medical Reform Committee of the Association, is issued with the present number of the JOURNAL; and all members of the profession who desire the settlement of this long vexed question, and who have not signed any other petition in favour of the Government Bill, should at once sign their names to it, obtain as many other signatures as possible, and then forward it to the General Secretary, 161A, Strand, London, in order that their signatures may be attached to the petition, of which the form sent is a verbatim copy. As the petition must be presented by Thursday next, the immediate attention of members of the medical profession is earnestly requested. Members of the Association will do good work by bringing the petition under the notice of those not enrolled in the ranks of the Association; but all who have the welfare of the public and of the profession at heart, who seek to elevate the social status of the profession amongst the educated classes by the enforcement of a higher standard of literary education, and by securing a trustworthy examination in the three great branches of professional knowledge—medicine, surgery, and obstetrics—on the part of all its members; in short, all who desire to see the profession of medicine, in reality as well as in name, one of the learned professions, and, as such, occupying the honorable position and exercising the legitimate influence to which it will then be justly entitled, must not allow the present favourable opportunity—which, if neglected, may never again occur—to pass, without straining every nerve to facilitate the passing of a measure which, in the main, embodies the great principles, for the realisation of which the profession has for many years contended, and which at last, it may be confidently expected, are on the eve of being legally enacted.

Some of the representatives and office-bearers of several of the corporations have urged that the establishment of a compulsory uniform minimum examination, although such examination would include the three branches of medicine, surgery, and obstetrics, would tend to lower rather than to elevate the profession. At present, it is a fact that a large proportion of registered medical practitioners practise all these branches of the profession, although examined and, consequently, qualified in one only. At present, men who have repeatedly failed to pass one board, are known to have obtained a license from some other board, on the strength of which license they have been registered. At present, the miserably defective general education of many medical students has been proved beyond all question, before the Royal Commission. In the face of these facts, it is strange any one should be found to maintain that the rectification of these abuses should have a lowering effect on the profession; but the marvel ceases when it is found that all such objectors are concerned with the maintenance of the privileges and interests of one or other of the universities or corporations. The Education Committee of the General Medical Council, in 1868, declared that "one of the great evils at the present moment is the inequality of the examinations for the license. The easy examination of one licensing body tends to depress the standard of the examination in all the rest." The remedy proposed was—"a conjoint examining board for each division of the kingdom," to examine for the license. Any higher degrees might come after, and should be optional.

Under the Bill of the Government, the minimum license cannot be obtained from any single university or corporation as at present, but must be conferred by a combined board, the examination of which will be checked by inspectors appointed by the divisional boards, and by visitors appointed by the Medical Council, in all cases the supreme authority. No individual university or corporation will benefit by passing the candidate, and all temptation to make the examination unduly easy will be removed. The examinations, in each division of the kingdom, are to be made as nearly equal as possible, and, in this respect also, the Medical Council will exercise its influence. In short, the Medical Council will not only have the privilege of exercising supervision, but it will also possess controlling power. The visitations of three examining boards, one in each division of the kingdom, will not present the difficulties inseparable from effectually visiting nineteen or more such boards. Visitations will now be made effectual, instead of, as hitherto, fitful, spasmodic, and inefficient. The intent of the Royal Commission to secure competent knowledge in all practical branches of the profession as an essential to registration, by the exclusion of partially qualified men, does not admit of dispute; and the Government, in legislating in the same direction, are manifestly acting in the interest of the public. In connection with this all-important matter, it must also be borne in mind that the new Medical Council will be constituted very differently from the present General Medical Council, in which the bulk of the Council is made up of members closely connected with the government of the corporations; seventeen, at least, out of the twenty-four members being directly representative of the universities and corporations, and specially charged with the care of their interests; while the only element which can in any way be considered thoroughly independent is composed of the six Crown nominees, forming a hopeless minority in a Council of twenty-four. In the new Medical Council, as framed in the Government Bill, the universities and corporations will no longer be directly represented; they will no longer send seventeen direct delegates to the Council, but all the medical authorities will be combined to select members to represent them as a whole, and such members will worthily represent all that is best in connection with both universities and corporations. The interests of the Government and the public will be represented by six Crown nominees, as in the past; but their influence in controlling the corporations will be much augmented by the increase in their relative proportion. The direct representatives of the profession will connect the profession with the Medical Council, and will report to that Council professional opinion on education, both general and professional; on examinations and the granting of diplomas; on the registration of colonial and foreign degrees; on the granting of higher titles—which, after the passing of this Act, will only be (Clause 27) "granted after examination in respect of a substantially higher degree of knowledge than is required to obtain a qualifying diploma under this Act;" and lastly, on the misuse of titles. The chasm now existing between the General Medical Council and the profession will thus be bridged over, and the voice of the profession heard. In such a Council, all interests will be represented, and the benefit of the public be secured; all private or class advantages will be as nothing compared with the general welfare.

While thus approving of the Government Bill as a whole, it must be clearly understood that the Association, at the annual meeting at Worcester, though expressing great satisfaction at the result of the inquiry before the Royal Commission, distinctly "reserved the question of proposed amendment of details;" and it was unequivocally shown, in our observations on the Government Medical Bill last

ek, that, in petitioning in favour of the Bill, it in no way follows t t we endorse all the details. No Bill, whether a Government or a rivate measure, ever yet passed the legislature without modifica- t 1; the present Medical Bill covers forty-three folio pages, and, as r ards many of the subjects embraced in it, will inevitably evoke d sent. Details will necessarily afford matter for discussion and r ision when the Bill is in Committee. An opportunity for the e ression of their views will then be afforded to all who o ect to the arrangements proposed in the Bill in respect of the p liminary education of the medical students, with regard to w ich the profession holds strong opinions as to the necessity of im- p ving it in both literature and science; in respect of the allocation o he funds to be derived from the examinations, in connection with w ch we publish an important letter from Dr. Atthill; in respect o he wording of the clauses relating to the assumption of titles, as t which some of the fears expressed have no foundation. For in- s nce, the doctorate of the University of Paris will not, as has been s mised, be rejected; neither is there any probability that any f lly qualified and registered man will be subjected to penalty w en using a *bonâ fide* degree, obtained on such examination as the M dical Council will sanction. The object of the Government and o the Association is to put an end to the existing widespread a mption of bogus titles and degrees. All who object to t drafting of any of the clauses of the Bill will find a fitting o ortunity for asserting and supporting their respective views; b in all our endeavours we should be wise enough to con- t t ourselves with the attainable, and not rashly seek to oppose a B in its entirety, because in some of its parts it is not worded as w could have desired. In all legal enactments, we are at the mercy o he Legislature. The Association endeavoured to make the double q lification essential to registration when the Bill of 1858 was p sed; but, notwithstanding every effort, the Association was de- f ted. In the present instance, the profession is favoured by a p erful Government, and prudence dictates that all parties should c bine to frame a Bill beneficial to the public and satisfactory to t profession, assured that no such opportunity will again present it lf. We have powerful bodies to contend against, but united we a strong, united we shall be triumphant; and we now end as we b an, with a pressing appeal to every member to canvass the mem- b s of both Houses of Parliament, and to *Petition*.

FRIEDREICH'S DISEASE.

I s just twenty years ago since Professor Friedreich, whose recent d th has deprived the University of Heidelberg of one of its great- e ornaments, first drew attention to a peculiar form of degenerative a phy of the posterior columns of the spinal cord, to which he and o ers after him have applied the name of "hereditary ataxy." This t n, however, appears to be an unsuitable one, as it would seem to i ly, first, that the disease usually known as ataxy or tabes spi- n is is not hereditary; and second, that the disease which Friedreich d cribed both clinically and pathologically, is otherwise identical w h Duchenne's locomotor ataxy. Now it would be a great mistake t suppose that hereditary influence is wanting in the production of t ordinary form of ataxy, for patients suffering from it have very c mmonly inherited the neurotic constitution, as manifested by the oc- c rence in their parents of hysteria, epilepsy, insanity, megrim, and e essive excitability of the nervous system, as shown by habitually v ent manners, frequent outbursts of passion, etc. Direct trans- m sion of tabes from parent to offspring appears to be more rare, y Carré has recorded eighteen cases of it in three different genera- t ns of the same family, and Charcot and others have seen similar i ances. On the other hand, the malady first described by Fried- r ch differs in many most essential points from ordinary ataxy; and a hough Erb, in his treatise on Diseases of the Spinal Cord, in Z mssen's *Cyclopædia of Medicine*, considers it simply an unusual form of tabes, the most recent investigations on the subject agree rather with Friedreich's original view, that the two affections are quite distinct. Two essays on the subject which have lately appeared—the one by Feré, in the *Progrès Médical*, and the other by Hammond, in the *American Journal of Nervous and Mental Diseases*—induce us to consider the present aspect of the question.

The cases originally recorded by Friedreich were not such of direct transmission of a peculiar form of spinal disease from parents to children, but instances of a malady occurring in brothers and sisters, whose parents had been free from it. The term "hereditary ataxy" is, therefore, a misnomer. "Family ataxy," although more correct, does not sound well; and, under these circumstances, we may provisionally accept Browne's proposal to call the malady in question "Friedreich's disease," which has at least the advantage of not committing us to any special pathological theory.

Friedreich's observations extended over three sets of cases, viz., a brother and a sister, whose father had been a notorious drunkard; three sisters, whose parents were industrious and healthy; and three sisters and one brother, whose father seems to have been a somewhat remarkable character, as he combined the functions of tailor, barber, and musician, drank heavily, led a fearfully immoral life, and eventually died of consumption. The wife of this man was bodily healthy, but unusually stupid; she mentioned, however, as a fact, that all the four children had been conceived while the father was in a state of intoxication. This latter circumstance is known to give rise occasionally to epilepsy, paralysis, idiocy, and insanity.

Friedreich thought that the female sex was more liable to the affection than the male, as seven of his cases occurred in girls, and only two in boys; but out of forty-eight cases collected by Feré, twenty-eight occurred in boys, and only sixteen in girls, showing a preponderance of the male sex. As regards age, the malady seems to generally commence about the time of the development of puberty, that is, between twelve and seventeen years; and in connection with this it is useful to remember that Rokitansky has found great tendency to venous hyperæmia in the spinal canal during that period of life. Hammond speaks of cases where the affection commenced between six months and ten years; but fuller details than he has given are required to make us accept that statement. The general tendency of Friedreich's disease to appear at an early time of life, however, distinguishes it altogether from Duchenne's ataxy, which usually becomes developed between thirty and forty years of age.

The malady generally commences without any apparent exciting cause or premonitory symptoms, with a feeling of muscular debility in one or both legs. Walking becomes difficult, but does not show the peculiar features of Duchenne's ataxy. The gait is staggering, like that of a drunken person, but the want of co-ordination is not increased by shutting the eyes. After a time the trouble spreads to the upper extremities, and the finer movements of the hands and fingers become impossible. The affection assumes occasionally the hemiplegic form. The head is sometimes seen to oscillate like that of a person who goes to sleep on a chair; and this tremor is increased when the patient moves the head. There is also a peculiar form of nystagmus in the horizontal axis, showing that there is want of harmony in the muscles of the eyeballs. Then the speech becomes slow and drawling, and eventually quite unintelligible. In spite of this the tongue appears to be freely movable in all directions, can be easily protruded and held out without any appearance of tremor. Sometimes, however, in the later stages of the disease, there is tremor in the tongue and glossoplegia. Towards the end there is more or less complete muscular paralysis and wasting, and occasionally pain, cramps, and rigidity.

A curious feature of the complaint is, that sensibility does not suffer until the very last; while in Duchenne's ataxy, lightning pains, areas of hyperæsthesia and anæsthesia, numbness in the soles of the feet and the sphere of the ulnar nerve, are early symptoms. The sphincters do not suffer, and there is for a long time no tendency to

bed-sores. The cutaneous reflex sensibility and the electric tests are normal. The tendon reflexes have not been studied in the earlier cases, but where they were investigated, were found to be absent. The intellect is normal, and the special senses do not suffer. Argyll-Robertson's symptom, which is so common in ordinary ataxy, is absent in the complaint now under consideration. In men there is impotency; and in women menstruation is irregular and unsatisfactory. Less constant symptoms are curvature of the spine and a peculiar form of vertigo, which comes on in sudden paroxysms, and is not influenced by the position of the patient when the attack begins.

The course of the malady is exceedingly slow; and it is only quite towards the end that sensibility becomes affected, and that there is tendency to sacral bed-sores and catarrh of the bladder, with pain and cramp in the muscles. Symptoms pointing to an affection of the medulla oblongata are then apt to make their appearance, viz., acceleration of the pulse, excessive perspiration and salivation, and diabetes insipidus. Death is preceded by Cheyne-Stokes's respiration. In one case the affection had lasted altogether thirty-one years, in another twenty-six; and where death took place at an earlier period, it was owing to typhoid fever, to which these patients seem specially apt to succumb. They appear to possess only slight powers of resistance to the typhoid poison, and collapse is apt to set in at an early period of the fever. This was in some cases no doubt promoted by an excessive fatty degeneration of the heart, which was found after death.

From what we have said it will be apparent that the disease is as different from ordinary ataxy, as one form of Bright's disease from another; indeed the symptoms resemble rather more those of multiple cerebro-spinal sclerosis in patches, than the common form of tabes. Sclerosis in patches is also liable to become developed towards puberty; there is no sentient or sensory trouble, the sphincters act well, but there is an affection of speech and vertigo. On the other hand, the peculiar form of tremor which is seen in multiple sclerosis does not occur in Friedreich's disease; and there are exaggerated tendon-reflexes, spastic gait, and muscular rigidity, strabismus, diplopia, and impaired intellect in multiple sclerosis.

Clinically, therefore, Friedreich's disease appears to be one *sui generis*, and the same holds good as far as pathology is concerned. In ordinary tabes the lesions are generally confined to the posterior columns, while in Friedreich's disease a greater variety of degenerative changes appear to exist. There is posterior lepto-meningitis, and both Goll's and Burdach's columns are affected, the degree of the sclerosis being greatest in the lumbar portion of the cord, less in the cervical, and least in the dorsal region. In all but Friedreich's first case the lateral columns were likewise affected, and in some the disease was found to have extended to the anterior columns, to Clarke's vesicular columns, and to the central grey matter. In the medulla oblongata, the sclerosis extends to the posterior pyramids and the floor of the fourth ventricle, involving the nuclei and trunks of the hypoglossal nerves. The posterior roots have generally been found wasted and indurated, and the brachial, crural, and sciatic nerves in a state of atrophy.

Friedreich's disease, therefore, appears to be a diffuse sclerosis of different portions of the spinal cord and medulla oblongata, and clinically, as well as pathologically, distinct from tabes and sclerosis in patches. It is hardly worth while to discuss seriously Hammond's opinion that the disease begins in the medulla oblongata, and afterwards invades the cerebellum; for clinical observation points clearly to the fact that the disease begins in the lumbar enlargement of the cord, and pathological anatomy has shown the cerebellum to be healthy, even after the affection has lasted upwards of thirty years. The complete collapse of Duchenne's original theory of ataxy being a cerebellar disease, might have prevented Hammond from once more bringing the cerebellum forward in connection with the pathology of a similar complaint.

THE SMALL-POX DEATH-RATE AMONG CHILDREN AS INFLUENCED BY VACCINATION.

THE leading article on vaccination, which appeared in our issue o February 17th, has received a considerable amount of attention a the hands of antivaccinists, and attempts have been made by then to throw discredit on the striking figures therein adduced. In a letter to our contemporary, the *Echo*—in whose correspondenc column part of our article was reproduced by Dr. Drysdale—a co respondent endeavours to show that our figures are incorrect an absurd, inasmuch as, according to him, they lead to absurd result "We have just been told," says this writer, "by the Local Gover ment Board that 125 vaccinated children died of small-pox last ye in London. Now, if our children had been unvaccinated, for ever one of these 125 there would have been, according to the MEDICA JOURNAL and Dr. Drysdale, 183 deaths, and that amongst childre alone. Now, 183 times 125 gives 22,875 deaths amongst *childr alone*, not counting adults, and that in London only! A mortali so unheard of in prevaccination times takes away one's breath."

The inference here made, however, is not justifiable without takin into consideration the qualification to which our figures were su ject. Basing our calculation on hospital statistics, we pointed o that the ratio of the mortality among the vaccinated to t mortality among the unvaccinated was as 3 to 550, "oth conditions remaining the same;" that is to say, provided t comparative conditions of the vaccinated and the unvaccinated we those existing in the case of the hospital patients. We are w aware, as are our readers, that the conditions in the case of hospi patients are not necessarily the same as among the general popu tion; and we were, therefore, careful to avoid making our stateme refer to the general population, without the qualification m tioned. How far this qualification modifies the ratio based on h pital statistics, we are now able, in some measure, to gat from Dr. Buchanan's recent report. According to that repo the saving of life among children under ten, instead of be 23,000, is only about 12,000; but the report, at the same time, sho how this difference arises. It is there stated that, of the 125 dea registered as occurring among vaccinated children under ten, seve were vaccinated during the incubation of small-pox, and were, the fore, unvaccinated at the time of contracting the disease; wh others were found not to have been vaccinated at all, so that number comes to be reduced to 105. Without deducting sc other cases who were suffering from other diseases at the ti they were attacked by small-pox, the correction thus given redu the estimate from 23,000 to 19,000. Further, Dr. Buchanan's re shows that vaccination performed at the public vaccination stati was more protective than the vaccination of private practice. is extremely probable, therefore, having regard to the class fr which hospital patients are chiefly drawn, that the mortality am the vaccinated in hospital is comparatively less than in priv practice. This fact, together with the probably greater morta among the unvaccinated in hospital than in private prac (arising from the difference in the social position of the patie will suffice to explain a large part, at least, of the remaining di ence between the estimate based on our figures and the estimat Dr. Buchanan. On the whole, we believe the statistics entitle u infer that, had the vaccination of the population generally bee the same standard of excellence as among hospital patients, t would have been a saving of between 15,000 and 16,000 live children under ten during the year 1881 (not 1882, as is erroneo made out by the writer referred to), as compared with what w have occurred had all the population been unvaccinated. A was, there was an actual saving of at least 12,000 such lives.

These figures are undoubtedly large, and may, for that rea "take away one's breath," if one be an antivaccinist, but they by no means unprecedented in prevaccination times. In Londo

vaccination times, the total death-rate from small-pox was equal an average annual rate of about 16,000 in a population of four illions, and in epidemic years it was much larger. Most of these aths, we know, were among children; but, in the absence of reli- e data, it is impossible to estimate the death-rate among chil- n under ten. Such data, however, exist for other towns. In ester, for example, during the years 1772-77, Haygarth (*Sketch a Plan to Exterminate the Casual Small-pox*) gives the annual erage death-rate as 63 among children under ten. Since the pulation was about 15,000, this gives an average annual mor- ity of over 16,000 in a population of the same extent as London 1881. It is hardly probable that the death-rate in London in demic years (it must be remembered that 1881 was an epidemic ar) was less than the average annual death-rate in a small town e Chester. It is very evident, therefore, that the death-rate de- ced from the figures brought forward in our article, and in Dr. chanan's report, cannot be called unprecedented in prevaccination nes. Not only so, but the remarkable similarity that death-rate ars to the actual prevaccination death-rate in Chester tends rongly to confirm the accuracy of these figures; and demonstrates e probability that, if all children under ten had been unvaccinated 1881, the death-rate among them would have been not 900 only, t 18,000, or more.

ACUTE PNEUMONIA.

ICH acute diseases of the respiratory system as coryza, laryngeal tarrh, bronchitis, pleurisy, and pneumonia, have been very pre- lent during the past month of severe weather. Though the etiology acute pneumonia is still a very open question, but few will doubt at exposure to severe cold and an east wind proves itself an im- rtant factor in many cases. While some would regard it as only e determining circumstance, and not the essential cause, of the tack, others would say that it alone is a sufficient cause for one rson, though not for another. We want to learn more perfectly hat are the antecedent circumstances in the life-history of the dividual that make one more susceptible to an influence to which any others are subjected without harm. Is it an hereditary dis- osition? Is it preceding and predisposing disease in the lungs, or ie existence of certain diathetic tendencies? What has abstinence excess in the use of alcohol to say to it? What insufficiency of od or of clothes? Can unsanitary surroundings predispose to it? ow far do the circumstances of everyday life, such as confinement overheated workrooms, or too enervating and luxurious surround- gs, contribute elements of danger? Does excessive mental or dily fatigue often open the door to the enemy? Most of these re generally believed to be conditions which predispose to pneu- onia; probably, by depressing the "vital powers," or diminishing ie adaptability to surrrounding circumstances, by enfeebling the mpathetic reflexes, and in this way making individuals susceptible the morbific influence of cold. But which of these antecedents the most potent? Which produces the most fatal results? Do ese various causes modify the course of the disease when estab- shed? Does the pneumonia which is excited by exposure to cold iffer in any way from those cases which are found associated with nsanitary conditions or with infectious diseases? If so, what are he clinical features which distinguish each variety? When pneu- onia is excited by such atmospheric conditions as those under hich we have recently suffered, does it often attack many of those esiding in one house, as it is thought to do under certain other onditions?

All these questions demand answers from us. Each of us can eadily contribute his share, and the labour has been reduced to a inimum by the cards of inquiries that have been prepared on this ubject by the Collective Investigation Committee of the Associa- ion; and we most earnestly appeal to each one of our members who has had a case of pneumonia under his care during the past month, to fill up one of these cards, and forward it as his contribution to the common fund of knowledge; in doing so, we would ask each observer to pay especial attention to the existence of any of those predisposing causes which we have indicated, and to mention any circumstance which he thinks may have rendered the patient liable to attack. Many of our readers have already been supplied with these cards; those who have not them at hand, can obtain them by applying to the honorary secretary of the Collective Investigation Committee of their Branch, or to the secretary of the Collective Investigation Committee of the Association.

THE weekly health report, according to the Alexandria correspondent of the *Times*, shows 571 men sick, out of a total force of 8,632. The absence of the means of transport will prevent the removal of any of the troops before May.

A COMPLIMENTARY dinner, in appreciation of the honour which he has conferred on medical and general literature during the last forty years, is to be given to Dr. Oliver Wendell Holmes on April 12th. Dr. Gaillard Thomas, of New York, is chairman of the committee.

DR. FINCHAM being about to retire from the office of Physician to the Westminster Hospital, it is proposed to present him with a testimonial of the esteem in which he is held by his professional brethren. It is requested that all subscriptions be paid to the Treasurer of the Fund, Dr. Octavius Sturges, 85, Wimpole Street, W., on or before April 20th.

THE scholarships in medicine and surgery, recently founded by the Society of Apothecaries of London, are each of the value of £100. They are tenable for two years, and are open to all medical students of a certain standing. The dates of the examinations for the respective scholarships and other particulars will be fully advertised.

GENERAL MEDICAL COUNCIL.

THE English Branch Council has been summoned at 11 o'clock on Wednesday, April 18th, and the Executive Committee at 2 o'clock on the same day. A general meeting of the Council has been summoned for April 19th.

MR. E. F. FLOWER.

MR. EDWARD FORDHAM FLOWER died early on Monday morning, at his residence, 35, Hyde Park Gardens. The deceased gentleman was widely known for his humane crusade against the cruel practice of driving horses with bearing-reins, having for many years laboured to influence public opinion in this matter. He had been in declining health for some time, and for several days before his decease was quite unconscious. Mr. Flower, who leaves a wife and three sons, one of whom is Professor Flower, of the Royal College of Surgeons, was born in 1805.

UNITED STATES NAVAL MEDICAL SOCIETY.

THE medical officers of the United States Navy have formed an association, to be entitled the Naval Medical Society, for the purpose of establishing friendly relations between its members, of interchanging professional experiences, and of assisting each other in scientific inquiry and research. All officers of the naval medical corps are admissible on application to the Secretary. The Society is to meet regularly on the first Thursday of every month in Washington, and at other times when the business committee may think it advisable, or when five other members may so request.

THE VICTORIA UNIVERSITY.

A SUPPLEMENTARY charter conferring on the Victoria University the power of granting degrees has been signed by the Queen. According to the original charter, a course of study at a College of the University is essential for degrees not honorary; and since the additional power has been granted by the Crown, and not by Act of Parliament, this requirement will apply to the medical degrees of the Victoria University. It is probable that the residential clauses will be after the pattern of those in force at Edinburgh; but as the charter, though signed, has not yet been issued by the Home Office, its provisions are not at present known.

HOSPITAL INQUESTS WITHOUT MEDICAL EVIDENCE.

OUR attention has been drawn to an, as we believe, unusual, and certainly undesirable practice, which has sprung up at Bolton, where the coroner is in the habit of holding inquests on patients who have died in the infirmary, without hearing medical evidence. In two recent cases—one an inquest on a railway porter, who died after an injury received during shunting, and the other, the suicide of a married woman—no medical evidence was taken, a nurse at the infirmary giving *quasi*-surgical evidence. We are at a loss to understand the reason for this, seeing that no fee is payable to a resident medical officer for his evidence. It is very undesirable that such inquiries should be held without the production of medical evidence as to the cause of death.

A NEW COLONIAL BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WE announce with much satisfaction the formation of a new Branch of the British Medical Association in one of the colonies. On February 13th, a meeting was held in the Colonial Hospital at Georgetown, Demerara, under the presidency of Dr. Fisher. Mr. F. H. Edmonds, at whose suggestion the meeting had been summoned, explained the object in view, and read letters of approval from several medical men in British Guiana. He moved, "That it is expedient to form a British Guiana Branch of the British Medical Association in British Guiana." This was carried unanimously, as were also resolutions providing for the appointment of Secretaries in the different counties, and for the summoning of meetings. Mr. Edmonds and Dr. Brebner were appointed Secretaries for Demerara county, and Dr. Kennedy and Dr. Leary for Essiquibo and Berbice respectively.

DIPHTHERIA AT MERTHYR TYDFIL.

SERIOUS prevalence of diphtheria has recently been observed at Dowlais, in the district of the Merthyr Tydfil Local Board. Four cases occurred in November, six in December, 33 in January, and 15 in February, or 58 in all. The number of fatal cases was 14, and the cases occurred in 46 houses in about 33 streets. The health-officer considers that the malady was chiefly spread by the filthy surroundings of the patients. His experience as health-officer during the last seventeen years, has been that diphtheria has made its appearance wherever putrifying excrementitious matter was found, when the weather has been such as would favour the growth of the putrescent matters. In Dowlais, as elsewhere in the district, the places where putrescent matters are deposited, during the winter months especially, are numberless. On ash heaps in waste places; in backyards, where ashes and refuse are deposited; where fowls and ducks are kept; where yard drains have been either displaced or broken; where old cesspits and closets are imperfect, and where sewage gases escape. In the majority of instances, some or other of these causes of disease have been found to exist. The presence of these pernicious sources of sickness, together with the exceptional warmth of the weather, have, in his opinion, mainly conduced to the production of the many cases of sickness that have been reported. We cannot say, however, that we are altogether satisfied with this explanation.

THE BRIGHTON REVIEW.

AT this review, Surgeon Cummings, Scots Guards, was senior medica officer of the bearer-company that marched with the column, and h made the arrangements for the march past on the 26th, and subse quent operations in the field, aided by Lieutenant Maclure, adjutan of the corps. The arrangements that were made were most satis factory. On the 26th, two small field-hospitals (three tents each were pitched; No. 1 on Windmill Hill, not far from the race-stand and No. 2 about two and a half miles off to the eastward at New market Farm. No. 1 was in charge of Surgeon Burrows, Sussex Ar tillery, and No. 2 in charge of Surgeon-Major Shepherd, Victori Rifles. The following medical officers of the volunteers assisted a these hospitals: Surgeons Davidson, Carson, Norton, and Bull. Th sick received every care and attention. Palliases stuffed with straw blankets, hot tea, beef-tea, brandy, and other medical comforts wer provided. The casualties received during the day were as follows epilepsy, 1; syncope, 1; colic, 4; sprain, 3; debility, 4; blister of foot 1; total, 14. All these were able to rejoin their corps in the evenin except one, who was sent to the County Hospital. A case of frac ture of the femur, from a fall, occurred in the town on the nigh before the review. It was sent to the County Hospital. We ar indebted to Surgeon-General Ekin for his courtesy in givin information.

THE PECULIAR PEOPLE.

MR. PAYNE held an inquest this week respecting the death of Alic Maria Cousins, aged eleven months, the child of Robert Cousins, clerk in the War Office, against whom a verdict of manslaughte arising out of the death of another of his children, was returned b a coroner's jury, but the grand jury at the Central Criminal Cou threw out the bill, and the case was not tried. The cause of deat in the present case was tubercular disease of the lungs. No medica man was called in. An elder of the Peculiar People, who anointe the child and prayed over it, was examined, and he admitted that seemed so ill that if he had not belonged to the Peculiar People, h should have sent for a doctor. Mr. Price, senior house-physician Guy's Hospital, who had examined the body of the child, said tha he believed death was hastened by want of medical attention. I the child had been seen two months ago by a medical man, its lif would probably have been preserved. The coroner, in summing up referred to the former case, and regretted that the grand jury ha thrown out the bill at the Old Bailey, as he was of opinion that that charge had been gone into, it would have taught the fathe such a lesson that the present case would not have occurred. Th evidence clearly showed that the father had not conformed to th law of the land; and he trusted that if this case were sent for tria it would have a more satisfactory result. The jury returned a unanimous verdict of manslaughter against Robert Cousins.

SURREPTITIOUS IMPORTATION OF DISEASE.

COMMENT is made by Dr. Wallace, in his last periodical report o Greenock, of the introduction into his district of three cases scarlet fever, the infection in each case having evidently been con tracted in New York. The patients were passengers, along wit their father, in an Atlantic liner, which left New York on Decembe 21st, and arrived at Glasgow on January 1st. The children sickene on the 24th, 28th, and 31st respectively. From a remark made t the father by the doctor on board, the latter appeared to have reco nised the infectious nature of the disease. He did not, howeve enlighten him sufficiently, since the father was allowed to land wit his children, whom he conveyed by a tramway-car to a railwa station; and thence by train, after staying two hours in the waitin

om, to another station at Greenock, from which he took them in a mmon cab to the house of a friend, who carries on the business of dairyman. A medical man was then called in, and the patients moved to hospital, other measures being taken to prevent an ex-nsion of the mischief. It is impossible to estimate how much sease may have been disseminated by these children, before they me under proper sanitary supervision. Had intimation been made the sanitary authority on the arrival of the vessel, all danger ould have been averted. Some inquiry should be made as to the tion of the ship-surgeon in the matter; and as to the answers given the captain to the questions of the Customs-officers at Glasgow, to the health of the passengers during the voyage.

MR. MUNDELLA.

E understand that Mr. Mundella is slowly recovering from the ness under which he has recently been labouring. The right nourable gentleman was seized with severe pain and stiffness in e neck after exposure to the cold winds which have recently sited us; this pain was found to be due to a periostitis involving e spinous processes of the vertebræ of the neck, the mastoid pro-sses, and the muscles attached to these bones. The inflammation is of a rheumatic character, but was severe enough to lead to me purulent collection, but no abscess necessitating an operation s formed. The pain and discomfort, with the resulting sleepless-ss thus produced, have combined, in a constitution never robust, produce a considerable amount of debility, though never enough cause serious anxiety to his medical attendants. The improve-nt has recently been so considerable, that some hopes are, we derstand, entertained of Mr. Mundella's shortly leaving town for ange of air.

THE LATE MR. JOHN BROWN.

HIS well-known personal attendant of Her Majesty the Queen ex-ed at Windsor Castle on the evening of March 27th, in the fifty-th year of his age. We are informed that Mr. Brown felt ghtly indisposed on Friday, March 23rd, but continued to dis-arge his duties until the following evening; he then complained general depression and an ill-defined uneasiness. On Sunday rning, an erysipelatous rash appeared on the face; it rapidly ex-nded to the scalp, and he passed into the comatose typhoid con-tion commonly observed in the worst forms of erysipelas. He ed at eleven o'clock on Tuesday night. He was attended by . James Reid, resident medical attendant to the Queen, Windsor stle; and Sir William Jenner was called in consultation. No trace any wound or injury could be found, nor could any constitutional edisposing cause of erysipelas be discovered. Mr. Brown, who as ths son of a farmer on the estate of Colonel Farquharson of vercauld, had always enjoyed robust health until recently; it his friends have noticed during the last year a diminution his accustomed vigour.

SPREAD OF INFECTION BY PAWNBROKERS.

T the present time, when several zymotic diseases are epidemic some parts of London, and in certain urban districts throughout e country, it may be useful to draw attention to a source of pro-gation of infection amongst the poor, which sanitary authorities pear seldom to consider, or often to overlook. We refer to the read of contagion through the medium of clothes deposited in wnbrokers' shops. The persistency with which the contagium of rtain zymotics, and especially of measles, scarlatina, and small-x, clings to clothes is well recognised by the medical profession. ot a few cases have been recorded of the propagation of these seases by means of the retention of infecting power in clothes, ich had been shut up in boxes for months after exposure to the iginal infection. Probably many cases of zymotic disease which are supposed to be sporadic, on account of the absence of obvious evidence of direct contagion, might be accounted for in this or in some similar way. Preventive medicine, which has regarded, with so much advantage to the public, the milk of the dairyman and the linen of the laundress, might now profitably turn its attention to the bundles of the pawnbroker. In many districts of the king-dom, the commoner zymotics are practically always with the poor; and these maladies will probably always remain more or less preva-lent amongst us until every possible source of infection is clearly re-cognised and adequately controlled. In many places, it is a weekly custom amongst labourers and the poorer artisans, to pawn clothes at the beginning of the week, when money is scarce, and to take them out of pledge again at the end of the week, when wages come in. While the garments are in the pawnbroker's charge, they lie together in bundles, distinguished by numbers and dates. The pawner need not give his real name and address, for the possession of a pawn-ticket secures his claim upon the articles he has pledged. The danger we point out is one which could be avoided in great part, if sanitary authorities were furnished with power to enforce a few simple restrictions upon the pawnbroker's traffic in clothes. Reliable registration of the names and addresses of pawners would do much to prevent the evil, while it might also be possible to insist upon the disinfection of clothes in suspicious cases, before the ap-parel is received by the pawnbroker.

PUERPERAL FEVER AT KENSINGTON.

IN his last monthly report, Dr. Dudfield gives details as to certain cases of puerperal fever spread by a midwife, which are interesting, not only as showing the facility with which that disease may be propagated, but as evidencing the need of the registration of mid-wives, which has so often been urged by the Association. Six deaths of women from puerperal diseases were held by Dr. Dudfield, in his report for January, to have no special significance, as they occurred in the practices of an equal number of medical men. One of these women, however, was subsequently found to have been confined by a midwife, the medical man who certified the cause of death having been only called in at the last gasp, so to speak. This same medical man has since certified in a second case, the deceased woman having been confined by the same midwife, who has, moreover, had two other cases, not fatal, of the same nature. Her conduct appears to have been the more reprehensible, inas-much as she was cautioned by some three or four doctors, after the first fatal case (January 19th), to relinquish practice for a time, which she did not, for the other non-fatal cases referred to occurred subsequently, but before the second fatal case (February 19th). The medical man who certified the two deaths has stated, that not only did he caution the midwife to discontinue her practice for a suitable time after the first case, but also that he himself had abstained from this branch of practice since January 19th. Another of the medical men referred to has likewise stated that he did not attend in her confinement the woman whose death he certified as having been caused by puerperal peritonitis; and this gentleman added that, subsequent to the poor woman's death, he had abstained altogether from midwifery practice for many weeks. The details of the cases in question will have interest to obstetricians. Case 1.—Mrs. W. was attended in her confinement by the midwife on January 14th, and fell ill with puerperal fever on the 17th or 18th. On the 19th, she died, having been seen that day only by Dr. R. and Dr. B. Dr. B. certified the death. Both doctors informed the midwife as to the nature of the complaint, and advised her to abstain from prac-tice for a time. So far as is known, this was the midwife's first "bad case;" the origin of it has not been traced. Case 2.—Mrs. H. (1) was confined by the same midwife early on January 26th, and fell ill with puerperal fever on the 28th or 29th. On the 29th, she was seen by Dr. W., who, recognising the nature of the disease, de-clined to attend on account of his general practice. On January

30th, Dr. S. was called in, and the patient, who is still very ill, is still under his care. Her baby died when nine days old, but the cause of the death has not yet been ascertained. Case 3.—Mrs. H. (2) was confined by the same midwife in the afternoon of January 26th, and fell ill with puerperal fever on the 28th. On the 29th, she was seen by Dr. L., who, recognising the nature of the complaint, sent a message to the midwife to abstain from practice for a time. When the midwife heard that a doctor had been sent for, she exclaimed that "her practice would be stopped." Mrs. H. is still under doctor's care, very weak and ill. Case 4.—Mrs. D. was confined by the same midwife on February 7th. On or about the 13th, she fell ill with puerperal fever. She was seen once by Dr. R., who saw Case 1, and who, recognising the nature of the case, declined to attend on account of his general practice. He has since repeated his caution to the midwife. Dr. B., who certified in Case 1, was then called in, and was in attendance till the patient died, February 19th. So far as can be ascertained, the midwife appears to have had three other midwifery cases within the period from January 19th to February 19th, which pursued a normal course.

POTTED MEAT AGAIN.

ANOTHER savoury delicacy for the breakfast table, writes a provincial contemporary, was brought to light last week at the Birmingham police-court, in the course of an inquiry into the constituents of certain potted meat. An enterprising manufacturer of this popular compound, who is in the habit of supplying it wholesale to small dealers at suspiciously low prices, was called upon to explain the presence in his house of a bag containing five pieces of donkey-flesh, weighing in the aggregate about seventy pounds. The flesh, which was evidently that of an animal which had died a more or less natural death, had been parboiled and prepared for use, and there could be no reasonable doubt that it was intended for the mincing machine; and, but for the timely intervention of the inspector, would have gone forth in the shape of potted meat, to tickle the palates, upset the digestion, and perhaps poison the blood, of numbers of unsuspecting people who might be induced to buy and eat it. The defendant, who, it seemed, had been cautioned on a previous occasion for having unsound meat in his possession, did not attempt to deny the soft impeachment in this case, but pleaded only in a paraphrase of the well known argument that "a man must live," to which the Bench in effect, if not in words, rejoined that they did not see the necessity for it, by condemning the nasty fellow to a month's imprisonment. Potted meat is evidently not the only form in which the flesh of animals unfitted for human food is purveyed by enterprising tradesmen, for, immediately the donkey-meat case was disposed of, the magistrates were called upon to inquire into a case of horse-meat. It may be a foolish prejudice which prevents people in this country from emulating the French in their taste for horse-flesh, but even in France, we believe, hippophagists require that their horses should be slaughtered, and not suffered to die a natural death. In his eagerness to break down British prejudice against horse as an article of diet, Joseph Matthews appears to have overlooked this rather important condition; and, as the thirty pieces of flesh found upon his premises were evidently cut from an animal which had not only died a natural death, but had suffered for some time previous to its decease from some inflammatory disease, requiring the administration probably of a great deal of powerful physic, the new viand can scarcely be said to have had a fair trial. According to the testimony of a veterinary surgeon, indeed, the meat was not only nasty, but unwholesome, and likely to prove highly injurious to anyone who might eat it. Food of this objectionable character could not be considered cheap even at fivepence per pound; and, as the defendant's malpractices were believed to be of long standing, and his meat trade had been regarded for a considerable time with great suspicion, the Bench could not well do less than sentence him to a month's imprisonment. Pecuniary penalties for offences of this class would evidently be futile, as convictions are difficult to procure, and the profits of a few weeks' trading would more than counterbalance any money fine which the magistrates have it in their power to impose. The bad meat trade, it must be remembered, is not only a source of peril to, and a cruel fraud upon, consumers, but a serious wrong to honest butchers, who are, of course, unable to compete with the unscrupulous vendors of horse and donkey-flesh, who obtain their raw material from the knacker's yard. As to potted meats, and all similar preparations, it should be remembered the public have an easy way of protecting themselves, by purchasing only approved brands, as the reputation of a respectable established firm is too precious a commodity to be risked for the sake of the gain resulting from the use of unsound or improper meat.

THE WESTMINSTER HOSPITAL AND THE "DAILY NEWS."

A CORRESPONDENT of the *Daily News*, signing himself "G. S.," has, in a letter dated March 21st, accused the authorities of the Westminster Hospital of a certain want of consideration in the manner in which out-patients are compelled to wait for the door of the department to be opened, standing the while "in the street this wet and wintry weather." We are here brought to the fringe of a great subject, one which has already received much attention from persons specially acquainted with hospitals and their difficulties, and one which must before long claim the very serious attention of the public. Few people outside the profession know what a vast number of out-patients are daily seen at the hospitals and dispensaries of London. We are informed that twenty thousand out-patients were treated at the Westminster Hospital alone last year, and it is a very small special hospital which does not have five thousand out-patients in the year. As the late President of the Harveian Society recently said, about one in three of the total population of the metropolis receives, yearly, gratuitous medical relief. We have made these preliminary observations, to show that the question is not quite so simple a one as might appear at first sight; it is one which, we are aware, has received serious consideration from the authorities of the hospital; and we have now before us a printed report drawn up by the medical officers in charge of the out-patient department. We are informed that the doors are opened from 1 P.M. to 1.30 P.M., and during that half-hour all comers are admitted; at 1.30 P.M. the doors are closed, and are only reopened at intervals of about ten minutes between 1.30 P.M. and 2 P.M., for the admission of patients who are not making their first attendance. Practically, it is found that whatever hour the doors are opened, a certain number of patients invariably congregate about the door beforehand. Some time ago the committee, recognising this, erected a covered way at the entrance, so as to afford some partial shelter in inclement weather. The fact is, that it is almost impossible to make regulations with regard to an out-patient department at a large hospital which will not bring hardship on some one. In this particular instance the patients congregate around the door, and stand in rain and wind entirely to suit their own convenience. If, on their first attendance they came at 1 P.M., or if on subsequent occasions they come between 1.30 P.M. and 2 P.M., they would be admitted either at once or after a delay of a few minutes. G. S., while admitting the force of this objection, speaks of the anxiety of the patients to "secure a good place, and not waste time, which perhaps is valuable to them elsewhere." Perhaps we may be allowed to hint that people whose time is valuable have no business in the out-patient department of a hospital at all; such a department is meant for the sick and suffering poor. Doubtless many people who are not poor, and whose time is valuable, are found there; and it is this perversion of the true design which has paralysed all efforts to render the working of the out-patient system easier and more effectual for both physicians and patients. As the Westminster physicians say in their report above quoted, "it is really, to a great extent, a question of space," and, as

may add, of time. It is impossible to properly attend to more than a given number of patients in a given time; twenty new patients in one afternoon is the limit at present in force at the Westminster Hospital; but with regard to old out-patients there is no limit. From various causes, from increased population, and increased facilities of locomotion, the number of out-patients has outgrown the powers of the hospitals and their staffs. Some plan must be devised in each individual case which will stay this increase, or lead, perchance, to a decrease; and a plan which results in excluding people whose time is valuable, in favour of persons who are really poor and really ill, is not productive only of hardship.

DRAINAGE OF CANNES.

A REPORT on the works of sewerage and drainage proposed for the town of Cannes, has been published by Captain Douglas Galton, C.B., F.R.S. It is well worthy of perusal. The old town of Cannes, it must be remembered, occupied the slope of Mount Chevalier, and the level ground eastwards to the sea, but, during the last few years, its growth has been rapid. The population in 1877 was but 14,000; in 1882 it had increased to 20,000; and the hills around the town are dotted with villas and hotels rising one above the other, in close proximity, and often below the level of the roads, the foul waters of the higher being liable to pollute the subsoils of those at lower levels, while, in the old town, there is already an amount of overcrowding among the poor, unsatisfactory both as to health and to morals. The annual rainfall is 35.4 inches, but the number of rainy days is small, the heavy falls of rain being speedily carried off by between *ruisseaux*, or natural water-courses between the hills, dry during the greater part of the year. The water-supply is derived from the Siagne at St. Césaire, whence it is brought by an open conduit or canal, and, except during heavy storms, is clear and good. The turbidity rarely lasts more than a few hours, and, at such times, the communication between the river and canal is cut off. What is not wanted by the town is allowed to run to the sea by one or other of the *ruisseaux*. These must ever remain the means for removing the storm-water, but they have lately been utilised for domestic water, and, what is worse, for the overflow of the dumb wells in the gardens of the villas and hotels. In the town, the *misseaux* have been supplemented by one main and several minor sewers; fœcal matters, however, are excluded from these and placed in earthenware vessels, from which they are transferred to barrels which, when full, are carted away for manure. In the villas and hotels water-closets are general, the sewage passing into a fosse or cesspool, sometimes under the house, at others in the garden. These are required to be watertight, and are periodically emptied pneumatically by the *employés* of the Compagnie des Vidanges. Owing to the quantity of water used by the water-closets, the sewage is not saleable, and is discharged from the fourgons into the sea, beyond the mole, through an iron pipe, which carries below low water mark. But, to avoid the expense of frequent emptyings, an overflow pipe is often provided, by which the excess of liquid is carried into the nearest *vallon*, saturating the soil with sewage, and vastly increasing the dangers of the cesspool system. Besides, the pneumatic apparatus never removes the more solid matter and sediment, which remains putrefying in the *fosse*. House refuse and kitchen stuff, if placed by the householder in the dustway, is removed by the *Service de Balayage*, along with other street sweepings; but, in the suburbs, is buried in the garden, where soon becomes a nuisance. Captain Galton having been requested by the Mayor of Cannes to report on the new sewerage works, designed by MM. Bruniquet and Vizan, expresses his approval of them, as a whole; but is of opinion that their cost would be reduced, and their efficiency increased, by certain alterations. The rainfall being irregular and yet heavy, should, he recommends, be excluded from the sewers, and carried off by the *ruisseaux*, or by iron pipes laid in the bed of these natural water-courses. The size of the sewers would then be no more than the actual requirements of the sewage. Wherever a sewer is laid, the house-drain should be connected with it, all intervening *fosses* being strictly prohibited. Captain Galton then explains the more important points in the laying, construction, ventilation, and flushing of sewers in general, and the arrangement of house-drains and their connection with the sewer, as well as many other details of sanitation, as understood in this country. He gives a rough estimate of the volumes of rainfall and sewage, and the velocity of the latter, according to size and gradient of the sewer; lastly, he discusses the question of the outfall, and recommends the covering in, or at least the fencing round, of the Canal du Ligne.

SCOTLAND.

WE understand that the number of students who have presented themselves for the preliminary examinations in Arts for the Medical Faculty, recently held in the University of Edinburgh, is over 470, as compared with 406 for the corresponding examinations in March of last year.

GLASGOW UNIVERSITY COURT.

AT the last meeting of the University Court, held on the 22nd inst., the following appointments of Assistant Examiners were unanimously made: Professor J. Bell Pettigrew, M.D., in Anatomy; Dr. Andrew Wilson, in Botany and Zoology; Mr. Robert R. Tatloch, in Chemistry and Materia Medica; and Dr. David Newman, in Physiology and Pathology.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

THE Dr. James Watson prize of the Faculty, of the value of fifty pounds, has been adjudicated to Dr. William MacEwen, Surgeon of the Glasgow Royal Infirmary. The subject of the successful essay is: "An Experimental Inquiry into the most suitable and most reliable Material for the Ligature of Arteries, and for Sutures." The competition was open to Fellows and Licentiates of the Faculty.

EDINBURGH ROYAL MATERNITY.

IN the beginning of May, the present house-surgeons of the Edinburgh Royal Maternity and Simpson Memorial Hospital will be succeeded by G. Armstrong Atkinson, M.B., C.M., and John Thomson, M.B., C.M. At the same date, Dr. Keiller will come on duty as ordinary physician, in succession to Dr. Angus Macdonald, whose quarter then expires.

AMBULANCE LECTURES IN ABERDEEN.

THE course of eight ambulance lectures, delivered to the Aberdeen Rifles by Surgeon-Major Angus Fraser, has been brought to a close. In addition to the ordinary instruction, the men were provided with a lithographed pamphlet, containing a carefully compiled and admirably illustrated summary of the whole course of lectures. The men made a most creditable appearance at the written examination held at the end of the course.

THE COMBE LECTURES IN SCOTLAND.

THESE lectures, delivered by Dr. Andrew Wilson, F.R.S.E., etc., and instituted by the trustees of the late George Combe, have been closed for the year 1882-83. They are delivered each winter and spring in various Scotch towns; Perth, Falkirk, Galashiels, and Hawick, having been chosen for the lecturer's operations this year. In the two latter towns, "Health Lectures," supplementary to the Combe course of the previous year, were given by Dr. Wilson. The aim of the instruction is that of placing the laws of health and the facts of physiology plainly and popularly before the people. It is satisfactory to learn that in this work Dr. Wilson has had the gratification of full public support and countenance in each town.

HADDO HOUSE COTTAGE HOSPITAL.

THE erection of cottage hospitals in different parts of the country, is a striking feature in connection with the improvement in medical practice, and already in the north of Scotland there are several of these institutions, in which admirable service is rendered to the district where they are placed. The Haddo House Cottage Hospital has just been opened at Tarves, in Aberdeenshire. The hospital was instituted by Lord and Lady Aberdeen. Patients admitted are expected to pay a small weekly sum for their maintenance.

THE OLD EDINBURGH INFIRMARY.

THE disposal of the site of the Old Edinburgh Infirmary seems at present a puzzle to the civic rulers. There are two schemes at present engaging public attention: one to run a street through the ground, which would be connected with the High Street by a viaduct one thousand feet long, bridging over the Cowgate; the other to lay it down in grass, with walks and flower plots. Considering the density of population in this quarter, the latter plan seems the most feasible, even though the city should suffer a pecuniary loss by creating the site into recreation grounds.

THE MEDICAL SCHOOL OF THE UNIVERSITY OF EDINBURGH.

THE Edinburgh Town Council, at its last meeting, resolved to vote the sum of 1,000 guineas towards the fund for completing the new Medical School of the University. The corporation subscribed handsomely towards the same object on former occasions, and in view of the completion of the University extension buildings, and of the approaching celebration of the tercentenary, Principal Sir Alex. Grant and those associated with him, are putting forth what is expected to be a successful final effort to raise the balance of the sum required to finish and equip the new buildings.

ODONTO-CHIRURGICAL SOCIETY OF SCOTLAND.

THE Odonto-Chirurgical Society of Scotland held their annual meeting last week, in Edinburgh. The report submitted was approved of, and it was agreed to print the *Transactions* of the Society. Mr. Macleod, of Edinburgh, communicated notes on the "electric light in dental surgery," and pointed out the great advantage it would afford to dentists in throwing a clear light into the cavity of the mouth. In the evening, the members of the Society and other gentlemen, including Professor Turner, Dr. Littlejohn, and Dr. G. W. Balfour, dined together in the Balmoral Hotel.

HEAVY RAILWAY DAMAGES.

IN the disastrous railway collision which took place at Pennilee, near Paisley, in September 1880, there were several passengers severely injured. One of them, Mr. John Clapperton, was for more than a year confined to the house, and received permanent injury to one of his feet. The railway company agreed to submit the case to arbitration, and the arbiter has just given his decision, awarding the sum of £8,250, with expenses. This is, we believe, the highest award ever given in Scotland for personal injuries received in connection with a railway collision. The injured gentleman was in business as a ship and insurance broker.

THE BOARDING-OUT OF PAUPER LUNATICS.

DR. ARTHUR MITCHELL, commissioner in lunacy, reports approvingly of the system of boarding-out pauper lunatics, adopted by St. Cuthbert's Parochial Board, Edinburgh. He says: "These figures disclose an active movement of the population, ensuing out of the practical application of some views as to the various ways in which pauper lunatics should be provided for. It would be a great advantage to the country if such views were more generally held and acted upon."

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending March 17th, it appears that the death-rate in the eight principal towns was 28.8 per 1,000 of estimated population. This rate is 7.1 above that for the corresponding week of last year, and 2.4 above that for the previous week of the present year. The lowest mortality was recorded in Greenock—viz., 16.7 per 1,000; and the highest in Dundee—viz., 34.8 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.8 per 1,000, or 0.1 above the rate for the previous week. Whooping-cough continues to be the most fatal miasmatic disease. From acute diseases of the chest, 177 deaths were registered, or 28 more than in the previous week. The mean temperature was 34.7°, being 2.8° below that of the week immediately preceding, and 12.9° below that of the corresponding week of last year.

HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending March 17th shows that there were 632 deaths registered, as compared with 609 in the preceding fortnight, representing a death-rate of 32 per 1,000 living. In the corresponding fortnight of last year the death-rate was 7 per 1,000 less. Of the excess of deaths registered this year, 40 per cent. are caused by infectious diseases, 28 per cent. by pulmonary diseases, 22 per cent. by miscellaneous unclassified diseases, and 10 per cent. by nervous diseases specially affecting children. As regards the temperature, last week was the coldest experienced since the mid-weeks of last December, and the coldest week recorded in March since March 1881, which was phenomenal in severity. There were 227 deaths from pulmonary diseases, giving a death-rate of 11 per 1,000 living, and constituting 35 per cent. of the total deaths. The deaths from enteric fever numbered 7, and from typhus 1. The number of deaths from the infectious diseases of children was 92, viz., 50 from whooping-cough, 34 from measles and 8 from scarlet fever. It is to the ravages of this class of diseases, which are intensified by the cold, that the high death-rate of Glasgow is at present due. Whooping-cough alone contributes 2 deaths per 1,000, and measles alone 1.7; so that these two diseases alone make the death-rate 32 in place of 28. The average age of the 50 fatal cases of whooping-cough was 23½ months, and of the fatal cases of measles 18½ months. Dr. Russell remarks that the figures give emphasis to the warning—which must be repeated again and again, so as, if possible, to impress it on the poor classes—that children of tender years should be kept from exposure to the infection of these diseases as long as they can. It is in infancy they kill; and the longer children are prevented from taking them, the better their chance of recovery when seized. The whooping-cough epidemic is most fatal in the eastern and northern districts; the measles, in the southern and western.

THE GLASGOW RECTORIAL ADDRESS.

THE Right Hon. John Bright was, on the 22nd inst., formally installed as Lord Rector of the University of Glasgow, and afterwards delivered his rectorial address to the students. As was anticipated, from the fact that Mr. Bright, in early days, was an entire stranger to University life, it was entirely political in its character, and, in great measure, consisted of an exhortation to the listeners to interest themselves in the great political questions of the day, in addition to pursuing those paths of learning which are more specially associated with University education; and in giving their decisions in all matters of national importance, he urged them to reverse, in the future, much of what had been our policy in the past, and, by steadfastly opposing wars, to build up the honour and happiness of the people on the firm basis of justice, morality, and peace. Whether it was desirable that a Lord Rector should make use of his academic position to forward the political views of the party he represents, is a matter open to discussion, but his opinions were expressed with much of the fire and all the charm of

atory that have marked any of his best efforts. It is a matter of atification that the conduct of the students was all that could be sired, especially when it is remembered that, for some days pre-ously, there had been a good deal of friction between them and the niversity authorities as to the arrangements proposed for their commodation during the address. Although a fair amount of ood-humoured demonstration marked the proceedings previous to e address, Mr. Bright was awarded a quiet and patient hearing by e students of both political parties, notwithstanding that many of s statements were calculated to light up party feeling.

IMPORTANT ADULTERATION CASE.

HERE has just taken place in Edinburgh an important prosecution ıder the Sale of Food and Drugs Act, 1875. On the 21st instant, grocer was charged with a contravention of the above Act, in ıving sold a tin of Colman's mustard, which was not of the "nature substance and quality of the article demanded." Analysis showed at the article sold contained flour to the extent of 12 per cent· cording to one witness and 8.8 per cent. according to another· ıe judge found that the mixing was not done fraudulently and for e purpose of increasing the bulk or concealing the quality. Under ese circumstances, seeing that the element of fraud was entirely ısent, he dismissed the case, with costs. There was brought out the case a decided conflict of scientific evidence as to the ad-ntages or the reverse of mixing flour with mustard; some holding at its presence served many useful purposes, while others regarded as most deleterious, and that the procedure was to be placed in e same category as mixing sand in sugar or lard in butter.

THE HEALTH OF THE EIGHT PRINCIPAL SCOTTISH TOWNS.

IERE were registered in the eight principal Scotch towns during ·bruary 1883, the deaths of 1,293 males, and 1,287 females. Allow-ce being made for increase of population, this number is 57 below e average for the month for the last ten years. The respective ath-rates were, per 1,000 of the population of each town: in linburgh, 21; in Leith, 20; in Aberdeen, 18; in Greenock, 27; Perth, 23; in Glasgow and Paisley, 28; and in Dundee, 26. No ss than 40.3 per cent. of the entire mortality was of children der five years of age, and the percentage of each town was: in rth, 27; in Aberdeen, 30; in Edinburgh, 35; in Leith, 37; in isley, 38; in Dundee, 42; in Glasgow, 43; and in Greenock, 47 r cent. Zymotic diseases contributed 16.4 per cent. of the entire ·rtality. This rate was exceeded in Glasgow and Dundee. Whoop-g-cough was the most fatal epidemic, having caused 7.6 per cent. all the deaths; while, in Dundee, no less than 14.6 per cent. of the deaths was attributed to it. Fever caused 41 deaths, of ıich 10 were tabulated as typhus, 28 as enteric, and 3 as simple ntinued fever. Of the 10 deaths from typhus, 4 occurred in eenock. Scarlatina caused 44 deaths; croup 29; diarrhœa 28; asles 26; diphtheria 26; metria 4; and dysentery 1. To apo-xy, 77 deaths were attributed; to paralysis, 66; to cardiac dis-es, 161; to hydrocephalus, 63; and to premature birth debility, deaths. Phthisis pulmonalis contributed 259 deaths, or 10 per nt. of the whole; whilst inflammatory affections of the respiratory gans, other than those referred to already, contributed 646 deaths, 25 per cent. of the entire mortality. Seventy-three deaths were ributed to violent causes, of which three were suicidal. Two ths were ascribed to the direct effects of intemperance. Seven males were aged 90 years and upwards, the oldest of whom was, usual, a widow, who reached 100 years. The month of February 3 has been warmer than the average by 2.5 degrees; and though rainfall and the mean pressure of the wind have been rather ater, yet the humidity of the air has been less, and the prepon-ant direction of the winds from south and west, or genial rter.

IRELAND.

AT a special general meeting of the Cork Protestant Fellowship Society held recently, Dr. William Ashley Cummins was elected Physician to the Society.

HEALTH OF DUBLIN.

FROM the monthly health report of Dublin—issued by the superintendent medical officer of health for the city, Dr. Cameron—for January last, we find that the death-rate for that month compared favourably with the rate in the same month during the previous three years. In 1880 it was 45.42; in 1881, 42.1; in 1882, 39.75; and this year, 35.86. The zymotic death-rate in the same months was 8.14; 4.76; 8.97; and 3.18. The only zymotic disease which attained to serious proportions was whooping-cough. This malady caused 42 deaths in the city. Bronchitis, as usual in January, was rife. The mean temperature of the month was 41.32° F., 1.0° higher than the average of mean temperature of the corresponding period during the previous ten years.

DR. H. MACNAUGHTON JONES.

LAST week, previous to his leaving Cork for London, Dr. Jones was presented with several addresses, accompanied by pieces of plate, from various associations, as marks of the esteem and respect with which he is regarded. The members of the Cork Medical Assistance Association, with which he was connected as medical officer, have presented Dr. Jones with an address and a splendid silver salver. At the Royal Cork Institution, the members of the Cork Medical and Surgical Association, besides an address to Dr. Jones, united with the members of the South of Ireland Branch of the British Medical Association in presenting him with a full-sized oil portrait, painted by Mr. Brennan. In addition to these, the students and graduates of the Queen's College gave a beautifully illuminated address, and as an accompanying gift a handsome clock, Dr. Jones having for the past five years occupied the chair of Midwifery in that institution. Lastly, a testimonial was subscribed by the citizens of Cork, in appreciation of the valuable services rendered by him in connection with the public medical institutions of the city, three of which he was mainly instrumental in establishing. This latter consisted of an illuminated address, accompanied by a beautiful Louis Quatorze clock, and a handsome claret jug and salver. So many proofs of the wide esteem in which Dr. Jones is regarded by his numerous friends in Cork must be highly gratifying to that gentleman.

THE MEDICAL ACT AMENDMENT BILL.

AS might be expected, this Bill has created considerable uneasiness amongst the medical licensing corporations of Ireland; and committees of their respective bodies have been holding frequent meetings to consider what action should be taken with regard to it. All the corporations will, we understand, petition against the Bill in its present form; and it is stated that Earl Cairns will oppose the Bill on its second reading in the House of Lords, on behalf of the University of Dublin, of which he is Chancellor. A petition from this University against the Bill has already been forwarded for presentation to Parliament. This petition states, *inter alia*, that "during the past five and twenty years, highly educated medical and surgical graduates of the University of Dublin have enjoyed the privilege of placing their names directly upon the *Medical Register*, and no complaint has been made in any quarter of any deficiency in either their general or professional qualifications. If, however, the Medical Act Amendment Bill should become law, this privilege will be taken from them, and they will be compelled to pass, in addition to their university examinations, one or other of

the three schemes of examinations proposed to be established under the medical boards of England, Scotland, and Ireland. The very constitution of these three schemes of examinations shows that they are intended to protect the public against the registration of incompetent candidates, and not to test the attainments of persons so highly and thoroughly educated as the medical and surgical graduates of the University of Dublin. The University of Dublin, fully approving, as it does, of two important principles contained in the Amendment Bill, namely—1. The requiring of a complete knowledge of medicine, surgery, and midwifery from all persons previous to registration; and 2. The prevention of the registration of incompetent candidates—are willing to accept the appointment of coadjutor examiners by the Medical Council, at the final degree examinations in medicine, surgery, and midwifery, as a condition to the University retaining the right of its candidates to direct registration." The petition further asserts that the Bill contains no provision for the protection of the rights of University candidates at the medical board examinations in each of the three kingdoms, such as was recommended by the Royal Commissioners; and further, that the constitution proposed for the Irish Medical Board differs in principle from that proposed for the English and Scotch Boards. In these two boards, care is taken to give the majority to the universities, as representing the higher education, but in the Irish Board this is reversed, and the Irish universities are proposed to be represented by a minority. The principle is clearly admitted in the Bill by giving the Universities of Oxford and Cambridge a proportion of four-fifteenths upon the English Medical Board, to which the number of their medical graduates would by no means entitle them. But, even taking the low ground of the work done in conferring medical degrees and licences, the following figures show that the Irish universities are entitled to as large a representation upon the Irish Board as the Scotch universities are upon the Scotch Board, and to a much larger representation than the English universities are upon the English Board. (A) Irish qualifications.—Registered during the nine years ending 1882, and remaining in the *Register* for 1883: Total number of persons on the *Register*, 1,656; total number without university degrees, 932; total number with university degrees, 724. These figures show that, during the last nine years, the proportion of persons registering with medical degrees from the Irish universities is 43.6 per cent. of the total number of persons registering with Irish qualifications. (B) Scotch qualifications.—Registered during the nine years ending 1882, and remaining in the *Register* for 1883: Total number of persons on the *Register*, 4,095; total number without university degrees, 2,289; total number with university degrees, 1,806. These figures show that, during the last nine years, the proportion of persons registering with medical degrees from the Scotch universities is 44.1 per cent. of the total number of persons registering with Scotch qualifications. (C) The proportion of persons registering with medical degrees from English universities is very much smaller than in the case of Ireland or Scotland. Notwithstanding these facts, the Bill proposes to confer a majority of eight-fifteenths upon the English universities, and of eight-elevenths upon the Scotch universities, on the respective boards; while it is proposed to give the Irish universities a minority of four-elevenths on the Irish Board, being only one-half of the representation provided for the Scotch universities.

DEATH FROM CHLOROFORM occurred in a case, reported by Dr. Michael, at a meeting of the Maryland Clinical Society (*Maryland Medical Journal*). The patient was a man fifty years of age, who had a stricture in the membranous portion of the urethra. External urethrotomy was about to be performed, but while the anæsthetic was being administered, during the stage of excitement, the patient raised himself up suddenly and fell back dead. An ounce of whisky had been given half an hour before, and another ounce just before using the chloroform.

COLLECTIVE INVESTIGATION OF DISEASE.

DIPHTHERIA.

THE Subcommittee, who are at present engaged in examining the records received of cases of this disease, desire to call attention to the following points, concerning which information would be particularly valuable.

1. Cases in which the period of incubation can be exactly determined.

2. Records of sporadic cases.

3. Examples of repeated occurrence of the disease in one house, or in one family.

4. Particulars from medical officers of health concerning districts which are remarkable for—(*a*) special immunity from the disease, (*b*) frequent recurrence of the disease.

The Subcommittee will be very glad to receive information of the epidemic prevalence of the disease in any district.

A circular has been sent to all medical officers of health, inviting their co-operation in this investigation, and replies have been received from the undermentioned gentlemen, promising to give the Association every assistance in their power, and containing, in many cases, valuable information, for which the Subcommittee desires to express its warmest thanks. To all of them cards have been sent for distribution, and members practising in these districts are especially requested to communicate with their medical officer of health in the event of a case of diphtheria coming under their notice.

Medical Officer of Health.	District.
E. A. Applebe, Esq.,	Hay (urban), Brecon
A. W. Barclay, M.D.,	Chelsea
A. Baker, Esq.,	Aysgarth (rural), Yorkshire
T. C. Bailey, Esq.,	Crewe (urban)
E. G. Barnes, M.D.,	Eye (urban), and Hartismere (rural), Suffolk
L. J. J. Barnes, M.D.,	Crayford, Kent
E. W. Bawtree, M.D.,	Lexden and Winstree (rural)
J. W. Blandford, Esq.,	Stockton (rural)
H. Branthwaite, Esq.,	Willesden
W. H. J. Brown, M.B.,	Alnwick and Canongate (urban) Northumberland
F. W. Clarke, Esq.,	Bury St. Edmunds
T. Clark, Esq.,	Western Williton (rural), Somerset
G. F. England, Esq.,	Moulton (rural), Lincolnshire
A. L. Evans, Esq.,	Hawarden (rural), Flintshire
H. George, M.D.,	Horncastle (urban and rural), Lincolnshire
W. Kitto Giddings, Esq.,	Calverley (urban), Yorkshire
P. Grubb, Esq.,	Warminster (urban), Wiltshire
J. Hardwicke, Esq.,	Rotherham (urban)
T. W. Hime, M.B.,	Sheffield (urban)
G. E. Hyde, Esq.,	Martley (rural), Worcester
A. Jackson, Esq.,	Market Weighton, Yorkshire
G. A. Kenyon, M.B.,	Chester, Bromborough; Higher and Lower Bebington; Neston, Parkgate; Tarporley (urban), Butterhead, Tarvin; and Wirrall (rural)
T. Milne, M.D.,	Accrington (urban), Lancashire
D. H. Monckton, M.D.,	Lichfield (rural), Staffordshire
C. K. Morris, Esq.,	Spalding (urban), Lincolnshire
W. C. Morris, M.B.,	Chester-le-Street (rural), Durham
J. B. Moxon, Esq.,	Brigg (rural), Lincolnshire
A. C. Munro, M.B.,	South Shields (urban)
J. Neal, M.D.,	Sandown (urban), Isle of Wight
J. Oldman, Esq.,	Huntingdon (urban and rural)
D. Page, M.D.,	Grasmere, Windermere (urban); East Ward, Kendal; Sedbergh, Ulverston; and West Ward (rural)
R. H. Paterson, Esq.,	Gainsborough (rural)
T. C. Railton, M.B.,	Withington (urban), Manchester
F. J. Roberts-Dudley, Esq.,	Staleybridge (urban), Lancashire
C. E. Saunders, M.D.,	Berkhampstead; Hemel Hempstead; Hendon, Watford; Welwyn, St. Albans (rural); Barnet, East Barnet; Tring, Harrow (urban)
E. Seaton, M.D.,	Nottingham (urban)
C. C. Smith, M.B.,	Redditch (urban), Worcestershire
S. W. Smith, M.D.,	Pershore (rural), Worcestershire
W. W. Stainthorpe, M.D.,	Guisborough (rural and urban); Loftus, Skelton, and Brotton (urban); Wareham and Purbeck (rural), Yorkshire
W. Stanfield, M.D.,	Lees (urban), Lancashire
H. Sworder, Esq.,	Luton (urban)
J. F. W. Tatham, M.D.,	Salford (urban)
G. C. Tayler, M.D.,	Trowbridge (urban)
G. Turner, Esq.,	Bishops Stortford; Hertford, Buntingford; Ware (rural)
J. H. Walker, Esq.,	Pickering (rural and urban) Yorkshire
G. T. B. Watters, M.D.,	Wheatenhurst (rural), Gloucestershire
A. V. Wheeler, Esq.,	Birkdale (urban), Lancashire
A. F. Williams, Esq.,	Brixworth (rural), Northamptonshire
S. M. W. Wilson, Esq.,	King's Lynn (urban)
T. Partridge, Esq.,	Stroud (rural and urban); Bisley (urban)
S. K. Powell, M.D.,	Fairfield, Peterchurch, Herefordshire
M. K. Robinson, M.D.,	Bridge; Blean; East Ashford; Eastry; Eltham; Thanet; West Ashford (rural); Dover; Herne Bay; Hythe; Broadstairs (urban)

Cards have been forwarded to all of the above medical officers of health. Application should be made to them in the event of an epidemic occurring in any of the respective districts.

WE are requested to state that a meeting of the Association of the Fellows of the Royal College of Surgeons formed at Worcester in August last, for the consideration of matters affecting the interest of the Fellows, and the Government of the College, will be held in the Council Room of Exeter Hall on Tuesday, April 10th, at three o'clock in the afternoon. Mr. Pearce Gould and Mr. T. H. Bartleet are the honorary secretaries.

THE IRISH GRADUATES' ASSOCIATION.

THE annual metropolitan dinner took place on St. Patrick's Day, Saturday, March 17th, at the Queen's Saloon, Holborn Restaurant, at 7 p.m.; the President, E. Waters, M.D., F.K.Q.C.P., in the chair. Twenty-eight members and guests were present, including the President-elect, Professor Yeo; the Vice-Presidents, Sir W. Mac Cormac and Dr. Balthazar Foster, Dr. Chadwick, Mr. Macnamara, Mr. Ernest Hart, Dr. Glover, Dr. Fothergill, Mr. London, and others. Several letters of apology had been received. An unusually good dinner was well served, and the wines were excellent. The usual loyal and friendly toasts, peculiar to the association, were duly given and honoured. Each guest was presented with a sprig of shamrock from the Hill of Tara. A pleasant evening was spent, and the company separated early.

A meeting of the Council was held at an earlier hour. Some new members were elected, and it was resolved to present the following petition to both Houses of Parliament in favour of the Government Medical Bill, to be signed on behalf of the Council by the president and the honorary secretaries.

To the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the Irish Graduates' Association sheweth—That the Irish Graduates' Association was formed to establish a bond of union amongst those holding degrees or diplomas from Irish Universities or Corporations, for the maintenance of social intercourse, and for promotion of professional objects.

That the Irish Graduates' Association deplore the existing system of granting professional titles, whereby nineteen Universities and Corporations are separately empowered to grant one or more qualifications, each entitling the possessor to be placed on the *Medical Register*, and thereby to practice all branches of the medical profession, although possibly only qualified in one.

That the report of the Royal Commission on the Medical Acts has shown that the licences of these numerous authorities are obtained on most unequal terms, and in many instances notwithstanding deficient knowledge, and that an unworthy competition exists in the granting of degrees and licences.

That the existing General Medical Council, formed by the Medical Act of 1858, has, during twenty-five years of existence, failed to remedy these defects.

That the Lord President of the Privy Council has introduced a Bill into your Right Honourable House, intituled—"An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners."

That this Bill provides for the modification of the General Medical Council by the introduction of direct representatives of the profession, and by the diminution of the direct influence of the Corporations who have hitherto dominated the Council.

That this Bill further provides for the compulsory combination of all the medical authorities in the formation of boards of examination, one in each division of the Kingdom, to conduct complete examinations in medicine, surgery, and obstetrics, and that the licence of such boards shall give the sole right of admission to the *Medical Register*.

Your Petitioners therefore pray that the Medical Act, 1883, may become law.

And your Petitioners will ever pray, etc.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A SPECIAL meeting of the council of the Royal College of Surgeons of England was held, on Thursday last, to consider the Medical Acts Amendment Bill, now before the House of Lords. A statement regarding the Bill, drawn up by the President and Vice-Presidents' Committee, was submitted, and it was resolved that the President and Vice-Presidents be authorised to seek an interview with the Lord President, to lay before him a statement of the Council's objections to the Bill in its present form. A special meeting of the Council will be held on Wednesday next, to consider what future steps shall be taken regarding the Bill. The statement in question may, we understand, be obtained by fellows and members of the College, during the course of next week.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., May 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at Exeter Hall, Strand, London, on Wednesday, the 11th day of April next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 15th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meeting will be held at Bridgend, on Wednesday, April 18th. Members desiring to read papers, etc., are requested to send titles to either of the undersigned by the end of March.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—A special general meeting of this Branch will be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Tuesday, April 10th, at 8 P.M. 1. To consider the organisation of the Committee on Collective Investigation of Disease, appointed at the last meeting of the Branch. 2. To consider the Bill for the Compulsory Notification of Infectious Diseases now before Parliament.—ALEXANDER HENRY, M.D., W. C. GRIGG, M.D., Honorary Secretaries, London, March 27th, 1883.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

A CONJOINT meeting of the above Districts was held at the Grand Hotel, Brighton, on Wednesday, March 14th; WILLOUGHBY FURNER, Esq., in the Chair. Thirty-three members and visitors were present.

Medical Provident Society.—Dr. WITHERS MOORE drew attention to the subject of a Medical Provident Society, and moved, "That, in the opinion of this meeting, it is desirable that a Medical Sick Benefit Society be established." This was carried.

Specimens.—Mr. Blaker exhibited some microscopical specimens of lung, lymphatic glands, and sputum, showing bacilli of tubercle.

Papers.—The following papers were read.

1. Dr. Godson: On Retroversion of the Gravid Uterus.
2. Dr. Hollis: On a Case of Athetosis. (Patient shown.)
3. Mr. Butlin: On the Pathology and Treatment of Nasal Polypi.
4. Mr. Blaker: On a Case of Battey's Operation.

Next Meeting.—It was decided that the next meeting of the East Sussex District should take place at Tunbridge Wells, in May.

CORRESPONDENCE.

THE GOVERNMENT MEDICAL REFORM BILL.

SIR,—As I have been a consistant advocate of medical reform, and moreover, at the recent meeting of the Dublin Branch, moved a resolution to the effect that the Branch approved of the principle of the policy advocated by the Parent Association, you will, perhaps, give me space for a few brief comments on the Bill which you summarised in this day's issue of the JOURNAL; for I regret to say that I am disappointed in the details of the Bill, and I believe that, if it be not modified in several respects, the prospect of its becoming law will be materially lessened.

I have always considered the cardinal principle of medical reform to be, uniformity in the standard of education and examination, in the three divisions of the kingdom, and also uniformity of fee. The Bill contains absolutely no provision to insure the former, and the latter important point is ignored altogether.

The only paragraph in the Bill which bears on the cardinal point is the following very vague one: "So far as is practicable, a uniformity of standard shall be aimed at in the final examinations held by the medical boards of the several parts of the United Kingdom." Doubtless the "schemes" which are to be drawn up by the several medical boards are not to be "valid" till approved of by the Medical Council, and confirmed by the Privy Council; but it is possible that the examination held by one of the divisional boards may be much less stringent than that of another, and therefore "uniformity" becomes as far off as ever.

As already stated, uniformity of fee is not required at all; and the omission of this most important requirement has evidently led the framers of the Bill to adopt a plan for the division of the surplus funds, which is not alone most unjust, but which, if adopted, will lead to the extinction of several of the most deserving of the medical corporations.

At present, the majority of the medical corporations derive their income from the fees paid for their licenses, and it would have been but just that any balance which remained after paying the necessary expenses, should be retained by the medical board of each division of the kingdom, and distributed by it to the medical corporations of that division, in proportion to their importance, which might fairly have been estimated by taking the number of candidates licensed by them in the preceding three years. Now the money goes to one common fund, to be allocated to the maintaining of such medical museums and libraries as may belong to any of these bodies, and which have been hitherto maintained out of fees paid by candidates for their licenses. The result will be that one or two Corporations having splendid libraries and museums will absorb the major part of the fund, and that Scotland and Ireland will see the money derived from the candidates educated in their schools expended elsewhere, while the Scotch and Irish colleges, which believed that they would receive a fair proportion of the fees paid by candidates under the new system, will, unless their higher degrees be largely sought, die of inanition. Thus by one and the same Act a gross injustice is perpetrated, and the maximum of injury inflicted on the medical corporations.

All this was needless, had uniformity of fee been insisted on; but, as that has not been done, a method is adopted by which, as nothing can be gained by charging more in one division of the kingdom than in another, uniformity will be indirectly attained, but at the cost of the greatest possible injury to the medical corporations.

These bodies, or at least the great majority of them, deserve well from the State. It has become necessary for the public peace to interfere seriously with their privileges, and to lessen their *prestige*. For the loss of these, they might fairly demand some compensation; but, instead of compensation, they are needlessly injured. I would ask the members of the Association to weigh well the nature of the results likely to follow if the provisions of the Bill which I have commented on become law, and to hesitate before they support it in its integrity.

In another point, too, the legitimate influence of the medical corporations is needlessly destroyed. Why should the appointment of the examiners, under the new scheme, be taken from the several colleges, and handed over to the medical boards? It would be easy for the Medical Council to apportion the number of examiners to be selected by each of the corporations, in each division of the kingdom. Instead of this, the Medical Board is elevated above them. In fact, the Bill, as at present framed, inflicts the maximum degree of injury on the corporations, instead of the minimum, as should fairly have been expected.

I trust that steps will be taken to remedy these blots. There are other objectionable points, which I do not wish to occupy your space by discussing; but, certainly, the proposal to compel the payment of an annual registration fee is most objectionable, mainly from the confusion and trouble it would cause.—I am, etc.,

LOMBE ATTHILL, M.D., Vice-President, Dublin Branch, British Medical Association.

94, Merrion Square, Dublin, March 17th, 1883.

*** This letter has been referred to in our leader on Medical Reform in this day's issue. The suggestions contained in it will doubtless, be brought under the notice of the Government.

SIR,—I ask permission to say a word or two of warning to the profession on the subject of the Government Medical Reform Bill, which has just been introduced. With many of its provisions I cordially concur; but those which have to do with a method of State examination demand the most serious attention of all who are anxious that the change shall be to the advantage of high class medical education.

My contention is that, a State examination being granted as a necessity in order to meet inequalities of tests, the mode in which it is proposed to carry it out by the Bill now before Parliament will have the effect of lowering or destroying altogether many high standards at present existing. The State examination will be that which will enable a man to have his name placed on the *Register* and to hold any public appointment. It will be a maximum test—at best a merely qualifying test—and in the majority of cases I am sure it will turn out that candidates will be satisfied with it, and will not proceed for higher diplomas. Why should they? The public really know nothing, and care nothing, about what examinations a doctor has passed—whether he is a M.D., or a Licentiate, or a Fellow. These have their value only in professional circles. The result then will assuredly be, that after a few years the State examination will be found to satisfy the ambition of all but a very few.

This would be a great misfortune to the profession at large. Students will prepare themselves to satisfy the examination, and their knowledge will be in direct ratio to the severity of the pass. What, for instance, is to become of such a standard as that of the University of London? or of the University of Edinburgh? or of the College of Surgeons in Ireland? or of any really reputable licensing body? Men, holding a document which fits them for election to any public office, and which alone can be registered, are not likely to be found in any numbers seeking a test more difficult than the one they have passed, and paying money for what is really of no advantage.

Thus at one stroke the educational standard will be lowered and the destruction of the corporations will be initiated. In my opinion both these evils could be easily avoided, and it was for this I contended at the meeting of the Dublin Branch a few weeks ago. The true function of a State examination is to act as a check upon the licensing bodies; and, for this purpose, it should come *after*, not *before*, any other examination. It should be of a sufficiently high standard to catch the candidates allowed to pass on poor knowledge; and, if there are any sinning corporations, as we hear there are, they could not very long survive the habitual rejection of their licentiates. This would have the effect of making the corporations everywhere give a *bonâ fide* examination, and it would certainly raise the general level of professional knowledge. If, however, the State examination come first, I repeat that it will degrade education; it will be no check upon licensing bodies, which may make any test they like; and it will be open to any of them in this way to continue an unworthy competition by easy examinations or by conferring distinctions on payment of some small fee.

I believe I am right in saying that two very able members of the Royal Commission held this view, and urged it; and I feel strongly that it is the view which, on consideration, will commend itself to the profession at large.

I do not at all concur in the wholesale charges which are being made against the corporations. If their influence have been malign, medical and surgical progress has not been retarded. I much fear that the result of ten years of the proposed scheme will be by no means so favourable, while under its shadow some of the corporations, at all events, will have permanently withered.—I am, sir, yours, etc., W. THOMSON, M.A., F.R.C.S.

34, Harcourt Street, Dublin.

*** We fear the writer has not read the evidence before the Se

Committee or before the Royal Commission. The writer assumes that the licence will be a minimum test; at best, a merely qualifying test. This assumption is marked by the manifest mistake that, because it will be the minimum entitling to registration, it will be a poor minimum. Now, what will this minimum be, compared with the minimum now entitling to registration—a minimum such as has been disclosed in the evidence before the Royal Commission, some of which was adduced by Dr. Waters, when the deputation from the Association waited on Lord Carlingford in November last—a minimum granted by unvisited and weak corporations? The minimum under the Bill will be a complete examination in medicine, surgery, and obstetrics, more thorough in every way than the present examinations of any single licensing board; in fact, an examination passed before a reliable examining board, having no interest in passing the candidate; and, as an additional security, the examination visited and approved by the Medical Council. Next, the writer assumes that the candidates will be satisfied with this licence, and will not proceed for higher diplomas; and asks the question, Why should they? The answer is: For the same reason that men now go for higher diplomas, viz., to prove superior attainments, and thereby to improve their social and professional position. So far from being content with the licence, good as that licence will unquestionably be, the fact of higher literary and professional attainments, which the licence will secure, will only the more stimulate them to ascend higher. We shall, in fact, then have competition upwards, instead of competition downwards, all to the advantage of high-class medical education. As regards the other points in the letter, the arguments adduced in the report of the Royal Commission dispose of them.

SIR,—On behalf of the Medical Alliance Association, we wish to draw the attention of the profession to the following facts, viz.:—

That the Government Bill, as it was urged by the Reform Committee of the British Medical Association it should be, has been drawn upon the lines recommended in the Report of the Royal Commission, and, *so closely have these lines been adhered to*, that the Bill may be considered, virtually, as the Report itself thrown into the form of an Act of Parliament. That this Bill provides, as it was stated in the circular-letter of the Medical Alliance to the profession of October last it would provide, for the establishment of perfect freedom in the practice of medicine and surgery. It repeals all the restrictions on practice now possessed by the profession, so that it deserves to be hailed with joy by the chemists and druggists who, with triumph, may look upon it as a chemists' and druggists' emancipation Bill.

2. It deserves to be hailed with joy and triumph by the venereal quacks, and quacks of all kinds, as a quacks' emancipation Bill.

3. It deserves to be hailed with joy and triumph by the herbalists, as a herbalists' emancipation Bill.

4. It deserves to be hailed with joy and triumph by every person who wishes to practise medicine, as every person's emancipation Bill.

To the medical profession the Bill is unjust, harsh, and oppressive; to medical students it is still more unjust, harsh, and oppressive. Thus, it does NOT provide for a one portal to the profession, but for many portals, with a *final* portal. When this final portal is passed, no medical title whatever will be permitted to be taken but that of "licentiate of the Medical Council in medicine, surgery, and midwifery." Such licentiate will not, in virtue of his licence alone, be permitted to use the title of physician, nor surgeon, nor apothecary, nor any other medical title whatever but that above stated. For these reasons, and for many other reasons not now stated, the Medical Alliance consider the Bill to be most pernicious to the interests of the profession and the public; they will, therefore, oppose it with all the force that may be at their command.—We are, your obedient servants,

R. H. S. CARPENTER, L.R.C.P.Lond., and L.S.A., Chairman of the Medical Alliance Association.

CHAS. CHAPLE, M.D. St. Andrew's, M.R.C.P.Edin., L.S.A., Treasurer.

JOHN P. HENTSCH, M.R.C.S., L.S.A., Honorary Secretary.

** The *objects* of the Medical Reform Committee and the signatories to this letter are identical, and we invite their co-operation in improving the Medical Bill. Certain it is that the venereal quacks, *et id genus omne*, have taken alarm, and are actively preparing petitions signed by their friends and clients against this Bill, as they have invariably done on previous occasions. It is expressly provided (clause 6) that non-registered persons cannot recover any expenses, charges, or fees for medical or surgical attendance.

MEDICAL PROVIDENT SOCIETY.

SIR,—I think that many would-be members have been frightened by the figures quoted by Drs. Thurston and Clibborn. What the actual expense will be, is, of course, a matter for experienced actuaries to decide; but I should like to call the attention of your readers to the working of one of the best friendly societies in England—I refer to the Hearts of Oak Society. I have before me their balance-sheet and statement of income and expenditure for the year ending December 31st, 1881. This society has been in operation about forty years, and during that time they have been able to accumulate a reserve fund of nearly half a million sterling. I mention this, to show that, if anything, the premium paid by each member is higher than need be. During the year 1881, members of the society received benefits amounting to £146,113, but of this amount £87,541, or sixty per cent. only, was received by them as sick-pay, the remainder being payments for superannuation, lyings-in, funerals, losses by fire, etc. I find that during the same year each member contributed £2 0s. 2d. to the society. Now, as only sixty per cent. of the total expenditure relates to sick-pay, it is quite clear that sixty per cent. of the income would amply cover the liability in respect of sickness; so that instead of £2 0s. 2d., only sixty per cent. of that sum would be required, or about £1 4s. *per annum* per member. For this latter sum, each member is entitled to eighteen shillings per week sick-pay; from this data, it would be easy to calculate what the premium should be to cover any given sum as sick benefit. The next point is, the expense of management, which amounted to nearly three and a half per cent. on the gross income, or 1s. 7d. per member. In estimating our probable expenditure under this head, we must not forget that our premiums will probably be from four to six times more than those paid by members of the Hearts of Oak; let us suppose we pay five times more than they, that is, £6, instead of £1 4s. Then the expenses of management in our case would, at the same rate, amount to only one-fifth part of $3\frac{1}{2}$, or equal to 7 per cent.; or, to put it in another way, for every thousand members in the Hearts of Oak, at £1 4s. each = £1,200, at $3\frac{1}{2}$ per cent. = £42 for working expenses; for 1,000 members in our society, at £6 each = £6,000, at 7 per cent. = £42.

The last point to which I now wish to call attention is the probable amount of sickness we are likely to experience. The figures given in the Hearts of Oak accountants' report for 1881 show that the average for that year was eight days per member *per annum*; and seeing that this is an old-established society, having members in it aged from 70 years down to 19 years, it affords a very fair base for us to calculate upon; and, in my opinion, our sickness will be even less than eight days per member.

I must apologise for the length of my letter, but even now I have left much unsaid.—I am, sir, yours faithfully,

Bridgwater, March 21st, 1883. J. BAIN SINCOCK.

SIR,—I shall be glad if you will add my name to the list of those willing to form a Medical Provident Society.

Having commenced practice since trade has been very bad, and having a small but increasing family to care for, it is often a matter of grave anxiety when I reflect that I might be ill, for weeks or months, and have nothing to fall back upon, besides having to pay and keep a qualified *locum tenens*. Insurance meets the difficulty in case of accident or death, but would be of no assistance in a long illness.—I am, sir, yours faithfully, G. HODGSON HIGGINS.

107, Beckett Street, Leeds, March 21st, 1883.

SIR,—Will you kindly add my name to the list of those willing to join in the formation of the proposed Medical Provident Society. I deem it a scheme in which all *medici* should unite; the few wealthy, because they would be aiding the cause of their poorer brethren; the average, because help may be useful at some time; and the struggling, because some assistance would be forthcoming in the event of illness incapacitating from work. Yours very faithfully,

Malvern, 20th March, 1883. STANLEY HAYNES, M.D.

SIR,—I cannot, for the life of me, see what grounds Dr. Boys has for saying, in your last issue, that I "take the credit of starting" the proposed medical benefit society. Let me, however, assure him that I have never taken anything of the kind; that I have never for a moment thought of doing anything so manifestly absurd. The

idea is a very old one, and the real originator would be as difficult to discover as the birthplace of Homer. In all probability, he is not now in a position to advance his claim.—Faithfully yours,

Bordesley, Birmingham, March 4th, 1883. T. H. RAVENHILL.

EIGHTH LIST.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. Augustus Buchan, Manchester; Mr. A. S. Connellan, Bradninch; Mr. E. S. Perkins, Exeter; Mr. F. Waddington, Armley; Mr. C. B. Gabb, Hastings; Dr. John Lake, Teignmouth; Dr. G. Symes-Saunders, Exminster; Mr. G. G. Bothwell, Topsham; Mr. J. Mayne Randle, Ivybridge, Devon; Mr. L. Hains, Totnes, Devon; Dr. H. B. Pattinson, Topsham; Dr. R. L. Rutherford, Exminster; Mr. Thos. G. C. Evans, East Budleigh, S. Devon; Mr. James Somer, Broadclyst, Devon; Mr. Fred. Cheese, Crediton; Mr. T. A. Gray, Ottery; Dr. C. J. Workman, Teignmouth; Mr. E. A. Brash, Exeter; Mr. G. F. Webb, Dawlish; Dr. Henry Davy, Exeter; Mr. John Moone, Exeter; Mr. John Mortimer, Exeter; Mr. H. W. Furnival, Woodbury; Mr. A. De Wynter Baker, Dawlish; Mr. E. J. Domville, Exeter; Mr. T. Tinley, Whitby; Dr. M. R. J. Behrendt, Burringham; Mr. G. H. Hart, Harborne, near Birmingham; Mr. T. G. Lithgow, Farnborough; and Mr. J. T. Roberts, Burton-on-Trent.

*** The list is rapidly gaining in numbers; but several hundred adhesions should, we think, be enrolled as a preliminary to practical action, and we shall be glad to continue to receive names.

SHIP-SURGEONS.

SIR,—From a recently published Parliamentary Report may be ascertained the following facts:—During the six months, ending June 30th, 1882, 108 steamships (of which 104 were British) carried emigrants from Great Britain to the United States and Canada. These vessels were upon different voyages under the *full* "medical charge" of no less than 141 different medical officers—showing that 33 changes took place within that period. Of these 141 gentlemen, 8 possessed no qualification which would entitle them to practice in the United Kingdom; and 35 others held but one diploma; 29 as surgeon only, 3 as physician only, and 3 as apothecary only. 46 are reported as being but 25 years of age or under, and 19 as being but 23 years of age or under. Of the latter, 11 held but one qualification. 65 would have been ineligible, through lack of the minimum professional qualification, for the most junior medical appointment in the Royal naval, military, poor-law, asylum, or prison services; and of the entire 141 medical officers thus entrusted with the care of so many thousand valuable lives, under circumstances of unequalled difficulty, *only* 27, *possessing any qualification as a physician and surgeon, had reached their* 30*th year.*

These facts need no comment. Certainly there could be no stronger justification of my repeated complaint that "medical officers, in the Atlantic emigration services, are appointed without due regard to age, professional qualification, experience, etc., or of your own statement, that "Comparatively few medical officers, in every way suitable, can be found in the Mercantile Marine services."—Your obedient servant,

J. A. IRWIN, M.A.Cantab; M.D.Dub.; M.R.C.S.Eng. Late Hon. Phys. to the Manchester Southern Hospital.

Adelphi Hotel, Liverpool, March 19th, 1883.

THE COLLEGE CONCORDAT.

SIR,—I am an M.B. of the University of London, and I am proposing to take the membership of the College of Surgeons. Do I understand rightly that under the new college arrangement which you have described as the College Concordat, I shall not be allowed to present myself unless I go to the College of Physicians and take out their license, paying 15 guineas for it, in addition to my medical degrees of the University. If so, this is medical reform with a vengeance, and it certainly is high time for the Government to interfere. I am, Sir, yours truly, M.B. (London).

*** Whether the arrangement will be carried out we do not know. As we have already stated, we believe the College of Physicians does not understand its own proposal; and the College of Surgeons has not made up its mind on the subject. But if the scheme of the College of Physicians has any real and serious meaning, it can only have the meaning which our correspondent describes; and it would affect in the same way graduates of any of the Scotch Universities or the University of Cambridge. But we can hardly think that the authorities of the College of Surgeons would be so unwise as to cut off their own tails to oblige the authorities in Pall Mall, who propose to leave themselves surgically tailless, and to surrender the charter which enables them to grant a license in surgery as well as in medicine.

HOSPITAL AND DISPENSARY MANAGEMENT.

CORK MATERNITY.

THE annual meeting was presided over by Dr. Wycherly, City High Sheriff. During the past year 360 poor women were attended at their own homes, this being effected by an expenditure of only £137, which sum includes payment of some bills due for some years. The subscriptions and donations are only £92, and of this £15 was the proceeds of an amateur theatrical performance given in aid of the funds. It is to be regretted that a deserving charity like the Cork Maternity is not more liberally supported; but if its claims to assistance were more prominently brought before the public, many of the charitable would be disposed to contribute. The following resolution was unanimously adopted:—"That it is with deep regret we have heard of the resignation of our consulting surgeon, Professor Macnaughton Jones, and we desire to record the expression of our sincere thanks to him for the valuable services he has placed at the disposal of the institution since its foundation." The proceedings shortly afterwards terminated.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE.

THE annual report of the Barnwood House Hospital for the Insane at Gloucester, for the year 1882, which has been published recently shows that a profit of £5,455 was earned by this institution during last year, when the average number of patients under treatment was 126. And this large profit was earned while the treatment of the patients was carried out on the most liberal scale, and while the charitable and benevolent objects of the institution were kept constantly in view. Fifty-five patients have been maintained at reduced rates throughout the year, most of them for payments largely below the actual cost of their maintenance. Many of them have also been supplied with clothes, wine, and other extras, at the charge of the institution. No one accustomed to the critical perusal of the reports of public institutions, and able to read between their formal and familiar lines, can read the official record of the work of Barnwood House without realising that that establishment is really in a most prosperous and flourishing condition, and is rapidly extending its usefulness. It is fortunate in having a medical superintendent whose zeal and energy obtain hearty encomiums alike from the Managing Committee and the Commissioners in Lunacy.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

THE fourteenth annual report (1882) mentions that during the year 633 in-patients have been admitted, being a larger number than in any preceding year. The hospital affords accommodation for 100 patients but the demands for admission far exceed this number. Early in the year the managers received intelligence that the late Mr. John Jones, of 95, Piccadilly, had made the munificent bequest of the residue of his estate to this hospital, and the amount to be eventually received is expected to produce an income of about £2,000 a year. The board are desirous of increasing the usefulness of the institution by the erection of four more blocks of three houses each, to accommodate eighty additional patients, and they mention that they have received the handsome offer, from an anonymous friend, of funds for building and furnishing one house; and they are anxious to obtain similar gifts for two more houses, so that a complete block may at once be commenced for the accommodation of twenty patients. Several of the houses have been built *in memoriam*, and bear the names of deceased relatives or friends. The results of the year's working are, from a medical point of view, highly satisfactory. Out of 536 cases no less than 424 had improved during their stay. The mortality was only 2.36 *per cent*,, the lowest which has yet occurred in the history of the hospital. In ten of the fifteen fatal cases there was no reasonable prospect of improvement from the day they entered. That they were permitted to leave home could only have been from the natural hesitation of the medical attendant to pronounce their cases hopeless: a hesitation kindly meant, but cruel in its effect. The board wish the governors and subscribers to bear in mind that this hospital is intended for patients in the *early* or *incipient* stage of consumption, where permanent alleviation or cure

easonably to be excepted. We need hardly say that the report hows that the medical officers are fully alive to the importance f the recent discoveries by Koch by a specific organism in consumption, and that they are anxiously watching its bearing upon he general management and special treatment of the cases under heir charge.

MILITARY AND NAVAL MEDICAL SERVICES.

IRISH STUDENTS AT THE ARMY MEDICAL EXAMINATIONS.

UR contemporary, the *Medical Press and Circular*, in its issue of ne 14th instant, has published an article headed as above, in which, lthough not directly asserted in so many words, it is plainly insinuted that a system of excluding Irish candidates from appointents in the Army Medical Service, has been going on of late, not n account of their inferiority in professional attainments to other ompetitors, as shown by the results of the competitive examination, ut simply on account of their nationality. We cannot conceive a ore grave charge than this is to bring against the integrity of men olding the positions in the profession which the examiners do; nor ne more calculated to create ill feeling, and spread dissension, beween members of our profession who happen to be practising in fferent parts of the United Kingdom. Even to ventilate the susion that gentlemen, officially appointed to conduct so serious and sponsible a duty as that of determining the order of merit among number of professional competitors for public appointments, can betray their trust as to assign superior positions to some of the ndidates which they do not in justice deserve, or to put down wer in the lists, or even exclude others with no less injustice, erely because they are not natives of England or Scotland, seems ally monstrous. Who are the present examiners? They are Mr. orge Pollock, F.R.C.S., of St. George's Hospital, and Surgeon in dinary to the Prince of Wales; Sir Joseph Fayrer, M.D., F.R.S., norary Physician to the Queen and Prince of Wales, President of the dia Medical Board; Professor Aitkin, M.D., F.R.S., Professor of Pathogy in the Army Medical School; and Dr. Allman, F.R.S., Emeritus gius Professor of Natural History in the University of Edinburgh, d M.D. Dublin; all gentlemen holding very high rank in the prosion, members and associates of some of the most distinguished blic bodies and societies, and no less conspicuous from their social sitions than by their published contributions to science. Can our temporary really expect that the examiners, whose names we ve mentioned, will condescend to undertake the task which it tes it leaves to them of explaining the suspicious facts which it fesses to have disclosed?

And what are these so-called facts? After mentioning that, at a ent dinner of the Dublin Branch of the British Medical Associan, pointed allusion was made by both Dr. Lyon, M.P., and Mr. son, M.P., to complaints which had reached their ears that, since ember 1879, when the Army Medical Service was reformed by latest Royal Warrant, Irish students had been "boycotted" by examining board, our contemporary states that, being very unling to give credence to a statement of this sort, it had instituted areful tabulation of the results of the army examinations, as orted each year by the department to the General Medical ncil, and it then proceeds to give these results in certain tables. results are not shown according to the number of vacant comsions, for which the successive competitions took place, the ber of competitors of different nationalities who presented themes on each occasion, the standard of merit, or averages of the ks gained at the respective examinations; but, without reference hese points, they are simply tabulated in percentages of the sses" and "rejections" of candidates prior to 1881, and of sses for appointment," "qualified but not appointed," and "ed," after 1881. The latter do not specify whether the percent include the results of the examinations for the Indian branch he Army Medical Service, as well as the British branch, the exnations for which are both carried out at the same time. But ther they include both branches, or only one, we assert that the entages given are, practically, of no worth, because they do not the whole truth of the case, and because the conditions under h the figures have been collected are by no means similar. Even pting the percentages as they are placed before us, what do they ? They show that, before the last warrant appeared, which e commissions in the British portion of the Army Medical Ser- much more valuable than they had previously been in pay, position, and prospective advantages, fewer English and Scotch students entered the army medical department in proportion to Irish students, than have entered it latterly. We believe this is generally known to be the case. But the percentages put forward nowhere give any clue to the causes of these different proportions, much less any grounds for a suspicion that the difference is due to any unjust action on the part of the examiners. We happen to have before us the list of surgeons on probation who passed through the London examination in October 1880, shortly after the new warrant had been promulgated, and were successful in getting commissions in the Army Medical Service, together with the number of marks gained by them; and also the list of the surgeons, with the marks gained by them, who were commissioned after the last examination in October 1882, for the Army Service. In the former instance, the number of the vacant commissions which were competed for and filled up, was 95; 69 of these being for the British Army Medical Service, and 26 for the Indian Army Medical Service; in the latter instance there were only 23 commissions for both branches of the service together, 15 for the British, and 8 for the Indian Army Medical Service. In the former instance the highest number of marks gained in either branch of the service was 2,510; in the latter, the number gained rose to 2,960 marks. In the former, in the British branch, 31 surgeons got commissions who did not score as many as 1,600 marks, while the numbers went down as low as 1,250, and in the Indian branch, out of the 26 surgeons, no less than 22 failed to get up to 2,000 marks; on the latter occasion, when there were only 15 vacancies in the British branch, the lowest on the list attained 1,870 marks, and in the Indian branch the lowest got 2,185 marks. What chance of gaining a commission would the 57 surgeons have had in the competitive examination of last October, when the vacant commissions were so few, and the marks attained so relatively high, who nevertheless succeeded in gaining commissions with the relatively low number of marks they attained in the examination of October 1880, on which occasion such a large number of commissions were offered in competition? Manifestly these successful competitors of 1880 would have been out of the race altogether in 1882. The two conditions cannot be put on the same level, as is done in the percentage tables published by our contemporary.

Certain general facts are well known about the British portion of the Army Medical Department. Prior to the issue of the last warrant the service was exceedingly unpopular, especially in the English schools, and none of the more highly qualified students came forward to compete for commissions in it. Latterly, the circumstances have been reversed, and not only students of a much higher class of attainments, but in some instances, surgeons who have already obtained positions on the staff of London hospitals, and have had considerable practical experience in their profession, have given up the situations they were holding for appointments in the public service. What with the former unpopularity of the military medical service, and the fact, as shown by the Army List, that no commissions in the Army Medical Department were conferred between August 1878, and March 1880, the ranks of the department at that period became greatly undermanned; and consequently, as soon as the attractive warrant appeared, large numbers of commissions were thrown into the market, as it were, and there were almost as many appointments as there were competitors for them. After a few competitions the ranks became filled up; and since that was accomplished, the commissions offered for competition have been comparatively few. On the other hand, as the advantages of the service have become more fully known and realised, candidates have come forward in greater proportional numbers, of higher practical qualifications, the competition has been more keen, and the number of failures to secure appointments has necessarily under such circumstances been much larger.

One passage of the article in question shows how the simplest occurrence may be caused to wear an aspect of unfairness without the least foundation. In complying with the request of the General Medical Council for statements of the numbers of competitors examined who passed for appointments in the Army Medical Department, and who failed to obtain appointments, certain returns were furnished; but, in their old shape, these returns did not show whether the failures to get commissions had been due to the defective qualifications of the candidates, or because there were not sufficient commissions available for disposal. To remove this uncertainty, in 1881, as explained in the proceedings of the Council at the time, the form of return was changed, so as to show the number appointed, the number qualified, but not appointed, and the number disqualified. The mode of classification of the competitors and the arrangement of the lists were not changed; the names were placed in order of

merit, according to the number of marks gained by each candidate in the competition, as they had been previously; and as many appointments as were vacant were filled up from the list in the order of succession in which the names appeared. On this mere alteration in the forms of the returns just described, however, our contemporary makes the following remarks: "But in 1881 a new system of classification was introduced. From the whole number who pass, a limited number are *selected* for appointment, and it remains to be shown upon what ground this *selection* is made. Whatever the ground may be, a perusal of the results of the subsequent examinations places it beyond dispute that the selection has been altogether to the disadvantage of the Irish candidates." The italics are ours. When so simple a fact as that which really took place is made to assume the shape depicted in these sentences, is it to be wondered at that other things appear in the article in equally distorted forms?

We feel inclined to dismiss as unworthy of notice the suppositions and conjectures expressed in the last paragraph of the paper we have been commenting upon, but we are aware that it might lead to a surmise that we concurred in them if we made no allusion to them. It is almost amusing to read, after the remarks of our contemporary, the whole of which appear to be suggestive of some irregular means being used by the London examiners to exclude Irish students from Army Medical commissions, the following concluding sentences. "We do not wish to adopt the theory that Irish candidates have been 'boycotted,' for the facts are capable of explanation in other ways." But what other ways are presented to us by our contemporary? They are the following. "Perhaps," the article goes on to say, "the London and Edinburgh 'coaches' have got more complete possession of the pet questions of particular examiners than the Irish 'grinders'; or perhaps, as is confidently asserted, the printed papers get into the hands of London teachers in advance of the examination." We are sufficiently acquainted with the nature of the competitive examination in London to be able to state, that it is by no means confined to replying to printed questions, or to a written examination. It is eminently a practical examination. Knowledge of the nature of diseases and injuries is tested in the persons of living patients, surgical operations on the dead body are performed in presence of the examiners, the manipulation of surgical appliances is observed by them, and a considerable part of the trial consists in oral examination. The written examination forms only part of the ordeal which the competitors have to pass. Young surgeons who have had a good general education, but who have also been working as clinical assistants and dressers in large hospitals, or holding other like practical appointments, have the best chances of success in an examination so conducted. We are informed that the Scotch students have very little to do with "coaches" or "grinders," and that very few of the better class of English students find it necessary to resort to them. The observations in the last and preceding paragraphs of the article under notice seem to show that the complaints of unfair dealing on the part of the examiners have emanated from the Irish "grinders." The questions put at the written examinations are printed, and are open to the observation of every one, whether Irish or English, when once they have been circulated; but we have no doubt that the same precautions are taken for preventing them from being known beforehand, as are taken on all corresponding occasions in the public services. We should like to know by whom, and on what ground, "it is confidently asserted," as our contemporary states, that the questions get into the hands of London teachers in advance. If there is no reasonable ground for such an assertion, surely it is very unworthy of a respectable journal like the *Medical Press and Circular* to spread abroad such shameful conjectures. We feel sure there are no surgeons holding the positions of teachers in the London schools, and not only in the London schools, but in any school of standing in the United Kingdom, who would not be the first to expose the delinquents who might attempt to get them to take part in such a dishonest proceeding.

ARMY MEDICAL SCHOOL.

THE opening of the forty-sixth session of the Army Medical School, which takes place on Monday next at Netley, will be signalised by the entrance on his official duties, as assistant professor of pathology, of a gentleman well known for his valuable contributions to scientific medicine. We refer to Surgeon-Major T. R. Lewis, M.B., of the Army Medical Department, late on special duty, attached to the Sanitary Commissioner with the Government of India, who, for many years past, has been engaged upon an elaborate investigation into the causes and nature of cholera and other tropical diseases, carried out in such complete and accurate detail, as to entitle his numerous memoirs in which the results of his investigations have been made known, to a place in the first rank of original research. Not least amongst these, and surpassing them, indeed, in special interest, are his treatises "On a Hæmatozoon in Human Blood," and "The Pathological Significance of Nematoid Hæmatozoa," published in 1874, in which, among others, the anatomy and life history of that now famous parasite, the *filaria sanguinis hominis*, originally discovered by him in human blood in 1872, was so minutely and accurately described. We are glad to find that the Government of India has fully recognised the great value of Dr. Lewis's public services in a special despatch lately addressed to the Secretary of State, signed by the Governor General and all the Members of the Council of India. This, we believe, quite exceptional honour, will be heard of with pleasure by the whole profession, as a graceful tribute to the ability and devotion of one of their body. We congratulate the School and the Professor of Pathology, the distinguished author of "The Practice of Medicine," Dr. Aitken, F.R.S., on this most suitable appointment by Director-General Crawford.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

THE following is the text of the Bill "to provide for the better Notification of Infectious Diseases," now before the House of Commons. It has been prepared and brought in by Mr. G. Hastings, Sir Trevor Lawrence, Dr. Farquharson, and Mr. Brinton.

Whereas it is desirable to provide for early notification to sanitary authorities of the occurrence of infectious diseases within their districts: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows; (that is to say)

1. *Short Title.*—This Act may be cited for all purposes as the Infectious Diseases Notification Act, 1883.

2. *Construction of Act.*—This Act shall be read and construed with the Public Health Act, 1875, 38 and 39 Vict., c. 55, and the Metropolis Local Management Act, 1855, 18 and 19 Vict., c. 120, and any Acts amending the same.

3. *Definitions.*—"Infectious disease" shall include small-pox, cholera, typhus, typhoid, scarlet, relapsing, continued, and puerperal fever, scarlatina, and diphtheria, and such other disease as the sanitary authorities, under the provisions and for the purposes of this Act, may from time to time declare to be infectious. "Sanitary authority" shall mean, in the metropolis, vestries and district boards as constituted under the provisions of the Metropolis Management Act, 1855; and, in all other parts of England, the local authority as constituted under the Public Health Act, 1875.

4. *Notice to be given of Persons suffering from Infectious Disease.*—In order to secure that due notice be given to a sanitary authority of any inmate of any building used for human habitation who is suffering from any infectious disease, the following provisions shall take effect, that is to say: 1. If any such inmate be suffering from any infectious disease, the occupier or the person having the charge, management, or control of such building (or if such occupier or person be prevented by reason of such disease, then the person in charge of such inmate), shall, so soon as he shall become aware of the existence in any such inmate of any such disease, forthwith give notice thereof to the medical officer of health at his office. 2. If such inmate be not a member of the family of such occupier or person, the head of the family (resident in such building) to which such inmate belongs, or if there be no such head, or if such head be prevented by illness, then such inmate (unless prevented by reason of such disease, or of youth) shall, on becoming aware of the existence in such inmate or in his own person, as the case may be, of such disease, forthwith give notice thereof to such occupier or person. 3. The sanitary authority shall provide and supply gratuitously to every registered medical practitioner residing or practising in the district, who shall apply for the same, forms for the certificate or declaration to be made by such medical practitioner of the particulars hereinafter mentioned in relation to such cases, according to the form set forth in the schedule to this Act. 4. Every medical practitioner attending on or called in to visit such inmate shall, on becoming aware that such inmate is suffering from any infectious disease, forthwith fill up, sign, and deliver, or send to the medical officer of health at his office, a certificate or declaration stating, according to the form so prescribed, the name of such inmate, the situation of such building, the name of such occupier or person, and the nature of the infectious disease from which, in the opinion of such medical practitioner such inmate is suffering. 5. The sanitary authority shall pay to every registered medical practitioner who shall, in pursuance of this section, duly make and give any such certificate or declaration, a fee of *two shillings and sixpence* for each such certificate or declaration in respect of cases occurring in his private practice, and a fee of *one shilling* for each such certificate or declaration in respect of cases occurring in his practice as a medical officer to any public body or institution. 6. And any person who shall wilfully offend against this enactment shall for every such offence, be liable to a penalty not exceeding *forty shillings*.

5. *Other Diseases may be declared to be within the foregoing Provision.*—The sanitary authorities may, from time to time, by resolution on the report of the medical officer of health, and approved by the Local Government Board, order that any infectious disease other than those specifically mentioned in this Act shall be deemed to be an infectious disease within and subject to the provisions of this Act. 1. Any such order of the sanitary authority may be permanent or temporary only; and, if temporary, the period during which it is to continue in force shall be specified therein, and the sanitary authority shall give public notice of the order by publishing the same by advertisement in two of the local newspapers circulating in the district; and, after such public notice has been given, the provisions of this Act shall, so long as the order continues in force, apply to the disease specified therein in like manner in all respects as if such disease were an infectious disease specifically mentioned in this Act. 2. The production of the newspapers containing a copy of the resolution shall be conclusive evidence that public notice of the order has been so given. 3. The sanitary authority shall, immediately after any such order shall have been made, send a copy thereof to each registered medical practitioner residing in the district, but the omission to send any such copy shall not affect the validity of such order.

. *Sanitary Authority to make Enactment known.*—Every sanitary authority
ll take means to make this enactment generally known, by affixing notices
he contents thereof in all public places where such notices are usually affixed
hin the district of such authority.
. *Act not to apply to Ireland.*—This Act shall not apply to Ireland.
. *Commencement.*—This Act shall come into operation on the *first day of Octo-*
one thousand eight hundred and eighty-three.
CHEDULE.—*Form of Notice:* Notification of Infectious Diseases Act, 1883.
hereby certify and declare, in pursuance of the above-named Act, that (here
e the name), living at No. (here state the number and name of street or
cription of house) Street, is suffering from infectious disease, viz. (here insert
ne of disease). Dated the day of , 188 . Registered medical prac-
ner, or householder, or person in charge (as the case may be). To the sani-
authority of the district of ."

NOTIFICATION OF INFECTIOUS DISEASES.

R Liverpool correspondent writes:

n the course of discussions on the subject of notification which
e taken place during the past two years in Liverpool, various re-
tions have been cast on her medical men by gentlemen in the
ncil, who were anxious to make it obligatory on them to notify.
ecially has it been said that, while they objected to bear the
den of compulsory notification, they offered no alternative plan
dealing with infectious disease. Though this charge was entirely
ounded, suggestions of a definite character having been sub-
ted to the Health Committee very early in the controversy, yet
blic meeting of the profession was called in September 1882, at
ch eight practical recommendations were agreed upon, and for-
ded to the City Council for their consideration. The chief of
e had, indeed, been presented to the Health Committee a year
iously, in a conference between that body and a number of re-
entative members of the profession. The Council for the year
ed to exist, without having done more than affirm the abstract
sability of notification. In order, however, that there might be
xcuse for inaction and no ground for charging the medical pro-
on with indifference, Mr. R. Hamilton, a medical member of
Health Committee, gave early notice of his intention to move
hat Committee the following resolutions:—1. That applica-
be made to the Local Government Board for power to put into
ation so much of section 134 of the Public Health Act as would
uit the Health Committee to employ qualified medical men to
and inspect every house of any street where two or more cases
e following infectious diseases had occurred: typhus, typhoid,
l-pox, cholera, scarlet fever, and diphtheria; the medical men so
inted to act under the directions of the Health Committee; 2.
the necessary steps be taken to repeal the by-laws made by the
cil in 1869, under the statute of 29 and 30 Vict., and to enact
by-laws so as to make all the powers of section 90 available;
nat a form of certificate be issued from the medical officer of
h's department, stating whether isolation is sufficient or not,
of 2s. 6d. to be paid to every qualified medical man for notifi-
n of any case of typhus, typhoid, small-pox, cholera, scarlet
, or diphtheria; and 4. That quarantine houses be obtained for
urpose of temporarily accommodating those whom it is found
sary to remove from infected dwellings or houses closed for
ection.

. A. B. Forwood, late chairman, and now vice-chairman of the
mittee, gave notice at the same time that he should ask it to
mend the Council to apply to Parliament in the next session
Act to enable them to require compulsory notification, both
e medical attendant and the householder, giving powers of re-
where necessary; to provide suitable places for the tem-
accommodation of the inmates of any house who have
compelled to leave their houses by the operation of the Act; to
le hospital accommodation for the persons removed who are
receipt of parochial relief; for the police magistrate to prohibit
le of milk from any premises from which, in his opinion, it is
that contagious or infectious diseases may be spread; and to
schools in infected districts. The penalty proposed under the
r failure of householder to notify, if a medical attendant be in
lance, is not to exceed 40s., and if no medical attendant, £5.
enalty on the medical attendant for wilfully neglecting to
is not to exceed 40s.

Forwood's propositions met with but two supporters, and
herefore lost. Ultimately, after discussion, the first three of
amilton's suggestions were adopted as recommendations to the
il, to be considered at a special meeting held on the 14th
.

hat meeting, the first and third were alone discussed, with
ult that the first was adopted in a modified form, and the
negatived. The resolution ultimately agreed upon was: "That the Health Committee be authorised to appoint not exceeding three medical men to assist in the sanitary inspection of the town."

It is now, therefore, open to the Committee to appoint, presumably at a competent salary, as many as three medical men, who will act as assistants to the medical officer of health. As the proceeding is tentative, it is probable that only one or two appointments will be made at the outset. They—*i.e.*, the appointments—ought to be productive of much good. There is ample scope in a huge city like Liverpool for the energies of several medical officers of health. It cannot be doubted that much annoyance has been caused by non-medical inspectors having formed opinions both as to the nature of the disease from which patients, whose cases have been notified, have suffered, and as to the likelihood of injury accruing from removal to hospital, totally at variance with those formed by the medical practitioners in attendance; and if no other result than the avoidance of such recurring cause of irritation issued from the formation of the contemplated offices, it would be a satisfactory one. But the terms of the resolution are wide enough to admit of much more than this; and it is to be hoped that the influence of one or more young, active, energetic, and well-trained medical men will make itself wholesomely felt in many directions.

It is a little disquieting, however, to find the Chairman of the Health Committee reporting to the Council that the medical officer of health, unlike the majority both of the Council and of the medical profession, could see no advantage in the appointment of such assistants. It is to be hoped, notwithstanding this opinion, that results will soon justify the wisdom of this step, and that it may then serve as a precedent for many of the other large towns to follow. There can be no question that the kind of apprenticeship to be served by fulfilling subordinate duties in towns like Liverpool, Glasgow, Birmingham, etc., might be the most valuable training possible to young men who intend to devote themselves to public medicine; and the success which has the appointment by the Surrey magistrates of medical inspectors, under the Contagious Diseases (Animals) Act, is sufficient to raise a well founded expectation of advantage from this new departure.

It does not seem clear yet what is to become of Mr. Hamilton's second resolution. Probably it will be adopted. Why such a city as Liverpool, with her thousands of emigrants, and her streets of sublet-houses, should have failed hitherto to avail herself of the advantages, which other towns have secured, by the application to them of section 90 of the Public Health Act, 1875, it is very difficult to understand. Perhaps it is explicable on the assumption—though this seems scarcely likely—that by-laws, founded on the Sanitary Act of 1866, have been continuously applied, notwithstanding that parts I, II, and III of that Act, and, therefore, all by-laws depending on them, were repealed by the Public Health Act; and that as those by-laws gave powers somewhat analogous to, though by no means so complete as, those framed by the Local Government Board under section 90 of the Act of 1875, the want of these latter was not keenly felt. It is hardly possible, however, that the application of powers not warranted by law could have been made for nearly eight years, so that there must be some other explanation for its non-adoption.

NOTIFICATION OF INFECTIOUS DISEASES IN NOTTINGHAM.

SIR,—I have read the comments that appeared in this week's JOURNAL on an expression used by me in a recent report on the Notification of Infectious Diseases, with reference to a statement made by Dr. Brookhouse, of Nottingham, to the deputation or commission from the city of Liverpool in September last. In justice to myself, I trust that you will allow me sufficient space to reply fully thereto.

In the first place, your readers should know something of the circumstances under which Dr. Brookhouse's statement was made. In February of last year the Nottingham Town Council, upon the report of their health committee (which I forward herewith), resolved to put their local Act for securing the Early Notification of Infectious Diseases partially into operation. Small-pox was the disease which the health committee at that time desired should be notified; and, though it was finally resolved in the Council by a small majority to include scarlet fever as well, it was small-pox that was singled out as a test of the usefulness of notification. Further, in order to show even more clearly their desire to test its efficiency as a means of limiting an epidemic before committing themselves to the exercise of their powers, they resolved that notification should be in operation with regard to this disease for the period of twelve months only.

At the latter end of September last, the Liverpool commission attended in Nottingham, having announced their intention of coming only a few days before. The time chosen was in every way most unfortunate for me. The Congress of the Social Science Association was taking place in Nottingham. I had several months before consented to act as Honorary General Secretary for that Congress. I mention this partly to show how it happened that in Nottingham we were unable to carry out the suggestions of the Liverpool commission, as to arranging for practitioners representing both sides of the question being present to meet them, and also to show that in my enforced absence it especially behoved those who were present to be careful in the statements they made.

On that occasion Dr. Brookhouse made this statement:—"I think I am correct in saying, that this epidemic of small-pox was greater than the one which occurred in 1871, when we had not the same facilities. I think this has been a more extensive and severe epidemic than that of 1871-72, *which was just the time of the appointment of the Medical Officer of Health.*"

The severity of an epidemic is always measured by the number of deaths it causes in proportion to the population. During the epidemic of 1871-72, the number of deaths were 349, the population, in 1872 being, in round numbers, 88,000. During the recent epidemic the total number of deaths were only 57, the population for 1882 being 193,000. The severity of the first epidemic was, to that of the second, as 13 to 1 (I spoke of it in my report as about 10 to 1). Everyone must admit, then, that Dr. Brookhouse (who is physician to the infirmary, and who, for that reason would, no doubt, be taken by the gentlemen from Liverpool to speak with authority), in making this statement was, to say the very least, giving an opinion most strikingly in opposition to the actual facts. Coupled with this statement of opinion, there is an observation (which has called forth the remarks of my medical friends in Nottingham and elsewhere) *which connects the appointment of the Medical Officer of Health, with the occurrence of that which, in his opinion, was the most severe epidemic.* This statement, be it observed, was made deliberately to a committee of gentlemen from Liverpool, by whom it was to be published and circulated throughout the kingdom. Moreover, it was the *only* medical statement, on this most important point, taken by the committee. Nottingham then was to be represented to the general public as a town in which the Notification of Infectious Diseases, and the appointment of a Medical Officer of Health, had proved to be distinctly a disadvantage, as regards the control of small-pox (the disease to which the Notification Act specially applied); and that on the authority of one of the principal medical men of the town. This statement, so entirely unwarranted by the actual facts, and so damaging to the cause it is my duty to advocate, and to the office I have the honour to hold, was made at a critical period, and it became my bounden duty to expose it when the proper time arrived. Accordingly, at the conclusion of the twelve months' trial, I reported to the Health Committee on what I consider to be the very successful working of their notification clause in its limited application. I had to refer to this statement which, if not very pointedly contradicted, was certain to prove very damaging in the future, as in fact had been the case already. In so doing I used the expression, "obviously untrue," in the sense that Dr. Brookhouse's statement was obviously contrary to the facts. If you will do me the favour to refer to the report (a copy of which I forward) you will at once see that this is the interpretation which, I think, almost every one would put upon it; for, on turning over the page next to that on which it occurs, there will be seen, side by side, two charts, exhibiting graphically the difference between the two epidemics, so that "he who runs, may read." I was not aware, until the morning of the 13th inst., that Dr. Brookhouse had attached a meaning to this expression, other than that which I intended. I received a letter from him then which I forward, and which, with others, you will publish if you think proper to do so, and if your space will allow.

Now, had Dr. Brookhouse written to me to ask me to withdraw the words which were considered by him to be offensive, and had he at the same time expressed regret for his own statement which provoked my comment, I should not only have withdrawn the words, but, in doing so, should, in a public manner, have expressed my regret at having used them. But, as you will see from his letter, he did nothing of the kind. Having been himself the aggressor he demands an apology from me with a threat of punishment. Under such circumstances, I submit it would have been impossible for any gentleman to have acted otherwise than I did. I wrote at once to make it clear in what sense I used the words to which he objected. In fact, I withdrew an expression which might be considered unparliamentary in a parliamentary way. Dr. Brookhouse has refused my explanation in terms which I consider to be highly offensive.

To recapitulate:—Dr. Brookhouse commenced by making a statement of opinion to the Liverpool Commission which was utterly unwarranted by the facts with regard to the epidemic of small-pox. He coupled with this statement an entirely unprovoked attack on the office I held. It subsequently became my *public* duty to comment on his statement. In so doing I made use of an expression which is open to the objection that it is capable of an interpretation other than that I had intended. Thereupon, he, without one word of regret for his own extremely erroneous and damaging statements, or for the entirely unprovoked attack he has made on the office of Medical Officer of Health, calls upon me to apologise in a threatening manner. I write to explain clearly the meaning in which I used the expression to which he objected. He replies in an offensive manner, and subsequently writes still more offensively in forwarding the correspondence to the local journals.

Under these circumstances, I feel quite sure that the members of the Association generally will sympathise with me when I say that neither my sense of public duty nor my sense of self-respect will permit me to make the apology you suggest that I should offer. I am most deeply sensible of what is due to the members of our profession. I have held the post of Medical Officer of Health here for ten years, and both before that time and since I have had very considerable experience and knowledge of the difficulties peculiar to the public service. During the whole of that time my conduct has, I believe, always been considered to be marked by caution and moderation. That I have not been altogether unsuccessful in impressing favourably those with whom I have had to deal, the possession of those qualities is testified to in various ways. I may, perhaps under these exceptional circumstances, without the risk of being misunderstood, forward to you a copy of a minute which the Health Committee of this town were so kind as to pass a short time ago. As regards this question of notification you will, I am sure, do me the justice to say that the tone I have adopted is fairly moderate considering the standpoint from which I am bound to view it. Beyond purely official reports, I have not written much on the subject, but if you will refer to my paper at the meeting of the Association at Bath, 1878, to my letter in our JOURNAL (vol. 2 p. 321, 1881) after the meeting of the Association at Worcester last year, to my speech at the meeting of the Social Science Association at Nottingham, and to my evidence before the Liverpool Commission, I do not think you will find much to take exception to. If you will do me the favour to look through these you will see that I have been throughout fully alive to the disadvantages, as well as the advantages, of Notification to Sanitary Authorities, though I show that I am decidedly of opinion that the advantages counterbalance the disadvantages. I have been harassed, it is true, by persistent (and as I think, unreasonable) opposition from a few members of the profession here to our system of notification, which I maintain at least deserved a fair trial. If I have been betrayed for once into an incautious expression, I would ask—Is all the tact and temper to be on one side? And are those members of the profession who have not the same public responsibility in connection with this question to be perfectly at liberty to assail us whenever and however they may please? And are we Medical Officers of Health alone to incur censure for incautious expressions at a time when reckless utterance seems the rule with our opponents? Are we alone to be called upon to make humiliating apologies under circumstances in which outsiders would consider any apology at all superfluous? If this be so then most clearly the argument respecting notification must proceed under such very unequal conditions that unless we are prepared to sacrifice all personal comfort to that which we firmly believe to be in the main right, the public by whom we are employed must eventually suffer.

I have, however, that faith in the love of fair play which pervades all classes of Englishmen, that I cannot believe that, even though their prejudices may be against us, the members of our profession will ever allow even a small section of our body to be so treated.

Your obedient servant,

EDWARD SEATON, M.D., London, M.R.C.P.
Medical Officer of Health, Member of Council of British Medical Association, Physician to the General Hospital at Nottingham, etc.

NOTIFICATION OF INFECTIOUS DISEASES IN ABERDEEN

SIR,—Compulsory notification by medical men is attracting at now a good deal of attention; so that a statement of the a working of this system in a large town like Aberdeen cannot f

e useful. It will also be of advantage at the present time; for Ir. Hamilton of Liverpool has recently published an interesting amphlet in which, after an exhaustive consideration of the subject, ıe conclusion come to is not in favour of the scheme. The chief bjections pleaded are these. In all towns where compulsory notifiıtion is in force, there is antagonism and ill-feeling between the ıedical officer of health and the private practitioners; where there no such friction, the compulsory system is either loosely or not roperly carried out. Then comes a still more important objecon, that notification has not lessened or helped to stamp out ıidemics.

The position of Mr. Hamilton, and the special attention he has ven to the subject, will deservedly give him weight in influencing ıe opinions of those who are interested. It is, therefore, but fair show that one town which was not visited give facts altogether variance with those claimed to be the basis of the adverse opinion. is here intended simply to set against each objection the actual ate of affairs in Aberdeen, which will make it evident that, although one Scottish city the working of compulsory notification is characrised, justly or unjustly, "as a sham, and a temptation to the edical men to increase their incomes," in another it is worked out a manner that will not lay it open to either of these serious arges, but with benefit to the community.

It is the more easy for me to give an unprejudiced statement, as is not a matter of bolstering up some pet scheme of my own. ımpulsory notification on the part of the medical men in Aberdeen ıs not brought about by my advice. I am, therefore, in a position see its successes and its failures.

Compulsory notification came into force in August 1881, the ıjority of the medical men being in its favour. At first there was, ıongst a few of the medical men, a feeling of reluctance to comply; is reluctance was mainly due to the fear of interference by the edical Officer of Health in the diagnosis, etc., of the disease, and ıo to not knowing quite what that official would do when a case s reported to him. Care, however, was taken to explain to them, every convenient occasion, that the duties of the Medical Officer Health were confined to ascertaining whether the patient was pro-ly isolated from others, whether the precautions taken were isfactory *to him* to prevent the spread of the disease, and what s the origin of the disease if it came from a previous case, or was e to the unsanitary condition of the house. The house and roundings were to be dealt with, and not the patient, unless lation could not be carried out. These assurances, with the ctice of them, allayed any misgivings that arose; and now, during ıeriod of twenty months, there has not been a single hitch, nor 're I heard directly or indirectly any complaint.

'he want of friction is not to be put down to slackness in carrying sanitary measures. However well this accusation suits other ns, it will certainly not apply to Aberdeen. It cannot be ounted for as in Edinburgh by putting on the card "No imme-te attention necessary," or "no interference required." Such ra information is unrecognised, unless when the doctor writes a e giving private reasons.

ich and poor are alike visited when reported—the form of report post-card, addressed, on the one side, to the Medical Officer of lth, on the other it has the following particulars:—

"City of Aberdeen.

—— 188 . *Notice of Case of Zymotic Disease.*—1. Name of pat, ——; 2. Description of case, ——; 3. Probable cause, ——; Street or No. of house where occurring, ——; 5. Reported by ." On the same day that the card is received, the house is ed, either by myself or a trained inspector, and a printed form l up, which gives particulars about school, milk-supply, occupa- of parent, probable source of infection, and sanitary state of se.

the same time, printed instructions are given to the householder the isolation of the patient, and the proper use of disinfectants; what penalties are incurred by breaking the sanitary laws.

ıe teacher of the school is then communicated with, and in-ed that an infectious disease is in such a house where one of the ls resides; and he is instructed not to receive the child back the house is certified free from infection.

ıring the illness, an occasional visit is made to ascertain that the utions are being continued. These visits are, as a rule, taken ly; for everything is done to try to convince the people that the ary officials wish to be a help to them.

ere is entered in a book the probable time the house should be fected; and the householder is requested to send word to the when the doctor says this can be done. If no word is received, when the day comes round presenting the entry in the book, the house is visited; and, if the patient be better, the room or rooms in which he or she has been are thoroughly disinfected; so also the clothes, unless, as in some cases, the doctor and householder prefer to do these things thoroughly themselves.

Out of 459 cases of scarlet fever and typhus in 1882, 380 houses were disinfected by the sanitary authority.

If the means of isolation be not satisfactory, the patient is removed to the hospital. During the year 1882, 250 patients were removed to the hospital. In one instance only amongst this large number was it necessary to apply for a magistrate's order. All the others were persuaded to be removed from their homes.

The foregoing will make it plain that it is not from inaction on the part of the sanitary department that everything works harmoniously.

In reference to the second objection—that notification neither lessens nor stamps out an epidemic—it is answered by the following facts. Twice during last year an inaccuracy of diagnosis allowed typhus fever to get a hold in Aberdeen, where, from the peculiarly large and crowded tenement houses in which a colony of poor families live, each family occupying, perhaps, only two or three rooms, or even fewer, the conditions for the spread of fever are present to a much larger extent than in English towns. In both instances the threatened epidemics were stamped out; although in one, before it was discovered to be typhus, it had obtained such a footing as to have twenty-four ill in one street, and had spread from there to other parts of the town. Some patients were too ill to be removed to the hospital. When this occurred, a nurse was sent to take charge and see that isolation was strictly carried out.

Both epidemics were stamped out in a little over two months, a circumstance entirely due to the medical men reporting the cases to which they were called. Several times, typhus fever has cropped up in single cases, and its spread at once stopped. Small-pox has been imported several times, with no further spread; diphtheria the same; typhoid fever the same. Scarlet fever is always kept within controllable limits; it is not eradicated. I am not so sanguine as to expect that, for there are always a number of very mild cases which get no medical attendance, and which keep up the infection. With compulsory notification, there is no difficulty whatever of stamping out those epidemic diseases which the public mind has been educated to consider dangerous and preventable; but, in measles and whooping-cough, especially the latter, public opinion has not reached that stage, and so far, compulsory notification is for them a vast expenditure, and apparent waste of money. Very little progress can be made in the stamping out of these two diseases until the citizens are sufficiently aroused to the danger to be willing to put themselves to much more inconvenience than they are inclined to at present, or to allow their children to be taken to the hospital, and there treated for what they at present consider natural diseases. I agree with Mr. Hamilton, that compulsory notification for these two diseases has so far shown no power to lessen or stamp them out; for the others, my experience leads me to form a different opinion. In both, however, it seems to me only a matter of time and education.—I am, etc.,

W. J. Simpson, M.D., C.S.S Camb.,
Medical Officer of Health, Aberdeen.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

Sir,—The Health Committee of Nottingham have published a report of Dr. Seaton, the Medical Officer of Health, on the result of the compulsory notification of infectious disease in that town during the first twelve months of the Act being in operation there. I confess to a feeling of disappointment on reading Dr. Seaton's report. In answer to the question whether the measure has been "beneficial in its operation or not," Dr. Seaton "can only answer in the most emphatic manner that its results have proved beyond a doubt to be of great benefit to the public." Seeing that the compulsory clauses have only been in operation one year, this seems a very decided, if not premature, expression of opinion, and one naturally proceeds to look up the evidence by which it is supported.

Only two diseases are scheduled for notification at present in Nottingham, viz., small-pox aud scarlet fever. It must be admitted that compulsory notification affords means of securing isolation, and of being able to push vaccination where it has been neglected. Dr. Seaton lays much stress on these points. But neither of these is the ultimate end of notification. What it is alleged to be able to effect is a stoppage, or at least a very unmistakable diminution of certain infectious diseases.

Has it effected this at Nottingham? Dr. Seaton says: "The

results are such as to furnish *satisfactory proof*" (the italics are mine) "of the value of notification to all who are open to conviction." There is an implication in this statement which is certainly objectionable, and the statement itself is supported by no sufficient evidence. What is the evidence? It amounts to this: Nottingham suffered much less from small-pox in 1882, with compulsory notification in force, than in 1871-72 without it; and therefore notification is to be credited with being a success, and all who are in any way "open to conviction" will accept the inference. But is there any proof given that the result claimed has been due to compulsory notification? Is there any evidence that the effect will be lasting? None.

Dr. Seaton compares the period 1871-72 with 1882. But there is no reason to confine one's attention to this limited period in the history of Nottingham; and usually there is great advantage in extending observations over the maximum period. It appears from the Registrar-General's Reports that there were 144 deaths from small-pox in Nottingham in 1871, and that the deaths increased in 1872 to 205. Compulsory notification was not in operation then, and disinfection was not so actively carried out as at present. But what about 1873? There was not a single death from small-pox that year, nor in any of the five succeeding years. There was one in 1879, and none in 1880. It is regarded by Dr. Seaton as a triumphant proof of the efficacy of notification that it has reduced the deaths quarter by quarter in 1882, but what about the complete stamping out of small-pox entirely for six years after the bad year 1872? How was this effected? Would notification have improved on this?

Notification of small-pox appears to have come into operation in February 1882. The total deaths from small-pox in 1881 were four, and in the four quarters of 1882 respectively 3, 12, 24, and 12. Small-pox cannot therefore have been very widespread at the time the notification came into operation, yet can it be said notification did much towards stopping or checking its spread, with more deaths before us, and the additional fact that up to September upwards of 550 cases had occurred?

The reply usually given to such a question is, "It would have been much worse without notification." This is a supposition, and the question of compulsory notification is too important to be decided by fond fancies, or by a deduction that it "*must have*" been of service, as Dr. Seaton argues.

With reference to scarlet fever, Dr. Seaton is equally emphatic in declaring that, "notification has been attended with the most excellent results." What is the evidence? I give, *verbatim*, Dr. Seaton's remarks: "The scarlet fever epidemic reached its height during the third and fourth quarters of 1881, and the first quarter of 1882, during which period the deaths were as many as 405. The number has declined rapidly since, and during the last quarter the deaths were only 25 in number, and up to the present time this year (February 22nd, 1883) there have only been eight. The small number of deaths (from scarlet fever) which have recently taken place is mainly due to the extensive prevalence of the disease last winter; at the same time it is impossible to ignore the fact that the notification and preventive measures resulting therefrom must have contributed very materially towards the limitation of the epidemic." There is one fault stated here in evidence, viz., the diminution of deaths, and then follows the conclusion, viz., notification, etc., must have contributed largely to this result. Not a figure or fact is given in support of the statement that notification of scarlet fever has produced "most excellent results," except what are contained in this paragraph.

From the Registrar-General's figures it appears that the death-rate from scarlet fever in Nottingham during the past twelve years has been as follows:

Year	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
Death-rate	0.32	0.05	0.12	0.53	1.72	0.79	0.19	0.54	1.06	0.77	1.87	1.44

Now, it appears to me that there is little comfort to be derived from these figures by those who believe in the efficacy of notification, and I fail entirely to see where the "most excellent results," as regards Nottingham, are evidenced. Only twice during the past twelve years has scarlet fever been as fatal as in the year of compulsory notification. In 1875 the death-rate from scarlet fever was 1.72 per 1,000. In the next year, 1876 (without compulsory notification), it fell to 0.79, and in 1877 to 0.19 per 1,000. In 1881 the death-rate from scarlet fever was 1.87 per 1,000; in the next year it had declined to 1.43 per 1,000 with the assistance of compulsory notification, and with "more than three times the amount of disinfection of infected houses, rooms, bedding, and clothing, than any year previous" (*sic.*). The low death-rate from scarlet fever during 1871-1873, when there was no compulsory notification, is noteworthy. Great stress is laid by Dr. Seaton, and other supporters of his views, as to notification, on the fact that it affords an opportunity of giving useful advice to friends and neighbours of the patient on sanitary matters. At Nottingham, on receipt of the notification, "a caution is left to warn the householder of the penalties incurred in connection with the exposure of infected persons," etc. The responsibility thus brought home is, he considers, "of the first importance in preventing the spread of scarlet fever. In this respect," he continues, "the function of the health committee is educational, and the great advantage is that by the notification, the lesson is taught to the people at a time when they are likely to heed it" (p. 11). Now, what evidence is there that the educational results obtainable from notification have been effective at Nottingham? The death-rate from all causes in 1882 was 23.2 per 1,000. Only once during the last six years has the death-rate exceeded this, viz., in 1878, which was 24.2; during one year it was the same, and during three years it was lower. In 1881, without the compulsion, or the educational advantages, or the active disinfection practised in the following year, the death-rate was 22.4, while in 1882, with all these instruments which are claimed as necessary and effective means of lowering the death-rate, it rose to 23.2 per 1,000.

With regard to the 7 zymotic diseases, which it is claimed are specially influenced by notification, the death-rate in 1882, under compulsory notification, was 4.41 per 1,000, while in 1881 it was only 4.0. During 1877, 78, and 79, the rate was much lower than in 1882, averaging only 2.46 per 1,000; in 1880, it was 4.8 per 1,000. Do these facts endorse Dr. Seaton's statement as to the efficacy of notification to diminish death-rate?

The shortness of the period during which notification has been in force in Nottingham renders a decisive opinion as to its effects impossible. Had not Dr. Seaton published a report, which he says is such "as to furnish satisfactory proof of the value of notification to all who are open to conviction," it would have occurred to no one as necessary to enter into the question at length. But, so far as the figures at our disposal go, can they be said to be so plainly in favour of notification? It is not suggested here that the increase of deaths is due to notification, although medical men living in Nottingham and elsewhere, with local knowledge, consider this to be the case. What has been shown to be the case in Nottingham as to the sequence of events since notification has been put in force can also be shown with regard to many other towns.

One great difficulty in testing the efficacy of notification is, the apparent reluctance of those who alone have the figures to publish them. Dr. Seaton's pamphlet is notably bare in figures. It has been the experience of many medical officers of health that there is an unwillingness on the part of medical officers, in many towns where notification is in force, to give information bearing on the subject, quite different from the ready and cordial desire to assist their colleagues which characterises Medical Officers of Health in general. It is most important, in the interest of the public, that this reticence should cease. Let us have fewer protestations and inferences, and all the facts and figures. Let such results as are proved be given in full. Many towns are considering seriously applying for power to compel notification, in the vague belief that it would be useful. Can any responsible adviser recommend such a course, on the "satisfactory proof of the value of notification afforded by Dr. Seaton? No allusion is here made to the ethic question of compulsion, to its alleged tendency to produce concealment, and hostility between medical practitioners and the sanitary authority, or other disadvantages. The all-important one as to the effects of a year's notification in Nottingham leaves no space for these points, although there is much to be said on the subject.—I am, etc.,

T. WHITESIDE HIME, B.A., M.B.,
Medical Officer of Health for Sheffield.

* In some instances, the revised figures of the Registrar-General were not at my disposal.

POISONING BY CARBOLIC ACID.—An infant belonging to Thomas W. Hunt, of the township of Hope, was accidentally poisoned during the early part of the month by the servant girl, who gave the child a spoonful of carbolic acid in place of soothing syrup.

SUICIDE.—Dr. Touch, of Inverary, has committed suicide by cutting his throat. Deceased was a staff-surgeon in the Indian Army during the Mutiny, and was repeatedly mentioned in despatches for distinguished conduct.

MEDICO-LEGAL NOTES AND QUERIES.

MEDICAL QUALIFICATIONS AT THE ANTIPODES.

THE case of Jackson *v.* Goode, tried in the Supreme Court of New South Wales, before Mr. Justice Windeyer, is one which is well worth the earnest consideration of the profession. It shows that from Australia a man may go to America, obtain a diploma in medicine from one of the numerous colleges in the various States, and come back again in a few months a full-fledged doctor, and can then be placed on the *Register* of the colony as a duly qualified medical practitioner on producing this easily obtained diploma, and making a declaration that he was a student at a school of medicine for three years. It is apparently not necessary to produce any documentary evidence of his having so studied. By his own admission, the plaintiff, W. J. Jackson, had only attended one winter course of lectures of not more than six months in California, and when on his oath in the Supreme Court, only attempted to claim credit for attendance at lecture during twelve months in England, at the medical school, Newcastle-on-Tyne. In proof of this last, he produced a schedule of certificates from the various professors, one of the signatures to which, purporting to be that of Dr. William Murray, he admitted to be a forgery, and would not swear that it was not written by himself. In the face of all this it is hard to understand on what ground the jury gave him a verdict for five pounds on the fourth count; the slander therein complained of being the question: "Why did you not call in a properly qualified surgeon?" This followed their special finding in the third count that Jackson's diploma had not been obtained on a three years' course of study, as required by law, and that his statement to this effect and his declaration deposited with the Medical Board for this colony was untrue. What the judge's opinion of the verdict was appeared when he not only refused to certify for costs, but also ordered the schedule of certificates of attendance on the English lectures to be impounded, and said that were W. J. Jackson present in Court he would have him committed for trial for having knowingly made a false declaration.

The sequel of the case shows the difficulties which beset private medical practitioners, who undertake to expose for the public good such impostures as that practised by Jackson. Having obtained a verdict in his favour on three out of the four counts in the indictment, Dr. Goode was legally entitled to have the greater part of his costs paid by the plaintiff. Before he could obtain them, Jackson had sold off and left the colony, and Dr. Goode is, therefore, saddled with an expense of £500 for costs, besides losses resulting from five days' absence from practice in attendance at the Court. The case is one which entitles Dr. Goode to the sympathy of every properly qualified medical man in the colony, if not to some practical proof of their recognition of the public service he has rendered; and to those at home who are engaged on the elaboration of a new Medical Act, it shows how important it is that the provision recommended by the Royal Commission under which medical prosecutions would be undertaken by the Public Prosecutor or Attorney General, should be extended so as to include in the colonies the colonial law officers. This would be all the more necessary if, in future, as has been proposed, colonial qualifications and degrees were admitted to registration by the General Medical Council.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 22nd, 1883.

Anwyl, James Norman, Devon and Exeter Hospital.
Curnock, Wesley, Portland Villa, Leamington.
Cuthbert, William Hawkins, The Grove, Newtown, Montgomeryshire.
Mander, Percy Robert, Grimsbury, Banbury.

The following gentlemen also on the same day passed the Primary Professional Examination.

Barton, Henry Thomas, London Hospital.
Bindley, Victor Norman, London Hospital.
Dodson, Arthur Edward, Charing Cross Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly Examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, March 5th, 6th, 7th, and 8th, the following candidates were successful:

For the Licences to practise Medicine and Midwifery.—George Lowbridge Baker, London; John William Gormley, Drogheda; Timothy Howard, Sandymount, Dublin; William John Vivian Rowe, Rathgar, Dublin.

For the Licence to practise Medicine only.—Thomas David Collis Barry, Liverpool.

For the Licence to practise Midwifery only.—William Robert Hamilton, M.D., M.Ch. Roy. Univ. Ireland, Fivemiletown, co. Tyrone; John Colclough Hoey, Kingstown, co. Dublin; William McGee, Donnybrook, co. Dublin.

The following Licentiates in Medicine, having complied with the by-laws relating to membership pursuant to the Supplemental Charter of December 12th, 1878, have been duly enrolled Members of the College:

Andrew O'Kelly Nolan, Lic. 1865, Gort, co. Galway; Richard Marlay Blake, Lic. 1876, Dundalk.

MEDICAL VACANCIES.

The following vacancies are announced:

BARONY PARISH OF GLASGOW.—Medical Superintendent of the Lunatic Farm Asylum. Salary, £500 per annum. Applications by April 10th.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications by April 7th.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Assistant Physician. Applications by April 6th.

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by April 7th.

DARLINGTON HOSPITAL.—Junior House Surgeon. Salary, £100 per annum. Applications to C. I'Anson, Esq., Fairfield House, Darlington.

KILLARNEY UNION, Coom Dispensary.—Medical Officer. Salary, £120 per annum and fees. Election on the 5th proximo.

KINGSBRIDGE UNION.—Rural Sanitary Authority Medical Officer of Health. Salary, £100 per annum. Applications by April 6th.

LINCOLN COUNTY HOSPITAL.—House Surgeon. Salary, £100 per annum. Applications by April 23rd.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum. Applications by March 31st.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary, £100 per annum. Applications to the Chairman of the Committee by April 25th.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, AND LUNATIC HOSPITAL OR ASYLUM.—Honorary Assistant-Physician. Applications by March 31st.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.—Resident Physician. Applications to Messrs. Henry and Scott, 20, St. Andrew's Square, by April 7th.

THAME UNION.—Medical Officer of Workhouse. Salary, £40 per annum. Applications by April 11th.

THAME UNION.—District Medical Officer. Salary, £100 per annum. Applications by April 11th.

VICTORIA DOCK DISTRICT PROVIDENT DISPENSARY, London, E.—Assistant Resident Medical Officer. Salary, £120 per annum. Applications by April 4th.

WARWICK COUNTY LUNATIC ASYLUM.—Salary, £120 per annum. Applications to the Superintendent.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, Welbeck Street, W. Assistant Physician. Applications to P. F. Proctor, Secretary.

MEDICAL APPOINTMENTS.

BASS, F., M.R.C.S., appointed House-Surgeon to the Royal Cornwall Infirmary.

FARMER, S., L.R.C.P., appointed District Medical Officer for Phillack, Gwinear and Gwithian, *vice* T. Sanctuary, M.D., resigned.

FARMER, S., L.R.C.P., appointed Public Vaccinator for Gwinear and Gwithian.

FARMER, S., L.R.C.P., appointed Surgeon to the Mellanear Mining Company.

FARMER, S., L.R.C.P., appointed Surgeon and Agent to the Coastguard Station at Gwithian.

HARDWICKE, E. H., L.R.C.P. appointed Medical Officer to the Solihull Hospital for Infectious Diseases.

HASBROUCK, S., M.D., appointed Resident Surgeon to St. Mark's Ophthalmic Hospital, Dublin, *vice* J. J. Robinson, M.B., resigned.

HOBART, N. J., M.D., appointed Consulting Surgeon to the Cork Ophthalmic and Aural Hospital.

HORROCKS, Peter, M.D., appointed Assistant Obstetric Physician to Guy's Hospital.

WILLIAMS, W. C., B.Sc., etc., appointed Professor of Chemistry to the Firth College, Sheffield, *vice* Professor Carnelley, F.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

LITHGOW.—On March 10th, at Stirling House, Farnborough, Hants, the wife of T. G. Lithgow, L.R.C.P.Lond., of a son.

DEATHS.

BURT.—On January 2nd, at sea, on board the ship *Alexander Duthie*, J. Kendall Burt, M.B., of Kendal, Honorary Secretary to the Border Counties Branch of the British Medical Association.

ISBELL.—On March 18th, at Wye Bank, Hereford, Richard Woodward Isbell, L.R.C.P.E., L.R.C.S.E., aged 30.

MCLINTOCK.—On March 25th, at the Grove House, Church Stretton, Salop, J. R. McLintock, M.D. Friends will please accept this (the only) intimation.

HEALTH OF FOREIGN CITIES. — It appears from the statistics, published in the Registrar-General's return, for the week ending the 24th instant, that the death-rate recently averaged 35.6 per 1000 in the three principal Indian cities; it was 33.8 in Calcutta, 34.7 in Madras, and 35.2 in Bombay. Small-pox caused 107 deaths in Bombay and 14 in Madras, and cholera 27 in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-three of the largest European cities, was 30.8, and was 4.8 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 42.3, and showed an increase; the 753 deaths included 24 from scarlet fever, 23 from typhoid fever, and 13 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania — the death-rate averaged 25.8, and ranged from 18.8 in Christiania to 27.7 in Copenhagen; the deaths in Stockholm included 10 from measles and 4 from scarlet fever. In Paris, the death-rate was equal to 30.5; 43 fatal cases of diphtheria and croup, 39 of typhoid fever, and 9 of small-pox were recorded. The 215 deaths in Brussels included 3 fatal cases of small-pox, and were equal to a rate of 27.4. The death-rate in Geneva did not exceed 19.3. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.7, and ranged from 26.1 in Amsterdam to 30.1 in the Hague; diphtheria and croup caused 18 deaths in Amsterdam, and small-pox 7 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the mean death-rate was 28.8; the rates in these cities ranged from 22.6 and 23.8 in Berlin and Dresden, to 34.4 in Munich and 41.3 in Prague. Six deaths from enteric fever were returned in Prague, and diphtheria showed fatal prevalence in most of these German cities, but especially in Dresden and Berlin. The death-rate averaged 32.5 in three of the principal Italian cities, being 31.0 in Turin, 32.1 in Rome, and 36.3 in Venice; diphtheria caused 12 deaths in Turin and 6 in Rome, while 4 fatal cases of measles occurred in Venice. The 133 deaths in Lisbon were equal to a rate of 34.8. In four of the largest American cities, the mean death-rate did not exceed 26.1; the rate ranged from 21.3 in Baltimore to 29.3 in New York. Small-pox caused 20 deaths in Baltimore and 6 in Philadelphia; in the latter city 20 fatal cases of diphtheria, and 13 of typhoid fever, were also returned. Diphtheria was more or less fatally prevalent in each of the other American cities.

HOT WATER AS A BEVERAGE. — A physician writes, in the *World of Science*, some very interesting things regarding what to drink. "The habit of drinking strong tea, or black coffee, directly after dinner, is especially bad, and certainly interferes with digestion. At breakfast-time, a healthy man has all his sleep in him, and surely it is then unscientific for him to inflict upon his system strong tea or coffee. At 'tea-time,' tea or coffee may well be indulged in moderately; the bulk of the day's work is done; the body not only wants rinsing out, but fatigue is felt which may well be counteracted by the use of a mild stimulant, such as tea; and bedtime is not yet so near that sleep is thereby interfered with. Most nations that drink coffee largely get a sallow skin; and I am inclined to think that the carbonaceous matter of the roasted coffee, when so largely and frequently taken, may perhaps have something to do with this. For hardworking people, who are not corpulent, I should suggest the thick flake-cocoa as the healthiest and most nutritious breakfast beverage. For those who do not want fattening drinks, and who often cannot digest cocoa, I should say drink hot water at breakfast. Those who dine late, and make their dinner their main meal, need a diluent drink an hour or two afterward; and, if they drink tea, it keeps them awake, or makes them irritable and nervous. I find, for myself, that dining solidly, as I am obliged to do when I have done my work (7.30 P.M.), and often needing to work from 9 to 11, a tumbler of hot water brought into my study or laboratory is the best and wholesomest drink, and, after a few evenings, it will be as much relished as the usual draught of tea. The hot water assists to complete the digestion of residual food, it acts upon the kidneys, and rinses out the effete matters, and thus will be found to wake one up sufficiently, and neither to injure the stomach nor to keep the brain awake after bedtime. In cold weather, warm water is by far the best drink at dinner-time; and, in hot weather, a draught of warm water is far wholesomer and more cooling than cold or iced water."

VACCINATION.—Mr. E. S. Machin of Erdington, near Birmingham, in the Aston Union, has received a fourth grant of £7 15s., from the Local Government Board, for efficient vaccination.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Dr. De Watteville will show a new Method of obtaining Light for Medical Purposes. Dr. Symes Thompson will read a paper on the Alpine Winter Health-Resorts. Mr. Benton will show a new form of Diet-Chart, and a form of Feeding-Cup. Dr. Cullimore will make some remarks on the Use of the Moxa in Chronic Affections of the Spinal Cord.—Odontological Society of Great Britain, 8 P.M. Casual Communications by Mr. Ackery and Mr. Lucas. Mr. J. Blanc Sutton: On the Development of the Lower Maxilla. Mr. Alfred Coleman: On Spontaneous Fracture of Teeth.

TUESDAY.—Pathological Society, 8.30 P.M. The Morbid Anatomy and Pathology of Diabetes, by Drs. Frederick Taylor, Finlay, Hale White, Ralfe Stephen Mackenzie, Seymour Taylor, etc.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown. The following papers will be read: Dr. Fancourt Barnes: A Case of Labour with Atresia Vaginæ. Dr. Herman: On Gangrene of the Vulva.—Epidemiological Society of London, 8 P.M. G. B. Longstaff, M.B.: Phthisis, Bronchitis, Pneumonia: Are they Epidemic Diseases?

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. Sidney Phillips will show a case of Double Congenital Dislocation of the Radius. Dr. Silcock will show a specimen of Tubercular Ulceration of the Bladder, Testicle, Kidneys, etc. Dr. John Williams will read the paper of the evening: Antiseptics in Midwifery in Lying-in Hospitals and Private Practice.

FRIDAY.—West London Medico-Chirurgical Society, 8 P.M. Ordinary Meeting.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

AN APPEAL.

SIR,—May I ask you take some notice of the accompanying circular? It is a very sad case. Dr. Brown and myself were fellow students at Guy's, he is only 37 years of age, and up to December last was hard at work in his profession with Dr. Jeffery at Eastbourne. He is now paralysed on the left side, there has been no return of motion or sensation since the seizure, and he is developing symptoms which point to the implication of the spinal cord. He was in practice at Beckenham for several years before going to Eastbourne, and was presented, on leaving that place, with a purse of 250 sovereigns, and only just lately a few friends at Eastbourne gave him a chronometer and chain. He was nominally partner with Dr. Jeffery at a salary, which, of course, with his illness has ceased. The committee contains nearly all the local gentlemen of importance, and I am also willing to receive and acknowledge subscriptions on behalf of that committee, and forward any sums to the honorary secretary, Rev. E. E. Crake.—Yours faithfully,

FREDERICK WALLACE,
District Honorary Secretary, Metropolitan Counties Branch.
March 28th, 1883.

*** The circular to which Mr. Wallace refers, gives the names of the committee—nineteen in number, and states that, at a meeting of the committee, held on Monday, February 26th, the following resolutions were unanimously passed: "That a fund be raised with a view to render pecuniary aid to Dr. Charles R. Brown and his family under the present unhappy circumstances in which Dr. Brown's sudden affliction has placed them." The committee earnestly invite subscriptions in aid of the fund. They deeply regret to say that Dr. Brown's illness is of so serious a nature that there is no hope that he will ever be able to resume the active exercise of his profession. The early age at which this calamity has befallen Dr. Brown has deprived him of the opportunity to make provision for his wife and young family (consisting of five children), who are thus left entirely unprovided for.

J. M. C.—We fear the author is beyond the influence of remonstrance on such subjects, and is quite aware of the highly objectionable nature of the course which he takes.

LICENCES AND DEGREES.

SIR,—Your answer to the question of "M. S." in your issue of March 3rd, having elicited no comment in the JOURNAL, I shall be glad if you can find room for a few remarks.

You say, "A medical man holding the qualifications named (L.R.C.P., Edin., L.R.C.S.I., and L.M.), and being registered, has an undoubted right to describe himself to the public as one who professes to cure disease." No one, I think, is likely to dispute that proposition; but surely it holds good regarding every registered practitioner, whatever qualifications he may hold; and if that be so, is it in the latter equally as in the former case, "a mere matter of good taste and professional etiquette," whether a man style himself Dr. or not? I think such an argument is a *reductio ad absurdum*.

The *vox populi* no doubt dubs all practitioners alike, Dr., but that fact gives the L.R.C.P. no greater reason (I will not say right) for calling himself so, than it gives his neighbour the L.S.A., or M.R.C.S.; and to most educated people the title of Dr. implies, in our profession as well as in divinity, law, music, etc., the possession of an university degree, and not a mere collegiate diploma; but your argument would permit its assumption by all registered men.—Yours faithfully,
March 13th, 1883, VERAX.

*** Our correspondent has omitted two important clauses from the sentences which he quotes, which materially alter their meaning. We said that "a medical man holding the qualifications named, and being registered, has an undoubted right, under the Medical Act of 1858, to describe himself," etc.; that is, he has a legal right to do so; and since the Act, which prohibits any but a registered person taking medical titles, does not specify which particular title each is to take, we added, "it is in this respect (*i.e.* in a legal sense) a mere matter of good taste," etc.; that is to say, no penalty is incurred, and no law broken. This, it will be perceived, is a mere statement of facts; we carefully avoided entering into controversy as to the use of the title by licentiates, and contented ourselves with stating what is, we believe, the ordinary usage of English professional circles.

A "PROVINCIAL SURGEON," No. 2, should put the facts before the Registrar of the Pharmaceutical Society, Bloomsbury Square, London.

GUIDE TO THE MEDICAL SERVICE.

SIR,—Mr. Francis will find a good deal of information on the subjects mentioned in his letter in a little book published by Dr. E. Diver, entitled, I think, *What Shall be my Practice?*—Yours faithfully,
316, Upper Street, N., March 24th, 1883. FRANCIS JOHN BUCKELL.

MEDICINE AND PHARMACY.

SIR,—The questions at issue are—1. Does the dispensing and sending out of medicines by medical men, whether charged for or not, lower the status of the profession, and give it a trade aspect to the public? The frequent remark of patients who notice their accounts is, "I have only had so many bottles of medicine," implying that they are paying for their medicine, and not for advice, and looking upon it as purely a trade transaction. 2. Are medical men really anxious, or do they care to raise the social status of the profession by sacrificing any profit they derive by the sale of their medicines; and are medical men generally fully aware of the position they ought to hold? If so, why is it that, while the clergyman of the parish, by whatever means he may have entered the Church, is noticed by the best families, the doctor is looked upon as little better than a tradesman, and is treated accordingly.

In every town and important village, there is usually a medical man who has the M.D. degree. The order of precedence is: Doctors, Esquires, younger sons of Knights of the Garter, younger sons of Baronets, younger sons of Knights of the Bath, younger sons of Knights Bachelors, clergymen; so that, in point of fact, he is six above the clergyman in the order of precedence; but does he take it, and does the M.D. try to do so? The public are probably ignorant on the matter, and therefore their attention should be called to it, and every M.D. should get the order of precedence inserted in his local newspaper, with an article calling attention to it; and let the doctor stick up for his rights. If people do not know how to treat them, they should be told.

And now, another word on pharmacy. Let all the M.D.'s unite to get an Act passed to make it illegal for medical men to dispense their own medicines. What is done on the Continent can be done here; there no difficulty is found, and patients understand, and are perfectly satisfied to have their medicines supplied by the druggist. I hope, in any new Medical Act, such a clause will be inserted, and also that registration will be made compulsory; that no one will be allowed to practise without being registered, under heavy penalties; and that no document signed by a medical man shall be considered legal unless the word registered be written after name and qualification; and that registrars be not allowed to accept certificates signed by medical men unless so worded, and that the use of the word registered without being so be considered a felony. This, in a great measure, would prevent illegal practice.—Yours faithfully, AN APOTHECARY.

SIR,—There is a view of this question which has not been taken up by any of your correspondents. It is this. Dispensing by medical men leads indirectly to quackery of the worst description, in short, to imposition. It is a common custom in some practices for eight-ounce bottles to be dispensed, to be taken in ounce doses every three hours. A patient will, naturally, finish this in two days, if taken every three hours; or, if six-ounce bottles be used, with a similar dose, even three times a day, he will finish the mixture in two days. Perhaps 2s. 6d. is charged for a six-ounce mixture of this description, and a similar bottle could be procured from a druggist for 1s. 3d. This is, in my opinion, wrong; for, in addition to the 2s. 6d., a fee for a visit is charged. The reason that such a charge is made is simply this, that medical men make no many bad debts that an exorbitant profit is required. Besides, over and above this, a practice conducted on such a system is not scientific, and patients are more likely to be very chary of sending for a medical man who sends a new bottle of physic every day, or every other day. It is much better to charge for medicine, just as much as will give you a fair profit, say 1s, per mixture, and to visit your patient more frequently, and charge fairly for your visits. The system here recommended is much more followed in Scotland than in England, and I am certain of this, that it is less likely to lead medical men to be regular tradesmen, and is more likely to keep up the dignity of the profession. Scotchmen, on coming to practise across the border, always remark that the medical profession is much more of a trade in England than it is in Scotland. The difference between the two countries, I ascribe to the practice in England being still largely influenced by the old apothecary system, which in Scotland has never had a foothold. From what I have said, I think it is clear to an unbiassed mind, that were we, as a body, clear of drugs, we should occupy a much higher position as a profession than we do. When the public see a man pushing medicine into his patients, and sending them a mixture every day, they at once think there is something wrong about it, when they do as well under another practitioner who does not give one quarter the quantity of physic. Because the public like plenty of physic, it is no reason why we should pander to a depraved appetite, and impress on them the belief that they must be saturated with medicine before they can get rid of the mildest ailments. Sensible people see through this system very quickly; and medical men, in many instances, instead of acquiring the character of scientific philanthropists, are looked upon as little better than pettifogging attorneys; and doctor's bills, and the doctor's visits are dreaded as bugbears; and people when they get into the doctor's hands, wish they were out again. The labourer is certainly worthy of his hire, but that is not what I am striking at. I am anxious to point out, as I once heard Mr. Lister say, that there is no profession where there are greater temptations to quackery than in the profession of medicine. In conclusion, prescribing is preferable to dispensing, for the following cogent reasons. 1. It tends to a more scientific line of practice. 2. It is generally a kind of practice in which the receipts bear a greater equality to the bookings than in a dispensing practice. 3. It removes a source of great temptation to indulge in quackery. 4. It carries out a simple act of justice to the druggist, by permitting him to do the work for which he has been trained and licensed, and receive the pecuniary benefit of his work. 5. If generally adopted, it would raise the present position of the medical man in society.—I am, sir, yours, ONE WHO KNOWS.

COLONIAL PRACTICE.

SIR,—Can any of your readers give me any information respecting the chance of practice there is for a man of good health, aged 40, and holding degrees M.D., M.R.C.S., L.S.A., in New Zealand, Australia, or at Winnipeg, Manitoba; any information as to kind of life, fees, and class of work? I am married, and no children.—I remain, sir, yours obliged, M.D.

PRURIGO PODICIS.

SIR,—A patient of mine told me lately that a weak solution of sulphurous acid was of great benefit to him when suffering from prurigo podicis. He did not know the precise amount of dilution, but it was not so strong as to cause any smarting or irritation.—Your correspondent of last week might give it a trial.—Yours truly, JOHN KENNEDY.
Elie, March 19th, 1883.

HERBALISTS AND CERTIFICATES OF DEATH.

SIR,—Will you kindly inform me in your columns whether a herbalist, whose name does not appear in the *Medical Register*, has any right to give a death-certificate? In the case in question, the ordinary certificate form was duly filled in after death, and accepted by the registrar, by a man who after his name added M.D.U.S.A. Is such a certificate valid? If not, to what extent is the writer of it answerable to the law? As this is one of many of the same sort of cases, I should be glad to have your opinion as to the best course to adopt to put an end to this bogus practice. Perhaps the Medical Defence Association may care to have particulars.—Yours sincerely,

A. B. C.

*** There is nothing illegal in any unregistered medical practitioner, quack, or herbalist, filling up a death certificate form, unless there be a false pretence of being a registered medical practitioner. Such a certificate, however, is distinctly not a legal medical certificate within the meaning of the Births and Deaths Registration Act, 1874, and probably "A. B. C." is mistaken in believing that the certificate in question was so accepted by the registrar of births and deaths, as this would be in direct contravention of the official instructions regulating this part of his duties.

DENTIST.—We are not aware of any etiquette on the subject to which you refer in your letter. You had better address one of the dental journals.

GERMAN MEASLES.

SIR,—I must apologise for not having expressed myself more distinctly. I said: "Can 'German measles' spread as either scarlatina or measles?" What I meant by this was: Can German measles, when it spreads, appear in the form of scarlatina or measles? It seems an absurd question to ask, but it was put to me by a clergyman, who told me that the medical officer of health had so stated.—I am, sir, yours truly,

A MEMBER.

C. J. D.—Awaits insertion at the first opportunity.

PREVENTION OF LACERATION OF THE FEMALE PERINÆUM.

SIR,—I have found the preventitive treatment described by Mr. Duke in the JOURNAL of March 10th last, a very safe and sure way to prevent laceration of the perinæum. I do not remember having noticed it in any work on Midwifery. Having had many cases to attend, common sense led me to adopt the practice; and an hour spent at the bedside assisting the dilatation with each pain, I am sure accelerates the completion of labour, and invariably saves the perinæum from rupture. I am, of course, writing in respect to first labours.—I am, etc.,

AN ASSISTANT.

DR. HARRIS (Redruth).—We do not know of any such card from any recognised authority.

THE TONGUE IN CEREBRAL DISEASE.

SIR,—Will any of the readers of the JOURNAL kindly inform me whether they have observed the following symptom in cases of cerebral disease; viz., a slow interrupted manner of protruding and retracting the tongue, most difficulty apparently being experienced in withdrawing the organ into the mouth? I have seen this in two patients, one suffering from tubercular disease of the brain, the other from pyæmia supervening on scrofulous inflammation of the lymphatic glands. Both patients died. In the first, numbers of tuberculous tumours (165) were found in the brain-substance and in the sulci; in the second, there was intense congestion of the vessels of the pia mater and brain-substance, with effusion of two ounces of serum into the left ventricle.—Remaining, yours truly,

W. J. LE GRAND, Surgeon A.M.D.

8, St. Joseph's Terrace, Dublin, March 28th, 1883.

M. O. H. (Plymouth) will find particulars required in Mr. Burdett's book on *Cottage Hospitals* (Churchill), and can get further information on application at the Local Government Board.

HYPERIDROSIS.

SIR,—Your correspondents "C. H. F. R." in the JOURNAL of the 10th, and "H. A. L." of the 24th instant, will confer a great benefit by kindly stating if, in their opinion and experience, the treatment they recommend will prove serviceable in that obstinate variety axillary hyperidrosis—a case of long standing, equally profuse in winter as summer, strictly confined to the axillæ, and for which numerous drugs have been tried in vain.—I am, etc.

AXILLA.

PROPRIETAS.—We know of nothing worth attention which has been recently written on the subject.

CONCENTRATED INFUSIONS.

SIR,—Will one of your correspondents kindly inform me how to make concentrated infusions of such drugs as gentian, calumba, or cascarilla, so that they will keep good and clear, similar, in fact, to those sent out by the wholesale druggists?—I am, etc.,

M.R.C.S.E.

ERRATA.—In the JOURNAL of March 10th, page 464, column 2, line 31 from bottom, *for* "1.3 grains," *read* "1.3 per cent."—In the JOURNAL of March 24th, page 568, last line of column 2, *for* "589," *read* "584."

LORD DEAS AND MEDICAL MEN.

SIR,—In your issue of March 3rd you gave the following statement by Lord Deas at the last Glasgow Circuit Court as to the judging of insanity: "No persons whatever are better judges of whether a man is or is not insane in the eye of the law than an intelligent jury. Doctors are mere witnesses; you are the jurymen and the judges." When Lord Deas was present at his last Inverary circuit, on a medical certificate being read to him that "X. Y." was unable to attend on account of illness, he gave the audience the benefit of his opinion in regard to the value of this certificate in the following words: "If any of Dr. Z.'s friends are present, they may tell him that he does not know how to write a certificate." The cause of illness not being given, was the "front" of the certifier's offending. The cause of the illness of the summoned juryman might have, without injury to the public character, been written all over the court-house walls, but it was suppressed as a matter of principle, it being considered that the cause of an individual's illness is by no means, in a matter of this kind, to be divulged even to a judge. Was the certifier right?—I am, etc.,

M.D.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Carter, Liverpool; Mr. C. M. Kempe, New Shoreham; Mr. G. Hodgson Higgins, Leeds; Mr. W. A. Norris, Wokingham; Mr. J. Bain Sincock, Bridgwater; Dr. Stanley Haynes, Malvern; An Union Surgeon; Dr. Sutherland, Edinburgh; Dr. W. G. Curgenven, Derby; Mr. Charles E. Gosling, Moseley, Birmingham; Dr. Percy Boulton, London; Dr. Robertson, Buxton; Mr. W. T. Ramsden, Dewsbury; Dr. C. E. Glascott, Manchester; Mr. T. J. Dyke, Merthyr Tydvil; Dr. Mackenzie Booth, Aberdeen; Dr. J. C. Uhthoff, Hove, Brighton; Dr. Archibald, St. Andrew's; Messrs. Radclyffe and Co., London; Dr. Neil MacLeod, Edinburgh; Mr. Wm. F. Phillips, Andover; Dr. A. Sheen, Cardiff; Dr. Waters, Chester; Dr. D. E. Flinn, Kingstown; Mr. A. C. Hemmingway, Retford; Mr. J. T. Roberts, Burton-on-Trent; Mr. Robert B. Smart, Manchester; Dr. Harris, Redruth; Mr. E. H. Edlin, Plymouth; M.R.C.P.; Mr. J. Ekin, Aldershot; Mr. T. Cross, Norwich; Mr. E. Gordon, Stockport; Mr. B. Lane, Letterkenny; Mr. W. J. Le Grand, Dublin; Mr. T. G. Lithgow, Farnborough; Mr. C. S. Redmond, Gateshead-on-Tyne; Miss Bertha Muller, London; Dr. Harker, Burton, Westmorland; Dr. C. A. Cameron, Dublin; Mr. J. W. Springthorpe, Melbourne, Australia; Dr. L. Colbourne, Buenos Ayres; Mr. H. W. Hubbard, London; Dr. Edward Seaton, Nottingham; Mr. R. Tudor Risk, Harrow; Dr. Bond, Gloucester; The Secretary of the Faculty of Physicians and Surgeons, Glasgow; Messrs. Norton and Co., Llanelly; Mr. J. Warner Clark, Brighton; Our Aberdeen Correspondent; Mr. Abbott, Tunbridge Wells; Dr. H. J. Hardwicke, Sheffield; Mr. Thomas Laffan, Cashel; Dr. Churton, Leeds; Scrutator; Mr. John Gorham, Tunbridge; Dr. H. B. Baker, Lancing, Michigan: Mr. Thomas Leeds, London; Mr. C. J. Wright, Leeds; Dr. Collie, London; Dr. David Newman, Glasgow; Mr. Robert Gray, Armagh; Mr. W. Donovan, Whitwick; Dr. Bourneville, Paris; Dr. Robertson, Buxton; Mr. F. Waddington, Armley; Dr. W. J. Simpson, Aberdeen; Mr. F. J. Buckell, London; Mr. M. R. G. Behrendt, Burringham; Mr. E. S. Machin, Birmingham; Mr. T. Tinley, Whitby; Dr. R. J. O'Brien, London; Dr. Manson Fraser, London; Mr. Arthur Kempe, Exeter; Dr. Tripe, London; Dr. Norman Kerr, London; Dr. P. J. Gallway, Tramore; Mr. J. Goodwin Shea, Chesterfield; Mr. G. D. Orrock, Edinburgh; Dr. Denne, Edgbaston; Dr. F. Needham, Gloucester; Mr. J. S. Stevens, York; Dr. W. Russell, Carlisle; Multiple; Dr. Philson, Cheltenham; Dr. C. Browne, London; Dr. T. W. Hime, Sheffield; Mr. J. G. Parsons, Bristol; Dr Leent, Amsterdam; Dr. Saundby, Birmingham; Mr. W. E. Wyllys, Great Yarmouth; Dr. Sawyer, Birmingham; Dr. Herman, London; Dr. C. E. Oldham, Bleckingley; Dr. A. B. Garrod, London; Mr. A. C. Malley, Craven Arms, Salop; Mr. J. Russell Harris, Torquay; Dr. M. Thomson, Newport, Salop; Mr. C. B. Gabb, Hastings; Dr. E. G. Barnes, Eye; Mr. Arthur Cooper, London; Dr. C. E. Prior, Bedford; Mr. D. Hoadley Gabb, Hastings; Dr. Leech, Manchester; Mr. George Eastes, London; Mr. G. H. Hart, Harborne; Mr. E. S. Dutton, Tenby; Dr. Andrew Wilson, Edinburgh; Dr. John Shea, Reading; Mr. W. A. Buchan, Manchester; Our Glasgow Correspondent; Dr. McKeczie, Glasgow; Mr. John A. Rafferty, London; Mr. M. D. Makuna, London; Dr. W. E. Hadden, Liverpool; Dr. Joseph Rogers, London; Mr. W. D. Rosario, Lahore; Dr. Arlidge, Stoke-on-Trent; Mr. W. Townsend, Cork; A District Medical Officer; Mr. J. Stopford Taylor, Liverpool; Mr. C. Hall Penn, Anstey, Leicester; Mr. Charles Card, Bath; Messrs. Wyleys and Co., Coventry; Mr. T. G. Lithgow, Farnborough; Mr. F. Spence, Manchester; Mr. G. D. Porter, London; Mr. A. Kempe, Exeter; Dr. F. Barnes, London; Mr. H. G. Armstrong, Reading; Division of Labour; Dr. Acland, Oxford; Dr. Eklund, Stockholm; Mr. T. Wallace, London; Dr. Walker, Peterborough; Mr. R. W. Savage, London; Mr. C. Sanders, Birmingham; Dr. A. W. Sandford, Cork; Dr. Bernard, London; Dr. O'Connor, London; Dr. Mortimer Granville London; H. C. P.; etc.

BOOKS, ETC., RECEIVED.

A Treatise on Fractures. By Lewis A. Stimson, B.A., M.D. With Three Hundred and Sixty Illustrations on Wood. London: J. and A. Churchill. 1883.

The Student's Guide to Dental Anatomy and Surgery. By Henry Sewill, M.R.C.S., L.D.S. Second Edition. London: J. and A. Churchill. 1883.

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THE LUMLEIAN LECTURES
ON
URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

BY ALFRED BARING GARROD, M.D., F.R.C.P., F.R.S., ETC.,
Consulting Physician to King's College Hospital.

LECTURE II.

(Continued from page 603.)

LET us now study more closely these two forms of renal calculus, and let us begin with the more simple kind. I will select one which is very minute indeed, a mere point of matter; this, when placed in a small cell under the microscope, presented an appearance which is exhibited in the enlarged drawing on the screen.

It is seen to be irregular on its surface, as if composed of a number of little beads or grains aggregated together. Let us now watch the result of putting into the cell a few drops of a solution of carbonate of lithium. After a few minutes, the superficial beads became more or less transparent, and exhibited, in many instances, the appearance of small cells which had been denuded of their contents. The little calculus soon has a translucent ring around it, which becomes broader and broader as the action of the carbonate of lithium spreads, the opacity of the calculus remaining in the centre only. Under the continued action of the lithia-salt, this last remnant of opacity also disappears, and the whole calculus is reduced to a translucent substance, which has the appearance of being made up of a great number of little vesicles. If polarised light be employed, this is seen to contain matter having a crystalline structure; but the still further continued action of the alkaline fluid ultimately removes this too, and the calculus is then seen as a mass apparently made up of colloid matter in a more or less membranous shape.

In these experiments, as well as in those made on the spheroidal cells of the urinary excretion of the lower animals, I have always employed a solution of carbonate of lithium, which has the advantage of not injuring the membranous structure of the substance; whereas Dr. Carter, in his examination of calculi, appears to have used the solution of potash of the *Pharmacopœia*—a preparation which tends to destroy that structure, and to mask, to a great extent, the character of the changes that occur. In the drawing on the screen are depicted the various appearances exhibited by one of the very minute seed-calculi during the progress of its solution by the lithium-carbonate.

Before proceeding to the examination of the more complex renal calculi, I wish again to draw your attention to the spherules from the excretion of the serpent and the bird, that you may see how they behave under like circumstances. Of course, the largest of these is very much smaller than the minutest calculus that we can make use of; but this fact in no way interferes with the observation of such spherules.

Let us first imagine that we put a particle of the white excretion on a microscopic slide, in a drop of alcohol, which does not alter the spherules; and, after covering it with a thin glass disc, examine carefully. Then the appearance depicted on the screen is seen; some spherules being large, some smaller, and some smaller still, till at length a size is reached which seems to be the smallest which they are capable of assuming. Next, let us place a moistened finger upon the thin upper glass, and rub it upon the powder for a few seconds, using a fair pressure; then, on re-examination under the microscope, the whole of the spherules have disappeared, and in their place are seen innumerable irregularly-rounded particles of a pretty uniform size.

If, instead of using pressure, we allow the alcohol on the slide to evaporate, and introduce a drop of a solution of carbonate of lithium, and then watch what follows, we shall see that the outlying spherules in the field are usually the first to be acted upon, and exhibit the following appearances. After a few minutes, some of the spherules show a transparent line around them, which, on close examination, is seen to be composed of transparent beads; this ring grows larger and larger, so that, in a short time, no opacity remains, save in the centre of the spherule. As time goes on, with renewed application of the alkaline solution, the dark central mass gets smaller and smaller, and at last altogether disappears, our original spherule being changed into a round membranous mass, without definite structure, containing crystalline matter which powerfully polarises light, which matter also in turn gives way under long-continued action of the lithia solution.

If we compare this description of what I may call the "dissolving view" presented to us by the changes in the normal spherule of the bird or reptile, with that before given of those which occur in the small or rudimentary calculus, we cannot help being struck by their close resemblance; in fact, whatever differences there may be, seem to be little more than differences of degree. Surely this must make us reflect on the possibility of there being a close relationship between the two, and may fairly suggest to us the question whether the rudimentary uric calculi found in man may not be merely aggregations of spherules—the product of the original cell-formation of the uric acid. In the case of the bird and reptile, we are sure that the spherule cannot have been deposited from uric acid previously dissolved in the urine, seeing that there is no such fluid to dissolve it; and it may be that, in the case of man also, the individual components of these calculi are simply the original cell-formations of uric acid, which have become somewhat altered in chemical composition, and rendered less soluble. If this be true, and if we can show that these rudimentary calculi are not produced by the precipitation of uric acid from the urine, we must at once remove them from that class of deposits which are called sand or gravel, seeing that these latter, whatever their size, have an altogether different structure. It is to the spherular grains and the more complex structures that I shall confine the name of renal calculi.

Dr. Prout, in his description of an uric acid calculus, speaks of the centre of uric calculi as non-crystalline in character.

In several renal calculi which I have examined, I have found some spherular bodies—masses of irregular shape, resembling much the partially broken-up pyramids, into which the spherules of the excretion from reptiles and birds frequently split when carefully rubbed and only partially disintegrated. I have also found crystals of oxalate of calcium, many of them octahedral in shape. From these examinations, I have formed the opinion that the appearances in the nucleus may arise from a slow alteration taking place in the first-formed or spherular urates, by the action of the fluid urine upon them, causing the gradual decomposition of the original ammonia salt, and an increase of its insolubility, leading, also, to the subsequent production of oxalate of calcium, which, we know, is often the result of the action of a ferment on uric acid.

I may here state that I have often found that the excretion of reptiles and birds, when acted on for a long time by weak solutions of carbonate of lithium, leave a residue consisting of the organic or colloid matter, mixed with crystals of oxalate and carbonate of calcium, and that these are often in the spherical form.

If, instead of a very small and rudimentary calculus consisting merely of an aggregation of grains, we take one of a larger size and more complex structure—one, for example, one-eighth or one-sixth of an inch in diameter—we find that, around this granular central nucleus, layers are arranged in concentric order, that is, the calculus becomes laminated, the number of layers depending greatly on the length of time during which it has been exposed to the action of the urine. These layers vary much in thickness, and also in colour, and probably are most of them originally composed of some urate rather than uric acid itself. The subsequent action of an acid urine on a deposited layer of an urate would often slowly reduce the urates into a state of free uric acid. In examining renal calculi which have this laminate arrangement, I have frequently found the central nucleus almost devoid of colour, and very different in this respect from the surrounding layers, which are generally of a pale or dark fawn colour. What is the cause of this peculiarity of the nucleus? The only explanation which at all satisfies my mind is, that the nucleus-granules have never been in a state of solution since they were formed in the kidney-cells, and, therefore, have never become re-crystallised with the colouring matter of the urine; in fact, that they are in a condition very much like that of the renal spherules of the lower animals. The colour of the layers is not at all difficult to explain; for, whenever uric acid or urates are deposited from solution, they invariably take with them the colouring matter of such solution, which becomes intimately united with the crystalloid, giving it an altered shape. Thus it appears to me that we have a rational explanation, both of the pale appearance or absence of colour in the nucleus and of the colour of the different layers which surround it.

I have now given my ideas on the subject of the formation of uric renal calculi, but I would wish them to be looked upon as such only—not as demonstrated facts. My object will be accomplished if they cause pathologists to reconsider their preconceived views, and if they become a starting-point for new investigations. It must, I think, be confessed that, up to the present time, the explanations of the origin of calculi have been either, on the one hand, most erroneous, or, on the other, most unsatisfactory.

Influence of Diet.—There can be little doubt that the occurrence of gravel and calculus is largely influenced by the diet; but on this subject I feel sure that the opinions frequently held are not altogether correct, and require to be reconsidered. As we shall find in our next lecture, that a gouty diathesis is so potent in the production of the diseases under review, it will be quite safe, in so far as the discussion of food is concerned, to assume that what tends to produce gout tends also to develop calculus, and that the diet which is of avail in the treatment of the one disease is equally so in the management of the other. It will be desirable to turn our attention to the principal groups of aliments, and ascertain what influence they have, not only upon the formation of uric acid, but also upon its condition with respect to solubility.

1. *Sugar.*—Much has been said about sugar as an article of diet in uric acid affections; and, of what has been said, much is certainly devoid of foundation. Nothing is more common than for a patient to tell one that he always avoids sugar, and looks upon it as a poison to the system, and a principle to be altogether shunned.

How do the facts stand with regard to sugar?

There are three kinds, which are commonly met with in different articles of food: *(a) Cane-sugar*, which, although it is most commonly seen and most largely cultivated as a separate article of diet, is yet much less common than *(b) Glucose*, or grape-sugar, which so extensively pervades the vegetable kingdom; and *(c) Lactose*, or milk-sugar, is a third kind, which gives the slight sweetness to the milk of different animals. These three forms of sugar are very closely allied to each other, both in physical properties and in chemical constitution. Cane-sugar, when warmed with a trace of mineral acid, is resolved into glucose, and undergoes the same change when taken into the stomach. Grape-sugar is also closely allied to starch; and the latter, under the influence of many chemical agents, and when taken into the alimentary canal, passes through the stage of dextrine into that of glucose. Both cane and grape-sugar are prone to undergo the alcoholic fermentation, and to be resolved, chiefly into carbonic acid and alcohol. Milk-sugar, or lactose, undergoes the alcoholic fermentation only indirectly, and much less quickly than glucose; still, milk does ferment with yeast. On the other hand, lactose is apt to undergo another change, and to be directly converted into lactic acid, with the production of some butyric acid. Besides these three, there are some other sugars existing in small quantities in the animal body; but these need not occupy our time.

The most common of the non-nitrogenised principles contained in food is starch, seeing that it forms seventy per cent. of wheaten flour; and almost the whole of many of the simple amylaceous articles of food, as rice, maize, arrowroot, tapioca, sago, etc.; also of the potato, turnip, carrot, and so on, when these latter are dried. It can be shown that, when taken into the alimentary canal, starch is soon changed into glucose-sugar by the action of the saliva and pancreatic juices; and, when cane-sugar is taken, the same change ensues—so that, however carefully sugar is avoided as an article of food, it is still abundantly formed in the canal when amylaceous matters are eaten; and the result is the same whether a pound of starch in any of its dietetic forms, or a pound of cane-sugar, be taken, glucose-sugar being formed in both instances.

There is a very popular idea that sugar causes what is termed acidity, and hence it is scrupulously avoided by many. Is this true? Between two and three years ago I was much struck at seeing an American surgeon of great repute, putting lump after lump of white sugar into his tea, and I asked him why he did so. He told me that, in the States, it is a common habit to take sugar thus as a preventative of heartburn, and that he took it for that purpose. His answer made a strong impression on my mind, and since then I have often questioned dyspetic patients as to their experience on this point. At first nearly all exclaim, "Of course sugar causes acidity," but as yet I have failed to find anyone who could assure me, from personal experience, that the eating of lumps of ordinary white sugar produces more so-called acidity than taking any other article of diet. Many of us probably know that the eating of a dry biscuit is often followed by the same symptoms in a severe degree. It must be borne in mind that I do not for a moment include sweetened fruits, and such-like substances in the same category as sim sugar. One can hardly believe that the eating of a lump of c sugar would seriously add to the glucose which is daily produce the alimentary canal of an individual living on an ordinary mixed d Let us see what has been found experimentally with regard to influence of sugar on the production of uric acid. Böcker says t the effect, in man, is to lessen the quantity of that principle, Bischoff and Voit have proved that, in dogs, starch produces same effect on the urinary excretion as sugar, so I think we n say that there is no increase in the uric acid when sugar is tak When, however, sugar is given to an animal along with a fi amount of nitrogenised food, it causes a marked diminution of eliminated nitrogen and, at the same time, a great augmentatio the weight of the animal; so that there is no doubt as to the fluence of sugar and amylaceous matters in fattening; they act fact by preserving the protein compounds from undergoing rapid metabolism as otherwise would take place.

Although the uric acid is not increased but rather diminished sugar, may not the taking of sugar cause that principle in the u to assume a less soluble form? May it not develop a greater amo of free acid in the urine? Dr. W. Roberts asserts that the acidit not increased either by cane sugar or by honey, which chiefly sists of glucose, and I know of no observations which indicate t the urine is rendered more acid by the taking of this extensi diffused article of food. The same negative result, as to the aci of the urine, has been observed in the case of fresh fruits, more, Wöhler has found that cherries, apples, and strawber either diminish the acidity or even cause alkalinity, through conversion of the vegetable salts which they contain into the bonates of the same bases. As we proceed we shall meet with o proofs that sugar does not necessarily influence the productio the diseases under consideration.

I must devote a few minutes to the discussion of a most imp ant subject, viz., the influence of different alcoholic beverages the production of uric gravel and renal calculi. We must remem that all such beverages contain alcohol united with different pro tions of water; some little more than this, others, however, con sugar, together with colouring and so-called extractive matters, salts of potash and lime, united with vegetable or mineral a Many wines, also, contain a certain amount of some free org acid. It is necessary to investigate the influence of the most portant of the constituents of these beverages upon the uri secretion, and first let us take alcohol itself.

1. *Alcohol.*—According to the experiments of Böcker and H mond, the uric acid appeared to be slightly increased in quantit the taking of alcohol, and even this is matter of doubt, and, o whole, its influence on the production of that principle may be garded as inconsiderable, nor is there any reason to suppose th sensibly affects the acidity of the urine.

2. *Distilled Spirits.*—In the various distilled spirits, as bra rum, gin, and whisky, there are found very small quantitie different ethers and essential oils, which, doubtless, modify to extent the action of the alcohol on the different functions, but no essential alteration in the constitution of the urine.

3. *Wines.*—The various kinds of wines, although they posses character in common, viz., the presence of œnanthic ether, still from each other in many important particulars, so that, to asce their properties and their influence upon the production of cal and gout, we must group them into at least two classes.

In the first division we have the natural light wines, in whic alcohol is small in quantity, not more than 10 per cent., a which the fermentation has been allowed to proceed till the of the sugar has become destroyed. These wines are rich a acid tartrates, and in racemates.

In the second division we may place the Peninsular win Spain and Portugal, the wines of Sicily and Madeira, and C pagne and the other sparkling wines. These all contain a con able quantity of sugar, owing to the arrest of fermentation has been induced by the addition of distilled spirit, for it m remembered that the process of fermentation is stopped wh per cent. of alcohol is developed. In this class of wines ther marked absence of the vegetable salts, which become insolu the addition of the spirit, forming the well-known crust dep on wine casks, which is known in commerce under the na argol.

Besides these two divisions, there are many wines which ar or less of an intermediate character; some, in their propertie proaching to our first, others to our second group.

In each class of wines we also find some which are whit

ich are red, the difference depending on the presence or of the colouring matter derived from the inner surface of e-coat. In many of the inferior wines there also exists much d, arising from the setting-in of the acetic fermentation.

question now arises, have we any facts with regard to the effects of different wines in the diseases which we are now ing? I think we have many, and much information which se to guide us in the prevention of such diseases. With o gout, our knowledge under this head is considerable, and serve as a pretty accurate guide in the case of calculus, ow close is the connection between that disease and gout, must not for a moment be supposed to say that all the hich lead to the one form of disease must necessarily pro- other.

, as I believe, be confidently asserted, with respect to gout, h an absence of alcohol in any shape, coupled with an ab- hereditary predisposition derived from alcohol-drinking s, the disease would be practically unknown; and that Noah, ing his vineyard and drinking the wine thereof, laid the ns of much misery for his descendants.

ost essential to separate the different kinds of alcoholic s from each other in estimating their tendency to produce Thus alcohol in the form of distilled spirits, although, en in excess, it causes serious mischief, injuring the liver, heart, and other organs, still has little or no power of pro- e uric acid diathesis, or, at any rate, the gouty development spirit-drinking countries, or among spirit-drinking families, known. Look at Scotland and its whisky-drinking classes ey are said not to be too sparing in their potations—the s practically absent; hardly ever seen in the hospitals. oland, where they drink a kind of arrack; the same holds physician from Warsaw, to whom I was once showing some out in my hospital wards, said that he was peculiarly inte- them, as it was the first time he had ever seen examples isease; and, in connection with this, I may mention that, loes spirit by itself fail to cause gout, but the combination nd sugar is harmless in that direction; for toddy, I am ually a sweet beverage.

however, we investigate the influence of wines, we shall erent result. Drinkers of the common light wines, such as Bordeaux and the Rhine wines, suffer but little; while, e same nations, those who indulge freely in beer, as do the ts of Berlin and Munich, for example, are by no means free results to their health.

nce shows, with respect to the influence of the different ines, that the natural light wines, in which the alcohol is mount, while there is an almost complete absence of un- matter, which contain also a considerable quantity of acid salts, are little liable either to produce gout, or to lead to tion of calculus or gravel.

other hand, the Peninsular wines, and those which resemble ch are stronger in alcohol, contain much unfermented d are almost devoid of the vegetable salts, have great ucing power, and, at the same time, lead readily to a of urine favourable to the production of gravel and

Liquors—Ale, Beer, Stout, and Porter.—We come, lastly, t liquors—ale, beer, stout, and porter. In the manufac- l of these, the fermentation is arrested at a particular as to leave what is called a "body"; in that they are lly fermented, they resemble, therefore, the Peninsular w, from my own experience, and I believe it is also the of all who have attended to the subject, I can confidently these beverages have a great tendency to produce the liathesis. Compare the hospitals of Edinburgh and Glas- hose of London. In the former, gout is scarcely known; r, the disease is common, the difference, as I believe, ly due to the different beverages drunk by the working the two countries; it is, in fact, the difference between l malt liquors.

en shown, therefore, that alcohol, in the form of distilled ough it is capable of producing the greatest mischief, use calculus or gout, and that the lighter and more fully wines are comparatively free from such power for harm; he other hand, the imperfectly fermented wines, such as , madeira, marsala, and champagne, as well as all malt e most prone to induce the different forms of disease he manifestations of the uric acid diathesis. It is now hat we should at least endeavour to ascertain what principle or principles, present in some of these alcoholic beverages, absent from others, lead to the development of this diathesis, or aggravate it when it is already manifested, owing to hereditary or other causes.

It cannot be the alcohol alone. This, I believe, can be fully and satisfactorily proved, seeing that large groups of people whose custom is to drink freely of distilled spirits are yet free, instances are to hand in Scotland, Sweden and Norway, and Poland. It cannot be the sugar alone; for, although the partially fermented wines and malt liquors contain sugar, yet sugar, added to distilled spirit, does not appear to produce the uric acid diathesis. It cannot be the acidity alone, for the wines which are most harmless, are quite as acid, or even more so, than malt liquors and the Peninsular wines, and many people, who strongly object to the least acidity in wines, will, nevertheless, often take lemon-juice to an extravagant extent.

If, then, neither the alcohol, nor the sugar, nor the acidity, by itself is the cause of certain beverages proving so injurious, is it a combination of any of these that does the harm? We already know that the combination of alcohol with sugar, and that of alcohol with acid salts, are innocuous as far as the uric acid diathesis is concerned. What, then, is there left for us to fall back upon in explanation of the peculiar properties which some of these beverages possess, while others are devoid of them? The only conclusion that I can arrive at, with my present knowledge—and it is the result of much thought during many years—is that it is something which is a result of imperfect fermentation, and you will find that it is those beverages in which fermentation has commenced, and has been allowed to proceed to a certain extent and has then been checked, which, of a certainty, cause gout, and, probably, lead also to the production of gravel and calculus. If I am asked to state more exactly what this principle is, I cannot do so; it may be an influence only, a condition of matter, a ferment. At present it is a mystery to me.

In connection with this subject, however, I must return for a moment to that of sugar, which I told you had, as I thought, been regarded askance without due cause.

I would say that I do not, for a moment, classify with sugar either sweetened fruits or vegetables; for I am quite sure that such articles of diet will frequently produce heartburn and other dyspeptic annoyances in individuals who are not in the least inconvenienced by sugar itself. I cannot help thinking that these contain a *something* which is not simple sugar, but a substance which is the result of the long contact of the sugar with the fruit or vegetable juices—a kind of semifermented matter; in fact, that same something which exists in the stronger wines and the various malt liquors. Of this I feel confident, that in many cases where sugar, whether by itself, or in tea, coffee, and light puddings, does not disagree, and where fresh fruit, although sweet, produces no discomfort, the combination of sugar with these juices, if time has been given for them to act upon each other, will often cause well-marked dyspeptic symptoms.

But it may be said: If so, a ripe orange cannot be a good thing to eat, as it contains both sugar and acid juice, and these substances have been in contact with each other for a long time. I answer: Not necessarily so. So long as the orange exists as a fruit, with its botanical structure intact, so long there may be no change taking place between the different constituents. We have a striking analogy to this in the case of the bitter almond. When whole, this seed contains the crystalline amygdaline and an albuminous ferment. Separate one of these from the other, and each, by itself, is innocuous; crush and moisten the almond, prussic acid is immediately formed, and the union of the two principles is the production of a deadly poison.

VACCINATION.—Dr. Lionel A. Weatherly of Portishead, Somerset, has received a third grant from the Local Government Board for efficient vaccination.

PAPER labels may be removed from bottles by wetting the surface; then hold for an instant over any convenient flame. The steam penetrates the label at once, and softens the paste.

IN the *Gazette Hebdomadaire*, M. Vigier states that camphor may be perfectly suspended, and become easily divisible, by the following formula:—Camphor, 15 grains; gum arabic, 30 grains; one yolk of an egg; and two ounces of decoction of linseed.

VACCINATION.—Mr. W. Blackburn of Uppermill, Saddleworth, has lately received a Government grant for successful vaccination in his district.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture I.—The Circulation of the Blood: a Problem in Hydrodynamics.

After preliminary observations, indicating the relations of anatomy and physiology, and showing that many physiological problems could not be solved by the methods of anatomy alone, but along with the methods of chemistry and of physics, the lecturer gave a brief account of the course of the circulation; and presented some of the difficulties met with in determining the physical conditions in a system so complicated, and so difficult of direct investigation. The object of the lecture was to show how many of these difficulties had been surmounted by direct experiment. The method followed by Dr. McKendrick is, to give a short account of the lives of the great discoverers, so as to add the element of personal interest to the narrative. He gave a sketch of the life of Galen, and described the notions as to the flow of the blood (it could not be called a circulation), which, on the authority of Galen, were accepted for fourteen hundred years. Galen performed, at least, one important physiological experiment; for, by opening an artery between two ligatures, he showed that it contained blood, and not air—thus upsetting the notions of Erasistratus and the doctors of the Alexandrian School. With some historical details, he passed on to Vesalius (1514-1564); gave a sketch of the career of that great anatomist, showing especially how he revolutionised anatomy by dissecting the bodies of men instead of the lower animals, as had been the practice of the Galenists. In particular, Vesalius described the position of the heart; he recognised the layers of fibres in its muscular walls; he investigated the structure and action of the valves; and he disproved the Galenic notion of apertures in the ventricular septum, by which, according to Galen, there was a mixture of the blood brought to the heart by the veins with the air brought to the left side of the heart from the lungs. Still, Vesalius had no notion of the circulation. Fallopius (1523-1562) investigated the anastomoses of vessels before the art of injection, invented by Ruysch (1638-1731), a century later. Columbus, a prosector of Vesalius, who died in 1559, was one of the first to have a notion of the pulmonary circulation; but he failed in recognising the heart as a propulsive organ. After dismissing the claims of Cæsalpinus (1549-1603) to having anticipated Harvey, he referred to Servetus (1509-1553), and expressed his opinion that he perceived the course of the circulation, from the right to the left side, through the lungs; and that he also noticed the change from venous into arterial blood. Servetus claims remembrance, not so much in having recognised the track of the blood, as in having said that respiratory changes happen in the lungs, and not in the left ventricle. He then showed that Fabricius ab Aquapendente (1537-1619) described the valves, and prepared the way for Harvey.

After a short statement of the ideas regarding the circulation held by the immediate predecessors of Harvey (1578-1657), he gave a sketch of the life of that distinguished man, and an account of how he solved the problem of the circulation. Harvey showed many reasons for accepting the view that the blood must pass from the right to the left side of the heart by the lungs; but he added to the notions of all his predecessors by showing that this was done by the propulsive action of the right ventricle. Partly by a determination of the amount of blood passing through the lungs in a given time, and partly by the result of experiment, by using ligatures, Harvey was forced to the conclusion that there must be a circulation. The lecturer showed how Harvey had not obtained these ideas by mere speculation, but by actual experiment on living animals. The heart was observed *in situ;* and by this one simple observation he dispelled the old notion that the pulse-beat was synchronous with the diastole of the heart. He showed that the pulse-beat occurred when the ventricle contracted. Harvey was not a random experimentalists. Before each experiment, he had before his mind the question it was designed to test. But, in addition, he was a thinker, and he had that faculty of insight belonging only to the highest genius. He was really the founder of the experimen school of physiology.

The circulation in the capillaries was first shown by Malpi (1628-1694), and thus the doctrine of the circulation was establish The lecturer then referred to the operation of the transfusion blood practised in animals by Lower and others about 1660, and done on a human being in 1667, as showing the acceptance of theory of the circulation. Physiologists then began to make careful and elaborate investigations as to the force of the heart, pressure of the blood, the velocity of the blood, and the phenom of the circulation. First alluding to Borelli (1608-1679), he sho how his conclusions were wide of the mark by the absence of from experiment, so that he estimated the force of the hear 180,000 pounds pressure; but the careful drawings of dis tions of the heart by Borelli indicated that he knew the sp arrangement of its fibres. The next who investigated this sub was James Keill, a Scotch physician practising in Northampton, was born in 1673, and died in 1719. He was the first to m quantitative estimates of the force of the heart, and fixed it at and a half ounces, the error being due to want of data from pr experiment. Then came Stephen Hales, the famous Rector of dington (1677-1761), who first measured the pressure of the bloo the vessels by direct experiment on living animals. By ca methods and calculations, he showed that the pressure was a $51\frac{1}{2}$ pounds—not far from the truth. The lecturer gave an acc of the life of Hales, showing his versatility and power in va departments of science. His works are models of research an clear exposition. In this respect they resemble the writing William Harvey, and the two books (the *De Motu Cordis* and *Hæmostatics*) might fitly be regarded as a kind of *principia* fo physiological student.

The lecturer next alluded to the researches of Thomas Y (1773-1829), published in 1808, in which Young showed (1) wh blood-pressure gradually diminishes from the heart to the peripl (2) why the velocity of the blood becomes less as it passes fro greater to the smaller vessels; (3) that the resistance is chie the smaller vessels, and that the elasticity of the coats of the ries come into play in overcoming this resistance in the interva tween systoles; and (4) that the contractile coats did not act propulsive agent, but in regulating the distribution of The lecturer claimed that, in this, as in many other investiga Young had anticipated later discovery and theory.

He then passed on to show that, during the present century, siologists had been striving to obtain more accurate data b employment of instruments by which measurements could be di made on the living animal. He described the hæmadynamo of Poiseuille, devised in 1826, and the modification of this in kymograph by Ludwig in 1847. The graphic method of registr originated with the Marquise d'Ons-en-Bray in 1734, and was sequently applied by various observers to the automatic rec of meteorological phenomena. In 1800, Thomas Young showe time might be recorded in a drum; and, lastly, James Watt d a method for recording the variations of pressure in his engin drum rotated by the engine itself. The lecturer showed ho kymograph registered mean arterial pressure.

With regard to the velocity of the blood, he exhibited the dromometer of Volkmann, invented about 1850; and the hæ chometer of Vierordt, devised about 1858. He also showe dromograph of Lortet and Chauveau, constructed in 186 criticised the instruments. The best instrument for deter velocity is the strohmuhr of Ludwig, invented in 1867. [The tachtometer, strohmuhr, and the sphygmograph of Vierordt kindly lent by Professor Rutherford.]

He then showed the gradual development of the sphygmograph the pulse measurer of Poiseuille, through the tubular sphygm of Hérisson, to the first sphygmograph of Vierordt. He refer to the method followed by King, in England, before the co tion of the sphygmograph, by which he showed the move an artery by the oscillations of a lever lightly placed upon last came the sphygmograph of Marey, now in the hands of physician.

He referred to the great labours of Marey, in develop graphic method, and described specially the classical experi a horse, performed by Chauveau and Marey in 1861, by whic determined the relative time and character of the movements right auricle, right ventricle, and apex-beat.

Lastly he summed up the results of all these observation short statement of the generally accepted theory of the circ thought out by G. H. Weber about thirty years ago. Did M

when he saw for the first time the steady flow of blood in the capillaries, ask himself the question: "Why is the current in the capillaries continuous, when the force driving it is the intermittent action of the heart?"

The next lecture will be on the relations of the nervous system to the circulation.

ON THE PATHOLOGY OF DIABETES: ESPECIALLY DEALING WITH DIABETIC COMA.*

By STEPHEN MACKENZIE, M.D., F.R.C.P.,
Physician to, and Lecturer on Medicine at, the London Hospital.

COMING to the meeting, prepared only to take part in a discussion on the pathology of diabetes, which was to have been opened by Professor Hamilton, I have been asked, in his unexpected absence, to introduce the subject. Though for some years past I have been paying special attention to the study of diabetes, I am not prepared, at twenty-four hours' notice, and without any materials for reference, to deal comprehensively with this large and interesting matter. It has seemed to me better, therefore, to confine my remarks to the modes of termination of diabetes, especially with reference to diabetic coma.

With the assistance of Dr. Gabbett, medical registrar, I have recently analysed the records of all the fatal cases of diabetes in the London Hospital during the last eight years and a half, and the results are given in the following table:

Analysis of all the Fatal Cases of Diabetes in the London Hospital, from the beginning of 1874 *to Midsummer* 1882.

Death by coma; no gross disease found *post mortem*			7
Death by coma; no *post mortem* examination	No signs of pulmonary or other visceral diseases during life	3	4
	With pulmonary disease during life	1	
Death by coma	Recent pneumonia or phthisis	4	8
	Old pneumonia or phthisis	4	
Cerebral hæmorrhage			1
Cerebral meningitis; coma			1
Cerebral tumour			1
Spinal cord disease and phthisis			1
Stricture of urethra; suppurative nephritis; coma			1
Scrofulous nephritis			1
Pneumonic phthisis			9
Scirrhus of pancreas; sudden collapse			1
Gangrene of foot; death rather sudden			1
Dermoid ovarian cyst; calcified mesenteric glands†			1
			37

From this series of cases, twenty-one of which have been under my own care, it appears that coma and phthisis are the two most common modes of termination of diabetes. It is with coma that I wish to deal to-day. Coma is a much more common ending of diabetes than is often supposed by those who see but few cases of the disease. In this series, coma of a peculiar kind was the termination of diabetes in nineteen out of thirty-seven cases, or in just over half the number. Of these nineteen cases of coma, in seven *post mortem* examination showed no gross visceral disease to which the coma could be attributed; in four cases without *post mortem* examinations, there was no *ante mortem* evidence of visceral disease in three, and in one there were well marked signs of pneumonic phthisis during life. Further, there were eight deaths from coma, with old or recent pulmonary disease found at the necropsy; in some of these the affection of the lung was insignificant, in others advanced. I must here remark that the coma that closed the scene in the cases of diabetes, complicated (or followed) by pulmonary disease, had certain special characters, to be presently described, showing its connection with the diabetes rather than with phthisis. It was not the mere loss of consciousness that terminates many exhausting diseases. Suddenly developing coma is an unusual ending of ordinary phthisis. Besides these nineteen cases, it will be observed that in three others death was by coma, but an obvious explanation was presented on *post mortem* examination—viz., cerebral hæmorrhage, meningitis, suppurative nephritis.

Dr. Frederick Taylor, in a valuable paper "On the Fatal Termination of Diabetes, with Special Reference to the Death by Coma," (*Guy's Hospital Reports*, vol. xxv, p. 147,) gives an analysis of the fatal cases in Guy's Hospital, which corresponds very closely with mine.

Coma	No visceral lesions	14		
	Visceral lesions inactive	3		
	Visceral lesions active	7	... ...	26
	No *post mortem*	2		
Coma (diabetic?) renal disease			... ...	3
Pneumonia; influence of coma doubtful		1		
Coma absent; no *post mortem*		2	... ...	3
Phthisis, pneumonia, Bright's disease, peritonitis without coma				11
				43

The occurrence of coma in diabetes is influenced by certain conditions, especially the age of the patient, the rapidity of the disease, and the state of the lungs. Thus, in my series of cases, the mean age of those dying of coma was 33.5, and the mean age of those dying without coma was 38.5 years; but this statement does not represent the full influence of age, for all the cases, with one exception only, dying at or below 25 years, died of coma. The rapid course of the disease, which as a rule is equivalent to severity, as also pointed out by Dr. Taylor, favours the occurrence of coma. The mean duration of my whole series of cases was rather over one year and three months, whilst, in cases of pure coma, it was only eight months. Of the deaths from miscellaneous causes, the duration was two years and two weeks, and, in the cases of phthisis without coma, it was one year and four months. There is another circumstance that influences the occurrence of coma, though I am not aware that anyone has drawn attention to this point; and that is freedom from, or only slightly developed, affection of the lungs. Thus, in my series, in the nineteen fatal cases, the lungs were found after death unaffected in seven; in three, in which there was no necropsy, there were no signs of disease in the chest during life; and the mischief in the lungs was only recent in four; so that there was either no pulmonary disease, or only recent, and in some slight, mischief in fourteen out of nineteen cases of diabetic coma. This has very important prognostic significance; for, when well marked signs of disease of the lungs are discovered in a case of diabetes, the probability is that the case will assume the characters of a rather rapid form of (pneumonic) phthisis; the sugar lessening as the pulmonary disease advances, and usually disappearing from the urine prior to the death of the patient. On the other hand, when pulmonary disease is absent or slight, the occurrence of coma is more to be feared, especially the younger the patient, and the more acute the disease. It is necessary, in order to understand the pathology of diabetic coma, to consider its mode of oncoming, and special characters.

Onset.—Pain in the epigastrium or hypochondria, often very severe, sometimes ushers in the attack, and may precede for several days the coma. Delirium, usually of a light garrulous kind, is observed in some cases. Rapidity of pulse is occasionally the first indication of impending coma. Vomiting and diarrhœa, separately or together, I have noticed in some cases for a day or two before the attack. Severe headache precedes the coma in others. Fatigue, as pointed out by Prout, and noticed by nearly all who have written on the subject, often determines coma, and the latter is thus frequently induced by a journey.

Special Features of the Coma.—One of the most striking symptoms in most, though its degree varies in different cases, is a peculiar laborious breathing—an "air-hunger,"—extraordinary efforts of filling the chest being made. The patient lies gasping for breath, like a person after violent exercise, whilst no condition in the respiratory organs accounts for its occurrence. Sometimes, this dyspnœa precedes the coma, sometimes the dyspnœa and coma appear together. The coma in most cases commences gradually. The patient can at first be roused, but it steadily progresses until it is profound. It occasionally commences more abruptly, and in a few cases passes off, usually to return. The surface of the body is generally cold, and the skin and mucous membranes livid; the pulse is rapid and small, and ultimately becomes uncountable. The external and internal temperature sinks exceedingly low, and I have known the temperature in the rectum to be little over 90° Fahr. This combination of coldness, lividity, and rapid pulse has led me for some time to call the condition "coma-collapse." Incontinence of urine is noticed in some patients. The breath has been noticed by some good observers to have a peculiar odour, like sour beer, vinegar, acetic ether, acetone, etc.; but in no case which I have observed has this been detected, though I have been on the outlook for it since 1874, and have directed the attention of those watching the patient to the point.* Dr. Frederick Taylor's experience corresponds with mine.

* Introduction to a Discussion in the Section of Pathology at the Annual Meeting of the British Medical Association in Worcester, August 18

† Said to have helped herself to codeia.

* I have, since reading this paper, seen a case of typical diabetic coma in which the breath had the characteristic acetone odour, and perchloride of iron turned the urine to a purple-brown. There was no necropsy.

It has been said that a high temperature is necessary for its occurrence, owing to the low volatility of acetone. The urine is also said sometimes to give off a similar odour, but I have not noticed it even when evaporated. In some cases, the addition of a solution of perchloride of iron to the urine produces a deep brown colour. This, which is a test for acetone, I have myself noticed in some cases.

Having thus briefly reviewed the circumstances in which diabetic coma makes its appearances, and its characteristics, let us consider the theories that have been advanced to explain it.

In 1874, Kussmaul drew attention to a remarkable mode of death in diabetes, in which extreme dyspnœa of a peculiar kind occurred with, or was followed by, coma. Previous observers, first Petters, later Kaulich and Cantani, had drawn attention to the presence of acetone in the excreta of diabetics; the latter also to its occurrence in the blood, and he described four types of acetonæmia. Kussmaul, however, was the first to subject this theory to experimental tests, and he thought that the intoxication by acetone resembled the respiratory phenomena and coma observed in diabetes. But he found that the quantity of acetone necessary to produce this state was considerable, and greater in amount than there was evidence of being present in patients dying of diabetic coma. He suggested that, "the long continued introduction of acetone into the blood might, in weak conditions of the nervous system, induce a chronic poisoning, which might suddenly assume an acute form, just as chronic alcoholism in drunkards breaks out into delirium tremens." Dr. Balthazar Foster, in 1877*, recorded a case of diabetic coma, drawing attention to a peculiar pale creamy condition of the blood which, on exposure to the air, acquired a pinker and brighter colour, assuming a magenta-like tint. Dr. Foster, together with Dr. Saundby, then tried the effect of mixing acetone with healthy blood, with the effect of producing exactly similar appearances as in the diabetic blood. In both the diabetic and acetonised specimens of blood, the microscope showed the creamy condition to be due to the presence of a large quantity of molecular matter, which looked like fat, but did not dissolve in ether. Under the microscope the acetonised blood corpuscles were seen to break down into granular *débris*. "Roughly examined, it looked like blood containing a good deal of fat, but neither the artificially acetonised blood, nor that of the boy, owed its appearance to fatty matter. The addition to fresh blood of chloroform, alcohol, or ether, failed to produce similar effects." Dr. Foster concluded from this case, from the experiments of Kussmaul, and the analyses of Petters, Betz, Rupstein, and others, that the coma was due to the development of acetone in the blood—acetonæmia. Similar appearances of the blood have been observed by von Jaksch and Dr. Norman Moore. In two cases of Dr. Frederick Taylor's series, the blood appeared milky. In none of the series of cases at the London Hospital has this condition been recorded.

I have often noticed the blood to be thick and dark; and one of the theories that have been advanced concerning its nature is that the blood is dehydrated. I mention this to show that this creamy condition of the blood is not general. The organs, after death, in some recorded cases, have emitted an acetone odour, but this has not been the case in any necropsy I have made. In one of the cases recorded by Dr. Taylor, the organs were examined after death by Dr. Goodhart and Dr. Stevenson, but no acetone was found. Acetone has been found in other diseases unassociated with coma. Though it has been detected in some cases of diabetic coma, it does not thus appear to be present in any considerable quantity in many, and the evidence is against it being a general explanation of the coma. In 1879, the late Professor Sanders and Mr. (now Professor) Hamilton published a paper in the *Edinburgh Medical Journal*, in which they showed that, in a case of diabetic coma, the blood had the peculiar pink colour, with milky or creamlike serum; and it occurred to them that the fatty condition of the blood might have given rise to fatty embolisms. Accordingly, Dr. Hamilton examined into this point, and found that the blood which had an acetone odour contained a quantity of fat, and microscopic examination of sections of the lungs and kidneys, etc., showed fatty embolisms of such extent as seriously to interfere with the circulation of the parts at which they occurred. They record, also, another case, in which the blood presented an appearance and odour similar to the first, but no microscopical examination was made of the organs. Reviewing what was known on the subject, and especially insisting on the lipæmic condition of the blood, which many previous observers had noticed, they concluded that the dyspnœa and coma were due to the occurrence of fatty embolisms, chiefly in the minute pulmonary vessels, and to a less extent in those of the kidneys and other organs. They thought the quantity of acetone found in the blood in diabetes too small to account for the fatal symptoms; and their experience of mixing acetone with blood differed from that of Dr. Foster. They pointed out, moreover, the differences in the symptoms between experimental poisoning of animals with acetone and diabetic coma. Dr. Louis Starr has recorded a case in which the blood was milky during life, and in whose lungs a few fat-embolisms were found after death, but there was croupous pneumonia also. Dr. Fitz has recorded a case of diabetic coma with a few fatty embolisms; and Dr. Gamgee has recorded a case in which, though the blood contained 13.55 parts of fat per thousand, no embola were found in the organs. In another case, the blood contained 1.88 per thousand of fat, and had an acetone odour. In three of Dr. Frederick Taylor's series of cases of coma, no fatty embolisms were found microscopically. I have inquired with great care into this point.

I have examined sections of the lungs, kidneys, brain, heart, etc., stained with osmic acid, in three cases of pure diabetic coma, but in no case have I found fat embolisms or fat in the vessels. I have also examined five cases of characteristic coma, in which there was pulmonary disease, the latter sometimes quite insignificant in amount, but in no case were fatty embolisms present. I have, further, in order to ascertain whether fatty matter was apt to occur in diabetes apart from coma, examined ten cases of diabetes terminating in various ways without coma, but without finding fatty matter or embolisms in a single instance. In one of my series of cases of coma, fat is reported to have occurred in the urine at the close of the case; unfortunately, there was no necropsy.

Mr. Moullin, in an excellent article on fat-embolisms, has shown that they are extremely frequently met with after injuries—he found them in twelve of fourteen consecutive cases examined—and have not necessarily the grave significance which is sometimes attached to them.* In Sanders and Hamilton's case, they were so numerous as, no doubt, to occasion grave symptoms. I am inclined, therefore, to agree with the writer of a very able leading article, in a recent number of the BRITISH MEDICAL JOURNAL†, who says: "It seems certain that all cases of diabetic coma have not milky blood; probably, also, all cases of milky blood are not due to the presence of fat; while there is strong evidence that, even when fat is present in large quantities, it does not always cause embola; and, when it does so, they appear to be neither more numerous nor better marked than may be seen in the lungs of cases of fracture, which have died without presenting any special features."

It was at one time thought that the coma that frequently terminated diabetes was uræmic in nature. This view finds but few supporters now. The sufficiently striking clinical differences between uræmic and diabetic coma, and the fact that, in many typical cases, no such disease of the kidneys is found as would account for the occurrence of what is called uræmia, alike negative this view.

Another suggested explanation of diabetic coma is hyperglychæmia; but, whilst this is present in all cases of diabetes, there is no evidence to show how this acts in cases of coma. Moreover, whilst coma sometimes occurs in those who, not having submitted to efficient treatment, have very large quantities of sugar in their blood, it quite equally happens to those who, under dietetic and medicinal treatment, have had the quantity of sugar in the blood greatly reduced. I am here taking the quantity of sugar in the urine as indicative of the amount of sugar in the blood.

Dr. Hilton Fagge has suggested dehydration of the blood as an explanation of the coma;‡ and his case, temporarily benefited by saline injections, lends a certain amount of support to this theory. In other cases, no good has followed saline intravenous injections. I must state, however, that, in several of my own cases, the blood was dark and thick—"tarry," as it has been described.

Schmitz, of Neuenahr, has suggested fatty degeneration of the heart as an explanation of the occurrence of coma. I have examined the heart, in four cases, with reference to this point, without finding the muscle-fibres more degenerated than is common in persons dying of exhausting and wasting diseases.

Ebstein, who has treated the subject with great breadth of grasp, directs attention to alterations in the renal epithelium, as a cause of the retention in the blood of acetone, sugar, etc. In two of my cases, the remarkable hyaline transformation of the epithelium of the kidney, as depicted by Cantani, was present; but of these cases, one died of cerebral hæmorrhage,§ the other of connective pneu-

* Read in the Medical Section at the Annual Meeting of the British Medical Association in 1877. Published in full in the BRITISH MEDICAL JOURNAL, 1878, vol. i, p. 78. The clinical account of the coma is most graphic.

* See an excellent article on Fat-Embolism, by Drs. Saundby and Barling (*Jour. Anat. and Phys.*, vol. xvi, p. 515).

† May 6th, 1882, p. 665.

‡ *Guy's Hospital Reports*, vol. xix, p. 173.

§ *Royal London Ophthalmic Hospital Reports*, vol. ix.

onic phthisis, without coma. In seven other cases of coma, the ithelium did not present important changes.

Teschenacher draws attention to the resemblance to traumatic ock, and suggests that the cause is to be found in some lesion of e sympathetic system. The symptoms are certainly suggestive of is view, and the contracted left ventricle often found *post mortem* vours it. If a poison, developing in or retained in the body, is the use of the coma, this may act especially on the great abdominal mpathetic.

In conclusion, it seems to me, from the foregoing review of the idence advanced in their favour, that (as Ebstein also has said) no e of these theories is applicable to all cases of the coma of abetes, though each explanation may fit particular cases. Though e evidence in favour of acetonæmia appears to me at present quite conclusive, yet, intoxication by some such poison, with a special inity for the sympathetic system, developing in the blood or tis-es, appears to me the most likely direction in which we shall have search for the cause of diabetic coma.

REMARKS ON THE MORBID ANATOMY AND PATHOLOGY OF DIABETES.*

By R. SHINGLETON SMITH, M.D., B.Sc.,
Physician to the Bristol Royal Infirmary.

SINCE the discovery of Claude Bernard, that an artificial diabetes ght be produced in the lower animals by stimulation of the dia-ic centre in the medulla oblongata, pathologists have been looking for the results of such stimulation in consequence of disease ectly affecting, or secondarily involving, the diabetic centre. arious pathological conditions have been found in individual es to be associated with glycosuria, and conditions not involving ply the medulla oblongata, but inducing the same result through agency of various peripheral portions of the vaso-motor system. presence of sugar in the urine was attributed by Schiff to con-utive paralysis of the vaso-motor centre; but recent researches m to show that irritation of almost any portion of the vaso-or system may cause glycosuria. Not only may injuries of the o-motor conducting paths, in their passage downwards from the lulla through the spinal cord, be followed by diabetes, but the same lt will follow sections of the cord in various regions down to the l of the first lumbar vertebra, by destruction of the upper and er cervical, and of the upper thoracic sympathetic ganglia, or n after section of the large peripheral nerve-trunks, such as the tic (Schiff). In 1868, Braun first drew attention to the frequent ence of sugar in the urine in cases of sciatica; and this observa-has since been confirmed by numerous other observers.

isorders of the nerve-centres, giving rise to diabetes, may be of various kinds: they may be either cerebral or medullary; and hard has shown that destruction of the vermis cerebelli in rab-will give rise to the presence of sugar in the urine, which is not nded by any alteration of the blood-pressure, and, consequently, ot likely to be caused by disturbances in the circulation. nges of various kinds have been recorded by numerous authors; ours, extravasations of blood, softening, and various microscopic cations of degeneration, are the changes most commonly found. minute changes recorded by Dickinson have not been confirmed ll observers; the feature observed by Dickinson, and believed im to be constant and characteristic, was "a dilatation of the ies and of the perivascular spaces in the medulla and the pons, h appeared to lead to the escape of the contents of the vessels, subsequent softening and destruction of the nerve-substance nd." I have carefully examined the medulla oblongata in several marked cases of diabetes, and have not been able to see there the ges described by Dr. Dickinson. The spinal cord appears to be less frequently the seat of the primary lesion than the brain. inson observed a dilatation of the central canal in the dorsal lumbar portions, with proliferation of the lining epithelium.

regards the condition of the sympathetic ganglia in diabetes, I made numerous observations, but without finding any uniform definite change. Poniklo states that, in five cases of diabetes ved by him, there was an absence of the medullated bundles of from the sympathetic system in the abdomen. This is an vation which I have not been able to confirm, inasmuch as has been no difficulty in demonstrating the usual axis-cylinder in sections of the semilunar ganglia, of the splanchnic nerves, and of the cervical ganglia, from various fatal cases of diabetes which have come to my notice. On comparing the sections from diabetic patients with other sections from the ganglia of patients who had died by accident and from various diseases, the specimens, having been preserved and mounted in a similar manner, show only very slight differences, depending on the thickness of section and variations in staining, etc. There is, however, one feature on which I would desire to make a further word of comment; it is, that there appears to be an excess of granular pigmented cells in the diabetic sections. Such granular cells are always present; but my sections show a larger number of pigmented cells, and more numerous granules in the cells, than in sections from the ganglia in other diseases.

In spite of much discrepancy as regards the details of the influence of the nervous system in melituria, there is an universal accord that injuries of the medulla oblongata, of the lowermost cervical and uppermost thoracic ganglia, and of certain connecting filaments of the two, give rise to the presence of sugar in the urine.

The following case is an interesting illustration of the point in question. I have here sections of the cervical cord of a patient aged 51, whose symptoms pointed to the existence of an injury, probably (at the commencement) a minute hæmorrhage, high up in the cervical spinal membranes, followed by irritative meningitis, and then very gradual myelitis from pressure, and finally ascending degeneration reaching up to the medulla. Glycosuria had existed for one month before the fatal syncope occurred. After death, a small tumour was found at the middle of the cervical region, occupying the anterior aspect, and compressing the cord. The tumour was situated in the dura mater, was composed of a reddish myxomatous tissue, occupying cyst-like cavities in the meshes of the fibrous membranes. In the sections of the cervical cord, various abnormal conditions were present. The most striking feature was the looseness of texture of the grey matter, as if much infiltrated with serum; its texture was loose and spongy, very unlike the usual compactness of the grey matter of the cord. The looseness of texture brought into view numerous neuroglia-cells with delicate fibrillary processes. The epithelium of the central canal had undergone abundant proliferation, the canal being blocked with a mass of small round nucleated cells, with none of the normal columnar form. The canal was surrounded by a number of concentric rings of connective tissue with very fine elongated nuclei. Scattered throughout all parts of the cord were numerous and large amyloid bodies; they were most abundant in the tissues immediately around the central canal. In the dorsal and lumbar regions of this cord, similar appearances were observed, viz., proliferation in the central canal and diffusion of amyloid corpuscles; but the sponginess of the grey matter was limited to the cervical region.

In this case, the diabetes was clearly due to the implication of the vaso-motor nerves along the track of the cervical region of the cord, or in the medulla itself; and the question naturally arises, How is it that diabetes is not a more constant symptom in cases where the cervical cord is affected? It is well known that, in tabes dorsalis, melituria is rarely, if ever, present; and yet the disease may be so advanced as to have caused an atrophic diminution in size of the cord to one-half its bulk, and there may be evidences of disease as high up as the floor of the fourth ventricle. I have prepared numerous sections of the medulla from cases of tabes; they show decidedly abnormal conditions from the extension upwards of the sclerosis along and around the central canal to the floor of the fourth ventricle, and yet no one of these patients presented any evidences of glycosuria. Now, it is a remarkable feature of sections of the cord in tabes, that, in spite of the most advanced sclerosis of the posterior columns, perhaps also a general sclerosis of the antero-lateral white columns, the grey matter continues to be fairly healthy; the cells have not undergone atrophic changes; and the grey matter, as a whole, is the most healthy portion of the cord. On the other hand, in the case I have quoted, and of which I now exhibit the specimens, the white matter is the most healthy, the grey matter having undergone a complete transformation from its normal texture and appearance. By contrasting these two conditions, in the one of which sugar was present, and the other in which it was absent, it would appear that the presence or absence of glycosuria may depend on the implication or otherwise of the grey matter of the cord in the cervical region; and we may hence infer that the grey matter is the portion of cord along which the vaso-motor nerves pass. Experiments have been made by Schiff, who found that division of the entire cord at the level of the second dorsal vertebra would cause diabetes; often also it would result from section of the individual columns of the cord, sometimes the

* Read in the Section of Pathology at the Annual Meeting of the British Medical Association in Worcester, August 1882.

posterior, at other times the anterior. Pavy found that section of the cord between the second and third cervical vertebræ soon gave rise to sugar in the urine; but below this point section was ineffectual. As regards the cervical region, we may surmise that the presence of glycosuria is an indication of disease affecting the grey matter, and therefore deeply seated. Pavy's experiment further shows that it must be above the third cervical vertebra. We may, therefore, expect to have, in association with glycosuria coming on in cases of spinal disease, other symptoms resulting from destructive disease of the grey matter of the upper cervical cord and the nuclei of the medulla oblongata. It may, accordingly, be suspected that other and perhaps more serious symptoms will shortly follow the appearance of glycosuria in cases of spinal disease.

DR. SAUNDBY (Birmingham) said that, to his mind, the evidence in favour of the acetonæmia theory was very far from being conclusive; but he believed that the symptoms were most probably due to some form of toxæmia, though it was not at present possible to identify the poison. The only other suggestion that commended itself to him, was that of Teschemacher, which drew attention to the resemblance of the phenomena to those of traumatic shock. He was not able to regard the theory of fat-embolism, suggested by the late Professor Sanders and by Professor D. J. Hamilton, as at all adequate. The blood in by far the largest number of cases of diabetic coma was not milky, and when it was, it certainly did not usually give rise to embola. In a paper by Dr. Barling and himself, in the July number of the *Journal of Anatomy and Physiology*, they had pointed out that the vessels of a patient, who died recently in diabetic coma with milky blood, contained no true embola, but merely fat-globules embedded in the blood-clots. So far as he had seen, the fat existed in the blood in the form of a fine emulsion, which could not cause embolism; and he believed it was only after death that the granules of the emulsion ran together to form large globules, which simulated the appearance of fat-embolisms. It was, moreover, important to remember that fat-embolisms were apparently the rule in all cases of fracture or severe contusions of soft parts; yet it was only in exceptional cases, where the embola were very numerous, that any symptoms were produced.—DR. MACKENZIE said that, whilst differences in the circulatory organs in the aged and the young accounted for certain differences, yet some cases, terminating by coma, did occur in aged persons. As regarded Dr. Pavy's suggestion, that diabetic coma was due to some disease of the respiratory and vascular centres in the medulla itself, whilst as an hypothesis it was entitled to respectful consideration, it must be remembered that this was the point to which the attention of microscopical investigators had been directed. Dr. Saundby's remarks interested him very much, and confirmed the assertions of other observers, that fatty embolisms, when present, had not the importance that had been attached to them by some.

DONATIONS AND BEQUESTS.—Mr. George Henry Strutt, of Bridge Hill, Belper, has given £1,000 to the endowment fund, and promised £50 *per annum* for three years, to the Derbyshire Hospital for Sick Children.—Miss Caroline Hutton, of Lincoln, bequeathed £300 to the Earslwood Asylum for Idiots, £200 to the Samaritan Free Hospital for Women and Children, £500 in trust for building a fever ward at the County Hospital, or for maintaining it if already built, and £500 out of the proceeds of the sale of her dwelling-house in Eastgate to the Lincoln General Dispensary, and the remainder to the Lincoln County Hospital.—Mr. Henry Matcham, of Ramsgate, bequeathed £500 to the Ramsgate and St. Lawrence Royal Dispensary.—The Lowestoft Convalescent Home has received £300 under the will of Mrs. Cann, of Wramplingham.—Mr. B. J. Hudson has given fifty guineas to the Middlesex Hospital.—Mr. G. W. P. Bentinck, M.P., has given £50 to St. Peter's Hospital for Stone, and £50 to the Middlesex Hospital.—"E. T." has given £50 to the Hospital for Women.

PRESENTATION.—Dr. Edgar Flinn, on the occasion of his leaving Brownhills, Staffordshire (where he had been in practice for over seven years), was presented with an illuminated address and very valuable time-piece, subscribed to by the employés of the Brownhills and Conduit collieries. The inhabitants of the district also presented him with a superior case of surgical instruments, accompanied by a neatly-illuminated album, containing a complimentary address and the names of the subscribers. Dr. Flinn, previous to his departure, was entertained at dinner at the Station Hotel by his fellow-townsmen, when many expressions of regret were made at his removal to Kingstown to undertake the appointment of surgeon to St. Michael's Hospital.

NOTES OF CASES OF DILATED STOMACH: WITH REMARKS.

BY T. SANCTUARY, M.D., Hale, Cornwall.

(Continued from page 614.)

CASE IV.—A machinist, aged 37, complained of heartburn a r
eating, followed in a short time by nausea, pain in the stom
retching, and vomiting. She was pale, emaciated, with bad te
and looked much out of health. Besides her food, she vomite
brownish sticky liquid, which varied in quantity from one to
teacupfuls. Her family history was unimportant. The pre
illness had come on gradually with flatulence and distension a
food, and a feeling of fulness. Her tongue was pale and moist,
bowels constipated, urine and menstruation scanty. On exam
tion, I found the stomach extending an inch below the navel,
the cutaneous veins well marked, though the skin of the abdo
was not tense, but rugged and withered. The amount of ga
distension varied, but not apparently inversely as the amoun
eructation, and was never constant for more than five minutes
time. She told me that (some years ago) she had suffered a
deal of pain after food, and had also occasionally vomited bloo
could not define the pain more exactly than over the whole are
the stomach; and from this fact, as well as the knowledge tha
blood had been vomited for several years, I was inclined to t
that I had to deal with a case of simple dilatation, caused, per
by previous ulceration and cicatrization. Happily, there has
no opportunity of verifying this diagnosis by *post mortem* exa
tion. She consented to let me try the siphon-tube, and feed h
the bowel, without any previous course of medicine except a do
Carlsbad salt every morning for ten days; and I used the tube
a day for three days, and afterwards twice daily. Perfect toler
did not ensue in her case for a week; but she was able to us
tube herself at the end of a fortnight, when I discontinued th
mata, and recommended that she should take some liquid fo
small quantities frequently during the day, choosing such thin
cocoa, milk (with or without soda and lime-water), and farina
foods; and entirely avoiding tea, coffee, and alcoholic beve
The progress of her case was uneventful. After two months'
ment, she was able to dispense with the tube and take ord
food without pain or trouble, though only in small quantities
time.

NOTE I.—For this operation, I use (*a*) a soft œsophageal tube tw
in length; (*b*) three or four feet of stout India-rubber tubing,
eighths of an inch in diameter, weighted at one end with half an i
leaden pipe. At first, I employed the ordinary red compo
stomach-tube; but, finding that this became sodden and lia
crack with much wear, I substituted for it one made of bla
green French composition, after the style of the French *cat
coudés*, as being more pliable, safer for the patient's own use,
greater durability.

The patient sits on a chair, under a shelf a foot and a half
his head; on the shelf I place a pint glass graduated meas
solution, and immerse in it nearly the whole of the India-
tubing, coiling it inside the glass. To one end of the tubing is at
the lead-weight, to the other the œsophageal tube. Then in a co
minutes withdraw the coiled tubing, allowing the lead-weight t
the end of it inside the solution at the bottom of the measure, and
taneously introduce the œsophageal tube into the patient's st
The solution being thus set in action by the siphon, soon fi
way into the stomach, until the glass measure is empty. T
once, pinching the tube tightly just above the lead, I take th
measure from the shelf and place it on the floor; then rele
grasp on the tube, and the liquid returns by reversed action i
glass again, bringing with it any fermenting material th
stomach may contain. The operation may be performed once
or three times at each sitting, until the solution returns cl
neutral. I use various solutions, the principal of which a
Half an ounce of dilute sulphuric acid: 2. Two drachms of
potassæ permanganatis: 3. Two drachms of dilute nitric aci
Two drachms of salicylic acid—in either case, made up to
with pure water. The sitting is completed with a pint
spring water. As a rule, after the first few sittings, the op
is performed without any nausea or inconvenience or the
the patient.

NOTE II.—It has been questioned whether the siphon-tube
cient to remove the whole of the contents of the stomach, bo
and liquid. Some of the German writers maintain that liquids

ovable by these means, and that the stronger suction-power of stomach-pump is necessary for solids and thick viscous liquids. ve never tried any mechanical means except the siphon-tube, have found hitherto that free irrigation will break down lumps read, potato, etc., which are then brought back through the tube, icking in one or other of its eyes. I have brought up many es thus from patients' stomachs, and have never noticed any shing in that organ after the operation has been carefully per- ed.

OTE III.—The quantity of vomit varies from two ounces to three s, and contains one or more kinds of fungoid growth, together with c, butyric, and acetic acids, mixed in the gastric juice. In all four s I found abundance of "sarcina ventriculi;" in Cases I, III, IV, 'torula cerevisiæ," and in Case III alone a species of fungus re- oling mould (ascophora mucedo), with this difference, that eas in the latter the fructiferous stalk which bears the sac or dium is single, in the growth I found in the stomach it was rally branched. The sarcinous growth was composed of small re bodies, heaped together in square masses, consisting of cubic (gonidia) in multiples of four, with rounded corners, each cell y marked by cross lines and depressions.

e general appearance of the vomited fluid was of a grumous n colour, or watery acid mucus, or coffee-ground substance, h was sometimes in a state of fermentation, with a frothy yeast- surface.

. Clifford Allbutt, who has studied this subject carefully, to whose kindness in giving me many valuable hints in and 1875 I am greatly indebted, informs us that the ex- ce of simple and primary dilatation of the stomach as a antial malady, is said to have been recognised early in the nteenth century by Spigeling, and it has cropped up from time to till our own day, when Oppolzer and Kussmaul, in 1869, drew tion to it. It appears to be essentially a chronic disease of the ach, consisting in distension of that viscus, the muscular coat ming attenuated and fibrous, and the mucous membrane smooth hin, with loss, if the case be of long duration, of many or few e gastric tubes, thereby interfering with the proper secretion of ic juice and the power of digestion, as well as with the normal ments of the organ by the weakening of its muscular coat.*

ng the chief characteristics of this disease is the constant heart- patients experience after food, which continues until they are red by an attack of vomiting. They suffer a good deal of pain, t is not so localised as in ulceration, and there is not usually æmatemesis. The whole abdomen feels sore, and vomiting is nt throughout the twenty-four hours in a greater or less degree. omited matters vary in amount from two to sixty fluid ounces, are of the nature described in Note III, plus any food that ens to be in the stomach at the time. If there be any com- tion—*e.g.* ulceration, simple or cancerous, then there may be l, cancer-cells, shreds of the gastric tissues, and other matters ng the ejecta. The stomach is probably seldom entirely emptied ch act of vomiting; for, if the patient be shaken afterwards, or bdomen percussed and auscultated simultaneously, a splashing l will be elicited. We generally find the stomach distended gas, and there are many and sour-smelling eructations. nts complain of feeling fulness and distension in the abdomen, here is an evident enlargement of the stomach as made out by per- on.† The patient is generally feeble, pasty-coloured, and emaci- tongue moist and clean, or slightly furred; appetite variable; in- tion for food usually fair, sometimes inordinate, but there is a l of satisfying it from fear of the consequences. According to Dr. tt we often find the appetite good, or even large, where the dilata- is of local causation, and defective rather in those cases where the lation is a marked local result of a general cause, such as con- d fever or anæmic debility. Defect of appetite may, in many s, be simulated, the patient's desire for food being subordinate is fear of the discomfort which food creates. Thirst is usually nt, sometimes excessive. The urine is as often normal as not, in ty, but diminished in quantity, as in all cases of vomiting. Muscu- ebility is extreme, and cramps in the limbs and trunk are common. sionally we observe the abdomen much distended at a parti- cular point corresponding to the greatest vertical distension of the stomach when the patient is lying on his back: the skin of the abdomen is withered and gathered into folds, which surround the visible bag of the stomach. If the trunk of the patient be sharply moved, or the stomach itself shaken by the hand, we hear the characteristic splashings very plainly; in some cases too, the stomach-tube may be felt through the abdominal wall, lower down than the limits of an ordinary stomach would allow. Sometimes we see the superficial veins of the abdomen large and prominent; and if the abdominal walls be thin, the movements of the stomach may actually be followed by the eye.

The causes may be variously classified, but all depend upon one of the two following:—1, obstruction to the onward passage of food through the pylorus; 2, excessive distension, positive or relative, of the stomach. The former may be brought about by cancerous stricture of the pyloric orifice with hypertrophy of submucous tissue; by non-malignant thickening of the pylorus by enormous hypertrophy of muscular fibre; by cicatrisation of an ulcer, and this may lead to ulceration anew, on account of even small hard things not being able to pass; by contraction of an ulcer and consequent pyloric obstruction; by external pressure of tumours; by the action of corrosive substances; and probably by spasm of the pyloric outlet.

Positive excessive distension is produced in an ordinarily healthy stomach by the ingestion of large quantities of indigestible food, such as suddenly give rise to a large amount of gas. (I believe I have seen dilatation produced in a schoolboy by giving him alternately, dissolved in water, powders of bicarbonate of soda and tartaric acid, and closing his mouth whilst the unpleasant evolution of carbonic acid was going on inside!)

Relative excessive distension, on the other hand, occurs only in an already weakened stomach, where the patient is in a state of great exhaustion, hysteria, and, perhaps, long-continued vomiting, phthisis, and chronic gastric catarrh produced by heart disease. Here we can easily understand, why even a small amount of food should produce as serious a result as an enormous meal might do to a healthy stomach. In some of these cases, the pylorus after death has been found quite open, even more so than normal; so that probably paralysis of nerve power, degeneration of gastric muscle, and spasm of pyloric orifice, were all associated in producing the dilatation. Sometimes, also, it has seemed not unlikely that fever, the great degenerator of muscle, may have weakened permanently the contractile power of the organ; and, lastly, peritonitic adhesions are supposed by some to be a fertile cause of dilatation. The disease occurs in both sexes—usually after the twenty-fifth year, but cases have been known much earlier in life.

Treatment.—We have to deal with an organ upon the healthy action of which, the functions of digestion and nutrition to a great extent depend; an organ which when dilated always contains some decomposing and irritating material which prevents the due secretion of gastric juice, and absorption of nutriment, besides causing pain and vomiting. Could we only give the stomach a lengthened period of entire rest, our way would be rendered comparatively easy; but we are met at the outset by the necessity of constantly using it, unless we have recourse to enemata, to which many patients have an insuperable objection, and even if this be overcome, we cannot go on for ever feeding by the rectum. We must be very careful in our choice of suitable diet, suitable medicines, and suitable hygienic conditions, but when we have exhausted all these, there is but little certainty of relief, and in the end we are generally obliged to fall back upon gastric catheterism, which, if patients would more often allow us, is the best treatment to adopt *ab initio*. The tube should be used once a day for the first day or two, then twice a day, once after rising, and again about 5 P.M. In cases of malignant disease, we cannot, of course, hope for a cure, and in ulceration we are not justified in giving a positively favourable prognosis; but even in these we may promise relief, and in simple primary dilatation at an early stage we may confidently look forward to a successful and permanent result. With regard to diet, if the patient be able to tolerate any food in the stomach, we may recommend butter, cocoa, milk, raw eggs, and thick soups, and Brand's essence of meat in small quantities frequently administered, with ice to suck or lemonade, to relieve the thirst; but if, as is often the case, vomiting persist after each meal, we must rely almost exclusively for the time on strong enemata of beef-tea and the like. The medicinal remedies may be divided into three classes: (1.) tonic; (2.) disinfectant; (3.) sedative. These are exemplified by (1.) strychnia, quinine, quassia, hydrochloric and nitric acids, etc.; (2.) sulphurous, carbolic, salicylic and nitric acids, the hyposulphites, sulphites, and permanganate of potass; (3.) bismuth, hydrocyanic acid,

* most hollow muscular organs, excess of work calls for increased muscular h, where the demand is continuous, as in cardiac hypertrophy from lar disease. Here, when the distension is sudden, occasional, and excessive, uscle cannot accommodate itself to the strain, and gives way; hence the tion.

† requires a little practise to distinguish between the stomach-note and of the intestines, when distended. I do not see how this difference can be tically described in words, though it is quite appreciable to the careful ver.

and opium. Galvanism has also been recommended. I can only say, that I have never tried it myself, or seen it tried by others.

Prognosis.—This will vary with the cause of the disease: if it be of malignant origin, it is hopeless, unless, indeed, we venture to excise the stomach; but if it arise from irregularities of diet, or from weakening of nervous or muscular power by fever, we may hope for recovery proportionate to the thoroughness with which we remove the cause.

SOME REMARKS ON THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.

By W. J. WALSHAM, F.R.C.S.,

Assistant-Surgeon to, and Demonstrator of Orthopædic and Practical Surgery at, St. Bartholomew's Hospital.

During the past autumn, whilst in charge of Mr. Willett's wards, it fell to my lot to tie the femoral artery three times for popliteal aneurysm. In each instance, two ligatures were applied, a little less than half an inch apart, and the artery completely divided between them. The ligatures used were kangaroo-tail tendon; the wounds did well; the operations were performed strictly antiseptically; and in each instance the patient made a good recovery. The cases presented several features of much interest, which, however, it is not my intention to recount here, it being my aim rather to again call attention to a method of ligaturing large arteries in their continuity, which, I venture to think, is by far the safest as yet known. I say again, because no novelty can be claimed for it, as it is the method that was advocated and practised by the elder Bell, among others, and in the long past by the Arabian physicians. In recent times, as far as I know, Mr. Thomas Smith has been the first to once more resort to it; and at St. Bartholomew's Hospital, upwards of eight large vessels have been successfully tied in this way.

In the discussions that have been raised from time to time at the medical societies, and at the last meeting of the British Medical Association, on the value of different kinds of ligature, carbolised and chromicised catgut, ox aorta, whale tendon, carbolised silk, carbolised nerve, kangaroo-tail tendon, etc., it has always seemed to me that a very important point in accounting for failure has been lost sight of. Want of success has nearly always been attributed to the fault of the ligature used, and little or no account has been taken of the way in which it was applied. It is true that different opinions have been expressed as to whether the ligature should be tied tightly or loosely; whether or not it should be our aim to divide the internal and middle coats of the artery; or whether the mere contact of the ligature with the vessel is not sufficient to accomplish our purpose. The point to which I would refer as influencing the result of the operation is the amount of separation of its sheath that the artery has been subjected to in passing the ligature. That failure, in some instances, has been due to the softening or giving way of the material used, there can, of course, be no question; but I cannot help thinking that too free a separation of the sheath in passing the ligature may have had, in many instances, more to do with the want of success than the kind of ligature chosen. As the vitality of an artery depends in great measure upon the blood-supply that it receives from its sheath, it is easily conceivable how very little more or less separation may determine the success or failure of the ligature. No point, I suppose, is more strongly insisted upon in the works of surgery than the necessity of exposing as little of the vessel in its long axis as possible. I doubt, however, if in practice we are always sufficiently careful of this rule.

Mr. Savory, in an article in a recent number of the *Lancet*, calls attention to the danger with which, he thinks, is fraught the modern practice of separating the sheath of the artery by means of the director. He says: "It has happened in more than a single instance to me to see the artery injured, both in the dead and the living, by operating in this way;" and, to avoid the danger, he strongly advocates the opening of the sheath with the knife. It must have happened to all to have seen varying amounts of sheath separated from the artery by different operators, and even by the same operator at different times; and I believe that, whether the director or the knife be used, a certain amount of risk must always be run of too free an exposure of the vessel. There must always be a portion of the artery, however small, on each side of the ligature, the blood-supply of which has been more or less interfered with; and, as the vessels of the sheath run principally in a direction from the proximal towards the distal end of the artery, it is but reasonable to suppose that the blood-supply on the distal side of the ligature will be the more affected, a circumstance which may have more to do than is generally supposed with the fact that, in secondary bleeding, the blood more often comes from the lower than from the upper end of the vessel. A slightly extra separation of the sheath must render the exposed portion of the artery liable to slough, or to die and be cast off. Such would appear to have occurred in the very interesting case reported by Mr. Bartleet at the last meeting of the British Medical Association.

"On the seventh day after ligature, alarming hæmorrhage ensued. On opening the wound, the artery-forceps brought up, with the slightest pull possible, what proved to be the catgut ligature. On examining this, the catgut was found to be not at all softened, but firmly knotted, slightly surrounding a small piece of artery which had come away with it. It did not appear to have ulcerated through the artery at all. The artery had separated about one-tenth of an inch above, and the same distance below, the ligature." Here the ligature had evidently no share in causing the secondary hæmorrhage, as it came away intact; and it seems difficult to explain how the death of the portion of the artery which came away with it was caused, other than by loss of vitality in consequence of the disturbance of the blood-supply that it receives from its sheath. It is not stated in the report how the sheath was opened. It would be instructive to know, in cases in which secondary hæmorrhage has occurred, in what way the vessel was freed from its sheath.

If two ligatures be applied, and the vessel divided between them, all risk of too free a separation of the sheath is absolutely avoided, as one ligature can be applied at the spot where the sheath is separated above, and the other where the sheath is separated below After the vessel is divided, each cut end retracts, drawing the respective ligatures well into the sheath, thus leaving the blood-supply of no portion of the vessel on the proximal and distal side of the upper and lower ligatures respectively in any way interfered with. The artery is thus placed under very nearly the same conditions as one which has been ligatured in a stump, and exactly under the conditions as one the ends of which have been secured in a wound, and from such secondary hæmorrhage is very rare. Indeed, I am not aware that, after the two ends of a divided vessel have thus been tied in a wound, hæmorrhage, except from the slipping of a ligature, has ever occurred.

The normal longitudinal tension of the vessels constitutes another, and I believe not inconsiderable, source of danger in ligaturing an artery in its continuity. A transverse wound of an artery, as first pointed out by Mr. Savory, in consequence of this elastic tension, assumes a diamond shape. Should any part of the ligature cut through the vessel before it has become permanently occluded, this tension, by causing such a cut in the vessel to gape, thereby disturbing the connection of any internal clot that may have formed, or adhesions of the coats that may have taken place, must tend to the production of secondary bleeding. In a case of secondary hæmorrhage under the late Mr. Callender, on cutting down at the seat of ligature to secure the bleeding points, the hæmorrhage was clearly seen to be due to such a cause. The vessel, which had been secured by a catgut ligature, had given way opposite the knot (which itself was intact), and a gaping wound one-tenth of an inch wide existed in the walls of the vessel. By applying two ligatures, and dividing the vessel between them, all tension is taken off, and both ends are placed in a state of rest—the most favourable condition for healing.

It may be objected by those who teach that the internal and middle coats need not be divided, that the method here advocated is at the present day a retrograde step. Space does not permit me to discuss in this paper the question as to the desirability of dividing the internal and middle coats. For my own part, my mind is fully made up that such a division is most desirable; and, holding this view, the objection with me can have no weight. It has also been objected, that the application of a second ligature and division of the artery detracts from the simplicity of the operation—a point, I suppose, other things being equal, always to be aimed at in surgery In this instance, such an objection appears to me to be a mere question of sentiment, and, as such, I venture to think, is of little moment, if, as I believe, it is a fact that, by using two ligatures and dividing the artery between them, greater safety is obtained.

Medical Magistrate.—The Lord Chancellor has added the name of Dr. Josiah Oliver to the Commission of the Peace for the borough of Maidstone.

ANEURYSM OF BOTH POPLITEAL ARTERIES: CURE BY LIGATURE OF THE FEMORAL ARTERIES

AT THREE YEARS' INTERVAL: DEATH FROM MALIGNANT DISEASE OF THE STOMACH THIRTEEN YEARS LATER: DISSECTION OF FEMORAL VESSELS.

By SAMUEL GORDON, M.D.,
President of the Carmichael College of Medicine and Surgery, etc.

THE perusal of that most interesting Hunterian Lecture recently delivered by the President of the College of Surgeons of England, has recalled to my memory the particulars of a case which occurred many years ago in the Richmond Hospital, and which, as I believe, was never published. The following notes may possibly prove of some interest to the readers of the JOURNAL. Not the least interesting feature connected with it rests in the fact that the late Mr. Peile, who took great interest in the case, often told me, when examining it, that he was with the late John Hunter when he first tied the femoral artery for popliteal aneurysm; and, when he had secured the ligature and closed the wound, he turned round and said to Mr. Peile, "Now the absorbents are busy below, like mites in a cheese."

The patient's name was James Owen. In the earlier part of his life, he had been a herdsman and caretaker, and so exposed to cold and damp by day and night, and had a great deal of exercise on foot. At the age of 29, he applied to the late Mr. Todd, in the Richmond Hospital, for relief from an aneurysmal tumour in the left popliteal space. Mr. Todd, in the year 1817, tied the left femoral artery; and in a short time Owen returned home to the county Meath, able to resume his work as a herdsman, to which occupation he now added that of horsebreaker.

Three years after the first operation, he observed a similar swelling in the right popliteal space, and knew, from the similarity of the symptoms, that it was the same disease from which he had suffered in the left leg, and been cured. Accordingly, he returned to the Richmond Hospital, when Mr. Todd, in the year 1820, tied the right femoral artery, and he returned home, the second aneurysm being perfectly cured. He now enjoyed uninterrupted and perfectly good health for thirteen years, and continued at his work as herdsman, and occasionally breaking-in young horses. He had, in fact, recovered such perfect use of his limbs as qualified him for any species of labour. About the close of the year 1835, being then forty-five years of age, he was attacked with frequent vomiting and other very severe dyspeptic symptoms, and returned to the Richmond Hospital, convinced that another cure would now be effected for him. It was a great disappointment to him to find that Mr. Todd was dead; but he was admitted under the care of the late surgeon Adams, whose many clinical lectures on the various interesting points of the patient's history are still remembered by old Richmond Hospital students.

The dyspeptic symptoms steadily increased, and it was soon but too evident that he was suffering from malignant disease affecting the great curvature and pyloric end of the stomach. It was a very remarkable coincidence that, in the bed beside him, was placed a patient (Norton by name), who was suffering from malignant stricture of the cardiac orifice and the lesser curvature of the stomach; and to contrast the symptoms of these two patients was a matter of almost daily occurrence. The two stomachs are now placed beside each other in the museum of the Richmond Hospital, and the recent *post mortem* appearances are admirably represented in two drawings by Conolly. Owen gradually wasted, and became subject to incontrollable diarrhœa; there was, at times, a distinct impulse conveyed to the cancerous tumour by the abdominal aorta, which was sufficient to impress the patient's mind with the idea that it was the same form of disease he was now afflicted with, as when he had the pulsating tumour behind his knees, and he, therefore, could not understand why he could not be again cured. He became frightfully emaciated, and died on April 3rd, 1836. Notwithstanding extreme vigilance on the part of his relatives, the indefatigable curator, the late Professor Smith, having abstracted the stomach and appendages, and secured, also, the lower half of the body, the abdominal aorta was injected, and the lower half of Owen's body was most skilfully dissected.

The following notes describe the condition of the ligatured vessels and the state of the collateral circulation.

On the right side, the femoral artery was tied, five inches from Poupart's ligaments, two inches and three-quarters from origin of profunda, down to which it was found obliterated. The profunda was much enlarged, and, besides its usual branches, gave one large branch to the short adductors. The perforating arteries were also much dilated. One large branch from the middle perforating ran directly into a muscular branch of the femoral, which was given off in Hunter's canal, about one inch and a half above the origin of the anastomotica magna.

In the popliteal space, the artery was reduced to a cord, and contained no injection at the part where it lay on the posterior ligament of the joint. The inferior articulars and the recurrent tibial were larger than usual.

On the left side, the femoral artery was tied three and a half inches from Poupart's ligament, one and a half inches from the origin of the profunda, down to which it obliterated the descending and transverse branches of the external circumflex rose just above the ligature, from the superficial femoral; three-quarters of an inch below ligature, a large branch (of the size of the radial at its origin) ran into the adductor magnus; the termination of this seemed to anastomose with the perforating branches of the profunda, which were very large. The internal circumflex gave a large branch to the short adductor muscles.

In the popliteal spaces the injection stopped at the superior border of the ligamentum posticum Winslowii, and began againat the inferior border of the same ligament. There were two superior external articular arteries, one of the size of the ulnar, anastomosing along the external lateral ligament with the inferior external articular, which was also enlarged.

There were masses of injection lying along both popliteal nerves. These came from a large branch of the first perforating artery.

The size of the branch from the profunda to the short adductors was rather remarkable on both sides. The terminal branch of the right and left internal circumflex was enlarged, and probably anastomosed with the sciatic. The anastomoses between the perforating arteries on both sides were very free. The left superficial femoral artery below the seat of ligature was larger than the right.

The preparation is now preserved, in good condition, in the museum of the Richmond Hospital, where the details given in the above description of the arteries of each thigh can be verified.

ON PICRIC ACID AS AN URINARY TEST.

By CHARLES HENRY RALFE, M.D., F.R.C.P.,
Assistant Physician to the London Hospital.

I HAVE just read Dr. Mahomed's letter which appeared in the JOURNAL of the 24th ultimo, relative to the question of the value of picric acid as a distinguishing test in the various forms of albuminuria, and Dr. Johnson's communication, which appeared last week, in reply. As the statement made by me at a recent meeting of the Pathological Society, with regard to the action of picric acid on peptones, has been introduced into the controversy, I should like briefly to offer a few comments on this interesting and important subject.

It appears to me that Dr. Johnson admits the point I brought forward at the Pathological Society, viz.: "Though these new tests—picric acid, etc.—are extremely delicate reagents for the detection of albuminuria, yet further tests are required in order to distinguish one variety of albumen from another; and that heat, and heat alone, can determine that the albumen present is serum-albumen, and not a modification or distinct variety." Since, in order to distinguish between the precipitate given with picric acid and sero-albumen from that of peptones, he says that, with the latter, the precipitate "was immediately and completely redissolved by heat below the boiling point," thus it is made clear that, in testing for albumen in urine, the test by heat must never be omitted. This also supports, I think, the contention raised by Dr. Mahomed at the Clinical Society.

With regard to the question of peptonuria, my observations do not coincide with those of Dr. Johnson that its occurrence is a "rare and exceptional phenomenon," since I have been able frequently to demonstrate the presence of peptones in many cases of temporary or intermittent albuminuria. The reason they are so often overlooked is due, I think, to the fact that they are usually associated with the presence of ordinary albumen; as is natural, since the presence of peptones in the renal vessels would render the blood-serum more diffusible. In testing these urines, it often happens then that serum-albumen being detected, no further search is made for peptones. It is, however, easy to demonstrate their presence, since they strike a peculiar rosy red with Fehling's solution in the cold, absolutely distinct from the mauve coloration the same reagent gives with any form of albumen. When peptones and albumen are mixed

in the same solution, then the rose colour predominates over the paler mauve. Another delicate test for their presence is the increased rapidity with which a peptonised urine will make a solution of albumen pass through a filter in a given time, as compared with a urine free from peptones. With respect to the nature of the peptones present in urine, I believe they consist chiefly of parapeptone, and that what may be called for convenience the "final" peptones, are only present in small proportion.

Dr. Johnson further infers that picric acid detects the modified albumen (alkali albumen) that occurs in highly alkaline urine. It undoubtedly does so, as it does with all forms and modifications of albumen; but still here the employment of additional tests, such as determining the nature of the alkaline reaction (fixed or volatile), and the reaction with heat, before and after neutralisation, will throw considerable light on the nature of the chemical changes in the urine which have brought about this modification, and thus prove of considerable service to the practitioner. Again, picric acid, I believe, precipitates mucin from urine (I have found experimentally that a solution of mucin, carefully prepared from ox-gall, gives an abundant precipitate with picric acid). Now here, again, unless a determining test is used, we are likely to fall into error, since the urine often contains a considerable quantity of mucus in solution; and, if we rely only on the picric acid test, it is possible that we may be misled into magnifying a slight vesical catarrh into renal disease.

The true position of picric acid as an urinary test, I believe, is this. It is the best possible substitute for nitric acid: since it is far more delicate, and it is far more convenient and cleanly for use. Further, picric acid has this advantage: that it can be made available for the detection of sugar in urine. The very best thanks of the profession are, therefore, due to Dr. Johnson for the introduction of this valuable and convenient reagent, which will enable the practitioner, at the bedside of the patient, with ease to detect the presence of these substances in the urine; and thus, on the spot, to gain an insight into the probable nature of the case. But, in making use of this convenient reagent, he should be careful not to employ it in a routine manner. In every instance, especially in testing for albumen, he should see that a sample of urine be sent to his house, where tests for determining accurately the nature of the albumen present can be employed. Of these, *heat* is the most important clinically; since the blood-albumens—sero-albumen and paraglobulin—are alone coagulable by heat, at temperatures ranging from 72° to 76° C.

CLINICAL MEMORANDA.

PERIOD OF INCUBATION OF MEASLES.

IT gives me much pleasure to be able to corroborate the statements of Mr. Vacher with regard to the period of incubation of measles. Having taken careful notes in many cases, I have arrived at the conclusion that the period is fourteen days, but that it may vary a few hours either way.

The discrepancies with regard to the number of days, as laid down in our text-books, have probably arisen from one or other of the following causes. First, that measles may be communicated at least four days before the rash appears. Secondly, that, in a certain number of cases, a slight rash appears upon the face and chest from two to four days before the general rash comes out. My practice has shown me that, when a copious rash has appeared before the fourteenth day, the case has occurred in a house where a previous case existed, and where there has been a probability of the children having either slept or played together prior to the rash appearing in the first case. Measles appear to be most infectious during the days when the rash is most abundant, but, owing to the long incubation period, the disease is infectious for several days prior to the appearance of the rash, and, in some cases (varying according to the severity of the case), for quite three weeks afterwards.

During the past autumn and winter, a "measle wave" has passed over this neighbourhood, and, while watching its progress, I have been struck with the fact that the fresh cases usually appeared in batches, upon Saturday, Sunday, and Monday. In tracing the origin of the cases, I have come to the conclusion that they were, as a rule, caught in one of the following ways—1, in some place of worship; 2, and most common, in Sunday school (I say this because children are sent to Sunday school by parents, to get them out of the way, at an earlier date than they are generally admitted into the regular schools); 3, on Monday, at the ordinary school classes. I could note numerous instances in support of the fourteen-day period, but will only state the following.

I attended a choir boy on January 7th. On the 21st, he went into the choir against my orders to the contrary. On February 4th, the lady who sat next to him developed a copious rash. My own son had measles; fourteen days later, his sister had the rash well developed.

Fourteen months ago, I attended a single case of measles. My last visit was paid to the patient twelve days later, and, fourteen days afterwards, I was in bed with a good crop of measles. Both these cases were second attacks, and both patients had been frequently exposed to the contagion of measles with impunity.

A somewhat curious chain of cases occurred in my practice some years ago. I was attending the eldest daughter of a lady for measles of rather severe type. There were seven children, and the mother was anxious for them to have the disease and get it over; consequently, free intercourse was allowed. Fourteen days later, the second daughter had the rash. Fourteen days later again, the third daughter developed rash, and again fourteen days passed, and the remaining four children were in bed with a severe attack of measles.

While speaking of the period of incubation of disease, I may mention that I have had frequent opportunities of determining this in mumps, and have found it always twenty days, with some few exceptions, where second cases have occurred among members of the same family.

W. E. GREEN.

DEATH DURING THE ADMINISTRATION OF ANÆSTHETICS

THE following case will, I think, support Mr. Patterson's opinion of Case IV, that, in "some cases, at least, shock" might be the cause of death. The patient, a young, healthy looking man, about nineteen years of age, was admitted into the ——— Infirmary, suffering from a tumour of one orbit, by which the eye was considerably protruded. It was decided that both the eye and the tumour should be removed. Chloroform was administered, and the surgeon asked "Is he under?" to which the reply was, "almost," the operation was commenced and the patient struggled somewhat until the optic nerve was cut, when his jaws closed with a distinct "click," his breathing ceased, and all efforts to bring him round failed. At the *post mortem* examination "all the organs were apparently healthy. This is the only case of a death under chloroform which I have seen but in reading I have been struck with the frequency of its occurrence during the performance of trivial operations, and I think it is possible that sufficient care has not been taken to see that the patient is fully anæsthetised, and that the cause of death has not been too much chloroform, but "shock" from too little chloroform.

G. W. ISAAC, M.B., Clifton.

CASE OF TRISMUS TREATED WITH CHLORAL AND BROMIDE OF POTASSIUM.

A. M., AGED 22 years, was working in a mine on October 5th when two stones fell on him from a distance of ten or twelve feet one struck him just behind the left hip-joint and knocked him down, the other struck his face. He walked to my surgery, about a mile from the mine. I was not at home, but called at his house about two hours after. He complained of being stiff, and could walk with difficulty; no visible injury on hip nor pain, only tenderness. He had a small wound on left side chin, about three quarters of an inch long, and about a sixteenth of an inch deep in the middle; it was rather dirty. His face was washed, the wound bathed with warm water, and soap liniment given him for his hip. Next day he was better. On the 7th, he sent in to say he was nearly all right again. I received this message at 5 P.M.; at 7 P.M. I received another message, saying he was much worse. I visited him at once; found he had gone up to bed at 6.30 feeling well; just after he got to bed, he was seized with severe pain in neck and at the angle of the jaw. His teeth were firmly closed; risus sardonicus was well marked. He could hardly utter a sound when trying to speak. Pulse 108, temperature 102°, bowels moved twice during the day. I inserted a steel elevator between his teeth, and gave him twenty grains of chloral and twenty of bromide of potassium (in the form of syrup). He swallowed this with great difficulty. I applied a very hot linseed poultice around his chin and neck from ear to ear, covering the wound and throat; it was changed every hour. Six hours, after that every two hours for twenty-four hours; this gave him great relief.

At 12 P.M., he was still in much pain; I forced open his teeth and gave him twenty more grains of each drug. He looked very bad, and complained of severe pain at the pit of the stomach, going through to the back. At 8 A.M. next morning, still in great pain; slept a little; I for

his teeth, giving him severe pain in doing so; they opened a more easily; I gave him twenty more grains of each drug and milk. I administered an enema of warm water, soap, and entine; he passed a small motion in about ten minutes; still plained of pain in stomach. At 2 P.M. much improved; he slept; pain in face easier, could move the jaw a little; pulse temperature 100°. I gave him ten more grains of each drug, grains calomel, half a pint of beef-tea. At 8 P.M. much oved; beef-tea and milk, and ten grains of each drug. At 3 restless; twenty grains of each, and, at 7 A.M., ten grains of

9 A.M. much better; bowels moved once; pain at pit of ach; poultices discontinued. At 9 P.M. much better; little pain tomach; two motions passed during day. At 10 A.M., on the , much improved; abdominal pain little, tongue cleaner, bowels ed once; felt more like himself again; from this time made an terrupted recovery; resumed work again in about a fortnight. leg was a little stiff for some time after.

ie above is a peculiar case; the symptoms of trismus came on in two days of the accident, which was of a trivial nature. He the abdominal pain, which is so serious a symptom in these s; very severe spasm, closing the teeth firmly; and looked very I consider the quick recovery he made remarkable.

y House, Camborne, Cornwall. E. SCUDAMORE ANGOVE.

MYXŒDEMA FOLLOWING HÆMORRHAGE.

JOURNAL of March 17th contained a Clinical Lecture on Myxma, by Dr. Oliver, in which reference was made to the causes of disease. A case of the kind lately came under my notice where disease supervened on a state of intense anæmia, consequent on severe *post partum* hæmorrhage. The patient—a woman under , with several children—was a poor cottager in a country ge. T. R. H. CLUNN, Prestwich.

SURGICAL MEMORANDA.

NGENITAL CONTRACTION OF KNEE-JOINTS WITH DOUBLE TALIPES: TENOTOMY AND SUBSEQUENT EXTENSION WITH MARTIN'S RUBBER BANDAGE.

., aged 12, was first brought under my notice in January of last . She then presented the following deformity.

oth the knee-joints were contracted, the legs being flexed on the hs almost at right angles. There was also a double talipes s. The usual mode of progression was on "all fours." On being ended vertically from the axillæ, the tips of the toes only hed the ground. The hamstrings offered a firm resistance to any mpt at extension. and very severe reflex contractions ensued r such an attempt.

inding the muscles on the weakened side responded to the dic current, an operation was decided on. Accordingly, at the of January 1882, I operated on the right limb, dividing all the strings and the popliteal fascia subcutaneously, this latter being inctly ridged up into vertical fibro-cartilaginous bundles, which way on division with audible crepitus. The talipes was also ted at the same time by division of the tendo Achillis and ils.

ie limb was put up in plaster-of-Paris, and undisturbed for six s.

ie plaster was then taken off, the limb was held only slightly nded, and a back splint applied at the knee.

Martin's rubber bandage was then wound round the instep, a stocking well padded, and brought up "on the stretch," on outer side of the limb; this was fixed above the knee, and then l to bind down the knee to the splint, each turn of bandage g put on the stretch; the knee was well padded, a thick pad g placed over the patella. The limb was thus brought gradually its normal position, the talipes being remedied at the same e. The left limb was operated on a month later, with the same r-treatment.

he strain of the antagonistic muscles being taken off, the limbs eloped rapidly; the calf of the right limb, within the month, ing two inches in circumference.

aradism, friction of the limbs, "massage," etc., and, later on, application of a permanent apparatus, made by Messrs. Maw, extension at the knees and ankles, completed the case.

The child can now walk a quarter of a mile without stopping, with little support, although the limbs "give" to a certain extent at the knees, from the want of sufficient power in the extensors.

T. HENDERSON POUNDS, M.R.C.S., Snodland, Rochester.

THE COAT-SLEEVE AMPUTATION.

IN the description of the "coat-sleeve" amputation, contributed by Mr. Richard Davy to the JOURNAL for June 17th, 1882, I cannot help thinking there is a point omitted of considerable practical importance. This omission did not strike me on reading the article, when it appeared, but only a fortnight ago, when I was called upon to amputate through the leg of a fairly muscular man, in its middle third, in a case of accident.

In performing the operation by this method, in such a case as mention, after making the circular incision in a part of the limb where the circumference is considerably less than you find it at "three or four inches" (the length of sleeve recommended by Mr. Davy) above that, this incision alone will be found insufficient (at any rate, in a fairly well-formed healthy subject) to allow of turning up the sleeve, except a very short distance—two inches, perhaps—on account of the increasing disproportion between the size of the skin-sleeve and that of the limb over which it has to be skinned. It may be that such a difficulty would not be encountered in amputation for chronic disease, where there has been absorption of subcutaneous fat and muscle, and where the skin has lost in great measure its natural contractility. But, where the normal proportions of the limb are maintained, and where this healthy (and powerful) contractile force exists, such a difficulty would be found to embarrass the surgeon amputating by this method in the middle third of the leg, thigh, forearm, and upper arm; but not so in the upper thirds, except in the case of the thigh. Seeing that considerable force would not accomplish what I desired, I followed what appeared to me the simplest way out of the difficulty, and made a longitudinal incision in the posterior aspect of the flap, long enough to allow the skinning process to be accomplished without more than moderate force in traction. In every other respect, the operation seems to be highly satisfactory. L. COLBOURNE.

Buenos Ayres.

THERAPEUTIC MEMORANDA.

A PRESCRIPTION FOR ACUTE RHEUMATISM.

SOME time since I introduced, through the JOURNAL, to the notice of the profession, a special combination of familiar and tried drugs which I had found to be peculiarly efficacious in the treatment of acute gout, quickly relieving the pain and rapidly reducing the swelling. The communications I have received from many practitioners, reporting signal success in the use of my prescription, and thanking me for its publication, induce me to offer another suggestion; this time, for the treatment of acute rheumatism. It is with the maladies causing severe pain and producing exhausting unrest and sleeplessness I am specially interested; and, doubtless, I am not singular in finding in practice that most cases of chronic nervous prostration and sleeplessness, when not directly induced by brain worry, are traceable to some acute illness, such as gout or rheumatism, which has occasioned the sufferer severe agony, and has not, as a matter of fact, been quickly or completely cured. I will not venture to speculate on the causes of failure, nor will I occupy your valuable space with any observations on the pathology of gout and rheumatism, though I have strong opinions as to the prevailing views taken of these topics. I am now simply writing for practitioners who desire, above and before all other considerations, to know a remedy ready to hand which will in a majority of instances answer the purpose of prompt and effectual relief in the disorders they are called upon to treat and long to remedy.

In acute rheumatism, as early as possible in the case, give the mixture described below, in the diluted form in which I have prescribed it. Do nothing else, except to pack the painful joints in wraps of very loose cotton-wool, covered with light flannel; not oil-silk or any other vapour-proof material. ℞ tincturæ aconiti (*P.B.*) ♏xii; ammonii sulphidi ♏xvi; aquæ menthæ viridis destillatæ ℥vj. The dose is a fourth part, every fourth, or, in severe cases, every third hour, until the pain is relieved and the "fever" has abated. The mixture should not be prescribed in larger quantity than will suffice for four doses, on account of the tincture of aconite, and, more especially, the tendency of the sulphide of ammonium to decompose and deposit sulphur. J. MORTIMER GRANVILLE, 16, Welbeck Street.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

ENCEPHALOID CANCER OF THE PANCREAS AND LIVER: RUPTURE OF THE GROWTH, AND HÆMORRHAGE INTO THE PERITONEUM: DEATH.

(Under the care of Dr. F. T. ROBERTS.)

[FOR these notes, we are indebted to Mr. E. A. DINGLEY, House-Physician.]

Albert R., aged 50, married, a cabinet-maker, was admitted on February 12th, 1883. No hereditary history of malignant disease in his family could be obtained. He stated that he had always eaten "ravenously", had drunk three pints and a half of beer daily, and had occasionally drunk "to excess." He had lived in London for five years; previously, he had served in the Franco-German war; and, at the siege of Paris, caught cold, and had retention of urine and severe constipation. For two years before admission, he had had dyspeptic symptoms. On January 1st, he was knocked down by a cab. He did not feel hurt at the time, but, about a week afterwards, he felt a pain in the right hypochondriac, epigastric, and left hypochondriac regions; this pain was severe and continuous. He also suffered from loss of appetite, and noticed that he was emaciating and becoming weaker. These symptoms increased, and obliged him to leave off work on January 27th.

When admitted, the temperature was 97.6° Fahr. He appeared very ill, and was considerably emaciated. There was no anasarca. The skin was markedly yellow, especially about the face and the conjunctivæ. He was in a dull, heavy, drowsy condition, answering slowly and with difficulty. Sleep was very disturbed. The right side of the chest moved less than the left, but percussion and auscultation gave no signs connected with the chest. The arteries were rigid. The pulse was 100—small, regular, and compressible. The veins over the epigastrium were dilated. His appetite was very bad, and he complained of great thirst. There was no nausea or vomiting; but he suffered from considerable flatulence, and the bowels were constipated. The tongue was dry, and covered by a dirty yellow fur. The abdomen was very prominent, especially the upper half, which was divided from the lower by a groove, an inch and a half deep, running transversely across the abdomen, an inch and a half above the umbilicus. Above this groove, the abdomen had a solid irregular feel, and was decidedly tender. Signs of slight ascites were present. The stomach could not be defined. The liver-dulness began at the fourth rib on the right side, and the sixth on the left, and extended downwards to the groove before mentioned. The surface of the liver was very irregular, and in parts was peculiarly soft, whilst in others it was harder, but no distinct umbilications could be made out; it moved with respiration. The organ was tender. The spleen could not be defined. The urine contained a slight trace of bile, but was otherwise healthy.

February 14th.—The patient was in much the same condition; the jaundice was rather greater; he did not complain of pain, and was less restless. He was worse on February 16th; the jaundice and ascites had both increased. He was much weaker.

On February 18th, he was markedly worse, and the exhaustion was greater, but still he was perfectly conscious. The pulse was weak and small. During the morning, he kept getting out of bed and sitting up and straining on the chair, instead of using the bed-pan; he had to be put back to bed on two occasions. At 4 P.M., he became collapsed; the collapse rapidly deepened; the pulse became imperceptible at the wrist, the extremities cold, and the face covered with clammy sweat. These symptoms continued to increase until he died at 5 P.M.

The *necropsy* was made twenty-one hours after death. In the lungs there were signs of old bronchopneumonia at the apices, and of slight œdema. The base of the right lung was collapsed. The heart weighed ten ounces. Both ventricles contained clot, that in the right being slightly decolorised. The abdomen contained four ounces of dark fluid deeply blood-stained. The liver weighed one hundred and eighty ounces; its greatest measurement was thirteen and a half inches in the transverse diameter; the right lobe measured twelve and a half inches, the left eight inches, in the antero-posterior direction. The organ measured seven and a half inches in thickness; on the surface, there were everywhere visible large yell white masses, which had a very soft feel, amounting in so fluctuation; the masses varied in size from a pin's head to a three inches square. In shape, the masses were round or ova larger ones projecting about half an inch from the surface. S were breaking down and ulcerating, especially one on the righ of the right lobe, which was firmly adherent to the parietal toneum. On the upper surface of the right lobe there were more ulcerating projections, and near these there was one whic ruptured, forming a ragged cavity an inch deep and filled with clot. Near this spot, there was some clot in the peritoneum cutting into the liver, it was found to consist of broken down and to bleed very freely; scarcely any solid healthy liver-sub could be seen. The pancreas was greatly enlarged; the head globular mass four inches in diameter, the centre consisted c lowish broken down material; surrounding this were masses larged glands, quite soft when cut into; the body of the pa appeared to be normal. The stomach was small, and pre only some ecchymoses under the mucous membrane. The int were healthy, except that they had become adherent in places pancreas. The spleen was rather tough, but not otherwise a The right kidney weighed six ounces, the left five ounces. substance was tough, and the capsule was rather adherent. T contained a cyst one inch in diameter.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 3RD, 1883.

J. W. HULKE, F.R.S., F.R.C.S., President, in the Chair.

DEBATE ON DIABETES.

THE PRESIDENT, in announcing the subject for discussion, ob that the pathological anatomy of diabetes was a subject of he felt himself to have no certain or exact knowledge; he be however, that in this he was not singular. He thought th discussion ought to be confined to cases of diabetes mellitu ing on one side diabetes insipidus, as well as cases of gly in old people, which drag on a chronic course for many years out materially affecting the general health or longevity o persons.

Dr. WILKS said that he was not prepared to contribute facts or theories to the discussion, but as he had been asked t the debate, he would point out several subjects upon whic light might be cast. No doubt it was very probable that anatomical lesions commonly found were the consequence disease which lay behind all, and which was called diabete remembered the time when Bernard made his original experi he had witnessed these experiments in Paris, and the subjec had attracted much attention, and subsequently at Guy's H in the many *post mortem* examinations he had made, he ha fully examined the pons and the fourth ventricle, but without case, finding any recognisable pathological condition. Since Dr paper, read ten years ago, in which dilatation of the central and vascular changes in the medulla oblongata, and spinal cor described, the theory that the disease was due to some motor disturbance, or some disease of the ganglionic nervo tem, had found great favour; he hoped that any members wh ported this theory would advance substantial facts. His old t Mr. Wilkinson King, had taught that the liver was large and and with regard to this, and with regard, also, to the condi the pancreas and spleen, he looked for further information. A interesting pathological question was, whether the kidneys w a rule, enlarged. Very commonly they were habitually hy phied, as was expected, on theoretic grounds, to occur in which had to discharge an unaccustomed amount of wor thought it would be well to note whether anæsthesia and atro the skin had been noticed by any of the members; such chang been described. With regard to lipæmia, he remembered on of Dr. Babington's, where the patient was bled, and the blo standing, became covered by a layer of fat. Two other po great importance were—the duration of the disease, and th of death. Twenty years ago he would, had he been asked attributed death, in the majority of cases, to phthisis; while ply to that question, he would, at the present time, answer d coma. Where the cause of death was chronic disease of th what was the nature of this disease? Dr. Addison had taug

e destructive lung disease in diabetes was not ordinary phthisis, t tubercular phthisis, and he had applied the term albuminisation lung to the condition.

Dr. RALFE said he would limit his remarks to the question of cetonæmia." He distinguished between two forms of diabetic ma; to the one, and by far the rarer, the acute form, he thought e term acetonæmia ought alone to be applied. After describing e characteristic symptoms of this condition, he drew a parallel tween it and the symptoms exhibited in acute yellow atrophy, osphorous poisoning, and poisoning by the injection of acids into e blood. He doubted whether acetone was ever found free in the ood, though there was no doubt of its existence in diabetic urine. believed that it was present, however, in the blood contained in me other body that yielded it easily on decomposition. This body, me had supposed, was ethyl diacetate, but more recent investiga- n had shown that it was more likely to be aceto-acetic acid. If is was ultimately proved, it might offer an explanation—1, of the ghly acid condition of urine that was associated with diabetes; the lactescent condition of the blood, since acetic acid gave a lky appearance when agitated with a dilute and slightly alkaline xture of fatty substances heated to 100° Fahr,; 3, it would ex- in the intense fatty degeneration so noticeable in these cases of ite diabetic coma, since it was well known that injection of acids o the blood led to the increase of fatty matter in the od, and of fatty infiltration in the tissues and organs. Dr. lfe pointed out the parallelism between acetonæmia, and ite yellow atrophy and phosphorus poisoning, and alluded the statement made by Professor Gamgee in his work Animal Chemistry that, in a case of acute diabetic coma, ne liver was found, after death, to be the seat of intense ty infiltration, similar to that observed in cases of poisoning by sphorus." Dr. Ralfe thought there was no ground for doubting presence of aceto-acetic acid—given glucose in the blood—since was one of the many products of alcoholic fermentation that might formed. In conclusion, he felt warranted in believing that the acute ms of diabetic coma were due to a toxic agent, that this agent was n acid nature, that it was formed from the alcoholic fermenta- n of the glucose in the blood, that it was usually present in all es of diabetes, and gave the highly acid reaction to the urine so aracteristic of the disease; that sometimes it was produced to an essive extent, or its excretion was interfered with, in which case ave rise to symptoms closely parallel with those observed in acute low atrophy, phosphorous poisoning, or poisoning with bile-acids, taric, or oxalic acids. Dr. Ralfe thought that, if it could be wn that acute diabetic coma depended on a toxic condition, and s not due to any sudden nervous lesion, then the treatment should directed towards altering the percentage relationship of the od to the toxic agent; this might probably be best effected by nsfusion, either with blood, or even simple water, or a dilute ne solution; whilst endeavours should be made to rouse the pa- nt, and promote full action of the skin, which, he thought, could attained by the use of the cold pack, etc. Dr. Ralfe demon- ated the presence of acetone in diabetic urine by ferric chloride l iodoform reactions, and explained a process for the quantitative mation of acetone from the amount of iodoform yielded.

Dr. FINLAY showed microscopic sections of the lungs, kidney, liver, in, and spinal cord, from a case of diabetes which he had under care a few months ago in the Middlesex Hospital. The patient l comatose on the second day after admission to the hospital. history of diabetes was of only a month's duration; the urine tained 5 per cent of sugar. On the morning of the second day r admission, he complained of difficulty of breathing, and be- ne restless and somewhat delirious. When seen at 2 p.m., his thing was laboured and stridulous, and he was in a semi-uncon- us state, with a dry and brown tongue, but no sour smell in the th. Percussion-resonance over the chest was normal, and the th-sounds merely harsh. He sank into a state of profound coma, died at 7.15 p.m., above ten hours after the graver symptoms in. At the *post mortem* examination made by Dr. Fowler, the cles were found of a dark red colour, the mesenteric glands htly enlarged, the lungs engorged and friable, and the pancreas seat of a small hæmorrhage. The liver appeared normal, weigh- 52¾ ounces; the spleen small and pale, and the kidneys normal, the exception of slightly adherent capsules. The pia mater injected, the brain-substance firm, and appearing in every respect mal to the naked eye, as were also the cord and its membranes. blood, shaken up with ether, yielded no fat, and appeared per- ly normal when microscopically examined. Under the microscope, lung-tissue was found to be normal; no fat-embolisms were present. Although there were a few rounded bodies which stained black with osmic acid, these were in the alveoli, not in the vessels, and were probably fattily degenerated epithelium-cells. The kidney showed granular degeneration of the secreting epithelium, and some hyaline casts in the tubules. The liver-cells were granular, and ill defined. No dilatation of capillaries was observed. As to the nervous centres, sections from the pons Varolii and medulla showed to some extent the cribriform appearance described by Dr. Dickinson, but the excavations were small, and not common to all the arteries. Some of these were taken to be the result of the manipulation of the sections in cutting and mounting; and, as to the rest, it might fairly be questioned whether they were not more likely to be the consequence than the cause of the disease. There was nothing noteworthy in the condition of the spinal cord, the central canal appearing natural. In the record of the case, there seemed nothing to suggest an essential pathology, and he thought it would be unsafe to do so until there was a much larger store of *post mortem* records, with microscopic examinations of all the viscera which might be concerned in the causation of the disease, particularly of the nervous system, as well as examinations of the same parts from cases of other diseases for purposes of comparison. In connection with the general subject, his colleague Dr. Coupland and himself had searched the *post mortem* records of the Middlesex Hospital over a period of thirty-two years, and had found particulars of twenty cases of diabetes, of which a tabular statement and summary were given. In the course of this, reference was made to the interesting fact that a well marked case of lipæmia was observed in 1859 by the late Dr. Charles T. Coote, assistant-physician to the Middlesex Hospital, who made it the basis of an elaborate paper reviewing the whole subject, in the *Lancet*, September 1860.

Dr. HALE WHITE criticised in detail that theory for the pathology of diabetes which referred it to the existence of vacuolation in the nervous centres. In the first place, he stated that, in twenty-three *post mortem* examinations made at Guy's Hospital on diabetic subjects, no changes in the nervous centres were in any case detected. He exhibited microscopical sections of the nervous centres from some of the cases, together with the entire brain from one case, in which it was evident that the only appearance that could in any way be called vacuolation was due to the falling out of vessels from their spaces. Sections of a healthy brain, showing this false vacuolation, were shown. Specimens of the true vacuolated or "Gruyère cheese" condition were brought forward; and in all of them it was pointed out that, in the subjects from which they were taken, there was no sugar in the urine; for these two reasons, it was inferred that the pathology of diabetes was not to be found in any such condition of brain, which, if it did cause diabetes, would surely sometimes affect other centres, such as those of the seventh or ninth nerves; but affections of these centres were unknown complications of diabetes. Dr. Hale White next treated of the relation of glycosuria to insanity, and gave tables of the condition of the urine in one hundred and twenty-four cases of insanity which he had examined at Bethlem Hospital with Dr. Savage, and in the Surrey County Asylum with Dr. Paddison; out of these cases, only 2.56 per cent. contained sugar. Dr. Dickinson had given the percentage as 16.65; and it was suggested that possibly this difference was due to the presence of abundant uric acid, which would cause reduction of the copper test. Dr. Hale White stated, in conclusion, that he was not able to confirm the statement that children with tubercular meningitis are liable to glycosuria. For these reasons, he was not disposed to agree with any theory that had been put forward to connect the disease with described morbid conditions of the brain.

Dr. STEPHEN MACKENZIE would divide his remarks into three divisions: 1. An analysis of a number of fatal cases: 2. The naked-eye appearances in the body after death; and 3. The microscopic appearances in the cases examined. 1. *Analysis.* (The analysis will be found on page 658.) Some remarks were then made as to the changes found in relation to cause or effect. The frequency of pulmonary disease was well shown; in twenty out of thirty-seven cases, there were pneumonic or phthisical changes. It was pointed out that the phthisical changes were found in two organs only, the lungs and the kidneys, organs which were placed under peculiar circumstances in this disease. The occurrence of coma in association with diabetes was next cussed, it being pointed out that it was the determining cause of death in 19 of 37 cases, excluding all cases in which an explanation, other than diabetes, would account for its occurrence. It was pointed out that the coma in the cases in which pulmonary disease was present, differed in no essential way from that in pure cases. As regards its production, the various assigned causes were reviewed. In three cases of pure coma, five of coma with pulmonary

disease, and ten miscellaneous cases of diabetes, examination of sections stained with osmic acid showed no fat embolisms, and no fat in the blood-vessels. The pink or lakey character of the blood described by some observers was not noticed in these cases; the blood being either natural in appearance, or dark; sometimes thick, sometimes fluid. An acetone odour during life, or after death, had not been observed in any of the cases. He, therefore, concluded that, whilst fat-embolisms and acetonæmia might account for the coma in some cases, they were too inconstant to serve for a general explanation. At the same time, he thought that its sudden onset, peculiar features, and absence of characteristic lesions after death, pointed to some poison developing in the body; if not acetone, possibly something of an allied nature.—2. *Naked-eye appearances.* He knew of none pathognomonic, but some were frequent. He had not seen the cribriform condition of the nervous centres described by Dr. Dickinson. The most frequent, besides the emaciation and phthisis, were a shiny homogeneous condition of the liver and spleen. The kidneys were usually large, and often congested. The pancreas had only been found diseased in two cases: once scirrhous, once cretaceous.—3. *Microscopic appearances.* In fourteen cases in which the nervous system was examined, no changes were found. In six cases, slight peri-ganglionic vascular dilatations were found, but in none to the degree described by Dr. Dickinson. He was doubtful how far they were due to mode of preservation. Hyaline degeneration of some of the vessels was present in some cases, and miliary aneurysms of the retina in one. In the lungs, the changes were chiefly a necrotic pneumonia. In one case only, giant-cells were found; four cases had been examined for bacilli, but none found in any of them. In six cases, intra-alveolar hæmorrhagic extravasations were found; these were all cases of coma, and their occurrence was, no doubt, due to this cause. In the kidney, the most remarkable changes were a hyaline degeneration of the intima of the small arteries, and a peculiar skeleton-like condition of the epithelium of the collecting tubes. In the spleen, a hyaline degeneration of the arteries was found in all the cases (five) examined. The liver showed signs of fatty degeneration in only one of eleven examined: a point of importance in connection with fatty embolism. In the other cases, there was atrophy of the liver-cells. The pancreas was examined in four cases, but nothing of importance was found. The heart showed signs of wasting and degeneration. The morbid anatomy of these cases, therefore, was of a barren character, throwing no light on the pathology of diabetes. The changes found must be regarded rather as the consequences of diabetes than as explaining its occurrence. The paper was illustrated by microscopical specimens.

Microscopical Specimens.—Dr. D. W. FINLAY showed microscopical sections from the organs of the case referred to in his paper.

Mr. V. H. HORSLEY exhibited some microscopical sections of dilatation of perivascular sheaths, and of congestion of the nucleus of the hypoglossal, from a case of diabetic coma.

On the motion of the President, the debate was adjourned until the first meeting in May.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 30TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., President, in the Chair.

Osteitis Deformans.—Mr. HOWARD MARSH exhibited a man suffering from this condition.

Excision of the Right Carpus.—Mr. BARWELL exhibited a boy who had had strumous disease of the right wrist. Mr. Barwell had excised the lower end of the radius and ulna, and all the carpal bones; the boy had made a good recovery, and was now able to write well, and otherwise use the hand.

A Case of Contused Wound of the Thigh and Leg in a Child: Gangrene of thi Limb: Death.—Mr. ROBERT W. PARKER read a paper on this case. A female child, aged 14 months, was admitted into the East London Hospital for Children, having sustained an extensive wound of the left leg twenty-four hours previously. The wheel of a heavy dray had caught the outer border of the limb, and torn off a large crescentic flap of integument; the front of the knee-joint was exposed, but not opened. An attempt was made to clear off the mud with which it was plentifully covered, and so establish an aseptic condition, after which antiseptic dressings were applied. The child appeared to be doing well for about thirty-six hours, after which she became drowsy and restless, and some livid patches and œdema appeared on the foot. Twenty-four hours later, these symptoms had become more pronounced, and, on the following morning, extreme gangrene of the limb had supervened. She died The author sought the opinion of the members of the Society, first, on the treatment he had adopted, and, secondly, as to the cause of the gangrene. He felt that amputation in the upper third of the thigh, the only alternative, was a severe operation for such an infant; while the suppuration and granulation of such a wound, unless they ran an aseptic course, would almost certainly have proved fatal. As regarded the gangrene, no injury to the vessels could be discovered as a cause. Could the action of the carbolic acid have produced such a result?—Mr. HERBERT PAGE remarked that, although it was impossible to lay down any definite rule which should be applicable to all cases of gangrene, he was inclined to think that early amputation should be resorted to with much greater frequency than was often advised. He referred to the case of an infant, aged eighteen months, under his care about four or five years ago, who had his left elbow jammed in a gate. It was admitted to hospital by the house-surgeon, because the fore-arm was suspiciously cold, and there was doubtful fracture. Twenty-four hours afterwards, when Mr. Page first saw the patient, the arm was gangrenous to above the elbow; there was much swelling and inflammation, reaching almost up to the axilla; and the child was extremely ill—was, in fact, in the condition which Mr. Parker had described in his own case, when the blackness and the bullæ were first seen. Mr. Page immediately amputated at the shoulder-joint, contrary to the recommendation of a senior colleague that it would be better to wait. The infant speedily recovered. In addition to fracture of the olecranon and separation of the lower epiphysis of the humerus, the brachial artery was found plugged in two places, just above the bifurcation, the inner and middle coats being lacerated. He had no doubt that, in such cases as this, the right procedure was immediate amputation—not so much with the object of removing a dead portion of the body, as of separating the living from the dead, that the living might have some chance of further life; for, in these cases, the patient was being exposed to the gravest risks of septic poisoning, and the only hope of saving life was to remove the source of infection. Gangrene, he thought, was far too apt to suggest a line of demarcation, for which the surgeon ought to wait; but it should be borne in mind that there were very different kinds of gangrene. In the slow gangrene of old people, when there was not much inflammation, no harm might result by waiting for the natural line of separation; but, in such cases as that he had described, delay involved the utmost danger. Without in the least suggesting that the many difficult points arising in Mr. Parker's case would have warranted his adopting any other course, he laid stress upon the importance of early amputation in the large majority of cases of traumatic gangrene, whether there was an external wound or the injuries were wholly subcutaneous; and the measure by which the surgeon's decision should be arrived at should be the state of constitutional disturbance, which gave the best indications as to the amount of septicæmia, and the necessity for prompt action or otherwise.—Mr. CRIPPS thought it impossible to lay down rules for amputation in such cases. First, one must decide what was traumatic gangrene. If the main nerve, artery, and vein of a limb were all injured, the parts below died; but a line of demarcation would form, and the gangrene in such a case would probably not spread upwards. There were two kinds of spreading traumatic gangrene, which he could best exemplify by giving an instance of each kind. A man fell, and fractured his arm, which was put up in splints, but not tightly bandaged; next day, the fingers were swollen and dusky, and the splints at once removed, but the duskiness spread up the arm. The next day, the man's condition was very grave, although his temperature was only 99.5°. Mr. Holden then amputated at the shoulder, but the man was not relieved. The leg had also been lacerated by the accident, and several of his ribs fractured. The day after the amputation, gangrene commenced in the foot of the injured leg, and quickly spread up the leg and thigh. The patient soon died, when a clot was found in the femoral vein; he had also a fatty heart, fracture of seven ribs, and old pericardial and pleuritic adhesions. He had probably had an extremely feeble circulation before the accident, and it was thereby rendered still slower, so that the blood clotted slowly in the limbs. In such cases amputation was not of use. The patient had signs of constitutional depression from the first. The second case was that of a man who injured his thumb, and whose hand, four days afterwards, became swollen and extremely painful. Then the whole forearm swelled and the fingers became black; but the arm itself was red, and the line of demarcation red. The pulse was over 100; the temperature 104°. He remained in hospital for twenty-four hours, being carefully watched; then amputation was proposed, as his pain was intense—so severe, in fact, that it rendered him almost delirious. An hour or two after the operation, he was doing very well; his pulse had fallen, his temperature was 100°, and he was sleeping. In fo

ays afterwards, however, gangrene of the stump began, and spread, nd in three days further he died. Mr. Cripps thought that if mputation had been sooner done, a cure might have resulted. The angrenous products had already infected the arm before the opera- on. If surgeons would recognise these two kinds of gangrene, ney would discriminate between cases requiring, and those un- nited for, amputation. It had appeared to him that, if gangrene egan in a limb in which blood was extravasated, the effused blood ffered a most congenial soil for the spread of the gangrenous pro- ucts. In reply to the President, he said that the first patient had een described as a good husband, and not a drunkard; the second an was healthy prior to the accident.—Mr. HEATH said that to mputate the thigh high up in an infant of fourteen months old was carcely justifiable. He took it that the gangrene was the result of he injury; and that it was a form of gangrene in which a line of emarcation would have formed. It must be remembered that the arbolic spray, if played upon a limb for half an hour, distinctly owered its vitality. In the case of a young woman suffering from arcoma of the thigh, he had amputated at the hip; and she had ied twenty-four hours afterwards; he believed from carbolic acid oisoning, produced by the spray playing on so large a cut surface. here had been no carboluria, as was often noticed after large ope- ations done under the spray. Had the kidneys thrown off the car- olic acid, he did not think she would have died. Mr. Hilton had hought that large sores did better with greasy dressings, which ept in the temperature of the part. A little mud in a wound did ot, he thought, do much harm; but probably the child had a ortal injury from the first. Some surgeons seemed to think that n these days of antiseptic treatment no patient should be lost; but f every antiseptic precaution were taken, some would yet die, hough carbolised as much as possible.—Mr. PARKER said that he ad been surprised at the gangrene, because the wound seemed very uperficial, appearing to involve only the integuments. His case eemed scarcely parallel to that of Mr. Page. The soft structures ad not been much injured; nor the vessels. The cause of death he ould not wholly dissociate from the action of the carbolic acid.— he PRESIDENT thought that Mr. Heath's remarks had raised two oints, which he should be glad if he would, in a more objective ay, put into a paper that might be read before the Society.

Tetanus.—Mr. W. SPENCER WATSON contributed a paper on this ubject. It detailed the case of a well-nourished boy, aged 8, who ame under treatment eleven days after receiving a small lacerated ound on the dorsum of the foot. Four days before admission, ymptoms of tetanus commenced, and on admission the convulsions ccurred about once every half hour. At first the temperature was 01.0°, but afterwards was very little above the normal standard, eing 99.4°, but the pulse and respiration were much accelerated. he temperature on the second day was 100.2°, and continued at hat height till the fourth day, when it went up to 103.2°. He died he same evening. He was treated by the administration of chloral, ith occasional morphia injections and rather free purgation. A ustard plaster was applied to the spine. During the third day a evere spasm terminated by sudden cessation of breathing, but arti- cial respiration succeeded in restoring him. He died in a similar pasm ten hours afterwards. The *post mortem* examination showed that he membranes of the brain and spinal cord were intensely congested, ut the substance of both appeared healthy. Microscopic sections f the cord gave chiefly negative results. The only appearance that eemed abnormal, was the presence of slight vacuities in the grey atter surrounding the vessels and the multipolar cells. It was hought, however, that these spaces were due to the method of pre- aration of the sections. There was no exudation, either in the paces or in any part of the cord examined, except in some sections f the dorsal region, which presented colloid bodies here and there, uch as those described by Dr. Ross. Sections of the peroneal nerve xhibited changes, probably due to inflammation, chiefly affecting he sheath and neurogha. The questions raised by the case were— . Would the performance of neurotomy, or amputation at an early tage of the case, have given the patient a better chance of recovery? . Was the treatment by chloral and morphia the best adapted to he circumstances of the case? 3. Was the case an argument of ny value as showing that the microscopic appearances of the cord ere sufficient to demonstrate the essential tetanic condition? or as one justified in assuming that at present the microscope failed o give any reliable information, and that the essential changes in etanus were too subtle to be discoverable by any of the means of *ost mortem* inspection that we possessed.

Tetanus following Laceration of the Toes, and lasting Forty-two Days; Syme's Amputation; Recovery.—Mr. HOWARD MARSH read notes of this case. Alfred M., aged 8, was knocked down on September 9th by a tramcar, which passed over his left foot, severely crushing the three inner toes. On September 12th, he came into St. Bartholomew's Hospital, with the toes gangrenous. On September 23rd, tetanus set in; and, in the next twenty-four hours, rapidly increased in severity, and was attended with frequent and urgent spasms. Syme's amputation was performed in the afternoon of the 24th, with the effect that the spasms were both less frequent and less violent. Tetanus, however, continued severe for the next thirty-five days, and then gradually subsided, to cease entirely on the forty-second day. The wound healed slowly, but without complication. It was all but closed at the end of a month after the amputation. Treatment consisted in the administration of an abundant fluid diet, the frequent use of nutritive enemata, and the employment of enemata of chloral and bromide of potassium, and of the hypodermic injection of morphia. The chloral and bromide injections did very little, if any, good; but morphia always relieved the spasms and procured rest, though only for short periods. On many days, upwards of two grains were injected, as much as five-twelfths being injected at a time. The author remarked that the case was rare, not only as an instance of recovery from severe traumatic tetanus, but also on account of the prolonged period (forty-two days) over which the disease extended. Though many authorities were opposed to amputation, he resorted to it in this instance because the operation was not a large one, because the foot was already in part gangrenous, and because amputation afforded the surest means of removing peripheral irritation—a principal indication in the treatment of tetanus. He did not resort to nerve-division, as this might fail to check irritation, and he did not know which of the several nerves ought to be divided. In the present instance, morphia was the only drug that seemed useful, and, though employed in such large doses, it produced no unfavourable result.—Mr. PARKER showed a specimen that exhibited a local lesion in connection with tetanus. A man had a wound of his leg, tetanus had supervened, and Mr. Hutchinson had stretched the sciatic nerve; but the man died. The wound was found to be deep. The preparation containing it, which was now exhibited, showed a mass of muscle in which were the posterior tibial vessels and nerve glued together; and in the nerve were a few diseased spots. He had also seen a man who had been shot in the thigh with a pistol, loaded with powder and wadding; the wadding, after death from tetanus, was found in the thigh. Two men were loading a dung-cart; one dug his pitch-fork into the other's leg, and some of the material was carried into the wound. He died of tetanus. In all three cases, local lesions of nerves had been found after death. Then again, in a child who had a wound of the leg, and died of tetanus, there was no local lesion at all discoverable. He had also seen two cases of tetanus neonatorum without local lesion at the umbilicus. In the Rotunda Hospital, Dublin, cases had occurred which were thought to be due to malhygienic conditions; these being changed, the cases of tetanus also ceased. He thought the blood of all these cases should be examined, to see that there was no septicæmia.—Dr. DICKINSON inquired if tetanus were a blood- or a nerve-disease. A good deal was probably to be said in favour of its being a blood-disease, as it appeared to arise only in cases of open wounds, and there was, as it were, a period of incubation. But, however it originated, the irritation seemed to spread by the nervous system; and the nerves in the injured limb were often congested. He had never found in such nerves anything more, not even always that. The cord was often congested, though that was not the essential part of the disease. On the side of the cord opposite to the wounded limb were the greatest of these congestive changes, which might sometimes be described as gigantic lesions. As regarded treatment, he had seen the best results from the injection of the calabar bean in two cases, both of which recovered. Next to Calabar bean, he thought the best drug was chloral. Mr. Henry Lee had cut across the nerve of the wounded part, but without benefit. In such cases, the tetanus had already been started, and to do the operation then seemed like shutting the stable-door after the horse had been stolen.—Mr. BARWELL related a case of trismus which had occurred without external wound. A gentleman had, last November, a distinct trismus, with a curious spasm of his neck; he had a tender spot in his right leg, detected upon examination; and, upon its being pressed, he became opistholonic. Four months previously, part of a carpet needle had run into his foot, and had not come away. Mr. Barwell cut down at the tender spot, found the portion of needle, and extracted it. The patient had at once another opistholonic attack, and two others in the next six hours, though they were of lessened severity; but he had no other attacks after that time. Before the operation, his

temperature was 102°, and pulse 120; after the operation, both became lower. There was here no open wound; and the needle may have perforated a nerve. It had travelled, before removal, from the sole of the foot to a point above the inner malleolus.—Mr. BUTLIN said that tetanus was a collection of symptoms, due in various patients to different causes. It was impossible, therefore, to think that one kind of treatment could be of use in all cases of tetanus. Dr. Dickinson and Sir James Paget had seemed to think that the onset of tetanus might be foretold. A man had a crushed wound of the leg, the limb was dressed, and a weight applied to the foot to keep the knee straight. Clonic contractions began in the limb, and became tonic; and he died from spasm of the larynx. The popliteal nerve was then found surrounded by the inflammatory action taking place behind the knee, and the weight had made the nerve tense. This, it was supposed, had originated the tetanus. Now, in such a case, division of the nerve would probably prevent the development of the tetanic symptoms. It was necessary, perhaps, to clean out the mud which might become noxious in a wound; but earth had aseptic qualities.—Mr. MARSH said that the Calabar bean had been often employed in tetanus, and constantly found to be of little real use. After amputation, some cases of tetanus had often rapidly recovered. Strychnine produced symptoms like tetanus; but, if after a small dose the further supply of the drug were cut off, the patient quickly recovered. Similarly with tetanus, it might be that, if the supply of the cause of the disease were cut off, as by amputation, recovery might ensue. The cases, at any rate, had to be treated; and surgeons must try the best known plans, even if they were unable in all cases to justify their procedures by acknowledged scientific principles.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, MARCH 5TH, 1883.

JOSEPH WALKER, M.D., President, in the Chair.

Treatment of Epuloid Growths by Electrolysis.—Mr. BOYD WALLIS showed models illustrating the treatment of epuloid growths by electrolysis. In one case, that of a lady, a large epulis of six years' growth, springing from the back of the upper jaw, had been entirely removed by this means. The treatment, however, extended over six months. Another softer and more vascular growth had been destroyed by electrolysis in six sittings.

The Teeth in Relation to Age.—Mr. J. S. TURNER exhibited models of the mouth of the girl whose body was found, packed in a box, at a carrier's office in St. Luke's, about two months ago. He showed also her lower jaw. There was at first some doubt as to the girl's age, owing to the fact that on the right side of the upper jaw there were three molars, the first of which was thought to be a permanent tooth. It was, however, a temporary molar; and the second bicuspid, which, it was thought, had been removed to relieve overcrowding, had been retarded in its eruption. In the lower jaw, there were two temporary molars remaining; the canines were all fully in position, and so were the upper anterior bicuspids. Taking everything into consideration, he thought the girl must have been about fourteen or fifteen years of age. The case gave rise to some discussion, in which Messrs. Charles Tomes, Coleman, and Hutchinson took part.

Therapeutic Agents for the Promotion of Osseous Development.—Dr. J. C. THOROWGOOD pointed out that the composition of the bones and the teeth was practically identical, the latter having only a larger proportion of inorganic matter. The analysis showed that a considerable quantity of mineral food was required for the nutrition of these tissues. The mere administration of the necessary lime-salts was, however, by no means the only thing to be considered in striving to improve osseous development. Thus, in rickets, with an evident deficiency of lime in the bones, there was an elimination of from four to six times the normal amount of lime-salts in the urine, showing that the fault was in the process of assimilation. For the dentist, the most serious condition in children was that of acid dyspepsia; the child's breath had a sour smell; tongue furred, with red papillæ showing through; appetite often voracious, and bowels confined or irregular. To give a big-bellied, pale-faced child, in this condition, phosphate of lime and iron, would only make him more uncomfortable. But give him alkaline aperients, regulate his diet, cutting off excess of starch and sugar; order exercise, salt-water baths, etc.; and then administer the specific remedies indicated. Of these, the most useful were the soluble hypophosphite of lime and the chloride of calcium; either of these might be given in doses of two or three grains in glycerine and water. The lacto-phosphate of lime was also a valuable remedy. Diet was most important; the child must be taught to eat slowly. Brown bread and Scotch oatmeal would suit some children, and "seconds" flour was preferable to "best whites." By this line of treatment, the child would be brought into a condition in which the dental surgeon could work on the decayed molars with some prospect of his work remaining as a lasting proof of his skill. In conclusion, Dr. Thorowgood made some remarks on infant-feeding.—A discussion followed, in the course of which it was pointed out that, owing to the early development of the teeth, and the fact that, when once formed, they underwent but little change, treatment intended to improve their condition could best be carried out through the mother, so as to influence the child during the periods of intra-uterine life and of lactation.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

MARCH 1ST, 1883.

B. WALKER, M.R.C.S., President, in the Chair.

Ossified Cystic Kidney.—Dr. LAW showed the morbid specimens from a case of disease of aortic and mitral orifices, where an "ossified cystic kidney" was found *post mortem* on the left side. There were no symptoms indicating its condition during life.

Cancer of Pylorus.—Dr. LAW exhibited specimens of cancer involving quite two-thirds of the pyloric end of the stomach. Dr. Law remarked on the difficulty of diagnosis during life, owing to the absence of symptoms; vomiting being absent for weeks before death, though solid food—*e.g.*, rabbit—was daily partaken of. Hæmorrhage was absent; and pain was, as a rule, slight. The growth had been examined microscopically, and was found to be of a well-marked fibro-sarcomatous character.

Charcot's Disease.—The patient, from Dr. Bartolomé's wards at the General Infirmary, was introduced by Mr. C. ATKIN. He was aged 47, and had had for four years lightning pains, ataxic gait, and "bilious attacks." Last September, a well-marked "gastric crisis" compelled him to keep his bed for several weeks, and, on attempting to get up, had found that the right knee was swollen, and that he could put no weight on the limb. On admission into the infirmary, the limb was found swollen and helpless, and the tibia and fibula were painlessly dislocated backwards. Mr. Atkin alluded to Volkman's statement that tabetic arthropathy was really traumatic, and due to the awkward movements of an ataxic patient; and, after mentioning the diagnosis between this disease and osteo-arthritis, he referred to syphilis as the prime cause—an opinion held by Erb, Gowers, Westphal, Buzzard, and Fournier, though opposed by Leyden and Lancereaux. The bladder-symptoms in this case were interesting and peculiar, the urine not flowing readily away through the catheter, but being jerked out by the movements of the diaphragm. The Argyll-Robertson pupil was said to be present, but there was no optic atrophy; the latter condition according to Dr. Gowers, only occurring in 15 per cent of ataxics. No case, it was said, with the tripod of symptoms—viz., lightning pains, Westphal's test, and Argyll-Robertson pupil—had ever been known to recover. The prognosis of the state of the knee was bad as it came under the class that M. Charcot called "malignant."

Infantile Paralysis.—Dr. GWYNNE read a paper on this subject. After a short historical sketch of the disease, he dwelt upon the pathology of the affection as far as it had been ascertained. He drew a comparison between the symptoms and pathology of this disease with those of progressive muscular atrophy, and suggested the possibility that they were not so closely allied as Charcot endeavoured to prove. As regarded the initial fever that ushered in the symptoms, he gave it as his experience that it was rather the exception than the rule. He regarded the etiology of the disease as still very obscure, and thought it probable that many of the cases considered under the common title of infantile paralysis belonged to distinct lesions, and ought to be so distinguished. He did not think treatment had much to do with the result, but at the same time he thought all the means recommended should be employed, especially dwelling upon the use of galvanism and keeping up artificially the heat of the parts affected. He recommended the galvanic current to be first used; and afterwards, when the limb responded to the faradic current, that it should also be employed. He generally employed from ten to twenty cells, or even more; the positive pole being applied to the spine at or above the seat of supposed lesion, and the negative to the limbs after the "labial" method. He had no experience of the use of injections under the skin of ergotin, strychnia, etc.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 7TH, 1883.

E. MALINS, M.D., President, in the Chair.

Talipes.—MR. WM. THOMAS showed a child with talipes equinorus, which was being successfully treated by means of manipulan and the application of plaster-of-Paris cases.

Nephrectomy.—Mr. JORDAN LLOYD showed, for Mr. WEST, a kidney ich the latter had removed through a lumbar wound, four days eviously. The patient, a boy, aged 15, received an abdominal ury in November last. This was followed by hæmaturia, the velopment of a lumbar tumour, pus in the urine, and pyrexia. In cember, the aspirator drew off fifty-five ounces of purulent fluid m the kidney; this was repeated a week later, and followed up a lumbar incision and the insertion of a drainage-tube. Eighty nces of purulent ammoniacal fluid daily passed through the tube. the patient was rapidly emaciating, nephrectomy was performed. e kidney measured 8 inches in length, 4 inches in breadth, and nches in thickness, weighing 16 ounces.

Osteitis of Tibia and Fibula.—Mr. LLOYD exhibited the tibia l fibula removed, by amputation, from a boy, aged 9 years. The cimen showed acute osteitis involving the lower epiphysis of the ula, the upper end of the tibial shaft being similarly affected. ere were no inflamed tissues between these points, but by exsion there was pus in both the ankle and knee joints. After reval of the limb at the lower third of the thigh, convalescence was id.

Hæmorrhage from Tonsil: Ligation of Common Carotid Artery.—. M. A. MESSITER (Dudley), exhibited a male adult, upon whom he successfully ligatured the left common carotid artery to arrest morrhage from the tonsil. The history indicated a swelling of left tonsil, ulceration, and two attacks of copious bleeding. On second occasion Mr. Messiter tied the main artery, and a rapid valescence followed. It was thought that the ascending ryngeal artery was the probable source of the hæmorrhage.

Myxœdema.—Dr. SUCKLING showed a living case of myxœdema. patient was a woman, aged 35, who had been ill for ten years, first symptoms being drawling speech and puffy eyes. The face now œdematous-looking, but did not pit on pressure; the skin translucent, with a pinkish tinge on each cheek. Solid œdema each eyelid existed. The tongue, large and pale, moved slowly. general integument was dry and rough; the hands were llen; the lower extremities looked swollen, but did not pit. ech was slow, and words were slurred. Locomotion was tardy, there was no loss of co-ordination. The urine was pale, of a low cific gravity; no albumen; 70 ounces were passed daily. Muscucontractions with electricity were much below the normal; this Suckling attributed to the bad conducting power of the skin, to its dry condition and probable infiltration with mucin.

Trephining in Injury of the Head.—Mr. MESSITER read a paper on hining in cases of injury to the skull, and gave details of five ances in which this operation had been performed by himself his colleagues at the Guest Hospital, Dudley. He was of nion that to trephine early in many cases of cranial injury was, h the aid of Listerism, of the utmost importance, and a practice e commended.

The Pulse in Diseases of the Heart.—Dr. A. H. CARTER read a er on certain variations of the pulse in diseases of the heart; in course of which he discussed the diagnostic, prognostic, and rapeutic aspects of undue frequency, irregularity, and intersion of the pulse, in their relation to different cardiac lesions.

NORWICH MEDICO-CHIRURGICAL SOCIETY.

TUESDAY, MARCH 6TH, 1883.

E. G. BARNES, M.D., President, in the Chair.

Dislocation of the Fifth Cervical Vertebra.—Mr. WILLIAMS exited a specimen of dislocation of the fifth cervical vertebra, in ch reduction was effected; the rarity of the injury, and its possity being denied by many eminent surgeons, were dwelt upon. luction was effected by extension being made from the chin and put, while counter-extension was made from the shoulders. The uction was accompanied by a distinct snap or click. Death ocred on the fifth day. At the *post mortem* examination, the fifth vical vertebra was found dislocated, without any fracture of either r the sixth. Careful manipulation showed it was by no means a icult matter to reduce the bone; but, on cessation of extension, displacement again occurred. The position in which the head had been placed, after reduction, on a pillow level with the injured vertebra, was found to be essentially wrong, as it did not prevent the head and upper cervical vertebra from being carried forwards, reproducing the dislocation. The head should be placed over the edge of the mattress, merely supporting it by means of a band attached to something above the bed.

Popliteal Aneurysm, treated with Esmarch's Bandage.—Mr. KIDD related a case of popliteal aneurysm, treated with Esmarch's bandage. The bandage was applied tightly from the toes to the lower end of the aneurysm, then loosely over the joint, and again tightly as far as the middle of the thigh; the elastic band was then put on and the bandage taken off; the treatment was continued for two hours, and the sac appeared then to contain semi-solid clot. Signoroni's tourniquet was then applied at the apex of Scarpa's triangle, and the band removed. A strong pulsation was felt in the sac, the tourniquet not being screwed tight enough, and was immediately stopped. Gangrene of the foot subsequently took place, and Syme's operation was performed. The flaps sloughed, and amputation below the knee was then done—the progress of the case from that time being satisfactory. Mr. Kidd considered that the gangrene of the foot, which was of the dry kind, was due not to the elastic bandage, but to embolism, a clot being probably washed out of the sac when the elastic band was removed from the thigh.

Popliteal Aneurysm.—Mr. CADGE read notes of a case of popliteal aneurysm, cured by ligature of the femoral, after compression in various forms had failed.

Climacteric Dyspepsia.—Mr. PRANGLEY read a paper on a form of dyspepsia, which he termed climacteric. It occurred in women between the ages of forty and fifty. The symptoms were those of great nervous depression, with pain on the top of the head, noises in the ears, hot flushes and chills, with curious sensations in the abdomen; the dyspeptic symptoms were those of precordial distress, with palpitation, costive bowels, coated tongue, and foul breath. The treatment consisted of the administration of bismuth, bicarbonate of potash, and ammonia, adding valerian if the nervous symptoms predominated, followed by quinine, strychnia, and dilute nitro-muriatic acid.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, JANUARY 9TH, 1883.

MCCALL ANDERSON, M.D., President, in the Chair.

Removal of Patella.—The SECRETARY showed, for Dr. BEATSON, a boy from whom the entire patella of one limb was removed two years ago. The movements of the limb were now complete, and the patient suffered very little inconvenience in walking.

Removal of Knee-Joint.—Dr. RENTON showed a knee-joint and six inches of the femur, removed on account of ulceration of the cartilages and osteo-myelitis of the femur.

Fracture of Patella; Ligamentous Union.—Dr. CAMERON showed a man aged 35, on whom he had operated for a transverse fracture of the patella, which was united by a wide ligamentous union. The fragments were nearly three inches apart when the limb was fully extended, and so far apart during flexion as to admit the breadth of the hand between them. The patient had no power of extending the limb; and if by accident his foot chanced to catch upon any irregularity of surface, so as to cause a little forced flexion, he fell forwards. In May last, Dr. Cameron operated, with antiseptic precautions, by wiring the fragments and putting a drainage-tube into the joint. The wire (thick silver wire) was cut short and left in. The man now walked about with very little lameness, and had no inclination to fall. His only difficulty was in going down stairs. He could extend the limb vigorously, but he could not flex it fully, owing to the great shortening of the extensor apparatus.

Unilocular Ovarian Cyst.—Dr. NEWMAN showed, for Professor GEORGE BUCHANAN, an unilocular ovarian cyst removed from a patient from whom a parovarian cyst had been removed by Dr. Buchanan five years previously.—Dr. ROBERT POLLOCK described the clinical history of the case. About five years ago, Dr. Buchanan removed a cyst, and the lady made a good recovery. Menstruation was regular. About a year ago, pain and a distinct abdominal enlargement appeared, which were evidently due to the development of another cyst. After the removal of the second cyst, menstruation appeared on the tenth day.

Simple Perforating Ulcer of the Œsophagus, opening into the Left Bronchus, and causing Gangrene of the Lung.—Dr. FINLAYSON said this was interesting as an illustration of the simple perforating ulcer of the œsophagus, exactly resembling the kind found in the stomach. The occurrence of such simple ulcers had been denied by some; but

there seemed good evidence of their being found in the parts of the digestive tract adjoining the stomach. He referred to a case by Professor Flower in the *Medico-Chirurgical Transactions* for 1853 (vol. xxxvi), where the perforation took place into the aorta. References to various authorities for the occurrence of such ulcers were given. Most of the perforating ulcers of the œsophagus were due either to the destructive lesions of malignant disease, or to the effect of mechanical irritants, or to the influence of both—as the retention of some irritating substance above a malignant structure. Dr. Finlayson had found several cases more or less resembling the present, and he referred specially to a case, communicated by Mr. Part, in the eighth volume of the *Pathological Transactions*, and to an interesting case communicated by Dr. Wilks, and seen by Mr. Hilton (*Pathological Transactions*, vol. vi). The present case presented appearances in the lung such as were occasionally seen to result from foreign bodies retained in the bronchi; and Dr. Joseph Coats, who made the examination, was struck by the resemblance of the lung in this case to the appearances presented in a case, formerly communicated by him to this Society, where a prolonged illness, mistaken for ordinary phthisis, had resulted from the impaction of a mutton-bone in the bronchus. In making the present examination, he searched the bronchi for a foreign body; but the explanation was only reached when the œsophagus was removed and slit open. The foreign body searched for was then seen to consist of portions of the food passing into the left bronchus, and sucked up by the respiration into the left lung, which was hollowed out into numerous cavities filled with gangrenous matter. The right lung presented evidence of what seemed an impending affection of the same kind. The subject, a young man aged 22, had been healthy, and presented, in his family history, no indications of phthisical disease. Three months before admission, he had vomited his food, without any apparent cause, and this was repeated frequently for a week or two, by which time a cough began to come on. No blood had been brought up at first, but for some weeks before admission blood was frequently present in the matters vomited or expectorated. On admission, he presented the appearance of advanced phthisis. The expectoration and breath were very fœtid, and had a gangrenous odour. The physical signs revealed consolidation and great excavation on the left side, but little affection of the right side being recognisable. The temperatures were always high. The prominent feature was the combination of vomiting and coughing. It was supposed that the case was essentially one of phthisis, with some gangrenous complication, and that the vomiting and coughing might be due to irritation of the larynx during the swallowing of food. The larynx was free from disease. The patient sat up in bed to take his food, and he always secured a basin by his side. After taking a mouthful or two of fluid, he began to cough and vomit and spit, the contents of the basin being partly vomited food, partly dirty pus, with a very offensive smell, and often intimate admixture of blood with the pus. The cough occurred apart from the taking of food. He lived about a week after admission. In view of the *post mortem* examination, this condition became quite intelligible, although very puzzling during life.

Myoma of Uterus.—Dr. NEWMAN showed microscopic sections of the myoma of the uterus shown at the last meeting by Dr. Renton.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, FEBRUARY 16TH, 1883.

WILLIAM MOORE, M.D., in the Chair.

Living Specimens.—Dr. H. C. TWEEDY exhibited two cases of locomotor ataxy.

Specimens Exhibited by Card.—Dr. G. F. DUFFEY showed a specimen of Farre's tubercle of the liver; Dr. J. W. MOORE a specimen of pulmonary tuberculosis in a girl aged 12, with secondary infection of the intestines; Mr. LENTAIGNE, a specimen of ulceration and perforation of the intestines, with microscopical sections by Dr SCOTT; and Dr. REDMOND, a specimen of Bright's disease of the kidneys, complicated by peritonitis.

Sudden Change in the Colour of the Hair and Skin.—Dr. W. J. SMYLY read a paper on sudden change in the colour of the hair of an infant. The child, apparently perfectly healthy at four months old, was attacked with acute inflammation, followed by suppuration in the left temporal bone; there was paralysis of the left side of the face, with lagophthalmos, and of the soft palate. One morning, the hair on the right side of the head was discovered to have changed from its original mouse-coloured hue to a reddish yellow. The right eyebrow was similarly affected; and the skin of these parts and of the right hand was icteric. The pillow was saturated with a reddish-yellow perspiration. The abscess behind the ear was evacuated by a free incision. Although the child subsequently became hemiplegic, it made a fairly good recovery. It was suggested that the perspiration, which was of a peculiar colour, and probably of abnormal chemical constitution, not only destroyed the original pigment, but also dyed the hair a reddish-yellow colour.—Dr. BANKS referred to the case of a young woman. Half of the lashes of one of her eyes became snow-white, which she attributed to the annoyance suffered from the gaze of a "wall-eyed" admirer, who had white lashes on the defective eye.—Dr. WALTER SMITH related the case of a boy in whom the skin of the lobes of both ears and that of the back of the neck was of a sulphur-yellow, the downy hair being of a bright yellow-white. The hair of the head was brown. The yellow colouring could be readily removed by a moistened cloth, but no washing could decolorise the skin; nor did ether or chloroform produce any effect.—Dr. Charles F. Moore, Mr. Lentaigne, the President, and Dr. Grimshaw, also joined in the discussion. Dr. Smyly did not reply.

Locomotor Ataxy.—Dr. H. C. TWEEDY read a paper on two cases of locomotor ataxy. The first case was that of a pensioner aged 64, who was admitted into Steevens's Hospital in 1871. He was persistently treated with nitrate of silver, in doses of one-third of a grain, three times daily, and continued the use of the drug at intervals for nearly twelve years, during which time he was again in hospital during the years 1873, 1876, and 1882. The ataxic symptoms had completely disappeared, but the silver having been taken the patient had become argyrised. The second case was that of an engine-driver aged 42, in whom the disease was only of six months' standing. This patient also exhibited most of the phenomena of the rash-stage of the disease—the peculiar gait, partial asynergia, and fulgurant pain along the course of certain nerves; but, in addition, there were consecutive attacks of a cutaneous eruption, resembling erythema, entirely confined to the left side of the body, and unaccompanied by any of the usually attendant neuralgic pains. There was also a patch of an eruption resembling psoriasis, on the back of the left wrist; there was a similar patch coexisting at the opposite side.—Dr. BANKS was of opinion that, in a considerable number of cases of locomotor ataxy, the disease stood still, and in others appeared to be removed. He had used nitrate of silver with great advantage. He believed in the existence of a syphilitic taint in a large proportion of cases.—Dr. GRIMSHAW remembered the case brought forward by Dr. Tweedy. The result of the treatment was admirable.—Dr. NIXON agreed with Dr. Banks as to the frequency of arrest and even occasional cure of the disease, especially in cases in which syphilis existed. He considered the skin-affections in one of Dr. Tweedy's cases as coincidences, and preferred referring them to a syphilitic origin.—Dr. ROBINSON asked whether either of the patients was addicted to abuse stimulants.—Mr. LENTAIGNE mentioned a case in which Langenbuch stretched the sciatic nerve, and the symptoms disappeared. A subsequent necropsy showed the spinal cord to be perfectly healthy.—The PRESIDENT related a case of syphilitic origin, which recovered under the use of iodide of potassium.—Dr. H. KENNEDY and Dr. W. G. SMITH also took part in the discussion.—Dr. TWEEDY, in replying, said that, in the case which had recovered, the man had no syphilitic history. Neither patient had been addicted to intemperance.

Ulceration and Perforation of the Intestines.—Mr. LENTAIGNE read a paper on a case of ulceration and perforation of the intestines. A man, aged 30, had been admitted into Jervis Street Hospital, on December 6th last, complaining of cough and debility, and died there, on December 19th, from peritonitis, consequent on perforation of the intestines. After his admission, he had been carefully examined by Dr. Macfarney, but no organic disease could be found. On December 11th, on leaving the water-closet, he was suddenly attacked with all the symptoms of acute intestinal obstruction. These continued unabated until the 14th, when his bowels were freely moved by enemata, after which he had four free motions, passing large quantities of liquid yellowish brown fœces. Next day he seemed better, the pain having ceased, and the vomiting only occurring after long intervals. The ejected matter consisted of recently administered food. On the following day all the severe symptoms returned, and the man died on the 19th, eight days after the inception of the symptoms from obstruction. At the *post mortem* examination, besides the usual signs of recent general peritonitis, there was found a large collection of purulent putrid matter occupying that part of the peritoneal cavity which lay in the right inguinal region, the right half of the hypogastric region, a

ıe cavity of the true pelvis. It was apparently localised by the atting of the intestines. On removing the viscera, the pleura was ound to be ulcerated in its lower part, and the perforation had ıken place through the floor of one of the ulcers. It was situated one of the coils forming the boundary of the pus-containing ıvity, and was apparently sealed up by adhesive inflammation of ıe peritoneal coat. The spleen and mesenteric glands were enrged. The lungs were apparently healthy. There was no ulceraon anywhere else but in the lowest thirty inches of the ileum. He ılieved the case to be either one of veiled typhoid fever or of ceration, as the result of a previous attack of typhoid; and he ew attention to the great tenderness and pain over the thyroid ramen, and for a few inches below Poupart's ligament, on the inner pect of the thigh, a condition which, when coupled with the mptoms of intestinal obstruction, might easily lead to a mistaken agnosis of obturator hernia, due to pressure or inflammation of e obturator nerves before their exit from the thyroid foramen.—A scussion followed, in which Dr. MacSwiney, Dr. C. J. Nixon, Dr. W. Moore, and Mr. Lentaigne took part.

SUBSECTION OF STATE MEDICINE.

Opening Meeting, Thursday, February 8th.

C. A. Cameron, M.K.Q.C.P., President, in the Chair.

President's Address.—The President delivered an introductory dress, dealing with the subject of public hygiene from the earliest nes, and referring particularly to the sanitary laws and their adnistration in foreign States. The various sanitary Acts were reewed in detail, and praise given to the Irish Registrar-General for owing the death-rate per 1,000 persons in sixteen different classes society in Dublin in his weekly returns. The sanitary organisaıns of the chief Continental States and of the United States were scribed. Except in Scandinavia, they were inferior to the British nitary administration. In one department—the systematic inspecın of food, drugs, and poisonous colours—the sanitary authorities France, Germany, Belgium, and Holland, were more vigilant and tive than in the United Kingdom.

Census Statistics and Health Statistics.—Dr. Grimshaw read a per on some points concerning the relations between census statis-s and health statistics. He dwelt forcibly on the errors in calating death-rates on estimates of population founded on the rate increase between census periods. He also pointed out that estiıtes founded on the number of inhabited houses were also liable error. With the view of classifying the population into various ·ial grades, he made observations on the value of a "social" ısus; and at the suggestion of the Dublin Sanitary Association, ch a census had been compiled for the Dublin Registration Disct, so that now it was possible to strike death-rates for various ·ial grades of the community in that district. Since the comncement of the present year, during four weeks, the death-rate s as follows, as compared with a total death-rate of 30.6 per 00: professional and independent class, 22.45; middle class, 25.4; isans and petty shopkeepers, 26.1; general service class and workuse inmates, 37.2 per 1,000.—Dr. W. Moore asked whether the rease in the population in 1877-8 depended on the state of the rvest? To him, the social aspect of the statistics initiated by e Registrar-General was a new phase.—Dr. MacSwiney considered tistics of the duration of life of various classes would have a st important bearing upon life-assurance. From Dr. Grimshaw's tistics, it would appear that the actual speculation of life in some sses was much greater than in others, and thus the premium yable on a policy of life-assurance would depend much on the ·ial position of the individual as the important factor.—Dr. J. W. ORE said that, in certain northern nations, local estimates of pulation were made every two years, particularly in Copenhagen. took exception to the grouping of the wives and children of the isans in different classes, as erroneous statistics would result; in the case of the high mortality among the knife-grinders in effield, if they distributed the mortality in that particular trade er the wives and children, the estimate would be false. He would, refore, group together the wives and children as belonging to the isans generally, and so with the wives and children of the middle l upper classes.—The Chairman thought that to group the wives l children of artisans would involve too great minuteness of detail, l would be unnecessary in presence of the admirable statistics on e mean expectation of life as to persons of all ages founded on o millions of years of life in connection with life-assurance in the nuals of the Odd Fellows 'community. Dr. Grimshaw's classificaı was admirable. The death-rate of Dublin was, in his opinion, greatly influenced by the relatively large population of poor people in the city, in comparison with English and Scotch cities; and if there were statistics like those which the Registrar-General had collected in the last four weeks, there would be data to compare the sanitary condition of Dublin with that of those cities. The income tax of Dublin was greatly exceeded by that of English and Scotch cities of the same population, showing that Dublin was the poorer. —Dr. Grimshaw did not think the harvest had anything to do with the increase of population. Concerning life-assurance, he had asked a number of people connected with assurance companies whether they really considered the high death-rate in Dublin had any effect in increasing the premium, and they said not, that assurance business paid as well in Dublin as anywhere else. The death of a tradesman, for instance, from knife-grinder's rot, affected his family, as the family might then starve. The chairman's point about the income tax he did not consider sound. There was a large class of persons in English towns with incomes from £20,000 to £40,000 a year, while there were few such in Dublin, and as persons with from 10s. to £2 a week paid no income tax, the amount of income tax was no index of the death-rate.

Thanks were voted to Mr. W. R. Maguire for having exhibited a most interesting collection of sanitary appliances and models.

SURGICAL SECTION.

Friday, February 9th, 1883.

J. K. Barton, M.D., President, in the Chair.

Axillary Aneurysm: Ligature of Subclavian Artery.—Dr. T. E. Little read a paper on a case of axillary aneurysm, for the cure of which he had deligated the subclavian artery in its third stage. The tumour had a traumatic origin. Great difficulties surrounded the diagnosis, owing to the almost complete absence of pulsation or *bruit* in the tumour; nor could pulsation be felt at the wrist. The vessel was reached by an infraclavicular incision. The result of the operation was most satisfactory.—Dr. Bennett referred to the difficulties that attended the diagnosis in this case, being at one time of opinion that the tumour was of venous origin. In deligating the first stage of the axillary artery, he pointed out the advantages of keeping above and not below the cephalic vein.—Mr. Stokes asked the author what were his reasons for selecting the infraclavicular operation, which, in Mr. Stokes's experience, was much more difficult than the operation above the clavicle. The probabilities of finding the artery healthy were greater when the distant operation was performed.—Mr. Porter believed the deligation of the first stage of the axillary artery was a more difficult operation than that of the third stage of the subclavian. The vein gave a great deal of trouble, as a rule, and the surgeon must with great caution pass either the aneurysmal needle or the probe between it and the artery.—Mr. Croly dwelt on the difficulty of the operation, mainly from the great depth of the vessel. It had been suggested, in order to facilitate reaching the vessel, to saw across the clavicle. The collapse of the aneurysm after the operation was not a favourable sign. The case appeared to have many features of resemblance to that of an aneurysmal varix.—Dr. Little, in reply, observed that, to give some colour to what Mr. Croly had said, it appeared to him that the pulsation in the vein at the time was intrinsic. He gave his reason for selecting the infraclavicular operation, stating that the indications to keep away as far as possible from the aneurysm were not specially great, as the aneurysm had a traumatic origin. He agreed with Mr. Croly that the collapsing of the aneurysm on the application of the ligature was an unfavourable sign.

Strangulated Hernia.—Dr. Kilgarriff read the notes of three cases of strangulated hernia which had been operated on by him. In the first were the contents of the hernial tumour, consisting of the cæcum and portion of the ascending colon; the cæcum had a free mesocæcum, and the protrusion had a complete sac. The second case was one of congenital hernia. The spermatic cord had a diameter of three-fourths of an inch, and was slung by a distinct and free mesentery. The rigid inelastic condition of the skin of the patient rendered the replacement of the testicle impossible, and necessitated castration. In the third case, there was a double stricture, the external consisting of thickened intercolumnar bands, and the second at the deep abdominal ring. The results obtained in these cases were satisfactory.

For making permanganate of potassium into pills, B. S. Proctor *(Pharm. Jour. and Trans.)* recommends China clay and water. Th pills keep well, and disintegrate readily in water, yielding the per manganate unchanged.

REVIEWS AND NOTICES.

OFFICIAL REPORT OF THE SMOKE ABATEMENT COMMITTEE, 1882, WITH REPORTS OF THE JURORS OF THE EXHIBITION AT SOUTH KENSINGTON. London: Smith, Elder, and Co.

THE attempts that have been made for many centuries past to alleviate the unpleasantness arising from the smoke formed when bituminous coal is burnt, go far to form of themselves a sufficient guarantee that the idea that smoke is injurious, both to health and property, is not entirely chimerical, irrespective of the statistics which modern science, and a more complete organisation has rendered it possible to accumulate. It is not to be wondered at, therefore, that the idea should have suggested itself to two members, Mr. Ernest Hart and Miss Octavia Hill, of societies so greatly interested in the health of the metropolis and the country at large, as the National Health and Kyrle Societies, to bring about an exhibition such as was held at South Kensington in the winter of 1881-1882.

Seeing that about five-sevenths of all the coal burnt in London is consumed in grates, stoves, and kitcheners, it is not at all surprising that by far the larger class of exhibits consisted of such appliances. The grates and stoves exhibited are classified by Mr. D. Kinnear Clark, M.I.C.E., engineer to the committee, as follows:

Class 1. Open grates, having ordinary grids and upward draught. Class 2. Having solid floors, adapted for slow combustion and upward draught. Class 3. Open grates, underfed, with upward draught. Class 4. Open grates, to which fresh fuel is supplied from the back, or from the sides, or from hoppers. Class 5. Open grates having a downward, or a backward, or a lateral draught. Class 6. Close stoves.

Eighty-six chemical tests were made of the gases escaping from the flues to which these stoves and grates were attached, and Professor W. Chandler Roberts, of the Royal School of Mines, in his report on this subject, says that the method he finally adopted, consisted in taking, for a period of three hours from first lighting the fire, a continuous sample of the gases passing up the flue, and passing them first through asbestos to retain the solid matter, then through chloride of calcium to absorb the water, and next through soda-lime to retain the carbonic anhydride. The combustion of the hydrogen, carbonic oxide and hydrocarbons, was completed by glowing cupric oxide, the products, water and carbonic anhydride, being absorbed by calcium chloride and soda-lime respectively. As the amount of hydrogen—both free and combined—which passed up the flue had very many sources other than the fuel itself, it could not be considered to afford any idea as to the completeness of combustion in the grate, which was, however, represented by the ratio which the carbon, in its completely burnt form of carbonic anhydride, bore to the carbon as carbonic oxide and hydrocarbons; and this ratio having been found for each test, in order to make the many results obtained comparable with one another, the carbon as carbonic anhydride was, in each case, raised to 1,000, the carbon as carbonic oxide and hydrocarbons, being proportionately increased.

The results show that this ratio varied between the limits of 1,000 : 4 and 1,000 : 375, but in only nine tests did it fall below 1,000 : 200, six of which (three grates and three stoves) were intentionally worked for slow combustion.

Professor Roberts concludes, from the amount of matter retained by the asbestos, and from that deposited in the flues, that the carbon lost in the form of soot rarely exceeds 1 per cent. of the total carbon in the fuel. The best grates lost, in the form of gaseous compounds, 3½ per cent. of the total carbon in the fuel; the best stoves lost 2½ per cent.; and the mean for the whole of the grates and for all the stoves was 9 per cent. and 6¾ per cent. respectively.

The best class of grates was the one relying on a downward draught; the worst, the one depending on slow combustion.

The fuel used in making these tests was either Wallsend or anthracite, the former giving 69 per cent of coke, the latter 94 per cent.

Mr. Clark states that the grates and stoves were all tested under similar conditions; and he finds that, as regards heating power, the classes come in the following order

	Rise in Temperature per lb. of Fuel.
Class 6	4.48° Fahr.
Class 3	3.81° „
Class 5	3.38° „
Class 4	3.05° „
Class 2	2.99° „
Class 1	2.88° „

The velocity of the draught was greater in the case of the grates than of the close stoves, the former passing up 2,100 cubic feet of gas of the temperature of 62° Fahr. per lb. of fuel burnt, and the latter but 1,160 cubic feet.

The difference in temperature between the lower and upper parts of the testing-rooms during the testings was usually about 9° Fahr., the upper part being the hotter. Mr. Clark remarks that those grates which relied on systems of introducing heated air, of ventilation, etc., to reduce this difference, usually increased it; and he also gives the following table, showing the manner in which the heat evolved by the combustion of the fuel is utilised.

	Open Grates.	Stoves.
Heat carried up the chimney	43 per cent.	24 per cent.
Radiated and conducted heat absorbed by the walls	42 „	54 „
Heat lost by radiation and conduction externally and by imperfect combustion	15 „	22 „
	100 „	100 „

The committee on stoves and grates remark that, "although the smoke difficulty is far from solution yet, still a good deal of attention has been given to the matter; and, attention having been so much directed to it, there are hopes of still further improvement."

In making the awards, the jurors considered that the principal essentials were: 1, A grate or stove should give off no noxious fumes into the room; 2. That, in the case of open grates, there should be an abundance of radiant heat. They further say that, "subject to these conditions, we believe that apparatus to be most worthy of recognition in which the ratio of heating power to the amount of smoke produced is the greatest." Other conditions that were taken into consideration were cheapness, simplicity of construction, adaptability to existing arrangements, the application of some method for inducing ventilation, etc.

They award the gold medal to the underfeeder grate exhibited by Messrs. Brown and Green, and consider that the best ventilating grate adapted both for the use of Wallsend and anthracite, is Messrs. Clarke-Bunnett and Co.'s "Ingram grate." The best ventilating grate for Wallsend being G. H. Shorland's "Manchester grate," and the best ventilating grate for anthracite, Messrs. Yates-Haywood and Co.'s "Redmayne's Patent."

Silver medals were also awarded to G. Haller's "Kohlof stove;" Rosser and Russell's "Firebrick ventilating grate;" the Coalbrookdale Company's "Kyrle grate;" and Feetham's "Basket dog grate."

A bronze medal was awarded to T. E. Parker's "Venced grate," which, although it gave the most complete combustion, yet did not give so good results for heating power, and was faulty in construction when exhibited at London; but, exhibited afterwards in an improved form at Manchester, it took a silver medal. Bronze medals were also awarded to Perret's grate, for anthracite, and to Messrs. Reeve's and Henry's "Smoke filtering grate."

The most noteworthy of the stoves the jurors considered to be the one exhibited by Mr. C. B. Gregory, of Beverley, New Jersey, in which the combustion of the fuel was not attended with the least trace of smoke, which "was a result not obtained by any other apparatus," other than steam-boilers.

A silver medal was also awarded to Mr. Cornforth's "Little wonder," in which the combustion was also very complete.

Bronze medals were awarded to the stoves exhibited by Messrs. Farwig, Dunnachie, Harry Hunt (for the "Crown Jewel"), Barton, Piron, Musgrave, and Lönholdt.

An honorable mention was awarded to the exhibit of the Rev. F. Newcombe (a stove attached to a series of horizontal pipes, through which the products of combustion passed, and the soot partially deposited). The jurors also mention that Messrs. Doulton and Co.'s "Tile stove" gave good results, and they would call special attention to the grate of Captain Galton, R.E., but which, on account of his position to the movement, could not be tested.

The kitcheners burning solid fuel were tested both for cooking joints and puff-pastry, and the "Ladies Prize," of fifty guineas, was divided between Mr. J. J. Constantine (for his "Treasure range"), and the Eagle Range and Foundry Co. They were also awarded silver medals, as were, too, "The Radiator Range Co.; the Falkirk Iron Co.; and Messrs. Brown and Green (Messrs. Brown and Green's

underfeeder); and Mr. J. Engert's exhibits burnt their fuel most completely, but they burnt rather too much of it.

The jurors divide the gas-cooking stoves into (1) those having luminous gas-jets placed inside at the bottom; (2) those having luminous gas-jets inside at the top, from which the heat is communicated by radiation and refraction; (3) either luminous or atmospheric jets outside the oven; (4) atmospheric jets inside at the bottom.

The results of the tests showed that a twelve pound joint could be cooked for but little more than a penny, when using gas which cost 3s. 6d. per 1,000 cubic feet, bearing a favourable comparison with coal.

Silver medals for cooking stoves, suitable for twelve persons, were awarded to H. C. Davis and Co., Camberwell; Beverley and Wylde, Leeds; J. Wright and Co., Birmingham; J. C. Stark and Co., Torquay; and for a cooking stove suitable for larger establishments, to J. Slater and Co., Holborn.

The jurors were of opinion that, when gas is burnt in conjunction with coke or anthracite, it is only useful for occasional use to promote combustion; but they consider that, as a simple fire-lighter, it is of great advantage.

They divide the appliances for heating by gas into (1) close stoves, traversed by currents of air which are heated by conduction, the gas burning in a separate chamber; (2) open stoves, gas burning in conjunction with coke, anthracite, or asbestos; (3) gas-baskets or gas-fires, in which gas is burnt alone, the heat being delivered by direct radiation or reflection.

But, on testing these appliances, it was found that, with gas at 3s. 6d. per 1,000 cubic feet, it cost four times as much to heat a room with gas as it did with Wallsend at twenty shillings per ton.

The various methods adopted for the prevention of smoke in steam-boilers were all more or less efficient.

By the interchange of ideas, to which the Smoke Abatement Exhibition has given rise, a great step has been made towards the prevention of smoke; and, though not yet got rid of, still, in the end, the desired result will doubtless be attained.

ECONOMY OF COAL IN HOUSE-FIRES. By T. PRIDGIN TEALE, F.R.C.S., M.A. London: J. and A. Churchill.

"THIS little book, an expansion of a lecture delivered, on November 22nd, 1882, before the Leeds Philosophical and Literary Society," is written for the purpose of showing that the real method for increasing the completeness of combustion of the fuel is "slow combustion;" that, in fact, if any grate, as at present in use, be turned into a slow-combustion one, the fuel will be far more perfectly consumed, and the smoke be considerably reduced.

But it is rather unfortunate that this should have appeared later than the Report of the Smoke Abatement Exhibition, the testings that were made there having shown most completely that, of the many classes of grates that were exhibited, the slow-combustion ones were by far the worst, both for combustion of the fuel generally, and for the production of smoke in particular; and the rise in temperature of the room was very low for the amount of fuel burnt, although better, in this respect, than many of the commoner class of grates, which fact is, probably, in part dependent on the very considerable use of fire-brick made in the construction of the "slow-combustion" grates, a point on which the author justly lays very great stress. He says, too, regarding slow-combustion: "Surely, in this, we closely approach the ideal of Dr. Siemens, one of the great advocates of the economy of fuel. We, in truth, burn our fuel twice over, first converting it into gas which will burn, and not escape unconsumed as smoke up the chimney, etc." But here, again, the results of the testings are not confirmatory, as the report shows that, although the fuel is partially converted into gases, which, as the author says, will burn, yet, as a rule, these do not do so, but pass away unconsumed up the flue, and the smoke, instead of being diminished, is very considerably increased.

The remainder of the book is chiefly devoted to the description of an "Economiser," which the author has invented, by means of which he converts common open grates into slow-combustion ones. The results of numerous inquiries made of persons using these "Economisers" are given; and they, for the most part, testify to a considerable saving of fuel, with its attendant consequences. But before accepting these statements, it would be necessary to submit the apparatus to a searching investigation, as the results of the testings of other slow-combustion grates lead to entirely different conclusions.

There are, also, some plates, showing several "slow-combustion" grate and the methods of adaptation of the "Economiser."

NOTES ON BOOKS.

Manual of Pathological Histology. By CORNIL and RANVIER. Second edition. Re-edited and enlarged. Translated with the approval of the authors by A. M. HART. London: Smith, Elder & Co.—During the past ten years enormous progress has been made, both in physiological and pathological histology; and to none, perhaps, is the profession more indebted for this advance than to the distinguished authors of this admirable text-book. The first edition, which was published in three parts in the years 1869, 1873, and 1876, immediately took its place as a standard treatise on the subject; and it is not, perhaps, too much to say that in its simplicity of arrangement, its comprehensiveness and originality, the pathological histology of Cornil and Ranvier has no rival, with the solitary exception of Ziegler's pathology, which is now appearing in Germany, and the first volume of which has recently been translated by Dr. Macalister of Cambridge. The first volume of the second French edition was published in October, 1880. The translation of this work by an English pupil of the laboratory of research of M. Ranvier in the College de France, has conferred a substantial benefit upon the English student and practitioner. Whilst closely following the original, the translator has managed to put the subject matter into clear and elegant English; and mindful of the needs and convenience of students, has re-paragraphed the book, grouping under one head all that is said on one subject, and has also compiled and added a complete index and a few notes. Amongst the latter we notice in the first chapter a critical account of Gower's and of Malassez's Corpuscle-Counters, which adds much to the value of the text. The present volume consists of two parts. In Part I., which contains four chapters, the general pathological anatomy of the tissues is considered. The work opens with an excellent summary of normal histology. The morbid changes which affect the cells and tissues are examined from a general point of view. Inflammation is next discussed, and the important subject of tumours is then fully considered.

In Part II, the lesions of some of the individual tissues—namely, of the bones, cartilage, articulations, connective tissue, serous membranes, muscles, blood, heart, vessels, and nerves, including the brain and spinal cord—are described in sixteen chapters.

The work is fully illustrated, containing no fewer than 281 woodcut figures, many of them of great beauty, and all printed from the same blocks as those used in the French edition. The printing and paper are alike excellent.

The translator announces that the second volume will follow in due course, and will be translated as soon as it is published in France; in the meantime, we can strongly and confidently recommend the present volume as by far the best text-book in any language.

An Index to the Practice of Medicine. By W. M. CARPENTER, M.D., New York. W. Wood and Co.—In this very carefully written manual, Dr. Wesley Carpenter has produced what is in fact a pocket dictionary of medicine, of the most concise, convenient, and portable character. It is a veritable pocket-pook; and, for accuracy, soundness of judgment, fullness of information within its necessary and self-prescribed limits, and clinical instructiveness, it has not within our knowledge any rival. Its alphabetical arrangement, dogmatic clearness, and essentially practical character, recommend it strongly o the general practitioner.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SCHACHT'S SYRUPUS CINCHONÆ ALCOHOLICUS.

THIS preparation is made from carefully selected cinchona bark by a process specially designed for the purpose. It is a dark, ruby-coloured fluid, having a fairly agreeable taste. The dose is from ten to sixty minims three times a day, or oftener if necessary.

KNIVES FOR REMOVING PLASTER OF PARIS BANDAGES.

On this subject Dr. Garden writes: With regard to my instrument, which itself is a modification of a knife made for me previously, on the same principles, by Mr. Young, I may say that it is nearly three years since Mr. Young got the design from me, and that, after having given it a fair trial, I showed it at the Branch Meeting here in 1881. I am not concerned to set up any claim to priority in the matter; and I only wish that the fame of Mr. Davy's knife had reached these hyperborean regions sooner than it has now done, and thus have saved me the trouble and expense of having had one made from my own design.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 7th, 1883.

THE GOVERNMENT MEDICAL BILL.

THE General Medical Council, the composition of which has been utterly condemned in the report of the Royal Commission, is about to hold another and, there is much reason to believe, its last session. In reviewing its past history, we could have wished that the interests of the profession and the public, rather than that of the licensing corporations, had been the theme of its costly deliberations. After starting with a fund of more than £30,000, derived entirely from the members of the profession who were then in existence, and who gained no advantage of any kind from the payment, this Council, without any contribution whatever from the richly endowed universities and corporations, strongly represented upon it, has gone on for twenty-five years discussing one Medical Act Amendment Bill after another, mainly in relation to the interests of the corporations, until now, when, notwithstanding the further annual income of about £5,000, resulting from the imposition by the Medical Council of the highest fee for registration which the Medical Act of 1858 permitted, it is about to expire with a somewhat diminished exchequer, and without any record entitling it to the gratitude either of the profession or of the public. The forbearance of the profession towards the shortcomings of the Council during its early years was remarkable; the Association and the profession seemed loth to believe that a Council they had been instrumental in creating in the hope of establishing thoroughness and uniformity of qualification as the outcome of the reciprocity established by the Act of 1858, should not make any serious effort to attain it. The proceedings in the Council, however, after a time, made it manifest that the conflicting interests of the corporations formed an insuperable barrier to the attainment of this cardinal point; and the Association thereupon, backed by the profession, again started the demand for the direct representation of the profession in the Council, in order to introduce an element unbiassed by corporate interests, and animated solely by the desire to improve and elevate the profession. The story of the manner in which the Medical Council treated the courteously urged request of the profession were sad to tell, and is no longer necessary, for the Council is now about to meet under very different circumstances from those in which its sessions have been previously inaugurated. The Government Medical Bill may possibly be the subject of its deliberations; if so, and if the Council should, consistently with its self-respect, discuss its provisions, let us hope that £2,000 will not, as before, be again wasted on the debate of corporate interests and strifes, but that the session will be entirely devoted to the consideration of what will be most beneficial to the profession and to the public, no thought being given to special interests of any kind.

That the General Medical Council will have a difficult task before it in keeping clear of class interests, is manifest from the flurry and excitement amongst the corporations, consequent on the introduction of the Bill of the Lord Privy Seal into the House of Lords. Amongst others, the Royal College of Surgeons of England has been roused to activity. The attempted combination of this College with the London College of Physicians has been more than once referred to; and, indeed, the extreme crudeness as well as inopportuneness of their proceedings might well afford material for amusing criticism. What more ridiculous, than that neither college was to licence as a candidate anyone who had not previously passed the examination of the other. By the same proposal, a graduate in medicine of the University of Edinburgh, on presenting himself before the English College of Surgeons, must be refused examination through not having passed the London College of Physicians. The absurdity of the proposed scheme could not well go further, and reminds one forcibly of the attempts at conjunction in Ireland, starting, in the first instance, as in England, with the attempted conjunction of all the Irish medical authorities, and then gradually dwindling down through the various stages to attempted conjunction of the two Irish Royal Colleges, beyond which failure could no further go. The climax of this, the latest English scheme, as a block to legislation, was reached in the proposal that the agreement was only to be binding for five years. It is, in truth, time to put an end to this trifling in so grave a matter. Such feeble, inefficient, piecemeal, makeshift arrangements must be prevented through *bonâ fide* efficient legislation—such legislation as may endure, not for a quinquennium only, but for long years to come. The fate of the profession must be taken out of the hands of single independent corporations, and welded, under the control of the newly constituted Medical Council, into one consistent whole, worthy of the empire.

The Council of the College of Surgeons of England has issued a statement respecting the Bill of the Lord Privy Seal. The President and Vice-Presidents prepared this statement and presented it to the Council, and the statement would appear to have been adopted at once, in its entirety, by the Council. It is very doubtful whether it would have been accepted if it had been more carefully considered a process to which its diffuseness and involution are no doubt unintentionally hostile. At any rate, the profession at large would not allow that conjoint boards of examination, under the sanction and control of the projected Medical Council "could not possibly realise better examinations, and therefore better results for medical education, for the medical profession, and for the public," than the corporations under the Medical Act of 1858 have proved themselves capable of; and yet this is in the statement promulgated by the Council, but by the Council only, an interested witness, and not by the general body of members of the College. The statement summarises the proposals in the Bill relating to medical boards thus: "It is proposed (Clause 9) to establish three medical boards, one in each division of the kingdom, the members of which are to be elected by the several existing medical authorities in the corresponding division. These boards (Clause 10) are to frame 'schemes' for securing a single and efficient qualifying 'final examination', each in its own division of the kingdom, the admission to such examination being dependent on the passing through a 'prescribed course' of education and examination by competent recognised examining authorities, also to be defined and prescribed." This proposal, it is admitted, "carried out justly and consistently with the acquired rights and properly exercised privileges of existing institutions," would be advantageous to the public; but, in making this statement, the fact, that it is the very abuse of the acquired rights and privileges of some of the licensing bodies, to the detriment of the public and the profession, which has rendered the compulsory establishment of conjoint boards of examination necessary, is completely ignored. Space will not allow us to specify the objections urged against some of the powers assigned to the divisional boards—objections which may well be put into form when the Bill has reached Committee; but it is with regret we find "the loss or diminution of privilege, position, and influence, on the part of any of the constituted medical authorities," dwelt on in regard to a measure, the object of which is to improve medical education in the interest of the public, as is unquestionably the bounden duty of the Government.

The questions which may arise respecting medical titles and their registration are simply matters of detail, and cannot possibly wreck the Bill; undoubtedly, every care will be taken that no wrong shall be inflicted on the legally qualified practitioner. The Report of the Royal Commission (paragraph 80) distinctly recommends "that all titles now registrable, if recognised by the Medical Council, and all titles of a similar character, hereafter recognised by the Medical Council, should be registrable."

The "statements" of the College of Surgeons insist on the compulsory affiliation of every licentiate of the Medical Council to at least one of the existing medical authorities. This affiliation was, in the interest of the corporations, proposed in Bills promoted by the Association, but it has never found favour with Select Committees of the House of Commons, nor before the Royal Commission; and, as was stated in a recent leader, all Government measures, from that of Lord Ripon until now, have omitted it.

There is only one point more to notice in this important statement: it is the dissatisfaction of the College at being awarded only three (one-fifth) of the members of the English divisional board, the two Royal Colleges having two-fifths, or nearly one-half the members. The College maintains that the corporate bodies should be in a majority, as in Ireland, where the corporations nominate seven-elevenths of the members. The principle of giving eight-elevenths of the board to the Universities in Scotland, and two members to the University of Oxford in England, would imply that the Universities are thus largely represented in the interest of higher education; and the Universities of Ireland are, on this as well as on other grounds, there is reason to believe, dissatisfied with their position in this respect, and will, doubtless, seek to remedy it. In our editorial capacity in relation to this Bill, which we printed at length in a former number, the most striking fact has been the extremely small number of objections urged against it, compared with our roll of more than ten thousand members. In the case of dissentients, reference has, in most instances, been made to their doubts and difficulties in one or other of our leaders on the Bill, and all the communications will be laid before the Medical Reform Committee. Certain points in the provisions of the Bill will, doubtless, be amended; but, in the main, the Bill of the Government is distinctly the Bill of the profession, for the "good of the profession;" an expression for the first time used in the drafting of a Government measure. It has been brought in at the request of the profession, fulfils their aspirations, and promotes their welfare; and it only remains for the members of the profession individually and collectively to support it energetically by petitioning and by addressing members of both houses in favour of it.

DR. MANSON'S RECENT RESEARCHES ON FILARIAL DISEASE.

THE recent number of the *China Imperial Customs Gazette* contains further notes on filaria-disease by Dr. Manson, which will be read with much interest by pathologists in every part of the world. In this supplementary paper, Dr. Manson deals with the remarkable phenomenon which has received the name of filarial periodicity. The statement of the remarkable fact that filariæ are found in great numbers in the blood of an infected individual during the night, but are absent during the day, when first announced, was received with feelings of amazement; but the statement has now been confirmed by several observers, notably by Dr. Myers in Formosa, and by Dr. Stephen Mackenzie in London.

Dr. Manson has already pointed out that filarial periodicity is an adaptation of the habits of the filaria to those of the mosquito, the intermediary host indispensable to the future life of the parasite. This is the object of the arrangement; but the particular force or mechanism that operates on the embryo parasite, the cause of filarial periodicity, has yet to be ascertained. Dr. Manson now shows by experiments, that neither temperature, atmospheric pressure, nor light, has anything to do with it. Dr. Mackenzie showed that, if the patient slept during the day and kept awake during the night, periodicity was inverted, a fact which Dr. Manson has verified. The facts of the case, Dr. Manson remarks, seem to indicate that the conditions favorable to the ingress of the parasite become developed ordinarily during the last few hours of the waking stat and that they are slowly eliminated during the last few hours of sleep.

Dr. Manson varied Dr. Mackenzie's experiment in the case of two patients who were under his care, and concluded from his observations that filarial periodicity is maintained during prolonged watching, and also when the hours of eating are changed, so that the middle meal is taken at midnight and not, as usual, at mid-day; also that prolonged sleep possibly disturbs periodicity and diminishes the number of parasites circulating at the time of maximum; and that, when the usual allowance of eight hours sleep is taken in spells of four hours at a time, at intervals of eight hours, periodicity is disturbed, and the numbers circulating at the time of maximum are sensibly diminished.

Dr. Manson mentions a curious case in which periodicity appears to have been disturbed by the febrile condition.

In connection with the intimate pathology of filaria-disease, Dr. Manson broaches a singular theory. There is abundant evidence that *filaria sanguinis hominis* does not always or even generally give rise to disease. Why should the parasite, he asks, give rise to disease in one man and not in another, and why should one organ suffer in one subject and another organ in another? Dr. Manson founds his explanation on two cases.

On puncturing a gland in the groin, in a case of lymphatic œdema of the legs, he found in the lymph thus obtained not only the usual form of embryo *filaria sanguinis hominis*, as seen in the lymph and blood, but ova of the parasite containing active and perfect embryos. Since the parent filaria is not oviparous, how was the presence of the ova in this case to be accounted for? It was long before he succeeded in finding a similar case. But at last he was able to repeat the observation in a case of lymph-scrotum. He pricked a vesicle, and found filariæ in the fluid. The following day, when the lymph which had been drawn the previous day was again examined, filariæ were again to be seen. The feeble coagulum was now broken up by stirring. It rapidly disappeared, the small quantity of red deposit and some white cloudy flocculi subsiding. In this sediment were many embryos, and in nearly every slide ova with active embryos struggling vigorously to stretch through the chorional envelopes.

Here, then, are two cases in which the ova of the parasite are found in the lymphatics; and, as Dr. Manson remarks, the parent filaria, like other animals, is liable to miscarry. This accident, he states, is fraught with danger, and is in fact the cause of the elephantoid diseases, and the key to their intimate pathology. Whilst the outstretched embryo is only about $\frac{1}{300}$th of an inch in diameter, the ovum measures $\frac{1}{75}$th × $\frac{1}{500}$th, and is much too large to pass the glands. The embryo rolled up in its envelope cannot aid itself; it becomes, in fact, an embolus. The gland or glands directly connected with the lymphatic in which the aborting female is lodged, are thoroughly obstructed. An anastomosis for a time will aid the passage of lymph, but the anastomosing vessels will carry the embolic ova as well as the lymph. The corresponding glands will then in their turn be invaded, and so on, until the entire lymphatic system, connected directly or indirectly with the vessel in which the parent worm is lodged, becomes obstructed. Dr. Manson has examined lymph from the scrotum, the glands, and from the urine, in two hundred cases, yet, in this limited number of observations, evidence of premature birth of ova was obtained twice. Therefore, the accident cannot be of very rare occurrence; although, to have examined the lymph at the proper time, and in a suitable case, must be regarded as a fortunate circumstance not often to be encountered.

The novelty of the theory, and the apparent strangeness of the

facts, naturally suggest a certain degree of caution before the explanation can be regarded as definitely established. But it must be remembered that the metamorphosis of the filaria in the mosquito, the phenomenon of filarial periodicity, and other discoveries made by Dr. Manson in connection with this subject, have all now been confirmed by many independent observers; and we can have little doubt that this last, the explanation of the causes of elephantoid disease, by plugging of lymphatics by abortive ova, will also in time receive similar confirmation.

THE PROPOSED COLLEGIATE EXAMINATION.

In a recent article, we stated our conviction to be, that if the examination proposed by the English colleges were a perfect scheme, it would hardly improve medical education, because ignorant and lazy students would turn from it to more lenient licensing authorities. But we distrust the scheme put forward by the College of Physicians and Surgeons as a programme of medical education. If there was one point that came out more clearly than another, in the inquiry made by the Association regarding medical education, it was that, after a student had passed his preliminary examination, he should, if possible, proceed to study science at one of our universities, or in a school devoted to science teaching. There can be no reason why existing institutions, connected with our hospitals, should not maintain their reputation as anatomical and physiological schools; but there are obvious reasons why lads of eighteen years of age should be sent to our universities to learn science, unless they have homes in or near the metropolis. With reference to instruction in science, however, there was a strong consensus of opinion expressed in favour of granting freedom of action to students, as to how and where they should study, provided they were able to satisfy competent examiners that they possessed sufficient knowledge of these subjects to enable them to understand medicine and surgery. These examinations might be conducted by any authorities sanctioned by the General Medical Council. A student having gained a certificate of competency in science would not be required to pass any further examination in this subject, unless as it bore directly on the practice of his profession. If principles such as these were admitted as the basis upon which a scheme of medical education should be founded, there would seem but little difficulty in arranging the course of study in systematic order. But in most of the schemes which have been brought to our notice, there appears to be a tendency to bend the course of instruction into harmony with existing institutions rather than to consider its effect on the students. Doubtless, the plan of education propounded in the Medical Bill of 1883, is in accordance with ideas which meet with our cordial approval, but there is a want of decision in this portion of the Bill, which denotes either an incomplete mastery of the subject on the part of those who drafted these clauses, or else a wavering faith in the principles to which we have referred.

On turning, however, to the scheme of medical education propounded by the Colleges of Physicians and Surgeons, we find that, after a student has passed his preliminary examination, he will have to appear before the conjoint board on three different occasions. In order that he may pass the first of these examinations, the student must take up the subject of chemistry, materia medica, botany, and pharmacy. We cannot understand upon what grounds materia medica is placed among the elementary subjects of examination. It must include a knowledge of the properties and uses of drugs, perhaps the most difficult and important subjects a medical practitioner has to deal with.

One remarkable effect of the present system of medical education is, that under it a number of practitioners are constantly entering the profession, who know but little about drugs, and, consequently, affect to disbelieve in them. In truth, these so-called practitioners might with advantage hand their patients over to a good nurse; it would certainly be a simpler proceeding than pretending to treat them as physicians. It is hardly possible, however, to have devised a more direct means of accentuating and extending this want of faith in the power of drugs as an aid to combating disease, than to relegate their study to the first, or most elementary part of the examination which a medical student has to pass. Then again, under the old system, a student was obliged to attend chemistry simultaneously with physiology. Under the new scheme proposed by the colleges, it appears that a student can defer all instruction in chemistry till he has finished his first course of physiology; a proceeding which, to say the least of it, is a retrograde movement.

Lastly, it seems probable that residence as a pupil with a medical man, antecedent to attendance at a medical school, will be deemed equivalent to one winter and two summers of school and hospital work. In the final report of the Association's Committee on Medical Education, the subject of apprenticeship, or articled pupilage, was carefully considered, and the conclusion arrived at was, "That before a student receives his licence to practice, he should produce a certificate of having studied for six months with a general practitioner, or in a public institution where he has personal charge of patients at their own homes." This recommendation differs essentially from the plan which, so far as we can comprehend it, the conjoint colleges propose to adopt. We would refer our readers to the Association's report for argument in favour of the views enunciated by us on this important subject.

THE JUNIOR MEDICAL OFFICERS IN THE INDIAN SERVICE.

So many letters from junior officers of the Medical Service of India have reached us, complaining of their position, that we feel bound to take note of the fact that a spirit of discontent has arisen among them, of which it is well that the authorities at home should take note in time. On every side we hear that the promises put forth in the document given to candidates at the India Office are not carried out in India. We are quite aware that, notwithstanding the large reduction in the number of administrative appointments in the service it can still boast of a few prizes of considerable value; but "what are they among so many?" We gather from trustworthy information that the junior surgeons in India are in large numbers drawing only 286.10 rupees monthly, which is represented as the lowest rate of pay drawn by any commissioned officer in Her Majesty's Indian Service, combatant or non-combatant. We can only say that, if this be true, it is a flagrant departure from the promises by which young medical men are induced to enter the service. This, as we understand, is what is called, by a curious and mocking misapplication of language, "unemployed pay," the recipients being all the time hard worked, and so constantly moved about at their own expense from place to place, that they have hardly for a few months at a time the semblance of a home.

The above are the complaints that, week after week, pour in upon us; we have hitherto been chary of giving publicity to them. It is time that an authoritative answer was forthcoming. If they be untrue and without foundation, let this be known. If, on the other hand, they be well founded, let the grievances be redressed. Must we remind the Government of India of a fact of which the authorities at home were made sensible—that unreal warrants and delusive promises, although they may answer their purpose for a time, are sure to be found out, and that a Nemesis follows them all?

Mr. Hopwood, at the ballot in the House of Commons on Tuesday, secured precedence for May 1st; whereupon, amid much laughter, he gave notice of the well worn resolution against compulsory vaccination, in which he acts as Mr. P. Taylor's ally.

DR. MURRELL has been elected Assistant-Physician to the Westminster Hospital.

THE veteran hydropathist, Dr. Gully of Malvern, once a prominent figure in that relation, and subsequently brought painfully under public notice in the Bravo case, has recently died.

IT has been stated, but not, we believe, on adequate foundation, that Dr. Lyon Playfair has accepted the Chairmanship of the Endowed Schools Commission, the salary of which is £2,000 a year.

MR. GEORGE HENRY STRUTT of Belper has given £1,000 towards the Derby Children's Hospital Endowment Fund, and has promised to contribute £50 *per annum* for the next three years.

THE annual death-rate in the metropolis last week was 28.3 per 1,000 of the population, exceeding the rate recorded in any week since February last year. In the twenty-eight great towns of England and Wales, the death-rate averaged 29.2 per 1,000.

THIRTY-FOUR new cases of small-pox were reported by the vaccination officer to the West Bromwich Board of Guardians at their weekly meeting yesterday. Since January 29th, 302 cases had been reported, of which 204 were convalescent, 26 had died, and 72 were still under treatment.

DR. BRAXTON HICKS, F.R.S., has, by efflux of time, retired from the post of Obstetric Physician to Guy's Hospital, which he has held for many years with so much distinction and popularity. He is succeeded by Dr. Galabin, the Assistant-Obstetric Physician to the hospital, whose place has been filled by the election of Dr. Peter Horrocks, M.D.London, gold medallist in medicine and the honour class in obstetrics in 1877.

THE slight accident to the Queen still prevents Her Majesty from taking walking exercise, but has happily not affected her general health. The result of the sprain was, as is usual after such slight injury, to produce some little effusion of fluid into the knee-joint; and, as might have been expected, some stiffness and tenderness of the joint has occurred during and subsequently to the absorption of the fluid. These are the usual incidents attending slight injuries of the kind; and there is the fullest reason to anticipate that Her Majesty will soon be free from any effects of the accident, and be able to resume her usual habit of active exercise.

DURING the past few months, the Bath City Council has expended a considerable sum of money in improving and extending the famous baths of the city. The old Royal Baths, on which there has been a large outlay, were this week reopened by the Mayor, Mr. Handel Cossham, who was attended by the members of the Council and a large number of visitors. The fine Roman bath, which is situated near the Abbey yard, and which has recently been opened up, was also visited, as were the new baths which were lately erected at a cost of £14,000. The City Council seem to be showing a determination not to be behindhand in undertaking works which are calculated to add to the comfort and pleasure of visitors to the city.

THE POISON OF ERGOT.

IT seems, says *Nature*, to result from recent researches by A. W. Pehl, brought before the Russian Chemical Society, that the poisonous action of the ergot, the bad effects of which are so often witnessed in Russia, is due to putrefaction-poisons, [true ptomaines, which appear during the decomposition of the albuminoids in flour. The ergot, that is, the sclerotium of the small mushroom, *Claviceps purpurea*, has energetic peptic qualities, and thus would directly contribute to the formation of ptomaines in the flour.

BIRMINGHAM MEDICAL SCHOOL.

AT a meeting of the staffs of the General and Queen's Hospitals, held in Queen's College last week, Dr. Sawyer, senior physician to the Queen's Hospital, was unanimously elected President of the Birmingham Clinical Board, in succession to Dr. Russell, senior physician to the General Hospital, resigned. Dr. Russell's retirement is much regretted; his personal popularity and his unremitting labours have done much to strengthen the clinical department of the Birmingham School.

MR. P. F. DE LA RUE.

WE regret to have to announce the recent death, from carbuncle, of Mr. P. F. De la Rue of Devonport. For many years, the deceased, who held the permanent appointment of surgeon to the Devonport Workhouse Infirmary, and the offices of public vaccinator and surgeon to the Borough Police Force, had largely interested himself in the public institutions of the town. The large amount of intelligence he displayed in dealing with subjects that came before him for consideration, his genial temper, and his kindness to the poor, had secured him many personal and attached friends.

DEATH FROM CHLOROFORM.

A PRESS dispatch from Norfolk, Virginia, quoted by the *Philadelphia Medical News*, March 17th, states that a lady in that city, on March 9th, died under the following circumstances. She had been in the best of health, but suffered from an occasional attack of neuralgia, which was ascribed to an ulcerated tooth. Chloroform was administered after the usual custom, for the removal of the tooth; but, after it had been successfully drawn, the lady was found to be dead. The chloroform had been administered by her husband, who is a physician, and the usual precautions were taken.

INSURANCE AGAINST ACCIDENTS.

TWO members of the profession have within the past few weeks met with fatal accidents. It will be remembered that Dr. Ambrose C. Hughes of Liverpool was thrown from his gig, and sustained such serious injuries that he died in a few days. The second case is that of Mr. Herbert Lynsey Manby of Brewood, near Wolverhampton, who scratched his right thumb whilst making a *post mortem* examination, and died on the 2nd instant from blood-poisoning. Attention has lately been drawn to the establishment of provident societies for the profession, to meet emergencies arising from long service and ill-health; and another direction in which this may be done is by insuring against accidents such as we have referred to, especially as the cost of this description of insurance is very trifling. Both the deceased gentlemen had taken this precaution, and their families consequently will reap the reward of their prudence.

WHITE-LEAD WORKERS.

WE are glad to observe that the dangers to which workers in white-lead are exposed are attracting public attention. A parliamentary paper has been recently issued, containing a report on the subject by Mr. Redgrave, C.B., Her Majesty's Chief Inspector of Factories. This interesting document gives instructive details as to the evils to which workers in white-lead factories are exposed, and the precautions adopted. It is suggested that certain precautionary measures should be made compulsory by statute. Very recently, the coroner for East Middlesex and his deputy held two inquests on the bodies of persons whose deaths had occurred from lead-poisoning. In the first case, a girl aged 18, a lead-worker, died from cerebral disease induced by lead; and in the second case, a woman aged 27 died from

similar causes. Now that attention is being directed by the medical profession to these cases of saturnine encephalopathy, they will be found to be more numerous than was formerly supposed.

SIR WILLIAM GULL.

WE learn with much regret that Sir William Gull has resigned the position which for twelve years he had held in the General Medical Council as one of the Crown nominees. Sir William Gull had shown great assiduity in his attendance, and his speeches were always marked by much of that originality of view and epigrammatic force of expression which are characteristic of his public utterances. Just now, the outlook of the Council is peculiarly stormy, and its debates are likely to be more than usually filled by the barren strife of the representatives of interested and irritated corporations. It is not surprising, therefore, that Sir William Gull should, after so long a period of rather thankless public service in a peculiarly unpopular body, propose to devote his leisure in the future to the scientific topics and discussions of which he is a well-known master, and of which his address at the recent meeting of the Metropolitan Counties Branch, in support of collective investigation, was a brilliant exposition.

A "MOTHER'S FRIEND."

FROM the report of an inquest held a few days ago at Hanley, it appears that a local druggist has, with no doubt the best intentions, recently introduced a medical preparation, which seems, however, eminently adapted for increasing the infant mortality of the district. It is called the "Mother's Friend," a title which is certainly suggestive. In the evidence it was stated that, on the day of the child's birth, the midwife obtained a pennyworth of this useful medicine, and that she gave the infant eight or ten drops daily; in the end, it was seized with convulsions, and died. It was admitted that the medicine contained opium; but it was urged in mitigation that "it was largely used in the neighbourhood." The chemist who is responsible for its preparation said that, on the previous day, he had made six gallons, and that the greater part of it was then sold. We are told, on good authority, that one "soothing syrup" alone is answerable for the deaths of 150,000 children annually. We fear it will find a formidable rival in a "Mother's Friend."

BIRMINGHAM MEDICAL INSTITUTE.

THE annual meeting of the Birmingham Medical Institute was held on March 29th. Dr. Russell, the retiring President, who occupied the chair, delivered a valedictory address. He congratulated the members upon the satisfactory and steady progress of the Institute, referring at length to the growth of the library, which now contains 10,000 volumes; to the increased number of new members, of whom thirty-one were added during the past year; and to the sound and prosperous financial position of the undertaking. Dr. Wade was elected President for the ensuing year; Mr. J. F. West and Mr. George Jones were appointed Vice-Presidents; Mr. Lloyd Owen and Dr. Saundby were re-elected honorary librarians; Mr. W. G. Archer and Mr. Joseph Hunt were again chosen as honorary secretaries; Dr. Savage, retiring member of the committee, was re-elected; and Dr. Parkes was appointed a new member of the committee. After the meeting, about fifty of the members dined together at the Grand Hotel; Dr. Wade occupying the chair. The toast of "Prosperity to the Birmingham Medical Institute" was proposed by Mr. Crompton, and responded to by Dr. Bell Fletcher; and the "Health of the new President" was given by Dr. Sawyer.

UNIVERSITY COLLEGE HOSPITAL.

THE annual meeting of the governors of University College Hospital was held on Friday, March 30th, Mr. J. Chisholm Gordon in the chair. The secretary, Mr. N. H. Nixon, read the annual report, which stated that, during the year, 2,577 patients had been admitted to the wards, in addition to 159 who were in the beds at the beginning of the year, making in all 2,736 in-patients, while there were 19,895 out-patients treated, making in the whole 22,631 patients who had received the benefit of the institution in the twelve months. The Chairman, in moving the adoption of the report, said that one subject of congratulation was that, without in any way diminishing the efficiency of the hospital, the expenditure on the occupied beds had, during the last six years, been reduced from a little over £92 to a little under £71 each *per annum*. Notwithstanding this reduced expenditure, the expenses were in excess of income, and the year closed with a debt of £8,000. He urgently appealed to the public to help a charity which was economically administered, and was fulfilling a great work among the poor of the north of London. During the year, the patients had contributed in pence £300, and the richer classes had paid £53 for the use of the medicinal baths of the hospital, and £103 for the beds in the private wards. The report was unanimously adopted, and the committee was re-elected.

THE DEBATE ON DIABETES AT THE PATHOLOGICAL SOCIETY.

THE debate on diabetes, on Tuesday evening, at the Pathological Society, was as successful as could well be expected. No speaker could bring forward any very great body of facts, to throw light on the morbid anatomy of the disease; but, on the other hand, the Society was spared any crude theorising; the tone of the whole discussion was sound and scientific, and, so far as it has gone, will certainly tend to confirm the very widely held belief that, as yet, the structural changes which are the concomitants or causes of the disease cannot be recognised. After Dr. Wilks had made a few tentative remarks, Dr. Ralfe entered into a philosophical discussion of the theories which have been advanced to account for the occurrence of diabetic coma, and gave the preference to the most recent, which attributes the coma to the presence in the blood of aceto-acetic acid, one of the products of the fermentation of glucose. Dr. Stephen Mackenzie contributed a full and careful analysis of a comparatively large number of cases from the London Hospital; and Dr. Hale White combatted the theory that diabetes bore any consequential relation to the condition of the brain which has been described as cribriform, and compared in appearance to a Gruyère cheese. The debate will not be resumed, as was originally announced, at the meeting on April 17th, but at the first meeting in May.

INQUESTS WITHOUT MEDICAL EVIDENCE.

WE recently drew attention to the practice of holding hospital inquests at Bolton, without the production of medical evidence. We regret to find that the practice is not confined to Bolton, nor to hospital inquests. We are informed that, in Stockport also it is customary for inquiries to be held without medical evidence being forthcoming. A recent instance is that of an inquest held on the 24th ultimo by Mr. Ferns, deputy coroner, on the body of a woman, who was stated to have suffered from bronchitis, but had not been attended by a doctor. Be this as it may, a police constable deposed to finding the deceased, at three o'clock in the morning, lying inside a gateway, with foam proceeding from her mouth and nose. She was dead. The deputy coroner and jury, without any necropsy or medical evidence, arrived at a diagnosis; and a verdict was returned of "Death from natural causes." The deputy coroner, according to the newspaper report, tendered some excellent medical advice to the husband of the unfortunate woman—advice which came too late to be of service. He said that the husband was wrong in allowing his wife to be out so late, when he knew she was (according to the husband's diagnosis) suffering from bronchitis. It was dangerous for any person suffering from bronchitis to go out of doors at all, now that the weather was so extremely cold. We refrain

from further comment on the case; but hope that, ere long, the Home Secretary may be able to turn his attention to the whole question of coroners' inquests.

RAIN-BAND SPECTROSCOPY.

At the last meeting of the Scottish Meteorological Society, a very interesting address was given by Professor Piazzi Smyth on a subject which has lately excited a good deal of interest, and to which Professor Smyth was one of the first to direct attention. We refer to the use of the spectroscope in forecasting the state of the coming weather, as to whether it will be wet or dry. Further experience with the instrument seems to have confirmed Professor Smyth in all he wrote about it formerly, and he not only confidently believes in it, but he still continues to use it daily. He tells us that, in the morning, a look with it through an accustomed window at the lower part of the sky will, in a few seconds, show if the weather be at all set either for prospective drought or wet. Some little care and manipulation are necessary for obtaining the rain-band; but, if the instrument be first fixed towards the high sky and then turned down to the horizontal view through the thicker parts of the atmosphere, no difficulty is usually experienced in distinguishing the rain-band, sufficiently marked to indicate the amount of watery vapour dissolved in the whole line of atmosphere looked at through the spectroscope. When the amount of such watery vapour was greater at any time than would be justified by the temperature of the air, and the consequent increase of its capacity to absorb moisture, it might be taken for granted that rain would soon fall, and would be heavy in proportion to the darkness of the band. When in the Island of Madeira, Professor Smyth had been enabled to carry out much further his examination into the intimate and ultimate constitution of the spectroscopic rain-band, by viewing it when projected on the very face of the sun in a southern latitude, and with a spectroscope twenty feet long; and he found that the foundation lines upon which the water-vapour band was founded by Nature at the Creation, were the most clear, distinct, and definable lines known through the spectrum, and in no way deficient in any of those higher qualities which had caused spectroscopy to become an exact science. In fact, the water vapour lines were superior to the solar lines, remained more fixed in the spectrum, and were more capable of the very perfection of definition than any of the sun-lines. There can be no doubt, we think, that this power of the spectroscope to render apparent to the human eye an element in the atmosphere hitherto invisible, will prove of signal service in the future, especially if worked in conjunction with other instruments; and the Royal Society of Edinburgh, in awarding recently its highest prize to Professor Smyth for his labours in this direction, has marked its appreciation of the value it puts on the studies of the Astronomer-Royal for Scotland.

FRIGHTENED TO DEATH.

THE serious effects of shock to the nervous system, especially by fright, are constantly witnessed, the results being most commonly syncope and convulsions. Death itself is, fortunately, comparatively rare. It is reported in the newspapers to have occurred at Brockley, on March 21st, in the case of a girl, aged 18, who was frightened to death by a man dressed as a ghost, near the Deptford cemetery. The pathology of emotional death is of great interest, and varies in different cases. In some instances, a fatal issue results from sanguineous apoplexy; in others, and much more frequently, from shock to the heart. Examples of the former are recorded by Dr. D. Hack Tuke, in his *Influence of the Mind upon the Body*. Thus, a woman at Bradford received a fright from a man throwing a stone against her window. He had previously threatened her. She soon afterwards complained of numbness, and rapidly became insensible. There was right hemiplegia. She died in seven hours; and, on *post mortem* examination, a clot of blood was found in the left lateral ventricle. The cerebral vessels appeared to be healthy. In the well known example of death from the heart which occurred in John Hunter's own case, we have an illustration of the cardiac class. This organ was extensively diseased, and the left ventricle was strongly contracted. Other instances of death from emotion, in which the stress had evidently fallen upon the heart, and not upon the brain, are recorded in the collection of cases of death from powerful emotion to which we have referred. In some cases, however, there was no evidence of disease of the heart or of any organ of the body, as might indeed be expected. For instance, a man is reported to have died at Twickenham after witnessing the death of a neighbour. He made the remark, "I have never seen anyone dead before, and hope I never shall again." There was a *post mortem* examination made by Dr. Ward, but nothing was found to account for death; both ventricles of the heart contained only a little fluid blood, the organ itself being normal in size, and healthy. There is no reason to doubt that, in such instances, fatal syncope may arise simply from the action of the heart being inhibited, whether by direct excitation of the vagus, as maintained by Brown-Séquard, or of the accelerators of the heart in the first instance, followed by exhaustion, and the unantagonised play of the former. Any way, if the heart, as in Hunter's case, be strongly contracted on its contents, and the blood expelled, one efficient cause of syncope with fatal results is present. Probably this was the pathological explanation of this unfortunate girl's death, from the silly practical joke played upon her. She arrived home after her fright, in the road by the Deptford Cemetery, at Brockley, looking very ill and excited. She is said to have taken off her waterproof, drawn a chair to the table to take supper, then fallen forward with her head on the table, and died after a short struggle. Mr. Hollis, the medical man who was called in, made a *post mortem* examination, and reported that all the organs were healthy, but that the state of the heart, combined with the fright, would account for death. We should be interested in knowing whether this is meant to imply organic disease of the heart, or only the condition of the walls of the heart and its contents—the result of the shock. We conclude the latter. It is to be hoped the miscreant will be discovered, and receive the utmost punishment which the law allows. The coroner stated at the inquest that five other persons had been frightened at the same spot. We do not know why the jury did not record a verdict of "Manslaughter" against some unknown person.

ANOTHER DEATH FROM INJURIES RECEIVED AT FOOTBALL.

A VERY short time ago, we made some comments in these columns on the frequency with which serious casualties occurred in the football-field; and this week we have again to refer to the subject. A young man, aged 18, was, on Saturday, March 31st, thrown so violently to the ground, that the spine was fractured in the cervical region, and he died the following day. The game was played near Birkenhead, and, from the evidence given before the coroner, it appeared that the deceased was running with the ball, when he was overtaken and "collared" by one of the players named Smyth, and both came to the ground; Smyth, however, speedily recovered himself, and resumed his pursuit of the ball, and it was not for a minute or two noticed that his opponent was lying motionless on the ground. The unfortunate young man was immediately removed to the borough hospital, where, as we have said above, he died in the evening of the following day. His father, in a letter addressed to the coroner, stated that his son had told him that "the game was quite fair, and that he was more sorry for poor Smyth than for himself;" and the umpire gave evidence that there was nothing in the fall to break any of the rules of the game, and that Smyth did not "collar" the deceased "very heavily." The "collaring," however, was heavy enough to break the player's neck. We are reminded by this evidence of the reply of Mercutio, when Romeo says to him—

Courage, man! the hurt cannot be much;" the dying man answers

—"No; 'tis not so deep as a well, nor so wide as a church door; but 'tis enough, 'twill serve." It seems to us fully time that public opinion should express itself strongly on this matter; we have no hesitation in saying that the game, played according to the Rugby rules, is a brutalising occupation and exhibition, more worthy of a gladiatorial show than an English playground. That a certain skill and judgment and quickness of eye are required to play the game well does not affect the question; all these good qualities can be equally well trained and perfected in other games which do not entail such fearful danger to life and limb. Physicians, both in this country and on the Continent, have of late years shown very plainly that many of those chronic nervous diseases which not only shorten so many lives, but make the sufferers while they live a burden to their friends and a misery to themselves, are to be traced to injuries of the brain and spinal cord caused by severe falls. It is only these falls and blows received at football, which lead by their primary effects to rapid death, of which the public hears anything. How many lives are spoiled, how many promising careers are cut short, and replaced by long years of chronic illness, we do not know; but it is fair to assume that the number of such cases bears a large ratio to the number of deaths. Within the last few months, there has been a death from heart-disease, a death from injury to the brain, and now another from injury to the spinal cord; how many other cases of chronic diseases of one or other of these vital organs may not be traceable to football casualties? If the game cannot be made safer to the players, if the Football Association will not make its influence felt, then the game ought to be abolished, and replaced by some other, which shall be manly and health-giving, instead of deadly and brutalising.

PITY FOR THE VETERANS.

DR. CAMPBELL, of the Cumberland and Westmorland County Asylum at Garlands, near Carlisle, reiterates in the annual report of that institution just issued, a complaint, very frequently encountered in lunatic asylum reports, to the effect that, of the patients admitted, a large proportion are advanced in years and are really suffering from senile decay of the mental faculties. No doubt it is discouraging to the medical officers of asylums, zealous in their vocation and ambitious to show a high rate of recovery and a low death-rate, to have their wards filled with cases which tend to depress the rate of recovery and elevate the death-rate; but from a humanitarian point of view, a well equipped lunatic hospital seems to be the proper place for most cases of senile insanity. In this form of insanity there are generally frequent restlessness, and more especially nocturnal restlessness, tiresome garrulity, dirty habits, and a constant liability to accidents and intercurrent diseases which only skilled nursing and medical supervision can ward off or deal with. Surely patients thus afflicted cannot remain members of family circles that are confined to one or two rooms, and Mr. Bright tells us that 78 per cent. of our town population are still thus pent in; and surely they are not proper inmates of workhouses, where there is no night nursing and but few medical comforts. The Poor-law officials have really a great difficulty in knowing how to deal with such patients. They are found fault with for sending them to the county asylum for the sordid motive, as it is alleged, of taking advantage of the Government grant for pauper lunatics, and they are not unlikely to get into serious trouble if they detain them in the workhouse until a fractured thigh, or a paralytic stroke, or bed-sores close the scene. They are abused on the one hand for keeping in workhouses patients that ought to be sent to the asylums, and on the other for sending to asylums cases that ought to be kept in workhouses. Cases of simple dotage in which there is only some loss of memory and a little childishness, without insane conduct, may, of course, be properly sheltered in workhouses that have suitably arranged imbecile wards; but cases of senile insanity, in which there is any tendency to excitement or despondency, in which delusions exist leading to fidgety interference with others or in which there is paralysis, great muscular weakness, or debility, or ailments calling for frequent medical or surgical assistance, are best treated in asylums specially fitted up and organised for the reception of the insane. It ought to be scarcely necessary to point out that asylums were intended for the senile insane as well as for the young and middle aged, and that medical science is as beneficently employed in "husbanding life's taper at its close," as in amputating a limb, or in guiding over the rapids of typhoid fever. And yet the indignant protests sometimes made against the admission of cases of senile insanity into asylums, would almost suggest that a man or woman above 70 years of age was beyond the grade of philanthropy, and was entitled to nothing but a clean corner in which to lie down and die. A kindly consideration for those veterans, who having escaped the sudden hazards of the battle of life, have at length broken down under the fatigues of the campaign, is a mark of true civilisation, and we should be sorry to admit that any kind of asylum accommodation is too good for senile lunatics, or that any amount of skill and labour is thrown away in prolonging the span of days that remains to them or in alleviating their sufferings and decrepitude.

HOLIDAY COLONIES.

THE paper read by Dr. Varrentrapp at the International Congress of Hygiene, held last autumn at Geneva, has, within the last month, been published in a separate form by Vieweg and Son, of Brunswick. Seaside hospitals for scrofulous children, first established in England, are now numerous in France, Belgium, Italy and Germany; and in the last country similar institutions with baths are to be found at most of the salt fields at a distance from the sea. But the aim and character of the Holiday Colonies are entirely different: they are intended for the benefit of weakly, but not actually sick children of the poorer classes in large towns who, by their means, enjoy for two, three or four weeks in the summer the advantages of pure air, outdoor exercise, and abundant food. Initiated in 1876 by Pastor Biron, at Zurich, the movement rapidly extended itself through Switzerland and Germany, and in 1881 was taken up at Milan. Details may vary, but we may take the course followed at Frankfort as an example. Lists of children in needy circumstances and feeble health having been made out by the principal teachers, a medical man selects therefrom as many as the available funds permit. An inn, school, large farm-house, or other building with ample accommodation and good sanitary surroundings, is secured in an open, healthy part of the country, and ten to twenty children, boys or girls, are sent thither in charge of a teacher of the same sex. Larger parties of forty or fifty, under two teachers, were tried from motives of economy, but the teachers were apt to devote a less individual attention to their work. The ages of the children should be from eight or nine to fourteen years, younger ones requiring too much personal attention. The selection of the master or mistress is of the highest importance, good temper, thorough sympathy with the young, and high animal spirits being essential. The diet is always liberal, especially in meat and milk. When the weather is fine, the day is spent in walking out, and in free athletic sports and gymnastics suited to the strength of each child, bathing, swimming, and collecting butterflies, plants, etc.; the evenings, or wet days, in indoor games, reading, singing, arranging the collections, or any amusement that may suggest itself. Most of the domestic work is done by the children, and not only do they gain greatly in health, weight and bodily vigour, but with a really judicious teacher their improvement in habits of order, cleanliness, behaviour, and general intelligence is no less marked. It was feared that the increase in weight might be the result merely of the better food, and would be followed by a reaction when the children returned to a poorer diet; but monthly weighings, continued in some instances for six or more months, proved that the benefit received was permanent, and

that they returned home with improved digestion, and made greater progress in their school work during the following year. The necessity of decent clothing, and above all of sound boots, is met in the case of children whose parents are really unable to provide them, by private charity or out of the general fund, but a practical difficulty frequently arises from the parents reckoning on this and deliberately neglecting their duty to their children. In some places, as Hamburg, a different plan has been followed. Arrangements are made with country clergymen, schoolmasters, officials, and other respectable persons, to take into their families, often free of cost, one, two, or three poor children, but it must be admitted that under the most favorable circumstances they generally miss the constant round of physical exercise that forms the leading feature of the colony, and where, as in Denmark, 7,000 children are annually boarded-out with small farmers and other cottagers, though they derive some benefit from the mere country life, there is no guarantee that they fare much better than at home, and the intellectual and moral influence of a genial, intelligent teacher is, of course, altogether wanting. The cost of maintaining a colony varies with circumstances, but in Germany it averages two shillings per child a day.

THE VIVISECTION ABOLITION BILL.

THE fate of this Bill was a foregone conclusion; and, by being talked out, it only escaped the more ignominious end which was prepared for it. In moving the second reading on Wednesday night, Mr. Reid paraded before the House of Commons the usual stock arguments adopted by his party. His employment of the expression, "ought not to be tolerated," is in accordance with the main principle of the noisy but limited number of sentimentalists who oppose vivisection. A self-established body, of eccentric constitution, makes itself a final and infallible tribunal as to ethical questions of a difficult and intricate nature; and its oracles preach according to an arbitrary standard of their own creation. After dictating the new principle of research, founded on their special morality, a little argument follows, as a piece of condescension, no doubt. Mr. Reid favoured the House with some of the staple objections to experiments on animals. Mr. Reid referred to the report in the JOURNAL on Professor Rutherford's experiments on cholagogues, and favoured the House with his opinion that they led to no increase of knowledge, and also informed his brother legislators that the balance of scientific opinion was to the effect that curare neutralised anæsthetics, a statement that drew an emphatic denial from Dr. Farquharson. The Ferrier case was discussed in the usual fashion, and the well-known opinions of Sir William Fergusson and other surgeons who have made, at random, certain disparaging remarks on the utility of vivisection, were, of course, quoted. The allusion to twenty centuries of experience having proved the worthlessness of these experiments is open to the objection that science has only in modern times, practically, enjoyed the benefit of physiological experience under satisfactory and accurately defined conditions, and that the examples of scientific work conducted on correct principles have proved the vital importance of such experiments to medical and therapeutical progress. In conclusion, Mr. Reid, after some singular observations in defence of sport, stated his private opinion that if all the "doctors" in creation were to say that vivisection was beneficial to human nature he would not even then allow that it was justifiable. Mr. Reid set an example which his friends are slow to follow, by referring, with perfect courtesy, to the gentlemen whose experiments he specially quoted in the course of his debate. Mr. Cartwright, in moving the rejection of the Bill, declared that the evidence in its support was faulty, quoting as examples the evils involved in the impediments already encountered by Mr. Lister, and by Dr. Stevenson, the chemist engaged in the Lamson trial. In seconding Mr. Cartwright, Mr. Lyon Playfair, as representing the largest medical university in the world, vigorously defended the recent experiments performed by experts, and his defence was based on plain facts. Out of 300 experiments made in 1881, only ten were attended with pain. Mr. Playfair dwelt on the great necessity of gaining knowledge first, before such knowledge can be applied to any practical use, such as the relief of human suffering, illustrating this argument by the well-known instance of Galvani, who from studying the convulsions of a frog, when a copper hook passed through its muscles came into contact with an iron railing, founded the science of galvanism, which had produced the telegraph and was at the base of the modern science and art of electro-therapeutics. Mr. Playfair also spoke of the benefits of Pasteur's experiments in relation to cattle, and of his own experiments with chloroform upon rabbits, before he would allow Sir James Y. Simpson to try the effect of the anæsthetic on himself. The spread of cholera through sources of pollution in reservoirs, in 1847, was a passive experiment on human beings; had they been known at that date the subsequent teachings of Thiersch, from experiments on fifty-six mice, would have saved a large population from such subtle poisoning. He concluded by declaring that the Bill was prompted by indiscreet philanthrophy and would, if passed, lead to deplorable results. Sir William Harcourt strongly supported Mr. Playfair, and observed that Sir William Jenner and Sir James Paget, with whom he had conferred, had convinced him that researches involving experiments on animals were of the highest value, whilst the Act already in force prevented serious abuses. Mr. G. Russell supported Mr. Reid, and, with the calmness of invincible ignorance, reiterated the plea, of which the stupidity is now beyond the power of language to characterise, that these experiments are not for the benefit of the human race, as well as similar assertions; he admitted that they would be justifiable if such benefit could be proved. In face of all experience, Mr. Russell stated that vivisection tended to make medical men cruel, and unfit to be called in to the assistance of our wives and children, and talked about the development of "the devil within us." A debate conceived on such lines, and supported with such unflinching ignorance and strength of denunciation, might have maundered on for ever; for nothing is easier than to gratify the feelings by despising facts, and inventing the data of abuse. We commend to Mr. Reid and Mr. Russell the elementary lectures now being delivered by Professor McKendrick at the Royal Institution. If these ultra-sensitive legislators and those whom they represent could be compelled to attend an elementary course in Albermarle Street, such as this, the time of the Legislature would be saved, and the good sense of the country would be consulted. A division would, of course, have been decisive; but it is sufficient for the day that the Bill should have been talked out; we shall hear no more of it for this session; although so tempting an academic exercise for the anti-scientific party will probably lead many a declamatory humanitarian to parade his blunders, his ignorance, his pseudo-philosophy, and his one-sided zoophilism, before many a parliamentary audience for years to come.

SCOTLAND.

ON Monday evening, a concert was given to the patients in Leith Hospital, by the friends of the institution.

AT a recent meeting of the Edinburgh University Court, £2,000 was voted from the General University Fund for the completion of the New University Buildings.

THE Conservative students of Glasgow University have resolved to bring forward the Marquis of Bute as a candidate for the office of Lord Rector. It is expected that the name of the Liberal nominee will be announced in a few days.

ST. ANDREW'S UNIVERSITY.

THE General Council of this University, at their meeting on March

29th, expressed their gratification that a Bill for the appointment of an Executive Commission to deal with the Universities of Scotland was shortly to be introduced; and they reappointed their Legislative Committee to watch over the progress of the measure.

NATURAL HISTORY SOCIETY OF GLASGOW.

AT the meeting of this Society on the evening of March 27th, among the specimens shown were three human skulls from Peru, which exhibited very well the artificial deformities of the head which it is customary to produce in that country. Dr. Henry E. Clark gave some interesting details as to how these deformities of the skull are produced; and he described minutely the manner adopted by the Incas and other early races to attain this object, which was considered a mark of superiority.

LORD RECTORSHIP OF THE UNIVERSITY OF ST. ANDREW'S.

A MASS meeting of the students of St. Andrew's University was held, on the 20th ultimo, for the purpose of receiving the report of the committee appointed, at last meeting, to select suitable candidates for the Lord Rectorship. The names of six gentlemen were submitted to the meeting; but, ultimately, three were withdrawn, leaving the following three names from which to make a selection—viz., James Russell Lowell, Matthew Arnold, and Herbert Spencer. The latter gentleman has requested his name to be withdrawn, as the state of his health would not permit of his acceptance of the office, if elected. We believe that Mr. Freeman's name was deleted from the list, owing to his strong political leanings. It is understood that politics are not to be introduced into this contest.

ABERDEEN ROYAL INFIRMARY.

IT has been resolved to make a vigorous effort to clear off the debt of £3,300 now, unfortunately, cramping the usefulness of the Aberdeen Royal Infirmary. There is every prospect of this desirable result being soon accomplished. The University students held a meeting, with a view of taking steps to aid in reducing the debt It was unanimously agreed that a subscription should be at once set on foot amongst the students themselves. The interest of the medical students in the welfare of the hospital, in addition to the services of many of their number there, has been marked in a very practical fashion, the amount of money raised by them in its behoof—as proceeds of a concert and a "Christmas tree," etc.—having already exceeded, during this session, £30.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending March 24th show that the death-rate in the eight principal towns was 28.4 per 1,000 of estimated population. This rate is 5.9 above that for the corresponding week of last year, but 0.4 below that for the previous week of the present year. The lowest mortality was recorded in Aberdeen—viz., 12.4 per 1,000; and the highest in Glasgow—viz., 36.2 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 5.5 per 1,000, or 0.7 above the rate for the previous week. The most fatal miasmatic diseases were whooping-cough and measles in Glasgow, and whooping-cough in Dundee From acute diseases of the chest, 165 deaths were registered, or 12 less than in the previous week. The mean temperature was 35.3°, being 0.6° above that of the week immediately preceding, but 7.4° below that of the corresponding week of last year.

HALF A CENTURY IN A MADHOUSE.

DR. RORIE, in his annual report of the Dundee Royal Asylum, mentions a curious entertainment which took place in that establishment on the 31st of December last. It consisted of a ball and supper party, given by one of the inmates to his fellow-patients, on the occasion of the fiftieth anniversary of his admission to the asylum. The venerable host seems to have borne the weight of years and of his mental trouble lightly, for he presided at his jubilee with much *bonhommie*, and entered on his second half-century of lunatic asylum life with sanguine anticipations, and amidst the cordial congratulations of a large circle of eccentric friends. The only parallel to this singular entertainment at Dundee of which we can think is the dinner given by Mr. Dorrit to the collegians of the Marshalsea, when he ended his long incarceration in that historic prison. It is a startling speculation, that this aged lunatic of Dundee, if sent back to his native village, would be equal to two and a half Rip Van Winkles. But this is not all; for Dr. Rorie mentions that the fifty years which have been so auspiciously concluded were his second term of residence in the Dundee Asylum, and that he had once been discharged recovered after a previous sojourn there of unsurmised duration.

SANITARY PROTECTION ASSOCIATION.

THE Sanitary Protection Association held their sixth annual meeting in Edinburgh on the 26th ult. Professor Douglas Maclagan presided. It was announced at the meeting that the Bank of Scotland had, by a recent resolution, placed the whole of their branch banks throughout the country, numbering about one hundred, under the supervision of the Association as regards sanitary matters. The remarkable apathy of the class of people who should have at once joined a sanitary association, viz., the hotel-keepers and lodging-house-keepers, was strongly commented upon. This need not be wondered at, when it is borne in mind that out of hundreds, only two out of the class referred to applied for inspection. It is only by reading reports of this kind that one can form an idea as to the insanitary condition of our houses. The report showed that 612 inspections had been made in the course of the year. About one hundred country houses had been inspected and reported upon, and among them ninety per cent. were found to have direct communication existing between their drains and the interior of the house; eighty per cent. had their water storage arrangement more or less faulty; and no less than fifteen per cent. had the main cisterns in direct communication with large brick cesspools filled with putrifying filth. The veteran sanitarian Dr. Maclagan, was re-elected president for the ensuing year.

UNIVERSITY OF EDINBURGH.

A PUBLIC meeting was held in Queen Street Hall, Edinburgh, on March 28th, with regard to the extension and improvement of the buildings of the University of Edinburgh. Lord Provost Harrison was called to the chair. The chairman said that the University would soon complete its 300th year, and it was considered that the buildings in extension of the University, which were commenced a few years ago, should be completed; at all events, that all the class rooms should be furnished with the best appliances which science could suggest. It was calculated that that would cost £30,000, but the friends of the University thought they should not be content till the buildings were completed. For that purpose £100,000 would be required. The greater part of the deficiency in funds for the University had been owing to its great success, more especially in the medical school; for within the last few years Edinburgh had become the very centre of medical instruction for our colonies and the world. The Earl of Wemyss moved—"That the recent continuous increase in the prosperity and efficiency of the University of Edinburgh renders it highly necessary that its new medical school should be completed." Dr. Lyon Playfair, M.P., in seconding the motion, said that they must keep abreast and ahead of the progress that was going on around them. The resolution was unanimously agreed to. The Lord Advocate moved:—"That, as the University of Edinburgh still labours under the want of a hall for conferring degrees, conducting examinations and holding meetings of its members, strenuous efforts should be

be made to get that want supplied." Mr. A. J. Balfour, M.P., seconded the resolution, which was agreed to. Lord Moncrieff moved that the tercentenary of the University of Edinburgh is an especially appropriate occasion for appealing to its friends and old pupils, not only in Scotland, but all over the world, to contribute funds for the completion of its buildings. The Marquis of Tweeddale seconded the motion, which was supported by Mr. T. R. Buchanan, M.P., and agreed to. Principal Sir Alexander Grant moved:—"That this meeting acknowledges with gratitude the many generous donations previously made to the University building fund, and the liberal and encouraging subscriptions recorded in the preliminary subscription list for the buildings completion fund; and they are assured that funds contributed for this purpose will confer an important benefit on Edinburgh and Scotland, and on the cause of science and learning." In supporting the resolution the Principal stated that, like the Duke of Buccleuch, the present Lord Rector (the Earl of Rosebery) had headed the subscription list with £2,000. Dr. William Hunter, one of the presidents of the Royal Medical Society, seconded the resolution, which was agreed to. On the motion of Lord Kinnear, a vote of thanks was given to the chairman, and the proceedings terminated.

IRELAND.

DEATH OF DR. REYNOLDS PEYTON, OF BOYLE.

DR. REYNOLDS, who was surgeon to the County Infirmary at Roscommon, died on Saturday, the 31st ultimo. Deceased, who was a Doctor of Medicine of the University of Glasgow, and a Fellow of the Royal College of Surgeons in Ireland, had held the post of surgeon to the Infirmary for the past thirty-five years.

ADULTERATION IN THE COUNTY DOWN.

DR. CAMERON, analyst for the county, in his recent half-yearly report states that, as compared with former returns, a great improvement has taken place in the quality of the articles of food and drink sold in the county. Of 114 specimens of food sent for analysis, only five were adulterated, viz., two of whisky, one of coffee, and three of milk.

CONCERT IN AID OF THE BELFAST CHILDREN'S HOSPITAL.

ON March 30th, a most successful and enjoyable amateur concert was given in the Ulster Hall in aid of this society. The hall was crowded in every part, and the sale of tickets must have realised a handsome sum. The object of the concert was for the painting and decorating of the interior of the hospital. The charity is a very popular one in Belfast, and, on occasions of this kind, always receives a large amount of support.

HEALTH OF BELFAST.

DURING the four weeks ending March 24th, 73 deaths from zymotic diseases were registered, a number which included 35 from scarlet fever and one from small-pox. The average death-rate from all causes was 30.4; from zymotic diseases 4.4; and from diseases of the lungs 14 per 1,000 respectively. The births registered numbered 549, and the deaths 500. Scarlet fever and whooping-cough still show rather a high mortality, but the deaths from the other diseases of this class were below the average during the month.

CORK HOME FOR PROTESTANT INCURABLES.

THE average number of patients last year was thirty-four, and the expenditure £1,748, being a cost of about £50 for each inmate. The stimulants came to £114, which appears rather high, but the class of cases under treatment may explain this. During the year the Home lost the services of Dr. W. K. Tanner, who acted as consulting surgeon since the opening of the institution, and whose death was much regretted by the staff. Dr. T. C. Shuikwin, honorary visiting surgeon, died very shortly afterwards, and their places have been filled by the election of Dr. N. J. Hobart as honorary consulting surgeon; Dr. C. K. Tanner as honorary visiting surgeon; and Dr. C. Yelverton Pearson as junior visiting physician and surgeon.

THE ADELAIDE HOSPITAL.

THE annual meeting of the friends and supporters of this hospital was held last week. During the year 1882, 831 patients were admitted; 500 cases were admitted into the surgical wards. The mortality in the medical wards was about ten per cent. The number of cases of pulmonary phthisis exceeded that of any other disease. The report called attention to the pressing need for the establishment of a consumption hospital in a healthy locality in the country, near Dublin, where the poor would not only enjoy rest and comfort, but might, some at least, have a prospect of their disease being arrested in its course.

ARMY HOSPITAL CORPS ENTERTAINMENT.

ON Easter Monday, the detachment of this corps in garrison in Belfast, consisting of twenty members, including men, women, and children, were entertained most hospitably by their commanding officer, Surgeon-Major J. H. Usher, M.B. and Mrs. Usher. A picnic outside town was intended, but, owing to the severity of the day, this had to be abandoned. Instead, the entire party drove to the midday performance at the circus, which the children enjoyed very much, and, on return to barracks, were entertained to a substantial repast, and a number of choice articles were provided for the children. At the conclusion, three cheers were given for Surgeon-Major and Mrs. Usher, and the party separated, well pleased with their day's enjoyment.

DR. MACNAUGHTON JONES.

A SPECIAL meeting of the County and City of Cork Medical and Surgical Society was held on Wednesday, March 21st, to present Dr. H. M. Jones with an address. Dr. C. A. Harvey, President, occupied the chair, and a large number of members was present. The address was as follows:

"Dear Dr. Jones,—We, the members of the County and City of Cork Medical and Surgical Association, having learned that you are about to leave the city where you have so long and earnestly laboured in the practice of your profession, both in private and in many public institutions; cannot allow our connection with you to terminate without expressing our regret at your departure from amongst us, and from the scene of your former labours, to a more extended sphere of duty, where we hope your zeal and ability will meet with their due reward.—We remain, on behalf of the members of the Association, yours faithfully, Charles A. Harvey, B.A., M.D., *President;* Y. P. Golding, M.D., *Vice-President;* T. Gelston Atkins, B.A., M.D., *Treasurer;* C. Yelverton Pearson, M.D., *Honorary Secretary.*"

Dr. Jones having suitably replied, the proceedings terminated. The members of this Association have united with those of the South of Ireland Branch of the British Medical Association in presenting Dr. Jones with a full sized oil portrait of himself.

THE MEDICAL BILL.

THE University of Dublin, the Royal University of Ireland, the King and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland, have sent deputations to London to oppose, as far as possible, the passage of this Bill in its present form. The College of Physicians petitions against the Bill on the grounds, mainly, that it would remove all its sources of vitality—in common with the other medical corporations—by depriving them of their powers of examination, registration, and educational sources of income. In its observations on the Bill, the College notes that now,

for the first time, a measure is proposed not only for the amendment, but also for the codification, of the existing law. The College approves the proposal to introduce direct representatives of the profession into the Medical Council, and to grant the Council additional powers of a mandatory nature on matters relating to education and examination. Further, the title to registration required, namely, evidence of the competency of the candidate in medicine, surgery, and midwifery, has the warmest support of the College. The provisions of the measure, however, altogether fail, the College holds, to meet the acknowledged existing evils in medical education and examination, and will be fatal to the welfare, and even the existence, of this and other medical corporations. Because of abuses which exist, in which they had no participation, the College protests against being summarily deprived of its ancient right to grant licences qualifying to practise medicine and midwifery, and of the privilege which it has enjoyed since the Medical Act, 1858, of the direct registration of their licentiates—a privilege which it can be shown to be using well and wisely. The College is of opinion that this right and this privilege should be respected in any Act now to be passed, and that their vested interests should be fully protected. The College is willing to accept coadjutor examiners, on the terms proposed by Professor Huxley in his memorandum subjoined to the report of the Medical Acts Commissioners, on condition of the College retaining its right to direct registration of their licences. In case this proposal is adopted, the College is of opinion that it is essential that the Bill should provide for a compulsory conjoint examination between the Colleges of Physicians and Surgeons in each part of the United Kingdom. The College further objects to the proposed formation of the Medical Council, in so far as it is deprived of direct representation upon it. The College sees no reason for limiting the number of members of the Council to eighteen; and is strongly of opinion that the medical authorities, with certain few exceptions, should be directly represented as heretofore, particularly as the new Council will be entrusted with powers of a more ample and mandatory character, and will include direct representatives of the profession at large. As to the establishment of medical boards in each part of the United Kingdom, the College considers that, should a qualifying examination under such boards be deemed advisable, they should not be bodies corporate, but merely examining and superintendent boards. The College also suggests further amendments in the details of the Bill. The Council of the Dublin Branch has adopted a petition praying that the provision made in the Bill for improvement in the examination of candidates, and for the introduction of representatives elected by the registered medical practitioners of the United Kingdom, contained in the Bill, may become law. It has also drawn up, and circulated among the members of the Branch, a report upon the Bill, with remarks as to the amendments which it considers should be made in it.

VIVISECTION.

THE following official communication was this week forwarded to the Home Secretary.

DEAR SIR WILLIAM HARCOURT.—At a meeting yesterday of the Association for the Advancement of Medicine by Research, we, as Presidents of the Royal Colleges of Physicians and of Surgeons, were requested to let you know that the almost unanimous feeling of the Fellows and Members of the two Colleges is strongly opposed to the Bill for the abolition of vivisection which is to be brought into the House of Commons.—Believe us to be, dear Sir William, faithfully yours,

WILLIAM JENNER,
President of the Royal College of Physicians.
T. SPENCER WELLS,
President of the Royal College of Surgeons.

THE Watch Committee of the Town Council of Brighton have raised the salary of Mr. Robert James Rogers, the police-surgeon, from £65 to £100 *per annum*, in consequence of the increase of his duties.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN extraordinary meeting of the Council of the College was held on Wednesday last, to consider what further steps should be taken regarding the Medical Acts Amendment Bill, since the Lord President of the Council had refused to receive a deputation from the Council of the College before the second reading of the Bill in the House of Lords. It was resolved to petition the House of Lords against the Bill, and that the following statement regarding it be issued to all the Fellows and Members of the College.

"The Council of the Royal College of Surgeons of England directs the attention of the Fellows and Members of the College to the following as some of the results of the above-named Bill if it become law; viz.:

"1. That, on and after the 1st January, 1885, the diploma of Member of the College will not be recognised as a 'qualifying' title for the purpose of registration.

'That the present Members of the College, although they would still be registered by their title, would be liable to be brought into disadvantageous comparison with persons registered as possessing the proposed new title of 'Licentiate of the Medical Council in Medicine, Surgery, and Midwifery,' since the latter might claim that the title of Member of the College, having been discredited by its non-recognition as a 'qualifying' title, was inferior to their own.

"3. That there is no *guarantee* that the College would be appointed to carry on the Surgical part of the Examination for the required Licence to practise; and beyond the small privilege of electing, about once in five years, one fifth of the representatives of the Medical Board for England, the College would have no control over the efficiency of the Final "qualifying" examination.

"4. That power would be taken by Clause 38 of the Bill to levy on every Practitioner already registered a vexatious annual tax, the non-payment of which would involve the liability to removal of his name from the Register.

"Should the Fellows and Members of the College, after perusal of the foregoing statements respecting some of the probable results of the proposed legislation, be of opinion that such results will be detrimental, not only to their interests, but also to the welfare of the public, and will even endanger the existence of the College itself, they will, without doubt, exercise all the influence they possess, whether by petition to Parliament or otherwise, to prevent the Medical Act Amendment Bill from becoming law in its present form.

"The Council does not propose to offer any opposition to those parts of the Bill which relate to the direct representation of the Medical Profession in the Medical Council."

THE SIXTH DECENNIAL REVISION OF THE PHARMACOPŒIA OF THE UNITED STATES, AND THE PHARMACOPŒA GERMANICA.

III.

IN the previous articles, the main features of the pharmacopœias of Great Britain, of the United States, and of Germany were briefly compared. It now remains to review their general characters before commenting in detail upon the materia medica and preparations in each. It is, however, almost superfluous to refer to the general characters of the present *British Pharmacopœia;* and it would partake of the nature of ancient history to review the changes from the 1864 edition which were made in its compilation. This is more particularly the case, since, at the time of its publication, a series of articles, giving a very full analysis of its contents, was published in this JOURNAL. (BRITISH MEDICAL JOURNAL, 1867, vol. i, page 148, *et seq.*) It is sufficient to say, that the 1867 edition was, in every way, an enormous improvement upon its predecessor of 1864; one hundred and nineteen drugs and preparations were added; and only five contained in the 1864 edition omitted. The number of additions was further swelled, in 1874, by the thirty-four substances of the addenda. Beyond the points already discussed, the present pharmacopœia, in its preface, while urging the general adoption by physicians of the avoirdupois ounce and pound, allows the use of the symbols ℈ and ℥, *in prescribing*, to represent twenty and sixty grains respectively; and it defines what is to be understood by the terms water-bath and steam-bath. Lists of articles in the 1867 edition, but not in the previous one, and of articles omitted in 1867, but official in 1864, are given. Changes in names of substances, or in the composition of preparations, are duly notified; and an ap-

pendix contains a list of elementary substances then known, with their atomic weights; a list of chemical reagents, with processes for obtaining them in a state of purity; together with a series of test solutions for volumetric estimations, with methods for their preparation. Throughout the volume, volumetric solutions are ordered to be used for estimating the value of a chemical, whenever practicable and convenient; and, here and there, processes are given for the gravimetric estimation of important drugs—*e.g.*, opium, cinchona bark, elaterium, etc. Standards, below which the drug must not fall, are also sometimes given.

On merely glancing at the new *United States Pharmacopœia*, one is immediately struck by the general complexion it has necessarily assumed, owing to its compilation by a committee the majority of which consisted of pharmacists. It is markedly pharmaceutical in character. This is shown in many ways. For instance: although there is no great increase in the total number of titles of new substances contained in it, one hundred and fifty new pharmaceutical preparations have been introduced, as against one hundred and six which have been dismissed. The newly added articles include a class of galenicals named abstracts, concerning which we shall speak more in detail hereafter, and a large increase in the number of fluid extracts. The degree of fineness of powder to be used in various operations is accurately defined; the process of percolation is described in the fullest detail; and wines, tinctures, etc., are made, as far as possible, of an uniform percentage strength. No doubt, physicians and prescribers in this country would prefer seeing our own pharmacopœial preparations so made that the doses, rather than the strengths, should be approximated. The matter in the voluminous appendix is of pharmaceutical, rather than of medical or of therapeutical importance.

Besides the special characters already adverted to, the new *United States Pharmacopœia* gives a full historical account of the formation of the first and succeeding conventions, and an abstract of the proceedings of that of 1880, the resolutions defining the powers and duties of the committee of revision, and the general principles to be followed in revising the pharmacopœia; and makes provision for calling together a convention in 1890. The preface presents a full review of the changes made in the contents and in the arrangement of the text of the new pharmacopœia. "Preliminary notices" define the degree of comminution substances must undergo to form, say, No. 20 or No. 60 powder; give full directions for percolation, and contain all necessary information concerning specific gravity, temperature, and weights and measures. What may be called an appendix is unusually full. The customary lists of reagents and test-solutions are amplified by tables under each volumetric solution, giving the substances to be estimated with the solution, the exact equivalent of the absolutely pure substance each cubic centimètre of the volumetric solution is equivalent to, and the percentage strength of drug indicated by the pharmacopœial method of estimation. Then follow a list of the elements now known, with their atomic weights and equivalents; a table of thermometric equivalents according to the centigrade and Fahrenheit scales, extending from −39° Fahr. to +680° Fahr.; tables of percentages corresponding to various specific gravities—in the case of alcohol, according to Hehner; acetic acid, according to Oudemans; hydrobromic acid, according to Biel; hydrochloric, nitric, and sulphuric acids, according to Kolb; phosphoric acid, potassa and soda, according to Schiff; and aqueous solution of ammonia, according to Carius. A most useful table of solubility of chemicals in water and alcohol is next given. We suppose that the numbers are not intended to represent the scientifically exact amount that water and alcohol will take up at 15° and 100° C., but merely the quantities which can be conveniently dissolved. In the case of acetate of morphia, we are told that one part will dissolve in twelve parts of water at 15° C. There is no doubt of this; but, since the acetate is really so much more soluble than this would seem to indicate, it would be almost as useful to say that 1 part is soluble in 100 or 1,000 parts of water at 15° C. Tables, showing quantities of pharmacopœial alkalies required to saturate 100 parts of pharmacopœial acid, and *vice versâ*, follow the solubility table; and others give the amount of acid and alkali required to make 100 parts of certain potassium and sodium salts. Lists of substances added to and dismissed from the pharmacopœia are given, and of changes of official Latin and English titles, and a comparative table showing the differences of strength of preparations made according to the last and the present pharmacopœia. Lastly, very full tables are made out, indicating the relations existing between the metric system of weights and measures and those generally in use in the United States.

There is little change in the number of substances official in the new *United States Pharmacopœia*, the total number of titles in the last revision being 970; in the present, 997. Two hundred and twenty-nine substances have been dismissed; these include 78 crude drugs (almost all of vegetable origin), 28 inorganic drugs and chemicals, 106 pharmaceutical preparations, and 17 miscellaneous substances. Among the dismissed pharmaceutical preparations are, 2 waters, 3 cerates, 3 confections, 10 decoctions, 2 plasters, 13 solid extracts, 2 fluid extracts, 5 glycerites, 29 infusions, 4 solutions, 5 oils, 2 juices, 3 pills or pill-masses, 9 suppositories, 7 tinctures, 7 ointments, and 3 wines. Two hundred and fifty-six new titles have been added, and may be thus classified: 30 crude drugs (derived from the vegetable kingdom), 60 inorganic drugs or chemicals, 150 pharmaceutical preparations, and 16 miscellaneous substances. Among the new pharmaceutical preparations are 11 abstracts, 10 solid extracts, 35 fluid extracts, 11 syrups, 22 tinctures, 6 wines. The following is a complete list of substances dismissed from the *United States Pharmacopœia*:

Acetum.
— destillatum.
Achillea.
Acidum oxalicum.
— phosphoricum glaciale.
— valerianicum.
Aconitia.
Aconiti folia.
Alcohol (sp. gr. 835).
Alcohol amylicum.
Aloe barbadensis.
— capensis.
Alumen (ammonia alum).
Ammonii chloridum (commercial).
Angustura.
Antimonii oxysulphuretum.
Apocynum androsæmifolium.
Aqua acidi carbolici.
— acidi carbonici.
Aralia nudicaulis.
— spinosa.
Argentum.
Arsenicum.
Asarum.
Asclepias incarnata.
— syriaca.
Avenæ farina.
Barii carbonas.
— chloridum.
Berberis.
Bismuthum.
Cadmii sulphas.
Cadmium.
Caffea.
Canella.
Canna.
Carota.
Carthamus.
Cassia marilandica.
Castoreum.
Cataria.
Ceratum resinæ compositum.
— saponis.
— zinci carbonatis.
Cinchona pallida.
Confectio aromatica.
— aurantii cortias.
— opii.
Conii folia.
Coptis.
Cornus circinata.
— sericea.
Cotula.
Creta.
Cupri subacetas.
Cuprum.
Cuprum ammoniatum.
Curcuma.
Decoctum chimaphilæ.
— cinchonæ flavæ.
— cinchonæ rubræ.
— cornus floridæ.
— dulcamaræ.
— hæmatoxyli.
— hordei.
— quercus albæ.
— senegæ.
— uvæ ursi.
Delphinium.
Digitalinum.
Diospyros.
Dracontium.
Elaterium.
Emplastrum aconiti.
— antimonii.
Erigeron.
— canadense.
Euphorbia corollata.
— ipecacuanha.
Extractum arnicæ.
— belladonnæ.
— cannabis americanæ.
— conii.
— conii alcoholicum.
— dulcamaræ.
— engerontis canadensis fluidum.
— hellebori.
— hyoscyami.
— ignatiæ.
— jalapæ.
— senegæ.
— spigeliæ et sennæ fluidum.
— stramonii foliorum.
— valerianæ.
Fermentum.
Ferri ferrocyanidum.
— subcarbonas.
— sulphuretum.
Frasera.
Gentiana catesbæi.
Geum.
Gillenia.
Glyceritum acidi carbolici
— acidi gallici.
— acidi tannici.
— picis liquidæ.
— sodii boratis.
Granati fructus cortex.
Helianthemum.
Helleborus.
Hepatica.
Heuchera.
Hordeum.
Hyoscyami semen.
Infusum angusturæ.
— anthemidis.
— buchu.
— calumbæ.
— capsici.
— caryophylli.
— cascarillæ.
— catechu compositum.
— cinchonæ flavæ.
— cinchonæ rubræ.
— eupatorii.
— gentianæ compositum.
— humuli.
— juniperi.
— krameriæ.
— lini compositum.
— pareiræ.
— picis liquidæ.
— quassiæ.
— rhei.
— rosæ compositum.
— salviæ.
— sennæ.
— serpentariæ.
— spigeliæ.
— tabaci.
— taraxaci.
— valerianæ.
— zingiberis.
Iris florentina.
Juniperis virginianus.
Lini farina.
Linimentum aconiti.
Liquor barii chloridi.
— calcii chloridi.
— morphiæ sulphatis.
— potassii permanganatis.
Liriodendron.
Lycopus.
Maranta.
Marmor.
Mel sodii boratis.
Monarda.
Mucuna.
Nectandra.
Oleum camphoræ.
— monardæ.
— origani.
— succini.
— tabaci.
Os.
Ovum.
Panax.
Papaver.
Petroselinum.
Pilulæ quiniæ sulphatis.
— scillæ compositæ.
— saponis compositæ.
Polygala rubella.
Potassii carbonas impura.
Pulveres effervescentes.
Pulvis aloes et canellæ.
Quercus tinctoria.
Ranunculus.
Rubia.
Ruta.
Sabadilla.
Sabbatia,
Sago.
Sesamum.
Simaruba.
Solidago.
Spiræa.
Statice.
Succus conii.
— taraxaci.
Suppositoria acidi carbolici.
— acidi tannici.
— aloes.
— assafœtidæ.
— belladonnæ.
— morphiæ.
— opii.
— plumbi.
— plumbi et opii.
Syrupus fuscus.
Tapioca.
Testa.
Testa preparata.
Tinctura castorei.
— hellebori.
— iodinii composita.
— jalapæ.
— lupulinæ.
— opii acetata.
— rhei et sennæ.
Tormentilla.
Triosteum.
Trochisci santonini.
Unguentum antimonii.
— cantharidis.
— creasoti.
— hydrargyri iodidi rubri.
— iodinii compositum.
— sulphuris iodidi.
— tabaci.
Uva passa.
Veratrum album.
Vinum portense.
— tabaci.
— xericum.
Viola.
Xanthorrhiza.
Zinci oxidum venale.

The following list includes all articles added to the pharmacopœia for 1882.

Abstractum aconiti.
— belladonnæ.
— conii.
— digitalis.
— hyoscyami.
— ignatiæ.
— jalapæ.
— nucis vomicæ.
— podophylli.
— senegæ.
— valerianæ.
Acidum aceticum glaciale.
— boricum.
— hydrobromicum dilut.
— oleicum.
— phosphoricum.
— salicylicum.
Æther aceticus.
Aluminii hydras.
Ammonii phosphas.
Amyl nitris.
Amylum iodatum.
Antimonii sulphidum purificatum.
Apomorphinæ hydrochloras.
Argenti iodidum.
— nitras dilutus.
Arnicæ radix.
Auri et sodii chloridum.
Benzinum.
Bismuthi citras.
— et ammonii citras.
Bryonia.
Caffeina.
Calcii bromidum.
Calendula.
Calx sulphurata.
Camphora monobromata.
Carbonei bisulphidum.
Caulophyllum.
Ceratum camphoræ.
Charta potassii nitratis.
Chelidonium.
Chinoidinum.
Chysarobinum.
Cinchonidinæ sulphas.
Cinchonina.
Codeina.
Collodium stypticum.
Cupri acetas.
Elaterium.
Elixir aurantii.
Emplastrum capsici.
— ichthyocollæ.
Erythroxylon.
Eucalyptus.
Extractum aconiti fluidum.
— aloes aquosum.
— arnicæ radicis.
— arnici radicis fluidum.
— aromaticum fluidum.
— aurantii amari fluidum.
— brayeræ fluidum.
— calami fluidum.
— cannabis indicæ fluidum.
— capsici fluidum.
— castaneæ fluidum.
— chiratæ fluidum.
— conii alcoholicum.
— cypripedii fluidum.
— ergotæ.
— erythroxyli fluidum.
— eucalypti fluidum.
— euonymi fluidum.
— eupatorii fluidum.
— frangulæ fluidum.
— glycyrrhizæ fluidum.
— grindeliæ fluidum.
— guaranæ fluidum.
— hamamelidis fluidum.
— iridis.
— iridis fluidum.
— lactucarii fluidum.
— leptandræ.
— leptandræ fluidum.
— lobeliæ fluidum.
Extractum malti.
— mezerei.
— nucis vomicæ fluidum.
— pilocarpi fluidum.
— podophylli fluidum.
— quassiæ fluidum.
— rhois glabræ fluidum.
— rosæ fluidum.
— rumicis fluidum.
— sanguinariæ fluidum.
— scutellariæ fluidum.
— stramonii fluidum.
— tritici fluidum.
— viburni fluidum.
— xanthoxyli fluidum.
Fel bovis.
— inspissatum.
Fel purificatum.
Ferri carbonas saccharatus.
— iodidum saccharatum.
— oxidum hydratum cum magnesia.
— sulphas præcipitatus.
— valerianas.
Frangula.
Glyceritum amyli.
— vitelli.
Glycyrrhizinum ammoniatum.
Grindelia.
Guarana.
Hamamelis.
Hyoscyaminæ sulphas.
Illicium.
Infusum brayeræ.
— cinchonæ.
— sennæ compositum.
Linimentum belladonnæ.
— sinapis compositum.
Liquor ferri acetatis.
— ferri et quiniæ citratis.
— pepsini.
— sodii silicatis.
Lithii benzoas.
— bromidum.
— salicylas.
Magnesia ponderosa.
Magnesii citras granulatus.
— sulphis.
Maltum.
Menispermum.
Mistura ferri et ammonii citratis.
— magnesiæ et assafœtidæ.
— rhei et sodæ.
Mucilago cydonii.
Oleatum hydrargyri.
— veratrinæ.
Oleum adipis.
— aurantii corticis.
— aurantii florum.
— coriandri.
— eucalypti.
— gossypii seminis.
— lavandulæ florum.
— myrciæ.
— phosphoratum.
— picis liquidæ.
— santali.
— sinapis volatile.
Opii pulvis.
Opium denarcotisatum.
Pepsinum saccharatum.
Petrolatum.
Physostigminæ salicylas.
Picrotoxinum.
Pilocarpinæ hydrochloras.
Pilocarpus.
Pilulæ aloes et ferri.
— phosphori.
Piperina.
Pulsatilla.
Pulvis antimonialis.
— cretæ compositus.
— glycyrrhizæ compositus.
— morphinæ compositus.
Quillaia.
Quinidinæ sulphas.
Quinina.
Quininæ bisulphas.
— hydrobromas.
— hydrochloras.
Resina copaibæ.
Rubus idæus.
Salicinum.
Sapo viridis.
Sodii benzoas.
— bisulphis.
— bromidum.
— chloras.
— iodidum.
— pyrophosphas.
— salicylas.
— santoninas.
— sulphocarbolas.
Spiritus ætheris.
— aurantii.
— gaultheriæ.
— odoratus.
Staphisagria.
Sumbul.
Syrupus acidi hydriodici.
— althææ.
— calcii lactophosphatis.
— calcis.
— ferri bromidi.
— ferri quininæ et strychninæ phosphatum.
— hypophosphitum.
— hypophosphitum cum ferro.
— picis liquidæ.
— rubi idæi.
— sennæ.
Thuja.
Thymol.
Tinctura arnicæ radicis.
— aurantii dulcis.
— bryoniæ.
— calendulæ.
— chiratæ.
— cimicifugæ.
— croci.
Tincturæ herbarum recentium.
Tinctura ferri acetatis
— gelsemii.
— hydrastis.
— ignatiæ.
— ipecacuanhæ et opii.
— matico.
— moschi.
— physostigmatis.
— pyrethri.
— rhei aromatica.
— rhei dulcis.
— saponis viridis.
— sumbul.
— vanillæ.
Triticum.
Triturationes.
Trituratio elaterini.
Trochisci ammonii chloridi.
— catechu.
— krameriæ.
— sodii santoninatis.
Unguentum acidi gallici
— chrysarobini.
— diachylon.
— iodoformi.
— sulphuris alkalinum.
Ustilago.
Viburnum.
Vinum album.
— album fortius.
— aromaticum.
— ferri amarum.
— ferri citratis.
— rubrum.
Viola tricolor.
Vitellus.
Zinci bromidum.
— iodidum.
— phosphidum.

THE MEDICAL ACTS AMENDMENT BILL.

A MEETING of the Medical Reform Committee of the British Medical Association has been summoned for Tuesday, April 10th. The various communications containing queries, suggestions for amendments, and indications of defects in the Bill, which have been forwarded to us, have been placed in the hands of the Chairman of the Committee, with the view to their being brought under the consideration of the Committee.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 11th, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., May 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at Exeter Hall, Strand, London, on Wednesday, the 11th day of April next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 15th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meeting will be held at Bridgend, on Wednesday, April 18th. Members desiring to read papers, etc., are requested to send titles to either of the undersigned by the end of March.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—A special general meeting of this Branch will be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Tuesday, April 17th (instead of April 10th, as announced last week), at 8 P.M. 1. To consider the organisation of the Committee on Collective Investigation of Disease, appointed at the last meeting of the Branch. 2. To consider the Bill for the Compulsory Notification of Infectious Diseases now before Parliament.—ALEXANDER HENRY, M.D., W. C. GRIGG, M.D., Honorary Secretaries, London, March 27th, 1883.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the above District will be held on Thursday evening, April 19th, at half-past eight o'clock, in the Reading Room of the London Hospital Medical College, when the discussion on "Diphtheria, more particularly with regard to Treatment," will be resumed by Dr. Dundas Grant, who moved the adjournment at the last meeting. Dr. Stephen Mackenzie, Dr. Sansom, and others, have promised to take part in the discussion.—FREDERICK WALLACE, Honorary Secretary.—96, Cazenove Road, April 5th, 1883.

NORTH OF ENGLAND BRANCH.—The spring meeting of this Branch will be held at Bishop Auckland, on Friday, April 27th. Members are invited to give notice to the Secretary, at their earliest convenience, of any papers, etc., they may wish to bring before the Branch.—DAVID DRUMMOND, M.D., Honorary Secretary.—7, Saville Place, Newcastle-on-Tyne, April 2nd, 1883.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of the above district was held on Thursday, March 8th, 1883, at the Queen's Hotel, Upper Norwood; WILLIAM SOPER, Esq., of Clapham, in the chair.

Specimens.—The CHAIRMAN directed attention to several therapeutic preparations, specimens of which had been sent by Messrs. Allen and Hanburys, including the new compound of castor-oil and glycerine, etc., made at the suggestion of Mr. Soper. The Chairman also exhibited a specimen of Ford's chair-motor. This invention is for the purpose of an invalid moving from room to room. An ordinary chair is placed upon the "motor," and the patient by a lever has perfect command. The motor is adapted for hemiplegic, or paraplegic cases, being worked by right or left hand, or feet as desired.

Papers.—The following papers were read.

1. Dr. Alfred Sangster read a paper entitled, "Observations upon Dermato-Syphilis; with Points in Diagnosis."

2. Dr. Galton read Six Cases of Operation upon Strangulated Femoral Hernia, with Five Recoveries. He advocated the early performance of the operation as preferable to sending the cases to hospital.

3. Mr. J. Sidney Turner read Notes on Tracheotomy. He drew attention to the importance of making a sufficiently large external opening in the soft parts overlying the trachea, and inserting the cannula at its lower end, in order that its ascent with the trachea in the act of deglutition might not be interfered with, thus preventing the ingress of nourishment into it, which is one great source of dyspnœa, exhaustion and broncho-pneumonia, as well as to lessen the friction of tube in trachea. Mr. Turner also advocated the use of boro-glyceride to the wound as a lubricant to facilitate the upward sliding of the cannula, and to act as a germicide in diphtheria and other cases. As the result of attention to each and all of these points the reader had seen good results in his practice.

A paper promised by Dr. R. M. Miller, on Medical Reform, was unavoidably postponed for want of time.

Dinner.—After the discussions, the members dined together at the hotel.

READING BRANCH.

The Medical Act Amendment Bill, 1883.—At a meeting of the Reading Branch of the British Medical Association, held March 29th.

The Council of the Branch passed the following resolution:

"That it is desirable that if the Medical Act Amendment Bill, 1883, is passed, it should be amended, more especially in the following particulars:

"That every registered medical practitioner, who is now by virtue of his existing qualifications and registration entitled to practise 'medicine, surgery, and midwifery,' should, on and after the appointed day, be entitled to be registered in addition to his existing titles as a licentiate of the Medical Council in Medicine, Surgery, and Midwifery, without examination.

"That the Council of the Branch objects to the principle introduced into the Bill of imposing a direct annual tax on practitioners by the charge of an annual registration fee for keeping the name of each medical practitioner on the register.

"The Council of the Branch further strongly objects to the removal from the register of the names of those duly qualified practitioners who cease to practise.

"The Council of the Branch is of opinion that the saving clause 20, as to practise of existing practitioners, is insufficient to secure the rights of such practitioners, and that such clause should provide that all duly qualified registered practitioners should be authorised, not only to practise in such manner as they may now lawfully practise, but that they should also be entitled to hold all such appointments as they may now hold in virtue of their existing qualifications and registrations."

SOUTH OF IRELAND BRANCH: PRESENTATION TO DR. MACNAUGHTON JONES.

AT a special meeting of the Branch held recently in the Royal Cork Institution—Dr. P. J. Cremen in the chair—it was unanimously resolved to present Professor Macnaughton Jones with an address and testimonial prior to his leaving for London. For that object, a subscription-list was opened, and it was resolved to present Dr. Jones with an oil portrait of himself. The quarterly dinner was specially held on St. Patrick's night for the occasion; Dr. N. J. HOBART in the chair, in the unavoidable absence of the President. After the usual loyal toasts, the Chairman proposed, in happy and complimentary terms, the health of Dr. Jones, which was drunk with enthusiasm, after which the Secretary read the following address.

"Dear Sir,—We, the members of the South of Ireland Branch of the British Medical Association, desire to record the feeling of regret with which we have heard that you are determined to sever your connection with this Branch of the Association. We cannot permit this separation to occur without expressing our sense of the obligations we feel to you for the active interest you have ever taken in the entire work of this, the premier Irish Branch, since you first successfully founded it up to the present time; and we also desire to convey to you our warm appreciation of the practical value of your exertions in the cause of medical science generally in the South of Ireland, and to assure you of our affectionate regard and sincere wishes for your future happiness and welfare in the new sphere of your labours. As a token, we kindly request your acceptance of the accompanying portrait.—We are, dear sir, yours very faithfully (signed on behalf of the Branch), Ringrose Atkins, M.A., M.D., President; D. C. O'Connor, M.D., LL.D., D. B. O'Flynn, M.A., M.D., J. G. Curtis, F.R.C.S.I., P. J. Cremen, M.D., N. J. Hobart, M.D., J. A. Eames, M.D., Past Presidents; T. Gelston Atkins, B.A., M.B., Honorary Secretary. Cork, March 1883."

The address was then presented to Dr. Jones, who, in responding, referred to the original formation of the Branch, and the many medical friends, past and present, who were associated with him in working the interests of the Association in the South of Ireland; more especially alluding to the assistance he had received, in the early history of the Branch, from his friend the present President, Dr. Ringrose Atkins of Waterford; as also to the very happy relations which had ever existed between him and all its members, not the least among whom, he was able to reckon as one of his warmest friends the past President of the Association, Dr. D. C. O'Connor. Dr. Jones spoke in feeling terms of the many ties he was severing in the South of Ireland, and promised a warm "*cead mile failthe*" to any of the members who visited him in London. He thanked all the members of the Branch for their sympathy and kindness in presenting him with the address.

NORTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held in the Board Room of the County Infirmary, Armagh, on Thursday, March 15th. The President (Dr. John Moore, Belfast) occupied the chair. There was large attendance of members.

Business.—Dr. Palmer (Armagh) read the notes of a case of Artificial Anus after Operation for Strangulated Hernia; and showed the patient. The artificial anus is now closed, and the fæces are evacuated by the natural passage.

The President read notes of cases of Strangulated Hernia of Fourteen Days' Duration successfully operated on.

Dr. Bernard (Derry) showed a patient—male, aged 17—the subject of a large Abdominal Tumour. The tumour is of bony hardness, occupies the left iliac fossa, encroaches upon the rectum, and rises up into the abdomen, reaching as high as the cortal cartilages on the left side.

Mr. Fagan (Belfast) read a paper on the Nature, Symptoms, and Treatment of Hæmarthrosis of the Knee, with reports of cases. He also exhibited an Ovarian Tumour which he recently removed, and made some remarks on the case.

Dr. J. W. Browne (Belfast) gave a short account of a case of Tetanus, in which he trephined; and he exhibited the recent parts. A small spiculum of bone was found at the necropsy imbedded in the dura mater and covered over with lymph. The patient, a boy, went about as usual for fourteen days after the receipt of the injury, when tetanus set in. Dr. Browne also gave details of a case of Ligature of the Third Stage of the Subclavian, and exhibited the recent parts.

The President read notes of three cases of Chorea, and of a case of Puerperal Convulsions.

Dr. Workman (Belfast) exhibited the Bacilli of Tubercle.

New Members.—Seven new members were elected at the meeting.

Annual Meeting.—The annual meeting of the Branch was fixed for Thursday, June 14th. At this meeting, the election of office-bearers under the new rules will take place, and also the selection of a president to be put in nomination at the annual meeting in Liverpool as president-elect of the Association.

CORRESPONDENCE.

MEDICAL PROVIDENT SOCIETY.

SIR,—Permit me to express very briefly some views regarding the proposed Medical Provident Society. As a rule, members of our profession, when in active employment, are able to support themselves, and pay a *locum tenens* or assistant, should temporary illness occur. Insurance in a thoroughly reliable accidental office costs a moderate sum. If we enter when young, less than two guineas annually, expended in benefit societies such as the Ancient Order of Foresters, Odd Fellows, Shepherds, etc., will secure a weekly allowance sufficient to pay a *locum tenens*. The large number of members insures their reliability. What we want, as a profession, more especially, is an extension of the "benevolent society" system, whereby provision might be made in *necessitous cases of total disablement or death*.

Comparatively few young medical men can afford to lay by sufficient means to provide adequately for the support of widows and children, either by life-assurance or otherwise. I question if 5 per cent. of us, dying about thirty, could do so; at sixty, it is to be hoped, more than 70 per cent. could. Personally, I would most willingly contribute towards such provision; and I am convinced that the "benevolent" would be more successful financially than the "benefit" society, unless the latter were assured of a wider connection than seems probable. I have often regretted that the existing English benevolent societies did not extend their benefits beyond England; or, if so, that the fact is unknown.

In Scotland, it is compulsory for every licentiate of the national church to contribute to the "Widows' Fund." The same obligation is enforced by many banks and other corporations upon their *employés*. The widows of Scotch clergymen are thus to some extent provided for; and, as there are three scales of payment, it is optional whether a minimum or maximum provision is secured. Why might not medical men do likewise? If every member, or even a large proportion of the members of our Association, agreed to pay about two guineas annually into a fund, to be administered by a committee of the Association; if the moneys were allowed to accumulate for ten years; and if it were understood that every widow and orphan had a legal claim, but conformable to the necessities of their cases and the resources of the fund, the objectionable element of charity would be abolished, and in course of time every case requiring help would be suitably provided for. I have no doubt that the scheme would prove not only popular, but highly useful. It would enlist the sympathies of those who could afford to support their poorer brethren. Nay, it would be more economical for them to subscribe well to such a fund, rather than have the hundred and one calls for individual cases made upon their purses. The improvident man would probably neglect the matter, but many a man fighting uphill would gladly give for such an object, with the knowledge that the benefits were, if not for his, at least for such as his family.

Minor matters, such as age-limit for entrance of members (or if there should be any), the state of health, and proportionate contributions, I do not touch on, but merely indicate what may be regarded as broad outlines.

The project would be much less expensive than life-assurance for the individuals, and much more satisfactory; those who really required could be *all* supported in a very few years after the first ten.
—Yours truly, A. D. LEITH NAPIER, M.D.

Dunbar, N.B., February 28th, 1883.

SIR,—Will you be so kind as to add my name to the list of those anxious to form a "Medical Provident Society?" I am sure that every member of the profession who is depending on his health for his livelihood, must have long since felt the need of being able to make some such provision in case of illness. I hope soon to see more names from this side of the channel, joining in a scheme which would, I believe, prove an inestimable advantage to the profession in general.—I am, sir, faithfully yours, THOMAS M. MARTIN.

Piltown, County Kilkenny, April 2nd, 1883.

SIR,—Will you add my name to the list of those willing to form a "Medical Provident Society." Many of us feel the need of such a society. In case of illness it would be difficult to provide a *locum tenens* for a long period—at such a time a cheque every week would be a great blessing. As a body, we are not so provident as we ought to be, as the appeals in the medical journals from time to time amply prove. It is the duty, at least of every married doctor to, i sure his life, and also to join such a society for the benefit of h family, unless he has ample provision, which, unfortunately, ma of us have not.—Yours etc., JNO. BROWN, L.R.C.P.Lond.

Bacup, April 3rd, 1883.

NINTH LIST.

FURTHER letters of adhesion have been received from the followi gentlemen:—

Mr. J. H. Gilmour, Hurstbourne Tarrant; Mr. Thomas Brow London; Dr. Arthur Sandberg, London; Dr. Leslie B. Trott Coleford; Mr. William Owen, Hackney; Mr. C. E. Baker, Tenterde Ashford; Mr. F. Wallace, Hackney; Dr. F. C. Palmer, Brigg; D P. T. S. Colmer, Yeovil.

We, the undersigned members of the West Somerset Branch the British Medical Association, wish to have our names added the list of members who are desirous of establishing a Medic Provident Society:—Engledue Prideaux, Wellington; Hugh Olivey, North Curry; John Meredith, M.D., Wellington; W. Winterbotham, Bridgwater; H. W. Randolph, Milverton; Hen J. Alford, M.D.Lond., Taunton; William Hensman, Taunton; W. Todd, North Petherton; G. W. Rigden, Taunton; Henry Alfor Taunton; Wm. Kelly, Taunton; Thos. Marsden, Bridgwate Francis Benj. Parsons, Bridgwater; F. Farmer, Bridgwater; a H. M. Kemmis, Bridgwater.

*** The list is rapidly gaining in numbers; but several hundr adhesions should, we think, be enrolled as a preliminary to practic action, and we shall be glad to continue to receive names.

COLLECTIVE INVESTIGATION AND NOTE-TAKING.

SIR,—The work of collective investigation, now being undertak so actively by the Association, naturally points to the value and i portance of note-taking. Many surgeons, especially those engag in general practice, and from whom it is apparently desired to obta information, are quite unable to keep records of their most intere ing and instructive cases, solely from their inability to find time write them by the ordinary long-hand method; and, therefore, th will be only able to fill up the inquiry cards by *trusting to th memory*. It seems, therefore, to be an appropriate occasion for co sidering whether this difficulty could not be overcome. It would appropriate for the committee to examine and compare the differe plans already suggested, in order to elicit and publish the one b adapted for economising both time and labour. If all surgeons cou and would learn to write shorthand, doubtless the trouble of ca taking would be considerably lessened; yet this solution is clea impracticable and impossible for men already overburdened wi work. Undoubtedly, the cards already issued by the committee w have been found to be a great boon; and, at the same time, will n have illustrated the advantages and facility with which notes c be taken, if only a proper form and system is used. Yet, it is ve desirable that other outlines should be prepared, in order that surgeon may at any time promptly write down the history and co dition of any or all the cases he attends. There should be, I im gine, a special one for each *class* of disease, and probably eight nine would be required, although only a few of them would be nec sary for the work of one individual. I am myself in the habit using three: one for eye cases, one for ear and throat, and anot for casualties. Such papers I have found to be invaluable for bo private and hospital practice, as they involve but little real ad tional work, and enable me to recall at a glance the whole ante dents of a case. Four years ago (BRITISH MEDICAL JOURNAL, v i, 1879, page 381), Dr. Veale, late of Netley, wrote a most useful a suggestive article, explaining a simple system of notation, by wh the chief advantages of phonetic writing could, with very lit trouble, be obtained. Having been for some time trying to so the problem of rapid note-taking, I immediately adopted it, a ever since I have followed his plan of using letters and signs certain words. I can, therefore, speak of its usefulness after c siderable experience; and I think, unless some better and easier can be found, it deserves to be more universally known and utilis But this, or any other plan, which suited individual peculiarit could be adopted, if a slight modification of his note-book was m to suit the exigencies of place and work. Indeed, whatever syst of writing—long or shorthand—is used, there is still an urgent n for well arranged outlines, not only to obviate the risks of omiss to which all are liable when pressed for time, but also to secure notes being placed in such order and position as to enable the geon, during the progress of the case, to quickly refer, correct

supplement those already made. I am acquainted with, and have collected many different forms of out-patient letters, used at the present time at the London and provincial hospitals, but all appear to me to have serious defects. With a few exceptions, all I have hitherto seen have no arrangement whatever for systematic note-taking, being merely sheets of paper (of all shapes and sizes), with the name of the surgeon or physician and hospital thereon Most men I know are in the habit of writing out the details of special cases in books, yet there are many evident advantages in having complete notes of the case on the prescription paper, which is at once tendered by the patient upon entering the consulting-room; at least, where many persons are seen, and there is but little time for reference to volumes of manuscript, this would seem to be a necessity for the performance of accurate clinical work. I venture, therefore, to draw the attention of the committee to this subject, feeling sure that, with a proper code of signs, such outlines, if issued under their authority, would greatly stimulate and immensely assist the work Dr. Humphry has inaugurated. These forms would also, by lessening the tediousness of note-taking, encourage it being more frequently undertaken by medical men in general practice; and then, after the lapse of a short time, the committee would have at their command a grand accumulating record of cases, which, it is evident, would be more correct and trustworthy than any otherwise obtained. It is, however, unnecessary for me to point out the importance of this, or to mention the possible discoveries and beneficent results to medical science that might flow therefrom. Should the committee approve of my suggestion, and desire to undertake the work, I may mention that I should be happy to exhibit and explain to them (or to any one else) the forms I am in the habit of using.—Yours truly,

GEORGE ABBOTT.

23, Finsbury Circus, E.C., March 23rd, 1883.

MEDICAL REGISTRATION IN AUSTRALIA.

SIR,—As I am sure you desire to be just, even to so distant a medical field as Australia, I have the less diffidence in asking for a little of your valuable space, to correct the one damaging impression which your article on its defective registration of medical men, must give your numerous readers. Things are not so bad as you suggest. In the colony of Victoria, registration is as exact and precise as can be desired; there is little fault to find with the Board of Registration in New South Wales, though, as in your illustration, a cleverly perjured declaration may deceive for a time, only to be detected, however, in the end. The other colonies, I believe, do the best they can to limit medical practice to legally qualified practitioners, though, when we remember that they represent a population less than Liverpool, distributed over an area many times greater than Great Britain, it is easy to see how difficult it may be to prevent quackery and imposition. Indeed, in the more scattered districts it is impossible. There quackery is rampant. But, what is equally true and what I wish to lay stress upon is, that the authorities have, as a fact, established a fairly good barrier of medical registration, whenever its enforcement is practicable, against such impostors; though, from the nature of the case, fraudulent declarations have oftener to be met and defeated than is the case in an old established country like your own.—I am, your obedient servant,

J. W. SPRINGTHORPE.

"HOSPITAL SATURDAY" IN LEEDS.

SIR,—In your issue of the 17th instant, p. 322, you give the amount realised by the "Hospital Saturday" movement in Leeds, as £1,493. Will you allow me to say that this most desirable means of aiding the resource of our local charities is still singularly conspicuous by its absence, *i.e.* as an organised scheme for the benefit of the combined institutions, which has in many towns proved so successful?

The sum you name corresponds with that raised during the year 1881, from the annual contributions of workpeople to the General Infirmary alone, independent of their benefactions, and of the proceeds from donation boxes at the hotels, stations, etc., during the same period—all of which, according to the practice followed in Birmingham and elsewhere, would be included in a "Hospital Saturday" fund.

The Public Dispensary also receives its quota from the workpeople of the town, not reckoned in your total; but the sum falls far short of what its share of a general fund should reach; last year it amounted to £120.

So long ago as January, 1872, when trade was good, and the "Hospital Saturday" movement was in its infancy, I ventured, in our local Press, to urge its adoption here. I have, on more than one occasion since, taken an opportunity of stating its advantages. Two years ago I obtained information as to its machinery, etc., kindly supplied to me from Birmingham, where such noble sums have been realised. I brought the papers before the notice of the authorities of the Infirmary; but its late respected treasurer, Mr. Wm. Brown, informed me that, after consideration, "the Board did not think it advisable to adopt a similar plan of raising subscriptions for Leeds."

I am told that the operatives at many of the large works would gladly give to other institutions besides the Infirmary, but that they prefer to see the whole of the amount they contribute entered in one large sum, and hence rather object to their donations being divided into several smaller sums on separate subscription lists. Both employers and employed, however, would doubtless willingly consent to the whole of their contributions being handed over to one common fund, for distribution in due proportion; as for instance has for long been the case with our "Hospital Sunday" collections.

The annual number of patients relieved gratuitously by the Public Dispensary is nearly double the total of the General Infirmary; the number of cases visited at their own homes by the staff of the former, often exceeding the number of in-patients of the latter.

I am convinced that—though rather late in the day—if a "Hospital Saturday" were properly organised in Leeds, a sum could be raised which would eventually realise quite as much, or more, for the Infirmary, and a much more equitable share for our other main local charity, which at present does not receive an amount proportionate to the work it performs.—I am, yours, etc.,

CHAS. J. WRIGHT, Senior Honorary Surgeon
Leeds, February 24th, 1883. Leeds Public Dispensary.

INVALID TRANSIT AT THE WESTMINSTER HOSPITAL.

SIR,—As I have endeavoured since 1874 to impress on our profession the advantages of slinging patients during locomotion, I ask you to kindly publish the following facts.

On February 24th, 1883, I wanted to send a young lad into the country, on whom amputation of the right hip-joint had been performed, and who was slowly but surely losing ground by reason of the discharge arising from pelvic necrosis. The neighbourhood of the acetabulum was encircled by sinuses; and the lad was intolerant of local interference, and of any pressure on the right side or buttock. His home was at Harlington, Middlesex (fifteen miles from town); I therefore ordered one strong horse, and drove my invalid van to the Westminster Hospital. The lad was placed in one of my stretchers on a hair mattress at his bedside, carried down to the van, and slung to its roof by two elastic cord suspenders. The journey occupied two hours and a half; and he was carried into his own home, not only delighted by the drive, but also unhurt by one single jolt or concussion. I personally sat by his swing bed during the whole journey, and gave him sandwiches and port at halfway distance. On the return journey, I lay in the stretcher, and dozed off luxuriously.

I may also remind charitable benefactors that ambulance work was not unknown to the Good Samaritan; for, in addition to other kindly services rendered to the wounded man, "he set him on his own beast and brought him to an inn" (*πανδοχεῖον*: *δέχομαι*, I receive; *πᾶς*, everyone)—a singularly expressive word for a hospital.—I am, sir, your obedient servant,

RICHARD DAVY,
Surgeon to the Westminster Hospital.

DEATH UNDER CHLOROFORM AT THE GENERAL HOSPITAL, BIRMINGHAM.

SIR,—In connection with this case, which I saw noticed in the JOURNAL of March 10th, I thought it might be of interest if I recorded a fact I have not before seen brought under the notice of the profession; viz., that of a man dying under the influence of chloroform after having, three weeks previously, safely borne the inhalation of ether. This was the case of the man mentioned above. On February 9th of the present year, I placed this patient under the influence of ether, for the purpose of thoroughly examining the tumour, in the presence of Mr. Alfred Baker. I may state that he required a large quantity of ether to take the desired effect, and, while inhaling it, struggled violently, and, after recovering from it, was very sick; but, excepting that, he felt no ill effects from the administration, and walked home. I think this shows an advantage

ether possesses over chloroform; at any rate, to a man suffering from a like affection of the heart as this man.—I am, yours truly,

SYDNEY W. HAYNES, M.B.,
Resident Surgeon, General Dispensary, Birmingham.

March 15th.

SPECIAL CORRESPONDENCE.

MANCHESTER.

The Eye Hospital—Removal—Annual Report.

FROM the annual report of the Eye Hospital, we find that since its foundation, in 1852, the number of out-patients has increased from 2,284 to 12,284. In addition, 1,265 in-patients were treated during 1882. This great increase rendered it imperative that the Hospital should be enlarged and made worthy of the city; and the board of management, after careful consideration and consultation with the medical staff, have determined to build without delay.

Suitable grounds have been secured in Nelson Street, Oxford Road, and although this sight is not so central as the present one, it was felt that owing to the fabulous price asked for land in the centre of the city, the purer air and pleasanter surroundings of Nelson Street, and its close proximity to Owens College, it was best to remove there. Mr. Griffith, the house-surgeon, is to be congratulated on the completeness of the medical statistics, from which we extract the following.

Cataract Operations.—Annexed is a brief summary of the results of 154 extractions. 1. The operation was successful, and the resulting vision good, in 131 cases.—2. The operation was partially successful, resulting in closed pupil, in 10 cases.—3. The operation was successful but the vision was defective, from diseased state of eye before operation, in 4 cases. *a.* From choroidal atrophy in 2 cases. *b.* From atrophy of the optic nerve in 1 case. *c.* From divergent squint and congenital amblyopia in 1 case.—4. The eye was lost in 9 cases. *a.* From primary suppuration of cornea in 7 cases. *b.* From purulent iritis, followed by panophthalmitis and atrophy of the globe in 2 cases. In reckoning the successful cases, 4 of the second group may be fairly included amongst them, as in 3 the vision, resulting from opening up the pupil, was $1\frac{6}{24}$, 10, and 16 respectively. In the fourth case the vision at discharge was $1\frac{6}{18}$, and the patient did not attend again till after the lapse of seven months, having had in the meantime several attacks of iritis, producing closure of the pupil. Von Gräfe's modified linear was the operation performed in every case.

Shuttle Accidents.—There were 29 of these accidents during the year. In 23 cases the eye was completely lost from rupture of the globe; in 2 cases the eye was lost from irido-choroiditis; in 1 case from atrophy of the globe; in 1 case there was caused by the blow neuro-retinitis without any lesion of the other parts of the eye; in 1 case there was only slight conjunctivitis; in 1 case the injury was confined to the lids.

Purulent Conjunctivitis in Infants.—Out of a total of 539 cases of "Ophthalmia Neonatorum" there were 74 cases in which one or both corneæ were affected. The following is an analysis of the condition of these cases in which they were first brought to the Hospital. One cornea only was affected in 42 cases; among these, the eye was lost in 11 cases; perforation occurred in 6 cases; ulcer in 19 cases; leucoma in 2 cases; haziness in 4 cases.—Both corneæ were affected in 32 cases. Both eyes were lost in 7 cases; both eyes perforated in 2 cases; both eyes ulcerated in 12 cases; both eyes leucomatous in 1 case; both eyes hazy in 6 cases; one eye lost, the other ulcerated in 2 cases; one eye was lost, the other leucomatous in 1 case; one eye was perforated, the other ulcerated in 1 case.

The total cost of management for in- and out-patients, wages, etc., etc., only amounted to £2,524 14s. 10d., and the cost of board per in-patient per week to 5s. 3¾d. These figures prove the economical management of the institution, and ought to secure the hearty co-operation of all towards the new building.

PRESENTATION.—Mr. G. A. Farrer, of Brighouse, has been presented with a very handsome escritoire in oak, with silver plated mounts and fittings, "as a momento of his kindness in giving the lectures" to the women's class of the Brighouse centre of the St. John's Ambulance Association.

HOSPITAL AND DISPENSARY MANAGEMENT.

BIRMINGHAM HOSPITAL FOR WOMEN.

THE annual report for the year 1882, shows that 261 in-patients were treated; of these 194 underwent surgical operations. The abdominal sections performed during the year numbered 117; 106 women, so treated, recovered, showing a mortality of 9·4 per cent., which is slightly higher than the mortality of the previous year. In the out-patient department 2,462 patients were attended, as compared with 1,750 in 1881. The committee recommended that, in future, candidates for the post of surgeon to the in-patients shall be required to be Fellows of the Royal College of Surgeons of England, this being a formulation of what has already been practically in force, both the present surgeons holding the qualification indicated. In October and November last the attention of the committee was called to the mortality returns of the in-patient department, several deaths having occurred within a comparatively short space of time. The Medical Board was requested to report on the matter, but the results of their investigations were almost wholly negative. The increased mortality could not be traced to any failure of operating skill, to any omission of any precautions, or to any defect in the hospital. The only lesson that could be learnt was the general one of the desirability of continuing and even increasing the stringency of all their sanitary regulations. The committee thought the time had come for establishing a convalescent department in connection with the hospital, and an anonymous donation of £1,000 towards this object was announced. The treasurer's yearly statement showed a balance in hand of £626, but this included a donation of £583 from the Hospital Sunday collection, which would not again fall to the charity for three years. At the annual meeting all the acting members of the hospital staff—viz., Dr. Savage and Mr. Lawson Tait, surgeons to in-patients, and Dr. Hickinbotham and Dr. Edginton, officers for out-patients, all being subject to a law requiring annual re-election, were unanimously reappointed.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

AT a special meeting of the governors of the Birmingham and Midland Eye Hospital, held last week, the crude and ill-considered notice of motion respecting the laws of the institution in reference to the number, duties, and qualifications of the surgeons, to which we have before drawn attention, was not pressed. Wiser counsels appear to have prevailed with the authorities of the charity, and the meeting approved the common-sense and just course, which we suggested some weeks ago, of appointing a special committee to consult with the professional staff, and fully consider and report upon the points at issue. A representative committee was chosen, with power "to revise the rules for the management of the hospital, and that they be instructed to confer with the medical board on all points affecting the officers of the hospital." The Birmingham Eye Hospital is a great and prosperous charity. It is about to enter upon the occupation of its new and handsome buildings. The occasion seems opportune for a revision of its constitution and administration, especially when it was stated, on good authority, at the recent meeting, that, "if the institution had a reputation throughout the kingdom, it was certainly not owing to its laws."

GLASGOW DISPENSARY FOR SKIN DISEASES.

THE annual report of this institution was laid before the meeting of the subscribers on March 30th, and was adopted. Dr. McCall Anderson's medical statement showed that there has been a progressing increase in the number of new cases treated during the last three years, and that since the foundation of the dispensary, twenty-two years ago, 25,865 persons have received medical advice. During the past year 99 cases have been treated in the cutaneous wards of the Western Infirmary, with which the dispensary is connected. The majority of these were serious cases, which could not have been satisfactorily treated by means of out-door relief. The dispensary has also been extensively taken advantage of by students for the purposes of instruction, 47 having attended during the past year. The treasurer's statement showed the income to be £462, and the expenditure £352, allowing a balance of £110 to be carried towards the reduction of the debt on the buildings.

THE PAISLEY INFIRMARY.

THE supporters of this old-established charity have just held their ninety-seventh annual meeting, when a very encouraging report was read and adopted. The financial statement showed that the expenditure had been kept within the limits of the income, and that there

was a surplus of £79. During the year 715 patients had been admitted into the hospital, of whom 625 were medical and surgical, and 92 were fever cases. The bequest of the late Mr. James Clark for relief of out-door consumptive patients has proved of the highest benefit, and since April last forty-two patients of this class have been relieved at intervals, generally by weekly payments. Large as the fund is it is still found inadequate to meet all the demands on it, and many deserving cases had to be declined.

THE ROYAL SEA-BATHING INFIRMARY.

THE annual meeting of the above charity, situated at Margate, was held recently at the offices, Charing Cross, under the presidency of Colonel Creaton. The report, adopted by the meeting, showed that during the year 277, or nearly three-fourths of the patients discharged, had been cured or greatly benefited. The expenditure during the year had far exceeded the ordinary income, and the small invested capital had been drawn upon to meet the necessary outlay. The subscriptions amounted to £637 9s., and the donations, £623 3s. 9d.; and the Hodgson 5s. Fund to £1,026 5s. 7d. The wing, erected at the sole cost of Sir Erasmus Wilson, was finished and ready to be occupied, and the Princess of Wales had given leave that the four wards should be named after herself and her three daughters. Mr. John R. Taylor, Mr. Dunn, and the chairman, spoke of the munificent gift to the charity of Sir Erasmus Wilson, and a special resolution acknowledged the indebtedness of the subscribers to the donor, was carried, and ordered to be forwarded to Sir Erasmus. The Right Hon. Lord Overstone was re-elected president of the institution; the vice-presidents were re-elected, and Sir Erasmus Wilson was added to the number. Lieut.-Colonel Creaton having been re-elected treasurer, the proceedings terminated.

GLASGOW EAR HOSPITAL AND DISPENSARY.

NEARLY three years have elapsed since this institution was established in Glasgow, with the objects of treating persons suffering from ear diseases, and of teaching the science and art of aural surgery, and the progress made has been very satisfactory. Since the opening of the hospital 8,608 cases have been treated, and each year has seen a steady increase in the number of patients, last year there having been 835, as compared with 789 in the previous year. Of these 835, 667 were cured, 82 improved, 17 were incurable (including 10 deaf mute children), 39 were not treated, and 30 were still under treatment. Thirty-nine cases were admitted into the wards of the hospital for treatment involving operative interference. The financial statement shows that there is still a debt of £100 for the furnishing and outfit of the hospital.

ANDERSON'S COLLEGE DISPENSARY.

THE annual report, which was read and passed at the meeting of the subscribers to this charity held on March 28, states that during the year 4,480 visits had been made to sick persons, 1,080 of these being new cases. The total number of consultations in the various branches of the dispensary work was 11,810, of which 8,936 represented interviews with new patients. In addition to its ordinary work, the dispensary undertook the visitation of the 107 pensioners on the out-door fund of the Association for the Relief of Incurables in Glasgow and the West of Scotland, and these were apportioned among and attended by the students of the college, under the direction of the superintendent of the out-door visiting department. The financial statement shows a balance of £34 in favour of the dispensary, the debt of £84 which existed last year on the institution having been generously cleared off by Dr. Young, of Kelly.

PAISLEY BURGH PAROCHIAL ASYLUM.

IN the JOURNAL of March 17th, we drew attention to some charges that were made by a deputation of the Glasgow Parochial Board against this institution, reflecting very much on its management and the treatment of the patients. It is only right to state that at the last meeting of the Paisley Parochial Board, a report by a specially appointed committee on the Riccartsbar Asylum was read and adopted. It is preceded by a long and exhaustive statement by Dr. Fraser, the medical officer, which, besides dealing in detail with the treatment of the asylum patients during the year, controverts the adverse criticisms made by the Glasgow deputation. The report of the Asylum Committee deals *seriatim* with the alleged defects in clothing, bedding, heating, dormitory space, food, and the personal cleanliness of the patients, and not only declares that the charges are groundless, but explains and justifies the existing asylum arrangements. We shall be interested to see what the views of the Board of Lunacy are on the subjects under discussion.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.

WE have received the following reply to the article on the Devonshire Hospital and Buxton Bath Charity, contained in the BRITISH MEDICAL JOURNAL for March 17th, from Dr. W. H. Robertson, Consulting Physician to the hospital, and Chairman of the Committee of Management.

The statements contained in the communication by an anonymous correspondent, in the number of the BRITISH MEDICAL JOURNAL of March 17th, demand the most unqualified contradiction.

The hospital consists of a costly and durable building of ashlared gritstone, which was erected by the then Duke of Devonshire at the commencement of the present century, the fabric being as sound and perfect at the present time as it was when erected nearly a century ago. The building covers half an acre of ground, and surrounds a central space having also an area of half an acre. To erect such a building at the present time would necessitate an outlay of not less than £50,000. This building was built and used as stables, coach-houses, etc., until one-half of it was given to the Buxton Bath Charity in the year 1859, by the late Duke of Devonshire, and converted to the use of the fitly called Devonshire Hospital, the other half being still occupied by horses, etc., as before. The half thus used as a hospital contained 150 beds.

In 1879, the Governors of the Cotton Districts Convalescent Fund consented to make a grant of £24,000 on certain conditions, the principal condition being that the number of beds in the hospital should be increased to 300. In order to satisfy this condition, the whole of the building might have been pulled down, and an entirely new fabric erected, at the loss of a most valuable and durable structure, and at an additional cost that may be easily estimated by all who have been concerned in the erection of hospitals, but which could not have been less than double the sum of £24,000 proposed to be granted. A second plan of extension might have been to erect an additional story or storys upon the existing building, which also would have necessitated an expenditure far beyond the amount of the proposed grant. The third plan was to remove a passage which traversed the whole circuit of both floors with its walls, and obtain means of access from the inner area by covering it, and providing a gallery for the access to the rooms of the upper story. To cover this interior space of half an acre, the only durable, and by far the least costly, means was by a dome, which has been achieved by an outlay of £4,490. This plan enabled the contracts for the reconstruction to be let for sums within the amount of the grant, and the space required for 300 beds to be secured. The dome has, moreover, enabled the half acre of internal area to be protected from the weather, to be rendered dry instead of damp, and has provided, in addition, a vast hall for the use of the patients in hot or cold weather.

The interior of the hospital is warmed by 3,100 yards of hot-water pipes; 500 yards of pipes in addition are used to warm the internal area or hall; these pipes necessarily aiding more or less in warming the interior of the hospital. The central hall is used and valued by the patients, and has been subject of admiration and satisfaction to all the thousands of persons who have visited and inspected the hospital.

Only 44 windows in the interior of the hospital open into the central hall, whereas 106 windows of the same rooms are in the external walls, and give external ventilation; in addition to which all the wards derive external air through Tobin's ventilators; while a suction draught of great power in the central lantern is obtained by a large Boyle's exhauster.

None of the rooms in this hospital are less than 14 feet in height; the wards in the upper floor are considerably higher than this; only one ward contains a gable, and this increases instead of diminishing the internal area; and no other ward contains any device by which the cubic area is reduced.

The remainder of the misstatements admit of equally direct contradiction. All needful subsoil was removed in the construction and in the extension of the hospital; all foundations were concreted which were found to require it; the whole surface was covered with the usual means of excluding any surface excavations; and no odour of stables or other surface effluvium has been perceived, either in the part of the building converted to hospital use twenty-three years ago, or that which has now been added thereto. The extension has secured the removal of all stables from the neighbourhood of the hospital. The subsoil has been removed, concrete applied, and all means of obviating emanations from the soil have been had recourse to recently, that were used and found to have been effectual twenty-three years ago.

There has been the usual amount of difficulty attendant on reconstruction as to roofs, broken slates, blues, down-draughts, leakage, etc.; but all these obtained during the progress of the works, and have been gradually made good. It must be said that the statement as to the patients having been at times almost blown out of bed, or having had to get up at night because of the rain dropping on to the beds, is simply untrue. The spaciousness, the brightness, the size and shape of the wards, the ventilation, the warming of the interior, have been themes of praise from thousands of visitors, and the grateful testimony of the patients.

The mineral baths of the Buxton nitrogenous water are not within the area of the Hospital, because the elevation of the Hospital is nearly fifty feet above the level of the springs; and it was held, rightly or wrongly, that to subject the gaseous water to the action of force-pumps would seriously lesson its medicinal value. The roadway to the baths from the hospital is as good as it can be made; and crippled invalids, unable to walk, are taken to and fro in bath-chairs. The hot baths belonging to the Hospital are as good and satisfactory as those paid for by more wealthy visitors. The natural bath belonging to the hospital is necessarily at the same level as the other natural baths, and has been constructed as carefully as the space and site granted would allow.

It has only to be added that the Governors of the Cotton Districts Convalescent Fund scrupulously arranged beforehand all the conditions of the grant, nominated the architect, inspected and passed the plans, sanctioned the contracts, inspected and approved the works of the extension at frequent intervals during their progress, and gave the extension their entire sanction, and approval upon its completion.

The accuracy of the several statements contained in this reply is supported by Mr. Duke, the architect; Dr. Lorimer, the medical resident; and Mr. Joseph Taylor, the secretary; more especially as to the circumstances of which they have respectively official cognisance.

*** To this our correspondent replies: "Dr. Robertson naturally defends his offspring, but lamely. 1. As to cost: it is idle to assert that, with the enormous quantity of worked stone, colossal columns, oak timber, and other building material at hand, anything like £48,000 need have been spent on a

proper hospital, duly designed. As it is, two-thirds of the sum has been expended on the present hybrid building, which is neither stable, hospital, nor conservatory, but has some of the qualities of all three. 2. There must need be windows in the outer wall; but are we to assume as the measure of Dr. Robertson's standard of hospital construction, that their existence excuses the fact that the present natural course of the foul air of the wards is into the central hall? 3. On the upper floor, there is hardly a room of reasonable shape; and many of the rooms are too low in relation to their size. 4. The pervading odour of dung which occasionally comes from the soil permeated with a hundred years of stable-refuse, is sometimes so strong, that my attention was called to a very primitive method adopted for lessening the annoyance from it; but, as Dr. Robertson's olfactory sense is less perceptive, I shall not risk the chance of my informant being visited with penalties for having more than the official sensitiveness which may be considered right in the matter. (I send you the evidence.) Common sense and the ordinary laws of hygiene, however, have some right to be heard on such a subject. Finally, as to the highly important question of the baths and bathing arrangements, Dr. Robertson does not mention that force-pumps have always been used for the purposes of the hot baths, even those of the wealthy, and, at the present moment, the hospital has to use such a pump for its own hot baths, which I readily agree with Dr. Robertson in considering 'as good and satisfactory as those paid for by more wealthy visitors.' In properly coated pipes (so as to prevent loss of temperature), there, need be no fear that the water would lose its efficacy by being pumped into the hospital precincts. Even Dr. Robertson has nothing to say for the natural bath provided for the hospital patients, which I have no hesitation in describing as inadequate."

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL SCHOOL.

THE summer session of the Army Medical School, at Netley, was opened on Monday, the 2nd instant. The circumstances under which the proceedings commenced were saddened by the intelligence that Professor Aitken, F.R S., who was to have delivered the introductory address, was prevented from doing so by illness of an extremely grave character. It appears that the eminent professor was suffering from a severe attack of bronchitis at the time he was engaged in the recent competitive examination of candidates for commissions in the army and navy in London; and that, partly owing to the inclemency of the weather at the time of the examination, and partly to the continued strain on the time and exertions of the examiners from the number of gentlemen who entered into the competition, he returned home greatly exhausted, and with the pulmonary symptoms much aggravated. Pneumonia supervened, and the prognosis has become the more grave, inasmuch as constitutional deterioration from diabetes has been found to be attached to the pulmonic affection. Dr. Aitken had partly prepared his introductory lecture; but, owing to his illness, had not been able to complete it. It was, however, sufficiently advanced to show the scope of the objects he had in view, and it was accordingly read by Dr. Aitken's colleague, Professor De Chaumont, F.R.S. The task Dr. Aitken had undertaken was an analysis of the pathological records regarding the fever, commonly called the Walcheren fever, which led to so large a loss of life and such prolonged sickness among the troops that composed the expeditionary force which proceeded from England to Holland in 1809; and to show, further, that many of the conditions which had concurred to produce the disease and mortality on that occasion were repeated on the occasion of the Crimean War, owing to the experience then gained not being turned to proper account. From the discussion of the topics referred to, it was evidently the professor's intention to lay down rules to be turned to account in the future, but this part of the subject was only imperfectly developed.

The class for the session consisted of twenty surgeons on probation; fifteen being for the Army Medical Department, and five only for the Indian Medical Service.

REVACCINATION IN THE ARMY.

MR. P. A. TAYLOR, in the House of Commons, has been questioning the Secretary for War on the subject of vaccination of recruits, and is continuing his efforts to disparage this well-established means of preventing the spread of that terrible disease, small-pox. With reference to Mr. Taylor's question on this subject, a recent writer in the *Times*, giving the signature of William Tebb, states that "there is not only a strong objection and wide-spread doubt as to the value of, but positive repugnance to, revaccination, not only among recruits, but throughout the army." We should be glad to know by what possible means the writer has been able to ascertain the existence of this feeling throughout the army. If such a positive repugnance to vaccination existed in the army; even if it existed, not throughout the army, but in any considerable portion of it, we may be sure the officers and men of the army would not be slow in publishing the fact. It seems strange that such a sweeping statement should be made without the least authority to support it.

On the other hand, what are the facts with reference to vaccination and its protective influence in the army against small-pox? Without going back to past history, let us see what its influence was in the army during the last year of which we have statistical records. This is the year 1880. The average annual strength of the troops composing the army during this year was 159,622. The number of admissions into hospital for injuries and diseases of all kinds even exceeded the number of individual men, many instances of repeated admissions of the same soldier having occurred; but, among this vast number of cases treated by the medical officers in the military hospitals, there were only twenty cases of small-pox; that is, about one case in every eight thousand men. But even the greater number of these twenty cases occurred in foreign stations, where the troops were placed among populations who were destitute of the protection which experience in the British army so strongly shows the practice of vaccination affords. No less than twelve of the twenty cases happened in India, and six of these took place while the troops were on active service in Afghanistan. Only three of the cases occurred in the United Kingdom, where 83,895 men of the army were quartered; being in the proportion of one case among 27,965 men. Of the remaining five cases, two occurred among the troops in China and the Straits Settlements, one in Gibraltar, and two in Malta. With such facts established, is it probable that there is the least ground for asserting that a positive repugnance to vaccination is prevalent, not only among the recruits of the army, but throughout the army itself? Or is it at all likely that the military authorities, or the Secretary for War, Lord Hartington, will be likely to listen to Mr. Tebb's advice, to try the effects of abolishing compulsory vaccination of recruits, on Mr. Tebb's unsupported assertion that thereby he will "earn the gratitude of every regiment in the service?" Among the 24,015 recruits passed as fit for the service in the year 1880, 1,144 men had neither marks of small-pox or vaccination. Would it be a satisfactory thing to leave these men, who are liable to be placed on foreign stations where not unfrequently small-pox is rife among the native population, without any effort to protect them against infection? There was one fact observed in the examination of men who were seeking enlistment in the army during this year 1880 which we must leave the advocates for abolishing vaccination to explain as they best can. It was this: that, as compared with the previous year, there was an increase of over 10 per 1,000 among the recruits who bore marks of vaccination; and, on the other hand, a decrease of nearly the same proportion of recruits who had marks of small-pox. More men had been vaccinated, and fewer had had small-pox. There was also a slight decrease in the proportion of men who had neither marks of small-pox nor of vaccination. These figures seem to show that the anti-vaccination band is not achieving any marked success in its efforts to prejudice the civil population against the protection afforded by the practice of vaccination.

A VOLUNTEER MEDICAL CORPS.

A SCHEME FOR ORGANIZING A VOLUNTEER MEDICAL CORPS AMONGST THE MEDICAL STUDENTS IN LONDON.

1. It is proposed to organise amongst the Students of Medicine, in the various London Hospitals and Medical Schools, a "Volunteer Medical Corps," capable of providing Bearer or Ambulance Companies for the Volunteer Army, and bearing the same relation to the Volunteer Service that the Army Medical Department bears to the Regular Army.

2. At the present time the Volunteer Service has no Medical Organisation apart from the Regimental Medical Officers, and while such a condition exists, its efficiency as a military body is impossible. The present scheme affords a way out of the difficulty, by proposing an organisation of the Medical Students into a Volunteer Medical Corps, as a first step.

3. The method of achieving this would be—to organize in each separate Medical School a complete and self-contained "Bearer Company," with Officers, Non-commissioned Officers and men, and *materiel* complete as in a Bearer Company of the Regular Army. A "Bearer Company" is a military unit, consisting of eight Medical Officers, and some 120 Non-commissioned Officers and Men, regularly organised to remove the wounded from the field of battle; to carry them to a dressing station where the first dressing is completed, and, finally to transport them to the Field Hospital in the rear. Such a Company, or half Company, it would be perfectly possible to embody in each London Medical School.

4. At first this movement might commence as a civil organisation, and when a sufficiency of members had been enrolled, application would be made to the War Office to secure the Capitation Grant, as for ordinary Volunteers, the appointment of an Officer-Instructor from the Army Medical Service, and a proportion of Sergeants from the same body. *Materiel*, in the shape of Stretchers and Bearer Company Equipment would, doubtless, be supplied from the same source, in the same way that Guns are provided for Artillery Volunteers, or Rifles and Ammunition for the Rifle Battalions.

5. Each School would have its Bearer Company completely distinct and self-contained as a unit, but it would form a Company in a London Medical Volunteer Corps for administrative purposes, and for share in the Instructors' services.

s way the freedom of action of each School would be in no wise curtailed, rivalry in efficiency would be developed.
o meet the requirements of the Medical Staff or the Students of any Medihool in which the embodiment of a Bearer Company is not feasible, a r Company unattached to any special school can easily be organized.
ie advantages which might be expected from such a movement are these.
t would add a new bond to the associations and comradeship of the Stulife, on a basis of discipline and co-operation.
t would afford a common basis of work to the Civil and Military branches Medical profession, and would interest the Civil profession in the modern gement for the relief of the wounded in the field.
t would provide a Medical Organisation for the Volunteer Army, which be absolutely perfect of its kind, and by training the Students to the sys working, eventually educate the whole body of Volunteer Surgeons in lance Organisation.
n times of grave national emergency, or serious foreign war, it would emporary assistance to be given to the Medical Department of the Regular by trained and disciplined men, wearing a common uniform, and working same end—the Relief of the Wounded Soldier. In the same way that we ly saw the Post Office Volunteers despatching a contingent, to aid the y in a foreign war, so might the Volunteer Medical Corps of the future rained Volunteers to aid, if needed, the Medical Service of the Regular

his Organisation, if once set on foot, could have grafted on to it, if thought ble, a system of Municipal Ambulances, by attaching to the Companies ien to carry on the much-needed Ambulance work of this great city, and nbulances so used might be available for Military Service if needed. In nce the Organisation was completed, day by day new and useful develop of it might take place, and the various Provincial Medical Schools would ess, join in the movement.
considerable number of Medical Students are now serving, scattered about, ous Metropolitan Volunteer Corps. This grouping of them into a special fic corps would be much more useful to the individuals and to the country. ie expense to the State would be quite trifling. The *materiel* once supplied little renewing; the Capitation Grant is very moderate in amount, and the for an Officer-Instructor, and a dozen Sergeant-Instructors would not in an appreciable degree, the Volunteer estimates.
l Military Academy, Woolwich, March, 1883. GEO. J. H. EVATT, M.D., Surgeon-Major, A.M.D.
Dr. Evatt will be glad to explain any points not laid down with sufficient ss in this circular.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

Evidently Dr. Seaton is uncomfortable; he does not like the position in h he has placed himself; he likes still less my holding up of his profesl—or, rather, unprofessional conduct to public criticism. He would now to pose as an aggrieved one; I am sorry I am quite unable to permit him so. In his letter to you, he endeavours to direct attention from the real at issue, by charging me with connecting his appointment of medical h officer "with the occurrence of that which, in his" (my) "opinion he most severe epidemic." Dr. Seaton has already given proof that he ttach a meaning to his words they, in ordinary usage, will not bear; but bvious meaning, to my mind, of the above is, that in some way, I regarded either personally or by virtue of his office, as responsible for "the most e epidemic." Surely I have no need to disclaim that ?—it is too absurd. natter of fact, small-pox did rapidly spread immediately after Dr. Sea appointment in March 1872; but he was no more responsible for that he is to take credit to himself for the less severe recent epidemic. In the epidemic, vaccination and re-vaccination was very generally and ughly carried out, and in this, in my judgment, is chiefly to be found the nation. The way in which reference was made in my evidence before iverpool Commission to the medical officer of health at all was, as far as ory serves me, as follows. I had said I thought this epidemic was more e than that of 1871-2, when the examiner said, "That was just the of the appointment of the medical officer of health?" and I answered ."

Seaton says, had I written asking him to withdraw the words I con d offensive, and expressed regret at my own statement which had pro his comment, he should not only have withdrawn the words in a public er, but expressed regret at having used them. I did write asking him to draw the offensive words, but I did not express any regret for my state simply because it was the expression of an opinion only, and had no per bearing whatever; nothing, therefore, could justify him in singling me name in his report, and attempting to brand me with "obvious untruth." uld have been much more creditable to Dr. Seaton, morally and socially eed, in every relationship of life—had he listened to the voice of his own ience, or to the advice of his friends, and frankly done that which every rable, manly man would have done—viz., acknowledge the wrong and gise for it.
Seaton submits that, under the circumstances, it would have been impos or any gentleman to have acted otherwise than he did. Without saying o gentleman would have acted as he has done, it may fairly be said that any gentleman begins to be doubtful of the opinion others may form of nduct, he has some reason for his suspicions. *Qui s'excuse, s'accuse.* How into the more personal question I do not think it right I should ask to ss upon your columns. The correspondence has been sent to the various al journals, your own included, and appears in the *Lancet* of March 31st, ny one who wishes can read it there. Personally, I am quite content with neral professional and lay verdict in this controversy which has been nced locally, and I am further content to leave the matter with the sion as a whole.—I am, sir, yours obediently,
tingham, April, 1883. JOSEPH O. BROOKHOUSE.

SIR,—Dr. Hime's criticism of my recent report is directed mainly to the fact that I am only able to offer proof of the value of notification for so short a period as twelve months. This is no fault of my own. If, in February 1882, the Town Council of Nottingham had elected to give their Act a trial of twelve years instead of twelve months, I or my successor would, in the year 1894, be able to afford him the materials for comparing the period 1882-1893 with that which he has already given, viz., 1871-1882, not only with regard to the ratio of deaths to the total population, but also with regard to the ratio of deaths at the most susceptible ages of the several diseases notified, as well as the various local circumstances with which it would be desirable he should be furnished in order that his comparison might be complete, and free from sources of fallacy. I must confess I find it difficult to follow his reasoning in this direction, neither am I able to acknowledge the force of argument by which he would seem to imply that, because small-pox was practically absent from Nottingham during the interval between the two epidemics of 1871-72 and 1882, that therefore the evidence with regard to the efficacy of a notification system in controlling the latter of the two epidemics goes for nothing. Early in the year 1881, I issued a warning to the people here that they were pretty sure to be visited by small-pox soon, and advising revaccination. Pamphlets and posters embodying my advice on the subject were distributed through the town. Why did I issue that warning? Because I recognised particular circumstances which indicated danger. What were those circumstances? In the first place, the Nottingham population, by evading to a considerable extent the vaccination laws, and by almost universally neglecting revaccination, had become highly susceptible to small-pox, to the infection of which they had not been exposed for many years; in the second place, small-pox was epidemic in London, which at such times forms a prolific centre of infection from its frequency of communication with large provincial towns. Sheffield seems to have suffered, in proportion to population, even more severely than Nottingham at the last epidemic, which lasted through the whole of 1872, and cannot be said to have become extinct till the second quarter of 1873. By the time that small-pox is again epidemic in the metropolis, or one of the large centres of industry with which Sheffield is in constant communication, that borough will present a population highly susceptible; and then, if the disease is once fairly started, as is likely to be the case in the absence of any system of notification, the medical officer will probably have ample opportunity for putting his views to a practical test.

Now, as regards the actual good to be derived from notification. I am under the disadvantage that your readers will not have seen the report which is under criticism, and they will not, therefore, be in a position to form their own judgment on the line of argument that I have adopted. But, briefly stated, my experience of the practical utility of this measure coincides very much with that of Dr. Simpson, whose lucid and interesting account of the working of the system at Aberdeen I have just had the pleasure of reading in this week's JOURNAL. Taking the two diseases which the Town Council of Nottingham selected for notification, viz., small-pox and scarlet fever, I submit that the action taken by the sanitary authorities has been of such a character as to very materially help towards limiting their spread; and, further, that without being made very generally aware of the existence of cases through their system of notification, it would have been impossible for them to have secured anything like the same good results. For, in the case of small-pox, this system not only affords the means of securing the better isolation of the sick, either at their own homes or at hospital, but it also gives those who are most liable to come in contact with infection a chance of protecting themselves against the disease by vaccination or revaccination. For this purpose, the authorities have supplied themselves, twice a week, with vaccine lymph freshly taken from well chosen cases (number given) by two public vaccinators, to whom prizes have been awarded for good vaccination and strict compliance with the rules laid down by Her Majesty's Local Government Board. As soon as a case of small-pox is notified, the locality is visited, and those who are in any way likely to be exposed to infection are strongly advised to be vaccinated. At the same time, the practitioner who has notified the case is furnished with the means of vaccinating, if he should happen to be without; and, further still, where the people are in such circumstances as to make the fee an obstacle in the way of their being vaccinated, the authorities have removed the difficulty by paying it themselves. In so doing, I think it will not be questioned that their policy is a sound one from economical considerations, as well as from a sanitary point of view, seeing that very many of these persons would, if they had been attacked with small-pox, have become chargeable to the rates in one way or another. Firmly believing, as I do, that by this means many persons have, in all human probability, been saved from sickness, disfigurement, or death; and that, had they fallen ill, they would have communicated the disease to many others, I plead no excuse for using expressions which some may consider too strong. Passing to scarlet fever, it should be very distinctly noted that I have taken care to warn the Town Council against ascribing to preventive measures following notification a reduction of the disease, which I look upon as explicable in other ways. But I also tell them that such measures have materially helped towards the limitation of the epidemic, and, for this statement, I submit I had very good grounds. I mention, in my report, one important fact, that, during the year of notification, more than three times the amount of disinfection of infected houses, rooms, bedding, and clothing, has been secured than in any previous year, even including those years in which the disease was epidemic, and in which we were already possessed of our present appliances for disinfection. This is a fact which the medical officer of health for Sheffield seems disposed to pass over as of no consequence; but I am inclined to think that most of my coadjutors in the Public Health Service will regard it very differently. In manufacturing towns, such as Sheffield and Nottingham, where the people are constantly shifting about and changing their residences, it will sometimes happen that, after a house has been infected with scarlet fever, it is vacated without disinfection. Everybody is in ignorance of the fact that there has been scarlet fever, except, perhaps, the neighbours, who do not consider it to be their business to interfere in any way. The doctor has left off attending a short while before; and, if he happen to leave any instructions about disinfection, they are disregarded. The incoming tenants, little dreaming what is in store for them, go into the home, and some of the family fall ill. Now, this kind of thing, which, in my experience, is not of unfrequent occurrence without notification, is also, in my experience, preventable by notification. This is, in fact, one of several examples which I could give of the cases in which the agency of the sanitary authority is absolutely essential for the purposes of prevention, and in which it is unable to perform its proper function without authentic knowledge of the existence of the infectious disease. For it would be most unreasonable to expect the pri-

vate medical attendant, out of a sense of public duty, to acquaint either the landlord or the incoming tenant with the fact that he had been in attendance at this house for scarlet fever, and that he did not believe that disinfection had been carried out according to his instructions.

The medical officer of health for Sheffield passes over the part of my report which refers to the special action taken with regard to the attendance at Board schools of children from infected houses, and also that which refers to special precautions taken in the case of tailors, laundresses, etc., in order to comment on my observations on the educational advantages of notification, on which he very properly says I lay much stress. He asks what evidence is there that the educational results obtainable from notification have been effective. To this, I may reply by a counter question. I would ask him, as a private practitioner, what evidence has he that the advice and instructions which, like most other practitioners, he is no doubt in the habit of giving in cases of infectious disease to which he is called, bear any good results? I myself entertain no doubt that the advice and instructions of medical men given to their private patients represent in the aggregate an amount of life-saving which has an appreciable effect on the death-rate, but to what extent it would be impossible for me to say.

The action of the private medical adviser and that of the sanitary authority are in no sense conflicting in this respect. They are both working in parallel lines, with the same object in view. As I believe that the skilled advice given by the practitioner to the householder tends to confine disease within comparatively narrow limits, so I cannot doubt that the cautions administered by the sanitary authority bring home to him his sense of public responsibility, and consequently help in the same direction.

I could dilate considerably on this topic, and also on the advantages to be gained by the notification of other diseases, such as enteric fever and diphtheria, for I would not have it supposed that the two diseases selected by the Town Council of Nottingham for notification are the only ones which, in my opinion, should be notified. But I am afraid I have already encroached too much on your space; and I would prefer that others, whose experience is more valuable than my own, should write on the subject.

In conclusion, let me say that, though I have not touched on Dr. Hime's statistical statements, inasmuch as, from my point of view, they are somewhat beside the mark, I must not be taken to endorse their perfect accuracy. In reading through his letter, I observed an error of a rather important character. The death-rate of 1878 for Nottingham is represented as 24.2, whereas, if he will refer to the Registrar-General's report for that year (p. 253), he will see that it is really only 21.0. This difference of 3 per 1,000 persons living in the death-rate of a town the size of Nottingham, represented just about 500 deaths. According to him, 1878 was the year in which the death-rate was the highest in any of the last six years; according to the Registrar-General, it was the year in which it was the lowest. I perceive that Dr. Hime has a sharp eye for any occasional lapse from a strictly grammatical method of expression. The error to which I have referred is of a rather more important character in a discussion of this kind. I trust, therefore, I may be permitted to point it out without the risk of giving offence.—Your obedient servant,

Nottingham, April 2nd, 1883. EDWARD SEATON, M.D.

PARISH ORDERS.

SIR,—Will you or some of your numerous readers inform me how long an order to attend a pauper exists good? For instance, supposing an individual brings an order, and you attend him until he is well. Can he claim your attendance again in two or three months' time, without a fresh order from the relieving officer?—I am, yours very truly, M.R.C.P.

*** Unless the pauper's name be entered on the list of permanent paupers, which stands good for six months, from January 1st and July 1st in each year, it would be sufficient that our correspondent should attend the case until recovery, and then, in any subsequent illness, require the pauper to get a fresh order. Unless, however, the person's pecuniary circumstances have much improved in the interval, we would advise attendance without an order, as the probable result of refusal would be that additional trouble would be given. If, however, such attendance carries with it an extra fee, either for an operation, dislocation, or a midwifery fee, it is never safe to attend without an order, as the fee may be afterwards refused. Fees are only recoverable in the case of permanent paupers without orders.

PAUPERS AND NON-PAUPERS.

SIR,—Will you kindly inform me what entitles a person to the professional attendance of the parish or district medical officer free of charge? In my district, I am frequently asked by guardians and overseers to attend on poor persons in the parish who are not receiving out-door relief, and who are not entitled to any out-door relief. Can I legally refuse to attend these patients free of charge on the ground that they are not paupers? Can you recommend me the best book on the subject of the duties of a district medical officer?—I am, sir, yours truly, A DISTRICT MEDICAL OFFICER.

*** The question raised by our correspondent has been answered hundreds of times. The answer is to the effect that there is no absolute definition of what constitutes a person entitled to receive an order for parochial medical relief, as it is left to the discretion of the relieving officer, or, in an urgent case, to the district overseer. It is always advisable to attend the case until the next board meeting, and then report the circumstances of the person to the guardians. The best book of reference would be Lumley's *Manual for Poor-law Medical Officers*, obtainable from Kempton, medical bookseller, Wardour Street, Soho, London; or Glen's *Consolidated Orders of the Local Government Board*. The former publication will supply all the information our correspondent needs.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BUILTH RURAL DISTRICT.—A special word of praise is due to Mr. Herring for the general excellence of his report for 1881. The district, which contains a population only of 6,758 persons, spread over an area of some 137,116 acres, appears to have been thoroughly and systematically inspected; and in addition to giving the results of his visitations, Mr. Herring makes special reference to the prevalence therein of zymotic disease, of its probable origin, and of the measures adopted for its repression. The fact that but two deaths were recorded from zymotic complaints would seem to point to little need for special reference, but the occurrence of several cases of diphtheria and of typhoid has afforded the health-officer an opportunity of making some etiological inquiries of considerable interest. The first two cases of diphtheria occurred in two children, of family of five, all living under the same hygienic conditions, partaking of the same dietary, attending the same school, and both, previous to this attack, in sound health. The only point of difference between them and the rest of the family was in the matter of sleeping arrangements. The two children occupied a small bedroom, with no fire-place, except a window, twenty-four inches by eighteen inches, facing south-west. The room had been used by a former tenant as a wool-store, and at the time of his leaving in November there were a years' shearings on hand. When first used for sleeping purposes in January, 1881, the room was ordinarily cleaned, but was not lime-washed or in any way disinfected. One end and a side of the room were outside walls, the one containing the window exceedingly damp from the absence of eaves' spouting, and from the abutment of the roof of a built-on kitchen, allowing all the rain-fall on its surface to run down the side of the bedroom wall before reaching the ground. The question seems to arise whether there were any special reasons why these two should have become affected in preference to the remaining three, younger, and therefore presumably more susceptible children. Mr. Herring thinks there were, and in support of his statement advances three theories as to the source of infection, which apply with special force to the room in question, (*a*) aërial infection; (*b*) from wool; (*c*) fungoid growths. As regards his first theory, Mr. Herring shows that from February 7th to the 10th the prevailing wind was a westerly one and much above the average velocity of fourteen miles an hour. The window of the bedroom faced the south-west, and would therefore receive the wind in its full force, which no other window of the house did. There were, however, no cases of diphtheria within what might be called a reasonable distance, so that the case of aërial infection cannot be proved. In support of his second theory Mr. Herring has more proof to advance. It seems possible that some of the clippings may have been from diseased animals, and that the fleece may have retained the germs of some virulent ovine disease. The stagnant air of the apartment, and the warmth consequent on the accumulation of such a quantity of wool, would give the conditions necessary for their retained vitality, and probable reproduction and development. The room not having been disinfected before being used, might possibly contain some of the morbific bacteria; in this event the two children being the sole occupants of the room would be the only ones to suffer. As regards the third theory, that of fungoid growth, most writers on diphtheria agree that *dampness* of dwellings and their surroundings materially assists in the production of the disease. In one or two places the wall of the room in question was covered with a very fine semi-transparent mould, scarcely observable, except on the closest scrutiny. This, Mr. Herring presumes, would correspond with the *aspergillus* in Dr. Taylor's case (see BRITISH MEDICAL JOURNAL, June 2nd, 1881). The disease showed itself in the elder child on February 11th, four days after the heavy rain; it is therefore not unreasonable to class the two circumstances as cause and effect. Eliminating from the discussion the probability of the disease having arisen from (1) impure water; (2) dirty closets; (3) foul drains; or (4) actual contact with the disease in other persons, the three theories already referred to remain. Of the three, the last seems the most probable, as it fulfils the greatest number of the conditions observed as being the constant factors in the production of this malady.

BRAINTREE RURAL DISTRICT.—The comparatively recent appointment of one health-officer for the whole of this district, and the fact that it was previously under the charge of the district medical officers, render the report which Mr. Abbott has prepared somewhat incomplete. Moreover, the abstract forwarded scarcely conveys the information looked for in such productions. Mr. Abbott reports, however, that a house-to-house inspection was being made, and he recommends an improvement in the method of refuse-removal. The water-supply seems far from satisfactory, sixteen samples out of a total of eighteen being found in an impure condition. Provision for isolating cases of infectious disease is suggested; and for this purpose, Mr. Abbott thinks that two cottages should be

cured. The mortality statistics call for little comment. In all, there were 327 deaths registered; but, deducting those who died in the workhouse and who belonged to other parishes, this number is reduced to 308, representing an annual death-rate of 15.93 per 1,000. Nineteen deaths are attributed to zymotic causes, including two from small-pox, the disease, in both cases, being contracted in London. A serious outbreak of diphtheria occurred in the autumn; and, of a total of 21 cases, the disease proved fatal in four.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, April 5th.

Medical Act Amendment Bill.—Lord CARLINGFORD presented petitions in favour of this Bill from several quarters, including the Irish Medical Association, the Committee of the British Medical Association, the Irish Apothecaries' Hall, and many members of the medical profession.—Lord CRANBROOK presented a petition from the Royal College of Surgeons of England against the Bill in its present shape, and praying for certain alterations.—Lord CAIRNS also presented petitions in regard to the measure.—Lord CARLINGFORD, in moving the second reading, said the subject on which the Bill dealt had been long before the country, Parliament, the public, and the medical profession, who had been greatly agitated by it, and by whom it was universally admitted to be one which ought to be settled by legislation. He (Lord Carlingford) did not know that he should be more fortunate in his attempt to deal with the matter than those who had gone before him, although, of course, he trusted he should. He would say nothing about the strong wish which existed amongst the medical profession that the question should be settled, and he had the great advantage of having as a guide in the matter the report of the Royal Commission, which was appointed by the present Government to consider it. The noble lord referred to what had already taken place in Parliament on the subject, and expressed a hope that the measure would not fail in the respect in which others had failed—viz., the matter of the direct representation of the medical profession in general upon the Medical Council. The profession was at present regulated by the Act of 1858; and, since the passing of that measure, several other attempts to deal with the question had been made in their lordships' house. Since the attempt of the Duke of Richmond and Gordon, in 1878 and 1879, the inquiry by a Committee of the House of Commons, and the failure of legislation by the dissolution of Parliament, the present Government had appointed a Royal Commission to consider the subject, and their report was furnished last summer. Under the circumstances, it was clearly the duty of the Government to endeavour to deal with the matter upon the lines laid down in that report, which recommended itself to their judgment. In was in that way that the Bill he had now to present to their lordships had been framed. There were many matters dealt with by the Bill, which was a most extensive and complete measure; but now, as ever, the great evil to be dealt with lay in the fact of the multiplicity, and variety, and uncertainty, and insufficiency of the medical licences which admitted a man to the *Medical Register*, as a qualified practitioner, with a right to practice. There was a great want of security felt in this matter by the public. That great want was universally acknowledged; and the only mode of effectually dealing with it, as it seemed to the present Government, as it had appeared to their predecessors and to the Royal Commission, was by the plan of constituting, in each of the three divisions of the United Kingdom, a board, consisting of members of the licensing bodies, which Board alone should have the right of attesting and certifying the competence of those who were to obtain a legal right to practise in medicine and surgery. The noble lord then went on to explain the provisions of the Bill (which has been before the public for more than a fortnight). The Medical Board, he said, would represent all the bodies capable of giving degrees or diplomas. The number of these bodies might be increased or diminished from time to time by the Privy Council, on the motion of the Medical Council; and the Bill provided that the Medical Board should frame a scheme, not only for the final examination, but for the previous qualification and training of candidates, both in general and professional knowledge, and that this scheme should come into effect when it had received the approval of the Medical Council and of the Privy Council. It also provided that this scheme should aim at an uniform standard in the three countries. The Bill further proposed to enlarge the powers and the importance of the Medical Council, to improve its constitution, and also to lessen the number of its members, which would be an improvement. It proposed that the Council should consist of six Crown nominees, of eight to be elected by the medical boards of the three parts of the United Kingdom, and of four to be elected by the general body of medical practitioners in the United Kingdom. The Council would be reformed every five years. The next part of the Bill related to medical examinations, and required the Medical Board not only to conduct the final examination, but to take care that the whole course of curriculum had been carried out. They hoped also by allowing the Medical Council, acting on its discretion, to recognise persons holding colonial and foreign qualifications to practise in this country, to enable our countrymen in other parts to be favoured with reciprocity, and be enabled to practise in the colonies and abroad, which our own unfriendliness up to the present had prevented them from obtaining. The next part of the Bill made provision for punishing the fraudulent use of medical titles by so-called medical men. There were only two or three points in the Bill to which he need address himself. The first was the constitution of the Medical Council as a central body, which, he trusted, would be made thereby a more important and useful body than it was at present. The greatest change in the constitution was the admission of a representation on the Council of the general body of practitioners. This question had been the subject of an old controversy, which, however, he believed, was extinct now; and, in framing this measure, they had gone with the report of the Royal Commission in thinking that the whole body of the practitioners should be represented on the Council. They considered it most important that the profession at large should have every confidence in the Council. One of the reasons for the proposed change was that the Council was too large already, and without such change the tendency was for the Council to grow larger, which necessitated the grouping together of the various medical bodies, and nothing could be more unsatisfactory than this. With regard to the Medical Board, the only difficulty that arose was that of settling the proportion of its representation, but he had had the advantage of much advice on this subject, and he trusted that the figures he had inserted in the Bill as the number to represent them on the Council would in the end turn out to be satisfactory. With regard to the provision that these Boards should be the one examining and licensing Board, he did not think their lordships would object to that principle, which was one which had already been admitted, and had had the approval of the College of Physicians. There was one other question on which he wished to say a word. That was what was known as the affiliation of students after having passed their examination. Their affiliation to the medical bodies after the examination was not compulsory, and the Royal Commission had expressed their opinion that the compulsion was not necessary, as young medical men would feel it their own interest to affiliate themselves without any compulsion whatever. The question was a difficult one, but he did not desire to treat it as an essential part of the measure, and he would be willing to entertain proposals with regard to the matter before the next stage of the measure was reached. [*Hear, hear.*] He hoped their lordships, in passing the second reading of the Bill, would take a step in which the public had the very deepest interest, and would afford a guarantee to the public that those who they relied upon should be fully competent and qualified to deal with the question of life and limb.—The EARL OF ABERDEEN said that the Scotch universities agreed with the Irish universities, that the Bill would require to be very materially modified in committee before it was passed into law. Referring to the proposed additional examination, he thought it would be cruel to expect it of the students.—Lord MILTOWN thought the establishment of separate boards for the three countries would not have the effect desired by the noble lord of establishing uniformity. He considered also that the annual registration of practitioners was unnecessary and vexatious.—EARL CAIRNS hoped that the Bill, with some necessary modifications, would be passed into law, as the question of medical education was one on which the mind of the public had been maturing for some time. He understood that the main object of the measure was to prevent unqualified students from being admitted. [*Hear, hear.*] What he wished to call attention to was, that the Bill in its present form neglected the question of university education in Ireland. He objected to the proposed non-recognition of university qualifications on the *Register*; the insistance on the examination before the Medical Board. The universities of Ireland and Scotland had placed no less than 50 or 60 per cent. of the total number on the *Register*, and he felt that nothing could be further from their lordships than to injure a system which had produced such excellent results. There was one thing that might satisfy the universities, and

that was by giving them a strong and, in fact, a preponderating position on the Medical Boards. The system might do in England and Scotland, where the majority of those on the Boards were to be University representatives, but in Ireland out of the eleven members of the Board there were only to be five University representatives; and he considered that, if this scheme were to be carried out, the constitution of that Board should be changed so that there should only be five non-university members. If these matters were satisfactorily dealt with, we would be very glad to see the measure passed into law.—Lord Cranbrook called attention to the provision in the Bill which proposed, under a penalty of £20, to prohibit the use of foreign medical titles. It was no uncommon thing for practitioners possessing licenses of the College of Physicians and the College of Surgeons, to take degrees from foreign universities; and frequently they were only given after a most severe examination. It appeared to him a strong measure, especially in regard to those who already held these titles, to say that they should not use them. It would simply mean that they should say to their friends and patients, "You must not call me doctor any longer, or I shall be liable to a penalty of £20."—Lord Balfour of Burleigh pointed out that the Scotch universities took great interest in this subject, in proof of which it was only necessary to mention the fact that there were at present no fewer than three thousand students in those universities studying medicine. He protested against these universities being asked to give up the right of granting diplomas which entitled persons to be put upon the *Register*. Such a provision might be required in England, but it would not do for Scotland. The noble lord quoted the opinions of Professor Huxley, Mr. Bryce, and other members of the Royal Commission, to show that there was considerable division of opinion on this point in the Commission. He maintained that if the Scotch universities were asked to give up the privileges they had enjoyed for so long, their interests should be safeguarded by some better provisions than those in the Bill. If the measure were to pass in anything like its present shape, it would be a sacrifice of the privileges at present possessed by the Scotch universities.—The Earl of Camperdown, speaking as Chairman of the Royal Commission, after a passing allusion to the unfortunate death of Sir George Jessel, the Master of the Rolls, who had rendered much valuable assistance to the Commission, pointed out that at the present moment, when so many new universities were starting up, like the Victoria University, there would be increasing demands made for power to confer degrees; and then that these degrees should have the effect of placing the candidate on the *Register*, and increasing demands would also be made for seats on the Medical Council. It was admitted, on all hands, that some change must be made in the law; and, in his opinion, if a change were made it could only be in one of two ways—either they must allow the licensing bodies to go on increasing indefinitely, or else they must make up their minds to restrict the number. The Royal Commission had recommended that there should be one sole licensing body, and that the Medical Council, and he was glad to see that the Government had adopted that recommendation. The Bill was framed on the second of the two plans he had referred to. There would be in each of the three divisions of the United Kingdom a Medical Board to represent all the institutions which, in the judgment of the Privy Council, had taken sufficient part in the legislation connected with the profession. It must not be supposed that the creation of these Boards would, as a noble lord opposite seemed to fear, be a step in the direction of centralisation. The Boards would be composed of all the authorities who took an active interest in the medical profession, and, moreover, the principle of having one Board for each division of the kingdom, had been approved over and over again. The number allowed to the universities, in comparison with the number allowed to the corporations was by no means in comparison with the part taken in the matter of medical education and examination of the universities and the corporations. The proportion, however, in Scotland was not unfair when they took into consideration the preponderating part that the Scotch universities took in medical education. Probably the number allotted would require revision and careful consideration. Throughout, the Royal Commission had been most anxious to be strictly fair and impartial to all the important interests concerned. None of their lordships, who had neither been Presidents of the Council nor members of the Commission, could form any idea of the energy with which the most opposite views had been advocated by different members of the medical profession. At the same time, however, he had the greatest confidence in the good sense of the medical gentlemen of the country; and of the medical authorities, all were agreed that the present system could not go on, and that there must be some *modus vivendi* in the profession; and, if Lord Carlingford would be as conciliatory between this time and the time of going into committee, he would, in the end, give them a measure which for some time would lull to sleep this much vexed question.—Lord Carlingford having briefly replied, the Bill was read a second time, and the committee was fixed for this day fortnight.

HOUSE OF COMMONS.—Wednesday, April 4th.

Vivisection Abolition Bill.—Mr. R. T. Reid moved the second reading of this bill. He complained that the use of anæsthetics was not general in England in cases of vivisection, and gave instances of the sufferings inflicted on animals in consequence of no guarantee being required that anæsthetics were used. As the men who practised these things occupied high positions, and were well educated, he had no hesitation in attacking them, but he did not mean to attack the medical profession. To justify such practices, the necessity for them should be clearly proved. He believed that the torture of dumb animals was not justifiable under any circumstances. —Mr. Cartwright moved that the Bill be read a second time this day six months, contending that the case for it was not supported by evidence or practice, and that the restrictions of existing legislation were sufficiently stringent.—Dr. L Playfair, as the representative of the greatest medical university in the world, seconded the rejection of the bill, which, he said, would prevent all experiments and demonstrations in physiology, medicine, and science. According to the literal interpretation of the bill he could not stroke the back of a cat, or put the foot of a frog under the microscope. The question whether it was right to give pain to or sacrifice an animal for man's benefit was a moral one. There was no doubt about killing obnoxious animals. In India, there were thousands of them killed annually on the ground that man was of greater importance than those beasts. Man's duty to man was greater than his duty to beasts, and that was the justification for a great many cruelties perpetrated in the world. The offence against the moral law was the inflicting of pain when it was useless. The question of utility could only be decided by experts; and in answer to that question he contended that the 24,000 medical men who depended upon these experiments for their knowledge was in favour of their utility. Some of the greatest discoveries were only obtained by experimenting on living animals. He mentioned that Harvey could not have obtained his knowledge of the circulation of the blood but for experiments on living animals, and went on to give instances of the useful results obtained from such experiments in the knowledge of human diseases and their cure. Yet this bill refused to trust those humane men of the medical profession to whom human life was entrusted with the life of a frog. If the Bill were passed, certain dumb animals could be tortured out of pure malignity, but not for the purpose of medical experiment.—Sir W. Harcourt believed no such cruelty as was alleged existed at all under the operation of the existing law. The question was whether these experiments were necessary for the benefit of mankind. If they were they ought to be made; and he believed that they were made with the greatest care under the safeguards of the present law. No certificates for making experiments were issued from the Home Office without the assurance of the best men of science that they were necessary, and that the operator was a fit person to carry them out.—Mr. G. Russell supported the bill.—Sir J. McKenna, who opposed the bill, was speaking at 5.45, when the debate stood adjourned.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

Examinations for the Degree of B.M.—Examinations for the degree of Bachelor of Medicine, both first and second, will be holden in Trinity Term, on days to be hereafter notified. Candidates for either of these examinations are requested to send their names, on or before May 1st, to the Regius Professor of Medicine, Medical Department, Museum, Oxford.

VICTORIA UNIVERSITY, MANCHESTER.

Degrees in Medicine and Surgery.—At a meeting of the University Court held on March 30th, Vice-Chancellor Greenwood laid on the table the supplementary charter, dated March 20th, 1883, enabling the University to confer degrees and distinctions in medicine and surgery. After some discussion, it was resolved, on the motion of Dr. Ward, seconded by Mr. Oliver Heywood, that the

Council be empowered and instructed to appoint external examiners in medicine and surgery for a limited period, and to appoint certain lecturers of the University to act as University examiners; also to prepare, after a report from the General Board of Studies, a statute or statutes and regulations relating to degrees in medicine and surgery for the consideration of the Court, and to report on the subsequent appointment of external examiners in medicine and surgery, in accordance with the recommendation of the University Council. The Council were instructed to ascertain whether the University charter would allow the same facilities that had been given to Owens College students to be extended to the students of other colleges, when those colleges sought admission to the University. The Council were of opinion that such facilities should certainly be given.

MEDICO-LEGAL NOTES AND QUERIES.

FEES IN COUNTY COURTS.

SIR,—Can you tell me, through your paper, to what fee I am entitled in the following case:

I was subpœnaed to give evidence at a County Court, on behalf of a woman who had been injured by a cab, and who was under my care. On the day for which I was subpœnaed I went to the court, but the case was not called, but was adjourned for a month or so, when I am to go up and give evidence. I received 10s. 6d. with the subpœna. How much more can I claim? I may add that I am registered and qualified as a surgeon. If you could give me this information I shall be very much obliged.—I remain, sir, faithfully yours,

GUY S. PORTER.

King's College Hospital, Lincoln's Inn Fields, March 27th, 1883.

*** According to the scale of costs in the County Courts, the allowance to "gentlemen, merchants, bankers, and professional men," for attendance as witnesses, is 15s. to £1 1s. *per diem*. If either of these sums, or anything between them has been *paid* to a witness who properly comes in the class above enumerated, the money so paid is allowed on taxation. A doctor has a right to his guinea a day, but had better get the money before he gives evidence, unless he is satisfied with the promise of the solicitor who has subpœnaed him.

OBITUARY.

JAMES REID, M.D.

THE death of Dr. Reid of Ellon, in Aberdeenshire, took place suddenly and unexpectedly on Monday evening of last week. Dr. Reid was an M.D. of King's College, Aberdeen, and M.R.C.S. of England. He was in his usual health on the day preceding his death, which was due to apoplexy, and nothing occurred premonitory of so sudden a termination to a long and arduous professional career. Deceased was the son of the late Mr. Reid of Meadowbank, Belhelvie, and passed through the usual academical and medical curricula in Aberdeen, commencing the practice of his profession in Ellon upwards of forty years ago, where he rapidly acquired an extensive practice, which he continued to cultivate and maintain to the time of his death. He was also medical officer to the Parochial Boards of Ellon and Logie-Buchan. Dr. Reid leaves a widow and two sons, the elder of whom occupies the honourable position of family physician in the Royal Household, and the younger is in business in Japan.

RICHARD W. ISBELL, L.R.C.P.& S.Ed.

RICHARD WOODWARD ISBELL, who died on March 18th in Hereford, at the early age of 30, took his diplomas of L.R.C.P.E. and L.R.C.S.E. in 1879, after having displayed much ability for practical hard work during his connection with the Hereford Infirmary and other places. Soon afterwards he showed signs of chest-disease; and, although he had commenced practice with his father, Mr. E. J. Isbell, he was advised to try a warmer climate. He therefore entered the Royal Mail Service as surgeon. His time was spent in ships conveying mails to the Brazils, West Indies, Mexico, and Central America, calling at continental ports going and returning. In February 1882, his ship met a storm in the Bay of Biscay, and suffered severely. In the performance of his necessary duties in attending to the injured persons during the tempest, he twice fell and injured himself; and, on reaching Southampton, he was laid up, and soon afterwards found it necessary to resign his appointment as surgeon in the Mail Company's service. Although favoured with every advantage as to high medical skill—for which his family feel deep gratitude—and loving care at home, he sank on March 18th from consumption.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The primary examinations in Anatomy and Physiology for the diploma of membership of the College were commenced on Friday, March 30th, when 223 candidates presented themselves for the written portion of the examination, against 232 in the corresponding period of last year.

The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 2nd instant, and, when eligible, will be admitted to the pass examination, viz.:

Messrs. T. Casper Gilchrist, E. Taylor Milner, F. Charles Bury, R. Briggs Wild, and Robert Richards, students of the Manchester School; Sidney Barwise, C. Dennis Fitch, and F. William Emery, of the Birmingham School; T. Joseph Jones and A. Frederick Davenport, of the Edinburgh School; F. Joseph Knowles, of the Liverpool School; C. Edward Sunder, of University College; William Baigent, of the Newcastle School; H. Henry Graham, of the Toronto School; J. McGaw Woodbury, of the New York School; Ernest Humphry, of St. Bartholomew's Hospital; and N. Bamarji Gandwia, of the Bombay School.

Two candidates were referred for three months, and one for six months.

The following gentlemen passed on the 3rd instant, viz.:

Messrs. Patrick Lennon, Reuben Burnett, J. Hilton Thompson, F. H. Warburton Cottam, W. Henry Henshaw, C. Anthony Craston, and Harold Sidebotham, of the Manchester School; H. James Pocock, A. Reuben Aubrey, and L. Henry Williams, of the Bristol School; Ashton Street, Herbert Herbert, and Joseph Ellison, of the Leeds School; A. Clarkson Ingle, Edward Thornton, and E. H. Richmond Watts, of the Cambridge School; Frederick Proud, and John Stranghan, of the Newcastle School; W. B. Featherstone, and A. William Hill, of the Birmingham School; Edward Buxton, of the Liverpool School; A. Henry Smith, G. Wheatley Adams, A. Alexander Mumford, James Wells, Frank Nuttall, C. Edward Hollings, and Thomas Martland, of the Manchester School; Joseph J. Lister, Charles Yeoman, and H. Sydney Maudsley, of the Cambridge School; J. Leslie Jeaffreson, Frank Postlethaite, and G. Herbert Rnssell, of St. Bartholomew's Hospital; H. Thomas Platt, and Robert Crosby, of the Newcastle School; C. P. Karl Hemming, and Henry Tonks, of the London Hospital; A. John Tomkins, of the Bristol School; S. Hope Harrison, of the Birmingham School; T. Herbert Goodman, of Charing Cross Hospital; and George Rowell, of Guy's Hospital.

Three candidates were referred for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 29th, 1883.

Berkley, Ernest James Gibson, Terrace Road, Hackney.
Davy, Thomas George, 21, Milman Street, W.C.
Floyer, Frederick Anthony, St. Thomas's Hospital.
Knight, Edward, Riverdale, Letherhead.
Mitchell, Walter Frederick, St. Bartholomew's Hospital.
Vann, Alfred Mason, Grove House, Durham.

The following gentleman also on the same day passed the Primary Professional Examination.

Williams, George Forbes Crawford, St. Thomas's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

BARONY PARISH OF GLASGOW.—Medical Superintendent of the Lunatic Farm Asylum. Salary, £500 per annum. Applications by April 10th.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications by April 7th.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Assistant Physician. Applications by April 6th.

CHICHESTER INFIRMARY.—House-Surgeon and Secretary. Salary, £100 per annum. Applications by April 7th.

LEEDS PUBLIC DISPENSARY.—Resident Medical Officer. Salary, £80 per annum. Applications to Mr. H. B. Hewetson, 11, Hanover Square, Leeds, by April 13th.

LEIGH LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Applications by April 23rd.

LINCOLN COUNTY HOSPITAL.—House Surgeon. Salary, £100 per annum. Applications by April 23rd.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary, £100 per annum. Applications to the Chairman of the Committee by April 25th.

LONDON TEMPERANCE HOSPITAL.—Assistant House-Surgeon. Applications, etc., to Frank Wright, Esq., High Street, Kensington.

OXFORD MEDICAL DISPENSARY AND LYING-IN CHARITY.—Surgeon and Apothecary. Applications by April 9th.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.—Resident Physician. Applications to Messrs. Henry and Scott, 20, St. Andrew's Square, by April 7th.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.—Registrar. Applications to R. G. Kestin, Secretary.

ST. GEORGE'S IN THE EAST PARISH.—Assistant Medical Officer. Salary, £120 per annum. Applications by the 13th instant.

TUAM UNION, Headford Dispensary.—Medical Officer. Salary, £140 per annum and fees. Election on the 17th instant.

THAME UNION.—Medical Officer of Workhouse. Salary, £40 per annum. Applications by April 11th.

THAME UNION.—District Medical Officer. Salary, £100 per annum. Applications by April 11th.

THREE COUNTIES ASYLUM, near Arlesey, Beds.—Assistant Medical Officer. Salary, £100 per annum. Applications to the Medical Superintendent.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY, 73, Welbeck Street, W. Assistant-Physician. Applications to P. F. Proctor.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House Surgeon. Salary, £150 per annum. Applications by May 1st.

WILLITON UNION, Somerset.—Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by April 9th.

MEDICAL APPOINTMENTS.

ASHWELL, Herbert G., M.R.C.S., appointed House-Surgeon to the Great Northern Hospital, Caledonian Road, N., *vice* J. Neil Cook, resigned.

BAYLOR, R. J., L.K.Q.C.P.I., appointed Medical Officer to the Lismore Dispensary, *vice* R. O'Reilly, L.R.C.P., resigned.

KEIR, W. I., F.R.C.S., appointed Medical Officer of Health to the Melksham Urban Sanitary District.

MCWILLIAM, J. A., M.D., C.M. (Aberdeen), Lecturer on Physics at the Charing Cross Medical School, appointed Demonstrator of Physiology at University College, London.

MURRAY, H. M., M.B.Lond., appointed Medical Registrar to the Charing Cross Hospital.

PALEY, W. E., M.B., appointed Honorary Physician to the Peterborough General Dispensary and Infirmary, *vice* W. Paley, M.D., resigned.

PATON, F. E., M.B., appointed House-Surgeon to the Morpeth Dispensary.

SANDERS, C., M.B., M.R.C.S.E., appointed House-Physician to the Queen's Hospital, Birmingham, *vice* A. Orchard, M.R.C.S., resigned.

SANDFORD, A. W., M.D., appointed Surgeon to the Cork Ophthalmic and Aural Hospital, *vice* H. Macnaughton Jones, M.D., resigned.

SCOTT, E. S., M.B., appointed Medical Officer to the Shrewsbury Dispensary, *vice* E. Cureton, L.R.C.P., resigned.

SMITH, W. H., M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator to the Boston District and Workhouse of the Boston Union, *vice* E. B. Beckett, L.R.C.S.Ed., resigned.

WILLIAMS, E. R., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior House-Surgeon to the Stanley Hospital, Liverpool, *vice* F. W. Pilkington, M.R.C.S.Eng., L.R.C.P.Lond., appointed Senior House-Surgeon.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

POWELL.—On the 29th ult., at Elm Cottage, Beckenham, the wife of H. A. Powell, M.A.Oxon., M.R.C.S.Eng., etc., of a daughter.

MARRIAGES.

BOTT—KIRKMAN.—On the 29th ultimo, at St. Andrew's Church, Wells Street, by the Rev. W. Greenwood, B.A., William Gibson Bott, L.R.C.P. and M.R.C.S.Eng., of 61, Kennington Park Road, to Camilla Anne Kirkman, widow of Thomas Wolstenholme, of Kennington. "No cards."

EWART—MILLAR.—On the 2nd instant, at St. Jude's Church, Southsea, by the Rev. — Tomkins, John Henry Ewart, M.R.C.S., L.R.C.P.London, of Manchester, to Mary Isabella, eldest daughter of Major-General J. C. Millar, B.Sc., of Wilson Grove, Southsea.

GAWITH—LEETHAM.—On March 28th, at St. Mary Abbotts, Kensington, by the Rev. W. E. Haigh, James Jackson Gawith, M.R.C.S., of 23, Westbourne Park Terrace, to Selina Turner, widow of Walter Leetham, Esq., and eldest daughter of the late A. W. H. Prynn, Esq., of Hull.

ROUGHTON—HOGG.—On March 28th, at St. Mary Abbotts, Kensington, James Woolley Roughton, L.R.C.P.L., M.R.C.S.E., of Streatham Common, S.W., to Emma Mary Hogg, of 36, Cheniston Gardens, Kensington.

DEATH.

OWEN.—On March 28th, at his residence, Tue Brook Villa, Liverpool, Harold Owen, L.R.C.P. and M.R C.S., aged 60.

SENDING A CHILD BY PARCELS DELIVERY.—At the recent assizes in Belfast, an English gentleman named Porteous was sentenced to twelve months' imprisonment, with hard labour, for sending his infant child by rail from Belfast to Coleraine, in a flower hamper, addressed to a lady about whom he knew nothing whatever. The hamper was left by him at one of the parcel delivery offices, in Belfast, about 11.30 A.M., for transmission to Coleraine. It was forwarded to Coleraine, a distance of fifty miles, and placed in the parcels-office. About 2 A.M. next morning, the night watchman's attention was attracted to the cry of a child; and, on making a search in the parcel-room, discovered the cause, snugly and comfortably placed in its hamper. It is remarkable, and of interest to medical men, that, with all the knocking about this hamper must have got, the child slept and did not utter a sound for fifteen hours; and, when released from its incarceration (though this occurred in the middle of winter), it was not anything the worse for its confinement.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2 o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th. 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30 Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Dr. Cullimore will make some remarl on the Use of the Moxa in Chronic Affections of the Spinal Cord. D Gilbart Smith will read a paper on Two Cases of Pancreatic Disease. D de Watteville will show a new Method of obtaining Light for Medic Purposes.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Arth Barker: Nævus of the Rectum, proving fatal in an adult from Hæmo rhage. Mr. Harrison Cripps: On some Points connected with Loc Recurrence of Malignant Diseases.

WEDNESDAY.—Hunterian Society, 7.30 P.M. Council. 8 P.M. The Preside (W. Rivington, Esq.): Case of Removal of Loose Cartilage from Kn joint. Dr. J. Herbert Stowers: Observations upon the Nature and Tre ment of Infantile Eczema.

FRIDAY.—Clinical Society of London. Dr. Semon: Removal, by Internal O ration, of a Pin from the Larynx, in which it had been impacted Thirteen Months, and had caused Ankylosis of the Left Crico-aryten Articulation. Dr. Whipham: Two Cases of Enteric Fever accompanied an Erythematous Eruption resembling that of Scarlatina. Mr. B. Rot On a Case of Lateral Curvature of the Spine, illustrating its Treatm without the use of Mechanical Supports. Mr. Page: Case of Tabe Arthropathy, in which the Tarsal Bones of both Feet were involved. I Barker will exhibit a case of Subperiosteal Amputation at the Hip-joint

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PRIVATE DISPENSARIES.

THE rapid growth and multiplication of so-called dispensaries in London and the large provincial towns of late years, is a fact deserving more consideration than it has yet obtained from any of our professional bodies. In no sense public institutions, yet trading on a name which has, until quite recently, been restricted to public institutions, these private ventures are stated in many, if not most, cases, to reward their projectors with incomes far above what they could hope to realise in the ordinary way, while freeing them, at the same time, from some of the most harassing conditions of general practice, and from all bad debts. We are asked by a correspondent, who forwards a printed circular setting forth the advantages and fees of the "Marsh Lane Dispensary," at Bootle, to say whether it is considered professional (apart from the question of advertising by means of circulars like a greengrocer's) to conduct such a dispensary at all. We have no hesitation in stating our conviction that it is not so considered, nor should it be, we think; for no medical man should render himself liable to be detected, at any moment, by his patients, as sailing under false colours.

In the Metropolitan Counties Branch of our Association, the rule is, we understand, to reject any candidate for Branch membership who is known to keep a dispensary of this sort; and it is worthy of consideration in the various Branches whether this rule might not be extended with advantage. It must not be forgotten, however, that there are many other "institutions," with high-sounding titles, which are quite as little creditable to their professional promoters as the pseudo-dispensaries; and that the rule, if made, should be applied fairly all round.

F.R.S. (Athenæum Club).—The letter is possibly not intended for publication; but if so, looking to the institution and orator referred to, it should obviously be signed.

SINGLE v. MULTIPLE VACCINATION.

SIR,—Assuming that four cicatrices are more protection against small-pox than only one, will you be so kind as to explain why the period of protection should be prolonged in the one case and limited in the other? We are taught that a "virus received into the body multiplies indefinitely within it; that it leaves the body not by the organs provided for the separation of effete matters, but by a process of effloresence or multiplication taking place in certain situations and modes, which are characteristic for each disease." Are, therefore, the four punctures for the purpose of introducing a larger amount of virus or to act as doors for its departure? But, suppose a child vaccinated only in one place, and on three successive days following in the same place, thus throwing into the system a larger dose, would you still assert that the sole scar should be protective for only a limited period, but, that if four punctures had been made on the first day, the protection would be more prolonged? Will you also be so good as to tell me why scratching the skin for vaccination is a more certain method of performing the operation than insertion of a liquid drop under the skin by a valvular puncture? I have had more failures with the latter than the former mode, and do not understand why it should be so.—I am, Sir, yours, etc., MULTIPLE.

*** More definite knowledge of the *modus operandi* of specific fever poisons is required before satisfactory explanation can be given of the fact referred to by our correspondent. As a possible explanation, we may suggest that, since the vesicles are the sites at which the virus multiplies, and from which it is shed into the vascular system, it may be that two vesicles manufacture—if we may use the term—a larger number of germs than one vesicle, and so produce a more complete exhaustion of vaccine (and consequently of the small-pox) susceptibility of the host. That, however, is mere speculation. The important point is the fact that the protection afforded by vaccination does vary according to the number as well as the quality of the vaccine cicatrices. As regards the comparative success of "scratching" and "valvular puncture," different operators prefer different methods of vaccinating; and it seems tolerably certain that the greater success of any one method, in the hands of any particular vaccinator, depends rather on the operator than on the method adopted.

A FELLOW BY EXAMINATION (Wolverhampton).—Mr. Alfred Baker, of Birmingham, was elected a member of the Council of the College of Surgeons of England in 1874, and, no doubt, will be re-elected next July. There is a precedent in the case of Mr. John Gay.

THE SAD ILLNESS OF DR. BROWN, OF EASTBOURNE.

SIR,—I wish to add my tribute of respect to the sterling worth of Dr. Brown, of Eastbourne, whose sad illness has been brought under the notice of the profession by Mr. Wallace's letter in last week's JOURNAL.

I hope that very many of my brother practitioners will send what they can towards the fund which is being raised to help Dr. Brown and his family in this their hour of sad need and affliction.

This is but another instance of the great need there is of a "Medical Provident Society," and I am glad to learn that there is now some chance of such a club being formed (and incidentally, sir, I may ask you to put down my name as an adherent to the scheme).

In the absence, at present, of any such association, let us all do what we can to help this thoroughly deserving case.—I am, sir, faithfully yours,

Buckingham, April 2nd, 1883. W. L'HEVREUX BLENKARNE.

*** Mr. Wallace's address, which was omitted from his letter in last week's JOURNAL, is 96, Cazenove Road, Upper Clapton, London.

SIR,—I was very sorry to read the cause of the appeal on behalf of Dr. Brown, in your issue of March 31st, and shall be very happy to assist by subscribing to any fund that may be raised. May I ask whether this case has been, or will be brought under the consideration of the "Epsom Benevolent Fund Committee," or of the "British Medical Benevolent Fund." Would it not be desirable to state in what manner any moneys subscribed are to be used—whether handed over for present use by the poor patient, or invested for an annuity?—Yours faithfully, N. T. J. HAYDEN.

The Laurels, Newton Abbot, Devon, April 2nd, 1883.

THE following subscriptions have been received by Mr. Frederick Wallace, of 96, Cazenove Road, N., in answer to last week's appeal, and forwarded by him to the Rev. E. E. Crake, Eastbourne, Honorary Secretary to the fund.

	£	s.	d.		£	s.	d.
R. U. Wallace, Esq. ...	5	0	0	Dr. Marlie	0	10	0
J. Smart, Esq.	1	1	0	S. Welch, Esq. ...	1	1	0
W. L' H. Blenkarne, Esq. ...	1	1	0	T. Corbett, Esq. ...	1	1	0
O. H. Garland, Esq. ...	2	2	0	E. J. Hutchings, Esq. ...	0	10	6
R. E. Minan, Esq. ...	1	1	0	B. Booth, Esq. ...	0	10	0

ERRATA.—In the JOURNAL for March 24th, page 594, column 1, line 10 of the editorial comment following Mr. Wheeler's letter, *for* "enormously greater," *read* "enormously less." In the JOURNAL of March 31st, page 629, column 1 line 9, *for* "63," *read* "61.5;" and at line 11, *for* "over 16,000," *read* "about 16,000."

MR. T. COOKE.—The suggestion is, we fear, not practicable.

MEDICAL ETIQUETTE.

SIR,—In the JOURNAL of March 17th, in "Answers to Correspondents," and under the heading of "Medical Etiquette," both you and your correspondent except cases of urgency. I should feel much obliged if you would give your opinion on the case, stated thus:

Drs. Jones and Brown are neighbouring country practitioners, living some miles apart, but on terms of most friendly intimacy. Members of a family, always hitherto attended by Dr. B., meet with a serious accident in the neighbourhood of Dr. J.'s residence; Dr. J. is sent for in haste to the scene of the accident; he has the patients conveyed to their home, and gives whatever assistance and advice are immediately required. What should then be his course of action as regards Dr. B.; first, under ordinary circumstances; and secondly, supposing he is requested to continue to attend, knowing as he does that Dr. B. is the regular family attendant?—I am, sir, yours faithfully,

L. M.

*** In Dr. Styrap's *Code of Medical Ethics*, it is distinctly laid down that: "When a practitioner is called to an urgent case, either of sudden illness, accident, or injury, in a family usually attended by another, he should (unless his further attendance in consultation be desired), when the emergency is provided for, or on the arrival of the medical attendant in ordinary, resign the case to the latter, but is entitled to charge the family for his services."

Such rule should, in our opinion, govern the case referred to in "L. M.'s" note.

L.R.C.P.—According to the statute 32 and 33 Vict., c. 14, and a statement received from the Inland Revenue Solicitor's Office, such a gig is not exempt from the payment of the tax referred to.

AN OCTOGENARIAN.

SIR,—One of the healthiest men I ever saw presented himself for treatment at the St. George's Dispensary. He had a slight attack of bronchitis. I inclose rough notes of his case, which you may, perhaps, think worth publication in the JOURNAL.—I am, yours faithfully, H. SUTHERLAND.

6, Richmond Terrace, Whitehall, S.W.

Hugh Sandilands, aged 80. Joined the police force on May 13th, 1830. Passed fifteen years in the horse-patrol on Hounslow Heath; also had twenty years' night work in the force. Father died at forty-five and mother at forty-eight. General appearance, very stout and robust. Skin clear, but ruddy from exposure to the air. Walks now ten or twelve miles a day; locomotion as good as ever, with the exception of corns. Appetite good, tongue clean, bowels open every day. Diet: breakfast—cocoa, cold meat, and bread and butter. Dinner—meat and rice, and sago puddings; seldom cheese, which disagrees. Never takes tea; never takes any meal after five o'clock, but only bread and butter; goes to bed at nine, gets up at 6.30, and breakfasts at seven; takes only one glass of beer a day. Lungs and heart perfectly healthy, having now recovered from a slight attack of bronchitis; pulse 76, full, regular, and strong. Urine healthy, but passes water once or twice in the night. Widower, five children alive, youngest aged 40; another died of small-pox. Says he was quite virile up to three or four years ago, *i.e.*, up to 76. Intellect apparently clear, but memory only for names has been slightly waning within the last few years; remembers the jubilee in honour of George III. reigning fifty years; has seen, with his own eyes, four successive sovereigns; slightly deaf; very slight arcus senilis; wears glasses to read; taste and smell as good as ever; no false teeth; front teeth good, but back ones gone almost entirely; chews with the teeth which are left very well. Address—10, Grosvenor Buildings, Bruton Street, W.

INFANTILE FACIAL PARALYSIS FROM PRESSURE OF FORCEPS.

SIR,—A fortnight ago my wife was confined with her first child (a daughter). The occipito-posterior position of the head causing some delay, the forceps was applied, but it was not on for more than twenty minutes or half an hour at the outside. Immediately after delivery, the child was found to have facial paralysis. It is this most distressing circumstance which induces me to ask those of your readers who have experience of such cases, to give me their prognosis and treatment. The face has been steadily improving until a few days ago, but now the paralysis appears to be at a standstill. Trusting you will find space for this letter in your next issue, I enclose my card, and remain your obedient servant, A DISTRESSED MEMBER.

F.R.C.S., Liverpool.—The subject will be duly noticed. The annual election of Fellows into the Council always takes place on the first Thursday in July. Mr. Birkett, who goes out, it is stated, will not seek re-election.

"FOREIGN GRADUATES AND THE NEW MEDICAL BILL."

SIR,—I have received so many letters from Brussels and other Foreign graduates on the above subject, that I find I cannot reply to them all. Will you therefore allow me the space to say that a meeting of the Council of the Brussels Association was held last week to consider the matter, and that by their instructions I have communicated with the Lord Privy Seal.—Yours faithfully,

F. ERNEST POCOCK, M.D., Hon. Sec. Brussels Medical Graduates Association.

The Limes, St. Mark's Road, North Kensington, W., April 2nd, 1883.

LEX.—They have a full courtesy right to it; it has always been recognised.

A. H. F.—Under the circumstances stated it would, we think, be impossible to support the claim.

ENLARGED TONSILS.

SIR,—"S. M." asks for information as to the treatment of moderately enlarged tonsils. Supposing that such a condition does not cause impediment to respiration or articulation, or is unassociated with deafness, or is not the cause of recurrent attacks of quinsy, there is no reason why any treatment at all should be pursued; but, supposing that the enlargement is giving rise to any disturbance of function or health, there is equally no valid reason why the simple and effective treatment of abscission with a guillotine should not be employed. "S. M." is perfectly correct in his statement as to the very partial benefit of applications of nitrate of silver, which, while causing a certain amount of absorption of the soft glandular tissue, do but bind more closely together and render more indurated the connective stroma. I may further observe, that I know of three cases, two of which I have seen, where the long continued application of nitrate of silver to the throat produced permanent discoloration of the complexion. Applications of pastes of caustic soda or potash are extremely painful, tedious, and ineffective. Solutions of iodine, chloride of zinc, or of iron, while less painful, are no more efficient, and are more or less nauseous; nor has electrolysis, which is a very tedious process, been of sufficient service in reduction of enlarged tonsils to favour its recommendation, even to the specialist; in no case is it likely to come into general use. There is just one class of cases in which the tonsils, being diseased, give rise to considerable discomfort, but cannot be removed, because they are not enlarged; these should be treated by the galvano-cautery; this process, while far less painful at the time of application, as well as during separation of the slough, is infinitely more effective than the actual or other form of thermo-cautery, which is often followed by acute inflammation and œdema.

If objection to use of the guillotine be persisted in, the practitioner will often confer more benefit by internal administration of half a grain each of sulphide of calcium and iodoform in a pill, three times a day, than by any topical treatment.—Yours faithfully, LENNOX BROWNE.

36, Weymouth Street, Portland Place, March 10th, 1883.

MR. REDMOND, appears to us, to be entitled to the full fee, and could recover it at law.

DR. MCB.—No award of the triennial prize has yet been made by the Royal College of Surgeons. Dr. George Arthur Woods, of Southport, gained the last, in 1876; since which, no prize has been awarded. We think there must be some omission in the Calendar of the College.

BLUSHING.

SIR,—Some weeks ago, I saw an inquiry in your JOURNAL as to the prevention of blushing. I believe it is often due to wearing too thick underclothing, and especially too thick socks. An aunt of mine had habitually a red nose from this cause alone, which disappeared when she took to thinner stockings. Long-sleeved jerseys, too, are often a cause. Of course, the blusher must choose between the risks of rheumatism and the annoyance of this unfortunate symptom.

Sexual causes, such as masturbation, often produce the same unpleasant result. The best plan for an habitual blusher is to laugh and be very gushing, as, for instance, on meeting an acquaintance in the street, when he colours up; and he will then feel more at his ease than if he look sheepish and reserved. Blushing is really produced by the combined action of heat (as from overclothing) and temperament—natural or perverted. The moral effects of speaking in public, or of witnessing others speak, as in the House of Commons, are also useful, as they lead the blusher to think that, if he can thus command his feelings on an extraordinary occasion, much more, therefore, can he do so in the affairs of private life. Blushing being doubtless due to paralysis of the sympathetic circles of nerves surrounding the arteries, which, not contracting properly, allow a freer flow of blood to the surface, all causes, such as sexual intercourse and alcoholic stimulants, should be as much as possible avoided by the blusher.

Blushing is very common amongst the insane, but with them is chiefly due, I believe, to the warm clothing we put on them to avert the evil consequences of their carelessness about sitting in draughts, or lounging about in the open air. No drugs, in my experience, are of any use in blushing. Exercise at the proper times is useful, as causing a more equable flow of the current of the circulation.—I am, your obedient servant, H. SUTHERLAND.

6, Richmond Terrace, Whitehall, S.W.

M.D. (Chelsea).—We have asked for a definite statement on the subject, and it will certainly have the attention of the Medical Reform Committee.

APPOINTMENTS IN THE COLONIES.

SIR,—Will you allow me to inquire, through your columns, what opportunities there are for obtaining medical appointments in the colonies. I refer more especially to Sydney or Melbourne. I do not mean as regards Government service; but ordinary private practice, assistantships, hospital appointments, etc. Perhaps some of your readers, who have resided there, would kindly volunteer information on the subject.—Yours faithfully,

March 24th. MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—Will you allow me to inquire through your columns, if any medical brother can advise where to place a backward boy to prepare for the medical preliminary?—Yours faithfully, X. Y. Z.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Murrell, London; Mr. J. H. Gilmour, Andover; Dr. Crichton Browne, London; Mr. J. E. Jones, York; Mr. J. A. D. Mackay, Greenock; Mr. James Denholm, Marisbank, Pocton, Midlothian; Mr. W. H. Reeves, London; Dr. Eustace Firth, Norwich; Our Aberdeen Correspondent; Dr. De Romano, Cairo; Dr. Grant Bey, Cairo; Dr. P. H. Mules, Manchester; Mr. W. A. Frost, London; Mr. C. H. Welsh, Brighton; Mr. J. C. Smyth, Belfast; Dr. Sawyer, Birmingham; Sir J. E. Eardley Wilmot, London; Dr. R. Beverly Cole, San Francisco; Dr. A. H. Fraser, Witham; Mr. E. T. Bernard, London; Dr. R. B. Low, Helmsley; Dr. Jacob, Leeds; Dr. Ralfe, London; Mr. Nelson Hardy, London; Dr. V. Poulain, London; Mr. Macnamara, London; Dr. A. Graham, London; Dr. Evans, Brighton; F.R.S.; Dr. Fancourt Barnes, London; Dr. Leslie B. Trotter, Coleford; Mr. W. Alpin, Shanklin; Mr. W. K. Hobart, Londonderry; Dr. Brookhouse, Nottingham; Mr. Ffennell McCarthy, Worcester; Mr. John Brown, Bacup; Mr. C. E. Baker, Tenterden; Dr. R. Carter, Bath; Mr. A. H. Twining, Salcombe; Dr. Alfred Wright, London; Mr. F. Salter, Knottingley; Mr. T. M. Stone, London; Mr. W. L. H. Blenkarne, Buckingham; Mr. Thomas M. Martin, Peltown; Mr. G. Donald, Leith; Mr. F. A. Southam, Manchester; Mr. T. Wells Hubbard, Bromley; Dr. Rogers, London; Mr. J. C. Christie, London; Mr. E. Williams, Liverpool; Dr. P. M. Braidwood, Liverpool; Mr. N. T. J. Haydon, Newton Abbott; Our Dublin Correspondent; Mr. B. G. Morison, London; Our Belfast Correspondent; Mr. Alfred Dickson, Doncaster; Mr. W. Mallins, Watton; Mr. E. D. Marriott, Nottingham; Mr. J. H. Wraith, Darwen; Mr. H. F. Howard, Attenborough; Dr. Lionel A. Weatherley, Portishead; Dr. D. Drummond, Newcastle-on-Tyne; Mr. C. J. Wright, Leeds; Dr. F. E. Pocock, London; Mr. W. Thomson, Dublin; Mr R. Hughes, Bala; Dr. W. A. Bonney, London; Dr. Garrod, London; The Secretary of the Smoke Abatement Institute, London; Mr. George Stoker, London; Mr. J. A. Erskine Stuart, Batley; Mr. G. A. Farrer, Brighouse; Mr. E. White Wallis, London; Dr. R. C. Shettle, Reading; Dr. Seaton, Nottingham; Mr. J. Bain Sincock, Bridgwater; Dr. Styrap, Shrewsbury; Dr. Churchward, South Norwood; Dr. T. W. Hime, Sheffield; Mr. N. T. Brewis, Glasgow; Mr. Thomas Moore, Stockport; Mr. J. Martin, Portlaw; Dr. Mahomed, London; Dr. James McNaught, Newchurch in Rossendale; Mr. John Buchanan, Bridgenorth; Dr. Fairlie Clarke, Southborough; Mr A. H. Boys, Pill; Mr. Arthur Cooper, London; Mr. W. Williams, Festiniog; The Secretary of the Nineteenth Century Building Society; Mr. Joseph Loane, London; Mr. Andrew Spearing, Shaw Lane, Worcester; Dr. R. B. Low, Helmsley; Mr. A. H. Benson, Dnblin, etc.

BOOKS, ETC., RECEIVED.

St. Bartholomew's Hospital Reports. Edited by W. S. Church, M.D., and John Langton, F.R.C.S. Vol. XVIII. London: Smith, Elder and Co. 1882.

Dental Vade Mecum; Concise Notes in Anatomy, Physiology, Surgery, and Chemistry. Fourth Edition. By James Hardie, Dental Surgeon. Printed for the Author by William Collins, Sons, and Co., Glasgow. 1883.

Transactions of the Medical Society of the State of Pennsylvania at the Thirty-Third Annual Session, Held at Titusville, May 10th, 11th, and 12th, 1882. Volume XIV. Published by the Society. Philadelphia: Times Printing Office. 1882.

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THE GULSTONIAN LECTURES,
ON
THE STERILITY OF WOMEN.

Delivered at the Royal College of Physicians, February 1883.

By J. MATTHEWS DUNCAN, M.D., LL.D., ETC.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

Lecture III, Part I.—Its Prevention and Cure.

Mr. President, Vice-President, and Gentlemen,—As in past ages, so also in modern, sterility has been an object of great interest, study, and of experiment. The acquisition of wealth has at all times stimulated the agriculturist, the gardener, and the breeder; and the desire of offspring has no less stimulated men and women. At no time has the subject had more importance than at present; for the growth of science and the love of daring speculation bring now on the field a class of men of trained intellect, who invade it, not to make money or secure offspring, but in search of knowledge. It is to such men that Nature opens her secrets, and the divulging of truth through them is the just pride of philosophy.

A true theory of sterility, even though it be lamentably incomplete, is of very great importance in medical practice. Thousands of women are seeking what they call cure, and their advisers should surely take care to know what they can offer in return for the confidence placed in them. According as medical men have their course illuminated by knowledge, so will they be wise in advising; and if increase of knowledge, acting directly or by dispelling illusions, destroys faith in remedies, it may yet, in this negative way, add to the usefulness of the adviser. It has been said by Brodie of John Hunter, that, by teaching us when we are not to interfere with the ordinary course of events, he has contributed more towards the advancement of the healing art than all the inventors of remedies who had gone before him.

The course and the details of the argument in these lectures point to a law or laws of sterility not yet clearly formulated; and it is to be expected that progress will be obtained from inquiries such as have been here described, as well as from investigations of the intimate state of the reproductive organs, including those parts of the nervous system which govern them or are governed by them.

Deficient reproductive energy, or want of sexual vigour, is a theory too vague to be satisfactory. It is only a general idea which loosely binds together, meantime at least, the items of knowledge we have acquired as to sterility. Of course, it is a general idea to whose entertainment no known fact is hostile. But it is flimsy, like a ghost, and a fact might find it difficult to prove its steel; for, like a ghost, it might be cut by a sword without being destroyed or even damaged in the eyes of those who see it. Deficient reproductive energy is held to be proved by all the conditions which produce or which attend sterility in plants, animals, and man. In woman, it is shown by absolute sterility, by relative sterility, by excessive production, and by imperfect production, which may be abortion, or miscarriage, or morbid pregnancy, or children diseased or difficult to rear, or destined to peculiar diseases during extra-uterine life. Deficient reproductive energy cannot be regarded as a substantive disease with specific characters, course, and remedies. It is a constitutional condition, which, according to its cause, may affect a population or affect certain classes. Cold or heat may render a whole population sterile. Underfeeding or overfeeding, or premature or postmature marriage, may cause sterility in certain classes within a population. Sterility, the result of deficient reproductive energy, is an imperfection which does not show itself by measurable tangible qualities, such as a dwarf exhibits, but by absence of function, or a stunted or otherwise imperfect performance of function.

The consideration of the great causes of sterility, exhibited as they are in their results in populations and in classes of women, makes it almost certain that local causes, whether acting as impediments to conception or as unfavourable to pregnancy and to intra-uterine life, have very little scope for operation. These local causes have a clinical interest as affecting individuals; for they have not been supposed, far less shown, to have any connection, or even accidental association, with the great causes whose scope is wide and certain. In the production of cancer of the womb there may be great operating causes, such as age and multiparity, and there may be minor local causes, such as the so-called ulceration of the cervix uteri and its injudicious treatment; and these minor causes, although doing little harm to a population or a class of women, may be of the highest practical importance to individuals.

In women, the chief and best demonstrated sources of, or attendants on, sterility are juvenility or prematurity, elderliness or postmaturity, dysmenorrhœa, and disorder of sexual appetite and pleasure. Of these, the influence of age has been most fully shown, and it is that which is most under control with a view to prevention.

As in cases of constitutional diseases or of epidemic fevers, so here, the good done by prevention immeasurably exceeds, or may immeasurably exceed, any possible good by cure; and this, whether the good done is to a population, or class, or to an individual. The superiority of prevention is partly because the good is to a population or class, not to mere individuals. Prevention is to be, in part, effected by avoidance of unions of immature women or of elderly women: in other words, by securing that women are married at the age of nubility, or best age of marriage, with a view to fertility and the rearing of healthy children, and the safety of the mothers; and this age is fairly well ascertained to be, for a population or mass of women, not under twenty and not above twenty-five.

In the breeding of domestic animals and of animals in confinement, man can interfere easily and without restraint, except from his own interests, but it is otherwise in woman. She enjoys liberty within wide limits, and she is more or less subject to the restraint of social, moral, and religious law or custom. These restraints diminish the power of the medical adviser to guide; and, in general, he can do most good by diffusing knowledge as to the prognostics from marriage entered into under various conditions.

At present, the law of England legitimises marriage at a very early, a too early, age; and it, wisely no doubt, does not interfere with late marriages. "Without the sanction," says Major Graham, "of the laws of physiology, or of common sense, a girl may—but in the present day rarely does—marry at the age of twelve, a boy at the age of fourteen, under the existing laws of England; but the consent of parents and guardians is required in certain cases where either party has not attained the age of twenty-one; and the proportional number of either boys or girls who marry under the age of twenty is happily small.....The age," he adds, "of marriage cannot be directly fixed by laws; but legislation, by prescribing the minimum age of marriage, and the age of majority, does exercise a considerable influence on good numbers of the people directly, and on all indirectly. It becomes the custom or the fashion not to marry below the age of majority. Thus, in England, about 9,000 young persons of the age of twenty and under twenty-one married in the year 1851; while about 139,000 married in the four years after they were of age, as it is called, or in the years of age twenty-one to twenty-five. The age of majority is twenty-five years in France; and the age of twenty-five divided the minores from the majores in Roman law. The advanced age of majority, or of what becomes practically the lowest age of marriage, retards marriage indefinitely in many cases, and will probably be found, on investigation, to account, at least partially, for the comparatively small number of children to a marriage in France. By raising or depressing the age of majority, the Legislature, then, has the power to exercise considerable control over the population." These remarks of Major Graham are valuable in themselves, and indicate the view taken by a politician. The law of majority has, no doubt, great influence, and by it the State can modify the age at marriage to some extent; but the laws of love, of self-interest, and of social convenience are much more powerful.

The sterility of near relations, of interbreeding, or of breeding in and in, as it is often called, is generally recognised, though far from well proved in man, and forms what seems a contradiction in terms, an inherited sterility. It is believed to be shown not only by absolute sterility and its accompaniments, but also by the production of idiots and ill-formed children. Restraint by knowledge of these risks of intermarriage is no doubt a powerful preventive of sterility, but not so potent as it ought to be.

There is, as already pointed out, a sterility dependent on some inscrutable incompatibility of the parties, as in Augustus and Livia, Napoleon and Josephine. Cases like the following are not very rare, and I have actually observed them. A man marries successively three childless widows, and has children by each of them. A woman is married successively, and within child-bearing limits, to three

men, and has children by only one of them. Such cases, if very rare, might carry little weight, but they are so common as to have occurred within the knowledge of most observant people. Sterility of this kind we cannot foresee and prevent; and religion, morals, and law continue to interdict the cure that might result from a change of husband. Unfortunately, however, among large classes—chiefly, I am told, in Wales and some parts of Scotland—custom permits, and local morals do not interdict, a practice which produces many illustrations of this mutual incompatibility. The practice is called bundling, or keeping company, and consists in parents permitting daughters to cohabit with an eligible man on the understanding that, if pregnancy ensues, the legal marriage tie is made. A woman proving sterile may be deserted by her follower, and gets another with whom the result is different.

In ancient times, much was known and taught regarding the avoidance of sterility, and most of it was in accord with what is still taught, but little was done with a view to the cure. The physiology of reproduction was little advanced, and its primary or elementary conditions were quite unknown. When certain winds were believed to cause sterility, and fecundation was supposed to be effected by an aura seminalis, we could not look for rationality in practice. Accordingly, such cures of sterility as were then practised appear to us ridiculous or fantastic.

In modern times, the physiology of reproduction is comparatively far advanced, and the necessity of the physical conjunction of the male and female elements is especially recognised. But it may be doubted whether the cures of sterility are much more rational than those of the ancients, for the laws of sterility have been investigated with no great amount of success; and especially do we remain uncertain as to the physiology of the conveyance of the spermatozoa to the Fallopian tubes.

During the last thirty years gynæcology has made great and rapid strides of substantial progress, and naturally sterility, as part of it, has swollen in bulk; but the growth of it has not been satisfactory, for it has not a sure foundation. While our general knowledge of sterility in woman has made little advance, and especially that part of it which might be turned to practical account, the curing of sterility has reached great dimensions. As in other departments of therapeutics, there has been a great failure of logic; the *post hoc* and the *propter hoc* have been confused—a coincidence has been regarded as a consequence. The credulity of patients and of doctors has been a basis for useless and often injurious practice.

It is scarcely an exaggeration to say that, in recent practical works on sterility, there is exhibited entire ignorance or entire neglect of the laws of fertility. Every woman from fifteen to forty-five is regarded as likely to breed. If she be sterile, a cure is at once set agoing; and, if a child be not born, the failure is not debited to the nature of the case, but to the want of ingenuity in the doctor. A reputation for curing sterility is spoken of as if it were founded on substantial claims. The prevalent methods of curing sterility are founded on an implied theory that it in most cases arises from impediments in the way of the spermatozoa reaching the ovum. Without sufficient evidence, strictures are assumed to exist, versions and flexions of the womb are held so to distort the interior passage as to prevent progress of the spermatozoa, cervical catarrh is believed to stop them by mechanical obstruction or by chemically poisoning them; and for these real or imagined evils, sterile women are made the subject of treatment. It is the theory of mechanical obstruction that, by its simplicity and directness, has possessed the profession and the public; and accordingly many operations and modifications of operations, and very many instruments, have been devised to do away with the obstruction. The theory has had real rational support in the fact that dysmenorrhœa of a spasmodic kind does, as already shown, frequently accompany the sterility, and in the supposition that the same obstruction which causes sterility by impeding the entrance of semen, causes also dysmenorrhœa by impeding the exit of menstrual blood, or *vice versâ*. It has had still more satisfactory support in the observation that the cure of the dysmenorrhœa does occasionally bring with it cure of the sterility.

The very zeal with which the mechanical theory of sterility has been fostered, and its treatment in many ways pursued, has led to its present decadence, and there is now increased attention paid to other departments of fertility than conception. Especially and justly, the difficulties of naturally starting and healthily continuing pregnancy are brought prominently into view. The mechanical obstruction theory has begun to shrivel, because of the impression produced by the enormous, though inexactly ascertained, proportion of the failures of the attempts to cure founded on it. Even the ignorant sterile women could see that, if this theory of causation were true, there was an easy and plain theory of cure; and they could also see that the failure of the so-called cure was prejudicial to, if not destructive of, the theory. The importance of the difficulties of pregnancy now brought into prominence will, on account of its great reconditeness, be received with no enthusiasm, such as welcomed the obstruction theory; and the physicians who entertain it can offer no such brilliant prospects of cure to their confiding patients. It is, however, a decided step of progress in a subject of great practical importance.

It is in Germany that this department of sterility has been chiefly studied, and Grünewaldt of St. Petersburg is its best exponent. Recognising the importance of this work, I take the liberty of using it to show the great incompleteness of even the most advanced accounts of the subject. For Grünewaldt, sterility is truly never a disease, but a symptom of a disease. Nature has, he says, set no limits to female breeding other than the natural changes in the sexual organs that are observed in the senile state. Sterility is one of the most frequently occurring disturbances of function caused by diseases of the female sexual organs. In these views, and in his whole work, it is implied that sterility depends on disease of the sexual organs, including chiefly endometritis, mesometritis, perimetritis, and parametritis. The difficulties of conception, he says, have only a slight importance, compared with the disorders of the more important vital processes of pregnancy, and these disorders affect chiefly the tissues of the uterus.

It would involve an useless recapitulation of the substance of these lectures, were I to set about showing how partial and imperfect is that theory of sterility which makes it depend on local disorder or disease, whether the disease impede conception, or interfere with the progress of pregnancy. Taken together, the obstruction theory and the theory of Grünewaldt do but cover a small part of sterility, which may be described as the part affecting scattered and sparse individuals, giving thus its importance to these individuals, and to their advisers.

The obstruction theory and the theory of Grünewaldt make no room for that kind of prevention which we have described as of paramount importance. On the other hand, they open up great, indeed almost unlimited, fields, for the activity of curers. But the failure of curers is so notorious, and the curing of sterility has so bad an odour in the nostrils of many, probably of the majority, of the best in the profession, that it is worth while to ask the question, Is sterility curable?

Before this question there comes another which is of great importance, Should sterility be cured, as it is called? That, in the interest of the community, it should be prevented, I have no doubt; but, in this department of the subject, statesmen and economists have taken much interest, and I shall not meddle in it. I am of opinion, also, that it should, if possible, be cured. Yet a good argument may be made out for not curing it, in many cases at least; for the laws of sterility show that if it be, what is called, cured, there is a risk of some of its alternatives or attendants—morbid pregnancy, abortion, miscarriage, weakly children, excessive family, death of the mother, and others. But the practitioner hopes, by appropriate cures, to conduct his patient and her offspring in safety through these perils; and we do not, meantime, feel disposed to cavil with this, perhaps, over-estimated view of his rational expectations.

It will be admitted that reputation, even with well-informed medical men, is not sufficient to prove the reality of a so-called cure, and we are constantly meeting with instances of exaggerated credulity in reported cures of young women married between twenty and twenty-five, and who had not lived three years in the married state, for it is common for such ardent young women to thus prematurely regard themselves as doomed to persistent sterility, and seek advice with a view to averting their dreaded fate. But there can, I think, be no doubt that sterility is often cured; and such cases as the following do all but absolutely prove that cure is possible, and the sufficiency of the proof will not be controverted by anyone if it is added that such cases, though rare, are sufficiently numerous to prevent by their number, apart from their other circumstances, the confusion of a coincidence with a consequence.

A. B., married at twenty years of age, menstruated regularly since thirteen, had dysmenorrhœa most of her life, but not very severe; had never been pregnant. She had had no uterine treatment until the cervix was canalised by bougies in the usual way, twenty-two years after marriage. No known change was made in her conjugal or other habits. She became pregnant at once after the treatment, and had a living healthy child at forty-

two years of age. Now, five years after the birth, pregnancy has not recurred.

C. D., married at nineteen years of age, began to menstruate at thirteen, and was regular, with pain for a short time on the first day. After fifteen years of married life, she had had no pregnancy. She had had much uterine treatment. The cervix was canalised by bougies, and for the first time, according to her. No change was made in her conjugal or other habits. On resumption of cohabitation, two months after the treatment, she became pregnant, and had a healthy child at thirty-five years of age. Since this birth three years have elapsed, and she has been twice pregnant.

It is, however, desirable to go further than merely prove that cure is possible, that a cure has been effected; and I believe the most important means of curing sterility or relative sterility is improvement of the general health. In the case of plants, the value of digging about and dunging is well known, and so is the value of proper exposure to the sun, and so is the value, and, indeed, the necessity, of good air, not the air of large cities; and the use of these, when previously withheld, is certainly curative of sterility in many kinds. The cure is sometimes, as in apple or pear trees removed from the shady side of a wall to a better exposure, accompanied by other changes in leafage and in growth of wood, which make better general health evident to the eye. But the cure may have no accompaniment of other signs of better general health, for some London trees which are sterile have a fine outward show of healthy vigour, and it can scarcely be doubted that return to a purer atmosphere would restore their fertility, though it could do little to improve their appearance. In the case of animals, a similar influence of general health may be noted. The starving of fowls diminishes or even arrests their fertility. We cannot doubt that the agouti, released from confinement and restored to its natural habitat, would produce healthy offspring instead of dead and ill-formed, and that, similarly treated, the lioness would have cubs without cleft palate.

In the case of woman, the restoration to, or improvement of general health involves such a variety of considerations as renders it very difficult of treatment, and the whole matter comes as much under the care of the general physician as of the gynæcologist. But it may be mentioned that special means have been recommended, and are much used, such as the waters and baths of Germany. These are of different kinds; and the Schwalbach, Spa, Franzensbad, Ems, and Marienbad have great reputation. That they are often of some kind of service, I have no doubt; just as, I dare say horse-riding, said to be recommended by Boerhaave against abortion, may also be sometimes valuable as a remedy of that tendency.

It may well be objected, that general health is too vague a term, and that it would be better to profess ignorance than to ascribe to it such important and definite a result as sterility; and it will be justly asserted that the great mass of sterile women have the appearance of good health. The difficulty of the subject is well expressed by Darwin in a passage I have quoted treating of the causes of sterility in animals. After all, I think it best, in the present imperfect state of our knowledge, to group a large number of injurious ill-defined influences under the head of general health, and to consider its improvement a means of cure. Although an animal sterile under confinement appears healthy, one cannot positively object to the statement that sterility is evidence that it is actually unhealthy, and the cure by restoration of freedom seems to confirm the view. Whatever may be the objections to the term "general health," every one will recognise the importance of investigating the subject with a view to increasing our power over it; for it carries with it a strong influence, not only towards the cure of simple sterility, but also towards the safety of the mother, the avoidance of morbid pregnancy, of miscarriage, of dead, ill-formed, and unhealthy children, and of excessive families.

Overfeeding and the production of fat are often spoken of as if they were identical; but this is plainly not the case, for many excessive feeders are not fat. What is the influence on sterility of overfeeding, or feeding by particular foods without fattening, I do not know; but there are analogies which dispose the mind to suspect that influence may thus be exerted. Plants are habitually spoken of by gardeners as overfed by rich soils and manures, but they do not become fat. Mr. Thomson, recently showing me his tomato plants, pointed out some, set among strong manure, growing luxuriantly in wood and leaves, but producing little fruit; others, which had been similarly placed, he had restored to due fruit-bearing, with diminished production of branches and leaves, by diminishing the contact of their pots with the rich manure. The growth of stems and leaves some may regard as the equivalent of fat in animals; but, in that case, stoppage of growth would be equivalent to resorption of fat, which would be driving analogy too far.

Although the injurious influence of fatness in women on fertility is universally admitted, it has not been altogether proved. But universal consent is strong evidence, and it is corroborated by all we know of the power of this same condition in the lower animals. Generally, young women before commencing to breed are fat, or at least plump. When they bear children, they lose in weight by diminution of fat; again, as they cease to bear children, to resume the fat condition, the fat being now, however, differently disposed of in the body. The fat of the immature and of the post mature is, within moderate limits, an indication of health. The fat of sterility is not an indication of health, but is, so far as I know, itself healthy, and indicates no active or positive disease. To obesity I only make allusion. I have known grossly fat women bear children; but facts about obesity are too few to justify its separation from the common exaggerated fatness of sterility here referred to.

Spencer makes a distinction between normal plethora and abnormal plethora as indicated by fat, and connects sterility only with the latter. I quote his ingenious remarks, not so much for the sake of giving his description of a distinction, the force of which I cannot see, as for the sake of stating his general argument regarding overfeeding or plethora as indicated by fatness. Medicine recognises no normal plethora. For physicians, plethora is always an abnormal condition, whether accompanied by much deposit of fat or not. "Many facts," says Spencer, "may be brought to prove that fatness is not accompanied by fertility, but by barrenness; and the inference drawn is that high feeding is unfavourable to genesis.....There is a distinction between what may be called normal plethora and an abnormal plethora, liable to be confounded with it. The one is a mark of constitutional wealth; and this is the plethora which we have found to be associated with unusual fecundity. Abnormal plethora, which, as truly alleged, is accompanied by infecundity, is a superfluity of force evolving materials joined with either a positive or a relative deficiency of tissue-forming materials; the increased bulk indicating this state being really the bulk of so much inert or dead matter. Note, first, a few of the facts which show us that obesity implies physiological impoverishment.....Neither in brutes nor men does it ordinarily occur either in youth or in that early maturity during which the vigour is the greatest and the digestion the best; it does not habitually accompany the highest power of taking up nutritive materials. When fatness arises in the prime of life, whether from peculiarity of food or other circumstances, it is not the sign of an increased total vitality.....Of like meaning is the fact that women who have had several children, and animals after they have gone on bearing young for some time, frequently become fat and lose their fecundity as they do this. In such cases, the fatness is not to be taken as the cause of the infecundity; but the constitutional exhaustion which the previous production of offspring has left shows itself at once in the failing fecundity and the commencing fatness."

The fatness of sterility is not apparently a matter of high or of low general health, and seems to be of a different origin from that fatness which comes on men and women at the great climacteric, and on the latter whether they have borne children or not. Whatever may be its natural history, it is known to be in some degree under the control of the physician. Not by medicine, but by diet and exercise, he can restrain its production or cause its removal. For success in removing fat, the co-operation of the patient is necessary, for on her part there is required change of habits and restraint of appetite. Little can be said regarding the cure of sterility by reduction of fat, but experience has furnished no reason to doubt the favourable influence generally expected from it.

RESORCINE AS A LOCAL APPLICATION TO CHANCRES.—In the January number of the *Annales de Gynécologie* MM. Lebland and Fissiaux report six cases of soft chancre in women treated by the application of resorcine in powder or solution. The formula of the solution recommended is five grammes (75 grains) of resorcine to 20 grammes (5 oz.) of distilled water. The average duration of the six cases under this treatment was twenty-three days, whilst in five cases treated with iodoform the average duration was thirty-eight days. Resorcine is said to cause but slight pain, which usually disappears rapidly. The entire absence of odour gives this drug a great advantage over iodoform, to which indeed the authors consider it in all respects superior as a dressing for soft sores.

MEDICAL MAGISTRATE.—Mr. David Thomas, M.R.C.S.Eng., of Llandovery, has been placed on the commission of the peace for the county of Carmarthen.

THE LUMLEIAN LECTURES
ON
URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians

BY ALFRED BARING GARROD, M.D., F.R.S., F.R.C.P., ETC.,
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LECTURE III.

At the conclusion of my last lecture I spoke of the effects of saccharine food and of different alcoholic beverages on the uric acid excreting function.

To-day, before proceeding to the more purely therapeutic part of our subject, I must devote a few minutes to the discussion of other classes of food in reference to the same function; and, first, with respect to the influence of a nitrogenised, and especially of an animal diet. Observations are not wanting to show the effects of a pure meat diet on the urine. Those of Lehmann are, perhaps, the most satisfactory; they are so valuable that I must now call your attention to the results.

He first determined the daily excretion of the principal constituents of his urine when on an ordinary mixed diet; he then placed himself on a purely animal diet (chiefly eggs) for twelve days; afterwards, for another twelve days, on a purely vegetable diet; and subsequently, for two days on a purely non-nitrogenised diet, which consisted of fat, milk, sugar, and starch. You will see the results in the table, in which I have left the original numbers obtained by Lehmann, in grammes, as the smaller numbers are easier of comparison with each other than would be the case if the results were reduced to grains.

Table Exhibiting the Mean Results of Lehmann's Observations on the Effect of Different Diets on the Excretion of the Urinary Constituents. Expressed in Grammes.

—	Total Solids.	Urea.	Uric Acid.	Salts and Extractives.
On a mixed diet	67.82	32.498	1.183	12.746
On an animal diet	87.44	53.198	1.478	7.312
On a vegetable diet	59.24	22.481	1.021	19.168
On a non-nitrogenised diet	41.68	15.408	0.735	17.130

The conclusions which particularly interest us at present are that the total solids, as well as the urea, are much increased by animal food, while they are considerably decreased by a vegetable diet, and still more so by one which is non-nitrogenised; whereas the uric acid is not nearly so much affected by the nature of the food, provided that it contains nitrogen. Thus, it is seen that the urea, on an animal diet, was to the uric acid 53.198 : 1.478; on a vegetable diet, 22,481 : 1.021; and on a mixed diet, 32.498 : 1.183. Estimating the amount of uric acid, on a mixed diet, as 1, animal food brought it up to 1.27; a vegetable diet lowered it to 0.863; and a non-nitrogenised diet to 0.63.

Lehmann found that after the use of purely animal food the urine of man closely resembles that of the carnivorous mammals, becoming of a light amber colour; having a strong acid reaction, and containing neither lactic nor hippuric acid.

On the other hand, after a course of vegetable food, the urine becomes of a brownish-red tint, is much less acid, often deposits the earthy phosphates, and always contains alkaline lactates with oxalate of calcium—in fact, the urine closely approaches to that of the herbivorous mammal. It might be added, though Lehmann does not allude to the fact, that, under these circumstances, there is also found hippuric acid in considerable quantities.

As a result of all the experiments made by different observers—both on man and the lower animals—I think we may fairly come to the conclusion that meat, taken in such quantities only as are sufficient to keep up the nutrition of the body, has no tendency to increase the excretion of uric acid; that, when the diet is purely animal, but the quantity small (as is the case with the carnivorous animals when in confinement), the uric acid, far from being large, becomes exceedingly small in amount, more especially when it is compared with the urea. On the other hand, that the taking of a great quantity of meat—an excess compared with the requirements of the system—tends to increase the uric acid, though, even then, not more than in proportion to the urea. Funke states that uric acid is less affected by food than any other ingredient of the urine; it is, however, influenced by the time of taking it: that is, uric acid is thrown out in larger quantities after a meal than during the hours that an individual is fasting.

These different facts can be advantageously applied in practice in the treatment of gravel and calculus. In such cases, there is certainly no reason why a proper quantity of animal food should not be taken; and the knowledge of this is important, seeing that many patients have been lowered in health by being kept on insufficient diet, with the idea that, by these means, a lessening of the excretion of uric acid would result.

Fatty and Oleaginous Food.—With regard to the influence of such food on the urinary excretion, the experiments of Dr. Böcker seem to be most trustworthy; and from them it would appear that no influence whatever is exerted on the excretion of water, urea, uric acid, or any other constituent of the urine, by taking from about a quarter of an ounce to three ounces of butter daily.

Causes of Gravel and Calculi.—In the course of our experience, most of us have noticed that there are certain individuals who are prone, either to pass an urine thick from urates or containing uric gravel, or to void numerous small calculi; others, again, have no such tendency, and only on rare occasions observe any thickness in their urine. Can we link this condition with any other constitutional peculiarity? I think we can; and that we shall find, on inquiry into the history of those liable to pass gravel and calculi, that they frequently inherit gout. In looking over 1,900 cases of this disease, which I have had extracted from my books, I find it mentioned that, of this number, comparatively few had passed calculi. If, on the other hand, we examine cases of calculus, we shall find that a much greater percentage of these patients are the children or grandchildern of gouty parents.

In the course of my experience, it has frequently occurred to me to see a man suffering from gout, and to find that he has one child who has had attacks of joint-gout; another who is suffering from eczema; and a third who is passing uric gravel or calculi. It is not very uncommon to find articular gout and calculus present in the same person. Sydenham, in his own person, was a good example of this combination; in fact, we may fairly conclude that those who suffer from an abnormal condition of the uric acid function on the inner side of our imaginary partition, mentioned in the first lecture—that is, in the blood or system at large—are also more prone than others to experience the effects of a morbid state of the same function on the outer side, or in the urinary tract; in other words, gouty subjects, or those who inherit that diathesis, are more liable than others to gravel and calculus.

There are, however, many influences which act strongly in determining the morbid action to the urinary tract—influences which will often cause the occurrence of such troubles in those who do not inherit them. We see, for example, that, in England, stone is more common in some counties than in others, and at one time of life more than at another. How can we account for this?

Anything that checks the cutaneous function, such as the cold east winds of spring, felt so acutely in Suffolk and Norfolk, appears to act as an exciting cause, and it is well known that in these counties gravel and calculus are very common. When the action of the skin is checked, there is no increase of urates, but an undue acidity of the urine, which leads to the precipitation of the uric acid. Cold alone is not necessarily a cause, for in Sweden and Norway calculous diseases are very rare. Another cause which, I believe, leads both to an increase of the excreted uric acid and to its deposition in the urinary organs, is portal congestion. Of the exact pathology of this we are at present ignorant, but, in the prophylactic treatment of gravel and calculus, it is important to look to this point; and much good is produced by the frequent use of remedies which tend to relieve such a condition. Hence the value of Carlsbad waters and salts, and of the numerous saline purgative waters which, of late years, have been so much employed. It must always be borne in mind that, in this administration in the diluted form, the water itself becomes an important element in their action upon the system.

Effects of Water on Gravel and Calculus.—I have already told you that water plays an important part in the formation of uric gravel and calculus, and this must be at once evident when we observe that, in different animals, uric acid is thrown out in the solid or liquid

condition according to the relation existing between the solids and water contained in their urine. From this, it follows that the proper exhibition of water in the prophylactic as well as the medicinal treatment of calculous disorders must be a subject of much importance.

Many observations have been made on the effect of increasing and diminishing the quantity of water taken with food or when fasting. In the latter case, especially if the water does not pass off by the intestines, it causes the urine to become pale and copious (the *urina potûs* of old writers); but, at the same time, the action of the skin is augmented. It has been asserted that the amount of uric acid is lessened, but it is doubtful whether this is really the case; but any increase in the quantity of the urine helps to keep this principle in solution, and may thus mask its presence.

When the quantity of water taken with food is increased, it appears that certain of the urinary principles are augmented in amount, owing probably to the increased metabolism of the tissues; but, at the same time, it is stated that the uric acid is decreased. Further observations are much required before we can come to any accurate conclusions on this point. That the quantity of water passed by the kidneys in a given time has a great influence upon the physical condition of the urine, is evident. If, for example, a healthy man during one day passes an ordinary quantity of urine, and, during a second day, but half the amount, it is probable that, on the latter occasion, the urine will be turbid and thick from the precipitation of urate of sodium, whilst the first day's urine will remain bright and limpid; and yet the daily elimination of uric acid may be the same on both occasions, and it only requires that an equal quantity of water should be added to the concentrated urine to bring it to the same condition as the more limpid specimen. If a patient continues day by day to pass urine so concentrated that it rapidly becomes thick, perhaps even in the bladder itself, a very slight change in the acidity of the fluid will cause uric acid to be set free and crystallisation to take place, and then uric gravel, in the shape of cayenne pepper deposit, is formed.

If these changes only ensue after the urine has been passed, of course it is of no real consequence; but if they take place while the urine is still within the urinary organs, then either free acid or some urate may become deposited and form gravel, or increase the size of any calculus already existing within the urinary passages. The deposition of uric gravel is of very common occurrence in children; and I know, from clinical experience, that this often depends on the deficient amount of water excreted. I could give many instances of this, but one or two will be sufficient.

1. A little boy, about five and a half years of age, was passing, from day to day, urine which either contained uric acid crystals or gave rise to a copious red sediment almost immediately after it was voided; his health was otherwise good. I had the urine of the twenty-four hours carefully collected, and found that it amounted to sixteen fluid ounces, with a specific gravity of 1031. On simply causing the child to take five fluid ounces of water an hour before breakfast, and the same before his late afternoon meal, the quantity of urine was at once brought up to twenty-four fluid ounces, and the specific gravity reduced to 1017, nor could any uric acid be discovered when the fluid had stood for thirty-eight hours from the time when the last portion was passed. In a few days, the quantity of urine was increased to thirty-seven fluid ounces, and the specific gravity lowered to 1013.

2. A little girl, about eleven years of age, had the same condition of urine as the last, red gravel being constantly present. The total daily quantity of urine was twenty-four fluid ounces, specific gravity 1026. By the administration of water before two of the meals, the quantity was at once increased to forty-five fluid ounces, with specific gravity 1015, and after a few days to about forty-six fluid ounces, specific gravity 1013, the urine remaining free from any red crystals.

These cases, selected from a large number, are sufficient to illustrate the value of water as a therapeutic agent where there is a tendency to the rapid deposition of uric acid from the urine. In many cases, it is only necessary to give simple water, such as is usually supplied for drinking purposes—a fact constantly acted upon by patients suffering from such complaints when they resort to warm mineral springs, such as those of Contrexeville, Vichy, and other places, where, although the mineral constituents of the spring may to some extent influence its action, yet a considerable amount of its therapeutic value is due to the imbibition, at proper times of the day, and under favourable circumstances, of a large amount of water.

The importance of the proper administration of simple water in these cases as a part of the diet is the greater, seeing that the plan of treatment can be pursued for an indefinite period; whereas the duration of a course of mineral waters is necessarily limited to a few weeks. I believe that, as yet, the medical profession have not laid sufficient stress on the proper administration of water in the treatment of gravel and calculous diseases.

Effects of Alkaline Treatment.—In the treatment of uric gravel and calculus, the different alkalies and their salts play a most important part, and it is very desirable that their special actions, as well as their relative values, should be clearly made out: this I now propose to do.

I may at once bring to your recollection the fact that, if we give any fixed alkali in the state of a carbonate, it is absorbed and passes through the kidneys in an unaltered form; that is, a carbonate, when taken by the mouth, appears as such in the urine, and, therefore, necessarily diminishes the acidity of that fluid, sometimes rendering it neutral or even alkaline, according to the quantity administered; so that, if we give, at frequent intervals throughout the day, a quantity of the alkali equal to the neutralisation of about thirty grains of oxalic acid—the average acidity of the day's urine—we shall, as a rule, keep that fluid in a neutral state.

In considering the equivalents of the different alkaline metals whose salts are employed in medicine, we find that the neutralising power for acids of the different bases must vary considerably. The most practical method of estimating this power is to measure the different alkaline metals, in the form of their carbonates, against each other; when we find that 74 parts of carbonate of lithium equal 84 parts of carbonate of calcium (chalk or its congeners), 106 parts of carbonate of sodium, and as much as 138 parts of carbonate of potassium. This is an important practical fact, and one that must not be lost sight of in the treatment of calculous diseases.

It must, however, be remembered that it is not merely the neutralising power for acids of the above compounds that has to be considered in treating of uric acid disorders; we must also look at the character of the salts which result from the combination of the acid with the metal, for some urates are very much more soluble than others.

In my first lecture, I drew your attention to a table of solubilities of uric acid and several of its salts, drawn up from the results of a very careful set of experiments, the accuracy of which may, I believe, be relied on. This table is still before you.

On looking at it, we at once see that a considerable difference in the solubility of urates is manifested. Two of those given in the table are insoluble, viz., those of lead and iron; that is, no amount of distilled water, at the temperature of the body, could, apparently, dissolve either of them to the slightest extent. This fact is most important, though rather with reference to manifestations of uric acid in the system in the shape of gout, than its injurious effects as exhibited in the form of gravel or calculus.

It is a matter of clinical experience that lead-impregnation powerfully disposes to the production of gout; and I can also assert, as a result of long-continued observation, that iron-salts have a considerable tendency to cause a recurrence of an attack, when administered, as they often are, with a view to overcoming debility.

The difference of solubility in the alkaline urates forms a subject of great interest, for the value of a solvent may often be expressed correctly as the product of its neutralising power plus the solubility of the resulting salt. Let us take, for example, carbonate of sodium. It has been shown that its neutralising power is large compared with carbonate of potassium, 106 parts of the former doing the work of 138 parts of the latter; but, on looking at the table of solubilities, it is seen that the soda-salt has less than half the solubility of the potash-salt. The same remark applies to carbonate of magnesium, as, although it possesses great neutralising power, the resulting salt is very little soluble, and the very sparing solubility of the lime-salt renders its employment as a solvent of uric acid undesirable. Lime-salts, however, have been thus used, as we learn from the composition of the famous quack remedy of Mrs. Stephens, for the purchase of which the sum of £5,000 was granted by the Government in the earlier part of last century.

The other properties of the alkaline salts must also be taken into consideration when they are administered as remedies. On comparing a soda-salt with a corresponding potash-salt, it is found that the latter is more prone to produce diuresis than the former; at the same time, there is good evidence that the alimentary canal and its appendages, especially the liver, are more influenced by soda than by potash. This is what might naturally be expected, seeing that true bile consists essentially of glycocholate and taurocholate of sodium. Magnesia-salts act more or less as purgatives, and lime-

salts as astringents, but all act as neutralisers of acidity, and, to some extent, as solvents of uric acid. Gravel and calculi usually consist of free uric acid, and even the least soluble of the urates, omitting lead and iron, are much more soluble than uric acid itself, which, as we may see from the table, requires as much as eight thousand times its weight of water at 100° Fahr. to dissolve it.

There is one alkali—lithia—which will require some few minutes' consideration, and upon which I propose to bring forward several new observations and experiments; but, before proceeding to discuss its value, I may make some remarks on the different salts of the alkalies, some of which are more eligible for exhibition, especially in the treatment of gravel, than the carbonates.

All of us are probably aware that, if an alkaline citrate is given by the stomach, it is changed, either in the blood or kidneys, into the corresponding carbonate. The same is the case when an acetate or tartrate is administered; in fact, most of the vegetable salts are thus decomposed in the system, carbonates appearing in the urine. The establishment of this point is important, inasmuch as we can, by the use of these valuable salts, introduce into the system, through the mouth, salts which have no alkaline action on the stomach and form, often, an important part of vegetable food, and can still produce the remote alkaline influence where it is wanted; in short, we can often give even an acid salt, grateful and useful to the stomach, and yet have the very opposite effect induced upon the urine.

I will now draw your attention to the salts of lithia, which were first introduced as remedies by myself as far back as 1859. If we look to the atomic weight of the metal lithium, we find it very low, only 7. The number representing the carbonate of lithium is also small—compared with carbonate of potassium it is as 74 to 138; hence the neutralising power for acids possessed by carbonate of lithium is greater than that of carbonate of potassium in the above proportions. Next, if we look at the table of solubilities of the urates, we see that the acid urate of lithium requires only 220 parts of water at the body temperature to dissolve it; the corresponding potash-salt requiring 500 parts, and the soda-salt as much as 1,130 parts, while the magnesia and lime urates take 1,600 and 2,800 parts respectively; so that, with respect both to neutralising power and solubility the lithia-carbonate has a great advantage over the corresponding salts of potash, soda, magnesia, and lime.

I must now allude to a paper in the Medico-Chirurgical Society's *Transactions*, vol. xlviii, 1875, by one of our distinguished Fellows, Dr. William Roberts, of Manchester. The subject of this communication is "The Solvent Treatment of Urinary Calculi." I presume that the author's opinions are not changed since then, as, in the last edition of his work on "Urinary and Renal Diseases," the results set out in the paper are embodied.

Dr. Roberts came to the conclusion that potash-carbonate dissolves uric acid more rapidly than the soda-salt. This he ascertained by placing sections of uric acid calculi in phials, and causing currents of the different solutions, at blood-heat, to pass over them at a regulated rate. He also found that the strength of the solution employed was of much importance, the greatest amount of solvent power being exhibited in solutions containing from forty to sixty grains of the alkaline carbonate to the imperial pint (twenty fluid ounces). Below this strength, the power of the solutions gradually declined, until, with those which contained less than three grains to the pint, the solvent power scarcely exceeded that of water. On the other hand, if the strength was above sixty grains to the pint, the pieces of the calculus became encrusted with the alkaline bi-urates which were then deposited, and thus the further action of the solution was impeded. This was especially noticeable when the strength of the solutions was much above one hundred grains to the pint.

Even without the actual experiment with pieces of uric calculi, I think we could predict that potash would prove a more powerful solvent than soda; for we have only to glance at the table to see that urate of potassium requires, at the body-temperature, only five hundred parts of water to dissolve it, whereas the corresponding soda-salt takes as much as eleven hundred and thirty parts. The soda-salt certainly has an advantage in its greater neutralising power, but not sufficient to make up for the far less solubility of the resulting urate.

In the paper in the Medico-Chirurgical *Transactions*, and in his book, Dr. Roberts has the following foot-note with reference to the action of carbonate of lithium. He says: "Some experiments were also made with carbonate of lithia, which has been vaunted in recent times as a solvent for uric acid. Its power was found much inferior to that of carbonate of potash and soda. Its reputation seems to have been gained through its comparative insolubility. Only weak solutions of it *could* be employed," emphasis being particularly laid on the word "could." I refer to this passage because other authors have evidently been influenced by the statement; for example, Sir Henry Thompson, in his little work on *The Preventive Treatment of Calculous Disease*, almost repeats the above words, when he says: "Dr. Roberts finds carbonate of potash to be the most powerful solvent; better than soda, much better than lithia."

Having myself introduced lithia-salts to the profession as internal remedies, and having used them continuously for twenty-five years, I felt it was my duty to bring forward evidence in support of their value as therapeutic agents, and to ascertain the truth or error of the statement which had been put forward as to their comparative inutility.

For this purpose, I have recently had a series of experiments made, the results of which are seen in the table on the board.

TABLES.

Effects of Solutions of Carbonates of Sodium, Potassium, and Lithium upon Fragments of Uric Acid Calculi.

Strength: 60 grains to 20 fluid ounces. Temperature, 100° Fahr. Time of action, 12 hours.

In 9 experiments—3 with each carbonate—the solvent powers were as follows.

With Carbonate of Sodium:
21.2—18.1—15.3 per cent.
Mean = 18.2 per cent.

With Carbonate of Potassium:
28.6—27.6—38.3 per cent.
Mean = 30.5 per cent.

With Carbonate of Lithium:
43.8—58.6—47.7. per cent.
Mean = 50.0 per cent.

In 3 experiments. Stength of solutions, 50 grains to 20 fluid ounces. Time, 12 hours. Temperature, 100° Fahr.
With carbonate of sodium.....16.2 per cent.
With carbonate of potassium ...23.1 per cent.
With carbonate of lithium .....37.7 per cent.

1 Experiment.
Carbonate of lithium—100 grains to 20 fluid ounces.
Solvent power—70.2 per cent.

2 Experiments, using carbonate of potassium and lithium, 20 grains to the 20 fluid ounces.
With carbonate of potassium.....21.2 per cent.
With carbonate of lithium .....33.1 per cent.

2 Experiments, using carbonate of potassium and lithium, 10 grains to the 20 fluid ounces.
With carbonate of potassium.....11.2 per cent.
With carbonate of lithium .....17.5 per cent.

The substance employed was a large uric acid calculus given to me by my friend Mr. Erichsen. It was first cut, to ascertain its internal structure, and to see if this was pretty uniform throughout: then a portion was broken up, and the fragments washed with distilled water, and carefully dried. About equal weights of the calculus were put into three bottles, and solutions of neutral carbonates of sodium, potassium, and lithium were added to them.

The solutions were of the strength of 60 grains to the 20 fluid ounces; the action upon the calculus continued for twelve hours, at the temperature of 100° Fahr., with frequent agitation. Separate quantities of the calculus were taken, here called Nos. 1, 2, and 3. No. 1 was first treated with the lithia solution, then with those of potash and soda; No. 2 was treated first with the potash solution, then with those of soda and lithia; and No. 3 with the three solutions in the order, soda, lithia, and potash.

The quantity of the solution used in each case was the same. The results of these experiments are very striking. Let us first consider the soda numbers; we find that the percentage of solvent power in the three experiments was 21.2, 18.1, and 15.3, the average being 18.2 per cent. The percentage of the potash numbers was 28.6, 27.6, and 35.3, the average being 30.5 per cent. The corresponding lithia numbers were 43.8, 58.6, and 47.7, the average being 50.0 per cent. In all three cases, the difference between the mean and the extremes is not very large; and such differences must always exist when we use an impure substance, such as the fragments of a calculus, which is never composed of a pure chemical salt. We see, then, that, in solutions of the strength mentioned, the value of the lithia-salt over that of potash, and still more over that of soda, is most evident. Other experiments were afterwards made with solutions of different strengths. Thus, in three experiments, the

solutions contained fifty grains to the twenty fluid ounces. Time, twelve hours; temperature, 100° Fahr.; with frequent agitation.

The carbonate of sodium solution dissolved 16.2 per cent.
" " potassium " " 23.1 "
" " lithium " " 37.7 "

In another experiment, the sixty-grain lithia solution being used, but the time altered, at first to ten hours at 100° Fahr., then to eight hours at about 60° Fahr., the solvent power was 60.8 per cent.; but, when a solution containing one hundred grains to the twenty fluid ounces was employed, the solvent power was as high as 70.2 per cent.

Lastly, it will be observed that, when the comparison of the solvent power was made between the potash and lithia salts, using twenty and afterwards ten grains to the pint—the quantity used by Dr. Roberts in his lithia experiments—the results were in each case more than 50 per cent. in favour of the carbonate of lithium.

It will be seen from these experiments that so far as soda and potash are concerned the results obtained exactly agree with those of Dr. Roberts; they exemplify the greater solvent power of the latter over the former, a result which might have been clearly anticipated, but, on the other hand, they are totally opposed to his conclusions with respect to lithia. How is this to be explained? On looking at the solubility of urate of lithium, as seen in the table, we find it more than twice that of the potash-salt, or as 220 to 500, and we can scarcely believe that in solutions of the two carbonates the uric acid would be found to be most soluble in the one which contained the alkali which gave the more insoluble urate; this would be absurd—in fact, we should anticipate that the lithia solution would prove as superior to the potash as we have already found the potash to be to the soda solution.

We must look for some means of explanation. Dr. Roberts used the expression "only weak solutions of carbonate of lithia *could* be employed," italicising the word "could;" and he appears to have used in his four experiments, two of which are given in the Medico-Chirurgical Society's *Transactions*, solutions of the strength of 10 and 20 grains to the 20 ounces, whereas, in case of the potash, he found that a 60-grain solution is the most powerful. Now it will be seen in the table that solutions of carbonate of lithium were employed containing 60 and even as much as 100 grains to the imperial pint; and that, in the case of lithia, as the strength was increased the solvent power also was augmented. I should imagine that Dr. Roberts either used an impure carbonate of lithium or assumed that only one grain was soluble in the fluid ounce, as he used only 10 and 20 grain solutions; whereas as much as 100 grains can be dissolved, at the temperature of the body, in the imperial pint of water. Impurity of the salt and the use of solutions which were far too weak will at once explain the discrepancies and the cause of the erroneous statements with regard to the solvent power of the lithia-salts. No one who has thoroughly investigated the action of these salts, in comparison with those of soda and potash, as internal remedies, can come to any other conclusion than this, viz., that lithia-salts are far more powerful solvents of uric acid than potash-salts, while these latter are more efficacious than those of soda.

We have only to take three small phials, filled with a solution of the three carbonates, of the same strength, and to put into each the same quantity of small uric calculi, the amount being such that the lithia will dissolve them. If we carry these in a warm pocket, after a short time it will be seen that all the calculi have disappeared from the lithia solution, while more than half are left undissolved by the potash, and about four-fifths by the soda solution.

I have been informed by some patients that they have been deterred from using lithia-salts, although they had found them valuable, by having been told that their employment would prove injurious, owing to their caustic effects upon the renal organs. In answer to this objection, I may say that I have found the action of carbonate of lithium to possess less destructive power than the corresponding salts of potash and soda upon animal tissues.

The only effect that I have ever noticed has been that, when the quantity is increased beyond a certain amount, a little tremor of the hands is produced, which passes off at once on the diminution or omission of the dose of the salt. I have known patients, of their own accord, continue the use of lithia-salts for more than ten years, with the effect of entirely preventing the recurrence of the symptoms to remove which they were first prescribed, and without the production of any injurious effect. For myself, I have not the least doubt as to the value of lithia-salts as therapeutic agents, and am convinced that, by their employment, depositions of uric acid in the renal organs can to a large extent be prevented. Free dilution and administration on a fasting stomach are points of much importance, which should be attended to in the administration of alkaline remedies. I have been much in the habit of using potash with lithia, in the form of the citrate or the carbonate; the former to give neutralising, the latter to increase the solvent power.

In concluding my remarks on the action of alkalies, I may state that I do not myself believe in the value of any injections into the bladder in the treatment of vesical calculus; at the very best, the process must be most tedious; and at the present day, when the surgery of the subject has reached to such great perfection, when a calculus can often be removed completely from the bladder in a few minutes without the use of the knife, I cannot but think that the surgeon is better qualified for the treatment of such cases than the physician.

[*To be continued.*]

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture II.—The Circulation of the Blood: The Controlling Influence of the Nervous System.

As the walls of the heart and the coats of the arteries contain contractile tissue, we might anticipate that they would be more or less governed by the nervous system, thus influencing the rhythmic movements and the distribution of blood. It was also consistent with experience that various emotions acted on these organs; consequently, in the dawn of scientific thought, men referred many of the feelings of the mind to the heart (sacred writers, Aristotle, Plato, Galen, etc.). Many of the old writers accounted for the heart beating strongly under excitement, for flushing and palor, for the existence of pain in certain parts different from the seat of disease, by the use of the word sympathy, which expressed the fact of kindred feeling, but explained nothing. It was not until after the discovery of the circulation that any rational attempt was made to account for such phenomena. Vieussens (1641-1716) supposed that the pallor and flushing of the face under violent emotion were caused by the nerves compressing the carotid arteries in the first case, and the jugular veins in the second. Boerhaave (1668-1738) accounted for the systole and diastole of the ventricle by intermittent compression of the cardiac nerves. De Gorter (1689-1762) supposed that such compressions occurred in the wall of the heart itself. For many years, the doctrine of the *anima* of Stahl (1660-1734) influenced physiological thought, and the beat of the heart was referred, with all such phenomena, to the direct and usually conscious operation of the *anima*. Then arose Robert Whytt, a man whose life and labours have been nearly forgotten, even by physiologists. He was born in Edinburgh in 1714, graduated as M.A. at St. Andrews, studied medicine in Edinburgh and London, graduated as M.D. at Rheims in 1736, became Professor of the Theory of Medicine in Edinburgh in 1747, and died in 1766. In his great work *On the Vital and other Involuntary Motions of Animals*, he modified the opinions of Stahl. Whilst such motions as the action of the heart were caused by the operation of the mind, said Whytt, the mind governed them through the nervous system. In this work, also, there is the first glimmering of the doctrine of reflex actions. Sympathies occur, not by one part being directly connected with the other by means of nerve, blood-vessel, or membrane, but through the intervention of the spinal cord and brain. Whytt was a vigorous experimentalist, and investigated in this way the heart and vessels. He attributed flushing, etc., to an oscillatory motion of the small vessels, excited either by a stimulus directly applied, or by afflux of blood.

In those days, there was much discussion as to the arteries being contractile. Haller (1708-1777) held that they were, and in this he was vigorously supported by Cullen (1712-1790) and Whytt. In their experiments, these observers confounded not unfrequently the movements of the great arteries, due to elastic recoil, with an active muscular contraction; and the relative degree of elasticity and of contractility was not clearly established till John Hunter (1728-1794) made numerous experiments on the subject (see Hunter *On the Blood*, edition of 1794, p. 125).

At the time of Hunter's death (1794), the notions held as to the

influence of the great nerves of the heart were vague and unsatisfactory. Bichat (1771-1802) emphasised the distinction between the sympathetic and cerebro-spinal systems. In 1792, Sömmering (1755-1830) asserted that the cardiac nerves were distributed only to the vessels of the heart; Scarpa (1747-1832) showed, however, that the nerves actually ended in the muscular structure. Humboldt (1769-1859) showed in 1797, for the first time, that galvanism excited cardiac contractions; but it was not until 1837 that Burdach first observed the contractions of the heart become stronger when he applied both wires of a voltaic pile to the cervical portion of the sympathetic. The lecturer alluded to the experiments of Legallois, Wilson Philip, Flourens, and Valentin, all of which, though often contradictory and misleading, helped towards the elucidation of this difficult question.

In 1838-9, appeared the celebrated researches of John Reid (1809-1849) as to the functions of the eighth pair of cranial nerves. After giving a short sketch of the life of Reid, the lecturer described him as one of the most learned, accurate, and cautious physiologists that ever lived. His work was not connected with a great generalisation, or even a great discovery, and hence it may be undervalued and forgotten; but it was work so true and thorough, so masterly in its conception and execution, as to entitle him to a place in the first rank of workers.

In 1845, the Webers discovered the inhibitory action of the vagi. Before this, in 1839, Remak had described the cardiac ganglia. The older anatomists had, fairly enough, supposed that the vagus was a motor nerve of the heart (Piccolhomini, born 1556; Willis, 1622-1675; Lower, 1631-1691; Valsalva, 1666-1723). The Webers' discovery dispelled this idea, and laid the foundation of the doctrine of inhibitory nervous action. The lecturer then gave a short account of the information collected as to the innervation of the heart since 1845, which has led to the recognition of the action of the intracardiac ganglia, and of the inhibitory and accelerating fibres. Specially, he pointed out how the centres of the inhibitory and accelerating mechanism in the medulla oblongata and spinal cord may be influenced by peripheral impressions, a department of knowledge which owes much to Ludwig and his disciples.

Retracing his steps, the lecturer then detailed the beginning of experiment as to the innervation of the vessels. Pourfour du Petit, an oculist and surgeon (1664-1741), noticed between the years 1712 and 1727 that injuries to the sympathetic nerve in the neck caused contraction of the pupil, partial closure of the eyelids with protrusion of the third eyelid, and redness and apparent swelling of the eye. In 1755, Molinelli observed similar facts. In 1816, Dupuy, a veterinary surgeon at Alfort, under the eye of Dupuytren, observed the same phenomena, but he noticed, in addition, a rise of temperature on the affected side. These results were confirmed by Brachet in 1830; but they led to no theoretical views till Claude Bernard, in 1852, rediscovered them, and, in particular, noted the dilatation of the vessels and the rise of temperature. Bernard himself states that, between 1841 and 1852, he had often repeated Pourfour du Petit's experiment, but failed to recognise its significance. In the same year, 1852, Brown-Séquard, then in America, observed similar phenomena; and he found that irritation of the upper end of the sympathetic nerve caused the vessels to contract, and the pupil to dilate. Bernard also states that Biffi observed the effects of galvanisation.

These experiments showed that the blood-vessels are under the control of filaments in the sympathetic nerve; but it was not easy to trace the actual connections existing between the sympathetic and the cerebro-spinal system. A new method was wanted, and that was supplied by Augustus Waller, who, in 1849, discovered a process for investigating the nervous system, founded on disorganisation of the distal end of a divided nerve. By this method, along with Budge, he worked out the locality of the cilio-spinal region, for which they received the Monthyon Prize in 1852. At last, Bernard, in 1858, announced his great generalisation of vaso-motor nerves. The lecturer described the actions of these nerves, the necessity that arose for dividing them into vaso-constrictor and vaso-inhibitory, the discovery of the locality of the chief vaso-motor centre in the medulla, and the ways in which the activity of this centre may be elevated or depressed. He also gave an account of the physical phenomena of the circulation as influenced by nervous action.

It is evident that the nervous mechanisms of the heart and vessels must have a great influence on the pressure and velocity of the blood-current. Without arrangements for observing these physical phenomena accurately, such information could not have been ascertained. By means of the kymograph, in particular, physiologists have been able to work out the question—"To whom are we mainly indebted for these results?" Mainly, in the lecturer's opinion, to the Webers, John Reid, Claude Bernard, and Ludwig. The Webers took the first step towards recognising the great principle of inhibitory action; John Reid taught physiologists how to investigate the functions of nerves by his work on the eighth pair; Claude Bernard developed the great conception of vaso-motor nerves; and Ludwig showed how this conception, whilst it certainly made the hydraulic problems of the circulation infinitely more complicated than they were even to the imagination of Thomas Young, accounted for some of the phenomena, and indicated, at all events, the solidarity of the arrangements in a living being. Further, Ludwig used the evidence supplied by some of the phenomena of the circulation to explain phenomena of the nervous system, and he developed the methods by which the physiological effect of active substances, used as remedies, ought to be investigated. Finally, the lecturer showed that, without a knowledge of these facts, all of which had been gathered by experiment, most of the phenomena of fever and of inflammation were inexplicable.

AN INQUIRY INTO THE CAUSES OF THE INCREASE OF CANCER.

By HUGH P. DUNN, F.R.C.S.

In the preface to the forty-second Annual Report of the Registrar-General, the following observation is made in connection with the mortality from constitutional disease: "Cancer also maintained the increased rate to which it has been gradually mounting for many years." Let us proceed to inquire upon what data this opinion has been grounded, and test the accuracy of the statement by means of the figures which the report contains.

A cursory examination only is sufficient to divulge that the fell disease claims year by year a higher ratio of victims. Confining our remarks to the period of twenty years from 1860 to 1879 inclusive, and commencing with the first ten, we find that the total number of deaths from cancer during that time was 80,049, and the annual average increase was 248. During the years 1870-1879, the total number of deaths from cancer was 111,301, and the annual average increase was 320. Thus we have here, as far as numbers are capable of showing, conclusive evidence of the increment in the mortality from cancer. It is observable, also, that the rate of increase is much higher in the latter than in the first ten years. It is, moreover, the case, that the annual rate of increase is higher in the years 1860-1869, than in the preceding decennium—namely, in the years 1850-1859. In short, in the years 1850-1859, the increment was about 2,000; in 1860-1869, 2,480; in 1870-1879, 8,200 As the population increases at about the rate of one-tenth in every ten years, the influence of this upon the cancer-returns amounts to very little. We have, then, confessedly, to face the fact that cancer is increasing in our midst at a rate which bids fair to become more and more serious with the advance of time.

But, in dealing with the question of cancer, it is necessary to be mindful of its character as a disease, and of the manner in which its influence is exerted upon the community at large. Let us remember that the war which man has waged, and is waging, against innumerable morbid besiegers, has resulted in the extermination of some, and in the reduction to feeble resistance of many others. In carrying out these undertakings, the aid of science has been invoked with a success which has been good in the past, and is still progressive. By means of the enforcement of sanitary laws, the health of the community, as a whole, is immeasurably better than in the days of a civilisation which, though necessarily advancing, was yet in a primitive condition. But it may be said of civilisation now, that it has acquired a character of refineness—a delicacy, in fact, of organisation—so unequivocally marked, that it recoils upon itself, and brings into existence evils which, except under circumstances of this nature, would have remained unknown. Not only is man compelled to herald the approach of new morbid arrivals, but the circumstances of the case compel him to submit to an increment in the mortality from some diseases the pedigrees of which reveal an ancient ancestry. Of cancer, it is true that we possess no available resources for permanently diminishing its intensity and curtailing its extent. In accounting for this, it is only necessary to recollect the prevalent insufficiency of our knowledge of the origin of the disease. We can adduce no reason for its appearance in a person of robust health, nor as yet have we discovered any data which might tend to throw light upon the causes which influence the evolution of the various forms

of the malady. As to the question of its local or constitutional origin, there is as much to be said on one side as on the other. The acceptance of either one or the other can only be, in the present state of our knowledge, supported by statements which, at the best, are merely conjectural. Under these circumstances, then, it is not to be wondered at, that the annual increment of cancer continues without abatement. When obstructed by difficulties and problems of insoluble depth, we find our knowledge of the disease limited to an area which practically excludes us from interrupting its progress.

Turning now to the subject proper of this paper, our first inquiry has reference to the relative frequency of cancer in the male and female. We may ask, Is the increase general, or is it chiefly confined to one or the other sex? Let us turn to the tables in the report. We learn at once that the increase is chiefly noticeable in one sex, and that the female; for whereas, in the male, the numbers vary in a given series of years between increment and decrease, in the female, the former is always predominant. Having thus been shown the location of the increase, our next inquiry is, to what influences is it due? Are the social conditions different as respects women from those under which in former years they were placed. Possibly; but of this it is difficult to hazard a suggestion which might be even approximately true? Still, however, the principle of cause and effect must be at play in a matter such as this, about which no ambiguity can exist. If, indeed, cancer is increasing at the rate to which we have referred, it is conceivable that something is at work to lead to this result; and in reference to this point, we are reminded of the predilection which cancer exhibits for certain organs in the female, as the breast and uterus. Statistics collected by Birkett, West, Velpeau, and others, conclusively showed that the breast and uterus became cancerous chiefly in married women; and still more that their liability to the disease increased with their fecundity. Here then, is a point into which, in connection with this subject, it is necessary to inquire. It is essential for our purpose to assume that greater fecundity is now prevalent amongst women than was the case in former years. Where, however, is the evidence? Let us turn our attention to the record of the marriage-rate, by the side of which is inserted the birth-rate. We find that, in the year 1853, the proportional marriage-rate for 1,000 persons was 17.2, with a birth-rate of 33.2. In 1863 the marriage-rate was 16.3, and the birth-rate 34.1. In 1879 the lowest marriage-rate which has ever been recorded since the compilation of the returns was 14.2, with a birth-rate of 35.0. Thus it would appear from this, that whilst the marriage-rate has decreased, the number of births, as the result of sexual union, has increased. But if fecundity increased a woman's liability to cancer, perhaps we should find that the tables would exhibit a special increment of the disease at some particular period. This is the case. The most marked augmentation of the disease, and, be it observed, the most constant one, occurs between the thirty-fifth and forty-fifth years. Now, in women who have been prolific, the unequivocal manifestation of cancer is generally but little delayed after the cessation of childbearing; hence the figures of the table lend appreciable support to the suggestion at which we have hinted, that in the greater fecundity of women may possibly be found some explanation of the augmented mortality from cancer. The latest returns to which we have had access are those for the years 1878–79–80. In 1878, between the thirty-fifth and forty-fifth years, the number of cases in women was 1,222; in 1879, 1,286; in 1880, 1,298, or a net increase of 76 cases in three years during this period of life. For the sake of comparison, we append a table copied from the Registrar-General's Reports for the years in question, illustrating this point.

DEATHS FROM CANCER AT DIFFERENT AGES, 1878, 1879 and 1880.

Years.	All Ages	Total under 5 years	5	10	15	20	25	35	45	55	65	75	85
1878.													
Males	4207	32	14	20	27	28	122	351	803	1226			
Females	8457	37	14	9	26	36	307	1222	2057	2348			
1879.													
Males	4183	29	51	10	35	39	143	337	1249	1264			
Females	8616	32	52	12	22	37	383	1286	2162	2306			
1880.													
Males	4461	25	17	17	28	38	125	394	1294	1294			
Females	8817	25	13	19	30	38	346	1298	2149	2396			

It has been suggested as probable, that the increment of cancer is more apparent than real, upon the grounds of the greater certainty in diagnosis which at present prevails, and of the exercise of more discrimination in relegating to the proper cause the deaths from the disease. This hypothesis, however, cannot be supported, for the tables set forth in the Registrar-General's reports plainly indicate that the chief increment occurs in women at a time of life during which the recognition of cancer would involve no difficulty. For instance, the diagnosis of carcinoma of the breast or uterus, the organs which, in the female, suffer most frequently from the disease, belongs to some of the most simple questions upon which surgeons are called to express an opinion—a simplicity, indeed, of which the earlier surgeons were fully aware. And, furthermore, we may add that the effect of improvement in diagnosis would rather tend in the direction of limiting than of adding to the mortality from cancer; inasmuch as a skilful diagnosis, by enabling the surgeon to apply, under favourable circumstances, speedy radical treatment, would afford the patient the best chance of preserving life. But, although the strong predisposition to cancer which fecundity creates in the female, may operate, as we have supposed, in augmenting the mortality in the present day, it is conceivable that other influences are at work, to which the same result may in part be attributable. There is, for instance, a close connection between certain nervous conditions and the production of the disease. The eminent author of the *Clinical Lectures and Essays*, states that he has frequently observed that the spontaneous appearance of cancer has been preceded by mental grief or some anxiety of mind. Women, apparently healthy, pass through a period of trouble and anxiety, and subsequently to this, the breast or uterus (it may be) becomes the seat of a cancerous growth. The question might, however, be raised: What is the real connection between what amounts to the influence of the mind upon the body, and the appearance of cancer? Does mental anxiety simply cause a cancerous predisposition to become manifest, and in this way to hurry into existence that which, in time, would have become unequivocally demonstrated; or is it likely that patients, in whom cancer has appeared after mental troubles, would, except for this, have continued in health, and unaffected with cancer? It is needless to pretend that we know more than a very little as to the *rôle* played by the mind in the production of changes in the body. As we can adduce no scientific data upon which to found a physiological or pathological belief, we are compelled to resign ourselves to the unphilosophy of conjecture. There is, however, abundant evidence to show that mental disturbance may be productive of nutritional changes in the body, which vary in intensity. The inhibitory influence, for instance, of mental trouble upon the processes of digestion, which, may be succeeded by exaggerated functional activity of the intestines, as evidenced by the occurrence of diarrhœa, is perhaps one of the simplest examples to which we could refer. So far this is comprehensible; but how are we to explain the outbreak of cancer in a breast, the appearance of which immediately followed a period of mental anxiety, through which the patient had lately passed? How is it that a local cell-growth should suddenly commence to pass beyond its natural limits, and merge into prominence exhibiting characters suggestive of the developmental vitality of the embryo, and this after some perversion of nerve-power which was mental in origin? There is always some degree of "shock" present in all cases of mental grief; and "shock" implies a reduction of nerve power, to an ebb which is co-ordinate with certain phenomenal results, the persistence of which varies with the intensity of the cause. Hence, it is probable, that the depression of power following mental trouble has the effect of deposing the inhibitory influence of a well balanced nervous system, by the action of which the occurrence of morbid phenomena of various degree becomes impossible. It is, moreover, conceivable, that the effect of mental impressions upon the body would, at least in part, be determined by the condition of the nervous system. The higher the development of the nervous system, the more susceptible does it become to impressions from without. In the present state of civilisation in a crowded community, it is becoming more and more the case, that the occupations in which men and women are employed are of such a nature as to develop the nervous system pre-eminently in relation to the rest. In other words, the consumption of nerve-power in the daily routine of life, is not only of high rate, but coincidently with this there is also, in the present day, less opportunity of promoting healthy nervous action. Dr. Handfield Jones writes as follows, in 1864: "It is difficult to form a decided opinion on the matter; but there seems, I think, reason to entertain the belief that failure of nerve-power is much more characteristic of disease of the present day, than of that which prevailed thirty years ago. For this there may be various causes: the greater confinement of large numbers of the population within doors, and often in unhealthy rooms and workshops; the greater struggle to be main-

tained in the battle of life; the greater amount of the commoda vitæ; may all tend to increase the susceptibility of the nervous system, and to impair its resisting power." If, now, we refer to the forty-second annual report, we find that the annual average increase in the mortality from nervous diseases for the decennium 1860–69 was 580, while that for the decennium 1870–79 was 790, or an increment of 36 per cent. in the last ten years. Against this, however, there is the statement in the preface of the forty-third annual report, that the mortality from nervous diseases per 1,000,000 persons in the year 1880 was the lowest on record. It may be for the present there is a lull in this particular mortality; but it is observable, that this record only applies to deaths which have directly resulted from diseases of the nervous system. It obviously takes no account of the deaths from other diseases, the origin and fatality of which have a direct bearing in connection with persons in whom nerve-power is deficient and depraved. And this, taken in conjunction with the fact that the transmission of a neurosal temperament from parent to offspring is apparently sufficiently common in the present day, attaches to the consideration of nervous diseases an importance of no small degree.

"Nervous" patients, so called, usually beget "nervous" children, and the inheritance of the latter usually accompanies them throughout life, unless, indeed, by some means or other, they gradually cease to be less susceptible to its effects. It is conceivable, then, that with a nervous system, the equilibrium of which is easily disturbed, there must be in persons of either sex a greater proneness to exhibit on certain occasions unequivocal results of nerve-disturbances; in other words, a sensitive nervous system augments the predisposition to the production of nerve-disorders, increases the liability to the origination of neurosal effects when any perversion of nerve-power arises, and confers upon disease, when it occurs, a character indicative of the prevailing temperament, by intensifying more especially the subjective symptoms. The late Charles Moore, whose invaluable researches into the subject of cancer threw a flood of light upon the disease, was attracted in 1865 by the rate of increase in the mortality of cancer as prevalent then. He believed that it was owing to the well-being of the nation, and ascribed it to corn laws, good living, to the discoveries of gold, and sanitary improvements. Now a disease such as cancer, which is characteristic of the healthy, may be expected to abound amid conditions of health. Probably, then, its prevalence is greater amongst the rich than amongst the poor. According to Marc d'Espine, this is the case, for whilst in the wealthy classes the proportion of cancer is about 106 in 1000, in the poor classes it is 72 in 1000; or at the rate in the former case of 10.6 per cent., and in the latter of 7.2 per cent.

It has been observed that cancer is more frequent amongst the carnivora than amongst the herbivora. But the means of obtaining data upon this point are so meagre and uncertain, that it has been found impossible to formulate a satisfactory statement. In answer to a letter which I addressed to Mr. Forbes, of the Zoological Gardens, he states that, according to his experience carcinoma is not a common disease in animals in the Gardens, of any class. It is, perhaps, nearer the truth, then, to believe that, whilst occasionally carcinoma may appear in the carnivora, the occurrence of the disease in the herbivora is so rare as to be practically unknown. Dr. Crisp, however, stated in the discussion upon cancer at the Pathological Society, that carcinoma is not at all an uncommon disease amongst the domesticated animals; whilst in wild animals and uncivilised man it is rare; and in 230 of the quadrumana which he had examined, there were no traces of cancer. Mr. Haviland, in 1879, read a paper at the Society of Arts, on the "Distribution of Disease Popularly Considered," in which he stated that the mortality from cancer is highest in those districts which skirt the banks of the rivers of our country, which are seasonably flooded; that the Thames flows through a vast cancer-field; that there does not exist an important river, subject to seasonal flooding, that does not flow through high mortality districts; and he attributes the large mortality to the geographical, together with the climatic-surroundings of the rivers in question. It seems to us, however, that there is some fallacy in supposing this to be the case. It cannot be denied that the death-rate from cancer stands high in the propinquity of certain rivers, but this, we imagine, is for the most part due to the aggregation of towns along their course. If, however, the flooding of rivers were distinctly connected with a high cancer mortality, the record of the rain-fall for the year would probably indicate whether we might expect an increment or a diminution in the mortality from the disease. But a reference to this subject fails to yield any information in support of Mr. Haviland's hypothesis; for whereas, in the eight years between 1872 and 1879, inclusive, the annual rainfall varied between 20.0 in 1874, and 31.3 in 1879, the mortality from cancer shows an actual increase of 2806, or an annual average increase of 350. The comparison, however, between the rainfall for the years we have mentioned, and the mortality from cancer, is so marked, that we append the records of both in the following table—

	Rainfall.	Deaths from Cancer.
1872	30.0	9.993
1873	23.4	10.455
1874	20.0	11.011
1875	28.2	11.414
1876	24.2	11.604
1877	26.9	12.122
1878	29.2	12.664
1879	31.3	12.999

As the seasonal flooding of a river could hardly occur without a due proportion of rain, and as, in spite of the variability of the rainfalls, the increase in the cancer returns, as the table indicates, is year by year maintained, it is conceivable that Mr. Haviland's suggestion, ingenious and interesting though it is, requires further confirmation. Again, analogy would lead us to expect a higher mortality from cancer in the centres of population than in the country. The inquiries, however, made into this subject by several observers, have for the most part shown that this is not the case, and that the disease is not more prevalent among those who reside in towns, than compared with the inhabitants of country districts. The Thames may, nevertheless, be an exception to the rule, considering the enormous population which lives along its course. At any rate, let us hope that, if not this, at least some other and more tangible reason may account for the high cancer-mortality with causing which the river is credited; and that, after all, the Thames itself does not possess a subtle malignity, which, although unproven as it is, nevertheless causes us to look askance with some misgiving when enjoying the apparent innocency of its surroundings between the locks on its course. It is not improbable that the natural mortality from cancer in large towns with hospitals, and notably London, is exaggerated by the immigration of many advanced and hopeless cases which originated elsewhere, as Moore has suggested; and it is necessary, therefore, to take this circumstance into consideration when assigning a special cancer-mortality to a particular district.

Now, the evidence contained in the Registrar-General's Reports, conclusive as we believe it to be of the real increase of cancer, enables us also to determine that this increase is chiefly confined to a period of life commencing at early middle age (thirty-five), and terminating at the seventh decade. We do not find, on referring to the tables showing the mortality from cancer at different ages, that the disease has increased during early life. Speaking generally, we may say that the death-rate from cancer, especially during the first quinquennium, has for many years been constant.

[*To be continued.*]

A SERIES OF ABDOMINAL SECTIONS, PERFORMED DURING 1882.*

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THE following remarks are based upon the work, and the experience obtained from it, which occurred in my practice during the year 1882.

The cases, classified into a table, are as follows:

Operations and Disease.	Cases.	Deaths.	Operations and Disease.	Cases.	Deaths.
Exploratory Incisions	3		For chronic ovaritis	14	2
Operations for cystoma, 33			,, pelvic deformity	1	
One ovary	15		Removal of myoma	1	1
Both ovaries	10	1	Hysterectomy (Porro's operation)	1	
Parovarian cyst	4		Fibro-cystic tumour	2	1
Hydrosalpynx	1		Hæmatocele	1	
Pyosalpynx	3	1	Peritonitis	5	
Removal of uterine appendages, 22			Disease of liver	1	
For myoma	7		Tumour of kidney	1	1

Making a total of 70 abdominal sections, with 7 deaths. Of the patients, 49 were married, and 21 were single.

* Read before the Birmingham and Midland Counties Branch.

There is always, more or less, a difficulty in arranging a series of cases which possess so many features, utterly dissimilar, as are present in abdominal sections; and, in like manner, it seems equally absurd to place together operations of such varying danger and difficulty of performance, even though they are called by the same name. Hence it is that statistics of nearly all operations, but especially of abdominal ones, will be of comparatively little value, because operations are grouped together which have very little in common, both as to ease of performance and prognosis. Take a case of simple parovarian tumour; here we often have the simplest operation imaginable, with a prospect of recovery as almost certain as possible; and then take a case similar to one which occurred to me the other day, where the omentum was largely adherent to the tumour, and so also were eight inches of intestine, which, after separation, bled so profusely from its free convex surface that the vessels had to be stopped by pressure forceps and the actual cautery. Surely, though both these cases recovered, they ought scarcely to be tabulated together, because they have, as in the past, both been called ovariotomies. They are as unlike as possible; the first would have done well under any surgeon's hands, and the latter was one to try the resources of the most experienced operator.

I think Keith struck a true note on this subject, a few weeks ago, when he wrote as follows: "I am sick of ovariotomy statistics..... It is little to me whether my results are better or worse than those of others; it is much to me if I have a single death after an operation, except what may arise from some accidental or unforeseen cause;" and, indeed, whatever may be thought generally of statistics, they are, in my opinion, of little real value, except to the operator himself, and those who have witnessed all the cases which make up a given table.

The three exploratory incisions comprised a case of malignant tumour of the uterus, a myoma, which was incapable of removal or of allowing the appendages to be reached, and a case of chronic ovaritis, in which the ovaries were so shrivelled and, with the tubes, so adherent, as to render it impossible to remove them.

In one case, there was what I looked upon as a transplanted cyst; there was present a small ovarian tumour, about the size of an ordinary orange; it was very adherent, and, in separating it, the fluid escaped into the pelvis. The separation was continued, and it at length came out bodily through the wound, showing no sign of a pedicle. There was some little oozing at the bottom of the pelvis, but, with drainage, the patient did well. That this was an ovarian cystoma was shown by the character of the escaping fluid, and by the presence of a number of small secondary cysts in the wall of the one removed.

In one of the cases of ovarian cyst, operated upon in March, there was present a larger cyst in the inferior layer of the mesocolon, close to its left bend. It was filled with dark fluid, and a quantity of friable fibrinous (?) matter. The nature of this tumour is quite unknown to me. Two drainage-tubes were here inserted—one into the pelvis, and one into the collapsed cyst in the mesentery.

One patient had been tapped thirteen times before coming under observation; here there were no adhesions to the abdominal wall at the seats of puncture, but the pedicle was very long and quite cord-like, and a partial transplantation had taken place to the omentum, causing most extensive hæmorrhage on its separation.

I would very strongly urge the importance of resorting early to operations for removal of ovarian cysts—earlier than is often the case at present. Twelve years ago, it was nearly always thought best to wait until the patient was so worn down by the disease as to be on the brink of the grave. It is surely in accordance with common sense that, the smaller the tumour, and the earlier its removal is performed, the less difficulty and danger there will be. If such a practice were more frequently pursued, intestinal adhesions, twisted pedicle, peritonitis, and suppurating cysts, would be rarely met with.

Of the parovarian tumours, one was gangrenous, with a twisted pedicle, and it was accompanied by pregnancy in the fifth month. The placenta and fœtus came away ten hours after the operation, but the recovery was uninterrupted.

The treatment of certain cases of myoma by hysterectomy was, a few years ago, beginning to be practised; but it gave way, to some extent, to that by removal of the uterine appendages. Although my success in hysterectomy at that time was very good, I have practised the removal of the appendages; but I think now that most good will be found, speaking generally, to follow the removal of the whole mass, when practicable; and results, quite equal to the ovariotomy of ten years ago, may be expected. One of the cases in this series had the appendages removed by me last March. She was not really any better for it, though her tumour, I believe, has not since grown, which it had been doing up to the time I operated. Within the last few weeks, she has been in the Samaritan Hospital, under the care of Dr. Bantock, who has successfully performed hysterectomy on her. In the future, I shall, if at all practicable, prefer the major operation. With the clamp and the extra precautions of to-day, compared with formerly, these operations will be very successful. It would seem to be the case, that removal of the appendages is more likely to be of real benefit in arresting the growth of the tumour, and in preventing the hæmorrhage, in cases of bleeding myoma; and that it is not of the same value in the soft so-called œdematous tumours. For these latter, unquestionably, where practicable, complete removal is the operation indicated.

Only one such case was done by me last year, viz., the one which included "Porro's operation," published in the BRITISH MEDICAL JOURNAL, September 2nd, 1882; and here I would say that, by the adoption of this modification of the Cæsarean section, there need be but little fear of the result, if, in such cases requiring this proceeding, the patient be placed under operation in good time, before she is exhausted and injured by the fruitless efforts at delivery. This is the second recorded case of Porro's operation which has been successfully performed in England; the first was performed the day before by Mr. Knowsley Thornton, in the Samaritan Hospital.

My observation up to now has not led me to associate a cystic, an enlarged, or other condition of the ovaries as specially associated with the development of a myoma in the uterus.

In four of the cases of chronic ovaritis, the ovaries, after removal, were much larger than normal, and weighed:

	Right.	Left.
1.	250 grains.	..... 130 grains.
2.	148 ,,	..... 148 ,,
3.	230 ,,	..... 100 ,,
4.	120 ,,	..... 110 ,,
Average	187 ,,	..... 122 ,,

Recently, each of the appendages weighed, after removal, 360 grains. In such cases, the adhesions are very firm, and are, in my opinion, among the most difficult operations in abdominal surgery. Especially is this the case if the Fallopian tubes be, in addition distended with either serum or pus; in the latter case, there is always the fear of rupture occurring in extraction, with escape of the purulent contents into the pelvis, which, of course, must constitute an additional source of danger. The difficulties encountered in such cases are quite equal to, and tax the surgeon's resources as much as, those of the worst ovariotomies; and there is as much difference between such a case and the operation of oöphorectomy, so-called, or the removal of the normal ovaries, as there is between a very complicated ovariotomy and the removal of a simple parovarian cyst.

Of the six operations for peritonitis, the disease was subacute, and had been in existence for a considerable time without getting beyond a certain stage towards recovery. There was found, when the abdomen was opened, the condition described by Dr. Matthews Duncan as "serous perimetritis." The quantity of fluid varied from a very little to a considerable quantity; this was carefully sponged out; and, in every instance, the patient progressed favourably, and, I believe, each one was quickly cured by the operation.

Of the two fibro-cystic tumours, in one, the stump was thick, and I ligatured it, dropping it into the pelvis. This proved fatal; and I now think that, if I had used a clamp, the result might have been different. In the second case, which occurred in the Kidderminster Infirmary, suppuration had occurred, and the cyst burst in extracting it, spreading all over the abdominal cavity. Two drainage-tubes were inserted, one into the collapsed cyst, and one into the peritoneum. This patient did well.

In the case which proved fatal after the removal of double pyosalpinx, death occurred on the twenty-third day. The patient was quite well up to within four days of her death, when symptoms of acute intestinal obstruction set in, due to mechanical causes produced by previous adhesions within the pelvis. A drainage-tube had been used at the operation. The danger of not operating in these cases lies in the liability of rupture occurring; an accident, in my opinion, not a very remote one. Is it not possible that many of the instances of rapidly fatal peritonitis are due to such rupture? The more frequent recourse to abdominal section has brought about a knowledge of the fact that an attack of so-called "inflammation of the bowels" is often something very definite and tangible in the pelvis. If the attacks recur from time to time, we may often predicate a condition of things which is capable of removal by opera-

tion. I would go so far as to say that, if the patient be suffering from recurring attacks of this so-called inflammation, it will be not only justifiable, but the best practice, to make an exploratory incision, and remove the cause of the trouble, or whatever may be found necessary. Doubtless, many of the cases which are classed as chronic ovaritis are, in reality, at first attacks of pelvic peritonitis, which results in adherent ovary, adherent tube, and the consequent loss of the normal relation between the tube and ovary. Hence the acquired sterility so frequently observed.

The case of disease of liver was in a man to whom I was called, with a view of giving relief by surgical means. There had been a previous history of biliary colic and jaundice, and, with considerable enlargement and a raised temperature, his medical attendants feared the presence of pus. A small incision was made, and the liver was punctured by the aspirator-needle, but it was found to be quite solid. Recovery from this operation quickly followed; and, when the patient died, about eleven weeks afterwards, there was found no trace of cavity or fluid, but very many of the hepatic ducts were filled with black concretions, the gall-bladder being empty.

The tumour of kidney was in a woman, who was very greatly reduced when she came into the hospital. A small exploratory incision was made, and the tumour punctured with the aspirator-needle. It appeared to be quite solid. The patient could not bear even this simple proceeding, and died in about twenty-two hours afterwards. There was found to be an abscess in the substance of the tumour, which proceeded from the right kidney.

During the latter half of the year, I discontinued the use of the spray, and the results obtained were not noticeably different from what had occurred when extreme Listerism was observed. The number of cases is too small to be of any statistical value, but I trust in the future to give a reliable record in this matter. Certainly the cases since I omitted the spray have been of quite, if not more than, the average difficulty and danger. In all these operations, the same care and caution were observed as to cleanliness and the prevention of any putrefactive elements from outside coming into contact with the patient, the spray only excepted, as if Listerism were being practised. To Lister, most of the success attending such cleanliness is, in my opinion, due. Compare a non-Listerian operation of to-day with the manner in which the same was performed ten or a dozen years ago.

In twelve out of the seventy cases, drainage was used. This seems a large number, and an ardent observer of Lister would say that it would not have been necessary in nearly this number of times, if stricter precautions had been used. Of course, drainage is to be looked upon as only another means of preventing the retention of putrefactive elements in the body. One reason for my having used the drainage-tube so frequently may, I think, be that, having been for some years an ardent disciple, perhaps an enthusiastic one of Lister, I have been afraid at once, on suddenly discarding what I have been regarding as a sheet-anchor, to close up a wound where I expected there to be more oozing than I believed to be safe. In regard to the use of the drainage-tube, some judicious management is required. When the discharge from the syringe, having been for some hours fairly copious, suddenly ceases to come up, septicæmia may develop in consequence. This condition arises from the bottom or the openings in the side of the tube becoming blocked up, and should be obviated by withdrawing the tube, and, after cleansing, reinserting it, or placing a smaller tube in its place. I have a strong suspicion that one of my deaths, in the two of chronic ovaritis, was to be attributed to want of care in this matter.

It is very remarkable how soon the tube makes for itself a passage surrounded by lymph; and this passage appears also very quickly shut off from the general cavity of the peritoneum. Very probably, as time goes on, I shall drain less frequently, but I shall never hesitate to do so if there be any doubt. The Listerists consider draining to be much less frequently necessary, and perhaps it is so; but I have not yet been able to shake off a feeling of the necessity for frequent draining if the spray is not used.

Using the two words in their fullest sense, it would almost seem that we may be confident of our patient's recovery if we will keep her peritoneum "clean and dry." This is the practical position of affairs for us as surgeons, although we know that in reality a considerable amount of exudation, and even of blood sometimes, must be effused in many cases, and absorption will follow, with subsequent recovery.

Of the seven deaths, three were patients in whom drainage was practised. One died on the twenty-third day from obstruction of the bowels; one from what I cannot help thinking imperfect management of the tube, the fluid, from being copious, suddenly ceasing to flow; and the third death I could not discover why it occurred; the case was the removal of a myoma with adherent intestine, which had to be stitched up.

At one time, a good deal of importance was attached to performing abdominal, and, indeed, all operations in the pelvis after, rather than before, the monthly period, when the menstrual cycle is on the ebb rather than on the flow. I have of late not regarded this, and, in some instances, have found that menstruation has come on the day before, or even the morning of the operation. No ill results have, however, followed the performance of the operation.

ALBUMINURIC RETINITIS OF PREGNANCY.

By A. EMRYS-JONES, M.D.,
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THIS subject, which has been very briefly introduced by Mr. Salter in the JOURNAL for February 24th, 1883, is one of considerable interest, and one that has been but little noticed in ophthalmic or general medical literature. I propose, therefore, to report a few cases which have come under observation.

CASE I.—S. W., aged 25, was first seen March 4th, 1878. She first noticed her sight bad and eyelids puffed eight weeks ago, *i.e.*, three weeks before her first confinement. She had no pain nor headache. Vision: right eye, $18\frac{6}{9}$; left, $16\frac{6}{9}$. The pupils were wide. Ophthalmoscopic appearance: right eye, the disc was pale, with fairly defined margins; the veins were slightly distended. There were numerous exudative white patches all round the disc, and extending into the region of the yellow spot. Left eye, the margins of the disc were not so well defined; the patches were far more numerous and larger in size, especially around the yellow spot, where two or three small hæmorrhages could be detected. The urine was pale, specific gravity 1017, highly albuminous. This patient never came again, and the address given was inaccurate.

CASE II.—L. T., aged 38, soldier's wife, was first seen April 26th, 1878. She had four children living, and had had four miscarriages, the last a fortnight ago. There was a large quantity of albumen in the urine. Vision: right eye, $1\frac{6}{24}$ with $+30 = 1\frac{6}{18}$; left, $4\frac{6}{60}$; no glass improved. Ophthalmoscopic appearances: in both eyes were numerous glistening white patches around the yellow spots, and scattered over the retinæ, and also hæmorrhagic patches. June 4th, 1878, she was considerably improved in health, but the urine still contained a quantity of albumen.

CASE III.—H. E., aged 37, was first seen May 3rd, 1878; has had five children; the last was born last February. During her last pregnancy, she had very bad health, and suffered a good deal of pain in the loins and back. She suffered greatly from thirst, and had to micturate very frequently. Her sight was also very bad. At the above date, the vision was: right, $1\frac{6}{12}$; left, $19\frac{6}{9}$. Ophthalmoscopic appearances: the right eye was normal; left, there were glistening white patches around the yellow spot. There was abundant albumen in the urine. The heart was normal. She was ordered tincture of perchloride of iron.

December 5th, 1881. Vision: right, $6\frac{6}{9}$ with $+24 = \frac{6}{9}$ with $+18 = 1$; left, $16\frac{6}{6}$ with $+18 = 14$ letters. There was no albumen in the urine.

September 16th, 1882. The vision in the right eye was the same as left, with $+14 = 10$. With the ophthalmoscope, I could not detect any exudation or patches over the left macula. The optic nerve was a little paler than the right. There was no albumen in the urine.

CASE IV.—A. G., aged 32, was first seen September 27th, 1881. The left eye had been lost from an old accident. The right eye had been very good up to the last three weeks. She had complained of dimness; she said she saw everything foggy and misty. Vision: right eye, $1\frac{6}{9}$ *vix.* The ophthalmoscope showed numerous exudations and punctiform hæmorrhages around the macula. Albumen was present in the urine. She expected her confinement in about three weeks.

October 14th, 1881. She was confined; had an easy labour. The child was puny, and only lived fifteen days.

November 22nd, 1881. Vision in the right eye, $1\frac{6}{9}$. Nearly all the exudations and hæmorrhages had disappeared, and only a very small trace of albumen could be detected.

CASE V.—E. W., aged 25, was first seen November 30th, 1880. She had been married three years, and had one little girl aged 2; she had a still-born babe nine months ago. She said that, up to two months ago, she was in good health. She noticed she was pregnant; she

was very sick in the morning, and vomited a good deal. She expected to be confined in two months. There was no pain in her eyes. Vision: right eye, $20\frac{6}{6}$; left, $20\frac{6}{6}$. The ophthalmoscope showed numerous exudations and hæmorrhages over both retinæ. There was a large quantity of albumen in the urine. I have heard since that the confinement was normal, and that her sight improved.

CASE VI.—M. H., aged 43, was first seen November 25th, 1881. She had had four children, one living. Last August, she felt the usual symptoms of pregnancy, and, a short time afterwards, a dimness of vision. Vision: right eye, $16\frac{6}{24}$; left, $16\frac{6}{12}$. The ophthalmoscope showed optic neuritis, with well-marked exudations and hæmorrhages. There was abundant albumen in the urine. The last report I heard was, that she was better.

CASE VII.—E. J., aged 29, was first seen May 2nd, 1881. She had been married seven years; her first child was born six years ago, still-born; the next and only child, born two months ago, lived only two days. She had had no miscarriages. Vision failed a week before confinement. When seen, it was, in the right eye, $10\frac{6}{18}$; in the left, $10\frac{6}{36}$. No glass improved for distance. The ophthalmoscope showed numerous glistening patches and hæmorrhages around the macula in both eyes. The urine was slightly albuminous, of specific gravity 1025. Lithates were abundant. The heart was normal.

June 9th, 1881. Vision, with the right and left eyes, normal; the patches were less.

REMARKS.—Several of these cases occurred in the practice of my colleague, Dr. Little, to whose courtesy I am indebted for permission to publish them. I have also to thank our house-surgeon, Mr. Griffith, for notes of Case VII.

The prognosis in these cases is generally good, so far as the vision is concerned. Sometimes, patches of choroidal atrophy remain, and diminish the acuteness of vision considerably. As for treatment, I have generally advised the patients to be extra careful of their general health, and to take iron in some form.

I hope that these notes will induce practitioners to take careful notes of the presence of albumen during pregnancy, and the effect on the labour itself, and on the general health of the patient afterwards. The subject is one full of interest, and which I hope to discuss fuller at an early date.

RHEUMATIC ENDOCARDITIS.

BY T. J. MACLAGAN, M.D.

To one or two points in connection with the above subject, touched on in Dr. Sansom's Lettsomian Lectures, published in recent numbers of the JOURNAL, I would like to direct attention.

In speaking of rheumatic endocarditis, Dr. Sansom quotes and endorses the two practical reasons which I give for the failure of the salicyl compounds to counteract the cardiac, as they do the arthritic, inflammation: first, that the cardiac mischief has generally commenced before the patient comes under observation; and, second, that rest, which is essential to the recovery of an inflamed organ, and which is easily got in a joint, is unattainable in the heart. The first reason makes prevention impossible; the second is a bar to successful treatment. But, though this is true, it does not express the whole truth.

That a joint generally recovers from rheumatic inflammation, and that the heart does not, is a statement which expresses the broad results of clinical experience, but expresses them in a manner which, from a pathological point of view, is bald and misleading. The truth is (and striking as the statement may appear, it is absolutely correct) that everything which recovers in a joint recovers, also, in the heart. The one structure in the heart which does not recover, the endocardium, is also the one which has no analogue in any of the structures of a joint. In studying the pathology and treatment of rheumatic endocarditis, it is essential that this point should be kept before us; if we fail to do so, we are sure to fall into error.

The parts which suffer in a joint in acute rheumatism are the fibrous ligaments and tendons, and the synovial membrane. The parts which suffer in the heart are the fibrous rings and valves, the endo-and peri-cardial membranes, and occasionally the muscular substance.

The fibrous rings and valves are similar in nature and function to the fibrous structures of a joint. Each is apt to be the seat of rheumatic inflammation and, in both, this inflammation is generally recovered from.

The pericardium finds its analogue in the synovial membrane. Each is very vascular; each secretes a lubricating fluid; and each has for its function the facilitating the movements of a solid body. Each, too, is apt to be the seat of rheumatic inflammation; in each the inflammatory process tends to spread; and in both the tendency is to recovery.

The endocardium has no analogue in a joint. There is nothing in a joint which bears the least resemblance to it, anatomical or physiological. It is a non-vascular membrane, in which inflammation cannot, and, as a matter of fact, does not, spread. In nature and function, it is identical with the lining membrane of the blood-vessels, with which it is structurally continuous.

When it is affected in acute rheumatism, there is no general inflammation of its surface, such as is found in the pericardium and synovial membrane; the mischief is limited to a small portion of one surface of the affected valve. I have elsewhere* shown that the occurrence of the lymphy deposit which constitutes the endocardial lesion in acute rheumatism, and its limitation to one particular portion and to one surface of the valve, are to be explained, not by the direct action of the rheumatic poison on the endocardial lining, but by the mechanical rubbing against each other of valvular segments, whose deeper fibrous structures are the seat of rheumatic inflammation and thickening. This thickening of their fibrous structure it is which makes the valves rub; and the rubbing it is which irritates and roughens the membrane that covers them externally. The inflammation and thickening of the fibrous structures of the valve may be recovered from. What is not recovered from is the roughening of, and lymphy deposit on, its non-vascular endocardial covering. This is not recovered from, because the continued action of the valve keeps up the rubbing and mechanical irritation, and because the want of blood-vessels in the endocardium prevents absorption. This is a condition over which no drug could possibly exercise any control. It is directly of mechanical, and only indirectly of rheumatic, origin.

But it is by no means certain that we may not in some cases, by the early and free administration of the salicyl compounds, prevent the inflammation, and consequent thickening, of the fibrous texture of the valve, which is the origin of all the mischief. If we see a case early enough, and give these compounds freely enough, we may prevent the heart from suffering, as we undoubtedly do prevent joints from suffering. In no given case, indeed, can we be sure of having got this result; for the absence of heart-mischief can never be demonstrated to be due to the treatment. The possibility of such a result, however, is worth striving for; especially as the means of attaining it are also those called for in the interests of the joints. What is wanted, is the speedy arrest of the rheumatic process. This object can be attained only by giving one of the salicyl compounds in large and frequently repeated doses.

This leads me to remark that my recommendations in this respect have not been acted up to. What I recommend is, that from 20 to 40 grains should be given every hour for six hours, or until pain is relieved (which it generally is within that time), and that the same dose should then be given every two hours till the pain is gone and the temperature at or near the normal (which is generally the case within 24 hours). After that, the same dose is given at widening intervals of three, four, and six hours, for ten or twelve days.

But instead of giving it thus freely and largely, most observers are content to give only from 15 to 20 grains every three or four hours. That is quite an inadequate dose, and not nearly enough to give the full curative effects of the drug. I would again urge the use of the dose which I recommend. I do not exceed my right in asking that my treatment should be carried out in all its details before its results are subjected to criticism.

Salicin is the preparation to which I give preference, not because I regard it as superior to salicylate of soda as an antirheumatic, but because it may be given in large and frequent doses without causing such disturbance of the system as not unfrequently follows the use of the salicylate, and necessitates its suspension. My experience, too, is that those treated by salicin (which is a bitter tonic) convalesce more rapidly than those treated by the salicylate.

There is an impression abroad that it is very expensive. It is not so. Two of the chief English manufacturers of it have told me that they are prepared to supply it to hospitals and dispensaries at 10s. 6d. a pound. Convalescence is so much more rapid under its use, that I am not sure that it would not, in the long run, prove cheaper than salicylate of soda.

* *On Rheumatism: its Nature, its Pathology, and its Successfu Treatment.* By T. J. Maclagan, M.D. Pickering and Co. 1881.

But, whichever is employed, let it be given in large and frequent doses. I make this appeal in the interest of the heart as well as of the joints. Let every case of acute rheumatism be regarded and treated as one in which heart-complications may possibly be prevented, and it is probable that in some cases they will be prevented. But every hour is of importance, for it needs no argument to show that the danger to the heart is less in a case in which the course of the disease is arrested within 24 hours, than it is in one in which three or four days are expended in the process.

The fact has never been accepted by the profession that the course of acute rheumatism may in many cases be arrested within 24 hours of the time that treatment commences. The recognition of that fact is the keystone to all possible success in the prevention of cardiac complications.

CHEMICAL ANALYSIS OF WATER AND WATER SUPPLY.

BY CHARLES T. KINGZETT, F.I.C., F.C.S.

ATTENTION has been recently directed in this JOURNAL to certain investigations, from the results of which it is apparent that "polluting material, potent for harm," may be present in a water, the analysis of which would indicate it as of "extraordinary organic purity." I believe that this fact is recognised by all chemists, and most chemists will admit that an infected water may as readily pass one method of water-analysis as another. There can be no doubt that, while chemical analysis may throw much light upon the history of any particular water, and particularly if an investigation be made (as it always should be) of the source of the water, the methods at present employed by chemists are powerless to discover the presence of disease-germs in water.

Since discussion of this subject has in a manner been invited in these columns, I venture to make reference to some remarks upon Organic Matter in Water, which I published at the time when Dr. Tidy was endeavouring to obtain the confidence of chemists and others in that particular process of water-analysis which he prefers to employ. I pointed out (*Chemical News*, vol. xli, p. 254), upon the basis of new experimental evidence, that it was possible to add a certain amount of organic matter to water, after which it would pass Dr. Tidy's process as of "great organic purity," and yet could subsequently become putrid (and therefore pernicious); in which state, judging by the sense of smell alone, or that and the use of the microscope, it would be unhesitatingly condemned by all analysts. Some time before this, I had been investigating some points in the chemical history of putrefaction (*Journal of the Chemical Society*, 1880, p. 15), and, in course thereof, I had come into contact with facts which seemed to me to destroy the very ground upon which the "oxygen process," as defined by Dr. Tidy, rests. For instance, he says (*Journal of the Chemical Society*, "At any rate, it (the oxygen process) undoubtedly furnishes us with exact information as to the relative quantities of putrescent and easily oxidisable matters, and of non-putrescent or less easily oxidisable matters, present in the water." Now, my experiments clearly proved that the oxygen process can do nothing of the kind, for they demonstrated the fact that a water may contain at one time organic matter (extract of meat) in a non-putrescent condition; and that, when these same matters—excellent food originally—shall have become pernicious, the water will absorb far less oxygen than originally. My contention was supported by Mr. Charles Ekin, but neither then nor since has Dr. Tidy in any way confronted this difficulty; he has contented himself with what, for all that can be proved to the contrary, seems to be a merely accidental coincidence between the general indications of the permanganate method and Dr. Frankland's combustion process as applied to water-analysis.

My experiments showed that it is possible to introduce 50 fluid grains of a putrid extract (such as I had described) into a gallon of chemically pure water, without taking it out of Dr. Tidy's class of "waters of great organic purity." Similarly, 170 fluid grains could be introduced with the result of obtaining a water of "medium purity," and 255 fluid grains would only make the water of "doubtful purity." The putrid extract here referred to was swarming with organisms, and doubtless contained sepsin, which Dr. Burdon Sanderson has proved to be a blood-poison. In the face of these facts, what reliance can be placed upon the oxygen process of water-analysis? Having asked the question, I will also answer it by saying, None.

Apart from that general information which the chemist may obtain from the examination of waters by the well known methods, he can get no information of a precise character. Which way then shall we take to arrive at the information we seek? At present the way is not clear, but Dr. Angus Smith, in his extremely interesting paper (*Sanitary Record*, February 15th, 1883), has, I think, wandered near to it. Unfortunately, the method which he describes, admits, so far, of no quantitative expression. If we could take a measured quantity of suspected water, and introduce it into a medium in which such organisms as it contained would effect certain decompositions, the products of which we could determine by measure or weight, we should be well advanced in our task, although not at the end of it; for it would still remain to ascertain if any particular product of decomposition or fermentation may be taken as indicative of the work of a particular organism, and finally, we should have to determine if such organism, being thus far identified, is to be feared as the propagating cause of a particular disease.

Forced back in this way upon well ascertained general truths, the policy to be pursued as concerns water-supply, above all things should not be experimental. We well understand the danger of contaminating our rivers with filth which breeds disease, and we also well understand the enormous difficulty and cost of finding and using another source of supply for the metropolis. In this quandary it is not surprising if we involuntarily turn to the system of water carriage now almost universally in use (thanks to engineers), as the source of all this trouble, and I, for one, think that the shortest way out of the difficulty is to return to the dry closet system, taking advantage of chemical means (of which there are plenty) to prevent the excreta from becoming a source of pollution and disease. Our water-courses would then, in due time, reassume their original purity; we should be no longer exposed to the puffs of gas, loaded with disease-germs and poisons, which escape from the sewers into our houses, and from the ventilators into our streets, and we should cease to commit the enormous folly of throwing into the sea those valuable substances which, in the natural order of things, should be immediately returned to the soil which grows our food.

SURGICAL MEMORANDA.

GUNSHOT-WOUND OF THE ABDOMEN.

IN his very interesting history of a case of penetrating gunshot-wound of the abdomen, published in the JOURNAL of May 31st, Professor Buchanan states that he has been unable to find an example of "a bullet entering near the umbilicus, and making the half circuit of the body." As I came across a case somewhat of that nature a few years ago, I venture to send the following brief particulars.

During the engagement which followed the successful surprise of the village of Suppri, on the north-west frontier of India, on February 15th, 1878, a sowar of the Queen's Own Corps of Guides was struck by a bullet in the back. I saw the man, who was but two or three yards from me at the time, stagger, and expected to see him fall. He remained standing, however, and called out to me that he was wounded. Having given directions to the hospital-assistant as to his disposal, and mentally noting that the wound could be only a slight one on account of his being able to walk down a steep hillside with but little help, my attention was soon directed elsewhere. Some hours later, when the force had recrossed the frontier, and I could make a detailed examination of the wounded, I found the sowar above mentioned in bed, lying on his back, with his legs drawn up, and his face expressive of acute suffering. My first impression on seeing him in this state was, that the bullet had penetrated the abdominal cavity. There was not, however, the marked collapse usually attending so grave an injury. The bullet had penetrated the lumbar muscles on the right side of the spine, an inch from the middle line. Having stripped the abdomen with a view to a careful examination, as my fingers passed over the hepatic region a slight prominence was encountered, of such firm consistence as to at once lead to the conclusion that it was the bullet. A small incision over the spot was at once made, and a round bullet extracted to the great delight of the patient, and the immediate relief of his suffering. Both wounds healed in a few days, without any suppuration of the track made by the bullet. In this case, a round bullet travelling most probably with slight velocity, was deflected by the lumbar fascia, and very nearly made the half circuit of the body, as the site of extraction was two inches from the middle line in front immediately below the false ribs.

A. S. MALLINS, A.B., M.B., M.Ch., late Surgeon A.M.D.,
Walton, Norfolk.

OBSTETRIC MEMORANDA.

TRUE KNOTS OF THE UMBILICAL CORD.

On March 31st, I was sent for to attend Mrs. W., a secundipara. On my arrival, I found the membranes ruptured, and the head of the child presenting in the first position. The woman had a very easy labour. The child (a boy) was alive, though covered with a caul, and the cord, twisted once round its left arm, measured thirty-three inches and a half from umbilicus to placenta, and had a knot midway between the two, which was drawn tight. As to the cause of the knot, and when formed, I think it due to the length of the cord, the child slipping through a loop of it while moving *in utero* during the earlier months of pregnancy. The length of the cord, the easy labour (thus preventing any tension of the cord), and the tightness of the knot, are conclusive evidence, in my opinion, of the knot having been formed before labour.

Knottingley. FRANK SALTER, L.R.C.P., L.R.C.S.Ed.

PREVENTION OF LACERATION OF THE FEMALE PERINÆUM.

In the JOURNAL for March 31st, Dr. Trestrail, writing on the above subject, says, "I recommended what Dr. Duke now suggests." However, as he goes on to describe "continuous extension," I beg to say that my mode of treatment differs essentially. I stated most distinctly that I only use "extension" (or traction on the perinæum) during a pain, and only while it lasts, in order to imitate nature as much as possible, the action of the uterus being intermittent, and so practically analogous to the intermittent traction on the perinæum, which I advise; I cannot but think there would be great difficulty in getting patients (more especially primiparæ, in private practice at least) to submit to "continuous extension," as it would be decidedly objected to during the intervals between the pains. And as I have always found the intermittent traction on the perinæum fulfil the object in view (done in time), there can be no necessity for the "continuous extension," which to my mind is very analogous to the continuous contraction of the uterus set up by the use of ergot in labour, which constitutes one of the greatest objections to its use. ALEXANDER DUKE, M.K.Q.C.P.

CLINICAL MEMORANDA.

EPISTAXIS: HÆMORRHAGE THROUGH THE LACHRYMAL DUCT.

MR. S., aged 50, with mitral disease and albuminuria, sat out one of our recent sunny days, and caught a chill, which culminated in an attack of bronchitis and a relaxed state of the fauces and uvula, producing severe spasmodic cough; during one of these paroxysms, epistaxis, from the right nostril especially, came on rather profusely, and I was sent for. There was no difficulty in arresting it by plugging the anterior nares with dry lint. In two or three hours, after a severe cough, the hæmorrhage returned, and a messenger was sent to me, saying the bleeding had come back, and blood was running out of his nose and eyes. I found that the blood had welled up through the right lachrymal duct, and was suffusing his eye, so that he was constantly obliged to wipe it, and the handkerchief was pretty well stained with the blood, and the discharge only ceased when the nose ceased bleeding.

I have never met with the phenomenon before, neither have others to whom I have mentioned it; and so, I think, perhaps it is worth recording. D. HOADLEY GABB, Hastings.

DETECTION OF MINUTE TRACES OF MERCURY. — Professor Merget, of Bordeaux, describes (*Detroit Lancet*) an extremely sensitive reaction for mercury. It is especially adapted to the detection of traces of mercury in the urine, and in the blood and tissues of animals that have been poisoned by mercurial vapours. A sheet of bright copper foil is partially immersed in the fluid to be examined, and allowed to remain for some hours. A piece of paper is prepared by rubbing it with some cotton which has been impregnated with an ammoniacal solution of silver, and then allowed to dry; when the copper strip is removed from the liquid, it is dried by pressing it between folds of filter paper; these are enclosed between folds of silk paper, which is then covered again with the prepared paper, and placed between the leaves of a large book. In a few minutes, the silk paper becomes stained with a deposit of metallic silver by that portion of the copper which has been immersed in the mercurial solution.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CARCINOMA OF THE ŒSOPHAGUS: GASTROSTOMY: RECOVERY FROM THE OPERATION: DEATH THREE WEEKS AND A HALF LATER.

(Under the care of Mr. HENRY T. BUTLIN, Assistant-Surgeon to the Hospital.)

F. R., fifty-nine years old, a tailor, was first seen in the department for diseases of the larynx at the beginning of August 1882. He was a tall man, very thin and weak, who complained that he had been unable to swallow any solid food for the last six months, and that he had increasing difficulty in swallowing liquid food. In consequence, he had lost between two and three stone weight. He had never noticed any difficulty in swallowing until an orange-pip had been suddenly arrested in the gullet six months previously; from that time his symptoms had increased in severity.

The larynx was examined without discovering anything abnormal. An œsophageal bougie was arrested about fourteen inches and a half from the teeth—in other words, close to the cardiac orifice of the stomach. There was not any swelling in the throat, nor was there any tumour in any part of the body within reach of examination.

He was admitted into the hospital, and a second careful examination made, with a like result. Between August 9th and 15th, he lost two pounds and a half weight, although he swallowed a fair amount of fluid food.

Gastrostomy was performed, through Bryant's incision, on August 19th. The stomach was grasped without difficulty, and what was thought to be a portion of its anterior aspect, near the greater curvature, and nearer the cardiac than the pyloric extremity, was stitched with silk and wire sutures to the abdominal wall. The edges of the wound were protected by fastening the sutures over pieces of elastic catheter, and the entire operation was performed antiseptically. He recovered quickly from the operation, and during the next few days was fed solely by the rectum.

August 23rd. The wound was dressed under the spray. Union appeared to have taken place between the stomach and the parietes. The edges of the wound in the abdomen had also united, and required to be separated with a director.

August 24th. The silk sutures were loosened on account of the strain upon them.

August 28th. The stomach was opened with a bistoury, and a catheter introduced. From this time, he was fed through the tube in the stomach, but took, in addition, a certain quantity of food by the mouth. Ever since the operation, he had complained of pain of a dragging character in the abdomen about the region of the wound. This pain still continued.

On August 31st, he spat up a little blood-stained offensive mucopurulent fluid, and complained of burning pain at the pit of the stomach. During the next few days, he was fed as much by the mouth as through the tube, on account of the pain in the stomach, which was increased by the direct introduction of food. He slowly sank from exhaustion, and died on September 12th, having, during the last few days, refused to be fed through the wound.

The necropsy was very carefully made and recorded by Mr. Gill. The last inch of the œsophagus was occupied by a stricture, which was ulcerated in two places. It was wide enough to admit a probe. Higher up, between the œsophagus and the right bronchus, was a mass consisting apparently of cancerous mediastinal glands. The opening in the stomach was not situated where it had been thought to be, but within a very short distance of the pyloric end. The stomach was firmly united to the abdominal wall, and there was no trace of peritonitis. All the other viscera were normal. On the right side of the neck was a deep-seated abscess, which had formed some days before death, apparently as the result of cold. This abscess had added to his sufferings.

REMARKS BY MR. BUTLIN.—I have for a long time past intended to publish this case, but have been immediately stimulated to do so by the accounts which Mr. Marsh and Mr. Page have recorded of two cases of gastrostomy, one in the JOURNAL (March 31st, p. 617), the other at the Pathological Society (see BRITISH MEDICAL

JOURNAL, March 31st, p. 622). In these cases, as well as in my own case, recovery from the operation took place; and I quite agree with Mr. Marsh that these and similar cases which have been lately published prove that, so far as gastrostomy for malignant disease of the œsophagus is concerned, we are in the possession of new powers. These new powers have been acquired, chiefly, by the method of delaying the opening of the stomach until adhesions have been established to the edges of the wound in the abdomen—a method for which I believe we are indebted to Mr. Howse. Of course the operation is only palliative, and cannot add more than a few weeks or months to the patient's life. Yet I hope and think Mr. Marsh has taken too gloomy a view of the advantages to be derived from it.

In performing gastrostomy for malignant stricture, two distinct objects must be kept in view: first, longer life; second, relief of suffering and easier death. If neither of these objects has been attained, the operation had better never have been practised; but if either of them, especially the second, has been gained, the opening of the stomach has been thoroughly justified. In none of these three cases does life appear to have been lengthened by gastrostomy; nay, it must probably be admitted that the lives of two of these patients were slightly shortened by it. But two of the patients were rendered much happier by the operation, which relieved entirely the miseries of intense hunger. Mr. Marsh has, with characteristic modesty, forborne to tell how much satisfaction his patient derived from the direct introduction of food into the stomach, and how he expressed himself as being now "as happy as a king." To the end of his life, I think he never again suffered from hunger. Mr. Page's patient gained flesh after he was fed through the wound. Now, my patient was not at all relieved by the operation; nay, he was worse after it than before; for, whereas he had been previously free from pain, he suffered so much after gastrostomy that he would not permit food to be introduced through the opening. It is to draw attention to this fact, and also to the cause of the pain, and the best means of preventing it in other instances, that I publish the case. The pain was almost certainly occasioned by the short distance of the opening in the stomach from the pyloric end. If the opening had been about the middle of the great curve, or even nearer the cardiac end, where the stomach is less firmly fixed, the constant dragging pain would not have been experienced. To ensure, as far as possible, a better result in future, I shall adopt the vertical incision through the semilunar line, and shall examine the stomach with greater care to test its mobility, and to discover exactly the part of it with which I am dealing.

BIRMINGHAM WORKHOUSE INFIRMARY.

(Under the care of Dr. CORNELIUS W. SUCKLING.)

Case of Myxœdema.—M. T., aged 45, machinist, a married woman, was admitted on February 1st, suffering from a condition resembling œdema of the face, and having the aspect of chronic Bright's disease. Her father died from diabetes, her mother of dropsy. The patient had had very good health till about fifteen years before admission, when she was said to have had syphilis (from her husband). Ten years ago she began to drawl in her speech, and her eyes became puffy. This continued up to the time of admission. Her condition on admission was as follows. The face looked œdematous, but did not pit on pressure. The skin was translucent, with a pinkish tinge on each cheek. There was a solid œdema of each eyelid; the lips were red, and the tongue, which was large and pale, was moved slowly. The uvula and tonsils were not enlarged. The skin was everywhere dry and rough, with desquamation in places. The hands were swollen; the lower extremities appeared to be swollen, but did not pit on pressure. One third of a grain of pilocarpin, injected hypodermically, produced no effect, either on the salivary glands or on the skin. She stated that she improved in warm weather, and was worse again in cold; she explained this to mean that she could move about better. The patient answered questions slowly, she slurred her words, and spoke as if there were something in her mouth. There was no mental deterioration to be perceived, but she said that her memory was defective. She walked slowly and was feeble, but there was no dragging of the toes or incoordination. She was slow in all her movements. The patella-reflexes were diminished. The response of the muscles to faradism was much diminished; contractions could only be obtained with currents which caused her great pain. Localisation of sensation was not impaired, but there was slight analgesia and the discriminative sensibility of the skin was diminished. The conduction of sensory impressions was retarded. The urine was pale, of specific gravity 1010, and acid; it contained no albumen, nor sugar. The quantity passed was greater than natural, averaging seventy ounces daily. The heart was not enlarged, there were no signs of hypertrophy, but there was accentuation of the aortic sound. The pulse was slow (60) and not easily compressed. The temperature varied between 97° Fahr., and 98° Fahr.; after being examined, her temperature went up to 100° Fahr. Ophthalmoscopic examination showed nothing abnormal in either fundus. On a second occasion, the injection of pilocarpin was followed by sweating.

REMARKS BY DR. SUCKLING.—I thought the case was one of granular kidney, but on finding that the œdema did not diminish, and that her speech was peculiar, I carefully took her history. She is now (March 5th) taking nitro-glycerine. I still am of opinion that the kidneys are granular—from the accentuation of the second aortic sound, low density and large quantity of urine.

Case of Tubercular Peritonitis.—J. B., aged 45, a butcher, had been ailing for some considerable period. He had been very dissipated, and a heavy drinker of both beer and spirits. The patient stated that, about a week before admission, he felt low and weak; that he perspired a great deal; and that his abdomen was large and hard. He also had difficulty in passing urine, and had suffered from pain over the heart. There was no history of syphilis. His condition on January 5th was as follows. The abdomen was greatly enlarged, oval, and tympanitic; it contained some fluid, but not much. The superficial veins were not enlarged. The umbilicus was effaced, but not everted. Meteorism was excessive. There was only slight tenderness, but the patient complained of a general soreness over the abdomen. The circumference of the abdomen, at the level of the umbilicus, was thirty-eight and a half inches; opposite the ensiform cartilage it was forty-one inches. The urine was loaded with urates, but contained no albumen nor sugar. The liver and spleen could not be mapped out, on account of the excessive tympanites. The temperature was 100° Fahr., and the pulse small and quick.

January 6th. Meteorism was greater; the respirations were 28; the pulse 108, small and compressible; the temperature was 102.2° Fahr. The patient, from this time for about ten days, was much better. The meteorism diminished under the influence of belladonna and nux vomica; but there was diarrhœa—five or six unformed motions daily. The temperature was normal.

January 17th. The patient's temperature had again risen. He vomited seven or eight times. The stools were ash-coloured. The tympanites were much diminished. The intellect was clear, and he complained of sore-throat; sordes were present on the lips and tongue.

January 26th. He died quietly from asthenia.

Cirrhosis of the liver was suspected from the history and appearance of the patient, and from the quantity of urates in the urine. Diarrhœa was a prominent symptom throughout the disease, with occasional vomiting.

Necropsy.—The peritoneal cavity contained a considerable amount of fluid, of a dark-red colour (blood); at certain parts there were collections of clear straw-coloured fluid, with flakes of lymph. The great omentum was much thickened and retracted, forming a transverse band across the abdomen, consisting of fat and fibrous tissue. It was exceedingly tough, and covered with hæmorrhagic exudations. The peritoneum presented some hæmorrhagic exudation in various parts, especially in the left hypochondrium. The mesentery was thickened and retracted, and the whole of the peritoneum was studded with myriads of miliary tubercles. The liver weighed seventy-three ounces; the ligaments were much thickened and shortened. It was tough and hard, and its surface mammillated, being both fatty and cirrhotic. The spleen weighed sixteen ounces; it was congested, but not tough. The kidneys and the lungs were normal. The heart weighed only ten ounces, and was small for the size of the man. The right ventricle was dilated, and some fibrous pericarditis was present.

REMARKS BY DR. SUCKLING.—I must mention the fact, that the man had been in the Infirmary previously, suffering from some obscure cardiac mischief. The case is of great interest, since the tuberculosis was limited to the abdomen; and I believe tuberculosis of the peritoneum is exceedingly rare at this age, and in a patient free from lung-mischief.

THE New Batley Cottage Hospital, which has been erected by subscription, at a cost of nearly £5,000, was formally opened by the Earl of Wilton, the lord of the manor, on Tuesday, in the presence of the Mayor and Corporation and a large number of the principal residents.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 10TH.

JOHN MARSHALL, F.R.S., President, in the Chair.

Nævus of the Rectum proving Fatal in the Adult from Hæmorrhage. By ARTHUR E. J. BARKER, F.R.C.S.—This case was offered for special consideration on the following grounds: 1. On account of its rarity; no similar case being known to the author after careful search. 2. On account of the gravity of the condition in this special instance, in which, in a particularly strong and healthy adult, slow death from bleeding was the result. All the symptoms usually met with in those dying of loss of blood appeared to be present here. Beyond these, there were few special symptoms noticed as dependent on the condition. The patient, whose earliest symptom was an attack of diarrhœa accompanied by great loss of blood, usually suffered from constipation, and was obliged to strain much during defæcation. Sometimes, however, he had intervals of diarrhœa, always with great loss of blood, and felt no pain and lost no flesh, and there was no particular discharge from the rectum except during the attacks of bleeding. 3. Because a diagnosis of the condition was made by inspection of the rectum with a strong light. This was thrown up the bowel by a forehead mirror from a powerful lamp, and through a large vaginal speculum, which could always be introduced under chloroform. The treatment suitable to such cases was a point that might be usefully discussed. By this inspection, the mucous membrane of the bowel was seen to be marked by smooth longitudinal folds, mottled with a peculiar purplish tint. On these purplish folds were three shallow ulcers, whence blood flowed freely. The patient gradually sank, in spite of various remedies, and died from loss of blood. After death, the wall of the rectum was found to be much thickened in the lower four inches and a half of its length by nævoid growth in its walls, on the rugæ of which were the three shallow ulcers before described. The body in other respects was healthy and well developed, but almost free of blood.—Mr. HOWARD MARSH related the history of an essentially similar condition in a girl aged 10, under his care at the Children's Hospital in Great Ormond Street. She had been subject to attacks of hæmorrhage from the bowel from the time she was two years old. They had occurred at first at intervals of about a year, but after a time had grown more frequent, coming on about every month. The amount of blood passed varied from a teaspoonful to a teacupful. Whilst under his care, he had himself witnessed two or three hæmorrhages of the large amount. The symptoms of the case undoubtedly pointed to a nævus; and on examination of the rectum with a speculum, he found a nævus encircling nearly the whole of the bowel close to the border of the anus, and reaching about an inch and a half up the rectum. The aspect of the growth left no doubt as to its nature. Treatment with Dupuytren's cautery was found effectually to arrest the hæmorrhage for a time, but it was impossible to use such treatment over any large surface, for fear of producing a stricture of the anus. The position of the growth afforded no chance for ligature. The child was three times in the hospital, and was discharged finally with its hæmorrhage greatly relieved, but not entirely cured.—Mr. STANLEY BOYD admitted that, when he first examined Mr. Barker's case, in his capacity of Surgical Registrar to University College Hospital, he had been inclined to attribute the hæmorrhage to a malignant growth at the junction of the sigmoid flexure and the rectum. He had been able to feel with his finger masses which suggested to him malignant lipomata such as Mr. Curling had described. When he had introduced a speculum, he attempted to pass a rectal bougie through it, but had found it arrested in the sigmoid flexure; and its withdrawal had been followed by a rush of blood, which he imagined to have come from the sigmoid flexure, but which subsequent experience showed him to have come from hæmorrhage in the rectum regurgitating into the sigmoid.—The PRESIDENT asked whether Mr. Boyd had traced completely the endings of the small arteries in the growth.—Mr. BOYD replied that his examination had not been sufficiently minute to enable him to do so.—Mr. SAVORY asked if the growth involved the mucous membrane only.—Mr. BOYD replied that it involved the submucous tissue also.—The PRESIDENT remarked that one remarkable point in Mr. Barker's case, in which it differed from the case described by Mr. Howard Marsh, was that it occurred in an adult, and that the treatment by cautery which Mr. Marsh had adopted would probably have been much less suited to an adult, than to the child. The treatment in Mr. Barker's case, which had been chiefly injection of perchloride of iron, and the use of sulphate of copper and opium by the mouth, had been mainly tentative, and the death of the patient had been rapid.—Mr. BARKER had hoped that he might receive more suggestions as to the treatment, which had not proved itself easy. His patient had been the source of a remarkably offensive fœtor immediately after death, before there had been time for the decomposition of the blood. He was sorry not to have heard any explanation of this; he suggested its essential similarity to that which was observed in those who died in the extreme anæmia of scurvy.

On some points connected with Local Recurrence of Malignant Disease. By HARRISON CRIPPS, F.R.C.S.—The paper commenced by criticising the view commonly expressed, that local recurrence took place in the cicatrix of the wound, and pointed out that it was rather in the skin and subcutaneous tissue adjacent to the cicatrix that the recurrence was often observed. A paper published by the author in the Pathological Society's *Transactions* of 1881 was referred to, in which microscopic evidence was produced illustrating the view that, as regards malignant disease of the rectum, whether found in the mucous or in the submucous coat of the bowel, it was originally formed of cells derived from Lieberkühn's follicles. A theory founded upon these specimens was also suggested, viz., that the formation of leucocytes was one of the normal functions of the intestinal epithelium. Two cases were narrated in which recurrence of malignant disease undoubtedly first showed itself by cancerous nodules originating in the deeper layer of the cutaneous epithelium by the side of the cicatrix, that is to say, in a part of the skin that had not been removed at the time of operating. After referring to the views of Brodie and other surgeons as to the desirability of removing the entire mammary gland, notwithstanding the cancer may involve only a small portion, Mr. Cripps advised that the same principle should be applied to the superjacent skin. The theory upon which the surgeon advocated the removal of the whole gland-tissue was that, notwithstanding a great portion of it appeared sound, the epithelial lining of the ducts and acini was in reality already affected, and only required time for cancerous growth to become manifest; the epithelium within the gland being in direct continuity with that covering, and the superjacent skin being originally derived from it by involution. Thus the cutaneous epithelial cells lying over the gland were as liable to be implicated as those within it. Mr. Cripps recognised that it was the universal practice of surgeons, when operating for mammary cancer, freely to remove any skin that appeared to be implicated; but he suggested that, even in cases where the skin was soft and supple, longer immunity from recurrence might be possibly obtained by its wide and free removal, than by being satisfied with removing a mere elliptical portion involving the nipple.—Mr. ALBAN DORAN thought that, with regard to the method of formation of the leucocytes which Mr. Cripps had introduced into his paper, some attention should be paid to the homologous theories of Rindfleisch and Hayem, that the red corpuscles were not produced from the white, but from the nuclei of red marrow-cells. Bold as were these statements, they were supported by some long continued and very careful experiments.—Dr. CREIGHTON suggested that it was best to consider in a separate class those cases of malignant disease where the recurrent tumours appeared not in the scar, but in fresh skin, for then they were often found widely separated from each other, and from the original growth. The cancerous nodule in such cases he regarded as purely an affair of the subcutaneous connective tissue, and not of the rete mucosum itself. Cicatricial tissue was essentially embryonic; and for that reason, as Virchow had pointed out, was more liable to the invasion of cancer. It was not uncommon to see a cancerous growth on the basis of a healed ulcer.—Mr. BUTLIN observed that Mr. Cripps had raised, in the first place, a great clinical question, as to how much skin should be removed in operations for cancer. Mr. Cripps had urged that the more skin was removed, the less was the danger of recurrence *in situ*, or approximately *in situ;* and he did not imagine that that could be disputed. Its recurrence in glands was a different matter, and not immediately under discussion. Mr. Moore, at the Middlesex Hospital, he believed, was the first to show in practice how much too little of the skin it was the custom in his time to remove; and he had had remarkable success in some of his cases of cancer of the breast, where he had removed the fasciæ and subjacent muscles to a large extent. Dr. Gross, jun., also, the son of the celebrated surgeon of Philadelphia, had used similar methods with similar success; and the large and successful operations of Mr. Banks of Liverpool led to the same conclusions. Out of eleven cases of recurrence in Mr. Banks's practice, only four had been *in situ* (the others were in neighbouring glands), and these had been, not in the skin, but in the deep

muscles or fasciæ; showing that process of direct infection did not take place through the skin alone, but in dependence on products of connective tissue.—The PRESIDENT remarked that the question was essentially one for demonstration rather than for theory; and regretted that Mr. Cripps had not brought forward some microscopical specimens. He was himself inclined to agree with the text-books in saying that the cicatrix was the matrix, which was easily invaded by cancer, rather than the seat of its easy development. The lines or nodules of cancerous growth which were often found along the tracks of sutures in operations, were instances of the facilities which cicatricial tissue afforded for the invasion of a neighbouring growth. The benefit that might be expected in a case where an extensive removal of skin was possible, he thought, was undeniable. The late Mr. Clover, who had wide opportunities of watching operations, was of opinion that the present custom tended to remove less skin than was desirable. The surgical writings of Dr. John Brown, many generations ago, showed an old system of extensive operation, which would probably have pleased Mr. Cripps. In the case of operation on a cancerous breast, two threads were passed under the gland, the one vertical, the other horizontal; the whole mass was lifted up by these, and swept off by a circular stroke, the bleeding stopped by the actual cautery, and a mass of resins, and balsams, and tow, which proved crude antiseptics, plastered over the wound, and left for long adherent. The huge wound granulated slowly, but there was more final success than might, perhaps, have been anticipated.—Mr. HARRISON CRIPPS desired to explain, at the outset, that he had never ventured to claim anything novel in the treatment he had recommended; he had merely called attention to it as a matter of sufficient importance to justify some repetition. He quite agreed with what the President had said, that this was a matter not for theory, but for demonstration; and explained that he had refrained from showing a long series of specimens on which most of his remarks had been founded, because they had been previously shown to the Pathological Society, and some of them were figured in their *Transactions* for 1881. He thought that they showed, as clearly as could be shown in motionless dead specimens, the process of transformation of the nuclei of the columnar intestinal epithelium into the cells in the submucous retiform tissue. The cases of cancer of the rectum where secondary deposits, arranged after the pattern of Lieberkühn's follicles, were found in the liver, he considered strong proof that nuclei, descended from parents in the intestinal epithelium, had made their way to the liver, and there developed after the manner of their parents.—The PRESIDENT remarked, in conclusion, that the development of secondary growths, after the type of primary, was undoubted, but that the formation of leucocytes from the intestinal epithelium was the point which needed further demonstration.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, MARCH 7TH, 1883.

GEORGE BUCHANAN, M.D., F.R.S., President, in the Chair.

The Delhi or Oriental Sore.—Surgeon-General MURRAY read a paper on this subject. This disease had attracted little attention in India previously to the mutiny in 1857-8, at which time the palace and city of Delhi were occupied by European and native troops. The military cantonment had previously been situated two miles outside the city wall, and this disease was scarcely known amongst troops; but cases were occasionally heard of there and at Mooltan and Lahore. After 1858 it was brought prominently to notice, as the troops in garrison at Delhi were attacked with great severity. From 40 to 70 per cent. were admitted into hospital, suffering from the sore, whilst nearly half the regiment had slight sores, which were treated out of hospital. The disease was very tedious and troublesome, though only in two or three cases fatal. Where severe, or situated on a joint, it rendered the men unfit for duty; and when on the face, it was very disgusting and disfiguring. This was illustrated by eighteen photographs of the disease situated in various parts of the body. In 1865, the Government of India appointed a commission to investigate the disease, to trace out its origin and point out a remedy. Dr. Murray was president of this commission. It appeared on exposed parts of the body; at first as a small pimple, like an irritated mosquito-bite, and remained in this state for several days or weeks, sometimes even for months. It then slowly increased, and a thin fluid escaped from the top, which dried and formed a circular scab, gradually increasing in size and thickness. When this scab was removed, an indolent ulcer was exposed, with undermined edges and lobulated granulations in the centre, in healthy subjects like raspberries, but paler and more blue in cachectic cases. These ulcers, when very broad, showed signs of cicatrising from the centre; in all, there remained a depressed cicatrix after healing. This was the natural course of the disease, which might last from six months to two or more years, when uncomplicated with leprosy, secondary syphilis, miasmatic fever, or a cachectic state of the body, produced by other diseases or famine. Such diseases were aggravated and rendered more fatal by combination with the one under consideration. The Delhi sore appeared identical with the "yaws" of the West Indies, "parange" of Ceylon, and the "bouton" of the eastern and southern shores of the Mediterranean. At Delhi, Mooltan, and Lahore, the disease was endemic, and confined to residents within the city walls. The Commission at Delhi, after patient investigation, formed the opinion that the Delhi sore was a cutaneous disease, of parasitic origin, and that the foul water of the city wells was the *habitat* of this parasite. The wells were cleared out; and, from one near the Zeeunt Musjid, a cartload of bones was extracted. Probably, they had not been cleared out for centuries. The water from them was only used for washing or bathing purposes. The wells in all the ancient cities of India were very impure; and, if a germ or parasite in foul water were the cause of the disease, this would account for its presence in Mooltan, Lahore, etc.; whilst the impure water in some of the tanks in Ceylon would furnish its *habitat* in that country. Nearly all the dogs in Delhi suffered from this disease in the nose, whilst the body escaped. Dr. Fleming and others had supposed that they had discovered the germ of the disease; but, as Drs. Lewis and Cunningham, after careful examination, failed to see it, implicit confidence could not be placed in less experienced observers. To determine the contagious nature of the disease, six natives were inoculated from a fresh sore, and twenty-three out of twenty-four punctures showed irritation like that from vaccination on the third day, which gradually extended till the sixth and tenth day, when remedies were applied to check the disease in four men, leaving it to take its course in the other two cases. Photographs of these cases showed their similarity to the ordinary Delhi sore. The treatment recommended by the Commission was to avoid using impure water; or, if this were impossible, to boil the water before using it, and to have all the wells cleared out every year. The local treatment of the sore was directed to destroy the vitality of the germ by the application of the actual cautery in the earliest stage, and potential cautery, potassa fusa, or nitric acid and carbolic acid, or mercury, in more advanced stages; following the destruction of the specific disease by simple dressing, and washing with diluted carbolic acid.—In the discussion which followed, the President, Sir Joseph Fayrer, Surgeon-General Manifold, Dr. Scriven, Dr. Ewart, and Mr. Long, took part.

STAFFORDSHIRE BRANCH.

J. H. TYLECOTE, M.D., President, in the Chair.

Aneurysm of the Arch of the Aorta.—Dr. MONCKTON showed a patient suffering from aneurysm of the arch of the aorta. The case presented two sacs, one bulging through the first, one through the second intercostal space, close to the right margin of the sternum. The case had been under Dr. Monckton's observation almost two years, during which time the upper sac had sunk considerably, the lower one remaining almost stationary. The treatment had consisted of perfect rest and quietude for some months, low diet and large doses of iodide of potassium. The stethoscope, placed on the trachea in the hollow above the manubrium sterni, detected that jerking, vibrating expiratory murmur to which attention had been drawn by Dr. Mortimer. The fact of the pulse at the right wrist being much more feeble than at the left, led to the supposition that the lower sac was connected with the aorta, the upper with the arteria innominata.

Scirrhous Glands from Liver.—Mr. WOLFENDEN showed some scirrhous glands removed from the liver of an old gentleman, aged 82. He never complained of his liver, and enjoyed very good health all his life.

Hydatids of Uterus.—Mr. WOLFENDEN also showed a mass of hydatids expelled from the uterus of a woman aged 44. Very severe hæmorrhage preceded the expulsion for months. It was so great afterwards that an injection of perchloride of iron had to be used.

Cystic Kidney.—Dr. HATTON showed a cystic kidney, from a patient who died a few hours after an accident. The cyst was sacculated, and contained a creamy-looking fluid consisting chiefly of pus and granular matter. The patient was a man about 55 years of age, who had always enjoyed good health, and had worked in marl-pit the greater portion of his life.

Spindle-celled Sarcoma of Abdomen.—Dr. J. H. TYLECOTE exhibited a spindle-celled sarcoma removed from a farmer, aged 66, who twenty-two years ago had a tumour weighing nearly a pound removed from the abdominal walls. A few years since he noticed a small growth forming at one extremity of the old cicatrix. It continued to increase until it had attained the present size, when he called Dr. Tylecote's attention to it. Dr. Tylecote at once removed it. At the time of reporting, more than twelve months since this was done, there had been no further recurrence.

Heart with a Fibrinous Coagulum in each Ventricle.—Dr. E. W. HOPE exhibited this specimen. The patient, a young unmarried woman, employed as a factory woman, was admitted into the Wolverhampton Hospital, five days previously, for pneumonia on the base of the left lung. The symptoms were somewhat unusual. She was in a very exhausted condition. Her morning temperature was 97°, the evening temperature 107°, and her pulse 150. There was no symptom traceable to any heart-condition. There was no anxiety, and no dread of death. There was no pain either, or neuralgia, or disturbed muscular action. No heart-pang was observed before death; no dyspnœa, no breathlessness, and the surface of the body was pale, not livid.

Perforation of Intestine in Typhoid Fever.—Dr. C. ORTON showed a portion of intestine perforated, removed from a patient who died in the North Staffordshire Infirmary from typhoid fever. Death occurred on the eighth day after admission without any assignable cause. Dr. Orton expressed the opinion that perforation occurred previously to admission. He believed perforation of the bowel to be more common than is generally supposed.

Cyst of Inguinal Canal.—Mr. SPANTON showed a cyst removed from the inguinal canal of a married woman, aged 47. A swelling had been noticed in the groin two years and a half before, following a severe illness, accompanied with cough. The enlargement had gradually increased up to its present size—that of a duck's egg—and caused considerable pain. There was no distinct impulse on coughing, and the case was looked upon as one of probably irreducible omental hernia. In operating for its removal, a kind of sac was opened, within which lay the cyst, quite free, very white, and containing about two ounces of clear serum. The internal inguinal ring was closed, but above the cyst were two enlarged glands, which had caused the uneven surface which the tumour had presented. The case was mentioned as affording an example of one of the unexpected conditions often met with in operations in that region.

Removal of Uterine Appendages.——Mr. SPANTON also showed two cases in which the uterine appendages had been removed. The first, a young unmarried woman, aged 22, had been a sufferer, more or less, from the time she began to menstruate eight years before. She had suffered so much pain as to render her incapable of earning a livelihood, and she had been under the care of numerous medical men, including some months in a special hospital for women, and the Manchester Infirmary, as well as having been twice to a convalescent home. She never obtained more than very temporary relief. The chief symptoms were great pain in the ovarian regions, the back and thighs, before and during every catamenial period, which usually occurred once a fortnight, was excessive in amount, and continued three to four days, during which time she was obliged to keep her bed. When examined, the uterus was found normal, except slight endocervicitis, accompanied with some leucorrhœa. The left ovary was distinctly felt enlarged, exquisitely tender to touch, but the left could not be felt. Considerable tenderness existed on pressure in the inguinal regions. Applications of all kinds, including pessaries and medicines, had been diligently tried for six years without any benefit whatever. Mr. Spanton removed both ovaries and Fallopian tubes on January 1st, and she recovered rapidly without a bad symptom. The ovaries were about three times the normal size, the right one very adherent; the tubes were much thickened and distended, with numerous small attached cysts. The patient was now free from pain, and quite well. The second case was that of a married woman, aged 53, who had a numerous family, the last eight years ago. Since then she had never been well, suffering much pain, referred chiefly to the lower spine and left iliac region. For two years and a half she had been quite confined to bed and never left it. She had been attended by thirteen surgeons, Mr. Spanton being the last. The diagnoses made were numerous. Finding a very painful swelling in "Douglas's" space, on pressing which she said all her pains were produced, Mr. Spanton advised its removal. The operation was performed on January 30th. The wound was quite healed in a week, the highest temperature 100° Fahr., and she had been able to leave her bed for the first time for many months, and her general health was already greatly improved. The ovaries were atrophied, very friable, the right adherent, with the Fallopian tube greatly distended and bent upon itself—the free extremity being adherent to the proximal end. The left tube was thickened and enlarged, and deeply engorged.

Urinary Calculi.—Mr. VINCENT JACKSON exhibited nine urinary calculi removed during the last year from eight males; eight by lateral lithotomy, and one by lithotrity. All recovered. The age of the youngest patient was 3 years, and that of the oldest 50. The weight of the smallest stone was 5 grains, and of the largest 1,510 grains. Mr. Jackson also exhibited Dr. Bigelow's and Sir Henry Thompson's instruments for performing lithotrity at one sitting. He also showed a vulcanite bladder aspirator, which had recently been made at his request by Messrs. Weiss. Mr. Jackson contended that the lessening of the weight of these instruments was of the utmost importance, as well as of extreme convenience; for, whilst Bigelow's evacuator weighed twenty-six ounces, and Sir H. Thompson's twenty-four ounces, the vulcanite evacuator only weighed fourteen ounces: a gain of twelve and ten ounces respectively. Mr. Jackson showed Mr. Buckstone Brown's lithotomy tampon, and which he had improved by lengthening the tube attached to the bag, and terminating it by a vulcanite mouth-piece. By this arrangement, the surgeon was enabled to distend the bag orally, a much more convenient method than by inflating it by a pair of hand-bellows.

Pernicious Anæmia.—Dr. ARLIDGE read a paper on this subject, illustrated by cases. He looked upon the term as simply a provisional one, to include a group of fatal cases of anæmia, which observers had hitherto failed to bring within the limits of a pathological definition sufficiently precise to give them a fixed place in nosology. Nevertheless, the cases so grouped were distinguished from other forms of anæmia: from chlorosis, from leukæmia, and from pseudo-leukæmia. A leading character was the extreme poverty of the blood, not only in red corpuscles, but also in its albuminous and fibrinous elements; and this without excess of white corpuscles, and without enlargement of the spleen. Nothing satisfactory was known of the etiology of the condition; but it was peculiar that the disease had prevailed in Zurich and neighbourhood to an extent entirely unknown in the rest of Europe. On this point, Dr. Arlidge threw out the suggestion whether minute investigation of the blood might reveal the presence of bacilli or like low organisms as the cause of the vitiated state of the blood, deriving their origin from the drinking-waters of the city in question. In connection with this suggestion, he referred to the blood-disease generated among the troops lately employed in Egypt, who drank the foul waters of the canal. In two of the cases narrated in which the blood was examined, the red corpuscles were greatly changed in appearance, having a polymorphous and puckered form, some presenting bulging or budding processes, and in one case they were distinctly nucleated. In the matter of temperature, the observations were generally in accord with those made by the principal writers on pernicious anæmia; that is, except towards the close of the disease, there was no febrile heat, although an elevation of one or two degrees was common towards night. Within a week or two of death, a temperature of from 103° to 104° was noted in two cases. It was much to be desired that the temperature and its fluctuations should be accurately and frequently taken in the course of the various forms of severe anæmia, to ascertain if a general law dominated them, or if one or other variety presented distinctive features in respect of it.

After-Treatment of Luxations and of Fractures involving Joints.—Dr. MONCKTON read a paper on this subject.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY: ORDINARY MEETING.

FRIDAY, MARCH 2ND, 1883.

S. CHARLES SMITH, M.D., in the Chair

Spina Bifida.—Mr. JESSOP showed an infant six weeks old, upon whom he had, three weeks previously, performed an operation for spina bifida. The malformation was seated in the lower lumbar region, where a semi-transparent globular swelling of the size of a Tangerine orange had formed. An elliptical piece of skin having been removed from the summit of the tumour, and the remaining lateral pieces having been raised and held aside, the narrow neck of the unopened sac was encircled and tied tightly with a strong catgut ligature. The sac was now opened and clipped away to within less than half an inch of the catgut; its cut edges were accurately

adjusted by suture, and the lateral skin-flaps were brought together and secured over the whole. The wound, which was kept aseptic throughout, healed quickly, and a firm scar was all that remained to mark the site of the tumour.—Mr. ROBSON, referring to the case exhibited by him at a former meeting, and in which he had transplanted periosteum from a rabbit, reported that no new bone had been formed, but he thought the periosteum had helped to thicken the spinal coverings. A new principle in the operation was the treatment of the meninges by bringing together the serous surfaces, after the manner of modern peritoneal surgery.

Osteotomy for Badly United Pott's Fracture.—Mr. JESSOP also showed a patient in whom he had performed osteotomy through the fibula, two and a half inches above the ankle, and through the base of the inner malleolus, for a badly united Pott's fracture. The fracture had taken place six months before, and had firmly united in such a position as to render the limb quite useless. The patient, an unhealthy looking man, 58 years old, now presented a straight and useful limb.

Dental Engines.—Mr. MARGETSON exhibited some dental engines, and Dr. Bond's "surgical" engine, with appliances for operating on bones. He demonstrated the use of the surgical engine, showing how easily bone could be cut in any required direction.—Mr. T. P. TEALE quoted a case in which the inferior dental nerve had been exposed by means of this instrument, and the nerve stretched for obstinate neuralgia.

Enteric Fever.—Dr. JACOB gave an account of the *post mortem* examination of the body of a boy aged 10, who appeared to be in good health up to about thirty hours before death. He was then seized with vomiting, and became rapidly delirious. The lower part of the ileum showed an early state of enteric fever, which appeared to be the cause of death.

Epileptiform Seizures Apparently Due to Masturbation.—Mr. J. W. TEALE related a case of epileptiform seizures apparently due to masturbation, and cured at once by circumcision. Mr. Teale thought circumcision was very often advisable as a preventive measure, and quite concurred with the views expressed by Mr. Fletcher Little at the last meeting of the Society. He also related the case of a girl, aged 9, whose character and disposition had undergone a notable change previously to his being consulted about her. She had become very morose and irritable. It was discovered that there was a semi-purulent discharge from the vagina, with swollen clitoris and reddened vulva. The child acknowledged that she lay awake the greater part of every night, irritating the vulva and vagina. The starting point had been a slight vaginitis from chill; this had drawn the child's attention to the part. Measures were adopted to check the habit which had been acquired. In a year, she was again quite a bright and healthy child.

The Diagnosis of Scarlet Fever.—Dr. J. SPOTTISWOODE CAMERON (Huddersfield) read this paper. The author remarked that it was occasionally very difficult to diagnose this disease. Compulsory attendance at school made it especially desirable to recognise every case. He dwelt upon the several symptoms of vomiting, headache, and early delirium; and insisted, when these were present, on an examination of the throat. Enlarged lymph-glands between the ear and jaw were often of importance in doubtful cases. The tongue, if characteristic, was of value, but absence of strawberry-tongue did not necessarily exclude scarlet fever. Sudden high temperature persisting, typhus and small-pox excluded, generally in a child meant scarlet fever. The rash usually appeared not later than the second day, but he gave cases in which it had been delayed to the fourth or fifth days. In a case with a doubtful history, if he found a tongue with a moist, pale red base, smooth, except that its surface was covered with minute bead-like papillæ, he should strongly suspect scarlatina; this symptom was, perhaps, the least seldom absent of those characteristic of scarlet fever. This tongue might be found weeks after any pyrexia, but disappeared when there had been no pyrexia. There might be scarlet fever almost without fever, without angina, and without rash. In such indefinite cases, the tongue, the state of the skin, and the urine, were important. Passing to the differential discussion of scarlet fever, Dr. Cameron considered the difficulties presented by a case first seen in (1) the initial, (2) the eruptive, (3) the defervescent, and (4) the convalescent stages of the disease, going over the important symptoms *seriatim* in each step, and showing what light each threw on the differential diagnosis. In the initial stage, measles, diphtheria, small-pox, typhus, pneumonia, quinsy, and simple continued fever, might cause difficulty. The history of previous illnesses, the acuteness of the symptoms, the course of the temperature and the state of the throat, were important. Hospital and drain-throats were apt to be asymmetrical. Ulceration was not common at the beginning of a true scarlatinal angina. A sore-throat in a person who had previously had scarlatina might be infective, as in a case quoted; but diagnosis was generally helped by history of exposure. In the eruptive stage, measles, erythema, rötheln, and even urticaria, might have to be eliminated. In the stage of defervescence, typhoid fever, amongst other diseases, might be mistaken for scarlatina; and in that of desquamation, other febrile symptoms, latent albuminuria, nephritis, and even some skin-diseases, might require to be separated. There was no one sign always present in scarlatina. In doubtful cases, as complete a history of the attack as possible should be obtained; and a percentage of cases would remain in which the only guide to a diagnosis would be a knowledge of the diseased conditions prevalent around.—Dr. CLIFFORD ALLBUTT entirely agreed with Dr. Cameron, and thought that it could not be too plainly stated that there were some cases of scarlet fever which defied diagnosis; and that, if medical men were expected to give a positive opinion in every case, and at any stage, they were expected to do that which was impossible. This view of the matter was also clearly taken by other speakers.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 21ST, 1883.

E. MALINS, M.D., President, in the Chair.

Impaired Vision.—Mr. PRIESTLEY SMITH exhibited a patient suffering from greatly impaired vision. The periphery of the visual field was of normal extent. The central area was nearly blind, as demonstrated by charts taken with the perimeter; the optic discs were pale, the retinal arteries small. The man had symptoms suggestive of locomotor ataxy; he had also been a heavy smoker for many years. The central amblyopia pointed rather to the effects of tobacco than to atrophy from spinal disorder, but it appeared that there was a progressive atrophy going on, such as accompanies locomotor ataxy. It was suggested that the atrophic process had affected the central fibres first, because they were already damaged by tobacco.

Radical Cure of Hernia.—Mr. JORDAN LLOYD showed two hernial sacs removed for the radical cure of inguinal hernia. One patient, aged 50, died on the twelfth day, of pneumonia; no peritonitis. The second, a child aged 2, had made a good recovery.

Tumour of Bladder.—Mr. LLOYD also showed a tumour of the size of a hen's egg, which he had removed from the bladder of a man, aged 34. Symptoms had existed for twelve months. The patient was progressing favourably.

Fracture of Patella.—Dr. BARLING showed an adult patient who, by a fall, had torn the ligamentous union of an old fractured patella. By a longitudinal incision over the bone, the fragments had been laid bare, refreshed, and then approximated by a single silver wire suture, which was cut off short and left. The operation had been performed some weeks before, and the fragments were in good position. In course of time, Dr. Barling hoped that solid osseous union would take place.

Ulcerative Endocarditis.—Dr. LESLIE PHILLIPS exhibited a heart weighing thirty ounces, the seat of ulcerative endocarditis on the aortic and mitral valves. The aorta was ulcerated through an inch above the valves; the pericardium contained several ounces of blood, and each pleural cavity half a pint.

Calculus Passed by Urethra in a Female.—Dr. T. NELSON showed a calculus more than half an inch square, which had been passed from the urethra of a woman.

Treatment of Ringworm.—Dr. SIMON, in a paper on the subject, advocated thorough and vigorous measures so long as a black spot or a stumpy hair remained, and, when necessary, suitable constitutional remedies. For local application in recent cases, sulphurous acid and glycerine, and carbolic acid pomade, were useful; epilation was also often necessary. For chronic cases, oleate of mercury and croton-oil properly applied, as directed by Mr. Alder Smith, would generally effect a cure.

Control of Hæmorrhage in Operations at the Hip-Joint.—Mr. JORDAN LLOYD read a paper on a method of controlling hæmorrhage in operations at the hip-joint. After the limb to be operated upon had been emptied of blood, a pad was placed over the external iliac artery, and a double piece of a flat elastic tourniquet applied, so as to pass internal to the tuber ischii, across the pelvic ramus, parallel to and above Poupart's ligament, to a point above the iliac crest; the posterior half of the ligature crossed the sciatic notch and over

the buttock to meet its fellow above the crest. The tendency to slip down the limb was prevented by the hand of an assistant embracing the bandage. Mr. Lloyd quoted seven cases, three of which were of amputation through the joint, in which this method had been employed with every success. The advantages claimed for the plan were that it was so simple, that no special skill was required to apply it; that no injury was done to the abdominal or pelvic contents; that it controlled, without stopping, the hæmorrhage at a point nearer to the seat of operation than did any other plan now in vogue.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MARCH 16TH, 1883.

J. W. TRIPE, M.D, President, in the Chair.

Hospitals for Infectious Diseases.—A discussion took place on some of the "Practical Recommendations of the Royal Commission appointed to report on Hospitals for Infectious Diseases." The PRESIDENT said, in opening the discussion, that he believed, from the resolutions already passed at a meeting of the Society, that they were all of opinion that the provision of hospital accommodation for persons suffering from infectious diseases should be disconnected from the Poor-law administration, and he should not make any remarks concerning this recommendation. As regarded the second recommendation, to the effect that the certificate of disease should be sent to the medical officer of health, who was to satisfy himself that the patient could be isolated at home, and, if not, should notify the case to the Metropolitan Asylums Board, who would take charge of the patient, he thought a very onerous duty was cast upon the medical officer of health. If he had personally to satisfy himself as to that fact, in a district such as that of Hackney, it would lead to so great a delay in the removal of the patient, as to be very injurious, and would also prevent other necessary work from being done. Besides this, it might lead to so great a conflict with medical practitioners generally, as to bring matters to almost a deadlock. He thought that, as the Metropolitan Asylums Board, as newly constituted, would no longer be connected with the Poor-law authority, and would be bound to provide for all cases, the least complicated method of carrying out the removal of the sick would be for the Board to be required to remove all persons who were certified to them by any registered medical practitioner as suffering from an infectious disease. Dr. Tripe thought that this plan would cause less friction with medical practitioners, as the person giving the certificate would be responsible for the correctness of the diagnosis, instead of placing the medical officer of health in the position of a judge on that point. It would also be necessary to have the power of the medical officer of health as to compulsory removal somewhat strictly defined. As to the third proposal, that, if the sick person could not be isolated by his friends, the medical officer of health would be bound to take all necessary steps for his isolation, with power to clear the house of its inmates, and to require the revaccination of all occupants not otherwise protected, Dr. Tripe said that if this were carried out, which he considered would have to be done in a few cases, it would be necessary for the local sanitary authority to provide a kind of house of refuge where those who were removed could remain until the sick person had recovered. This might be costly in those cases where the bread-winner was attacked, as the family might have to be maintained in the quarantine house until he died or was sufficiently recovered to be removed. As to the power to require revaccination, there could be no doubt that it should be possessed by the medical officer of health. The discussion was continued by Dr. Bristowe, Dr. Corner, Dr. Dudfield, Mr. Lovett, Dr. Browning, Dr. Rogers, and Mr. Shirley Murphy.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

JULIUS DRESCHFELD, M.D., President, in the Chair.

Recent Methods of Staining Tissues and Organisms.—The PRESIDENT gave an interesting account of the principles and objects of recent staining methods, in the course of which he dwelt specially upon the behaviour of histological elements and of micro-organisms with different staining agents. Dr. Dreschfeld explained and demonstrated the methods of staining referred to, and illustrated his remarks by the exhibition of numerous specimens. Subsequently Dr. Dreschfeld exhibited sections of a chondro-sarcoma of the testicle, stained with a new staining agent, Vermilline.

Bacilli Exhaled by Phthisical Patients.—Dr. A. RANSOME exhibited specimens of bacillus (undistinguishable from the bacillus tuberculosus) exhaled by patients suffering from phthisis. These bacilli were obtained by condensing the vapour of the breath in a large glass globe, surrounded by ice and salt, and were stained according to Gibbes's modifications of Koch's method.

Placental Polypus.—Dr. C. J. CULLINGWORTH gave the clinical history of a case of placental polypus, which had resulted from retention of a portion of placenta of five years previous. Sections of the growth revealed fibrinous clot, and, near the attached portion, epithelial cells, entangled in fibrinous mesh-work.

Angiomata,—Mr. A. H. YOUNG showed a series of sections illustrating the histology of capillary and cavernous angiomata.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, MARCH 2ND, 1883.

J. MALLET PURSER, M.D., President, in the Chair.

Specimens Exhibited by Card.—Dr. QUINLAN showed (1) Bacillus Anthracis in Blood; (2) Bacillus Anthracis in Lung-tissue.—Dr. TWEEDY: Brain from a Case of Acute Hydrocephalus, with Microscopic Sections.—Dr. WARREN: Recurrent Fibro-myxoma.—Dr. DUFFEY: Secondary Carcinoma of the Liver, with Microscopic Sections.—Dr. R. MCDONNELL: Scirrhus of the Male Breast, with Microscopic Mountings, from a patient aged 29.

Blood-vessels of New Growths.—Mr. P. S. ABRAHAM read notes on the blood-vessels of new growths, with especial reference to their origin in granulation-tissue. The blood-vessels seen in sections of tumours might be considered under two heads—(1) those belonging to the proper tissue of the part into which the neoplasm had infiltrated; and (2) those which had arisen anew and belonged to the new growth itself. The former had become enveloped by the new invading tissue, which they afterwards, in greater or less part, supplied. The latter were the vessels of circumscribed growth, and were either prolongations or sproutings from the vessels of the neighbouring tissue, or, formed apart, had been subsequently connected with them. The small arteries and veins which came under the first category were often distinctly modified by what appeared to be inflammatory changes, and the proliferation of the cells of the coats might go on to such an extent in the case of the intestine, that the lumen might become occluded. An extreme case of the vascular wall thickened and studded with an irregular cell-growth, was seen in certain sections of leprous tumour. The young blood-vessels of neoplasmata in general did not always show any distinction of tunics; and sometimes, in a quickly growing mass of cells, the walls of the vascular channels could scarcely be distinguished from the surrounding cell-tissue. From the consideration of the sections of granulation-tissue, which had formed in sponges placed for various periods in wounds, and on theoretical grounds, it seemed unlikely that Professor Hamilton's new and ingenious mechanical theory for the formation of granulation-vessels would be altogether accepted. Even if the capillary blood-pressure were sufficient to produce the mechanical effect of forcing out and elongating the capillary loops, it was difficult to understand how it could cause the cell-multiplication in the wall of the elongating capillary.

Congenital Defect of the Rectum.—Dr. E. H. BENNETT read a paper on congenital defect of the rectum, based on the details of a case which he had treated during the winter by laparotomy, failing to reach the bowel by the perinæum. The variety of deformity exhibited was that in which the anus and other pelvic organs, except the rectum, were normal, and there existed a cord of variable length connecting the anal *cul-de-sac* with the extremity of the intestine.—Dr. M'Swiney, Mr. Stokes, and Professor Macalister discussed the foregoing communication.

Occlusion of the Inferior Vena Cava.—Dr. F. W. WARREN read a paper on occlusion of the inferior vena cava, illustrating his remarks with a rare case in which the inferior vena cava was completely occluded by a calcareous tumour, about the size of a bean, growing by a narrow pedicle from the great Eustachian valve. The tumour completely obstructed the vein at the caval opening of the diaphragm, and was adherent to the living membrane of the vein. The specimen was taken from the body of a male, aged 22. During life, both lower limbs—the front of the abdomen and the anterior aspect of the thorax—were covered with a close network of varicose veins, the head, neck, and upper extremities being perfectly normal in appearance. He died of enteric fever, from perforative peritonitis. The vena azygos took the place of the occluded vena cava, and was about the size of the latter vein in health; the superficial deep epigastric veins and the circumflex iliac veins from below, anastomosed

with the internal mammary and long thoracic veins from above, the blood-current passing from below upwards. The venæ cavæ hepaticæ were not obstructed. Dr. Warren was of opinion that the tumour commenced as a fibrinous vegetation upon the Eustachian valve, and then underwent calcareous degeneration. The tumour was round, small, isolated and attached by a narrow pedicle to the valve.—Dr. MACALISTER stated that the total number of cases recorded of obliteration or absence of the inferior cava was probably about twenty-three.—Drs. H. Kennedy and Bennett also commented on the paper, and Dr. Warren replied.

REVIEWS AND NOTICES.

LES ORGANISMES VIVANTS DE L'ATMOSPHÈRE. By Dr. PIERRE MIGUEL, Chief of the Microscopic Service at the Observatory of Montsouris, Paris. Large 8vo. pp. 308, illust. Gauthier-Villars. 1883.

THE atmosphere by which we are surrounded has been attentively studied in many ways, yet of the exact features and properties of the floating living matter which it contains at all periods, and which has been shown by various writers to play an important part in what are usually called spontaneous fermentations and putrefactive changes, we have but little correct knowledge. The antiseptic treatment of surgical wounds has proved so markedly beneficial, that operations are now undertaken which would otherwise have daunted the courage of the boldest operator. Larger acquaintance has been made with the causes that have led, in many districts in the world, to the decimation of cattle, to the great detriment of both producers and consumers. Hence, not only the medical profession, but the public, have been seriously awakened to the necessity for a more complete study of the living objects of the ordinary atmospheric dust—a study so beset with difficulties that, without every precaution, error is the result; therefore, we the more readily appreciate and welcome the publication of the above-named work at such a moment. So far as we know, it is unique. The author deals with his subject in a comprehensive manner. He proves himself to be an earnest and diligent student, a partisan of no school, whose aim has been search after truth, regardless if his more complete and careful methods of examination do not agree with previous authors in their results; nor does he hesitate to point out, when error has entered into their methods of study, what he considers to be the source of discrepancy.

Before hygiene can become a trustworthy science, it is absolutely necessary it should embrace a perfect acquaintance with the deleterious agents to be found in air, as well as in water. The air is doubtless contaminated in many ways, especially where the agglomeration of individuals, healthy and diseased, surrounded by different industries and necessities, the outcome of civilisation, constantly tends to pollution.

Dr. MIGUEL, in the above book, gives the results of several years' study of the comparative number of organic objects found in the air of the park at Montsouris, and that of the city of Paris, its streets (Rue Rivoli) and large cemeteries (Montparnasse), as well as of that found in the large hospitals and sewers, etc. Dr. Miguel is well known as the contributor on this subject to the yearly almanacks emanating from the observatory at Montsouris; and he is the only person, so far as we know, who has attempted to reduce the results of his extensive researches to a statistical form, not based so much upon the daily variations as upon the seasons, wet or dry, hot or cold, using the monthly means for comparisons, and noting such in relation with the increased death-rate in Paris. He finds a coincidence of increase in the two cases, but he does not go so far as to say they stand as cause and effect to each other. He sees that further careful research is needed, but, judging by analogy, the coincidence awakens very grave suspicions. When we speak of atmospheric dust in a scientific manner, it may briefly be divided into two classes—inorganic matter, about which, in this notice, we have nothing special to consider; and organic matter, which again may be subdivided into lifeless and living; the latter may be free, or resting upon the inorganic or the lifeless. Amongst the living, as may be expected, are found pollen-grains, yeast-cells, the spores of rust, smut, and mildew, confervoid and algoid spores—the minutest vegetable organisms placed in a class by themselves, in their latest classification, as Schizophytes, with a divisional separation by Cohn into various tribes. Some of these, from their extreme minuteness, require the use of the highest power of the microscope to distinguish them from each other. It is more particularly with certain of these Schizophytes that interest is claimed for special study concerning hygienic questions, whether the germs be carriers of contagion, or themselves the *contagium virum*. Here we touch the threshold of the germ theory of zymotic disease. This question has for years been disputed by two parties, putting aside, for the moment, the spontaneous origin of such maladies, the one believing in a chemical virus, capable of setting up changes in the living body of a definite character which may, and often do, terminate in death, the other being more "particulate," in so far that the virus is regarded as a living unit, capable, when introduced into the living body, of most rapid multiplication, if surrounded with the necessary conditions of pabulum, temperature, and moisture. The economy may now speedily succumb, either from such multiplication depriving the body of its customary food, or, by the blocking of minute vessels, thus disturbing the balance of nutrition, or, by severe local disturbance, leading to a general febrile condition that may terminate in death. Many of these minute bodies have been severally studied, especially those under the generic name of bacterium, from their supposed relation, as cause and effect, to the splenic fever of cattle, and septicæmia, etc.; whilst, in especial disease, that of pulmonary consumption or phthisis, a peculiar organism found by Dr. Koch, though previously, we believe, alleged to have been seen by Dr. Thompson of Victoria, Melbourne, is now attracting attention in all parts of the world. This minute object, appearing about one-fifth of an inch long and one twenty-fifth of an inch wide, when magnified a thousand times, and containing within it a series of minute spores or germs, has been cultivated outside the body, and, when obtained in a pure state, has been inoculated into a living animal, inducing death by tubercular disease. Considering the frightful scourge of consumption in this country, both to man and beast, especially the former, standing as the cause of about one-seventh of the deaths, and remembering that these objects are also found in the sputa of consumptive individuals, may we not expect to find such, when dried, to become part of the air-borne dust that surrounds us, and to the contact of which we are all exposed in our accustomed conditions? Should such, in the act of respiration, be carried into the lungs of individuals that present a favourable state for their rapid growth, may we not expect these minute organisms, if living, to germinate, and carry into the system the too fatal mischief? These minute organisms, called bacillus tuberculosis, have been recognised in the air issuing from the ventilating shaft at the Brompton Hospital. Take again the case of splenic fever, which is so sadly fatal. Here the organism, bacillus anthracis, can also be cultivated out of the living body, and, when introduced into it by inoculation, causes rapid death. M. Pasteur, whose name is so familiar to all interested in the study of fermentation, has endeavoured, by cultivation of this organism, at a special temperature and in certain media, to deprive it of much of its septic quality, and thus the modified virus, when inoculated into an animal, gives it only a slight form of the malady, the inoculation, after a short time, being again repeated, with a rather stronger virus. The two inoculations are stated as sufficient to render the animal proof against the most virulent virus. In France, on no mean scale has this been practised, upwards of 80,000 sheep and 4,000 to 5,000 cattle having been recently made the subjects of this most worthy effort, with great diminution of the yearly mortality, according to M. Pasteur, though time will determine how far successfully. France has again set the example by establishing a special laboratory at the observatory of Montsouris, under the superintendence of Dr. Miguel, for regularly collecting, examining, and testing the organisms found in the air; his researches forming special memoirs in the yearly *Annuaire de l'Observatoire de Montsouris*, now collected and extended in a very efficient manner in the handsome octavo volume just published, and beautifully illustrated.

Dr. Miguel gives a brief notice of the work of those who, since the time of the celebrated Ehrenberg, have turned their attention to the subject. He points out that the first systematic efforts were made in this country to obtain a knowledge of the different living organisms found in the air, and published by Dr. Maddox in the *Monthly Microscopical Journal*, vol. iii., p. 286, and vol. v., p. 45, and followed afterwards by a more extended set of observations, by Dr. Douglas Cunningham, made at Calcutta when on special service, and attached to the Sanitary Commissioner with the Government of India in 1872. These physicians used a self-acting aëroscope, without any method for drawing a definite quantity of air through the instrument, which Dr. Miguel considers necessary as a basis for all quantitative results for statistical use, though he also employs the self-acting form in some qualitative examinations. His plan is to draw by a water-respirator a given amount, usually 1,000 litres of air

through the aëroscope every forty-eight hours, the air passing through a narrow orifice, leaving the largest portion of its particles on a glass of a certain size, covered with a sticky material; the dust is, with the point of a sterilised needle smeared, over the plate evenly and placed downwards on a clean glass. It is put under the microscope, about 100 examinations are made of different parts, and the mean of the number of spores found, taking for calculation the size of the plate, the field of view, and the volume of air forming the condition of the formula employed, the same instrument and objective being always used. He also employs fractional cultivations in various sterilised media. He enumerates by such means the number of micrococci, bacilli, and bacteria found in the air at different places, and he points to some very curious and hitherto unknown facts, as to the relation which these minute organisms bear to each other, in the country and in the city. He also gives the number of bacteria found in the air at the top of the Pantheon, the park at Montsouris, and in the fourth division of the city, the numbers respectively being 28, 45, 462 per cubic mètre of air. He likewise points out the effects of the wind passing from different points, and when blowing over the city. He shows how the sum of the bacteria, less in rain, increases when dryness follows; notes their increase or decrease in different months, and finds that when the north-east wind traverses Paris, a larger number of bacteria are found in the air at Montsouris. He furnishes the tri-monthly means per cubic mètre from the autumn of 1879-1880, to the summer of 1881-1882. He finds for an equal volume of air the number of bacteria in the city and at Montsouris stand as 10 to 1, varying with the seasons, and also points out some curious weekly rises and falls, also the relation which the increase in number bears to deficiency in watering the streets. Statistics are likewise furnished of the bacteria found in the air of the large hospital, Hôtel-Dieu, which is six times more charged than the moist air of the sewer of the Rue Rivoli, and seventy times more than the air in the park at Montsouris.

Dr. Miguel does not rest satisfied with examinations of the air only: he also analyses by fractional methods the dust of habitations, the earth, and the infecting power of the waters of the Seine. The author also compares many points with the infecting power of the air in his laboratory, which, since it has been put to its present use, has, for a cubic mètre of air, become largely contaminated. He has carried his experiments in some cases to over eighty thousand, and has not failed to point out the extraordinary resistance of the germs of some of the bacteria to 445° Cent.—a temperature very far above the boiling point of water. Also the advantage is noted of a broth containing 1 per cent. of salt over the same broth without this quantity of salt, in reviving the bacteria. Supposing that the infusion of Liebig's extract of meat equals one, the addition of that quantity of salt increases its sensibility to the introduction of bacteria seven to eight times, The effect of the saturating power is likewise shown. At the close of this laborious work, various antiseptics and their effects are tabulated, many usually regarded as of the highest grade in destructive power being proved to stand far from their usually assigned place. The book is full of details. Methods are shown and figures given of the apparatus used in sterilising by hot and cold methods, and the necessary precautions for success fully stated. The work is the fruit of six years' conscientious labour, and may be regarded as unique, and of the highest value to all who intend to pursue this most interesting yet most difficult study. There are certain points to which exception may be taken, as employing forty-eight hours instead of twenty-four as the period of collecting; and some may demur to the enumeration and allowance made for the pollen and starch-grains; but, compared to the advantages of fractional methods of study in the cultivating media, they are lost to view.

We should be greatly pleased if some such Government laboratory were established in this and other countries. If arranged upon a preconcerted and defined basis, such an institution would become of the highest value, and probably lead to the discovery of the causes influencing epidemics, and their more perfect control by hygienic measures.

EDMUND HALLEY UND CASPAR NEUMANN: EIN BEITRAG ZUR GESCHICHTE DER BEVÖLKERUNGS-STATISTIK. Von Dr. J. GRÄTZER. Breslau: 1883.

THE foundations of the science of vital statistics were laid in the latter half of the seventeenth century by John Graunt, a worthy citizen of London, and Sir William Petty, M.D., F.R.S., ancestor of the Lansdowne family, and author of the *Political Arithmetic* and of observations on the bills of mortality of London and Dublin, besides other works bearing on what we now call political economy; but the materials with which they had to work were too incomplete to allow of any really trustworthy deductions. Contemporary with them lived Caspar Neumann of Breslau, who, imbued with a strong love of science, intended to follow the profession of medicine, but, yielding to the wishes of his father, entered the ministry of the church. Possessing extraordinary industry, vast learning, and earnest piety, he was not only an ornament to his sacred calling, and a voluminous writer in theology, but found time to do good scientific work. In these fields, however, his favourite study was that of vital statistics, or, as it was then called, political arithmetic, the data for which he found in the registers of births and deaths of his own town of Breslau for the five years 1687-1691 inclusive, which were, for that period, remarkably accurate. This brought him into communication with Henry Tustell, Secretary of the Royal Society of London, who had conceived the idea of obtaining information as to the duration of human life for the purposes of life-assurance. Caspar Neumann corresponded also with Leibnitz and with Halley in England, after the death of Tustell. Leibnitz, who used to say that public health was second only to public morals in importance, foresaw the bearing of statistical studies on hygiene; but to Neumann belongs the honour of having first boldly asserted that the phenomena of human life could be brought under the methods of the inductive philosophy, contrary to the fatalist doctrines of his time, and even of Bacon himself, who expressly excluded the "relations of Providence to man" from the methods of science. That Halley used tables supplied to him by Neumann had long been known; but all traces of these tables had disappeared. Dr. Grätzer, on being appointed Director of the Statistical Office at Breslau, commenced a search for the long-lost documents, first in Breslau, and then through friends in all the public libraries of Germany, but in vain. At the request of Dr. Schweitzer, Mr. Bond, Librarian of the British Museum, sought them there, but with like result. At length, Dr. F. Cohn applied to Professor Burdon Sanderson, and Dr. Williamson searched the archives of the Royal Society, where, among the manuscripts of Halley, the very tables, in Neumann's own handwriting, together with his Latin correspondence with Tustell and Halley, were brought to light; and in the work before us they are reproduced with all the peculiar signs and arrangements employed by the author. In another appendix, Dr. Grätzer gives an analysis of the registers of births and deaths during the years 1687-1691, reducing them to the tabular forms at present employed, and classifying the births as legitimate and illegitimate, live or still-born, as well as according to the sex; the deaths being arranged under sex, age, cause, and the months in which they occurred, with the ratio of each to the population and to the totals of births and deaths respectively; showing that, save as regards the nosological nomenclature, the Breslau registers were as full and accurate as any of our own time.

It would be impossible here to give any detailed analysis of these tables; but we may be permitted to call attention to a few striking points. Small-pox, in that pre-Jennerian era, was as exclusively a disease of childhood as measles, though vastly more fatal. One hundred and thirty-six deaths from small-pox were reported, of which 34 occurred in infants under one year of age, 75 between one and five years, 24 between five and ten, 2 between ten and fifteen, and only 1 in an adult. In the same period, 7 infants died of measles. Tooth-ill (*Zahnweh*), or, as we should say, "teething," counts its 218 victims. Rötheln is distinguished from measles (?), unless it means scarlatina; if not, the last is not separated from other fevers, which, whether continued or intermittent, are, with the exception of true typhus (*Fleckfieber*), included under a single head. The 12 deaths from sore-throat are probably diphtheritic. Still-births were 20 per cent. more frequent than now, doubtless from the forceps being [illegible] yet unknown; and the "natural increase" of the population, or excess of births over deaths, was but 35 per 10,000 living, against the present rate of 87. The population of Breslau was then 34,000.

We heartily recommend this pamphlet, containing in its ninety-four pages a vast mass of historical, biographical, and statistical matter, to all students of vital statistics.

PRESENTATION.—Mr. R. N. Lipscomb, on the occasion of his leaving Tring, after a residence of twenty-five years, has been presented by some of his friends and patients with a handsome silver tea and coffee service, together with a purse of money, accompanied by a list of the subscribers on parchment beautifully decorated.

NOTES ON BOOKS.

The Management of Chronic Inebriates and Insane Drunkards. By ALBERT N. BLODGETT, M.D., Boston, 1882.—In this work, the author shows that the peoples of to-day are different from their ancestors in having gradually become subject to an abnormal activity of all the cerebral and nervous functions. The causes of this unnatural tension have been personal ambition, want of principle, speculation, the more rapid dissemination of intelligence, and the aggregation into large cities, with the loss of much of home life. Natural food and natural rest will not provide for unnatural and superhuman exertion. Therefore stimulants are resorted to for the extreme nerve exhaustion from overwork and over excitement. Habit becomes second nature, and inebriety is the result. Chronic inebriety from deficient will-power, nervous force, or principle, is a great cause of modern inebriety and insanity. There is at present no proper provision for the treatment of dipsomaniacs. There are only the inebriate home and the lunatic asylum. In the former, the patients are boarders, and can be retained only as long as they or their friends can pay for their board. In the latter, the association with maniacs is a cruelty, and an inhumanity to the weak and the helpless. The remedy, according to Dr. Blodgett, lies in a suitable disposition of authority which shall place these people within the control of some restraining force. Without this provision, no effort at permanent cure can be successful. Chronic inebriates and insane drunkards, without means, may be employed by the municipality in public works, and thus be no burden on the ratepayers. Strict State inspection is indispensable.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

WYLEY'S FRICTION CAKE.

THE value of capsicum as a local application in lumbago, rheumatism, sciatica, myalgia, and a host of painful affections, has long been recognised. The "Friction Cake" is a preparation of Guinea pepper, mixed with an unctuous substance, so as to form a stick, which can readily be rubbed into the painful part. It is a powerful rubefacient, producing decided smarting in a few minutes; and it will be found an useful addition to our means of treating an obstinate class of cases.

WYLEY'S SALICYLATE THYMOL TABLET.

THIS is a tablet or stick containing thymol and salicylic acid. It is intended, primarily, for accoucheurs, but will be found useful in the *post mortem* room and for other purposes. It has an agreeable odour, and does not readily become rancid.

HEWLETT'S "LIQ. ERGOTÆ PURIF."

THE difficulty of procuring good and reliable specimens of ergot is well known. The preparation introduced by Messrs. C. J. Hewlett and Son, under the title of "Liq. Ergot. Purif.," will be found of valne in obstetric practice. The parturient dose is from one to two drachms.

SOLUBILITY OF OFFICINAL MORPHIA SALTS IN WATER AND ALCOHOL.—Some recent experiments, by Mr. J. U. Lloyd *(New Remedies*, May 1882, and *Detroit Lancet)* show that some of the statements of our text-books, in regard to the solubility of morphia salts, require modification. The solubilities, as determined by Mr. Lloyd, are as follows. Of acetate of morphia, one part requires of water at 60° Fahr., 11.7 parts; at 212° Fahr., 1.34 parts; of alcohol, specific gravity .820, at 60° Fahr., 68.3; at the boiling point, 13.3. Of hydrochlorate of morphia, one part requires of water at 60° Fahr., 23.4 parts; at 212° Fahr., 0.51 parts; of alcohol at 60° Fahr., 62 7 parts; at the boiling point, 30.8 parts. Of sulphate of morphia, one part requires of water at 60° Fahr., 21.6 parts; at 212° Fahr., 0.75 parts; of alcohol at 60° Fahr., 701.5; at the boiling point, 144 parts. The most important fact to be observed is, that sulphate of morphia is almost insoluble in cold alcohol; and that water will not hold, at 60° Fahr., more than about three grains to the fluid drachm.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 14th, 1883.

THE GOVERNMENT MEDICAL BILL.

ON Thursday, the 5th instant, Lord Carlingford moved the second reading of this Bill, in a lucid and comprehensive speech, in which the failures of the past efforts of preceding Governments in the same direction were mentioned. His Lordship specially referred to the fact that he had the advantage, over his predecessors, of the strong feeling of the profession in his favour, as well as the Report of the Royal Commission which had been appointed to consider the subject. The necessity for legislation, admitted to be urgent by the Medical Council in 1868, has been rendered more imperative by the increase in the number of qualifying medical authorities, through the power recently given to the Victoria University of granting degrees in medicine, thereby creating a twentieth diploma-conferring institution in the United Kingdom.

The Association now numbers fifty years of existence; twenty-five years passed before the Medical Act of 1858 was enacted; and now, after twenty-five more years of unceasing struggle, a Government, friendly to the profession, and recognising the importance and power of our great Association, has, at the express solicitation of the Association, undertaken legislation on the basis of the Report of the Royal Commission. In November last, a deputation waited on the Lord President of the Privy Council, in obedience to the mandate of the Association, imposed on its Medical Reform Committee, at the Jubilee Annual Meeting at Worcester, to request the Government to undertake this duty, with the assurance that the profession and the Association, supported by the medical press, would spare no efforts to support the Government.

That the deputation was fully justified in making this promise, was not only borne out by the resolution at Worcester, but by the still more important fact, that, ever since 1867, the Medical Reform Committee have, year by year, laid the record of their labours before the Association, at its annual meetings, and been unanimously reappointed. No more emphatic and distinct endorsement of the work done by them for the Association was possible.

In fulfilment of the request of the deputation from the Association, the Government have brought forward their Bill. In introducing it into the House of Lords, where the Government do not command the same majority as in the lower House, the risk of defeat on the second reading was encountered. Had this followed, the profession might well have bid farewell to any effective medical legislation during the present generation, and all the efforts of the Association towards this end would have terminated disastrously. Fortunately, the result has been far otherwise; the Bill has not only passed the second reading, but it has done so without a division, with favourable criticism on the part of Lord Cairns, the great legal authority of the Opposition, and with the unqualified approval of all the important organs of the public press; in fact, on no former occasion has any Medical Act Amendment Bill been so favourably received.

This Bill, the offspring of the Association, now claims the support of the profession. It is a novel procedure, and a new departure in

medical legislation, to find the Government acting in the interest and on behalf of the profession, and it is now for the profession to prove itself worthy of the trust reposed in it by the Government, and to show that it is not the untrustworthy "rope of sand" which its detractors have so frequently represented it to be. The Chairman of the Medical Reform Committee and others, in petitioning in favour of the Government Bill, have in no way bound themselves to support all its details. In regard to details, the Government have given ample opportunity for proposing amendments by putting off committee for a fortnight, and soliciting amendments for the consideration of suggested improvements. In the approval of the Report of the Commission, and in petitioning in favour of the Bill as attempting to embody the three great principles of conjoint examinations, of direct representation of the profession in the General Medical Council, and of rendering, through the Public Prosecutor, the penal enactments against illegal practitioners more effective, the Medical Reform Committee distinctly reserved, on all occasions, the right of amendment of details, and, as acting with the Government, pursued a course likely to secure a more favourable reception to their suggestions when the opportunity for making them arrived. With the view of formulating them, the Medical Reform Committee held a meeting in London on Wednesday last, when they carefully went through all the clauses of the Government Bill.

The Medical Reform Committee considered the details of the Bill *seriatim;* and, in Part 1, relating to the admission to medical practice, they will suggest, in regard to *Clause* 3, that no man shall be entitled to have his name entered on the *Medical Register* as a registered medical practitioner, unless, in addition to the licence of the General Medical Council, he shall be attached subsequently to one of the universities or medical corporations, and be authorised to register the title as acquired.

Clause 8. "On and after the said appointed day, a person who is not a registered medical practitioner shall not hold any appointment as a physician, surgeon, or other medical officer." This clause should be so worded as to reach unqualified assistants acting under the protection of legally qualified men in the conduct of branch practice, but not touching men actually resident with such legally qualified men.

As regards *Clause* 9, *Medical Boards*, the Medical Reform Committee object to the provisions in *Subclause* 6, whereby the proposed medical boards framed under this Bill are to be made bodies corporate with perpetual succession and power to acquire and hold lands.

And in *Subclause* 9, for "any person of full age" shall be qualified to be elected a member of a medical board, they recommend that there shall be substituted, "any registered medical practitioner."

Clause 10 should be altered so as to assign to the Medical Council, and not to the medical boards, the absolute and sole duty of framing rules and schemes for the examination, so as to ensure uniformity of:

1. Curriculum.
2. Standard of examination, and
3. Fees, as in Bills 1870, 1878, 1879, 1881.

PART II.—MEDICAL EDUCATION, CLAUSE 19, *Subclause* 1.—The provisions respecting the preliminary education of the medical student require to be strengthened.

PART IV.—MEDICAL TITLES, MEDICAL REGISTER, ETC.—The Bill should not be retrospective as regards the use of titles now enjoyed by legally qualified registered medical practitioners.

The whole question as to titles is in fact under consideration.

PART V.—EXPENSES AND MEDICAL FUNDS. *Clause* 38.—An amendment is proposed to the effect that the surplus funds of each of the divisional boards, after payment of the expenses incidental to the working of the boards and the conduct of the examinations, shall belong to the respective divisional boards.

Subclause 4.—The Committee propose that no annual registration fee be imposed on the registered medical practitioner.

Clause 55.—It is proposed that the returning officer of the Medical Council shall have the management of the election of the representatives of the profession, and not the medical boards, the functions of the latter being connected with education and examination.

Clause 70.—It is intended to preserve all the rights and privileges of existing medical practitioners; and, as regards the suppression of practice by unregistered medical men, we feel assured that the Medical Reform Committee sincerely sympathise with all who suffer therefrom, and earnestly solicit advice from those who desire to put a stop to it, in respect to any points in which this clause or others relating to its subject matter can be strengthened. It must, however, be remembered that all legislative enactments must be of such a character as to command the assent of the Legislature. The Irish Medical Association has already proposed certain amendments to the Bill of the Government in this particular, and the Reform Committee are fully prepared to support them.

In conclusion, we would venture to intimate that the present Medical Bill must inevitably be carried through the House of Lords, for the House, in allowing the second reading without a division, has virtually endorsed the principles which it embodies. The commanding majority of the Government in the Lower House also will preclude successful opposition to the Bill as a whole. It behoves all who desire to promote any special amendments of its details to strengthen the power of that Committee, which is, from the confidence reposed in it, and the duties and labours imposed on it by the Association through a long and uninterrupted series of years, regarded by the Government and other authorities as the recognised representative of the Association in respect of the matters delegated to it, and to assist the Medical Reform Committee in making the Bill as perfect as possible.

The Government has brought in this Bill for the Association at the instance of the Medical Reform Committee, supported by the most influential representatives of the medical press. The Medical Reform Committee were distinctly commissioned by the Association to prefer the request, and the Association will prove false to the professions of fifty years, if it do not unhesitatingly and unswervingly support the action of its own Committee. In supporting that Committee, the Association will exercise its legitimate and powerful influence; by ignoring the mission confided to the Committee, and entrusted to it through many years, through a very long and trying period, the consistency, and therewith the influence, of the Association will be in great measure lost.

In conclusion, we would urge every member of the Association to support the Government by signing a petition in favour of the Bill, and by canvassing members of both Houses to support it, while, at the same time, they specify the points in respect of which they desire to see it amended, in lieu of opposing the Bill because it is not worded or drafted precisely as they would have it. This is the course which we believe that true patriotism and a large regard to professional interests, will command.

ABUSE OF THE LUNACY LAW.

ONCE again the grave question of the possible abuse of the Lunacy Laws has been raised—this time in France. A most serious charge has been made against the widow of a Chilian merchant in Paris, and, if substantiated, the indignation which has been excited is not in excess of what so great an outrage on personal liberty for mercenary ends justifies.

Madame de Monasterio, her natural son Carlos Lafit, and others, conspired, it is alleged, to place Fidelia, the former's own daughter, in the private asylum of Dr. Goujon, in the Rue Picpus, Paris, in order to prevent her marrying, and to retain the use, or gain possession, of property left her by her father. Even seven years ago, Madame de Monasterio, it is asserted, treated her daughter in a way calculated to induce madness, in consequence of which she became

a patient at Charenton. She there recovered, was again subjected to the same treatment at home, and was again placed in the same asylum. On recovery she returned home, but, on finding herself treated in the same cruel manner, she fled for protection to the house of Madame Chalanton, formerly her mother's maid. But she was not allowed to rest there; Dr. Luigi was first offered a bribe of £60, to induce him to sign a certificate. He refused. Hereupon the services of two other doctors were sought, and obtained—one bearing the honoured name of Pinel, the other, Dr. Rivière—who certified her, and she was forcibly conveyed to the *Maison de Santé* of Dr. Goujon. Madame Chalanton (of whose character, amidst the conflicting evidence, it is difficult to form a certain opinion) raised a storm, and succeeded in inducing the police to take up the case. Alarmed at the consequences, Carlos Lafit removed Fidelia from the asylum within ten days of her admission, and conveyed her to the country. Madame de Monasterio was arrested, and, with her alleged accomplices, was brought before the Correctional Court recently. The indictment, however, broke down to this extent, that the court held that it had no jurisdiction in cases in which a patient has been removed within a certain number of days, and it was held that the action ought to be brought before the Court of Assize. It is devoutly to be hoped, in the interest of justice, that the Public Prosecutor will carry it forward to the higher tribunal. If this be done, and should the facts be proved, the parties to the alleged abduction adequately punished, there will be no ground for blaming the French law as inadequate to meet the occasion. But the question will still be, no doubt, warmly debated, whether the Lunacy Laws in France provide sufficient safeguards against the improper sequestration of persons in asylums. It is only recently that a French lunacy commissioner, Dr. Foville, has described in detail these laws in the *Journal of Mental Science*; and, in admitting and regretting that the manner of drawing up the certificate is not indicated so carefully in the law of his country as in that of our own, he says, "the adoption of printed schedules for the certificates, instead of being general, is, on the contrary, very exceptional in France." Dr. Pinel's examination of Fidelia appears, on the face of it, to have been singularly imperfect, and it is to be hoped that the admission of a patient on such a certificate as his must have been, will serve to bring about the reform which Dr. Foville himself desires. Such increased stringency must be called for in face of a certificate like this, whether Fidelia be or be not insane. The well-known alienist, Dr. Legrand du Saulle, asserts that she is. So does Dr. Goujon, who, as the French law stands, was justified in admitting her on an order and Dr. Pinel's certificate, even if not backed up by Dr. Rivière. Even were there no distinct mental symptoms on admission, the superintendent cannot be blamed for admitting her on certificate, and retaining her some days under observation. The French lunacy law requires that a physician from the prefecture of police shall examine patients within three days of admission. This duty was performed by Dr. Ollivier. To him, she made charges against her mother, but he took for granted that they were unfounded, and that they proved her to be labouring under delusions. It is easy to condemn so hasty a conclusion, but it is no doubt difficult to ascertain, in the first instance, whether a patient's statement have or have not a foundation in fact. In ninety-nine cases out of a hundred, the suspicion of a conspiracy among relatives and friends is a delusion; but this case is only another and striking example how necessary it is to be on the alert when the hundredth case turns up. In judging of the charges brought against the French law of lunacy or its practice, we are bound to mete out justice. We should not, therefore, too hastily jump to the conclusion that the French law is as bad as it is the fashion to represent it; but it evidently requires more stringent regulations in the direction we have indicated, and in others, as, for instance, in more certain and careful inspection, though we believe the fault lies more in the practice than in the law itself.

The *Times* draws the lesson from the Monasterio scandal, that lunacy certificates should be submitted to a magistrate for endorsement, and that they should only be issued by specially commissioned physicians—by experts in fact; and this is the change which public opinion is likely to demand, should the facts be all proved in this case, and should there be no evident safeguard against the recurrence of such cases.

THE REGULATION OF TENEMENT HOUSES.

THE Charity Organisation Society are taking up a question which is, in many respects, an extremely important one, both from a social and sanitary point of view. It appears to be a common practice to leave the street-doors of houses let to very poor tenants open at night, with, as may readily be imagined, the worst possible consequences. The facts on the subject have, until lately, been little known, even to many who visit systematically among the poor; but there seems no sort of doubt that the practice does exist, and that it brings in its train immorality, crime, and disease. Only recently, we recorded a case brought by Mr. Lovett, the health-officer of St. Giles's, before the Society of Medical Officers of Health (see page 160). A woman, who had almost succumbed to prolonged exposure, was discovered lying on an old mattress on the floor of a back cellar in Dudley Street, St. Giles's. She was nearly dead from cold and hunger; her clothes, which had been wet through from exposure to the rain, had dried on her; she was swarming with vermin, and rats were running about her. She would probably have died in the place, had not the shopkeeper's wife heard her coughing under the flooring of the back parlour. The cellar in question is a small rubbish-hole, measuring 13 ft. by 9. The woman had no right to be there; she did not lodge in the house, but was a tramp and a trespasser. Last year, a woman was found dead under similar circumstances, in another cellar. Mr. Lovett, in commenting on the matter, observes that "such cases occur through the front doors of so many of the houses tenanted by the poor being left unfastened day and night." "The casual visitors walk in uninvited, sleep in the cellars or on the stairs, use the closets, and some even ask for soap and water in the morning—though none pay rent. The landlords of the houses, as a rule, do not reside on the premises, and are either ignorant or apathetic about the matter."

As these vagrants do not take possession of their sleeping-place until night, and the Legislature has fixed the hours of inspection of dwelling-houses between 9 A.M. and 6 P.M., the sanitary authorities are powerless to deal with these people, either for overcrowding or for illegally occupying underground rooms. The Society of Medical Officers of Health incline to the opinion that the sanitary authorities could, under the existing law, take no action in such cases; and it would doubtless be futile to ask Parliament to extend the hours during which sanitary officers have power of entrance to ordinary premises. But it is worth consideration whether action could not be taken under Section 35 of the Sanitary Act, 1866, empowering the Secretary of State to confer powers on local authorities to make by-laws as to tenement houses. Such powers have, in fact, been conferred upon a considerable number of authorities, both metropolitan and provincial, though, so far as we can gather, they seem to have been very sparingly exercised. The section enables an authority to make by-laws for fixing the number of persons who may occupy a house or part of a house which is let in lodgings, or occupied by members of more than one family; for the registration of such houses; for their inspection, and other matters. It is true that no such power of free access by sanitary officers "at all times when required" is specifically given by the statute, as regards houses let in lodgings, as is given in the case of common lodging-houses; but amongst the model by-laws issued by the Local Government Board with regard to the former class of buildings, appears a clause designed with this object; and sanitary authorities need

herefore, have no compunction in exercising the power of unlimited ntry.

Remembering the class of landlord to whom these wretched hovels elong, it is evidently hopeless to expect that they will do much, or ven anything, to remedy the evils complained of. Nor can the natter be remedied by new legislation. It is to the stringent exer-se of their power of regulating such houses under the section bove indicated, that sanitary authorities must look for an improve-ent in this respect.

That the evil is a real one, the evidence which has been accumu-ted on the subject abundantly shows. One who is intimately cquainted with the dwellings of the poor says that "no one who aw the sin and misery caused by the present state of affairs could oubt the advantage of a change; mothers speak in the strongest rms of the temptation to which their boys and girls are exposed. he passages and stairs are now occupied at night by the worst eople turned out of the public-houses, and every word they say n be heard in the rooms. Sometimes a man will get up three or our times in a night to turn out these intruders; but it is of little se, they or others return; and more often the tenants do not care o trouble themselves or to risk having a struggle. Some are indif-erent; others look upon the evil as unavoidable, especially as, in any cases, the locks and keys of the street-doors are broken, and ne landlords will not go to the expense and trouble of keeping em mended."

Many of the health-officers of the metropolis are aware of the vils that arise from persons coming at any time into houses, in the ellars of which there may be vacant room. The police also say hat thieves and others turn into these houses, and so are able to ve unnoticed. In calling a public meeting for April 13th, to discuss ne question, the Charity Organisation Society have done good ser-ice, and it is to be hoped that some method may be devised for rappling with what is evidently a grave public evil.

HERNIA OF THE OVARY.

WITHIN twelve months, British medical literature has been enriched y a couple of original monographs on hernia of the ovary, written y two writers of great authority. Dr. Robert Barnes's paper, read efore the Royal Medical and Chirurgical Society in January 1882, s already well known. That obstetrician discussed at length the elation between enterocele, epiplocele, and ovarian hernia, and dwelt articularly on physiological points illustrated by observations on varies thus displaced. An ovary in the inguinal canal is in a eculiarly good position for observation. Those who are sceptical bout detection of a diseased ovary by bimanual palpation, will be ess doubtful about the changes observed week by week in an ovary ubject to hernia, provided they agree about diagnosis. Dr. Barnes lescribed the swelling of an ovary concurrently with the increased ension of the vascular system before menstruation, and directed ttention to the swelling of the round ligament under the same ircumstances—an important fact in relation to the share which the terus takes in the menstrual process. It was urged, in the same aper, that some tidal change, rising primarily in the ovary itself, aused nervous and vascular tension, the menstrual flow being a henomenon standing third in order in relation to the two previous conditions. The relations of cause and effect in the above changes, rom the normal quiescence of the ovaries midway between two nenstrual periods, were much elucidated by Dr. Barnes's observa-ions.

In the eighteenth volume of the *St. Bartholomew's Hospital Reports*, just issued, we find an interesting article on Hernia of the Ovary by Mr. Langton. As surgeon to the City of London Truss Society, the author has had great opportunities of observing the elation of this condition to herniæ of other kinds. Mr. Langton's emarks in the discussion that followed the reading of Dr. Barnes's ontribution, formed a kind of abstract of the paper now published in full. The author states that he has observed hernia of the ovary chiefly in early infancy. The examination of ovaries subject to this condition gives, in the case of infants, no more pain than is dependent on the manipulation of any other protruded abdominal organ. Adults frequently appear to experience the same sickening kind of pain observed when the surgeon presses a healthy testicle. This symptom is often absent, probably through ill development of the ovary. The use of a fine trocar will settle the question of diagnosis between this affection and cysts due to an incomplete and partial closure of th canal of Nück. Mr. Langton found that, in most cases that came under his care, after the menstrual period had been established, the monthly tenderness and enlargement of the protruded bodies were well-marked. In no case could any malformation of the genitals be made out. On rectal examination in adults, the uterus was found, as a rule, to be slightly deflected to that side on which the ovary had become herniated.

By means of a valuable series of details, statistical and descriptive, Mr. Langton throws much light on the relations of congenital inguinal hernia to displacement of the ovary. The proportion of cases in which bodies having all the characters of ovaries, as far as can be judged by palpation, were found in a series of this variety of hernia, proved to be one in fourteen. On the other hand, the ovary appeared to be involved in but one out of forty-five of a large series of cases of inguinal hernia, occurring in females of all ages over the first year of life.

Mr. Langton has observed, in all, sixty-seven cases of suspected ovarian hernia. Forty-three were congenital; out of these, twenty-nine were reducible and fourteen irreducible. The remaining twenty-four were acquired, appearing for the first time after the age of one year; the reducible cases in this series were eight—that is, half as many as the irreducible. The proportion of cases of right, left, and double hernia of the ovary can hardly be established authoritatively from so few cases—numerous, no doubt, when the cavity of the affection is considered, but scanty for statistical purposes. In one instance, the suspected ovary was found to lie immediately superficial to the saphenous opening; but there was reason to suppose that the ovary had issued, not out of the crural canal, but through the external abdominal ring, descending over its outer pillar into Scarpa's triangle. In only two cases did Mr. Langton find that the patients suffered so severely, at times, that the question of removing the ovaries was suggested; and in neither of these could the consent of the patient be gained. The author finally expresses his belief that further experience will teach us, that the ovary is more frequently involved in a hernia than has hitherto been suspected; but that cases calling for surgical interference are, comparatively speaking, very rare.

THE corpses of two Hamburgh ladies were cremated the other day at Gotha. The number of bodies consumed there has now risen to 112.

ON and after the first Thursday in next June, there will be a practical examination in chemistry for candidates for the primary examination at the Apothecaries' Hall. It will be conducted in a laboratory specially arranged for that purpose.

A MEETING of the medical men of the neighbourhood of Greenwich, and others, will be held at No. 4 room, in the Lecture Hall of that town, on Tuesday evening, April 17th, at 8 p.m. precisely, to confer with the honorary medical officers of the Royal Kent Dispensary, in order to obtain, if possible, an alteration in the rules of that institution, so as to do away with the present mode of distributing free letters to all applicants. Dr. Alfred Carpenter has kindly consented to take the chair.

DR. JAMES PALFREY.

WE regret to learn that Dr. Palfrey, who has for many years been Obstetric Physician to the London Hospital, died at his residence in Brook Street on Tuesday last, after a short illness.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council of the College was held on Thursday, the 12th inst. The minutes of the Extraordinary Council of the 4th were read and confirmed. Reports were received from the various annual committees. Mr. John Tomes, of 37, Cavendish Square, and Professor T. H. Huxley, were balloted for the election to the Fellowship, under clause 5 of the charter of 15 Vict., relating to members of the College of twenty years' standing, and were elected Fellows of the College.

LIFE AND DEATH IN ENGLAND.

WE believe that several of the points raised during the discussion in these columns of the question whether the duration of life in England is increasing, will be dealt with in a paper to be read on Tuesday evening next, by Mr. Noel A. Humphreys, at a meeting of the Statistical Society, held, by permission, at the Royal School of Mines in Jermyn Street. The title of the paper is, "The Recent Decline in the English Death-Rate, and Its Effect upon the Duration of Life." It is proposed to show, by the life-table method, the true effect of the recent decline in the death-rate upon the true duration of life in an English generation, and, also, at what periods of life the years added to the duration of life are lived.

COLONEL BURNABY.

COLONEL BURNABY, who has lately been travelling in Spain, and who only returned to London about a fortnight ago, during the cold east wind which then prevailed, is, we are glad to learn, fairly on the road to recovery from the severe attack of bronchitis with which he was seized. Last Sunday, symptoms of inflammation of the left lung appeared, which spread on the following day to the right lung. Dr. Collins then saw him in consultation with Dr. Quain. At one time, it was feared that the inflammation of the lungs might be complicated with typhoid fever, but the symptoms which threatened this are happily disappearing, and Drs. Quain and Collins now entertain hopes of an early convalescence.

SYNTHESIS OF URIC ACID.

MUCH interest attaches to the recent discovery by Horbaczewski of the synthesis of uric acid from urea. That these two bodies are chemically related has long been known; for, by oxidation uric acid yields urea, or rather the products of the oxidation of urea. On physiological grounds there has also been every reason to suppose that urea and uric acid are associated in some hitherto unknown manner. The merit, nevertheless, of first distinctly proving the connection by the conversion of the less complex urea into the more complex body, uric acid, belongs entirely to Horbaczewski. The transformation was effected by heating urea with glycerine in a sealed tube, to a temperature of 392.446° Fahr. In this way, and by further purification, a distinct quantity of uric acid was obtained in a crystalline form.

ANTI-VIVISECTION FAIR PLAY.

A PASSAGE in a letter which appeared on Wednesday in the *Daily News*, with the signature of a lady well known as an uncompromising opponent of vivisection, illustrates, in a most significant manner, that total absence of any sense of fairness which so eminently characterises the apostles of anti-vivisection. "The most astonishing thing in this debate, is the frank avowal of the Home Secretary that he has 'accepted the assistance' of the Association for the Advancement of Medicine by Research, a society avowedly formed for the encouragement of vivisection!" The fair correspondent is actually surprised that the Home Secretary, who, we may feel sure, has heard more than once from her party, should consult the other side. Herself one of the chief supporters of a society which exists for the purpose of giving corporate strength to its cause, and even forces its unsolicited opinion on Parliament and on the public, this writer takes exception to any unbiassed consultation of the opinion of an association formed for co-operative action by those who think differently, although the latter body is made up of authorities, the former chiefly consisting of amateurs.

MEASLES AT LANCASTER.

DURING the past year Lancaster was visited with a very severe epidemic of measles, and the account given of the outbreak by Dr. Harker, the health-officer, presents many points of interest. After about four years of almost complete immunity from the disease, several cases occurred in the early part of the year which were traced from Barrow. Gratuitous information was furnished by the medical men in attendance, and all proper measures to prevent the extension of the disease were adopted, and, it was believed, with success. Unfortunately some of the children were allowed to attend a public school, and to this cause is attributed the dissemination of the disease throughout the town. The epidemic lasted from February to April, during which period some 700 cases occurred. For the most part the disease was of an exceedingly mild character. Altogether, forty-three children, all under five years of age, succumbed, the illness in each case being accompanied with inflammatory chest affections. Looking to the disastrous consequences which have ensued from the introduction and spread of measles in his district, where the notification of infectious disease is compulsory, Dr. Harker advises that the disorder and the kindred one rötheln, should be included amongst those to be reported. He does not, however, say what preventitive measures on the part of the sanitary authority he regards as feasible, supposing information were received by them, as to every case of these two disorders. Half a crown per certificate for each case of measles would mean a serious drain upon the rates, with apparently little compensatory result.

SAD DEATH OF A SURGEON FROM A POST MORTEM WOUND.

AN inquest was recently held at Wolverhampton on the body of Mr. Herbert Lynsey Manby, surgeon, late of Brewood, Staffordshire, who died on Sunday, April 1st. Mr. C. A. Newnham, surgeon, of Wolverhampton, stated that, on March 15th, he assisted the deceased, whom he had specially called from Brewood, in making a necropsy of the body of a man, under the coroner's order. Whilst they were proceeding with the examination, deceased scratched his right thumb against the ragged edges of the ribs of the body; he at once washed the injured part, and applied carbolic acid to it. A few hours after the injury, deceased complained of faintness, and was much depressed; his thumb was swollen and hot, and a streak of inflammation was observable along the inner side of his arm. Signs of pulmonary complication, as usually seen in cases of septic poisoning, supervened, and Mr. Manby gradually became worse and died, in spite of the assiduous care of Dr. Wade, Dr. Malet, and other friends. Mr. Manby was only twenty-eight years of age. He pursued his professional studies at Guy's Hospital, and was admitted a member of the Royal College of Surgeons in 1877, having passed the first M.B. examination at the University of London in the previous year. His untimely end adds another name to the long death roll of members of our profession who have fallen victims to the risks of professional duty. He was a younger brother of Mr. F. E. Manby, of Wolverhampton, a well known and active member of the Association.

IS SYPHILIS COMMUNICABLE TO THE LOWER ANIMALS?

PROFESSOR NEUMANN has lately published (*Wiener Med. Wochenschrift*) the results of certain experiments performed by himself on various animals, with the object of determining the above question. The animals experimented on were three apes, two horses, a hare,

bbit, a guinea-pig, a marten, a rat, and a cat. These animals ere carefully inoculated in one or more places, and, in some cases, ı several occasions, with the discharge of indurated syphilitic sores, · of syphilitic papules, or the indurated sore itself was excised, and ımediately introduced into the cellular tissue of the animal. The ıs of soft chancres was also inoculated in some of the experiments. he material employed was transferred directly, and without delay, om the patient to the animal, with all due precaution. The period ıring which the animals remained under observation, after inocu-tion, varied considerably; in some, the time seems to have been ırdly sufficient for forming a decisive opinion; and, in some, the ıration is not stated. In one instance, however, that of a female ɔe, the animal was under close observation for four months and a ılf, during which time it was inoculated on eight separate dates, ı various parts of the body, with the secretion both of hard and ·ft sores, a hard sore being also implanted beneath the skin on one ·casion. In this, as in all the other experiments, the result was ·gative; that is to say, although local reaction—*e.g.*, abscess—metimes occurred at the site of inoculation, nothing resembling a ırd or a soft sore was ever produced. Thus Neumann is of opinion .at syphilis is a disease belonging exclusively to human beings.

SIMULATED SCARLET FEVER.

EFERENCE is made in a recent report by Mr. Crowfoot, the health-ficer of Beccles, to the existence in that borough of a number of ses of an eruptive disease among children, very similar in some re-ects to scarlet fever, yet differing entirely in other respects. The sease was characterised by an eruption on the soft palate and on e skin, exactly similar to the appearance presented by a case of arlet fever. It was also associated with the same high tempera-re and constitutional disturbance during the time the eruption sted, as is generally the case in the latter disease. The eruption most cases appeared about the second day of illness, and lasted ɔm two to six days. In no instance, however, was it followed by .y desquamation of the cuticle, by enlargement of the cervical ands, or any of those sequelæ frequently seen after attacks of arlet fever. At the end of a week the child was usually convales-nt, and had quite recovered at the end of a fortnight. It was noticed ɜo in several cases that one member of a family only suffered from e complaint, the disease not appearing to be of so contagious a .ture as scarlet fever. This eruptive disease may possibly have ·en dependent upon the same poison as that of scarlet fever, odified either by atmospheric conditions, or by some local or con-itutional cause. Mr. Crowfoot observes that, in the initial fever, ıd in the appearance of the eruption, the two diseases presented ı exact similarity, but, in the absence of desquamation and enlarge-ent of cervical glands, a marked difference. In no case that came ıder notice did the disease terminate fatally or present any grave nstitutional symptoms.

DIARRHŒA AT CIRENCESTER.

R. BOND has been investigating the circumstances attending a dden and extensive outbreak of diarrhœa and enteric fever in e urban district of Cirencester, and has prepared an interesting port on the results of his inquiry. The outbreak occurred in a part the district known as School Lane, which contains thirty-nine ıuses. Of this number, there were no fewer than twenty-eight in hich illness, more or less referable to the present outbreak, oc-rred, and the total number of persons affected was not far short fifty. As is usual in outbreaks of this kind, every degree of in-nsity was exhibited, from very slight and temporary diarrhœa, to e most distinct type of enteric fever; but, up to the date of the port, no death had occurred. In dealing with the possible causes the outbreak, Dr. Bond at once eliminates the milk-supply from ıy blame; and he thinks that the general results of his examination show that, though there is evidence of contamination of the water-supply, it is not sufficient to account for the general extension of the disease. The main sewer in connection with these houses was, however, filled to overflowing for at least a day or two a short time before the outbreak; and it was found that it had overflowed through two ventilators, to an extent that was sufficiently offensive to be provocative of general complaint from those who experienced its effects. At the same time, emanations from one of the ventilators, and also from the sinks and closets near it, were very offensive, many of the children who have since been affected having complained of them. Dr. Bond thinks that these circumstances should afford a sufficient explanation of the outbreak, but the theory of a contaminated water-supply seems to deserve some further investigation.

A CIRCULAR HOSPITAL.

ON more than one occasion, we have called attention to the Miller Memorial Hospital, which a committee of Greenwich gentlemen have been endeavouring to secure for South-East London, as a recognition of the services rendered by the late Canon Miller, D.D., to the Hospital Sunday movement, and to Greenwich. £5,000 having been raised, the Committee advertised for plans; and, after careful consideration, have proved themselves to be free from the usual local prejudice, by coming to the wise conclusion to build the new hospital on the circular system, because it best adapts itself to the peculiarities of the site at their disposal. Professor Marshall, who originated the proposal of circular wards for hospital purposes, will, therefore, soon have an opportunity of seeing his ideas put into practical execution in this country. The architects, Messrs. Young and Hall, who are at present building the new hospital at St. Leonard's-on-Sea, and one of whom is the architect to the London Fever Hospital, have prepared an excellent plan, based upon the soundest hygienic rules, and we congratulate them and the Miller Memorial Committee upon the wise selection which has been made. The Miller Memorial Hospital will be the first institution of the kind which has been built upon the circular plan in England; it will, no doubt, create much interest amongst hospital managers generally, and, whilst affording the maximum of comfort to the patients, it will attract to the institution a great amount of public attention.

TREPHINING IN FRACTURES OF THE SKULL.

M. CHAUVEL, at a recent meeting of the Société de Chirurgie, read a report on a case of complicated fracture of the cranium in a case reported by M. Schwartz. The patient was a man aged 25. A hard heavy mass fell from the height of two storeys on to his head. He was knocked down, but was able to rise without help and go to the hospital. His head was bleeding when he arrived there; but he gave clear answers to questions. The next morning, he was found to have a depressed fracture on the middle of the head. The meninges were torn, and there was hernia cerebri. Slight crossed hyperæsthesia on the right side of the anterior surface of the chest, with slightly diminished power of the right hand, were all the functional disturbance exhibited. During the first five days after the accident, the patient progressed favourably. On the fifth day, there was a little fever, and complete hemiplegia of the right side. The depression could not be raised; therefore M. Schwartz trephined, and removed two thin splinters of bone. On the seventh day after the operation, the patient could move his arm, and afterwards his leg. The wound healed well, notwithstanding an attack of small-pox. The patient, unfortunately, a little while afterwards fell on his head. A pulsating tumour, with fluctuation, appeared in the situation of the scar left by the wound. After puncture with an exploring trocar, an incision was made, and some granular pus escaped from an abscess situated in the cerebral hernia. Encephalitis increased, and the patient died. The *post mortem* examination showed that the psycho-motor centres were intact, and that pus had

passed into the ventricles. The bony breach was filled up with a fibrous membrane. M. Chauvel pointed out the interesting features of M. Schwartz's case, but thought that trephining ought to have been performed sooner, as there was not the slightest doubt that there was contusion of the brain. Depression of the bone was also evident.

THE OSSIFICATION OF THE SPHENOID BONE.

THE formation of the sphenoid bone, of which many conflicting accounts have been given by various embryologists, has been recently investigated with the most laborious care by Professor Hannover, who has in turn, according to the *Dublin Journal of Medical Science*, elucidated results which will be received with some degree of alarm by a large proportion of the rising generation of medical students. No fewer than twenty-six centres of ossification have been discovered by the industry of Professor Hannover, which make a huge addition, indeed, to the lists supplied to us by even the latest editions of Gray or Quain. They are disposed in the following order: "1 and 2—in the bottom of the sella Turcica, towards the inferior surface (at three months); 3 and 4—on each side of the crest (rostrum), appearing at the same time as the former; 5 and 6—in the alar apophysis (same date); 7 and 8—on the side of the planum (at four months); 9 and 10—at the superior part of the rostrum; 11 and 12—at the extremity of the limbus sphenoideus, behind the last-mentioned (five and a half months); 13 and 14—in the posterior root of the lesser wing (three and a half months); 15 and 16—in the anterior root of the lesser wing (five months); 17 and 18—in the great wing (two and a half months); 19 and 20—in the external pterygoid plate (two and a half months); this cannot be said with certainty to be separate from the last; 21 and 22—in the internal pterygoid plate (two and a half months); 23 and 24—in the hamular process (four months); 25 and 26—in the cornua of Bertin (three months)." Among the leaders of embryological research there are quoted on this subject: J. F. Meckel, who gave fourteen centres of ossification; Cruveilhier, who reduced the number to twelve; Kölliker, who gave a similar number, but arranged the centres somewhat differently; C. Brach, who recognises but ten; Virchow, twelve; Rambaud and Renault, nineteen, adding six other (accessory) centres; Huxley, twelve; Sappey, fourteen.

SYPHILIS AND RICKETS.

AT a recent meeting of the Société de Chirurgie, M. Parrot, on being invited by the President to explain his views on the relation of syphilis to rickets, took occasion to reiterate his now well known opinion that the latter disease is only the ultimate stage of hereditary syphilis, and that it is never produced by any other cause. There are three principal types of osseous change due to inherited syphilis which correspond with three successive epochs of infancy and childhood. The first of these types is characterised by the development of hard osteophytes, and the period for their development lasts from the later months of intra-uterine life up to about two months after birth. After this age, the second form, that of gelatinous atrophy, is found; while later still, generally after the first year of life, though sometimes earlier, the change characterised by the production of spongoid tissue occurs. This last is the change found in rickets, and the three types pass gradually from one to the other. The osseous change does not necessarily begin with the first form The type wi vary according to the age at which syphilis becomes active; but, if the bony change have gone through its three phases, the affected bones will retain marks by which the passage from one to the other can be traced. The first two changes are met with only in syphilitic children; and M. Parrot asserts that syphilis can be demonstrated, also, in ninety per cent. of cases of the third type—viz., those of spongoid tissue (rachitis). There remain, therefore, but ten per cent. of cases of rickets to be otherwise accounted for; and these, according to M. Parrot, must also be attributed to syphilis, in the absence of any other sufficient explanation to account for them; for he maintains that none of the causes usually put forward as giving rise to rickets are really sufficient. Scrofula, prolonged suckling, animal food given too early in life, derangement of nutrition, enteritis, etc., may exercise a certain influence in preparing the soil; but, if the germ of hereditary syphilis be not present, rickets will never be developed.

THE COLOUR OF MILITARY UNIFORMS.

IN the original choice and the prolonged popularity of red as the colour of our national uniform may be traced a striking illustration of an unconscious obedience to physiological law in a matter of taste. There is no absolute beauty in any single colour. The charm of any particular tint is strictly relative. When we prefer red, or blue, or yellow, our choice is owing to a deficiency as regards that colour in the general scene; and in our preference we unconsciously seek relief from monotony in the stimulus of variety. As a rule, in our country, by flood and field, or on hill or dale, the preponderance of colour is usually in favour of the blue end of the spectrum; hence red, in all its shades and compounds, is a refreshing alternation. For this reason alone, it is evident that the proposed change in the colour of the uniform of our soldiers from red to grey is sure to be unpopular. The report of the committee appointed by the Commander-in-Chief to inquire into "the comparative visibility of different colours suitable for military uniforms in the field" has been printed as a Parliamentary paper. The committee consisted of Lord Wolseley (President), Major-General Hawley, Major-General Elkington, and Mr. Ramsey, Director of Clothing for the Army. Professors Abel and Stokes assisted the committee by superintending the experiments by which the various colours were tested. A series of experiments were carried out under varying conditions of weather, atmosphere, surroundings, and background. Proceeding by a process of exclusion, the result was to eliminate all the colours at present used in the dress of the army, the "glaring conspicuousness" of white and scarlet being at once evident. The neutral colours, more particularly the Indian "khakee," which is a grey or dust-coloured cloth, and certain volunteer greys, were indistinct even at short distances, and practically all but invisible at long ranges. The question was in the end narrowed down to a shade of grey, which, besides its character of invisibility at a distance, stands exposure to sun and rain without fading. The committee have recommended that this grey, which is now worn by the 3rd Devon Volunteers, should be adopted as the service dress of the army. In the choice of clothing for our soldiers, the object of practical invisibility at a distance is now added to the other object for which dress is worn, namely, for protection against cold and against warmth. This latter is the fundamental aim of dress; its other uses are subsidiary. In any rearrangement of the clothing of our army, we trust the all-important functions of clothes as protectors against variations of temperature and the influence of direct solar rays, upon which the health of troops in the field so much depends, will not be overlooked. This is a subject upon which facts and experience have been accumulating, and in which army medical officers may be looked to for guidance. Experience of service in various countries has proved many valuable points as to how far variations in the texture and colour of clothes influence the protecting power of dress from extremes of heat and cold.

ANCIENT ROME AND THE CAMPAGNA.

DR. DRUMMOND of Rome delivered a lecture recently, before the British and American Archæological Society of that city, "On the Climate of Ancient Rome," in the course of which he argued that the Romans and their early rivals—the inhabitants of the cities of Etruria and Latium—must have been a healthy people. Had they been otherwise, they could not have played the marvellous part

which they did play in history. He believed much of their greatness was the outcome of their attention to hygienic laws, as evidenced by their baths and their excellent systems of water-supply. Dr. Drummond showed that classic authors bore out his conclusions, and that all historic evidence is in favour of the healthiness of Rome and its suburbs in early times. He believed that although the clearing of the forests, the silting up to some extent of the delta of the Tiber, and similar causes, had, no doubt, somewhat modified the climate, they had not altered it to any considerable degree; that the severe winters mentioned by Livy and other writers had had their parallel in modern times; that although certain spots in the neighbourhood of Rome were considered by the ancients to be unhealthy, they were not numerous, and that many which were undoubtedly healthy in Pliny's day are now notoriously insalubrious. He attributed the malaria of the Campagna, which has gone on increasing for centuries, to systematic neglect of proper drainage and cultivation. This had originated in the fatal policy of the Romans, who deported the inhabitants of conquered cities in the neighbourhood to Rome as slaves, and consigned the lands to colonists, who proved incapable of carrying out efficient cultivation, so that the Campagna relapsed into desert, and became more and more malarious. Dr. Drummond showed that the Campagna—not really a plain, but an undulating district, consists of volcanic materials discharged by eruptions at times when the Sabine and Alban mountains were acting, partly when the plain was beneath the sea, and partly after it had risen above it, and is, in consequence, possessed of a porous subsoil, disposed in layers, which are for the most part permeable to water. The craters of these mountains, which are now lakes—Albano, Nemi, Bracciano, etc.—have been shown by Tommasi-Crudeli to be the chief source whence the collected rainwater percolates through the rocks of the mountain base, and comes to infiltrate the subsoil of the Campagna, thereby fostering the conditions which engender malaria. Dr. Drummond described the remarkable system of archaic subsoil-drainage found in connection with the Roman hills, and in the Campagna, called "the cunicular drains," which seems clearly to have been designed and carried out in prehistoric times for the purpose and with the effect of rendering the Campagna healthy, habitable, and capable of extensive cultivation. Dr. Drummond urged the restoration of such a system; and, indeed, a Bill for legislation to this effect is now before the Italian Parliament. Should it become law, malaria seems likely to become a thing of the past, to the great advantage of Rome from every point of view.

BORDERERS ON INSANITY.

In an interesting lecture recently delivered by Dr. Ball (*New York Medical Gazette*) he reiterates the view that the generally received opinion that folly and reason are separated by a strictly drawn mathematical line is quite erroneous. There is a broad frontier, he says, between sanity and insanity, which is peopled by millions of inhabitants. Damasippus, in Horace, laid down the doctrine that all men are mad—"insanus et tu, stultique prope omnes." Dr. Ball, without going quite so far as this, holds that the number of persons perfectly reasonable on all points throughout the entire period of their existence form but a minority of mankind. The world abounds with people, he tells us, whom a strict scientific diagnosis would condemn as mad, or more or less "touched;" yet at no time of their life would it be permissible to put them under restraint. Such people are to be seen occupying, honourably and successfully, every position in life and society; we brush against them when we take our daily walks abroad; we see them in the mirror which reflects ourselves. Dr. Ball having stated the thesis of his discourse, proceeds to a classification of these "sane madmen," and assigns the first place "in the order of merit" (from what point of view he does not specify) to those who suffer from unreasonable, and in most cases irresistible impulses Naturally enough, the lecturer referred to the case of Dr. Johnson, and the curious impulse which prompted him to touch each post as he walked along the streets—an impulse so strong, that if he accidentally passed one by without the usual tribute of a touch, he felt irresistibly compelled to return and repair the omission. The overpowering impulse to laugh on occasions of peculiar solemnity, is one which even the most serious persons have experienced. A still more morbid impulse is that which sometimes urges pious people to indulge in blasphemous or profane language. A great English divine, Bishop Butler, was tormented all his life long by this temptation, which he only mastered by strong and sustained efforts of the will. The impulse sometimes assumes a suicidal form. Dr. Ball was recently consulted by a young man who was engaged to be married, but who found it impossible to visit his intended bride, because it would involve a journey of some length in a railway carriage, and he could never enter one without feeling a desire to jump out as soon as the train was in motion. He was advised to accustom himself gradually to this mode of travelling, by taking short journeys on the suburban line, but he could never get beyond Auteuil; there he had to leave the carriage for fear of accident. Homicidal impulse is likewise met with. Thouviot's case is one of the oftenest quoted. For years this unpleasant person was tortured with a burning desire to kill some woman or other, but he never felt the slightest wish to take the life of a man. He battled with the impulse for years, but at length it got the better of him. One day he murdered a young girl, a perfect stranger to him, whom unfortunate chance threw in his way in the kitchen of a restaurant. Dr. Ball was consulted some time ago by a painter of considerable talent who was a prey to these murderous impulses. He had married early in life, his family was large, and his cares and anxieties large in proportion. At about eight-and-thirty, without physical ailment of any kind or any especially unfavourable turn in his affairs, his mind began to be affected. If he saw a mirror he experienced a desire to smash it; near a window he felt a temptation to jump out; he never got a bank-note in his hand that he did not feel inclined to tear it in pieces. These morbid promptings presently assumed a more formidable shape; he began to be assailed with a temptation to strangle his children. His little daughter was dying of croup, and he spent night after night by her bedside nursing her with the utmost tenderness. "Yet," said he to the physician, "at the moment when I was praying, with tears in my eyes, that the child's life might be spared, I was tormented with a horrible desire to take her out of the cradle and throw her into the fire." "Even now," he added, "as I speak to you I feel a most intense desire to strangle you; but I check myself." The doctor never saw this patient again; a circumstance which he has perhaps no reason to regret, for as he was a man of powerful build he would have been an exceedingly "ugly customer" had his sanguinary impulses proved beyond his control. But up to that time, as the doctor remarks, he had kept them successfully in check. His nearest friends did not even suspect that he was subject to them. He fulfilled all the duties of life in a correct and exemplary manner. No doctor could have certified to his being insane. Yet assuredly he was on the "borderland" of insanity.

SCOTLAND.

An epidemic of scarlet fever having broken out in Lockerbie, the public schools have been closed. No fewer than 530 children, being nearly half the number of scholars on the roll, have been attacked.

Last week, the Edinburgh Select Choir gave a concert in the new Royal Infirmary, for the benefit of the sick who were sufficiently well to be brought together to hear it.

MR. ARTHUR JAMES BALFOUR, M.P., has endowed a lectureship in philosophy in the University of Edinburgh, tenable for three years.

THE success which has attended the first course of lectures given by Dr. J. Allan Gray of Leith, to the Midlothian Rifle Volunteers, has induced the lecturer to give a second course on stretcher drill, bandaging, and practical ambulance operations.

THE candidates for the medical superintendentship of Woodville Asylum are numerous. Several medical men belonging to Glasgow are in the field. Among others, we might mention Drs. Thomas, superintendent of the Glasgow Royal Infirmary; Dougan, Watson, Carswell, and Dunlop. The last three are, or have been, in the service of the Barony Parochial Board, with whom the appointment rests.

AMID the prevailing destitution in the Western Highlands and Islands, a case of starvation was reported from Lochinver, Sutherlandshire, by the clergyman of the district. The medical officer of the parish, Dr. Crerar, denies the accuracy of the clergyman's statement. The local authorities of the county intend, however, to make a thorough investigation into the cause of death, as some mystery surrounds the affair.

FIVE medical men belonging to the city of Perth, most if not all members of the Perthshire Medical Association, have, in the columns of the *Scotsman*, brought under the notice of the university and college authorities throughout Scotland the vital importance of the Medical Bill, in determining the destinies of the profession for many years to come.

A MEETING of the Glasgow Extramural Teachers' Association was held in the Faculty Hall, on the 11th instant; Dr. Morton, President, in the chair. Resolutions were adopted approving of the principle of the Medical Bill, in so far as the establishment of conjoint boards are concerned; also urging the propriety of extramural teachers being represented on the Divisional Boards, and lastly, that no teacher, if an examiner, should be permitted to examine his own students.

EDINBURGH UNIVERSITY COURT.

WE understand that, at the meeting of the General Council of the University of Edinburgh to be held on the 19th instant, Dr. Daniel Rutherford Haldane will be proposed for the office of Assessor at the University Court, in succession to Emeritus Professor J. H. Balfour. It is stated that Mr. Æneas McKay, advocate, and ex-Professor of the Faculty of Law, will also be nominated. Dr. Haldane's appointment would give much satisfaction to the medical profession who form a majority of the General Council.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending March 31st, state that the death-rate in the eight principal towns was 30.4 per 1,000 of estimated population. This rate is 8.4 above that for the corresponding week of last year, and 2.0 above that for the previous week of the present year. The lowest mortality was recorded in Edinburgh—viz., 20.7 per 1,000; and the highest in Greenock—viz., 38.5 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.9 per 1,000, or 0.6 below the rate for the previous week. Whooping-cough was the most fatal epidemic. Five deaths from fever were registered in Greenock. From acute diseases of the chest, 200 deaths were registered, or 35 more than in the previous week. The mean temperature was 37.4°, being 2.1° above that of the week immediately preceding, but 7.0° below that of the corresponding week of last year.

DISPOSAL OF SEWAGE.

AT the last meeting of the Glasgow Town Council it was intimated that Messrs. Hislop and Terry, Dunedin, had taken out a patent for the efficient and profitable disposal of the sewage of all cities, which they considered especially adapted for Glasgow sewage. It is too much to hope that this new process will solve the great sewage problem. How much the great sewer—the Clyde—has to do with the high death-rates prevailing in Glasgow, it would be difficult to say.

THE UNIVERSITY OF ST. ANDREW'S.

FRIENDS of the ancient University of St. Andrew's, fearing lest the dissolution of their university might be contemplated at no distant date, if the powers asked under the Scottish Universities Bill were granted, state that any such attempt would be contrary to the treaty of union. They point out that in the Act for securing the Protestant religion and Presbyterian Church government it is enacted, "that the Universities of St. Andrew's, Glasgow, Aberdeen, and Edinburgh, as now established by law, shall continue within this kingdom for ever."

THE LORD RECTORSHIP OF THE UNIVERSITY OF EDINBURGH.

LORD ROSEBERY, the present Lord Rector of Edinburgh University, whose term of office expires in November next, has, we understand, indicated his desire that he should not be put forward again. The name of Mr. Trevelyan, M.P., is freely mentioned as the candidate whom the Liberal students will select. We believe that, in the face of opposition which has been threatened, there is some likelihood that the party by whom the Duke of Albany was looked to as a suitable non-political Lord Rector, in whose election all sections might have concurred, have resolved not to allow his Royal Highness's name to be put in nomination.

THE GLASGOW ROYAL INFIRMARY.

WITHOUT going into the merits or demerits of the questions now at issue between the managers of this institution and their medical staff, we are glad to see that what is known as "the chloroform question," is receiving very anxious consideration at the hands of the Committee recently appointed to inquire into it and other kindred matters. Information has been sought from nearly all the large hospitals in the kingdom with reference to the practice followed in administering anæsthetics in each, and it is the intention of the Committee to lay before the next meeting of the directors of the Infirmary a report upon the subject. We shall look forward to this document with some interest, involving as it does matters of great importance, and in the consideration of which this JOURNAL has always taken a leading part.

UNIVERSITY OF ABERDEEN.

THE various classes in the Medical Faculty of this University closed on Friday of last week. The session just closed has been characterised by diligent attention to work on the part of the students. The various professional examinations for degrees in medicine began on Monday. There is a large number of entrants for these examinations. The summer session will begin on May 7th; and this year increased facilities will be afforded to the students for acquiring a knowledge of special departments of medicine. In addition to the ordinary classes, and those of Practical Zoology and Practical Physiology, there will be instituted new classes in Operative Surgery and Practical Pathology. Special classes, as already mentioned in the JOURNAL, have been instituted for affording practical instruction in Insanity, Diseases of the Ear and Larynx, and Public Health; and

the Senatus, at its meeting on Saturday last, resolved to afford similar facilities for practical instruction in Skin-Diseases, under Dr. Garden. Thus, very material advances are being made in the teaching strength of this University. The Shepherd Memorial Gold Medal for Surgery was gained by William Ronaldson Clark, M.A.; and the Keith Gold Medal, also for Surgery, was gained by George Duffus.

THE HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending March 31st shows that there were 706 deaths registered, giving a death-rate of 36 per 1,000 living, which is largely in excess of the corresponding fortnight of last year, when the death-rate was only 24½. The mean temperature was, however, seven degrees higher. An examination of the returns shows that the greater number of deaths this year are due to diseases of the lungs and to infectious diseases. The past fortnight has been very fatal to both extremes of life. The deaths below one year of age have numbered 152, and those of persons aged 60 and upwards have amounted to 114. In reference to these figures, Dr. Russell remarks: "Although March is always a trying month to the inhabitants of Glasgow, we have to go back to 1877 for a parallel to these returns. In the fortnight ending March 24th of that year, the mean temperature was 39° Fahr., and the death-rate 36. Not since until now have there been, so late in March, as many deaths of old people, or as many deaths from pulmonary diseases. The epidemic prevalence of two diseases (measles and whooping-cough) which prove fatal through their lung complications, at a time when lung-diseases are so fatal in themselves, goes far to account for the high death-rate.

IRELAND.

BARRINGTON'S HOSPITAL, LIMERICK.

THE Countess of Dunraven intended giving an amateur concert this week for the benefit of the funds of this charity; but, as circumstances prevented this arrangement, her ladyship very generously forwarded a cheque for £50 to the hospital.

HEALTH OF CORK.

DURING the four weeks ending March 24th, the total number of registered deaths amounted to 210 (including 51 dying in the workhouse, and, therefore, outside the borough), and 168 births took place. The annual death-rate per 1,000 inhabitants during this period, gives a total ratio of mortality of 33.0; but, deducting those who died in the workhouse, the urban death-rate will then stand at 25.0; from infectious diseases, 0.3; an infant mortality of 4.0; and a birth-rate of 19.0. These figures go to show that no material alteration has taken place in the urban death-rate, as contrasted with that for a similar period last year.

PRISON SURGEONS.

COMPLAINTS from across the Channel are published, and are ably referred to in the medical press, of the treatment the prison surgeons are experiencing at the hands of the Irish Prisons Board; and from our own knowledge of the scant courtesy shown by governing bodies in general to the medical profession, we feel assured that they are not without sound foundation. The Prison Act of 1878 caused, as might have been anticipated, many changes in prison duties, but the medical officer was protected, or supposed to be protected, by the 27th Section, which says that he shall perform "such duties as he may be required to perform by the General Prisons Board, so that the same are analogous to those they performed previously to the commencement of the Act, and, subject as aforesaid, they shall perform the same duties as nearly as may be as they shall be performing at the same date." The Prisons Board seems, however, to have put a novel construction of its own on those plain words. First, it endeavoured to force new duties on the medical officers without any additional pay, and, failing that, to reduce their salaries. An appeal to the law secured them their rights, but it could not prevent a series of petty persecutions which followed the defeat of the Board. Taking advantage of the letter of the law, the governing body takes an ignoble revenge by making every duty as inconvenient and annoying as possible—stooping to the pettiest details of interference, and even throwing obstacles in the way of the proper performance of the medical duties. Matters have now come to such a pass, that the medical officers have formed an association—the Irish Prison Surgeons' Association—in order that they may submit their grievances to the Irish Prisons Commission which is sitting. The Association will be represented by a deputation of men of good professional standing, who will not only place before the commission their relation with the Prisons Board, but will also submit questions as to increase of pay and subsequent retirement. Amongst those mentioned as members of the deputation are Drs. Jacob, Carts, MacDonnell, Middleton, and Falkiner. It would seem as if the position of the Irish prison surgeons were even worse than that of their English brethren; at least, we have never received complaints of purposely discourteous, or harassing treatment. That the duties have increased, even fourfold, is undeniable, but that the increase is simply the result of the growing exigencies of the times, and the advancement in medical and sanitary knowledge is equally unquestioned, and does not proceed from any desire on the part of those in authority to impose needless or disagreeable duties. No doubt meddlesome interference on the part of a discipline officer does occasionally imp de the surgeon, but this is not encouraged by the administrative uthority. The English surgeon willingly accepts the extra work nd responsibility, but he expects his services to be acknowledg d in a tangible form. We do not think that the Irish surgeon need complain of having to visit his sick daily instead of twice a week as formerly, and an inspection once a week of men in disciplinary confinement, although a new duty is, to say the least of it, a good precautionary measure; but we insist that, if in times past this was not thought requisite, and that the then salary was considered an equivalent of work, with advanced ideas and new duties, to say nothing of the depreciation in the value of money, it is not reasonable to suppose that increased remuneration should not be a necessary sequence. The public seems to be very dense on the present position of the medical profession. There is almost as much difference in the education of a medical man of the present day and that of the past generation, as there is between that of the latter and the old barber surgeon. The young surgeon of to-day has to be thoroughly and practically informed on a mass of material not dreamt of in his father's time. The public requires it of them, and the public is right, and no portion of the public is more exacting than the prison authorities. None but really good men will now be taken into the prison service, and good men must be paid for their services. We sincerely trust that our Irish brethren may be successful in their just cause, and we wish them to know that they can at all times command our hearty co-operation. Their mode of procedure commends itself especially as sensible, honourable, and above board. Union is strength, and delegates from the Irish Prison Surgeons' Association will, we are convinced, be not lightly set aside. A similar association of English prison surgeons must ultimately be formed; and, although there is no English commission now sitting, yet, as we have before shown, their views can be effectually furthered by the Parliamentary Bills Committee of the British Medical Association.

MR. DIGBY, apothecary on board H.M.'s ship *Dragon*, at Aden, has committed suicide, having taken a dose of prussic acid. No cause for the act is assigned.

PROCEEDINGS AT THE PRESENTATION OF A PORTRAIT OF MR. ERNEST HART.

[We have been requested to publish the following report. We do so in deference to the kind wishes expressed on the subject, and to representations, which, we trust, are well founded, that the proceedings, having reference to the Editor of this Journal, and being largely influenced by considerations relating to his work as an officer of the British Medical Association, and also to the position and influence of the Association and its Journal, will not be without interest to others than those who directly participated in them.]

A meeting was held at Grosvenor House, by permission of the Duke of Westminster, on Tuesday last, April 10th, for the presentation of the portrait of Mr. Ernest Hart to his wife, "in recognition," as the invitations stated, "of his many and valued services rendered to the profession at large, and especially to the Army and Navy Medical Services, and the influence which, during twenty-five years, he has exercised on sanitary and social progress, the advancement of the welfare of the sick poor, and the cause of public health."

The portrait, which has been executed by Mr. Frank Holl, R.A., is a fine work of art and a striking likeness.

The following is a list of the committee, which had for its Treasurer Mr. T. Spencer Wells (President of the Royal College of Surgeons), and Mr. Noble Smith as acting Honorary Secretary:—His Grace the Duke of Westminster; the Right Hon. Lyon Playfair, M.P., F.R.S.; Sir Thomas Watson, Bart.; Sir William Smart, K.C.B.; Sir Erasmus Wilson, F.R.S.; Sir Henry Thompson; Sir Joseph Fayrer, K.C.S.I.; Sir William Mac Cormac; Dr. Charles Cameron, M.P.; Dr. Farquharson, M.P.; William Adams, Esq.; Dr. J. H. Aveling; William Allingham, Esq.; Dr. Henry Charles Andrews; Alfred Baker, Esq., Birmingham; Dr. John Beddoe, F.R.S., Bristol; T. H. Bartleet, Esq., Birmingham; Dr. Henry Bennet, Weybridge; Professor Bentley; Dr. Lauder Brunton, F.R.S.; Dr. Robert Barnes; Dr. De Bartolomé, Sheffield; Dr. Crichton Browne; Dr. Francis Bond, Gloucester; Dr. Bucknill, F.R.S.; Dr. Chepmell; W. Watson Cheyne, Esq.; Dr. John Chiene, Edinburgh; Dr. Andrew Clark; Dr. V. C. Clarke; Martin Coates, Esq., Salisbury; Dr. Charles S. W. Cobbold; Inspector-General Colan; Dr. Alexander Collie; Fleet-Surgeon Dr. Cowan, Gosport; Professor W. H. Corfield; George Critchett, Esq.; G. Anderson Critchett, Esq.; J. Brendon Curgenven, Esq.; Dr. Maurice Davis; Dr. William Day; Dr. Walter Dickson; Dr. Horace Dobell; Nelson Dobson, Esq., Clifton; Dr. Robert McDonnell, F.R.S., Dublin; Alban Doran, Esq.; Dr. Langdon Down; Dr. George F. Duffey, Dublin; Arthur E. Durham, Esq.; George Eastes, Esq.; Dr. Arthur Edis; Professor Cossar Ewart, Edinburgh; Dr. William Ewart; Surgeon-General Joseph Ewart, M.D.; Surgeon-Major Evatt, M.D.; Stamford Felce, Esq.; George P. Field, Esq.; Dr. Ferrier, F.R.S.; Dr. Michael Foster, Cambridge; Dr. E. Long Fox, Bristol; Frederick J. Gant, Esq.; Dr. Septimus Gibbon; Dr. Charles J. Hare; Dr. Thomas Hawksley; William Holder, Esq., Hull; Timothy Holmes, Esq.; Dr. R. H. Hughes; Jonathan Hutchinson, Esq., F.R.S.; Vincent Jackson, Esq., Wolverhampton; Dr. George Johnson, F.R.S.; Dr. Macnaughton Jones; Dr. Hughlings Jackson, F.R.S.; Evan Jones, Esq., Aberdare; Henry Juler, Esq.; Dr. J. Robert Kealy, Gosport; E. Ray Lankester, Esq., F.R.S.; R. Liebreich, Esq.; Dr. Robert Liveing; Dr. William Macewen, Glasgow; Dr. Stephen Mackenzie; Surgeon-Major M. J. MacCormack, M.B.; Surgeon-General MacKenna, C.B.; W. H. Michael, Esq., Q.C.; Arthur Myers, Esq.; Albert Napper, Esq., Cranleigh; Dr. Richard Neale; Dr. William Ord; Dr. G. H. Philipson, Newcastle; Dr. R. Quain, F.R.S.; Surgeon-General Partridge; Staff-Surgeon Walter Reid, M.D.; Dr. Joseph Rogers; Dr. Marion Sims; Professor Burdon Sanderson, F.R.S.; Septimus W. Sibley, Esq.; Edwin Saunders, Esq.; George Smith, Esq.: Dr. Protheroe Smith; William Stokes, Esq., M.D., F.R.C.S., Dublin; H. R Swanzy, Esq., Dublin; Dr. Meymott Tidy; Fleet-Surgeon James Thomson; Dr. John W. Tripe; Dr. Harrington Tuke; C. M. Tuke, Esq.; Dr. T. J. Walker, Peterborough; Dr. W. H. Walshe, F.R.S.; Deputy Inspector-General Samuel D. Wells, R.N.; C. G. Wheelhouse, Esq., Leeds; Staff-Surgeon Henry C. Woods, R.N.; Dr. C. J. B. Williams, F.R.S.; Dr. C. Theodore Williams.

Upwards of five hundred persons assembled to take part in the presentation, including most of the above and a great number of leading medical men in London and the provinces, and persons eminent in science and prominent in various spheres of social usefulness and activity. [Considerations of space compel us to omit the list forwarded, and we are unwilling on such an occasion to make any selection of names.] His Grace the Duke of Westminster, who was one of the first to approve the work of the committee, of which he was a member, signified his wish to preside on the occasion, but being unexpectedly summoned by telegram to attend the House of Lords, left a letter addressed to the meeting, in which, while expressing his regret, "he congratulated Mr. Ernest Hart on this well-deserved recognition of his great public and professional labours, and expressed the wish that Mr. T. Spencer Wells should take the chair." The honorary secretary read the report, and stated that nearly five hundred persons had subscribed for the purpose of presenting this portrait. Many had at the outset expressed their wish to contribute large sums, but at an early date it was resolved that the amount of subscription should be limited to a maximum of two guineas.

Sir Henry Thompson moved, "that the report be received and adopted." He said, speaking as one of the hard-worked practitioners of London, that the profession was fortunate in having had in Mr. Ernest Hart one who had represented them so ably and so faithfully in their public relations, and on many great public occasions. There were few men who had such power of observation, such rapidity of action, such undaunted independence and pubilc spirit, such power of organisation, and such tact in execution. These were qualities, the combination of which was rare, more especially when united with that courtesy, good nature, and the genial qualities which he possessed in so remarkable a degree. Mr. Hart was a journalist of remarkable power, and there were few men who had more ably dealt with difficult circumstances, or who had done so much for the profession. He regretted much he could not express himself more skilfully; he had said infinitely less than he desired.

Dr. Quain, in seconding the motion, said Mr. Hart had constructed for himself a monument which would last for ever, in the way in which he had contributed to raise the British Medical Association to the position which it held. He had played a very large part in raising up one of the most powerful organisations which the world possessed. He had editorially guided it well, and he hoped he would long continue to do so. If he had done nothing else than this, he would deserve their gratitude. But there was no man more generally beloved, for while he was staunch and enduring in his friendship, he would never injure an enemy.

Dr. Cameron, M.P., supported the resolution. After referring at some length to parliamentary services, of which he had been the witness, he said that it would be an omission if he were not to refer to the part which Mr. Hart had taken in connection with vaccination and animal vaccination. He threw himself heart and soul into this great question of public health. From his demonstration of the "Truth about Vaccination" and the organisation of the London Conference on animal vaccination, great public results had followed, and this country now possessed a State Institution for vaccination from the calf.

Dr. Farquharson, M.P., said he had watched (with good facilities of observation as an old officer of the Army Medical Service) Mr. Hart's great career of public usefulness during its whole period of twenty-five years, and he was not surprised to see so overwhelming and so representative a gathering. The British Medical Association was a body of great public importance, but the members were scattered all over the world. It wanted some one to bring them together, and Mr. Hart, on many great occasions, both as the accomplished Editor of the Journal, and as the most efficient Chairman of the Parliamentary Bills Committee of the Association, which some years ago he had reorganised, had been enabled to concentrate and to bring to bear on political events the great influence of this large section of the profession, and vigilantly to protect the interests of every branch of the profession in a way never before accomplished. Mr. Hart had stamped his name on the best progress of the times. He could not state in too emphatic terms the great claims which Mr. Hart had upon the profession and upon the country for public recognition of a signal character.

Sir Frederick Pollock wished to say a word of Mr. Hart's services in the cause of Smoke Abatement. The remarkable success of that movement—upon the great importance of which he need not dwell—was, he could confidently say, due above all things to the energy, the enterprise, the ability, and the unceasing exertions of Mr. Hart. He had shown, too, the utmost courtesy and the greatest patience in matters which required a great deal of both; and without him that movement would not stand in the satisfactory position in which, he was happy to say, it now stands. He did not hesitate to say that all the inhabitants of London, and of all the other great cities and centres of manufacturing industry in this country, were

already under very great obligations indeed to Mr. Hart for the part he had taken in the matters, and in coming years the debt of obligation could but grow.

Mr. C. G. WHEELHOUSE said he should have been very sorry indeed if, as President of the Council of the British Medical Association, he were not permitted to say a few words on behalf of that Association. The British Medical Association and its JOURNAL had, in a very great measure, risen to their present eminent position of utility through the great services which Mr. Ernest Hart had rendered, and the profession owed to him a debt of gratitude for the signal services, and the brilliant ability by which he had done so much to add to the growth, the influence, and the power of the British Medical Association. The profession at large and its individual members had always found in Mr. Hart an earnest worker, ready to advance its best interests in every way, and prompt in seeing how best he could advance them; for there had never come under his notice a grievance which he had not been prompt to labour to redress; and there were public evils of all kinds that he had rooted out and remedied, which would not have been done but for his public spirit and influence. He trusted he might long be spared to continue his good work, both as editor of the BRITISH MEDICAL JOURNAL and as a public man.

Sir WILLIAM SMART, K.C.B., R.N., could not hope to say anything which would add to the high regard in which Mr. Hart was held, not only by the profession and by the services, but also by the public at large. There was still present vividly to his mind the scene when Mr. Hart, while still a student in 1854, appeared on a platform at St. Martin's Hall, to urge his fellow-students in London to call upon the Admiralty, who were then appealing for naval surgeons for the Crimean war, to take naval surgeons out of the midshipman's cockpit, and to treat them as men of professional education and gravity should be treated. That was his first appearance in public life, and a signal and immediate benefit was secured to the Service. From that day to this, he had been the constant friend and public advocate of the Naval Medical Service, and his influence with the Government had been repeatedly exerted with the best effects, both publicly and privately, in redressing individual grievances, and securing improved condition of pay, retirement, and relative rank for the officers. He looked upon an event such as this as a crowning event in any man's life; for Mr. and Mrs. Hart must know that this signal public and professional recognition came from sincere feelings and high motives, and that it was a spontaneous acknowledgment of the great position Mr. Hart had taken up in public life, as well as of affection and friendship from a host of friends such as any man might feel happy and proud to possess.

Surgeon-General EWART, speaking on behalf of the Indian Medical Service, would limit himself to speaking of services rendered in the year 1880 towards a redress of the grievances of Indian medical officers, when, as a deputation, they went before Lord Hartington. Mr. Hart then stepped forward, and in a few pithy sentences, and speaking with the authority which his experience and position gave him, told his lordship that the measures which had been carried out in India would be disapproved of by all the medical schools in England, Ireland, and Scotland; and that this service had, in the position in which it was placed, the sincere sympathy of the whole of the medical profession. The result was that, in a very short time, most of the grievances which could be redressed had been redressed, and compensation was given for the loss of important administrative appointments; to the junior service, increased pensions were given, and the period which they had to serve diminished. For these results, they were largely indebted to the exertions, energy, and ability, with which Mr. Hart had conducted their case, and the continuous assistance which he had given in the mattter. "There was," he said, "no name in the medical profession better known in India, among the gentlemen connected with the Indian Medical Service, than the name of Ernest Hart;" and the consequence was, speaking in his own knowledge, that a very important Branch of the British Medical Association had just been established, which was known as the North-West Branch of the British Medical Association; and there was no doubt in his mind that, in a short time, every important district would be supplied with its own Branch, affiliated with the parent Branch in this country, and become readers of its JOURNAL. He concluded by expressing the wish that Mr. Hart and his talented and accomplished wife might be long spared to enjoy their laurels, and to reap the benefits of their useful labours.

Sir T. W. CHARLEY, Common Sergeant of London, asked leave to say a word or two of the great part which Mr. Hart had taken in calling public attention to the system of criminal baby-farming. Mr. Hart having himself actively set on foot a detailed inspection, on behalf of the BRITISH MEDICAL JOURNAL, had succeeded in exposing the manner of proceeding of a number of these baby-farms. A Select Committee of the House of Commons was appointed to consider the facts, which was presided over by Mr. Walpole, and which included Dr. Lyon Playfair, M.P., Dr. Cameron, M.P., and other well known gentlemen. A Bill was introduced by this committee, in the framing of which Mr. Ernest Hart took a leading part; and he was happy to say that that measure, which Mr. Ernest Hart was mainly instrumental in procuring, and which he had the honour of helping to pass through the House of Commons, had become the law of the land, and had to a very great extent put down criminal baby-farming. By like joint efforts for the protection of young girls, the age of protection against abuse was raised by law from twelve to fifteen years. The Infant Life Protection Society had ceased to exist, but he hoped their work would long continue to live, and he was sure everyone present would echo the wish of the last speaker, that Mr. Ernest Hart and his wife will live long, and be the means of ameliorating in the future as in the past, the condition of those who were less able to help themselves.

The resolution was carried by acclamation.

The CHAIRMAN, in presenting the portrait to Mrs. Hart, read the following address, which was tastefully illuminated on pages of vellum, in a handsome volume bound in velvet:—

"To MRS. ERNEST HART.

"The five hundred subscribers, whose names are appended, and who have united in presenting to you a portrait of your husband, have been influenced not only by sincere personal regard for you and for him, but also by the desire to prove how highly they appreciate the devotion of his great abilities, for twenty years past, to the service of the medical profession and of the public.

"As Editor of the BRITISH MEDICAL JOURNAL, and as Chairman of the Parliamentary Bills Committee of the British Medical Association, your husband has exerted a powerful influence for good, not only upon the British Medical Association, but upon the whole medical profession, upon medical education, upon the study of the causes of disease, and on the prevention of contagious and infectious diseases. He has assisted in removing recent obstruction to scientific research, and in lessening dangerous opposition to vaccination.

"The improvement of the condition of the sick poor in workhouses and infirmaries, and the establishment by the Legislature of a system of metropolitan asylums; the suppression of baby-farming, and the passing of the Infant Life Protection Act; the guidance and development of the National Health Society in its useful labours for the diffusion of the knowledge of the laws of health among all classes, and the preservation of open spaces; the extension of coffee-taverns in the metropolis; the initiation and conduct of the present public movement for the abatement of the evils arising from the excessive production of smoke, and especially the holding of the Smoke Abatement Exhibition at South Kensington of 1882, and the formation of the National Smoke Abatement Institute: these are public works of national usefulness to which he has successfully devoted rare energy and capacity.

"The position and rewards of medical men who serve their country in the army, the navy, the Indian medical service, and the militia; in the public health and Poor-law services, and in civil life, have been improved or increased by his public and private exertions and social and political influence. By his editorial work, and his writings in the public journals, his labours have largely contributed to advance the well-being of the nation, to promote the best interests of the medical profession, and to increase good feeling amongst its members.

"These objects could only have been so successfully attained by true devotion to public and professional objects, by vigilant supervision of the labours of others, and by steady determination to aid only the honest and true, and to oppose the false or useless.

"In warm appreciation of the value and importance of the public work accomplished by your husband, and of the spirit in which it has been carried out, and knowing that you have encouraged and supported him in his daily labours, we have extreme gratification in presenting you with his portrait, and in expressing our thanks to you both, and our good wishes for your continued prosperity and happiness."

Mr. ERNEST HART said: In my own name and in the name of my wife, I thank you from the bottom of my heart for this generous gift, these gracious words, this great gathering of friends breathing an atmosphere of kindness, the fragrant memory of which we shall carry with us through all our lives. It is intimately true that I have

always been able to turn to my wife for solace, support, and encouragement in all that is best in my daily work, and in that which has met with your especial approval. She has always placed public objects high above private aims; and, in her enthusiasm for humanity, and her loving devotion, I have been able to find that encouragement and support, which we all of us need in the anxieties and toils of active life. That support and solace we naturally find in the home, and among those who love us; and here, speaking among friends who know so much of my life, I should like to be allowed to say how much I owe to my sister, who has aided me in much of my public work for many years with unfailing judgment and unceasing and affectionate devotion. The words that have been uttered could not but recall to my mind how much of all such public work is due to others. A man is only a son of his generation and of his time. Hosts of earnest workers and thinkers who have grieved and toiled, and broken their hearts over the crying evils of the day, have combined to ripen the time for any reform. No reform was ever yet carried by the energy or the foresight, the influence, or the power of any one man; the earth has been tilled and the seed sown by many; and as I heard the various topics referred to by various speakers, I could but think of that band of earnest workers, forerunners and coadjutors in the work, who bore the heat and burden of the days that are past, and to whom the triumph is mainly due. As you spoke of Workhouse Infirmary reform, I could but think of Anstie, the chivalrous and tender-hearted, to whom the pain of the sick poor was a personal suffering, of Carr, and the brave and solid Ashhurst; all have passed away. Rogers and Storr are here today, to join with me in saying how much also was due to the work of that nobleman in whose house we stand, and to whose work day by day, and week by week, joined to that of other statesmen, especially Lord Carnarvon and the Archbishop of York, it was mainly due that London now possesses a system of asylums for the sick poor suffering from infectious diseases, such as no other country possesses. But even that system of asylums has not yet taken its rightful place in our State system of hospitals; nor has it taken its rightful place in our system of medical education, for students are not yet admitted within the walls of those hospitals to study cases of infectious disease. They ought to be so admitted for the benefit of the poor and for the benefit of the public. As to Infant Life Protection, what could have been done, but for such men as Charley, Curgenven, Wiltshire, Oscar Thorpe, and others, who laboured with us side by side? As to Coffee-Taverns, it is only right to remember, both as to the past and as to the future, that the whole air has long been resonant with the sounds and echoes of the work of enthusiastic temperance advocates. From the provinces came the first impulse which we received. Our early metropolitan successes, bruited by the press, spread again like wildfire through the country, and soon every town and every village had its coffee taverns-and places of temperate resort and recreation. To listen to the statement of the Chancellor of the Exchequer, it would almost seem as if the walls of the strong citadel of intemperance were crumbling before the trumpet-sounds heralding the armies of temperance; but we medical men, who search the secrets of society, and watch the currents of class opinion, have to ask ourselves how much of this fading of the influence of drink is due to a change for the better in respect to the use of alcohol among the more educated and wealthier classes? How far has it yet reached the working classes? Has drunkenness among the working classes really abated? That is one question which it will be our duty still further to work out. I will refer to only one other subject that has been named, and that is, the British Medical Association. That great and powerful Association, strong in the purity of its aims and in the nobility of its purposes, has grown beyond any other association, by the nobleness of purpose of those who laid its foundations, by the elevation of aim, and the unity of the whole body of its members; by the determination of those who, from year to year, are elected to its councils, that it should serve only the highest interests of the profession. It will always be to me a source of the highest gratification to have been associated for so many of the best years of my life with those who have gathered at its councils, and to have had the privilege of co-operating with those officers who have served it so well for many years. And now, once more, let me say how deeply grateful I am, and how warmly I offer you the heartfelt thanks of my wife and myself, for this generous gift; and not less for these kind words, dictated much more by your feelings of friendship than by any merits of my own. It will be a precious possession to us, and to all our family; and while I feel it a proud testimony of the past, it shall be an incentive to future efforts for the best service of the profession, and to devotion to the cause of the people.

Dr. ROGERS, in proposing a vote of thanks to the Committee, coupling with it the name of Mr. E. Noble Smith, the Honorary Secretary, whose exertions had been so able and successful, spoke warmly of Mr. Hart's labours in bettering the lot of the Sick Poor in Workhouses, and on behalf of Poor-law medical officers.

The Rev. S. A. BARNETT, vicar of St. Jude's, Whitechapel, in seconding this resolution, said he well remembered, ten years ago, Mr. Hart saying to him that he hoped, in working, to leave the world a little better than he found it; and he could say, from a constant and close observation of his public and domestic life, that he had been living up to that hope.

Mr. NOBLE SMITH briefly replied.

Dr. ANDREW CLARK said he thought, without any exaggeration of language, that he might congratulate all those persons who had been engaged in this important, interesting, and happy ceremony, on having achieved, not only a justly merited, but a very great success—certainly a very justly merited success; for ever since he had known Mr. Ernest Hart—a greater number of years than he cared to say—he had successfully devoted his abilities, his energies, his opportunities, and his time, to those questions which affected the welfare of the community at large, as well as to the service of the profession. He saw that the testimonial had been contributed to by the most eminent in literature and science; and it had been presented by a man, himself so distinguished as to give distinction to any ceremony in which he took part. It had been presented by a man who had saved, he thought, more lives than any other man living; and who had given to his professional brethren the laws and conditions whereby they might save hundreds of the generations yet unborn—a man whose services to humanity had been so great, that every civilised nation but one on the face of the earth had made its acknowledgment to them; and that one nation which had not done so was our own. Lastly, he thought it was a great success; for it was presented in this, one of the great houses of this great metropolis, by the wish of its distinguished owner, and in the presence of this great assembly. Dr. Andrew Clark concluded by saying they could not depart without an acknowledgment to him who had always thrown himself into every good work which could, in any way, benefit his fellow-men, and tend to weld them in the duty of a common humanity. He was sure they were all grateful for His Grace's services, and he asked them all to crown the good work of to-day by an acclamation of thanks for the work which he had done.

Sir FREDERICK POLLOCK proposed a vote of thanks to the chairman, which was unanimously carried.

COLLECTIVE INVESTIGATION OF DISEASE.

THE COMMUNICABILITY OF PHTHISIS.

LIST of replies received to the second issue of this inquiry between March 3rd and March 30th.

J. Adams, M.D., Ashburton, Devon; C. E. Addison, Esq., Colchester; A. Cummings Air, Esq., Kennington Park Road, S.E.; J. Alexander, M.D., Paignton, South Devon; T. Clifford Allbutt, M.D., Leeds; W. Hamilton Allen, Esq., Bardney, Lincolnshire; C. H. Allfrey, M.D., St. Mary Cray; P. D. Anthonisz, M.D., Ceylon; G. Appleton, Esq., Lizard, Cornwall.

J. P. Badley, Esq., Dudley; Francis James Bailey, Esq., Liverpool; W. Bain, Esq., Stockport; J. B. Baker, Esq., North Kensington, W.; J. J. Baker, Esq., Bilston, Staffordshire; J. Balbirnie, M.D., Manchester; A. H. Bampton, M.D., Plymouth; G. H. Barfoot, M.D., Birkenhead; H. M. Barker, M.B., Sandown, I. of W.; G. R. Barnes, M.D., Ewell, Surrey; J. Barr, M.D., Liverpool; J. G. Barratt, M.D., Cleveland Gardens, W.; J. S. Bartrum, Esq., Bath; F. Bateman, M.B., Whitchurch, Oxon; J. R. Baumgartner, Esq., Newcastle-on-Tyne; Horace O. Bayfield, Esq., Lavender Hill, S.W.; D. Bean, Esq., Mossley, Manchester; F. C. Berry, M.D., Lynton, near Devon; D. Biddle, Esq., Kingston-on-Thames; J. G. Black, M.D., Harrowgate; John Blair, M.D., Shotts, Lanarkshire; W. C Blackett, Esq., Durham; Percy Blumer, Esq., Keyworth, Nottingham; Thomas Blunt, M.D., Leicester; W. Bodkin, M.D., Chelmsford; W. T. Bolton, Esq., Newcastle-on-Tyne; F. St. Q. Bond, Esq., Havant; Percy Boulton, M.D., Portman Square, W.; J. F. Boyes, M.B., Brighton West; J. D. Bradburn, Esq., Eccles, Manchester; W. N. Brake, Esq., Porchester, Hants; R. Brayn, Esq., Woking; W. H. Broadbent, M.D., Seymour Street, W.; A. C. Brock, Esq., Dorking; F. B. Brodribb, Esq., Colne, Lancashire; J. B. Bromley, Esq., Castle-Hedingham, Essex; W. F. Brook, Esq., Fareham; G. A. Brown, Esq., Tredegar; — Brown, Esq., Maryfield, Annan, N.B.; J. M. Bryan, M.D., Northampton; B. Bubb, Esq., Wrangle, Lincoln; J. W. Burman, M.D., Hungerford, Berks; S. H. Burton, M.B., Norwich; G. W. F. Bury, Esq., Barnet; A Butler, M.B., Torres, N.B.; C. Clark Burman, Esq., Belford, Northumberland; N. Benoly, M.D., Leytonstone; Christian Budd, M.B., North Tawton, Devon.

J. Caldwell, Esq., Shotts, Lanarkshire; W. Calwell, Esq., Wellington, Salop; Arthur J. Campbell, M.B., Mablethorpe, Lincoln; J. A. T. Cartwright, Esq., Leintwardine, Herefordshire; R. W. Case, M.B., Bakers Row, E; C. H. Cattle, M.D., Nottingham; H. Caldecott, Esq., Dorking; G. Chapman, Esq., Brierley Hill, Staffordshire; H. Charlesworth, Surgeon A M.D., York; J. Christal, Esq., Coote Hill, co. Cavan; James Christie, M.D., Glasgow; J. Clapperton, Esq., Winchester; B. Clarke, Esq., Upper Clapton; W. Clibborn, M.D., Birmingham; W. H. Coates, Esq., Hucknall-Torkard, Nottinghamshire; Abraham Colles, M.D., Wellington, Salop; R. Barrington Cooke, Esq., Scarborough; W. Cock-

ott, Esq., Catterick, Yorkshire; C. Coombs, M.D., Castle Cary, Somerset; S. Coombs, Esq., Worcester; Staff-Surgeon R. W. Coppinger, M.D., Portsouth; G. Cordwent, M.D., Milverton, Somerset; J. Cornwall, Esq., Glastonry, Somerset; A. Cox, Esq., Rugby; Staff-Surgeon Alex. Grant Colquhoun, editerranean Station; Samuel Craddock, Esq., Bath; E. H. Cree, M.D., Upper olloway; W. E. Cree, Esq., Upper Holloway; J. Crawford, Esq., Ightham, venoaks; J. Crocker, Esq., Bingley, Yorkshire; W. F. Crosskey, M.D., Lewes; Candler, Esq., Harleston, Norfolk; W. M. Clarke, Esq., Bristol; J. G. S. Cogll, M.D., Ventnor.

W. B. Dalby, M.D., Torquay; J. Dale, Esq., Stockton-on-Tees; T. Davidson, B., Thornhill, Dumfries; T. Davis, M.D., Londonderry; W. H. Day, Esq., ntonville, N.; H. H. Dearsly, Esq., Warlingham, Surrey; T. Dickinson, Esq., oane Street, W.; J. E. Dickson, M.B., Jersey; E. J. Don Bavand, Esq., Old eatord; J. H. Douty, Esq., Powick, Worcestershire; J. Drummond, M.D., ce, France; H. M. Duncan, M.D., South Hampstead.

W. F. B. Eadon, Esq., Bristol; G. Eastes, M.B., Hyde Park Square, W.; J. nton, M.D., Cleator Moor, Cumberland; W. Ebden, Esq., Haughley, Suffolk; Eddowes, M.D., Market Drayton; J. Edmunds, M.D., Bond Street, W.; G. C. lwards, Esq., Ipswich; F. C. Grant Ellerton, Esq., Leamington; J. W. Ellis, q., Swavesey, Cambridge; T. J. Evans, Esq., Llansawel, Carruth.

H. W. Fagge, Esq., Luttleworth, Leicester; G. B. Ferguson, M.D., Cheltenm; J. S. Ferris, M.B., Uxbridge; Surgeon-Major J. E. Fishbourne, Chatham; Fisher, Esq., Pemberton, Wigan; N. J. H. Fitzmaurice, Esq., Dunning, rthshire; W. A. Fitzgerald, M.D., Dublin; A. Flint, Esq., Westgate-on-Sea; rgeon H. A. Fogerty, M.D., Jersey; J. M. S. Foggo, Esq., Kensington, W.; G. ote, Esq., Kington, Herefordshire; A. Forsyth, M.D., Greenwich; Trevor Fow-, Esq., Epping; F. Fox, Esq., Wimpole Street; J. W. Fry, Esq., Wateringry, Kent; C. H. Furnivall, Esq., Acton, W.

J. E. Garner, M.D., Preston, Lancashire; Surgeon C. E. Geoghegan, Esq., Devonrt; George Gill, Esq., Liverpool; J. H. Gibson, M.D., Hull; W. Kitto Gidgs, Esq., Calverley, Yorkshire; J. Gill, M.D., Stratford-on-Avon; R. Gillard, q., Clapham Road, S.W.; A. Goullet, Esq., Finchley Road, N.W.; F. S. ulder, Esq., Dudley; A. Godwin, Esq., Hanley, Staffordshire; P. F. Graham, D., Limerick; M. H. Grattan, Esq., Chipping-Ongar, Essex; John H. Gray, B., Wandsworth Common, S.W.; T. W. Green, M.D., Rawtenstall, Lancaire; John Greene, Esq., Friday Bridge, Birmingham; Richard Greene, Esq., rthampton; J. R. Greenwood, jun., Esq., Dalston; T. F. Grimsdale, Esq., erpool; W. Gripper, M.B., Sumner Place, S.W.; J. W. Gooch, Esq., Eton, cks; H. George, Esq., Louth, Lincoln.

R. E. Hadden, M.D., Skibbereen, co. Cork; A. Haig, M.B., Torquay; J. Hamil-, M.D., South Kensington; J. Hannay, Esq., Weobley, Herefordshire; H. ndford, M.D., Nottingham; A. J. Harrison, M.B., Bristol; W. A. Harvey, B., Ventnor; J. Hassall, M.B., Northwich, Cheshire; M. Hay, M.D., Edinrgh; F. H. Haynes, M.D., Leamington; W. Francis Hazel, Esq., Oakley uare, N.W.; M. Heckscher, M.D., Manchester; John Hern, M.B., Darling-; J. Higham Hill, M.D., Royton; A. Hirst, Esq., Prestwich; J. Hodgson, B., Oldham; J. Sinclair Holden, M.D., Sudbury, Suffolk; W. B. Holderness, q., Windsor; H. C. Holman, Esq., East Hoathley, Sussex; J. S. Horsfall, q., Sowerby Bridge, Yorkshire; C. Holthouse, Esq., Petersham, Surrey; H. angway Hounsell, M.D., Torquay; W. Howse, Esq., New Swindon; W. yle, Esq., Manchester; T. Wells Hubbard, Esq., Bromley, Kent; Roger ghes, Esq., Bala, North Wales; E. Gordon Hull, M.D., Stockton-on-Tees; D. Husband, M.D., Bournemouth; C. F. Hutchinson, M.D., Scarborough; E. Hyde, Esq., Worcester; H. Harris, M.D., Redruth.

J. Idelson, M.D., Berne, Switzerland; W. W. Ireland, M.D., Prestonpans; E. Image, M.B., Bury St. Edmund's; W. Iliffe, Esq., Derby.

J. Jamieson, Esq., Edinburgh; W. R. Spence Jefferies, M.D., Burton-on-nt; P. S. Jakins, Esq., Regent's Park; J. Crosse Johnston, Esq., Lockwood, lford; C. J. B. Johnson, Wetherby, Yorkshire; J. Johnstone, Esq., Glasw; C. Handfield Jones, M.B., Montagu Square, W.; Evan Jones, Esq., Abere; Leslie Jones, M.D., Cheetham Hill, Manchester; R. Jones, Esq., Manster; F. W. Jordan, Esq., Stockport; H. C. Juler, M.D., Cincinatti, U.S.A.

P. Kavanagh, M.D., Brockley, S.E.; A. Kebbell, Esq., Flaxton, Yorkshire; ff-Surgeon G. Kell, Portsmouth; B. Kelly, M.D., Rotherhithe, S.E.; D. S. nnedy, M.B., Perth; John Kenzie, Esq., Larkhall, N.B.; J. E. Kenyon, Esq., ilford; Abraham Kidd, M.D., Ballymena; W. B. Kilburn, Esq., West Auckd, Durham; Gilbert Kirker, M.D., Mediterranean Squadron; M. S. Kennedy, q., Tipperary.

James Laing, M.B., Dunecht, N.B.; T. L. Laxton, Esq., Shepley, Yorkshire; nes Lawrie, M.D., Glasgow; H. C. Lawrence, Esq., Hyde Park, W.; G. R. per, M.B., Kesh, co. Fermanagh; C. G. Lyster, Esq., Kilkenny; G. H. ley, M.D., Portland, Dorset; S. Linton, M.B., Grangemouth, Stirlingsh.; A. D. Lithgow, Esq., Hans Place, S.W.; T. G. Lithgow, Esq., Farnborough; Lloyd, Esq., Conwil-Elvet, Carmarthen; W. Lock, M.D., Ipswich; W. Lomas, D., Charing Cross, S.W.; W. F. Lovell, Esq., Bristol; W. Lyon, Esq., Peterter, N.B.; R. R. Lloyd, Esq., St. Albans.

P. McCallum, Esq., St. Martin's, Perthshire; A. Macdonald, Esq., Kirkoswald, mberland; J. A. McDonagh, Esq., Hampstead Road, N.W.; A. C. McEwen, q., Chester; F. MacGeagh, M.D., Kingston-on-Thames; A. R. Mackenzie, D., Fortrose, Ross-shire; M. Mackintosh, M.B., Mortlake; J. B. Macleod, M.D., ndee; J. McNaught, M.D., Newchurch, Manchester; S. R. Macphail, M.D., lisle; E. McSheehy, M.D., Knaresborough; W. H. Mamfold, Esq., Liverd; F. Manson, Esq., Tunbridge Wells; J. Marshall, Esq., Wickford, Essex; Martin, Esq., Belfast; S. B. Mason, Esq., Pontypool, Monmouthshire; W. oper Masters, M.D., Thrapstone, North Hants; A. Mayer, M.D., Antwerp; Meadows, M.B., Leicester; J. Mellis, Esq., Fraserburgh, N.B.; R. M. Miller, B., Upper Norwood, S.E.; D. H. Monckton, M.D., Rugeley; J. Moore, M.D., ast; R. W. Moore, Esq., Wednesbury; W. R. Moorhead, M.D., Benburb, land; G. T. Mockett, Esq., Tyldesley, Lancashire; W. Mortimer, M.D., riff, N.B.; T. Morton, M.D., Kilburn, N.W.; J. Mossop, Esq., Bradford; Mulvany, Esq., Dundalk, co. Louth; J. Munro, M.D., Barnard Castle; A. S. rtle, M.D., Harrowgate; J. Moore, Esq., Bourton-on-the-Water; T. Morgan, q., Montgomery.

James Neal, M.D., Sandown, Isle of Wight; R. Neale, M.D., Boundary Road, W.; J. Neil, M.D., Portsmouth; J. G. Nevitt, Esq., Leeds; A. Perry Newman, D., Hawkhurst, Kent; G. Newstead, Esq., Eccleshill, Leeds; J. F. Nicholson, D., Hull; H. B. Noble, Esq., Clapham, S.W.; J. B. Norman, Esq., Southsea.

J. O'Connor, M.D., Brook Street, W.; J. O'Dowd, Esq., Netherton, Dudley; Ostlere, M.B., Stoke Newington, N.; C. A. Owens, M.D., Long Stratton.

J. Paterson, M.D., Constantinople; C. E. Perry, M.D., Folkestone; R. Petch, q., York; J. Picken, Esq., Randalstown, Ireland; N. Porritt, Esq., Huddersld; D Porteous, M.D., Darlington; G. E. Power, Esq., Hucknall Torkard, Notts; H. Power, M.B., Great Cumberland Place, W.; G. V. Poore, M.D., Wimpole Street; G. Pycroft, Esq., Kenton, Exeter.

T. C. Railton, M.D., Manchester; W. H. F. Ramsden, Esq., Dobcross, Manchester; T. D. Ransford, Esq., Bath; F. Rawle, Esq., Titchfield, Hants; A. C. Rayner, Esq., Preston, Lancashire; W. Rayner, Esq., Dorset Square, W.; C. S. Richardson, Esq., Oughtbridge, Yorkshire; J. J. Ritchie, Esq., Leek, Staffordshire; C. H. Roberts, Esq., Harrow Road; H. Robinson, Esq., Preston, Lancashire; W. Roden, M.D., Kidderminster; T. L. Rogers, M.D., Rainhill, Lancashire; J. R. Ross, M.D., Bally Kelly, Derry; T. Rutherford, M.B., Kelso, N.B.; R. Ryder, M.D., Nailsworth, Gloucestershire; J. Reid, Esq., Canterbury.

F. Salter, Esq., Leeds; W. A. Satchell, Esq., Bournemouth; Robert Saundby, M.D., Birmingham; G. T. Schofield, Esq., Mossley, Manchester; C. Manson Scott, Esq., Kingstown, Co. Dublin; J. Sedgwick, M.D., Boroughbridge, Yorkshire; C. E. Shelly, M.B., Hertford; W. P. Shipton, Esq., Buxton, Derbyshire; R. Sinclair, M.D., Dundee; E. Skinner, Esq., Sheffield; J. Simpson, Esq., Edinburgh; J. B. Sincock, Esq., Bridgwater; F. Simms, M.B., Mandeville Place, W.; J. L. Siordet, M.B., Mentone, France; F. Skerritt, Esq., Gort, Co. Galway; D. S. Skinner, Esq., Bedford Gardens, W.; J. Sloan, M.B., Bramley, Leeds; S. Sloan, M.D., Glasgow; T. Smailes, Esq., Honley, Yorks; P. Blaikie Smith, M.D., Aberdeen; G. H. Snowden, Esq., Portsmouth; C. Solomon, Esq., Skirlaugh, Hull; W. J. Sprott, M.D., Beeston, Notts; W. J. Square, Esq., Plymouth; W. H. R. Stanley, M.D., Euston Road, N.W.; Appleby Stephenson, M.D., Nottingham; Alex. Stewart, M.D., Pendleton, Manchester; J. Stewart, Esq., Newport, Fyfe, N.B.; Wm. Stewart, M.B., Kirkwall, N.B.; A. W. Stocks, Esq., Salford; R. Stone, Esq., Omagh, co. Tyrone; J. H. Stowers, M.D., Finsbury, E.C.; E. B. Stephens, Esq., Doddington, Cambridgeshire; F. W. Strugnell, Esq., Highgate Road, N.W.; W. A. Sturge, M.D., Nice, France; H. Sutherland, M.D., Whitehall, S.W.; W. Sutherland, Esq., Newcastle-on-Tyne; F. Sutton, Esq., Gainsborough; R. J. Swan, Esq., Spalding; J. R. Swanton, M.D., Bantry, Ireland; J. W. Sellers, Esq., Sileby, Loughborough; Surgeon-Major W. H. Steele, M.D., Limassol, Cyprus.

G. G. S. Taylor, Esq., Liverpool; James Taylor, Esq., Tandragee, Ireland; W. Bramley Taylor, Esq., Denmark Hill, S.E.; H. Terry, Esq., Northampton; H. G. Terry, Esq., Bath; E. Thompson, M.D., Cavendish Square, W.; H. Thompson, Esq., Hull; W. Sinclair Thomson, M.D., Ladbroke Grove, W.; H. E. Trestrail, Esq., Aldershot; G. M. Tuke, Esq., Staplehurst, Kent; A. C. Turner, Esq., St. Neots.

T. E. Underhill, M.B., Tipton Green, Staffordshire.

H. Vachell, M.D., Cardiff; C. T. Vachell, M.D., Cardiff; T. G. Vawdrey, Esq., Handsworth, near Birmingham.

H. E. Waddy, Esq., Gloucestershire; John F. Waller, Esq., Flegg Burgh, Great Yarmouth; F. M. Wallis, Benhill; C. Walter, Esq., Dover; T. M. Watt, Esq., Hovingham, Yorkshire; G. T. B. Walters, M.D., Stonehouse, Gloucestershire; G. S. Watson, Esq., Tunbridge Wells; J. Waugh, M.D., Toddington, Bedfordshire; F. R. Webster, Esq., St. Albans; T. Webster, Esq., Redland, Bristol; C. G. Wheelhouse, Esq., Leeds; C. W. Whistler, Esq., Colchester; G. H. Whitaker, Esq., Horwick, Bolton; T. C. White, Esq., Belgrave Road, S.W.; R. H. Wilbe, M.D., Finchley Road; G. T. Willan, Esq., Melton Mowbray; A. F. Williams, Esq., Ravensthorpe, Northamptonshire; E. Williams, Esq., Aberayron; H. F. Williams, M.D., Southsea; J. Williams, M.D., Ventnor, Isle of Wight; J. Williams, M.D., Swinton, Manchester; M. M. Williams, Esq., Wheelton, Lancashire; O. Williams, Esq., Burry Port, Carmarthenshire; D. Wilson, Esq., Whitcabbey, Belfast; Chas. Edw. Winckworth, Esq., Shefford, Beds.; J. W. Wolfenden, Esq., Tutbury, Burton-on-Trent; T. J. Woodhouse, M.D., Fulham, S.W.; A. Wood, Esq., Kirby Moorside, Yorkshire; A. Wright, Esq., Finsbury Square, E.C.; W. M'D. Wright, M.B., Dalkey, county Dublin; J. Wigglesworth, M.D., Rainhill, Lancashire; W. Wylie, M.D., Skipton, Yorkshire; John T. Waller, Esq., Flegg Burgh, Norfolk.

Several duplicate replies have been received; these have not been acknowledged in above list.

Total number of additional replies	386
Total previously acknowledged	668
Total	1,054

List of Returns received during the Month of March 1883.

Acute Pneumonia (41).

A. H. Bampton, M.D., Plymouth (1); R. L. Batterbury, M.D., Berkhampsted (1); G. A. Carden, Esq., Cheltenham (2); A. A. Cohen, M.B., Burwash (1); S. Wellesley Coombs, Esq., Worcester (2); T. Corbett, Esq., Kingston-on-Thames (1); D. A. Davies, M.B., Swansea (1); E. Drummond, M.D., Rome (1); A. P. Fiddian, Esq., Cardiff (1); C. Firth, M.D., Gravesend (1); T. L. Gentles, Esq., Derby (1); J. W. Gooch, Esq., Eton (1); A. Hallowes, Esq., Maidstone (1); J. Hamilton, M.D., Pelham Street, S.W. (1); E. W. Hope, M.D., Wolverhampton (1); H. R. Ker, Esq., Halesowen (1); T. C. Lithgow, Esq., Farnborough (1); K. N. McDonald, M.D., Cupar, Fife (1); Duncan J. Mackenzie, M.D., Derby (1); D. Macleod, M.D., Kilmarnock (1); J. M. H. Martin, M.D., Blackburn (1); R. Mears, Esq., Atherstone (1); Alex. Napier, M.D., Glasgow (1); J. Breward Neal, Esq., New Wandsworth (1); J. Neil, M.D., Portsmouth (1); R. Park, M.D., Crosshill, N.B. (1); G. E. Power, Esq., Hucknall Torkard (1); J. E. Ranking, M.D., Tunbridge Wells (1); W. Sellers, jun., M.B., Manchester (1); H. T. Sells, Esq., Dilwyn (1); A. Sheen, M.D., Cardiff (1); R. Smith, Esq., Heckfield, Hants (1); S. Charles Smith, M.D., Halifax (1); W. H. R. Stanley, M.D., Euston Road, N. (1); Stanley Taylor, M.B., Derby (1); Thos. W. Thursfield, M.D., Leamington (2); E. T. Tylecote, M.D., Stafford (1); J. W. Woolfenden, Esq., Burton-on-Trent (1); M. G. Biggs, Esq., New Wandsworth, S.W. (1).

Chorea (25).

F. Bagshawe, M.D., St. Leonard's (1); W. Benthall, M.B., Derby (3); J. H. Chapman, Esq., Dublin (1); A. A. Cohen, M.B., Burwash (1); G. W. Crowe, M.D., Worcester (1); E. Drummond, M.D., Rome (1); G. F. Duffey, M.D., Dublin (2); J. W. Gooch, Esq., Eton (1); H. Handford, M.D., Nottingham (2); F. H. Haynes, M.D., Leamington (1); E. W. Hope, M.D., Wolverhampton (1); A. G. S. Mahomed, Esq., Bournemouth (1); R. Wilson Moore, Esq., Wednesbury (1); C. A. McMunn, M.D., Wolverhampton (2); G. E. Power, Esq., Hucknall Torkard (1); A. Sheen, M.D., Cardiff (1); J. A. Erskine Stuart, Esq., Batley (1); Stanley Taylor, M.B., Derby (2); Miles A. Wood, Esq., Ledbury (1).

ACUTE RHEUMATISM (27).

J. Allen, Esq., Ripley, Derby (1); A. H. Bampton, M.D., Plymouth (1); G. H. Burford, M.B., Burton-on-Trent (1); H. J. Benham, M.D., Ipswich (1); A. A. Cohen, M.B., Burwash (1); A. D. Davidson, M.D., Swansea (1); W. E. Gascoigne, Esq., Halifax (2); J. Hardwicke, Esq., Rotherham (1); E. W. Hope, M.D., Wolverhampton (1); H. R. Ker, Esq., Halesowen (2); Duncan J. Mackenzie, M.D., Glossop (1); D. Macleod, M.D., Kilmarnock (1); E. R. Mansell, Esq., Hastings (1); B. G. Morison, M.B., Canonbury (1); F. J. B. Quinlan, M.D., Dublin (1); S. Chas. Smith, M.D., Halifax (1); W. H. R. Stanley, M.D., Euston Road, N. (1); J. A. Erskine Stuart, Esq., Batley (2); G. Taylor, M.D., Derby (1); Stanley Taylor, M.B., Derby (1); F. Turtle, M.D., Woodford (1); T. J. Vallance, M.D., Stratford (1); Miles A. Wood, Esq., Ledbury (1); G. E. Power, Esq., Hucknall Torkard (1); M. G. Biggs, Esq., New Wandsworth, S.W. (1).

DIPHTHERIA (56).

Clinical Cards (c.) 33. Sanitary Cards (s.) 23.

F. P. Atkinson, M.D., Kingston-on-Thames (1 c., 1 s.); E. G. Barnes, M.D., Eye (1 c., 1 s.); E. W. Bawtree, M.D., Colchester (2 s.); G. A. Carden, Esq., Cheltenham (1 c., 1 s.); J. G. Duncan, Esq., Ipswich (2 c., 1 s.); W. A. Elliston, M.D., Ipswich (1 c.); M. G. Evans, M.D., Cardiff (1 s.); Henry Harvey, M.B., Wavertree (1 c., 1 s.); W. J. Jackman, Esq., Coggeshall, Essex (2 c.); H. Langton, Esq., Brighton (1 c.); R. Bruce Low, M.D., Helmsley, Yorks (1 c., 1 s.); W. A. Macleod, M.B., Kilmarnock (1 c., 1 s.); J. Munro, M.D., Barnard Castle (3 c., 2 s.); T. F. Pearse, M.D. Liphook (1 c., 1 s.); Scudamore Powell, M.D., Peterchurch, Herefordshire (1 c., 1 s.); G. E. Power, Esq., Hucknall Torkard (1 c.); T. Hall Redwood, M.D., Rhymney (1 c., 1 s.); H. S. Renshaw, M.D., Sale, near Manchester (5 c., 5 s.); H. T. Sills, Esq., Dilwyn, Herefordshire (2 c.); E. Skinner, Esq., Sheffield (1 c., 1 s.); A. Smart, Esq., Bassingbourn (1 c., 1 s.); J. J. Stack, Esq., Hoxton, N. (1 c.); E. T. Tylecote, M.D., Stafford (1 c.); A. S. Underhill, M.D., Great Bridge (1 c., 1 s.); J. J. Welply, M.D., Bandon, County Cork (1 c.); Miles A. Wood, F.R.C.S., Ledbury (1 c.).

SYPHILIS (6).

G. H. Barford, M.D., Birkenhead (1 acquired, 1 inherited); A. A. Cohen, M.B., Burwash (1 acquired); W. H. R. Stanley, M.D., Euston Road, N. (1 acquired); R. S. Peart, M.D., North Shields (2 acquired).

Total returns received during month, 155.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meeting will be held at Bridgend, on Wednesday, April 18th. Members desiring to read papers, etc., are requested to send titles to either of the undersigned by the end of March.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—A special general meeting of this Branch will be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Tuesday, April 17th, at 8 p.m. 1. To consider the organisation of the Committee on Collective Investigation of Disease, appointed at the last meeting of the Branch. 2. To consider the Bill for the Compulsory Notification of Infectious Diseases now before Parliament.—ALEXANDER HENRY, M.D., W. C. GRIGG, M.D., Honorary Secretaries, London, March 27th, 1883.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the above District will be held on Thursday evening, April 19th, at half-past eight o'clock, in the Reading Room of the London Hospital Medical College, Dr. Hare, president-elect of the Metropolitan Counties Branch, in the chair. The discussion on "Diphtheria, more particularly with regard to Treatment," will be resumed by Dr. Dundas Grant, who moved the adjournment at the last meeting. Dr. Stephen Mackenzie, Dr. Sansom, and others, have promised to take part in the discussion.—FREDERICK WALLACE, Honorary Secretary.—96, Cazenove Road, April 5th, 1883.

NORTH OF ENGLAND BRANCH.—The spring meeting of this Branch will be held at Bishop Auckland, on Friday, April 27th. Members are invited to give notice to the Secretary, at their earliest convenience, of any papers, etc., they may wish to bring before the Branch.—DAVID DRUMMOND, M.D., Honorary Secretary.—7, Saville Place, Newcastle-on-Tyne, April 2nd, 1883.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE second general meeting of this session was held at the Railway Hotel, Stafford, on Thursday, February 22nd, 1883; Present—Dr. TOTHERICK, President, in the chair, and twenty-five members.

New Members.—Dr. Alfred Eddowes of Market Drayton, and Dr. E. W. Hope of Wolverhampton, were elected members of the Branch.

Specimens.—The following specimens were shown.

1. Dr. Monckton: Aneurysm of the Arch of the Aorta (Patient shown).
2. Mr. Wolfenden: Scirrhous Glands from Liver.
3. Mr. Wolfenden: Hydatids of Uterus.
4. Dr. Hatton: Cystic Kidney.
5. Dr. J. H. Tylecote: Spindle-celled Sarcoma of Abdomen.
6. Dr. E. W. Hope: Heart with Fibrinous Coagulum in each Ventricle.
7. Dr. C. Orton: Perforation of Intestine in Typhoid Fever.
8. Mr. Spanton: Cysts of Inguinal Canal.
9. Mr. Spanton: Removal of Uterine Appendages.
10. Mr. V. Jackson: Urinary Calculi.

Papers.—The following were read.

1. Dr. Arlidge: Pernicious Anæmia, illustrated by Cases.
2. Dr. Monckton: The After-Treatment of Luxations and of Fractures involving Joints.

SHROPSHIRE AND MID-WALES BRANCH: QUARTERLY MEETING.

A QUARTERLY meeting of the above Branch was held at the Working Men's Hall, Whitchurch, on Thursday, March 29th. Twenty-one members were present.

Representation in the Committee of Council.—A discussion took place as to the representation of this Branch in the Committee of Council. It was proposed by Mr. WITHERS, and seconded by Dr. GWYNN: "That the travelling expenses of one representative of this Branch in the Committee of Council should be paid by the General Fund." This resolution was put to the meeting, and carried.

Parliamentary Bills Committee.—Dr. Arthur Strange was unanimously elected as the representative of this Branch in the Parliamentary Bills Committee.

New Members.—The following gentlemen were elected members of this Branch, viz.: W. H. Packer, Esq., County Asylum, Shrewsbury; E. Robinson, Esq., Welshpool; H. Hawksworth, Esq., Welshpool; H. L. Palmer, Esq., Newtown, Montgomeryshire.

Paper.—Mr. Edward Cureton read a paper on Chorea, which was followed by a discussion on the treatment of that disease, in which nearly all present took part.

A Vote of Thanks to the Chairman brought the meeting to a close.

Luncheon.—Prior to the meeting taking place, Dr. S. Tayleu Gwynn provided an excellent luncheon, to which all present were invited. The President-elect, Dr. Edwyn Andrew, thanked the host on behalf of those present, for the hospitable manner in which he had entertained them.

CORRESPONDENCE.

THE MEDICAL PROVIDENT SOCIETY.

SIR,—The effort to establish a Medical Provident Society is decidedly praiseworthy, and shows a desire on the part of medical men to make preparation for the "rainy day." I am afraid, however, that many and great difficulties will have to be faced and overcome before such a scheme can be carried to a successful issue. To place the funds of such a society on a safe basis, the entrance fee and yearly subscription should be larger than the limited incomes of our poorer brethren could well afford, if the benefit is to be regarded as the right of every member, no matter what his circumstances may be, if placed on the sick-list. Anything under three pounds a week would go but a very little way in helping a man to keep things going if in real need of help.

To secure such an amount all round, the subscription should be so high that, I fear, it would prove prohibitory to those to whom such help would prove of real service. A man whose income may be from £300 to £400 a year would have to think twice before paying £7 or £8 a year for the chance of future benefit. Another danger connected with such a society, would be the temptation to some of the members to avail themselves of the allowance as an aid towards paying a *locum tenens*, if they could persuade themselves and others that rest and change were necessary. I do not say that they would do this in any wrong spirit, but it would be a temptation, and, under such circumstances, men are likely to deceive themselves; paying a large yearly subscription, they might think themselves fairly entitled to such benefit. What I would suggest is this: that every member of the British Medical Association should pay a minimum yearly subscription of one guinea towards a "Benevolent Fund." The more favoured brethren might, and I think would, pay more. This subscription might be paid at the same time as the early subscription. The fund might also be increased by donations and bequests. A certain proportion of the yearly amount raised should be invested as a reserve fund; the balance to be applied to the relief of those whose necessities required it. In time, the "reserve fund" would attain such dimensions as would make it possible to establish, on a safe basis, a benefit society, not, indeed, for those whose means are such as to place them beyond the reach of want, but for the less fortunate amongst us, whose circumstances are such as to prevent them making any provision for themselves, either in sickness or old age, or for their families in the event of death. Though not by any means possessed of a large income, I would gladly subscribe £2 2s. a year in support of such a scheme; and if those who are better off would only give in proportion, whilst others, not so well off, confine themselves to the minimum amount of £1 1s., I am satisfied that, in a very few years, ample provision would be made to prevent such a thing as want or destitution being known amongst the members of our profession. The machinery is already in existence for the successful working of the scheme, both in the case of collection and distribution. I would suggest the issue with the JOURNAL of a "query paper," briefly stating the objects in view, and asking what amount of support each member would be willing to give.

I feel confident that such a scheme would vastly increase the feeling of brotherhood throughout the members of the Association, and greatly extend its influence for good amongst the profession at large. I am also hopeful enough to think that a large-hearted scheme would meet with general acceptance at the hands of our members. Meanness and a closed purse are not characteristic of the members of our noble profession. I trust and believe that all that is required is to place the matter clearly before them.

I hope you will grant me space to do so, and that you, sir, will add to the cause the powerful aid of your advocacy.—I have the honour to remain, faithfully yours, JOHN W. MARTIN.

6, Brunswick Street, Sheffield, April 9th, 1883.

SIR,—In your issue of March 31st, Mr. Bain Sincock writes that my figures have probably frightened many into not joining the proposed Provident Society. But were my figures correct? If so, ought they not to have weight? if not, why does not Mr. Sincock show their fallacies? Allow me, on the other hand, to discuss Mr. Sincock's figures. As regards the Hearts of Oak, he argues that the fact that the Hearts of Oak has accumulated half a million is a proof that, "if anything, the premium paid by each member is higher than need be." This view, I maintain, is a fallacy. Half a million, written large, sounds a big sum; but, taken relatively, it here means only about three years' income. I showed, in my last, that the sick-rate at the age of seventy-five is about thirty times as great as at the age of twenty-five. All new members entering the Hearts of Oak are under thirty by the rules. Suppose the society were to cease admitting new members, each year the average age of their members would increase, and, *pari passu*, the cost of sickness, until a time must necessarily come when the cost of sick-pay exceeds the amount of yearly contribution; then they must begin to draw on the reserve. The real test, then, of the prosperity—nay, of the very probability of future existence of the society—depends on the answer to the question, Would the half-million accumulated be sufficient to meet every claim until the last member had died out? As the Hearts of Oak only concerns us in as far as it might serve as a model, I will not pursue the subject further. The next point is the expense of management. As I showed in my former letter, it would be sanguine to anticipate five thousand members, even after the society had existed for some years. Taking Mr. Bain Sincock's own estimate of £6 payment per member *per annum*, the premium income of the society would be £30,000, and of this Mr. Sincock allows £210 for working expenses. I question whether he would get a really efficient secretary for less. The rent, rates, taxes, coals, and gas would cost as much. As he proposes registering the society under the Friendly Societies' Acts, and not under the Companies' Acts, is he aware that this entails every fifth year a most costly examination of the condition of the society, which would alone swallow up more than the £1,000 which he has set aside for the working expenses of a quinquennium?

These are, however, details which can be adjusted; but there is one point which, I confess, is, in my humble opinion, absolutely essential. No one has hitherto attempted to solve the problem—but it must be solved, I think, if the society is to be a sound one—and that is, the question of supervision of the sick.

Benefit societies require their members to visit one another at their own expense. This gives them a great advantage, as the cost of this does not appear in their balance-sheets, and enables them to boast of their economical administration. This system is quite inapplicable to our profession. In the country, men are often miles from their next medical neighbour; and, unless nearly the whole profession joined, it would probably happen that a man would frequently be six, eight, or even ten miles from his nearest fellow-member. Would anyone with a tolerable practice dare to join a society which hung over him such a Damocles' sword, as the possibility of having at any moment to go at his own expense ten or twenty miles every week to visit a sick member? Surely, then, some substitute must be found. It would be simply madness to start a society which exercised no supervision over the sick. Are there no black sheep in our profession? I fear just as many as in any other. How about the men who spend their lives in making practices and selling them (or rather their brethren), and shift from place to place, dragging a lengthening chain of curses after them, and yet have an unctuous smile or look of indignant virtue if you dare impugn their honour? How these men would revel in the advantages offered by such a society! Every little ache or pain would be an excuse to stay at home with a pipe and a paper, while the society provided funds for a *locum tenens*, and a margin over for a nice little holiday after.

I should be glad to see a Medical Provident Society started, but I cannot see the wisdom of resolutely shutting our eyes to the difficulties. I would rather the subject were dropped altogether, than that it was started on such a rotten foundation that its ruin was only a question of years. I hope some one will be able to devise a cheap and efficient system of supervision.—Yours faithfully,

Tunbridge Wells. E. PAGET THURSTAN.

SIR,—Will you kindly enter my name as willing to join a well-organised "Medical Provident Society?" We are surely, as a profession, strong enough in numbers to set such a society on a firm footing. Nor can there be any reason why the society, when formed, should not be as useful to us as the societies, of which many of us are paid officers, are to the artisan and labouring classes for whose protection they exist. We can see enough of their working, among these classes, to judge how useful such an organisation might be to ourselves. I sincerely hope, for one, that the necessary energy and co-operative force may be forthcoming for its establishment.—I am, sir, yours faithfully, R. EARDLEY-WILMOT, M.B.

Petworth, Sussex, April 7th, 1883.

SIR,—There is a great necessity for a fund to enable members of the profession, when overtaken by illness, to provide a reliable

locum tenens as well as pension in total disablement or old age. Be pleased to add my name to the list of subscribers.—I am, sir, yours faithfully, BENJ. D. TAPLIN.

Binbrooke, Market Rasen, April 11th, 1883.

NINTH LIST.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. J. W. Wolfenden, Tutbury, Burton on Trent; Mr. C. E. Winckworth, Shefford, Bedfordshire; Mr. C. P. Hooker, Coltishall, Norwich; Mr. James Altham, New Galloway; Mr. Hugh Taylor, Coltishall, Norwich; Mr. G. Jackson, Plymouth; and Mr. J. M. Ryan, Colchester.

We, the undersigned members of the West Herts Medical Society, are willing to join the Medical Provident Society, when it is formed, and the rules are such as we can approve of:—P. Hood, M.D., president of the West Herts Medical Association; Alfred T. Brett, M.D., Watford, honorary secretary; Fred. C. Fisher, M.R.C.S., L.S.A., King's Langley; H. Case, M.R.C.S., L.S.A., Leavesdene, Watford; Oliver Lemon, M.R.C.S., L.M., King's Langley; George A. Hicks, M.R.C.S., L.R.C.S., Bushey; J. H. Berry, M.B., M.R.C.S., Watford; F. H. Watson Iles, M.D., Watford; Arthur Lofthouse, M.R.C.S., L.S.A., Hempstead; W. H. Hobson, M.R.C.S.E. etc., Berkhampstead; and R. L. Batterbury, M.D., Berkhampstead.

*** The list is rapidly gaining in numbers; but several hundred adhesions should, we think, be enrolled as a preliminary to practical action, and we shall be glad to continue to receive names.

THE MEDICAL BILL AND FOREIGN GRADUATES.

SIR,—Will you allow me space to inform those foreign graduates, who have taken the trouble to write to me, urging some prompt action, on the part of our Association, respecting the penal clauses of the new Medical Act, that Lord Carlingford has been officially communicated with, and has promised to give the matter his consideration. It would be quite impossible for me to reply to every letter that has been received. I may add, that there appears a likelihood of the matter being settled to the satisfaction of all concerned, and no pains will be spared by the Committee of our Association to promote this desirable end.—I am, sir, yours obediently, H. J. HARDWICKE, M.D.,

President of the Foreign Graduates' Association.

Sheffield, April 7th, 1883.

THE COAT-SLEEVE AMPUTATION.

SIR,—The practical observations of Mr. L. Colbourne, of Buenos Ayres, on this method of amputating, are quite true; and my reason for not specially mentioning the slit at the posterior aspect of the sleeve (which I have had to do myself in an amputation of the thigh) is, that in the majority of cases the slit is not necessary; and my object was to direct attention to the cylindrical sleeve. In the sartorial art, some sleeves are slit, and others are not. In the present day the majority of coat-sleeves are unslit; and this, I trust, will be the cut of modern coat-sleeve amputations.—Your obedient servant, RICHARD DAVY.

33, Welbeck Street, London, W.

THE FEEDING OF INFANTS.

SIR,—I think Dr. Quintin McLennan expresses himself rather strongly against the use of condensed milk, considering he has seen it used in "only two cases" (according to his own statement). I have used it in a great number of cases, with most beneficial results. I have in my practice, at present, three infants who are thriving rapidly on this food. Where children are to be fed artificially, I consider that condensed milk ranks second to cow's milk. The latter does not agree with all children, and it is in these cases that the former ought to be tried. The fault often lies with the nurse, not diluting the milk sufficiently. The new unsweetened condensed milk is a great addition to our artificial foods for infants.—Yours truly,

Stockton-on-Tees. H. J. BEATTY, L.R.C.P.

FUNGOID POISONING.

SIR,—I am again compelled, by a letter in your JOURNAL of February 24th, from Mr. Henry Thompson, police-surgeon, etc., Hull, to reopen my case of fungoid poisoning. The facts of that case have not been disturbed or controverted, but only attempted to be rendered abortive by erroneous surmises and imperfect analyses.

The child, in contradistinction to what Mr. Thompson says, was by no means a small one for its age; it was fat and well, very well nourished, and must have been able to walk or run as well as any child of similar age. It was naked when found, but not "wrapped up" in newspaper. Two papers covered it as it lay, clean and fair, on a bed of broken down nettles; one paper was of September 9th, the other of September 15th, clean readable papers.

There was a slight mark around the neck; so slight, that the policeman present thought I was mistaken in noticing it. This mark, when I finished my necropsy on the 27th (the body was found on September 26th), was fully four inches broad, and covered by myriads of maggots, which must, I suggest, have rendered any theory of the state of the neck in its normal state, when seen three days later, extremely problematical.

The lungs and thoracic viscera I found perfectly healthy; no emphysema; and, from a very free external handling, no congestion or undue crepitus.

I might have, in ordinary cases, extended my examination; but I had seen the external state of the stomach *in situ*, which revealed to me at once its interior condition, and which would give a sufficient cause of death. The healthy aspect of the lungs at the time I saw them convinced me that the appearances seen by Mr Thompson were wholly *post mortem* ones.

I will now treat on the condition of the stomach, as the principal purport of this letter, to uphold my case of fungoid poisoning. Externally, it appeared *in situ*, discoloured by purple and red patches interspersed with its lighter natural hues, and evidently contained no inconsiderable quantity of food. Internally, the mucous coat was intensely inflamed, showing purple and scarlet patches of more or less intensity of colour. It was easily removed by the handle of the scalpel. The muscular coat was not so deeply injected, but, nevertheless, was much inflamed. The contents of the stomach would fill a half-pint vessel with dark pultaceous matter of the consistence of poultice, and interspersed with larger and smaller portions (a dozen or more) of the uncooked outer whitish skin of an old fungus. The dark matter appeared to be the gills of an old mushroom; the whiter skin scattered amongst it gave it a most unique appearance. The inflammation of the stomach was also peculiar, and I claim its peculiarity to uphold my views, as given in my paper in No. 1,143 of the JOURNAL, that it was caused by its fungoid contents; that it was paralysed, and unable to eject or pass downwards its poisonous enemy.

And now for a short summary of the critique of Dr. Stevenson and Mr. Henry Thompson. They neither of them produce any evidence of a lesion to account for the death of the child.

Dr. Stevenson, in his legal evidence, says: "The first bottle, No. 3, contained a mass of brown stuff, about the size of an unshelled walnut, with innumerable maggots, on the whole forming an unrecognisable mass. After being washed, it had the appearance of a normal or healthy stomach a little decomposed. The mucous coat was eaten away with maggots." And from this he ventures on asserting that it was a "normal and healthy stomach," and ignoring all I and many others saw, assumes that it could not have been so inflamed, or contained the contents described; forming this conclusion after the destruction of the mucous coat by the maggots.

Mr. Thompson follows in his wake, and quotes from the mother of the child. At the second necropsy, on September 30th, the stomach of the child was taken out of its coffin from amongst a mass of maggots by the superintendent of police, who, holding it by the string I had on the 27th applied to it, handed it to Mr. Thompson, who looked at it, and without examination dropped it into a wide-necked bottle, to be forwarded to Dr. Stevenson. Is it to be admitted for a moment that this inspection is sufficient to enable Mr. Thompson to say as he does: "Anyhow, the condition of the child's stomach was not sufficient to cause its sudden death?" I say it is a most unwarrantable conclusion.—I am, sir, yours,

T. JACKSON, M.R.C.S.

P.S.—It is a mystery not explained, how the child obtained the poisonous contents of its stomach. I will again remark that they were seen by the coroner and his jury, the superintendent of police, and his men, and others. I am told, but I know not if it is correct, that the mother resides over a fish-shop.

*** This correspondence must close.

VACCINATION.—Mr. Roberts, public vaccinator, of Conings, Lincolnshire, has again received the Local Government grant for successful vaccination.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Clinical Hospital, Sale of Work.—Clinical Demonstrations on the Eye.—New Journal.—Sanitary Association.

r a recent sale of work promoted by the Ladies' Committee of the inical Hospital over £700 were realised. A "Friend" offered to pplement this by a further sum of £500, on condition that enertic steps be taken to increase the permanent income of the arity by additional subscriptions. Several changes have been ıde recently in the medical and surgical staffs, and it is believed at this introduction of "new blood" and renewed energy will ıse the standard of reputation and usefulness of the hospital.

A course of clinical demonstrations on the eye will be conducted the Royal Eye Hospital during the summer session by Drs. Mules d Emrys-Jones, honorary surgeons to the institution. It is to be ped that this attempt to utilise the excellent material of the hosal will succeed, and that similar courses will be instituted at other spitals and dispensaries in the city.

A new journal, to be called the *Sanitarian*, will be issued shortly. will record the operations of the Sanitary Association and its merous branches, the Nurse Training Institution, etc. Most of leading sanitarians of the city have promised their hearty coeration.

This association is at present devoting great attention to the quesn of bakehouses. They intend shortly to present a memorial ring the Local Government Board to retransfer the control of tehouses to local authorities, and that bakehouses should be ensed annually, periodically inspected, properly ventilated, etc. ıer public bodies would do well to move in a matter of such imtance as regards public health. They also have resolved to send etition, urging upon Parliament the necessity of the compulsory mination and registration of midwives.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE ROYAL ASYLUM, MORNINGSIDE, EDINBURGH.

annual meeting of the Corporation of the Royal Asylum was l in the Council Chambers, Edinburgh, on February 26th, the l Provost in the chair. The annual report of the managers showed the income for 1882 had been £41,544, and the ordinary expenre £37,737, while there had been £3,889 of extraordinary exliture, chiefly in reconstructing a new female hospital, a new valescent ward, and a block for laundry workers. The report of physician-superintendent (Dr. Clouston), stated that the patients he end of the year were 785, of whom 291 were private patients. re had been 329 admissions (93 of whom were private patients), discharges; and 83 deaths. Through a diminution in the numof pauper patients, all the applications for admission for private ents, even at the lower rates of board, had been granted for the three months of the year. Of the cases admitted, 82 per cent. been insane for periods under twelve months before admission, a larger proportion than usual had been acute and had organic ases of the brain. Of the 44 persons upset by domestic troubles, ere women. Dr. Clouston dealt with the subject of insanity rally, and the mode of treatment adopted in this asylum, giving iculars of cases which had resulted in recovery from mental ıse. One case of suicide was reported, the patient having en a glass globe, and by means of one of the pieces inflicted a re gash in the common carotid artery. Future improvements ıe treatment of the insane would, it was anticipated, show thems in: 1. Attendants of more intelligence and better training; 2. pplication of a better knowledge of insanity in individualised ment of single cases and special symptoms; 3. The scientific, posed to the empirical or mere convenient, use of an asylum for nsane, *quoad* the admission to and discharge of the patient the asylum, just as any other remedy is applied towards the of a disease; 4. The division of asylums into the two great es of hospitals for curative purposes, and comfortable homes ncurables. An extraordinary effect was said to have re- from an increased supply of milk and eggs to the patients rticles of diet, some patients having gained two or three in bodily weight in a few months. The report con- with some remarks on the action of the Royal University of Ireland in requiring a three months' course of clinical instruction, or attendance in an asylum, from all its candidates for graduation. It was predicted that the latter proviso would soon become universal among all the universities and corporations, and that it would do as much for the asylums and their medical officers as for the students.

BOURNEMOUTH GENERAL DISPENSARY AND COTTAGE HOSPITAL.

WE have received the report of this institution for 1882. It shows a marked increase, both in the income and in the number of patients. At the close of 1881 there was a deficit of £630 on the building fund, and of £105 on the general fund. But during the last year the debt on the building fund has been entirely expunged, and the general account shows only a balance of £57 due to the treasurer. These figures alone prove that the institution must be doing useful work, and must be held in high estimation throughout the large area whose medical wants it supplies.

We understand that the committee have ground on which they can build, and that, now the debt has been paid off, they look forward to enlarging their premises. As this is the only general hospital for a populous and very growing district, we can well believe that ere long it will be desirable to increase the accommodation which it affords.

THE LEWISHAM SELF-SUPPORTING DISPENSARY.

THIS has been in operation two years, and has enrolled 992 persons. All duly qualified medical practitioners, resident in the district, are eligible for the staff, and six of them are now serving.

At the outset, a special fund of £36 was raised to meet the preliminary expenses, but since then it has been entirely self-supporting, and last year no less than 93½ per cent. of the receipts was divided among the medical officers. It is worthy of notice how small a part of the receipts is spent upon management, and how large a part goes to the direct object in view; namely, the supply of medical attendance and medicine.

At present no dispenser, dispensary house, or central establishment is required, as the patients attend at the houses of the various medical officers, and there receive the attention they need. It is also worthy of notice that, although there are no honorary subscribers, yet the management does not rest solely with the benefit members. Some of the leading gentlemen of the neighbourhood are on the committee. This, we believe, is an excellent arrangement, calculated to make the wheels of the machine work smoothly, and to avoid the disputes and ill-feeling which not unfrequently arise under other systems.

There is no doubt that the Lewisham dispensary is doing an excellent work. It is organising medical aid upon the best and wisest principles.

BIRMINGHAM GENERAL DISPENSARY.

THE annual report of the committee, for the year 1882, shows that the receipts from all sources during the year were £6,415, including £1,555 from donations, and £3,283 from subscriptions and supernumerary tickets. The expenditure was £6,129, leaving a balance in the treasurer's hands of £286. The number of patients treated during the year showed an increase of 828 upon the year 1881. The average cost of each patient was 4s. 6¼d. The number of patients admitted by ticket during the year was 18,938, besides 183 accidents, and 3,116 teeth cases. The Camp Hill branch showed an increase of 209 patients, the numbers being 3,073, against 2,864 in the previous year. The Aston branch showed an increase of 174 patients, the numbers being 2,808, against 2,634 in 1881.

THE WANDSWORTH COMMON PROVIDENT DISPENSARY.

THE fourth annual report of this dispensary shows that it continues to carry on useful work in the district. It is, as our readers may remember, the out-patient department of the Bolingbroke House Pay Hospital. The dispensary has two classes of members. Class A includes persons whose average income does not exceed thirty shillings a week; and Class B persons whose average income is over thirty shillings but not over fifty shillings a week. It will thus be seen that this institution differs in some notable particulars from most provident dispensaries. The number of members in class A during the past year was 1,003, and in class B 236. These figures show a slight falling off from the previous year. No doubt this may be

explained by the fact that the resident medical officer has been in ill-health, and for some months his duties were performed by a *locum tenens*. The dispensary, on the completion of its third year of existence, became qualified to participate in the award of the Metropolitan Hospital Sunday Fund, and it is gratifying to state that, having satisfied the committee of distribution as to the careful management of the institution, it received the sum of £16 17s. 6d.

THE SUSSEX EYE HOSPITAL.

THE Brighton and Sussex Infirmary for Diseases of the Eye has recently been almost entirely rebuilt. It has been fitted with all the most modern improvements, and now contains accommodation for about thirty in-patients. It now claims to be the finest institution in the south of England for diseases of the eye. At a recent special meeting it was resolved that, in future it should be called the Sussex Eye Hospital.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, April 6th.

Vaccination Acts.—Mr. BURT asked the President of the Local Government Board whether it was the intention of the Government to introduce a measure in the present session to repeal or mitigate the severity of the compulsory clauses of the Vaccination Acts.—Sir C. DILKE said that, in the present state of public business, he could not throw out any hope of legislation on this question in the course of the present year.

Monday, April 9th,

Ventilation of the Underground Railway.—In answer to Mr. JAMES, Mr. CHAMBERLAIN said that the Board of Trade had not had brought under its notice any means of improving the ventilation of the Underground Railway. The Board had no means of testing the efficacy of such improvements, or power to enforce their adoption.

The Artisans', etc., Dwellings Acts.—Sir R. CROSS asked the Chairman of the Metropolitan Board of Works whether they were proceeding with the four new schemes under the Artisans' and Labourers' Dwellings Acts, 1875-82; and at what stage they at present stood. —Sir J. M'GAREL-HOGG said, in reply to his right hon. friend, he begged to inform him that the Metropolitan Board was proceeding with the four schemes referred to, and that the local inquiries made under the direction of the Secretary of State for the Home Department had been concluded in each case. If the Secretary of State, on the report of the local inspector, approved the schemes, provisional orders would, no doubt, be issued and confirmed in the usual manner.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL DEPARTMENT.

SIR,—May I make a few remarks on your review of the two pamphlets relating to the Army Medical Department in your last number? I refer to the date of the introduction of the non-regimental system, given by Dr. Evatt as 1873, by you as 1870. My own record of service bears witness to the inaccuracy of both dates.

1. I was gazetted assistant-surgeon of a regiment in the spring of 1871.

2. Notwithstanding Royal Warrants and General Orders, I continued paying regimental subscriptions as an assistant-surgeon (or surgeon) till my promotion (by the Warrant of 1876) to the rank of surgeon-major. Medical officers had been "struck off the strength of regiments" for some time—*i.e.*, on paper; but that this was mere pretence, I was made aware, to my chagrin, by my being mulcted of fifty days' difference of pay on promotion, although it was a positive certainty that I was about to be severed from the corps for general service abroad. I did my best to get off paying this tax, but the ruling was against me.

3. I went abroad at the beginning of 1877, and it was while I was abroad, subsequently, that medical officers were really dissociated from regiments, by being granted staff allowances, and by being excused payment of contributions and subscriptions to messes where they had no *locus standi*.

"Unification," then, was a misnomer until Sir William Muir made it a fact; for I think you will admit that a system which sanctioned the same (or a greater) drain on one's purse, while it pretended to sever an officer from a corps which, in many instances (in my own, for one), he had paid money for the privilege of serving with, was no system at all.

Under these circumstances, it is not to be wondered at that I was an ardent "regimentalist," for touching a man's pocket is a strong *argumentum ad hominem*. But I should be very sorry now to find that we were about to revert to the regimental system, under which there were many objectionable points; one of the worst being, to my mind, that of having two masters—the Colonel and the Principal Medical Officer.

Now, as regards the future prospects of the department, I may state that I have personally verified the statements given in the pamphlet, *The Present and Future of the Army Medical Department*, and I agree with the author in considering that, in two or three years, the stagnation in promotion will be heartbreaking, and that the authorities will have to do something eventually, unless they prefer that the ordinary routine work shall be carried on by a large number of grey-headed and soured individuals. Promotion by selection would undoubtedly do good, but it would require great care in its management. Promotion for distinguished service, over the heads of men who are not to be altogether superseded, ought not to be sanctioned; but, in its place, if brevet promotion is impracticable, a period of service should be given as a reward. This was given for the siege of Lucknow; why has it never obtained since? A fairer mode of recompense it is difficult to imagine; it hurts nobody else, and it is highly appreciated when it brings the recipient nearer his increase of pay, or his long-looked-for retirement.

Thanking you, Mr. Editor, for your constant advocacy of, and interest in our cause, I remain, etc.,

M.D.

THE INDIAN MEDICAL DEPARTMENT.

SIR,—Allow me to draw the attention of the few surgeons who are in favour of the departmental system to the loss of pay they incur while serving in India as the warrant of 1879, on the strength of which many entered the service, ignored in its entirety by the Government of that country.

First, as regards pay. A surgeon now draws the same amount as when he was a regimental officer, *minus* horse-allowance, when attached to cavalry or artillery, and all allowances for extra work—as, for example, when a surgeon had sole charge of a regiment, he drew 150 rupees in addition. These have been swept away since the introduction of the station hospital system. Secondly, as regards rank. The only advantage that the relative rank of captain carries with it is that he wears two stars on his shoulder-cords instead of one; his allowances, which go to form his consolidated pay, being those of a lieutenant. This, I may point out, is in quite contradistinction to the warrant of 1879, from the benefits of which we are totally excluded while serving abroad. Since the reduction in pay, the expenses have proportionately increased, owing to the constant change of stations; and as there is no allowance of any kind granted to meet the extra expenses of travelling, which are very heavy in India, each move represents a considerable loss, besides the inconvenience of breaking up your establishment. The result of one or two sudden orders to proceed to another station is that one is afraid to get some of the necessary comforts, which alone make life endurable in that deadly climate; as he is unable to bear the loss which a hurried sale will entail, and so has to content himself with the bare necessaries of life. The remedy for this state of affairs is, either appoint surgeons to regiments or stations for a certain time—this would be a great boon to all, and remove one of the many disadvantages of serving in India.—Your obedient servant,

SURGEON, A.M.D.

NAVAL MEDICAL OFFICERS, AND THE DISTRIBUTION OF THE EGYPTIAN WAR GRATUITY.

SIR,—I beg to call your attention to the classification recently adopted in distributing gratuities to the naval medical officers for services in Egypt; I do in the hope of obtaining your powerful aid for the redress of what I deem injustice. Relative rank is generally supposed to carry with it all advantages except actual command, and departmental officers in the army were given gratuities, in accordance with their relative, or honorary, rank. Thus—the medical, commissariat, ordnance, and other officers ranking with captains, obtained the gratuities due to captains, and so on through the various ranks.

In the navy, however, surgeons, ranking with naval lieutenants, were given the same gratuity as boatswains, gunners, and carpenters; inspector-general of hospitals and fleets, with relative rank of rear-admirals, are classed for gratuities below captains, commanders, lieutenants commanding gunboats and navigating lieutenants commanding store-ships; fleet-surgeons, ranking with commanders, get less than the third of the share of those favoured officers; and staff-surgeons are also classed with those of lower rank than themselves.

Considering the acknowledged value of medical officers in war, and the many risks and hardships, besides those purely professional, which they share with their combatant brethren, it is strange that they should be left out in the cold when distributing prize money and rewards. The chaplain, man of peace though he be, gets a more liberal slice of the sinews of war than the surgeon, who is as necessary as a combatant officer in warfare when once begun.

The classification adopted, and frequently applied to our detriment, is grounded on an order in council of May 16th, 1871, regulating the distribution of prize money before medical officers held their present relative rank. This is one of many instances which render relative rank for medical officers in the navy what Virgil would call a "*Vox et præterea nihil*"; but I feel that it wants representation to the Admiralty to prevent the recurrence of what is manifestly an anachronism.—I am, sir, your obedient servant,

SCALPEL.

*** This statement is quite accurate with respect to the army medical officers, and, if equally so with respect to the naval medical officers, there is much need for a reform of the existing naval rules on the subject.

IRISH STUDENTS AT THE ARMY MEDICAL EXAMINATIONS.

SIR,—My attention has been drawn to your article entitled "Irish Students at the Army Medical Examinations." I happened to be present in the House of Commons some weeks ago, when Mr. Gibson asked a question concerning the matter. The question had reference in the first place to the fact that the dates are known by names, and not by numbers, as is usual at other examinations. I think it is unworthy to even hint at any unfairness on the part of the examiners; but, as a complaint of this kind has been made, the rule should be changed. The second part of Mr. Gibson's question had reference to the qualifications of the examiners, and as to whether any of them had Irish degrees. It is quite true, that Dr. Allman does hold Irish diplomas, but it is useless to endeavour to establish any argument in favour of the existence of what one may call "national equality" on such a feeble ground as this. Dr. Allman is a distinguished naturalist and, I understand, excels in natural history; but none of the examiners in purely professional subjects—*i.e.*, medicine, surgery, or midwifery—have any connection with Irish corporations or Irish diplomas. In the latter part of the article in question it is stated of the examination for the Army Medical Service that "it is en

actical." You seem to infer from this that therefore Irish students are not well qualified to pass it as others. I have had experience of both English d Irish schools and students, as a student and as a qualified man; and I ow that, although English students are better informed as regards the ory of the profession and the subjects for the first College examination—, anatomy, physiology, etc.—they are not nearly such good practical sur- ons and physicians as their Irish brethren of the same years. The reason ply is that, whereas English students do not begin to walk the hospitals til the end of their second year of study, Irish students commence the actical study of disease in their first session. However, rightly or wrongly, re is a prejudice in England against Irish qualifications. That it exists in l life it is idle to deny, else how is it that there is hardly a general hos- l in England in which the diplomas of F.R.C.S.I. or F.K.Q.C.P. qualify a surgeoncy or a physicianship?—I am, sir, yours, etc.,

GEORGE STOKER, M.K.Q.C.P., L.R.C.S.I., M.R.C.S.Eng.
, Cadogan Terrace, Sloane Street.

-With reference to your remarks on the above heading in your issue of the t ultimo, permit me to offer a few remarks.

eing quartered in Dublin and having frequent opportunities of meeting professors and teachers of the Dublin schools, I became aware that there a feeling among some of them that Irish students did not meet with fair at the Army Medical Department Examination. I am bound to say, vever, that most of those I have spoken to did not credit the assertions of unsuccessful candidates, to the effect that "Irish students were boy- ed."

n old Dublin student myself, I naturally took great interest in the ques- , and being in London while the last examination was going on, I did self the honour of calling on Sir Joseph Fayrer, and I told him the reports t were being circulated in Dublin.

r Joseph Fayrer at once invited me to be present at the approaching ex- nation, and introduced me to the other examiners (Dr. Aitkin I had of se known before), and on my telling them of my wish to be present at examination, I was most courteously invited to attend as often as I wished. would be impertinence on my part to presume to defend the characters of men as the present examiners for the medical services, but a few re- ks as to the conduct of the examination will, I trust, not be considered of place, as being the evidence of a purely disinterested witness. The first ion of the examination, the written and *viva voce*, took place at Bur- ton House, and during the first two days, three "obligatory" and one tional" papers were given.

ie obligatory papers on "Anatomy and Physiology," "Surgery," and actice of Medicine," are each, I believe, valued at 800 marks, or 2,400 for three. The optional paper not counting for the "competition," may be garded. Now, during this most important part of the examination, viz., giving of 2,400 (possible) marks out of 3,200, there was no means whatever y of the examiners being able to tell what the nationality of the candi- s was, except indeed from the name, and it is an insult to common sense ppose that four gentlemen of the position of the examiners could be y of deliberate injustice to men having an Irish-sounding name.

e next step in the examination was the *viva voce*. For this, six candi- s were admitted at a time, and, during the hour, each was examined n minutes, by each of the four examiners, "sitting out" the other twenty ites.

pent several hours of two days listening to this *viva voce*, passing from xaminer to the other in turn, and hearing about thirty individuals exa- d in the various subjects. Here, again, there was nothing to guide the iners as to nationality but the name of the candidate and his accent, atter being the most evident means of identification (excepting, of e, in the case of the natives of India and half-castes); and no matter her the examination be conducted by "names" or "numbers," as some st, I think, in most cases, there would be little difficulty in telling the nality from the voice.

I said before, I do not presume to attempt to defend the characters of the emen conducting the examination, but I may say that more courteous, quiet, xaminers, it would be impossible to find. I was much struck by the patience which nervous and ignorant candidates were treated; as, instead of g to puzzle them, they were assisted to answer; there seemed a manifest to find out what each really knew by putting leading questions, and by is vulgarly called "helping a lame dog over a stile."

next stage in the examination was the "surgical" cases, each candidate given a surgical case (quite by accident, as far as the choice went), and ne hour to diagnose and write it out. For this, as well as the various oce examinations, 100 marks are given, or 500 in all.

concluding portion of the examination took place at the University ge and Hospital, consisting of "clinical medicine," bandaging, etc., and tions on the dead body, for each of which 100 marks more are given, all, bringing the "obligatory total possible" to 3,200.

operations were drawn by lot, a "major" and "minor" for each; and gain, I observed several candidates assisted and advised in the kindest y the examiners. As regards the "medical" and "surgical" cases, it me there was considerable inequality in the difficulty of making a good sis. I put this question to Dr. Aitkin, and was told by him that the m of case-taking" was what was marked for, not mere diagnosis and ent, which were, of course, considered on their merits.

y say that I came away strongly impressed with the absolute fairness examination, especially as regards the possibility of favouring one ality above another; that, in fact, if the examiners had even been so l, they could not, with the paucity of evidence as to nationality to hem, have been in a position to have favoured one at the expense of ier.

uestion of the possibility of the London or Scotch teachers being able ure the papers before the examination is so absolutely absurd, that it orthy of notice. As regards the question of "selection" for appoint- that is determined absolutely by the marks obtained. The Army l Department has nothing to say to it, but simply publishes the marks d by the examiners.

en hint that candidates who qualified for commissions were liable be selected" on account of nationality, is an imputation of the most s kind on the present Director-General, Dr. Crawford, himself an n, and one of the most upright men that ever lived.

deeply to be regretted that such unworthy insinuations should have found their way into the public press, and also that Mr. Gibson, M.P., and Dr. Lyons, M.P., should have been induced to take the matter up on such very questionable testimony.

Trusting you will kindly insert this letter in your next number,—I remain, etc.,

J. BUTLER HAMILTON, M.D., University of Dublin, Surgeon-Major A.M.D.

BEARER COMPANIES.

SIR,—I shall be greatly obliged if some readers of your JOURNAL will give me some information as to the formation of bearer companies in connection with a volunteer corps.—I am, sir, yours obediently,

M.R.C.P.

April 7th, 1883.

THE next examination of candidates for admission to the Royal Military Academy, Woolwich, will commence in London on Thursday, June 21st next, the medical examination taking place at the Academy on the previous day. The number of vacancies for competition will be fifty. Applications cannot be received unless made in strict accordance with the regulations. The successful candidates will be required to join the Royal Military Academy about September 24th.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

MEDICAL ENGLISH.

AT a meeting of the Gainsborough Board of Guardians held in the beginning of February last, a resolution was carried, on the motion of one member of the board, asking the "doctors" to furnish their reports in language "that might be better understood." The proposer of the resolution objected to the "jargon" (for such was his courteous expression) which the medical officers habitually used. The question was again before the board a few weeks later, when Mr. Wells, the original proposer of the motion, finding that five of the medical men had sent in their reports in the usual terms, characterised their conduct as "insulting," and moved that they be written to. This resolution was also adopted. At a sitting of the board held in the third week in March, three of the medical gentlemen forwarded letters of explanation. Dr. Mackinder of Gainsborough stated, in his communication, that he could not quite understand the purport of the resolution. Owing to the desire for "language that might be better understood," Dr. Mackinder, whilst retaining, as in duty bound, the same technical terms that had been employed ever since his appointment thirty years since, had in his last report appended a glossary of some of these terms. He was ready to continue the glossary on a more extended scale if desired, but he hardly believed that the guardians could be, as a whole, ignorant of terms adopted by the Registrar-General, and well known to all educated Englishmen who read the papers. Dr. Mackinder most rightly objected to the substitution of the language of local vulgarism, the unprecise popular nomenclature of human ailments, or even lengthy semi-scientific definitions, for recognised technical names of diseases. The blank spaces left on the report paper after the words "nature of the disease" allows full room for the word "diphtheria," but not for the definition "inflammation of the primary respiratory passages with exudation of coriaceous membrane, and great general contamination and constitutional disturbance." Mr. Sutton of Willingham wrote in a similar strain, and also reminded the board that, although he retained the technical terms, which was in accordance with his contract, he had furnished explanatory foot-notes in his reports. Understanding through certain observations in local papers that the proposer of the resolution against "jargon," wished that the terms should be "in Lincolnshire," Mr. Sutton described some of the cases in that local dialect of the English language, and suggested that Mr. Wells should assist him in the translation of the Anglo-Latin names of diseases into their Lincolnshire equivalents. Dr. T. B. Wright of Walkeringham showed, quite pertinently, that the English names of many common diseases would be quite unsuitable for the reports, owing to obvious questions of delicacy. These arguments of the three medical officers failed to convince or to satisfy the member of the board who had moved the resolution against "jargon." Nay, more, this indefatigable champion of popularised medical science boldly moved a resolution that Drs. Mackinder, Sutton, and Pope, be reported by the Clerk to the Local Government Board for defying the wishes of the majority of the guardians, by not making out their medical reports in language which should be a guide to the guardians. He

said the language used tended to mislead a majority of the guardians. This singular resolution was naturally lost, and an amendment was adopted by a small majority, to the effect that, the letters of the medical men were a sufficient explanation of their report. But the defeated guardian was careful to intimate that the subject would be "again" brought before the consideration of the board.

SUPERANNUATION IN THE ATCHAM UNION, SHROPSHIRE.

SOME months ago, we learned from our contemporary, the *Shropshire Guardian and Shrewsbury Herald*, that an official inquiry had been held into the management of the Atcham workhouse, consequent on the differences that had sprung up between Mr. Whitwell, the medical officer, and the master and matron of that establishment. The inquiry was conducted by the local inspector, assisted by Dr. Mouat. The evidence taken was so discursive, and withal so uninteresting, that we did not feel justified in commenting on it, as it appeared to us to be "much ado about nothing." We were subsequently, therefore, not a little astonished, when we read in the same journal that the Local Government Board had called for the resignation of the master and matron, the medical officer, etc., apparently on the grounds that, as these officials could not agree, it was the least troublesome course for the department to get rid of the whole staff rather than to make any mental effort to decide on which side the blame lay. As, however, there did not appear to the department to be much reason to find fault with either beyond the fact that they had agreed to differ, both the master and medical officer have since sent in applications to the guardians for superannuation allowance.

It would appear from our contemporary that the question of the grant or refusal to grant superannuation to the master and medical officer came on for discussion on Monday, the 19th ultimo. For the master, it was alleged that he had had forty-one years of service, and that, as his stipend was £100 a year, which, with board, residence, etc., made it £150 a year, he was entitled, at the least, to two-thirds; but the proposer waived this amount in favour of a grant of £50 a year. After a very lengthened discussion, it was ultimately agreed that half this amount should be granted; viz., £25 a year. This question having been disposed of, the subject of superannuation allowance to Mr. Whitwell came on for consideration. Not much time was occupied over that; for, after a very brief discussion, it was decided, by a majority of eighteen in a board of twenty-two, that Mr. Whitwell, who is sixty-eight years old, and has been the medical officer of the workhouse for thirty-seven years, should have nothing.

Comment on the above is unnecessary; the facts speak for themselves; but still, we cannot but remark in what very slight consideration the services of our profession are held by the general public—at least, as expressed by guardians.

NOTIFICATION OF INFECTIOUS DISEASES IN NOTTINGHAM.

SIR,—Dr. Brookhouse makes a statement in his letter to the JOURNAL of last week which is contrary to the facts. He says there: "As a matter of fact, small-pox did rapidly spread immediately after Dr. Seaton's appointment in March 1872." My appointment was not in March 1872, but in February 1873, as will be seen by reference to the JOURNAL, vol. i, 1873, p. 158. The epidemic of small-pox was quite over several months before I came to Nottingham. Dr. Brookhouse makes his statement the basis of the explanation he gives of the part of his evidence to the Liverpool Commission to which I have called attention, and to which I had such strong grounds for objecting. I consider, then, I have a right to complain now most seriously of his making such a mis-statement under such circumstances. My friends are of opinion that, in making his original statement, Dr. Brookhouse's sole object was to cast discredit on the office of medical officer of health; and, by representing the second epidemic as more severe than the first, to convey the impression to the gentlemen from Liverpool that the advice and services of that official had been rather a drawback than an advantage. This is the view that my friends took in the first instance, and it is strengthened rather than otherwise by the letters Dr. Brookhouse has thought proper to write. Quite apart from the offensiveness of his attack to me personally, it was clearly not only my right, but it was my public duty as well, to support the cause of notification, and to defend the office of medical officer of health; and I did so by exposing the incorrectness of his opinion, which served him as a pretext for his insinuations.—Your obedient servant,

EDWARD SEATON, M.D.

Municipal Offices, Nottingham, Health Department, April 9th, 1883.

NOTIFICATION OF INFECTIOUS DISEASES.

SIR,—It is not my intention to enter into a controversy with any of the twenty-five members of the Medical Institution who voted for the resolution referred to in the JOURNAL of March 24th; nor do I ask for an excuse, much less an apology, for the offensive treatment to which I have been subjected for some time past, but I am prepared to substantiate every statement in my report, except its application to the whole profession. I willingly acknowledge that there are in Liverpool gentlemen as honourable, high-minded, and humane as can be found in any city—gentlemen ever ready and willing to render assistance in preventing and alleviating suffering, and to many of whom I am personally indebted for much kindness. I should, therefore, sincerely regret if any word of mine had caused them the slightest pain, for I can assure them my remarks were never intended to have such a general application, though I allow they admit of that interpretation, and am truly sorry there was no such qualifying statement in the report.—I remain, sir, yours very truly,

Richmond Park, Liverpool, March 26th, 1883. J. STOPFORD TAYLOR.

EFFICACY OF COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE

SIR,—In your issue of March 31st, Dr T. Whiteside Hime asks for figures to test the efficacy of notification. I think the following figures, which relate to Radford and Lenton, are instructive. During the small-pox epidemic, 1871-2, Radford and Lenton were not included within the limits of the borough of Nottingham, notification was not in force, and 87 deaths occurred from small-pox. During the small-pox epidemic of 1882 (Radford and Lenton having in the meantime been annexed to the borough), notification was in full force, and, with a much larger population, four deaths occurred from small-pox. Dr. Hime objects to protestations and inferences, and asks for figures and facts only, so I offer no comment on the above.—I am, etc.,

HENRY R. HATHERLY,

Late Medical Officer of Health to urban sanitary district of Radford and Lenton.

AT the last meeting of the Manchester City Council, held on the 4th instant, the salary of Mr. Henry Whiley, the able Superintendent of the Health Department of the Manchester Corporation, was advanced from £500 to £600 *per annum*.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BOLTON.—The gradual and continuous decline of the death-rate in this borough must be a source of gratification to the sanitary authority, who possess in Mr. Sergeant a thorough and painstaking officer of health. During 1881 the death-rate from all causes was 19.18 per 1,000, against an average rate for the previous ten years of 23.8. Zymotic diseases accounted for 269 deaths, equal to a rate of 2.5 per 1,000, the largest mortality being registered from whooping-cough, which caused 119 deaths. Scarlet fever was fatal in 31 cases against an average for the previous ten years of 106, small-pox was not the cause of a single death, while two deaths only were attributed to diphtheria, and one to measles. To "fever" 25 deaths were referred including 19 from typhoid and three each from typhus and simple continued fever. During the autumn there were two outbreaks of typhus in a damp and unhealthy part of the town, and of 15 cases two terminated fatally. The whole of the block in which the second outbreak occurred, numbering 41 dwellings, have since been demolished. Diarrhœa accounted for only 91 deaths, against an average of 159 for the previous ten years. In only one recorded year was the diarrhœa rate lower than the year under report, viz., in 1879, when the atmospheric conditions were very similar, and the mean temperature did not rise above 59° Fahr. During the summer of 1881, the weather was cold, and only during July did the temperatvre approach 60° Fahr., and hence, in Mr. Sergeant's opinion, the main condition was wanting for the production of diarrhœa. Owing to the heat of July, the mortality from this disease in order during the fortnight ended August 10th rose to 13, the highest average attained during the year. It may be of interest, as bearing on this important question, to note that "in the year 1881 the rainfall at Bolton-le-Moors was 8.20 inches more than in 1880, and 2.20 inches more than the mean of the previous 50 years; and in the year 1881 the evaporation was 0.96 inches less than in the year 1880, and 2.82 inches less than the mean of the previous fifty years." There was a low rate of infantile mortality recorded, the deaths of children under five years of age being only 23.1 per cent. of the total deaths and 43.5 per cent. of the deaths, while at the other end of life there deaths (three of men and ten of women) were registered at or above the age of 85 years. In dealing with the notification of infectious disease—which has now been compulsory in the borough for four years—Mr. Sergeant has much that is of interest to report. During the year 469 cases were notified, of which 61 proved fatal, against 766 cases of sickness, with 120 deaths for the year preceding. The proportion of deaths from the infectious diseases for which reports were received was equal to 13 per cent. of total cases. The high rate from the diseases reported is, the health-officer thinks, most probably due to the fact that not unfrequently a medical man is not called in until the case proves severe or complications arise—an experience quite common with health-officers. By early information concerning small-pox and typhus Mr. Sergeant was able to suppress several outbreaks, which might have given rise to serious trouble. As an adjunct to the system of compulsory notification, Mr. Sergeant reports that plans have been approved for the erection of a hospital for the isolation of infectious cases.

BUXTON.—The only part of Mr. Turner's report needing notice is a very curious account of an outbreak of typhoid fever of [illegible] origin, commencing in October, in the person of a child who, for want of supervision, was allowed to play around excavations

sary to the reconstruction of a sewer, which had been broken in and thus blocked, pending the settlement of a disputed right of drainage. The child slipped on a bank, and fell into the long pent-up sewage. For a week he showed symptoms of lassitude and *malaise*, and on October 12th was the subject of typhoid fever, which, after running a course of three weeks or more, disappeared. This patient, it was reasonable to hope, had completely recovered; and his convalescence would have been uninterrupted, but for the administration, by a relative, of some mussels as a relish to his food. Unfortunately, this mistaken kindness, with other causes, induced a relapse which nearly proved fatal. During this relapse, relaxation of the care of the patient and neglect of the disinfection of his excretions resulted in the extension of the fever to three children, members of the same family. At the end of the year, all the patients had recovered, but were extremely emaciated. During July, there was a severe outbreak of diarrhœa, which was confined to one block of buildings, and was caused, undoubtedly, by an impure water-supply. A thorough cleansing of the reservoir and a flushing of the supply-pipes were immediately followed by a cessation of the disorder. The other mortality statistics call for little comment. Deducting the deaths of 22 non-residents, and of 3 persons who were brought into the district with their fatal disease upon them, there were 62 deaths properly due to the town, giving a death-rate of only 10.29 per 1,000. Several important sanitary operations were carried out during the year, notably in remedying several defects in the sewerage-system. The town is still unprovided with any hospital accommodation for the isolation of patients suffering from infectious disease; and, having regard to the growing importance of Buxton as a health-resort, the health-officer would do well to press upon his authority the necessity of the immediate provision of this great desideratum.

DERBY.—Mr. Iliffe's report on this borough is chiefly interesting for the account he gives of the working of the clauses of the Improvement Act of 1879, requiring the compulsory notification of infectious disease. Further acquaintance with their operation has lent additional weight to the health-officer's previous opinion, that they are of immense value and importance to the inhabitants of the borough. Without the notification of infectious diseases it would often be impossible to convince owners and occupiers of property, that illness, and perhaps death, were lurking in their dwellings. The medical men of the borough seem to have grasped tolerably accurate idea of their responsibilities, and no difficulty or opposition whatever has been experienced from them, with one exception. In describing the procedure upon the receipt of a notification that infectious disease exists, Mr. Iliffe states that opposition is rarely met with. In some cases, however, the interference of the inspector is resented, and the removal of a patient is objected to. The health-officer then intervenes, and in 99 cases out of 100, successfully. By conducting the business in this way, the sensitiveness of the medical practitioners, with regard to interference with their patients, is obviated, and the smooth working of the Act, so far as they are concerned, ensured. During 1881 the total number of certificates of infectious disease received, amounted to 331, but on inspection they revealed the existence of no less than 577 cases. The total cost to the borough for the year's certificates was £1 7s. 6d. With two exceptions, everything connected with the operation of the Act has been an unqualified success. The number of deaths from the seven principal zymotic diseases was 116, and these equal to a rate of 2.03 per 1,000; the average for the previous four years having been 3.2. Diarrhœa was only half as fatal in 1881 as in the previous year, the deaths being 44 against 98. Thirty-three deaths were registered from scarlet fever, being a further decline on the number for the previous year, which was 43. In 1878 and 1879 the numbers were respectively 64 and 244. Measles was very fatal in three cases, but whooping-cough caused 61 deaths, the largest number in any one year since 1877. Mr. Iliffe gives an interesting account of the prevalence of small-pox, and of the measures taken for its repression, commenting in severe terms on the delay that was allowed to take place before the sanatorium was in a fit state for the reception of patients. Deducting the deaths not properly due to the borough, the death-rate represents 18.7 per 1,000, being considerably less than the average for the previous four years. Of the total deaths (1,560), 410 were those of children under one year of age, equal to 129.9 per 1,000 births. The total number of deaths under five years of age was 649, equal to 41.6 per cent. of the whole mortality. The present sanitary condition of the borough receives considerable attention in the report. Some improvement has been made in the water supply, but the serious attention of the Town Council is directed to the very defective state of the house drainage. The mortuary was of excellent service during the year, the accommodation for *post mortem* examinations being much appreciated.

DURHAM RURAL DISTRICT.—The extensive prevalence of scarlatina in this and adjoining districts has already been the subject of an exhaustive inquiry at the hands of Mr. Spear, one of the medical inspectors of the Local Government Board, an abstract of whose report on the subject appeared in these columns on May 20th, 1882 (vol. i., 1882, p. 757). During 1881 there were 67 deaths registered from this cause, as against 115 in the previous year, being at the rate of 1.72 per 1,000 of the population. There was also a marked decrease in the fatality from zymotics generally, the total deaths recorded from these amounting to 89, while in 1880 the number was 245, representing a rate of 6.34 per 1,000. The figures for 1882 are not given in the report for that year, which is a serious omission. Mr. Blackett speaks strongly of the grave consequences which have been more than once caused by these schools, and he also complains of the want of care and caution on the part of schoolmasters, notwithstanding that he has caused them to be supplied with instructions pointing out the means whereby the spread of infectious diseases by children attending school may be prevented. The health-officer again reminds his authority that the district still remains without any provision for the isolation of cases of an infectious nature; and, in view of a threatened visit of small-pox, urges them to seriously consider the matter. During the year 1881, 745 deaths were registered, equal to a rate of 19.209 per 1,000; 378 of these occurring in children under five years of age, while 248 had not completed twelve months of existence. For 1882 the deaths were 613 in number, representing a rate of 19.25 per 1,000; 282 of them were under and 331 upwards of five years of age. The sanitary condition progresses under Mr. Blackett's supervision, but the authority have much work before them before their district can be considered in a satisfactory state. The detailed particulars of the sanitary condition of each parish in the district are a useful feature of the reports.

GLANFORD BRIGG RURAL.—Mr. Moxon has a satisfactory account to give of the health of this district during 1881. From all causes there were 484 deaths registered, representing a rate of 17.0 per 1,000, which, although below the rate for 1880, does not maintain the reduction of the three previous years. This, however, may be due to a fluctuating population rather than to disease prevalence. Zymotic complaints accounted for 67 deaths, against 87 in the previous year. Scarlatina was prevalent in most parts of the district, and amongst some 400 cases 39 terminated fatally, 25 being children under five years of age. Whooping-cough, fever, and diarrhœa together caused 20 deaths, but there was a total absence of small-pox and measles. Towards the close of the year diphtheria caused some trouble at Messingham, where an outbreak occurred, the cause being apparently a polluted water supply. As regards the value of infectious hospitals the health-officer has an unfortunate experience to record. He observes that where these have been provided to a considerable (but, perhaps, not sufficient) extent, the spread of scarlet fever has apparently been unchecked, and the disease has only subsided when it had exhausted the material of susceptible persons. This, he adds, appears to have been the case in the neighbouring town of Hull, where a serious epidemic of scarlet fever prevailed during several months of the past winter. As regards his own district, Mr. Moxon is convinced that in the present state of public opinion it is not likely that the hospitals which would be required would be provided, or if provided would be generally used.

HACKNEY.—In 1881 small-pox caused 225 deaths at Hackney, and in alluding to this fatality Dr. Tripe has little to add to the remarks which have appeared in his previous reports. As regards small-pox hospitals, he believes that they exert a more or less prejudicial influence on the health of the inhabitants of their neighbourhood if *more* than 100 patients are admitted, and that, therefore, more than that number should not be treated on any site, except in a great emergency, and that, under any circumstances whatever, the number should be absolutely limited to 150. Dr. Tripe is also of opinion that the infection of this disease can be carried by air as well as by articles of clothing; but when the number of patients treated in a hospital is small, judging from what has happened in this district, he believes that infection by air is comparatively rare. There were 70 deaths attributed to whooping-cough during the year. Dr. Tripe expresses his regret that such a large mortality, and that such great injury to the lungs of many who survive, should arise from want of knowledge and from carelessness. With the view of preventing the reckless exposure of children suffering from this disorder, application will be made to the sanitary authority to prosecute the person in charge of the sick

whenever a case comes to Dr. Tripe's knowledge of such exposure within his district in a railway train or public conveyance, where the sufferer is kept in the vicinity of healthy persons for some considerable time. During 1881 the district was visited with an outbreak of diphtheria and malignant sore throat, causing 61 deaths, 49 of which were certified as being from diphtheria. There were altogether 71 cases reported, of which 38 occurred in the same number of houses, 20 in ten houses, nine in three houses, and four in one house, so that the disease was confined to one case in a house in a little more than one-half of the whole. In most instances when two or more cases occurred in a house, the disease was caught by direct infection. Thus at one house a child, aged five years, first contracted the disease, and the mother who attended the child caught it a few days afterwards. At another house the grandmother who nursed a child eight years old took the disease and died. The elder of two brothers residing in Kingsland caught the disease from the younger, and the same is said to have occurred with two sisters. The mother of two children, who nursed them, was infected and died ten days after the death of the child who first contracted the disease. Measles accounted for 149 deaths, scarlatina for 118, typhoid fever for 60, and diarrhœa for 135. Altogether there were 832 deaths referred to the seven principal zymotic diseases, against 523 in 1880 and 404 in the previous year. The mean annual rate of mortality was 19.2 per 1000, after due allowance has been made for the deaths of residents of the districts in hospitals, against a mean of 19.6 in the ten years 1871-80. An immense amount of sanitary work was performed during the year, as many as 12,197 notices being served, and a considerably larger number of visits paid to premises in order to obtain the abatement of nuisances. One hundred and seven bakehouses were inspected, and were found to be in a similar condition, certainly not better, than before the inspectors of factories were empowered to issue notices for their being kept in a cleanly and wholesome condition. There were no water-closets or cases of bad drainage found in the bakehouses. An index would considerably enhance the value of Dr. Tripe's reports in affording a ready means of reference to the various subjects referred to therein.

OBITUARY.

HENRY STEELE, M.D.

DR. HENRY STEELE, one of the leading medical practitioners in Montrose, died there on April 7th. Deceased, who was a son of the late Dr. George Steele, studied at Edinburgh University, and graduated as M.D. in 1861. After a short residence in Elgin, he commenced practice in Montrose, and for many years had been recognised as one of the ablest physicians in the town. He was one of the medical officers of the infirmary, medical inspector under the Factory Act, and was chairman of the present School Board. He was in the 44th year of his age, and unmarried. Dr. Steele was a man of vigorous physique, robust, and extremely active in all his habits. He has been struck down in the full vigour of health and prosperity, and his loss is greatly deplored by the people of Montrose. As a practitioner, he was greatly beloved by his patients. As a citizen he took an active part in educational matters. It is hard to realise that one so strong and vigorous, yet withal so gentle and kind, should have been struck down in his prime and when he was doing excellent work both for his numerous patients and for the community. Dr. Steele was universally respected and admired in the district where he practised, and it will be long before his name and his many kindly acts are forgotten in Montrose and its neighbourhood.

ALEXANDER MILNE, L.R.C.P. & S.EDIN., SUNDERLAND.

ALTHOUGH it is now two months since the above named gentleman departed this life, it is not right, that one who did so much for students should pass away without notice. He was the author of manuals on *Midwifery* and *Materia Medica*, works which, a few years ago, were very popular with Scotch students. For many years he carried on a large obstetric practice in Edinburgh, and only left there a short time ago. He finally settled in practice at Sunderland, where he died in the beginning of this year. Few men had the power of saying so much in a few sentences, and withal adding a humorous strain to his discourse.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 5th instant, and, when eligible, will be admitted to the pass examination, viz.:

Messrs. Brian Melland, Matthew Benson, St. Strange Hall, J. William Rigby, C. Hermann Tattersall, Harry Merrall, C. Baring T. Langton, and W Henry Iddon, students of the Manchester School; J. Anderson Smith, G. Coring Campion, E. Frederick Bindloss, and A. Holdsworth Davis, of St. Bartholomew's Hospital; L. John Pisani, E. Thomas Gregory, and A. Edward Hardy, of the Charing Cross Hospital; Robert Swyer, Alfred J. Gregory, and W. E. Michael Raw, of the London Hospital; J. Wychenford Washbourn, G. Frederick Pollard, and H. Hennaway Roper, of Guy's Hospital; E. R. St. Clair Corbin, of University College; C. William de Gruchy, and W. Joseph Staddon, of St. Thomas's Hospital; and C John Jacomb-Hood, of King's College.

Three candidates were referred.

The following gentlemen passed on the 9th instant:

Messrs. W. John Gow, C. W. Forrest Young, C. Campbell Harris, W. Fredk. Pedler, and R. Francis Jowers, of St. Bartholomew's Hospital; John A. Jones; Hubert Holyoake, F. William Collingwood, and E. A. Otho Travers, of the London Hospital; H. Percival Gaston, F. Osmund Stedman, and George H. Baker, of the Charing Cross Hospital; F. A. Thomas O'Meara, and James Wheatley, of King's College; N. Peard Barrett, of University College; J. Black McIlroy, of the Westminster Hospital; Kanka Totsuka, of St. Thomas's Hospital; and George Varley, of St. George's Hospital.

Five candidates were referred.

The following passed on the 10th instant, viz.:

Messrs. James Soutter, W. George Spencer, J. Edward Panton, Reginald H. Combes, and Harold Davidson, of St. Bartholomew's Hospital; Henry Cropley, C. R. Mortimer Green, F. John Smith, and A. William Burrell, of the London Hospital; Henry Fooks, and J. Arthur Coleclough, of the Charing Cross Hospital; W. Hilton Heffernan, and Alexander L. Achard, of St. Thomas's Hospital; Eustace F. Bright, and Raymond Johnson, of University College; Arthur Hardwick, and G. Chamberlyn Cory, of the Westminster Hospital; Frederick Lever, and Sidney Wacher, of Guy's Hospital; Arthur Jervis, and J. Maurice Skill, of St. George's Hospital; and Albert Carless, of King's College.

Two candidates were referred.

The following passed on the 11th instant:

Messrs. F. Samuel Barber, F. Marsh Wright, and Humphrey Davy Rolleston, of St. Bartholomew's Hospital; Edmund Raghib, G. Henry Charlesworth, and P. King Lewis, of Charing Cross Hospital; A. Edward Price, and S. Walshe Owen, of Guy's Hospital; J. Vaughan Owen, and G. Taylor Gifford, of King's College; F. James Morgan, and A. Samuel Gubb, of the Westminster Hospital; J. Rose Bradford, William Permewan, and W. McDonogh Ellis, of University College; John Jarvis, and S. Harold Jones, of St. Thomas's Hospital; G. Francis Smith, of St. George's Hospital; and H. Edward Rayner, of the London Hospital.

Five candidates were referred for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 5th, 1883.

Dumbleton, Charles Eardley, 4, Felbrig Terrace, Ealing.
Fletcher, William John Harvey, Church Street, Uttoxeter.
Groom, Harry, 12, North Brink, Wisbech.
Guilding, Lansdown Murray, St. Lawrence, Reading.
Lyster, Arthur Edward, Brentwood, Essex.

The following gentlemen also on the same day passed their Primary Professional Examination.

Humphreys, Charles Evan, London Hospital.
Roe, Montagu Walter, St. George's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

BOARD OF TRADE.—Two Sanitary Surveyors. Salary, £300 per annum. Applications by April 30th.

CHILDREN'S HOSPITAL, Birmingham.—Resident Medical Officer. Salary £80 per annum. Applications by May 3rd.

CHILDREN'S HOSPITAL, Birmingham.—Resident Assistant Medical Officer. Salary, £40 per annum. Applications by May 3rd.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Chairman of the Committee of Management.

EAST SUSSEX, HASTINGS AND ST. LEONARDS INFIRMARY, Hastings.—Third Assistant-Surgeon, (Honorary). Applications by the 30th instant.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Non-resident Dispenser. Applications by April 18th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT, St. John Street, Deansgate, Manchester.—Honorary Assistant-Physician. Applications by April 18th.

LEIGH LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Applications by April 23rd.

LINCOLN COUNTY HOSPITAL.—House Surgeon. Salary, £100 per annum. Applications by April 23rd.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary, £1[illegible] per annum. Applications to the Chairman of the Committee by April 25th.

LOUGHBOROUGH MEDICAL AID ASSOCIATION.—Surgeon. Salary, £160 per annum. Applications by April 25th.

MADRAS RAILWAY COMPANY.—Medical Officer. Salary, 450 rupees *per mensem*. Applications to Julian Byrne, Secretary, 61, New Broad Street, E.C., by May 1st.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street.—House Surgeon. Salary £50 per annum. Applications by April 22nd.

PAROCHIAL BOARD AND PARISH OF KIRKMICHAEL, Banffshire.—Medical Officer. Salary, £100 per annum. Applications to the Rev. A. Guthrie, Minister of Tomintoul, Banffshire, by April 16th.

PAROCHIAL BOARDS OF STRACHUR AND STRALACHLAN.—Medical Officer. Salary, £80 per annum. Applications to the Rev. H. F. Macdonald, Strachur, Chairman of Stralachlan Parochial Board, by May 1st.

RATHDRUM UNION.—Medical Officer for Workhouse. Salary, £100 per annum, with £15 a year as Consulting Sanitary Officer. Election on April 20th.

ST. JOHN'S HOSPITAL FOR SKIN DISEASES, Leicester Square, W.C.—Dispenser. Salary, £80 per annum. Applications to St. Vincent Mercier, Secretary.

TUAM UNION, Headford Dispensary.—Medical Officer. Salary, £140 per annum and fees. Election on the 17th instant.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House Surgeon. Salary, £150 per annum. Applications by May 1st.

MEDICAL APPOINTMENTS.

ALDEN, E. W., M.R.C.S., appointed Surgeon and Apothecary to the Oxford Medical Dispensary and Lying-in Charity, *vice* H. Thompson, M.R.C.S., resigned.

ASHWELL, H. G., M.R.C.S., appointed House-Surgeon to the Great Northern Hospital, *vice* J. N. Cook, M.R.C.S., resigned.

BATEMAN, H. E., M.R.C.S., appointed House-Physician to the Royal Hospital for Diseases of the Chest, City Road.

BENNETT, W. C. S., F.R.C.S., appointed Dental Surgeon to the Middlesex Hospital.

DUFFE, R. E. G., M.R.C.S.E., appointed Assistant-Surgeon to the Cape Copper Mining Company.

DONALD, George, M.B. and C.M., appointed Medical Officer of the Parish of North Leith, *vice* Robert Macnair, M.D., resigned.

DUMBLETON, T. E., L.S.A., appointed House-Surgeon to the London Temperance Hospital.

ELLIOT, Henry F., M.R.C.P.E., F.R.C.S.E., etc., appointed Surgeon to the Infant Orphan Asylum, Wanstead, *vice* W. Scott, M.B., resigned.

HAMILTON, A. R., L.R.C.P., appointed House-Surgeon and Secretary to the General Infirmary, Hertford, vice D. Priest, M.R.C.S., resigned.

HEBB, F. J., M.R.C.S., appointed Junior Resident Medical Officer to the Great Northern Hospital.

HENSON, S. R., M.R.C.S., appointed Medical Officer to the Hull Workhouse, *vice* A. Macmillan, M.D., resigned.

HENTY, S. H., L.R.C.P., appointed Honorary Surgeon to the Holloway and North Islington Dispensary, *vice* D. O. Fountaine, L.R.C.P., resigned.

HITCHCOCK, Charles Knight, M.D., M.A.Cantab., appointed Medical Superintendent of the Lunatic Hospital, Bootham, York.

MACCALL, W. N., M.D., appointed Honorary Physician to the Clinical Hospital for Women and Children, Manchester, *vice* E. Gumpert, M.D., resigned.

MCNAMARA, H. W., M.R.C.S., appointed House-Surgeon to the St. Peter's Hospital for Stone and Urinary Diseases, *vice* R. Lloyd, M.R.C.S., resigned.

MAXWELL, Theodore, M.D.Camb., F.R.C.S.Edin., S.Sc. Cert. Camb., appointed Surgeon to the R Division of Metropolitan Police at Shooter's Hill.

MIDLEY, T. F., M.D., appointed Health-Officer and Superintendent of Vaccination to the Rangoon Municipality.

MYERS, C., M.R.C.S., appointed Assistant Dental Surgeon to the Middlesex Hospital, *vice* W. C. S. Bennett, F.R.C.S., resigned.

RICHARDSON, R., M.B., appointed Honorary Physician to the Stanley Hospital, Liverpool, *vice* A. B. Hughes, M.D., deceased.

RUTHAM, F. A., M.B., appointed Honorary Surgeon to the Clinical Hospital for Women and Children, Manchester, *vice* W. N. Maccall, M.D., resigned.

SORRAR, W. M., L.R.C.P., appointed House-Surgeon to the Carlisle Dispensary, *vice* F. Shearer, M.B., resigned.

STITLOCK, A. W. F., L.R.C.P., appointed Medical Officer to the Walsingham Union, *vice* R. H. Foot, M.D., resigned.

SURRALL, R., M.D., appointed Honorary Assistant Physician to the Stanley Hospital, Liverpool, *vice* R. Richardson, M.B., promoted.

WRIGHT, Wm. H., L.K.Q.C.P.I., L.M., M.R.C.S.E., appointed Public Vaccinator to the North District of the Derby Union.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

[illegible].—At Elton, Bury, on the 7th instant, the wife of J. G. F. Lees, M.B., of a son.

[illegible].—On March 22nd at Alexandria, the wife of Surgeon-Major John Alexander Shaw, M.D., F.R.C.S.I., Army Medical Department, of a son, still-born.

DEATH.

[illegible].—April 9th, at Portland House, Cheltenham, after much suffering, borne with Christian resignation and fortitude, Hannah, the beloved wife of Thomas Smith, M.D., aged 73. Friends will kindly accept this intimation.

HEALTH OF FOREIGN CITIES.—It appears from the statistics, published in the Registrar-General's return, for the week ending 31st ultimo, that the death-rate recently averaged 34.6 per 1000 in the three principal Indian cities; it was 27.1 in Calcutta, 35.9 in Madras, and 36.4 in Bombay. Small-pox caused 137 deaths in Bombay and 15 in Madras, and cholera 18 in Calcutta; small-pox fatality showed a considerable increase in Bombay, while the deaths from cholera showed a decline in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living, in twenty-three of the largest European cities, was 30.6, and was 1.4 above the mean rate during last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 40.1, and lower than in recent weeks; the 714 deaths included 29 from "fever," 26 from scarlet fever, and 15 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 26.3, and ranged from 19.2 in Christiania to 32.6 in Stockholm; four more fatal cases of measles were returned in Stockholm. In Paris, the death-rate was equal to 30.2; the deaths included 41 from measles, 30 from typhoid fever, and 12 from small-pox. The 240 deaths in Brussels included 4 both from small-pox and measles. The death-rate in Geneva did not exceed 23.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.2, and ranged from 26.5 in the Hague to 31.1 in Rotterdam; diphtheria and croup caused 14 more deaths in Amsterdam, and small-pox 5 in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.2; the rates in these cities ranged from 23.2 in Berlin to 38.0 in Trieste, and 41.7 in Prague. Diphtheria showed more or less fatal prevalence in most of these German cities, and especially in Berlin, Hamburg, and Dresden. The death-rate averaged 28.9 in three of the principal Italian cities, being 26.5 in Turin, 28.1 in Rome, and 35.3 in Venice; diphtheria caused 5 deaths in Rome and 6 in Turin, and measles 7 in Venice. The 147 deaths in Lisbon were equal to a rate of 38.4, and included 2 fatal cases of small-pox. In four of the largest American cities, the mean death-rate did not exceed 25.3; the rate ranged from 20.1 in Brooklyn to 25.3 in New York. Small-pox caused 15 deaths in Baltimore and 5 in Philadelphia; in the latter city 24 fatal cases of diphtheria, and 14 of typhoid fever, were also returned. Diphtheria also showed fatal prevalence in Baltimore.—The statistics for the week ending April 7th show that the death-rate recently averaged 35.5 per 1000 in the three principal Indian cities; it was 27.4 in Calcutta, 36.1 in Madras, and 37.7 in Bombay. Small-pox caused 131 deaths in Bombay, and cholera 36 in Calcutta; 18 fatal cases of small-pox were also recorded in Madras. According to the most recent weekly returns, the annual death-rate in twenty-three of the largest European cities averaged 30.2 per 1000, and was 5.9 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 41.7, and the 743 deaths included 28 from diphtheria and 15 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 26.0, and ranged from 90.0 in Christiania to 30.9 in Copenhagen; typhoid fever caused 4 deaths in Copenhagen and scarlet fever 4 in Stockholm. In Paris the death-rate was equal to 30.4; 44 fatal cases of diphtheria and croup, 27 of typhoid fever, and 9 of small-pox were recorded. The 204 deaths in Brussels included 4 from measles and one from small-pox, and were equal to a rate of 23.8. In Geneva the rate was 27.0, and was considerably above the average. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.1; the rate ranged from 20.3 in the Hague to 31.4 in Amsterdam; small-pox caused 9 deaths in Rotterdam and 3 in Amsterdam, and diphtheria 8 in the latter city. The Registrar-General's table includes nine German and Austrian cities, in which the mean death-rate was 30.0; the rates in these cities ranged from 24.6 and 27.6 in Berlin and Dresden to 37.6 and 37.0 in Breslau and Trieste. Whooping-cough caused 11 deaths in Vienna, and measles 6 in Prague; and diphtheria was more or less fatally prevalent in most of these German cities. The death-rate averaged 29.8 in three of the principal Italian cities, being 27.9 in Turin, 30.5 in Rome, and 31.4 in Venice; typhoid fever caused 7 deaths in Turin, measles 12 in Venice, and both diphtheria and measles showed somewhat fatal prevalence in Rome. The 129 deaths in Lisbon, including 3 fatal cases of diphtheria, were equal to a rate of 33.7. In four of the largest American cities, the mean death-rate was equal to 26.9; the rate ranged from 23.2 in Philadelphia to 29.4 in New York. Small-pox caused 3 deaths in Baltimore and 4 in Philadelphia; typhoid fever also again showed fatal prevalence in Philadelphia, and scarlet fever and diphtheria in New York and Brooklyn.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. A paper by Dr. Baddaloni of Nocera, Italy, on Permanganate of Potash and Viper-poison, will be read by Dr. Isambard Owen. Dr. Robert Lee will read a paper on the Relation of Progressive Spinal Deformity and Fragility of Bones to Insanity. Case of a man aged 40. Mr. Hugh Smith will show a case of Foreign Body in the Pterygoid Fossa.

TUESDAY.—Pathological Society, 8.30 P.M. Dr. Wilks, for Dr. Handfield Jones Occlusion of Vessels by Oil. Mr. V. Horsley: Adeno-Sarcoma of Testicle and Abdominal Viscera. Mr. Davies-Colley: Sarcomatous Ulcer of Back. Dr. F. Taylor: Sarcomatous Ulcer of Back. Mr. F. Eve: Hypertrophy of Limb. Mr. J. H. Morgan: Multiple Growths in the Bladder. Dr. Curnow: Hydatid Cyst in Lung; Ulcerated Intestines. Dr. Percy Kidd: Disseminated Growths in the Liver. Card Specimens.—Mr. Lediard: Spindle-cell Sarcoma—Dry Caries. Mr. Watson Cheyne: Tubercle-Bacilli. Dr. F. Taylor: Intestinal Obstruction. Dr. Abercrombie: Atresia of Right Ventricle of Heart.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. Symes Thompson will read a case of Hectic simulating Relapse in Enteric Fever. Dr. Drew will read a case of Gastro-enteritis simulating Typhoid Fever. Mr. Henry Morris: Ten Years' Experience of Cancer of the Breast.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

VACCINATION.

SIR,—Your reply to Mr. Lawrence Hamilton induces me to note to you the result of tabulation of twelve hospital reports in respect of the number of vaccine marks. (1870-1880.) The cases in all number 19,779. In some of them the terms "good," etc., by way of qualification, are not added. All marked "imperfect" are here kept by themselves.

Without qualification, there were among the 19,779:

	With one mark	1,124 cases
	With two marks	1,722 ,,
	With three ,, ...	936 ,,
	With four ,, and more ...	741 ,,
Good marks,	,, one mark	1,408 ,,
,,	,, two marks	1,105 ,,
,,	,, three ,, ...	806 ,,
,,	,, four ,, and more ...	768 ,,

In addition to these there are the "imperfect" marks, which are not so numerous:

Imperfect marks,	one mark	2,062 cases
,,	two marks	1,733 ,,
,,	three ,, ...	1,211 ,,
,,	four ,, and more ...	653 ,,
Traces of vaccine marks	... ...	938 ,,
Doubtful cases	... ...	228 ,,
Number of marks	... ...	1,205 ,,
Unvaccinated	... ...	3,139 ,,
	Total	19,779 ,,

Do not we find here recorded the total failure of vaccine marks to protect from vaccination? Is there a candid mind ready to put any other interpretation upon them? 19,779 cases and 14,269 show marks of vaccine! Five thousand and upwards with three marks or more! May the kindly light of science soon teach us to spare our bairns this useless cruelty.—Yours truly,

Darlington, March 20th, 1883. ALEXANDER WHEELER.

*** The figures quoted do not record "the total failure of vaccine marks" on the contrary, they bear witness to their success. Our correspondent has fallen into the error—a very gross one—to which we called attention in our issue of February 17th. He has compared the absolute occurrences of small-pox among two populations differing greatly in respect of numbers. According to this logic, the present death-rate of London is much greater than the death-rate of the last century, inasmuch as the absolute number of deaths is greater now than it was then, while in reality, the present death-rate is a mere fraction of that of last century. Before any comparison can be drawn from such figures as are brought forward by our correspondent, the proportions of the population vaccinated and unvaccinated must be taken into account. If the proportion vaccinated be taken as about 90 per cent. of the whole—a percentage probably very near the truth—then 3,139 cases among the unvaccinated would correspond to over 28,000 among the vaccinated, and 4,343 among those without marks to over 39,000 among those with marks), on the supposition that vaccination has no protective influence against small-pox. But the actual number of cases among the vaccinated is only 14,269, so that there is a difference of nearly 14,000 to be explained, only on the ground that vaccination has such power. Moreover, if the comparison be confined to children—where it is most pertinent, seeing that the protective influence intermittedly diminishes after childhood—the incidence of small-pox will be seen to be still greater among the unvaccinated than among the vaccinated. This is clearly shown by our article already referred to, and by the recent report of the Medical Officer of the Local Government Board. Further, our correspondent's table is incomplete; it ought to have shown also the percentage mortality among the different classes of cases. If this had been included, the evidence furnished by the table would have been not only (1) that the relative incidence of small-pox is greater among the unvaccinated than among the vaccinated, but also (2) that the mortality is greater among the unvaccinated than among the vaccinated when attacked by the disease. The figures of our correspondent construed in the only legitimate method, thus lead to a conclusion altogether different from that to which they seem to have led him. The "kindly light of science" shows that vaccinia is harmless for evil, yet exercises immense power for good, and teaches us that, if we value our children's happiness and lives, we must submit them to the operation.

Mutual Influence of Mind and Body.

SIR,—I should feel greatly obliged by your informing me, in your Notices to Correspondents, what authorities to consult on the influence of the body on the mind, and of the mind on the body, with respect to the treatment of the diseases of each.—Yours faithfully, R. HUGHES.

P.S.—Some time ago, there was published in the JOURNAL an article on the effect of colour in the treatment of the insane. Can you refer me to any work on the subject?

Bala, April 2nd, 1883.

*** The works on the mutual influence of the mind and body are: *A Dissertation on the Influence of the Passions upon Disorders of the Body.* By Dr. Falconer. 1788. *Of the Imagination as a Cause and as a Cure of Diseases of the Body, etc.* By Dr. Haygarth. 1801. *De l'Imagination.* Par Demaugeon. 1829. *Sketches from the Case-Book to illustrate the Influence of the Mind on the Body.* By R. Fletcher, M.R.C.S. 1833. *La Médecine des Passions.* Par Descurel. 1841. *The Power of the Mind over the Body.* By James Braid. 1846. *The Power of the Soul over the Body.* By Dr. Moore. 1846. *Illustrations of the Influence of the Mind upon the Body, in Health and Disease, with especial Reference to the Imagination.* By Dr. D. Hack Tuke.

Tricycles.

SIR,—The numerous inquiries respecting the "Doctor" tricycles compel me to request that all future inquiries be addressed to the Coventry National Bicycle and Tricycle Company, National Works, Coventry. Kindly notify this, and oblige, sir, yours truly, J. P. OATES.

Vaughan Lodge, Malvern Wells.

A Difficulty in Labour.

SIR,—Having lately and formerly met with several cases in which the head was very low in the pelvis—in fact, near the os externum, although still covered with the uterus, and in which it was very difficult, on account of the pressure downward, to discover the os uteri, it being more or less rigid, and very little dilated—I consider it well to mention this, in case any very inexperienced man might attempt to apply the forceps. These cases are always lingering—one of thirty-eight hours, another of twenty-four—in first cases; the exact duration of the others I do not remember; and I am of opinion that the immediate cause of labours was not natural.—I am, sir, your obedient servant,

Chilton Polden, March 12th, 1883. CHARLES YOUNG, Surgeon, etc.

A. J. R. (Burton Crescent) will find the information he requires concerning foreign universities and their curricula in the Students' (October) number of the *London Medical Record.*

Condensed Milk for Infants.

SIR,—I must reluctantly admit that my friend Dr. Neale is probably justified in concluding, from the records of the *Medical Digest*, that those who have written to the medical journals against the use of condensed milk for children exceed in numbers those who have, by such public methods, advocated its employment; but it does not follow that he should infer from that fact that the actual numbers for and against, in the profession generally, are in anything like corresponding ratio.

I am convinced for my own part that, though we must grant to the alarmists the credit of having shown the greatest courage and public spirit in publishing their opinions on the subject, the main bulk of the profession have been rather amused than otherwise by the earnest cautions which have appeared from time to time as to the terrible death which those familiar little cases, disseminated as they now are by millions throughout the land, were all bringing sooner or later, but with all the certainty of the Parcæ of old, to every luckless child who partook of their contents. It is true that a certain number of, mostly young, practitioners have insisted that diabetes and scrofula, and dangerous wasting away, and still more dangerous fatness, must, deductionally, follow its use; but, as a rule, their arguments have not been based upon facts. It is true that there has recently been an exception to this rule—the gentleman whom Mr. Adams recently answered, who had seen two infants operated upon for cataract; but, as even he only adduced one case of failure of the operation after the partial use of condensed milk by the patient, and as there were certainly hundreds of cases of similar failures before condensed milk was known, I do not see that this one case proves anything more than the contradiction of what, so far as I know, has never been claimed even by the most enterprising of the manufacturers or their agents, viz., that the partial use of condensed milk will ensure success in the operation for cataract in infants.

For my own part, I can safely say that I have advised or encouraged its use, as by far the best substitute for the one natural food of infants—woman's milk—in many hundreds of cases; and that, so far as I have been able to judge, I have never seen any harm result from its use, either at the time or afterwards, up to adolescence or later; and I believe that thousands of practitioners could give similar testimony.

Of course, I assume that the "condensed milk" used is such, and nothing else, except the one addition of cane-sugar. This is what the manufacturers mostly—all of them, so far as I know—allege; and a large number of analyses by well known chemists, such as Hassall, Wanklyn, and many others, substantiate the statement.

After all, when condensed milk is given properly diluted, in what way does it differ from that old-fashioned article of food, boiled milk, with cane-sugar to flavour it? I ask this question in reference to its chemical constitution; but I admit that some influence is produced either by the condensation, or some other part of the process it undergoes. I allude to the great difference in consistency between the curd of the condensed milk and that of fresh milk; but it is the excessive consistency and tenacity, toughness, in fact, of ordinary cow's milk, which makes it so indigestible, and altogether unsuited for the delicate stomach of the human infant. I conclude, therefore, that it is on account of the extreme flocculency of the curd of diluted condensed milk that it is as easily digested by infants as woman's milk; whilst the toughness into which ordinary milk is converted under similar circumstances so often resists completely the action of the gastric secretion of the infant, and can only be got rid of by vomiting; or, if partially digested and passed on, causes that persistent and intractable constipation which is such a constant characteristic of ordinary milk-feeding, but which I have never found to be caused by condensed milk.—I am, sir, yours obediently,

Finchley, March 26th, 1883. JAMES TURLE.

Medical and Surgical Education.

SIR,—In advocating the cause of compulsory education in Ireland, my mind is attracted to the vast sphere of usefulness which has not, up to the present, been developed in the opportunities which are presented for the extension of both medical and surgical education through the medium of the workhouse hospitals; and it occurs to me, that if those hospitals were open for the benefit of extending the means of education to medical students, it would not alone further the cause of science in that department, but at the same time do a vast amount of good, indirectly, to the patients, who no doubt would be better attended to by the pauper assistant-nurses, than they are at present. Why those hospitals have not been recognised as schools for instruction, I am at a loss to imagine. They supply subjects for anatomy, which is of immense importance; but how much better would it be if the student had an opportunity of studying all the various symptoms of disease in the patient, and could follow up the results. It may possibly be said that the workhouse hospitals do not offer a sufficient number of cases, so as to be able to engage the attention of students. I am not a medical man, and I cannot form any opinion on that point; but in the Cork workhouse hospitals, where there are upwards of one thousand patients, of ages ranging from infancy to old age, in bed every day, suffering from various diseases, I am inclined to say that they will afford ample scope for medical and surgical instruction; and the same remark will apply to the Dublin, Belfast, Limerick, and many of the other hospitals; I would except none, as the student residing in rural districts would have many convenient opportunities for the practical study of disease in those hospitals, which are at present closed by some workhouse regulation, which I feel assured, if attention were attracted to it, would be removed, and the hospitals opened for the benefit of both medical and surgical education, in a way similar to the other hospitals.—I am, etc.,

Passage West, Cork, April 5th, 1883. WM. D'ESTERRE PARKER.

SIR,—Would you, or some of your readers, be good enough to inform me how the appointment of surgeon to the Royal Naval Volunteers is to be obtained? Any particulars as to examination, cost of outfit, duties, etc., would greatly oblige.—Yours truly, R. N. V.

Subcutaneous Injection of Morphia.

SIR,—Your correspondent asks me where he will get the finest needles. I get mine either from Messrs. Farmer and Co., Grafton Street, Dublin, or Weiss and Son, Strand, London. But, wherever he gets them, he must be impressive to have the finest needles sent; for it is hard to persuade those who do not use them personally, that the difference between the finest and a size or two larger makes any difference to the user, and yet when they are frequently used it is very great.

Anyone wishing to compare sizes of very fine needles, should hold them up side by side, opposite to a strong flame of lamp or candle, when the slightest shade of calibre becomes visible. It is well occasionally to pass hot water through the needle before pushing a wire through, as otherwise the wire collects the rust into a mass and blocks the needle. J. MARTIN.

MEDICO asks: Can a gentleman possessing no medical qualification whatever, and not promising to obtain any, take at present the M.R.C.S. diploma alone?

*** He must obtain a qualification in medicine, or pass an examination in medicine at the College of Surgeons.

Colonial Practice.

SIR,—Can any of your readers inform me what chance of success a doubly qualified man, with good testimonials, etc. (married, with one child), would have in any of the colonies; also which colony is the best? He could command about £200.—Yours truly, ENQUIRER.

Epithelioma of the Lower Lip in Women.

SIR,—With reference to this subject, Dr. O'Connell is possibly correct in saying (JOURNAL, March 17th, 1883) that "Irish and Scotch general practitioners must see many cases in females;" yet my father, who has been in practice in Huntly for upwards of forty years, and has seen and operated on many cases of epithelioma of the lip, has never, to his recollection, observed a case occurring in a woman.

To metropolitan surgeons, by whom most of our text-books of surgery are written, I believe such cases must be very rare. I have not had the time nor the opportunity to consult all the standard works, but, in my remarks on the subject in the JOURNAL of February 10th (page 251), I cited Erichsen; and, in the issue of this paper for March 24th, I also find strong testimony from a most reliable witness. In his very interesting and suggestive *Remarks on the Local Origin of Malignant Growths*, Mr. Jonathan Hutchinson says (page 554): "The almost absolute restriction of cancer of the lip to males—that is, to those who smoke—is so definite, as to suggest the possibility of a sexual classification of cancer."

It is for our country brethren, then, especially Irish and Scotch, according to Dr. O'Connell, to inform us whether or not the exceptions are so numerous as to upset, or prove the rule.—I am, sir, your obedient servant,

Huntly, N.B. JOHN OSBERT WILSON, M.D.

ERRATUM.—In Mr. J. B. Sincock's letter at page 639, column 2, of last week's JOURNAL, in the last line and last line but four of the first paragraph, *for* "7 per cent" *read* "0.7 per cent."

Foreign Degrees and the Medical Bill.

SIR,—Last week you were good enough to insert a letter from me on the above subject. I shall be glad if you will allow me to say that since then I have had a communication from the Lord President to the effect that the subject shall receive his lordship's consideration when the Bill is in committee. This, although perhaps not quite as satisfactory as it might have been in the matter of words, seems to me quite so as to the spirit, and is, I think, all we could expect from his lordship in the present state of affairs. Foreign graduates may, in my opinion, rest assured that they will not be interfered with.—I am, sir, your obedient servant, F. ERNEST POCOCK M.D., hon. sec, Brussels Medical Graduates' Association.

The Limes, St. Marks Road, North Kensington, W., April 10th, 1883.

Tests for Albumen.

SIR,—With reference to Dr. Mahomed's mention of the test recommended by me, I should like to say that I add acetic acid after boiling in all cases, not only when the urine is alkaline. This is of importance. I may add that I used picric acid from 1874 to 1877, but gave it up finally for several good reasons, as untrustworthy.—Yours faithfully, ROBERT SAUNDBY, M.D.

Birmingham, March 24th, 1883.

The Case of Dr. C. R. Brown.

SIR,—May I acknowledge, through your columns, the receipt of the following sums sent to me in aid of the fund being raised for Dr. Charles Brown, for which the Committee are very grateful?

	£	s.	d.
W. B. Owen, Esq.	1	1	0
Dr. W. H. Tayler	1	1	0
Dr. Douglas Powell	5	0	0
B. C....	0	5	0

In reply to your correspondent Mr. Hayden, I am glad of the opportunity to state that the fund is placed in the hands of the following trustees, to be administered by them for the benefit of Dr. Brown and his family: F. W. H. Cavendish, Esq.; Dr. C. N. Hayman; and myself.—I am, sir, yours faithfully,

E. E. CRAKE.

Clifton House, Eastbourne, April 9th, 1883.

MR. FREDERICK WALLACE has, since last week, received the following subscriptions, which he has forwarded to Rev. E. E. Crake, Honorary Secretary of the Fund, Clifton House, Eastbourne:

	£	s.	d.
Morant Baker, Esq.	2	2	0
B. A....	3	3	0
Thos. Bryant, Esq.	5	0	0
Robert Harris, Esq.	2	2	0
C. M. Jessop, Esq.	1	0	0
H. Stear, Esq.	2	2	0

Stammering.

SIR,—May I be allowed to inquire, through the columns of your JOURNAL, whether there be any institutions, scholastic or otherwise, where children afflicted with stammering are received and trained. If not, is there any recognised method of treatment which could be pursued at home, or any book which might be referred to with advantage?—Yours sincerely,

JAMES ALTHAM.

New Galloway, N.B., April 9th, 1883.

Dipsomania.

SIR,—With the view of altering the present anomalous state of the law regarding the management of dipsomaniacs, would it not be advisable for the Secretary of the Collective Investigation Committee to institute inquiries concerning the development of dipsomania, and the mode of procedure to be adopted with persons suffering from the effects of intemperance in the varied forms so largely prevailing at present in both sexes, which must be the cause of so much anxiety and misery to thousands of families—and, I might add, to millions yet unborn?—Your obedient servant,

J. PEARSON NASH, M.D.

41, Portsdown Road, Maida Vale, W., April 9th, 1883.

Training for a Weak-Minded Child.

SIR,—I have under my care a child aged four and a half years, who is very deficient in intellect, though by no means sufficiently so to justify his being sent to an asylum. I should be very glad if you could inform me, through the JOURNAL, of the names of any places where such a case could be taken in and trained, as I am of opinion that the mind might, under proper care, be considerably developed. A place in one of the South-Western Counties would be preferred. I should mention that the child suffers from a partial paralysis of the sphincter ani, which renders his habits dirty.—Yours, etc.,

A. B. C.

*** The case in question would probably be taken in at the Western Counties Idiot Asylum, Star Cross, Exeter. If "A. B. C." will apply to the Superintendent of the Asylum at Exeter, he will receive all the necessary particulars for insuring the child's admission.

The Bacillus of Whooping-Cough.

SIR,—I shall feel much obliged if any member will give detailed instructions for the detection of the micro-organisms of pertussis. Are the manipulations the same as for the demonstration of the bacilli of tubercle, and what are the staining fluids used?—Faithfully yours,

L. A. C.

Australia.

SIR,—1. Would one of your correspondents kindly inform me what prospects there are for practice in Australia by a young married medical man? Any information through you, or a statement how such information may be obtained, will be acceptable. 2. Would you kindly tell me the name of the publisher of Sir H. Thompson's pamphlet upon cremation?—Yours, etc.,

DELTA.

Analysis of Air.

SIR,—Having been much interested in the articles on Dr. A. Smith's investigations on Koch's system of water-analysis, I would like to inquire where Dr. Smith's papers on the subject are to be obtained, and if there is also any rough and ready method of analysing air, as for instance, on visiting a room supposed to be overcrowded, or having persons in it affected with an infectious disorder. To collect the air, take it home, and examine it, is a tedious, troublesome, and to some extent, uncertain method; to do it on the spot would be of use to all medical officers of health. What is Dr. Angus Smith's address?—Yours obediently,

M. O. H.

*** 1. Dr. Angus Smith has suggested a very easy process for determining the presence and amount of carbonic acid in the air. It is described in detail by Surg.-Major J. Lane Notter in the *Sanitary Record* of July 15th, 1882, page 3.

2. Dr. Angus Smith's address is, Local Government Board, Whitehall, S.W.

Invalid's Home.

SIR,—I should be much obliged if any of your subscribers could recommend an "Invalid's Home," where a gentleman who is much crippled with rheumatism would receive board and lodging, with careful nursing. He is desirous of staying in London, and would pay from £2 to £3 a week.—Yours truly,

A. A. B.

Licences and Degrees.

SIR,—In to-day's JOURNAL (March 31st) a letter appears from "Verax" under the above heading. I beg to dispute that L.S.A. or M.R.C.S. has as good a right to style himself doctor as L.R.C.P. Query: Is L.R.C.P. a physician? If so, he is a doctor, for every standard English dictionary (*e.g.* Stormonth by Phelps) gives physician as a meaning for doctor; hence doctor and physician are synonymous terms. No dictionary gives surgeon or apothecary as a meaning for doctor. Consequently, if words have meaning and language interpretation, all physicians have a perfect legal right to style themselves doctor.—Yours, etc.,

ULSTERMAN.

Carbuncles.

SIR,—I have never used the knife, caustic, or anything similar, in the treatment of carbuncle, since the sulphide of calcium was brought into use. According to my experience, this medicine never fails to perform a cure, even in the oldest and most delicate people, in carbuncles and boils. It is also of great value in the treatment of scrofulous glands about the neck and throat, especially in suppurating glands after scarlatina. I have made inquiries in some parts of England, Ireland, and Scotland, and I have been amazed to find that the sulphide of calcium is seldom prescribed.—Yours truly,

JAMES C. L. CARSON, M.D.

Coleraine, Ireland.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

On the Pathology of Bronchitis, Catarrhal Pneumonia, and Allied Lesions of the Human Lung. By D. J. Hamilton, M.B., F.R.C.S.E., F.R.S.E. London: Macmillan and Co. 1883.

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THE LUMLEIAN LECTURES
ON
URIC ACID: ITS PHYSIOLOGY AND ITS RELATION TO RENAL CALCULI AND GRAVEL.

Delivered before the Royal College of Physicians.

BY ALFRED BARING GARROD, M.D., F.R.S., F.R.C.P., ETC.,
Consulting Physician to King's College Hospital.

LECTURE III.

(Continued from page 707.)

Influence of Hippuric and Benzoic Acids.—Before proceeding further with the treatment of gravel and calculus, I must redeem my promise to explain certain difficulties in the physiology of uric acid which had to be passed over in my first lecture; the discussion of these will, I hope, prove useful from a therapeutic point of view. How is it that the urine of the sucking calf contains a notable quantity of uric acid, seeing that the same animal, when it grows up and takes its ordinary food, excretes an urine which is devoid of this principle? Why should the simple alteration of food cause such a result if uric acid is formed in the kidneys themselves? Is not this fact completely opposed to the second view? Before endeavouring to explain these difficulties, I thought it desirable to prove the fact, and examined first the urine of two sucking calves. In both I found distinct evidence of the presence of uric acid. At the same time, I discovered another previously unknown fact—viz., that the cow's urine, also under certain circumstances, contains uric acid, as when taking turnips, mangold, brewers' grains and such like food, with little hay or grass, and that, with such a diet, there is little hippuric acid in it. In the horse's urine, which was rich in hippuric acid, I found no uric acid.

At first sight it would appear to follow from these various facts, that the seat of origin of uric acid is further back than the kidneys, and that these organs merely eliminate it from the circulating fluid; in other words, that what we have called the first view is the correct one; but I have already shown, in my first lecture, that the kidneys will not act as filterers of uric acid, even when that principle is known to exist in the blood. Still, difficulties remain against those who advocate the second view, and, until these be cleared away, I cannot feel that this latter has been placed on a satisfactory basis.

Some little time ago, in thinking over the subject of gravel and calculus, I arrived at the idea that, if the urine of man could be maintained in a condition resembling that of the herbivorous mammal, there would be no such things as uric concretions; uric gravel and calculus would be unknown.

Alkaline remedies, useful though they are, do not effect all that could be desired. They do, indeed, as we have seen, hold the uric acid in solution, but in no degree do they remove it, for analysis has shown that the amount eliminated under the influence of alkalies is not at all decreased. While following up my idea of assimilating the urine of man to that of the herbivorous mammal, I made several experiments, to which I will now allude.

I took a specimen of healthy human urine, of full specific gravity, and sufficiently rich in urates to give a free deposit of uric acid crystals when acidulated. With this I filled two tubes to about one fourth of their capacity. To the first of these I added the urine of a horse, so as almost to fill the tube; to the second I added the same quantity of distilled water, in order that the amount of dilution of the human urine should be the same in each tube. After the tubes had been kept for some two or three hours at about 100° Fahr., their contents were examined. A few drops of hydrochloric acid added to the second tube—where water had been used as the fluent—caused a slow crystallisation of uric acid, but the acidification of the first, in which the urine had been diluted with that of the horse, failed to exhibit any precipitation; nor, when it was evaporated to a small bulk, could uric acid be detected either by the murexide or any other test. The experiment was repeated with the substitution of the urine of the lion for that of the horse. This failed to cause the disappearance of the uric acid.

If these observations are correct, we have arrived at a remarkable conclusion, for we have found, not only that the horse's urine is itself free from uric acid, but that it possesses the power of destroying, at least to some extent, the uric acid contained in the urine of man. It struck me that this conclusion was one which might be fraught with weighty consequences, and deserved, or rather demanded, much further and stricter investigation to corroborate it. Such proof, you will find, is not wanting.

I next took eight very small uric acid calculi, none of them larger than a pin's head, and, by the aid of a solution of carbonate of lithium, dissolved them in a little water. To this solution I added about eight ounces of the urine of the horse. After the mixed fluids had been kept some few hours at the temperature of the body, no uric acid could be detected.

This experiment shows that uric acid, in the form of calculi, when first dissolved in an alkaline solution, is destroyed by the influence of some ingredient which is present in the urine of the horse. After reflecting upon these phenomena, I endeavoured to find out what was the principle contained in these urines of the herbivora which imparted to them this peculiar power; and, seeing that they are rich in hippuric acid—a substance absent from the urine of the carnivora—I instituted a very numerous set of experiments upon the action of this acid on uric acid.

First, a strong solution of hippurate of potassium was mixed in equal quantities with a cold solution of the urate of the same metal, and kept for some few hours at the temperature of the body. On subsequent examination for uric acid by the microscopic test, none could be found, nor could any be detected by the murexide test. Another recorded observation is as follows. A cold concentrated solution of urate of ammonia was mixed with a strong solution of hippurate of sodium, made slightly alkaline with the carbonate; after being kept for a few hours at 100° Fahr., no uric acid could be found.

As it might be urged that the uric acid, though existing, was masked by the presence of other matters, the following observations were made, and have been frequently repeated. A cold solution on urate of ammonium was added to one of hippurate of sodium, and the solution made slightly alkaline with the carbonate, so as to imitate as nearly as possible the conditions which exist in the urine of the herbivora. On immediately placing a drop on a microscopic slide, and acidulating it with hydrochloric acid, numerous long crystals of hippuric acid were soon formed, and afterwards rhombic crystals of uric acid were seen, these latter being readily distinguished by their characteristic shape, and by their intense polarising power for light. After about half an hour, the solution having been previously warmed up to the temperature of the body, a second drop was examined, and the uric acid crystals were found to be much less numerous, and, in another hour or so, they were not to be detected at all. The solution was afterwards evaporated, and no evidence of uric acid could be discovered either by the microscope or the murexide test. By this observation, the fact that a change slowly takes place in the solution of the mixed salts is demonstrated; and it is also proved that the uric acid is not simply masked by the presence of other salts, for it is readily exhibited when the solutions are first mixed, and only slowly disappears under the influence of time and warmth.

In the earlier experiments which I made, which were qualitative only, it was found essential that the hippuric acid should be in large excess, in order that the results should be conclusive; but I was soon led to make quantitative experiments, so numerous that their enumeration would be tedious. I shall, therefore, only give you the results obtained and leave the details to be studied elsewhere, if desired.

In these observations I have used the urates of ammonium, sodium, potassium, and lithium, and acted upon them with the hippurates of the same bases, and I have uniformly found that when hippurates and urates are together in solution a change ensues, the urate becoming gradually destroyed, and probably a part of the hippurate also. It has required, under the conditions which have been present in most of the experiments, nearly fifty times as much hippurate as urate for the complete destruction of the urate; but, when the dilution was much increased, the quantity of hippurate required seemed to be lessened, as little as twenty-five parts of hippurate being sufficient. Possibly in the animal body the action takes place more rapidly than in the flasks of the laboratory.

Although my experiments have been numerous, and have occupied a very long time, still I feel that more are required in order that we may arrive at definite conclusions as to the relative power of the different hippurates and urates over each other, and the quantity of

dilution which gives rise to the maximum amount of action—besides which, the nature of the change which ensues requires to be thoroughly investigated. The details of my experiments on the subject are contained in the appendix to a paper recently read to the Royal Society.

Having established the fact that hippuric acid reacts upon uric acid, we can, I think, at once make use of it to explain a difficulty which we left unsolved in our first lecture in relation to the urine of the sucking-calf. We have only to take our original assumption that there are cells in the kidneys of all herbivorous mammals capable of forming uric acid—then, this principle would be always present in the urine unless it was subsequently removed; and having now shown that hippuric acid has a destructive power over uric acid, it follows that, when the urine of a herbivorous mammal contains but little hippuric acid, then uric acid is present. This is the case in the sucking-calf. When, however, the young animal ceases to take milk and lives on a diet of grass, clover, and the like, then the urine becomes rich in hippuric acid, and the uric acid disappears, being removed by the destructive influence of the hippuric acid.

The explanation I consider to be satisfactory, though it is one which I could not, till recently, have imagined to be correct. It is generally supposed that hippuric acid replaces uric acid, that is, is formed in its stead in the system. It does indeed replace it, though not, as is usually thought, by being formed, under certain circumstances, instead of it, but on account of its possessing the power of removing the uric acid after it has been produced in the renal cells. The explanation holds good equally with reference to the occasional presence of uric acid in the urine of the adult herbivorous mammal. Under their ordinary diet a certain amount of uric acid is always formed. Hippuric acid is also present in large quantities, sometimes as much as 1—1.5 per cent., in which case no uric acid can be discovered in the urine; but, when these animals are made to eat food which fails to yield hippuric acid, the uric acid remains intact, and hence it is that, from time to time, we hear of the presence of this principle in the urine of herbivorous mammals.

Now it follows necessarily that what happens in the case of these lower animals, applies also to man. If the quantity of hippuric acid becomes increased, the uric acid becomes diminished, and we are in a position to explain an observation made by Heller, who, in conjunction with a friend, first ascertained the quantity of uric acid which each excreted daily when under an ordinary diet; they then changed the character of their food—Heller living for a week on wheaten and rye bread—his friend on rye bread only, water being the sole drink of both. The uric acid soon began to diminish and to be replaced by hippuric acid, and, at the end of the week a mere trace of uric acid was found in Heller's urine—none in that of his friend. During the next week, on an ordinary diet, the hippuric acid gradually diminished and the uric acid reappeared in the former quantities. Doubtless the character of the food, in these experiments, had a direct influence on the formation as well as on the destruction of the uric acid, for the amount of the nitrogenised elements of the food must have been small.

We know that glycine or glycocol (gelatine sugar), which enters into the composition of the bile of many animals, is closely connected with hippuric acid, that this latter can be broken up into benzoic acid and glycine, when boiled with caustic alkali, and, in fact, benzoic acid, when absorbed from the stomach, takes up glycine and becomes converted in the system into hippuric acid and is thus thrown out in the urine. Such being the case, I thought it most desirable to try the influence of this body upon uric acid and to find out whether it plays any part in the change of the uric acid. I made numerous experiments, using glycine in place of hippuric acid, the other conditions remaining the same, and in no instance did I observe any change in the uric acid; even when days or weeks had elapsed. I then had to look to benzoic acid and ascertain whether the change in the uric acid was due to its influence, and for this purpose I completed a set of observations corresponding to those previously made with hippuric acid. The results were as follows:

I found that benzoic acid, in the form of a benzoate, when in contact with an urate in an alkaline solution, caused the same slow change in the uric acid which ensued when a hippurate was employed. This change, however, cannot be well observed under the microscope, because the crystallisation of the benzoic acid is so rapid that the presence of uric acid is obscured; but, when the solution is evaporated and the benzoic acid removed by alcohol, the murexide test can be readily employed. In the appendix to my recent communication to the Royal Society, I have detailed the various observations on this point, which appear to show that about the same amount of a benzoate as of a hippurate is required in order fully to effect the change in the uric acid.

To us, as physicians, several questions naturally suggest themselves. Can we make any practical use of the facts before us? Will the administration of hippurates or benzoates prove of any practical value in the treatment of the different forms of diseases connected with the uric acid diathesis? Can a diet be devised which will assimilate to some extent the urine of man to that of the herbivorous mammal? These are questions of no little importance to us and to humanity at large.

Let us see how far they may be answered. In January 1842, when a young student, I read a paper before the Chemical Society, which was published in their *Transactions* and in the *Philosophical Magazine* for that year. It was entitled On the Conversion of Benzoic Acid into Hippuric Acid in the Animal Economy. In it, I fully confirmed Wöhler's then recent discovery of the conversion of the one acid into the other, but I proved that this change could not be effected by the benzoic acid uniting with the uric acid, as has been suggested; first, because the quantity of the latter was not sufficient; secondly, because the uric acid found in the urine excreted three or four hours after the taking of benzoic acid was not very appreciably diminished.

I also suggested in the paper the probable future synthesis of hippuric acid, and that, if benzoic acid be administered beyond a certain amount, the excess will pass into the urine in an unchanged condition. Both these suggestions have since then been realised.

Within the last few years, I have returned to the consideration of the subject, and have obtained a large amount of clinical experience.

If hippuric and benzoic acids in an alkaline solution possess the power of changing and removing uric acid, it is natural to suppose that, when the blood is in an abnormal state from its presence, the administration of the salts of these acids should prove valuable; for there is no doubt that, if hippurate of sodium be added to a blood-serum which shows the presence of an urate, the latter is soon removed from it. Clinically, I have derived great advantage from the administration of these salts, which I have used very largely in cases of gout; and patients have asked to be allowed to continue taking them, so much did they think they were benefited by them. To us at the present time, it is important to ascertain whether they are of value in cases where uric acid is liable to be deposited in any portion of the urinary tract. This I shall endeavour to do.

In the first place, these salts act advantageously on the mucous membrane of the bladder and its appendages; and, in cases where there is a disposition in the urine to become ammoniacal from decomposition, they are most useful in checking such tendency. You will, perhaps, remember that, in my first lecture, I said that I had found the urine of the horse much less liable to decomposition than that of man, a circumstance possibly due, in part, to its containing hippuric acid. This action on the membrane may influence much the secretion of the colloid matter, and thus prove valuable in cases of gravel and calculus, which are so intimately associated with this colloid; and lastly, it may have an effect upon the excretion of uric acid—a point which I must now endeavour to ascertain.

I have said that the usual absence of uric acid from the urine of the herbivorous mammal is due, not to its non-formation, in small quantities, in their kidneys, but to the presence of considerable quantities of hippuric acid in the urine; and that, provided that we remove this latter principle by an alteration in the food, assimilating it to that of the young sucking animal which takes milk only; or by giving vegetables which do not yield hippuric acid; that then uric acid appears in their urine. Ought we not, therefore, to conclude that the administration of benzoic or hippuric acid would influence the excretion of uric acid? Is this the case? In the herbivora, the urine is always alkaline in reaction; in man, it is acid. In my experiments on the destructive influence of hippuric or benzoic acid upon uric acid, I found it important to use solutions made alkaline with a carbonate, thus imitating, as nearly as possible, the condition of herbivorous urines. We do not get this in the case of man. Let us see the facts. In 1842, when, in a very limited number of experiments, I gave benzoic acid in the free state, I found but little alteration in the excreted uric acid, still it was lessened.

Kerner, who appears to have made a careful set of experiments, came to the conclusion that neither the nitrogenised nor the other principles of the urine were influenced by benzoic acid.

I have recently made some observations on the action of benzoic acid on the urine, with the results which I will give you in a minute. I may tell you that great care must be taken not to form conclusions from one or two experiments, as the excretion of uric acid is always

tful, little circumstances causing it to be greatly diminished for a ew hours, and then suddenly increased. If the uric acid is directly ormed in the renal cells, it is natural to suppose that much of it ould escape the action of the hippurates contained in the fluid ortion of the urine, and especially if that fluid is in an acid con- ition; and experiments seem to confirm this idea.

I will here give you the results which I have obtained.

First Set.

The average of four days' urine passed at 12 noon; breakfast at A.M.; specific gravity 1015; diet normal.

5 fluid ounces gave of uric acid 0.63 grains.

After benzoate had been taken 34 hours, and 95 grains taken in epeated doses.

5 fluid ounces gave of uric acid 0.126 grains.

After omitting benzoate 76 hours.

5 fluid ounces gave of uric acid 0.665 grains.

So that, in these experiments, the uric acid appeared to be much iminished by the influence of the benzoate.

Second Set.

Urine at 11 P.M.; dinner at 7 P.M.; no drug taken.

5 fluid ounces gave of uric acid 0.34 grains.

Urine at 11 P.M., after 55 grains of benzoate administered in ivided doses.

5 fluid ounces gave of uric acid 0.03 grain.

So that, as far as these experiments go, the uric acid was re- uced to one-tenth of its original amount by the action of the enzoate.

Third Set.

Benzoate of soda in 30-grain doses, three times a day. Urine from A.M. to 11 P.M., after having taken benzoate for 12 hours.

Total quantity = 39 fluid ounces.

Uric acid in the 12 hours = 3.90 grains.

Urine before taking benzoate, from 11 A.M. to 11 P.M.

Quantity = 31 fluid ounces. Uric acid = 4.96 grains.

So that the quantity of uric acid was much diminished by the enzoate.

Fourth Set.

Benzoate of soda given in 20-grain doses three times a day. Urine assed from 11 A.M. to 2 P.M., after 60 grains had been taken. Quan- ty, 5¾ fluid ounces; specific gravity 1020; evaporated to 5 fluid unces.

Total uric acid = 0.17 grain.

Urine passed from 11 A.M. to 2 P.M., after 120 grains of benzoate ad been taken. Quantity = 9½ fluid ounces; specific gravity 1016; vaporated to 5 fluid ounces.

Total uric acid = 0.57 grain.

When no benzoate had been taken for 27 hours. Urine from A.M. to 2 P.M. Quantity = 8 fluid ounces; specific gravity 1018; vaporated to 5 fluid ounces.

Total uric acid = 1.00 grain.

When no benzoate had been taken for 51 hours. Urine from A.M. to 2 P.M. Quantity = 12 fluid ounces; evaporated to 5 fluid unces.

Total uric acid = 1.25 grains.

When no benzoate had been taken for 75 hours. Urine from A.M. to 2 P.M. Quantity = 10 fluid ounces; evaporated to 5 fluid unces.

Total uric acid = 1 grain.

In this last set of experiments, during the administration of the nzoate, the uric acid was diminished in a remarkable degree.

The results of the preceding observations made with the alkaline nzoates differ from those obtained by myself in 1842, and also om those of Kerner, in 1858, on which occasions benzoic acid itself as employed. Nor is it difficult to explain the discrepancy, for we ow that benzoic acid, given by itself, increases the acidity of the ine, as is well shown when it is administered in cases of phosphatic ine; and, under these circumstances, it can possess little or no wer of changing any urate it may meet with in the renal cells or her parts of the urinary tract. I am still engaged in clinically vestigating the value of the benzoates and hippurates, both in ses of gout and of gravel and calculus; and I hope ere long to ing the further results before the profession. I can confidently firm that I have already obtained great advantage in the treatment these diseases from their employment.

I frequently give the benzoic acid in the form of benzoate of dium; but, if I wish at the same time to increase the quantity of e urinary excretion, then I give the benzoate of potassium or of hium; and, if there be an abnormal acidity of the urine, some saline citrate.

Seeing that herbivorous animals excrete hippuric acid in a greater or lesser quantity according to the character of the food upon which they are fed, I cannot help thinking that some article of diet might be devised for those who suffer from the diseases above-mentioned, which might, at least to a great extent, keep in check the tendency to form and deposit uric acid.

THE GULSTONIAN LECTURES, ON THE STERILITY OF WOMEN.

Delivered at the Royal College of Physicians, February 1883

By J. MATTHEWS DUNCAN, M.D., LL.D., ETC.,
Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital.

LECTURE III., PART II.—ITS PREVENTION AND CURE.

THE regulation of desire and pleasure cannot be passed over without some remarks. Of the moral condition of those in whom these feelings are absent, or in whom they are in excess, I shall say nothing; and this silence is not because the moral condition is either unimportant or without influence on bodily health and on sterility, but because there is little that requires to be said. The healthy performance of the function of childbearing is surely connected with a well-regulated condition of desire and pleasure; and a well-regulated condition is not a reduction to a minimum or total absence, neither is it excess. I have already said that both desire and pleasure may be, and not rarely are, entirely absent; and it is my opinion, founded partly on the distinct testimony or concurrence of married women who are examples of the evil, that an education, injudiciously ascetic, as it may be called, sometimes produces this deficiency, which is a source of much disappointment and disaster in married life; and this view is corroborated by what is quite certain—namely, that by indulgence the feelings may be, and not rarely are, produced or increased. Writing on sterility, Ambrose Paré gives directions how to increase desire with a view to conception. Equally important is excess of desire and pleasure, and its reduction within moderate limits is equally advantageous. Religion, morals, bodily health, and childbearing all combine to exalt the value and importance of moderation, and to show the evils of absence or of excess. The influence of separation of married people, or of living without cohabitation for a long time—a period, say, of several months—is very widely recognised; and it is probably dependent on the increase of desire and pleasure in those who have little of either, and on the restoration of them in those who have been rendered nearly impotent by excess. This power of separation has appeared to me to be far more frequently operative in women who have had a family than in those who are absolutely sterile; and remarkable examples are not rare.

I have heard and read of, but have not personally witnessed, the disappearance of sterility after recovery from a fever; and this result is ascribed to the prolonged separation caused by the illness. The explanation may be correct, but it does not appear to be the natural one, for fevers are powerfully injurious to general health, and are known to disorder the ovarian and uterine functions.

I have already spoken of sterility as caused by marriage, especially in the young, and we know the sterility of prostitutes and the sterility of confined animals who couple freely or excessively; and it is probable that all these infertilities may have a bond of union in their being due to excessive desire and pleasure, or to excessive sexual indulgence, or to both combined.

In animals, especially in cows and mares, the semen is described as being not rarely expelled from the vagina soon after coitus; and this failure to retain is said to be, in some cases, owing to the animal not being duly in heat. Attempts are made to cause retention by dashing cold water over the buttocks and external parts. A like failure to retain the semen is frequently complained of by women, who describe it as coming away immediately after coitus, and without leaving the horizontal position, or only on getting up. In either case, women often attribute sterility to this failure of retention, and seek a cure of it with a view to fertility. Further, I have repeatedly been distinctly informed by careful women who habitually have this disagreeable imperfection, that conception has

followed the rare occasions on which they have, as they noticed at the time, retained the semen. That this non-retention is often only partial is made probable by the occurrence of pregnancies in women who describe themselves as invariably suffering from it. It is rarely complained of except by the sterile, and, I believe, it is rare among the fertile. I have also a very strong impression, which I have no data to corroborate statistically, that it is especially common among those sterile women who have not sexual pleasure. I know nothing that modifies this condition, but believe that the production of sexual pleasure may have favourable influence. It probably depends on the failure of the timely dilatation of the cervix uteri, and, perhaps, of the uterine openings of the tubes so as to admit the semen, and on the failure of the simultaneous production of a condition of increased temporary negative abdominal pressure, or of that adspiratory action of the abdomen, which numerous old and recent authors invoke to explain the mechanism of fecundation; or it may depend on the failure of both of these conditions of ordinary successful coitus. Before leaving the subject, I must add that the facts as to this profluvium seminis are not of the highest degree of security; for, so far, at least, as I am concerned, they are not more than the statements of intelligent wives. They are probably quite accurate, as they are certainly given in good faith; but it is possible that mucous discharges or glandular secretion through the ducts of Cowper or Duverney may be, in some cases, mistaken for semen.

The immoderately great consumption of alcoholic drinks by women, without their necessarily ever reaching the stage of drunkenness, is so common and so potent a cause of disorder and disease, that it requires special mention. It is possible that much of the influence of this drinking might be justly ranked as part of mere overfeeding, whose injurious effects we have already spoken of; but this is far from certain. Indeed, while I am unable to give any strong evidence of the specially injurious action of alcohol, considered as an article of diet, I am much disposed to this view, being led to it by the good results in practice which I believe justly attributable to desisting from the use of it. The instances on which I rely are cases in which I have, by physical examination and other modes of inquiry, been unable to discover any evidence of disease of the internal genital organs. It would not make the conclusion more assured to enumerate cases which are not in number or other circumstances sufficient for a demonstration; but I may mention the leading features of one which could not but strike the most careless observer. This patient was brought to me to be cured of sterility; and, as some prolonged treatment was expected, she proposed to reside near me for a time. She was between twenty and thirty years of age, and had been several years living in fruitless marriage, absolute sterility. On two occasions, with at least two years of interval, I declared my inability to do anything against the sterility by local means, because I could discover no disorder or disease of the womb or its appendages. Having some suspicion of too liberal use of alcoholic drinks, I recommended teetotalism. After the lapse of a few years, the patient, now a happy mother, was again brought to me on account of some trifling complaint, and I was told as follows. Her drinking habits having increased, she was induced to go into seclusion with rigid surveillance, and in this she lived for about a year without any kind of alcoholic drink. When she came home again, she had lost much flesh, but was in good health, and she maintained what were now teetotal habits. She immediately became pregnant, and pregnancy recurred. Such cases are not singular, and induce a belief in a special hostility of alcoholic drinking to fertility.

But alcoholic drinking has, in addition to the general or constitutional disorder which it produces, well ascertained power, in certain cases, to induce disease of the internal genital organs. That which is most easily and distinctly made out is chronic ovaritis. It often comes and goes in the presence or absence of the cause. When it is present, sterility is not always a result, but frequently so, and its cure is often followed by the disappearance of the sterility.

We have, lastly, to consider the power of various local and chiefly uterine diseases and disorders, which have too much engrossed the attention of the profession hitherto. As I have already remarked, there can be no rational doubt that these local affections have a very limited scope of action; are, indeed, quite subordinate to the great causes of sterility affecting populations or classes. That they should have been the chief study of practitioners, as distinguished from statesmen or medical officers of health, is not only natural but in a sense just; for the practitioner cares not for the population or the class, but for the individual. If he is to do any good to the individual, it is by discovering something amiss, and providing a remedy, that he must work. And where is the practitioner first to look for a special cause of sterility if not in the essential organs of generation? Here he finds several diseases, only in recent years the subject of scientific investigation, so-called ulcerations, displacements, strictures, subinvolution, and others, upon which he easily founds a theory, generally a mechanical one, of the sterility which he at once proceeds to attempt to cure. If he fails to cure, that does not discourage him; for, in the present state of therapeutics the reputation of remedies is founded more upon faith than upon evidence.

The wisest practitioner is he who, giving due weight to all items of knowledge acquired in regard to a disease or an unnatural condition, sets limits to his faith or his expectations, and scrutinises the evidence on which a treatment is based, and this all the more severely if a certain result of the treatment is gain to himself.

Spasmodic dysmenorrhœa is the most striking morbid condition connected with sterility. It has its seat in the womb or its neighbourhood, and it is by most gynæcologists regarded as a purely local affection, having as its cause obstruction to the passage of the menstrual blood from the womb into the vagina by local or general congenital contraction of the canal of the cervix uteri. The nature of the affection, and the place it occupies in the theory of sterility, make me believe it to be a local affection in only a very limited sense—only in the same sense as irregular action of the heart or of the bronchi is a local affection. Its frequency, apart from numerous other considerations, is enough to make the pathologist hesitate to accept an alleged deformity of the cervix uteri as its cause. Besides, when the very rare alleged cause has really presented itself in rare cases of real pin-point os uteri, dysmenorrhœa has not been always present; in my practice, it has been always absent.

When evidence is led in favour of the obstruction theory of dysmenorrhœa, the argument from the success of treatment by enlargement of the passage is generally held to be irresistible, and its force to be, if that is possible, increased by the cure of sterility which often accompanies the cure of the dysmenorrhœa, or, at least, follows the enlargement of the passage. The frequent success in curing or relieving dysmenorrhœa by this treatment, and the occasional success in curing sterility, are not matters of doubt. I have, indeed, no hesitation in saying that while many other pieces of advice are of great value in the treatment of the associated conditions of dysmenorrhœa and sterility, and in the treatment of the when not associated, this is the only medical interference that approaches in dignity to a cure. By this means, and chiefly by this alone, have cures such as concern us here been effected. In attestation of this utility we may cite the very great number of much vaunted means by which the object is effected, by very many kinds of knives, many dilators, many expanders, many scissors, by tents of various kinds, by bougies of various shapes, all of them, when put into use, producing enlargement of a part or of the whole of the passage through the cervix uteri.

For those who deny the existence of contraction it is not necessary to say a word further against the explanation of cure by mere enlargement. For them, that is certainly not the explanation. And it is easy to frame theories of the cure of dysmenorrhœa by enlargement of the passages, which may have the great superiority over that founded on obstruction, that they may also explain the cure of the associated sterility. Now, though the very simple cervical obstruction theory has been held sufficient to account for the sterility as well as for the dysmenorrhœa, it is plainly in this respect impotent.

While it is doubtful whether any menstrual blood is regularly passed through the internal extremities of the tubes into the uterus, it may justly be held sufficient by the dysmenorrhœal obstructionist theorists to consider the passage of menses through the cervix alone. But they, of course, extend their theory of causation and cure to sterility, and here it is semen whose passage has to be studied, not menstrual fluid, and the cervix is not the only narrowed part of the semen's route, for it must pass not only through the cervix, but also through the Fallopian tubes. And if the seminal obstruction theorists find impediments in the cervix with its comparatively considerable dimensions, such as to allow their knives or scissors to work, what will they say of the closed capillary channel of the internal extremity of a tube? Their cure of sterility merely enlarges a passage where there was no apparent mechanical obstruction, and leaves untouched a passage where there is apparent entire impermeability.

That the obstruction theory (in all except its absolutely certain applications, as in imperforate hymen—cases to which we here make no reference) is excessively exaggerated, must be plain to every

who regards the almost innumerable cases of fecundation in extraordinary circumstances—cases without penetration; cases of impregnation in peculiar conditions, through the rectum or through the urethra; cases in advanced uterine cancer; cases in procidentia with great cervical hypertrophy; cases in extreme distortion by fibroids; and others. In this matter the appeal to comparative anatomy is most instructive, and the argument from it very evident. The apparent mechanical difficulties in the way of semen passing the cervix are, in some mammals, increased in an extreme and often a curious manner, without any consequent obstruction. To this matter Kehrer and Lott have paid particular attention, and have shown that the apparent mechanical difficulties affect the construction of the male organ in its relation to the female passage as well as the female passage itself.

To me it appears theoretically reasonable to connect dysmenorrhœa and sterility with rigidity of the cervix, and the opinion that it is so is confirmed by its being actually discovered in most cases. Anyone familiar with the use of increasingly sized bougies in dilating the cervix must recognise the greater force required in dysmenorrhœal than in healthy women, and the increase of painfulness of the process as the force used, slight though it is, increases. The overcoming of this rigidity by temporary dilatation, not the overcoming of a mechanical obstruction, seems to me in some mysterious way to exert a generally beneficial influence on that part of the process of fecundation in which the uterus is implicated during insemination. For it may be held as almost certain that, during the natural sexual orgasm in coitus, the internal ends of the tubes, which we almost never see but as absolutely closed passages, are temporarily opened inside, and that the same happens to the cervix; and while it is probable that such wide opening of the cervix is not essential for fecundation, it must be held as facilitating it or rendering it more probable. Besides, this opening is an indication that the whole nervous arrangements, as well as the physical organs, are co-operating to produce the object in view. The opening here pointed out has, in its natural or healthy performance, and in the obstacle from rigidity, close analogy with similar processes going on during the premonitory and first stages of labour; and the dysmenorrhœal pains have analogy in the irregular painful and useless contractions and pains of these stages of labour, and of the hours immediately following delivery.

No other disease—local, or presumably local—has such importance in the theory of sterility as spasmodic dysmenorrhœa. This great place is established by the frequent association of the two conditions, and by the probable connection of the dysmenorrhœal neurosis with profluvium seminis, with disorder of sexual desire and pleasure, and with other derangements of the sexual orgasm of coitus. But dysmenorrhœa has its place confirmed in a unique way, for its cure is universally admitted to be a distinct and direct step towards the cure of sterility, and this can be said of no other local condition.

During recent times, no disease has more engaged the attention of gynæcologists than the catarrh and peculiar changes of the cervix uteri connected with it, known generally by the name of ulceration of the neck of the womb. To it, even when in a very slight form, has been ascribed a very great pathological importance, and the Croonian Lectures of West seem to have had less effect in bringing the profession to a just judgment of its comparative insignificance than the overshadowing influence of some other temporary novelty. Among other evils which this very prevalent disease has been alleged to produce is sterility; but there is not a tittle of evidence that it has any special influence in preventing conception; and we have, for guidance as to this matter, our best help in the fact that conception and natural pregnancy are extremely common during its continuance. Among twenty-six cases observed by Grünewaldt, with a view to the study of the changes of the cervix uteri in the first month of pregnancy, he found only eleven with a quite healthy state of the cervical mucous membrane. Six had papillary and nine catarrhal ulceration, which no doubt existed before conception.

Almost identical statements may be truly made regarding versions and flexions, and I do not repeat them. But in this department of gynæcology increase of knowledge not only tends to diminish importance, but to show that the great mass of versions and flexions are conditions of simple health.

The importance of those diseases which prevent the commencement of uterine pregnancy, or render such commencement improbable or difficult, needs only to be mentioned. To Grünewaldt we owe a careful statement of the extent and potency of this class of diseases, and for them he, as already said, vindicates a morbid superiority over those conditions which prevent conception.

The diseases and disorders of the genital organs, whether they act in preventing conception, in preventing uterine pregnancy, or in interfering with its natural healthy progress, are operative in individual cases, and demand the most careful study of the practical physician, for it is chiefly through his power over them that he can hope to cure sterility. That in the early stages of the study of these diseases their influence should be exaggerated is natural. At all times there can be no doubt their study and treatment will be most important, not only on their own account, but with a view to the improvement of the general health. In the case of those local diseases which may be proved to have no special influence in diminishing fertility, their removal, by increasing the general health, will help towards a removal of sterility.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture III.—Respiration: Relation of the Organism to the Air Breathed: External Breathing.

After giving a short account of the function of respiration, as at present understood, the lecturer pointed out the importance of recognising it as really consisting of two processes, namely, the respiratory exchanges of the organism, and the respiratory exchanges of the tissues. The older writers had no clear ideas as to even the necessity of respiration. Hippocrates dimly recognised that, during breathing, a *spiritus* was communicated to the body. Galen and his followers held that the air passed bodily into the lungs, and, reaching the left ventricle of the heart, cooled the blood, and generated *spiritus*. Similar opinions were expressed by Descartes (1596-1650). Van Helmont (1577-1664) observed how impure the air became during respiration, and hints that the gas sylvestre may be given off from the lungs. About the middle of the sixteenth century, Malpighi (1628-1694) investigated the structure of the lungs, and described the capillary plexus on the air-cells, long known afterwards as the *rete mirabile Malpighi*. Then came the celebrated physical experiments of Robert Boyle (1627-1691), in which he experimented on animals with the air-pump. Boyle was the first to show: (1) the true mechanism of inspiration, comparing the thorax to a bellows enclosing the lungs, so that, when the bellows expanded, the greater "spring" of the air on the inner surface of the lungs dilated them; (2) that "depuration" of the blood in the lungs is one of the principal uses of respiration; and (3) that fishes respired by the air dissolved in water. Boyle's simple explanation of inspiration was for long not accepted, and two errors prevailed, namely, that the lungs actively expanded, and that air existed in the pleural cavity (Willis, 1622-1675; Malpighi; and Erasmus Darwin, 1731-1802).

These notions were thoroughly exploded by Borelli (1608-1679), who, in his great work, *De Motu Animalium*, Props. 82 and 83, practically stated the views presently held. Borelli was the first (Prop. 81) to make an estimate of the amount of air in an inspiration. The lecturer referred to a work by Swammerdam (1637-1680), dated 1667, and entitled *Tractatus Physico-Anatomico-Medicus de Respiratione usuque Pulmonum*, containing, at pp. 20-21, a description of an experiment in which he immersed in a vessel of water a dog having a long tube inserted in the trachea, and he observed the rise and fall of the level of the water during respiration. The lecturer referred to the experiments of Sanctorius (1561-1636), who detailed, in his work *Ars de Staticâ Medicinâ*, probably the first attempts to examine the phenomena of nutrition by a process of weighing. Sanctorius constructed a kind of balance, by which he weighed himself repeatedly, and observed what he gained by food, and what he lost by excretion.

The lecturer then described the celebrated experiment of Robert Hooke (1635-1703), performed before the Royal Society in October 1667, in which he kept a dog alive by artificial respiration; and showed that it was the fresh air, and not the movements of the chest, that renewed the contractions of the heart. This was a repetition of an experiment of Vesalius, detailed in his work published 1543.

Vesalius supposed that the movements of the lungs affected the movements of the heart; and he did not see, as Hooke did, that the heart moved because it was supplied with blood containing fresh air. Then came John Mayow, of Oxford, who died in 1679, at the early age of 34. He showed, by many ingenious experiments, (1) that combustion diminishes the volume of the air, and alters its qualities; (2) that respiration also affects the quality of the air, so as to make it unfit for the support of life; and (3) that an animal suffers if placed in an atmosphere the qualities of which have been injured by combustion. The "nitro-aërial spiritus" of Mayow, necessary to life, existed in the air. Thus, he came near the discovery of oxygen, made by Priestley a century later; but his observations were neglected for many years. Here the lecturer said that the dependence of progress in physiology on the state of scientific opinion as to chemical and physical questions, could not be better illustrated than in the history of physiological ideas regarding respiration.

The next great step was the discovery, in 1754, of carbonic acid, by Joseph Black (1728-1799), a discovery which had its origin in an investigation into the properties of lime-water, which was then used in the treatment of stone and gravel. Black discovered that magnesia gave off a "fixed air" (carbonic acid), with loss of weight; and, in 1757, he made two important physiological discoveries—namely (1), that the "fixed air" was injurious to animal life; and (2) that it was produced in respiration.

In 1772, Joseph Priestley (1734-1804) discovered that, after the air had lost its property of supporting combustion, this property might be restored by the agency of plants. Further, he observed that air, deteriorated by respiration, might be similarly renewed. In 1774, he obtained oxygen, and made important investigations into the constitution of the atmosphere. Within a year after Priestley's discovery, a paper on Respiration was read by Lavoisier (1743-1794), in which he brought together, as it were, the discoveries of Black and of Priestley regarding respiration. He was the first to make a quantitative examination, by, in 1780, placing a guinea-pig in a jar over mercury, and afterwards analysing the air. He and Seguin also examined the products of human breathing. These researches are not of value so much for the results they gave, as for the method employed. Lavoisier constructed a still more elaborate apparatus, with which he began experiments. This research, however, he never finished, as, in 1794, he fell a victim to the blind fury of Robespierre. It is narrated that he earnestly requested the respite of a few days to give him time to prepare for publication the results of his investigations. This was denied, and thus perished one of the greatest sons of France during a period of political excitement.

The lecturer then described the experiments of Sir Humphrey Davy in 1798, as to the action of nitrous oxide, and as to the respiration generally. Davy was the first to employ the method of breathing an atmosphere containing a certain percentage of hydrogen and analysing the results.

As to aqueous vapour, Stephen Hales (1677 to 1761), first measured the amount by breathing through a flask filled with wood-ashes. Similar experiments were afterwards made by Menzies and Abernethy, and Lavoisier made estimates by an indirect method. Thus he determined the quantity of oxygen consumed and the carbonic acid produced, and assuming that the amount of oxygen was more than sufficient to form the carbonic acid, he came to the conclusion that the excess united with hydrogen in the lungs and passed off as water.

Another great experimentalist of this period was Lazarus Spallanzani (1729-1799). The lecturer gave a short account of his life. He investigated respiration, more particularly in invertebrates, showing that many such animals breathed to some extent by the skin. He also made the important discovery that, even in atmospheres of hydrogen and nitrogen, carbonic acid was given off; but he was in error in supposing that this carbonic acid was produced in the stomach. Thus he missed the point that carbonic acid is formed—at all events, to some extent—by the chemical operations in living tissues. The experiments of Spallanzani were made with great care, and quantitative results obtained by the use of the endiometer. In 1823, W. F. Edwards first showed that the carbonic acid produced in an atmosphere of hydrogen was too great to be accounted for by the amount of oxygen in the lungs or carbonic acid in the stomach. This may be called a transitional experiment, connecting researches into external with those into internal breathing. In 1809, Provençal and Humboldt investigated quantitatively the breathing of fishes.

The lecturer then indicated the more modern methods of estimating the quantity of air, and the chemical changes excited in it. As instances of the first, he referred to the spirometer of Hutchinson (1846), to that of Bonnet in 1856, of Guillet in 1859, and of Bergeon in 1869. Here again the graphic method of Marey has been of great service. As to quantitative researches on the respiratory changes involving accurate measurement and analysis of the air, he instanced those of Andral and Gavarret (1843), Vierordt (1845), Regnault and Reisset (1849), Pettenkofer (1860), and Angus Smith (1862). The lecture was illustrated by experiments.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

Lecture I.—Animals approximating to the Vertebrata: their Embryology, and that of the Vertebrata.

It is now an almost universally accepted opinion that the animal kingdom originated from one common form or basis. As time has rolled on, specialisations and adaptations have taken place in all parts of the body, and in all directions, till now we have the earth inhabited by a variety of forms, varying in complexity and form from the lowest forms of protozoa up to man himself. To accomplish such changes must have required an infinitely vast number of years, greater by far than is possible for the human mind to conceive. Nor do the forms now existing represent more than a fractional portion of the countless number of animal forms which have become extinct during the course of time. Before we can intelligently understand the morphology of the higher forms and of man, which is the ulterior object of all our researches, we have to make ourselves acquainted, as far as we can, with that of the lower forms, and the changes they undergo during their life-history. In the higher forms, these changes take place rapidly, and hence are more difficult to observe; while in the lower forms, they take place more slowly, and can, therefore, be studied more perfectly. Since we have begun to study the embryology of animals, great light has been thrown upon the history of the evolution of the animal kingdom; and knowledge has been obtained in this way which it would have been impossible to gain from a mere study of anatomy and physiology. Curiously enough, it is only within the last thirty or forty years that this subject has been taken up by anatomists, and the attention which it merits been given to it. When I began life, the only text-book in which reference was made to it, such as to be of any use as a guide to study, was Johannes Müller's work on *Physiology*. During the last ten years, an enormous impulse has been given to embryology by the labours of the late Professor F. M. Balfour of Cambridge, whose untimely death last year we have all to lament. Probably there is not a man who has ever lived on this earth who has done so much within the short space of ten years, and between the ages of twenty and thirty, for the spread of knowledge, as Professor Balfour has done. While we mourn his inestimable loss, it must be a matter of some consolation to us that he has left behind, in his work of two volumes on *Comparative Embryology*, the result of his labours. In addition to his great knowledge of embryology he was gifted, to a peculiar degree, with the power of seeing when one observer was right and another was wrong, and selecting the essential points out of the works of each. The result has been that he has succeeded in placing the whole history of the subject in a compact and clear form, from what was before, in some respects, a chaotic mass.

The subject which we have more particularly to study to-day is the low types of animals approximating to the vertebrata, and which have not yet acquired the characters of vertebrata proper. They are non-craniate animals (so called in contradistinction to the vertebrata which are craniate), and are divided into two groups. 1. *Urochorda*, which are represented by the Ascidians. In them, the organisation is of a very simple character; the notochord exists in the tail-segment, and is not continued into the trunk; the whole dorsal wall of the posterior part of the archenteron is converted into the notochord. 2. *Cephalochorda*, of which the *Amphioxus*—the lancelet—is the representative. In it, the notochord extends from the one extremity to the other of the body, as well as the spinal

the head, however, has not become differentiated, but the
l' is, as its name implies, sharp at both ends. The amphioxus
only animal of the kind now existing; but probably, in times
past, this and allied forms have been abundant.
sing from these, we come to the lower forms of true verte-
which agree with them in possessing a notochord and per-
d respiratory pharynx of large size lined with mucous mem-
, and ciliated in some parts, through which water-currents
The points of difference between them are the absence of
n in the non-craniata, while the vertebrata proper possesses a
ım or cephalic skeleton.
process of development in the amphioxus is nearly the
as in mammalia, including man himself. The ovum first
es into two nearly equal spheres, of which one is slightly larger
nore transparent than the other. The larger sphere and its
cts go to form the outer layer, and is called the epiblastic
; the smaller forms the inner layer, and is termed the hypo-
c sphere. Both the spheres are divided into two, and each of
our so formed into two again. At the moment of their first
ıtion, the spheres are round, and arranged in two layers; at
oint, one of the hypoblastic cells passes to the centre, and the
ovum again takes a spherical form. Each of the four epi-
c spheres divides into two; and the ovum thus becomes con-
ed of twelve spheres—eight epiblastic and four hypoblastic,
rmer of which are smaller than the latter. The four hypo-
c spheres next divide, giving rise, with the eight epiblastic
es, to sixteen spheres of nearly equal size. Of the eight hypo-
c spheres, four pass to the centre; while the eight superficial
stic spheres form a kind of cup partially enclosing the hypo-
c spheres. The segmentation of both epiblastic and hypo-
c spheres continues, and in due course the epiblast completely
in the hypoblastic spheres, except at one small circular area
blastopore—where the hypoblast remains in contact with the
e for some time, but is ultimately covered over by the epi-
The next change is the complete separation of these two
by the appearance of a narrow cavity between them, except
region adjoining the blastopore. The cavity, once formed,
y enlarges, and with it the ovum, which assumes the form of a
alled vesicle, called the blastodermic vesicle, composed of
stic cells, while the hypoblast is lens-shaped, attached to the
side of the epiblast. As the vesicle enlarges, the hypo-
layer spreads out on the inner surface of the epiblast,
ecomes flattened; the central part of it, however, remains
r. This central thickening forms an opaque spot, which after-
becomes the embryonic area. The next change is, that the
onic area now becomes pyriform, and there is present a
ive middle layer or mesoblast, derived from the hypoblast
anterior end, while at its posterior end a streak makes
pearance, which is due to a proliferation of round cells
the epiblast. The streak becomes more marked; the meso-
increases; and an axial groove is formed on its upper
e—the formative groove. In the part of the embryonic
n front of the streak, two folds arise, bounding a shallow
. These meet in front, but diverge behind, and inclose
en them the formative streak; these are the medullary folds,
ıclose the medullary plate, which now grows rapidly in length.
ın as the medullary groove is formed, the mesoblast, which
rs to grow forwards from the streak, becomes divided into two
l plates. The hypoblast becomes united with the epiblast in
ial line at the posterior part of the embryo, and the cells which
ct the hypoblast and epiblast are continuous posteriorly with
ıed epiblast and hypoblast of the formative streak, the hypo-
in the region of the formative streak having become distinct
the other layers. The thickened axial portion of the hypo-
in the embryonal region becomes separated from the lateral
as the notochord. Soon after the formation of the notochord,
poblast grows in from the two sides, and becomes continuous
middle line. The formation of the notochord takes place
before backwards; and at the hinder end of the embryo, it is
ıued into the mass of cells which form the formative streak,
ing at this point continuous with the epiblast. At this stage,
ree layers are definitely formed. The epiblast originates from
iblastic segmentation cells. The hypoblast originates likewise
the hypoblastic segmentation spheres, which give rise to the
ıass within the epiblast on the appearance of the cavity of the
dermic vesicle. The history of the mesoblast, though obscure,
to be that, while part of it originates from the hypoblastic
part is undoubtedly formed from the epiblast of the formative
.

This description applies to the general embryological developmen
of the vertebrata, and partly to that of amphioxus also, the form
which is best known of these prevertebrata, but in it the process
is more simple than in the higher forms, and the changes take
place more slowly, so that they may be observed more accurately.

The food portion of the yolk is very small; segmentation results in a nearly uniform blastosphere, one wall of which becomes thickened and vaginated, giving rise to the hypoblast, while the larva takes the inform of a gastrula with an archenteric cavity opening by a blastopore. The blastopore rapidly narrows, and the embryo assumes an elongated cylindrical form, with the blastopore at its hinder extremity. The blastopore passes to the dorsal surface; and by the flattening of its surface, a medullary plate is formed, extending forwards from the blastopore. On the formation of the medullary groove, and its conversion into a canal, the blastopore opens into this canal, and gives rise to a neurenteric passage leading from the neural canal into the alimentary tract. At a later period, this opening closes, and the neural and alimentary canals become separate.

In the simplest types of Ascidians, the series of changes is almost the same, but the blastopore assumes a more dorsal position. It also lies at the end of the medullary groove, and becomes converted into a neurenteric passage. The mesoblast originates in amphioxus from a pair of lateral diverticula constricted off from the archenteron. The formation of these commences at the front end of the body, and is carried backwards, and each contains a prolongation of the cavity of the archenteron. After the separation from the archenteron, the dorsal parts of the diverticula become divided by transverse septa into successive somites, the cavities of which disappear, while the walls become converted chiefly into muscle plates, but also into the tissue around the notochord. The ventral part of each diverticula becomes united in the middle ventral line, and forms the body cavity. The notochord appears to rise as a third median and dorsal diverticulum of the archenteron. The central nervous system is formed from the epiblast by the medullary plate becoming isolated from the remainder of the layer. From the epiblast are also formed the organs of special sense, the retina and pigmentary layer of the choroid, the membranous labyrinth of the ear, taste-bulbs, crystalline lens, pituitary body, and epidermis. From the hypoblast is derived the internal lining of the pleuro-peritoneal tract, the epithelial lining of the various abdominal and thoracic viscera, and notochord, while from the mesoblast are derived all the remaining parts of the body-muscles, bones, connective tissue, and blood-vessels, generative and urinary organs, dermis, and tegumentary organs.

REMARKS ON A SO-CALLED NEW, OR HITHERTO UNOBSERVED, TYPE OF FEVER IN THE CENTRAL PROVINCES OF INDIA.

By SIR J. FAYRER, K.C.S.I., M.D., F.R.S.

In the annual report of the Sanitary Commission of the Central Provinces, for the year 1881, there is an interesting account of a supposed new type of fever, by Surgeon-Major Evers, Civil Surgeon of Wardha, one of the six districts into which the division of Nagpore is divided.

Before referring to the cases which have arrested the attention of the civil surgeon, and which are undoubtedly of considerable interest, it may be well to notice briefly the physical and climatic condition of the geographical area in which they occurred.

That portion of the Indian Peninsula known as the Central Provinces, comprising the divisions of Nagpore, Sumbulpore, Nerbudda, Chutesghur, and several native states, is situated between 17° 50′ and 24° 27′ N. lat., and 76° and 85° 15′ E. long.; it has an area of 112,912 square miles, and a population of 9,251,229 in 1877, of a very mixed character; the aboriginal or non-Aryan element being still largely represented, though gradually giving place to the Hindu and Mahomedan races. Dr. Hunter says, "the gradual displacement of the hill tribes in one of their last refuges is clearly shown in these Provinces, by the simple fact that whereas the so-called aborigines number barely over two millions, the Hindus, in 1862, numbered 5,879,950; thus forming 71.69 per cent. of the inhabitants of the Provinces. The denser the population, the greater is the proportion of Hindus, varying from 85 per cent. in the Nagpore plain and Wardha valley, to 57 per cent. on the Satpura plateau."

The hill tribes generally are of a very dark complexion, black

skin, flat nose, and thick lips, which proclaim their non-Aryan blood. They are for the most part a light-hearted, cheerful people, of questionable morals, addicted to drinking, and animal food, formerly, it is to be feared, to human sacrifice. They are active, vigorous, and excel as hunters. From the name Gondwana, by which the greater part of the Central Provinces was formerly known, they are called generally Gonds; and now, as before remarked, form a minority of the population. The census of 1872, according to Hunter, returned their number at 2,014,731. The proportion of these tribes to the total population, varies from 62.5 in Mandla, to only 4.63 in Sagar districts.

The term aborigines is, perhaps, not strictly correct, as they are, probably, the descendants of a mixture of Dravidian and Kolarian non-Aryan races, who entered India from the north, and mixed with the Autochthones. It serves, however, to distinguish them from the races of true Aryan stock, with the lower castes of which they have also probably mingled. This is sufficient to show that the population of this part of India is of a very mixed character, and is interesting as regards any predisposing influence that may be developed by food, mode of life, or personal habits.

The physical features of this part of India are interesting in the same connection. The province consists of table-lands, broken hill ranges, forests, lakes, streams, valleys, and alluvial plains. The geological formation comprising, besides the Vindhyan deposits, a variety of the older rocks and trap, resting on crystalline or sandstone, and later rocks, volcanic, gneiss, or crystalline and metamorphic. In some parts there are alluvial and tertiary deposits, and plains of red or black soil. The rivers are rapid and clear, with certain cataracts and reservoirs of great beauty. The mixture of hill and valley, plains, forest and cultivation, of rapid river and picturesque reservoirs or lakes, enters into the formation of some of the wildest and most interesting scenery in India. Some of the plateaux have an elevation of nearly two thousand feet. These are varied with plain, valley, and broken hill ranges.

Wardha, the district to which I now especially refer, lies between 20° 18′ and 21° 2′ north, and between 78° 4′ and 79° 15′ east. The north of the district is hilly, formed by rugged and long spurs of the Satpoorah, running in a south-easterly direction, and covered with timber, shrubs, or grass. The ghats of Talegáon, Chicholi, Dhamkund, Uranegaon, rise—a succession of escarpments—in the trap rocks from the bed of the river Wardha. The hills here rise 1,726 in Malegaon, to 2,086 in Garumsur.

To the south, the country opens out in an undulating plain, intersected by water-courses, and broken here and there by isolated hills. The surface generally is black cotton-soil, varying from ten feet to a few inches in depth, the average being two feet. Underlying it, for the most part, is trap, and nodular limestone is mixed with it. Cotton and wheat are the chief crops, and there is a good deal of pasture-land.

The climate of Wardha is characterised by rapid and violent changes in temperature. Dr. Hunter says, at the civil station, the average temperature in the shade in 1876 was:

May:	highest reading	...	110°
,,	lowest ,,	...	105°
July:	highest ,,	...	92°
,,	lowest ,,	...	74°
Dec.:	highest ,,	...	81°
,,	lowest ,,	...	73°

During the summer months, a hot north-west wind blows steadily. The rains generally open with a hurricane about the middle of June, and last till the end of September. Average rainfall, 30 inches; but in 1881 it was 54.32—exceptionally heavy.

All the physical conditions of climate and country which usually give rise to malaria exist in abundance: a high and varying temperature; organic matter and subsoil moisture; broken ground; ravines; water-courses; reservoirs; and alluvial bottoms, in which the water lies near the surface, and where organic matter is decomposed under the influence of heat and moisture. The result is fever in all its forms, from the slightest febrile disturbance to the most fatal stupor; and it is worthy of note, that the mortality is higher in districts than it is in towns.

Other forms of tropical disease are common, though, as elsewhere in India, they are as nothing in point of frequency and mortality to the fevers.

Deaths from simple intermittent are a comparatively small item in the fever death-rate, the great fever mortality being due to the remittent and continued forms, or those which, I have ventured to suggest, should be called endemic typhoid, and which, I also believe with Leon Colin, are, in a large number of cases, due to the "transformation dans l'organisme lui-même d'une forme primitivement palustre;" at the same time admitting that the fever may be due, in some cases, to the same causes that give rise to typhoid and enteric fever in other climates or localities.

Cholera also occurs; the records showing that, from 1869 up to 1881, the years 1870, 71-74, 80, were those of its least incidence.

Cholera-Deaths.

1870	107
1871	19
1874	14
1880	330

The Years of Greatest Incidence.

Year.	Cholera-Deaths.	Rate per 1,000.
1869	57,079	10.50
1875	14,643	1.98
1876	20,124	2.71
1877	3,408	0.46
1878	40,985	5.53
1879	27,575	3.77
1881	9,140	1.23

The death-rates per 1,000 of population in cholera years are stated by the Sanitary Commissioner as above.

In 1881, Cholera occurred in every month of the year; but August and September it was peculiarly severe.

The deaths from all causes were—

Cholera	9,140
Small-pox	1,816
Fevers	143,933
Bowel complaints	22,133
Other causes	60,488
Wound accidents	2,225
Suicides	542
Wild beast deaths	1,190
Total deaths	241,467

The general death-rate for the entire province was 32.57 per 1,000. In two districts, the death-rate was above 40 per 1,000; in two between 30 and 40; in the remainder, under 30 per 1,000.

As usual in India, the vital statistics of the Provinces assign the mortality to fevers, 77,277 males and 66,656 females (total, 143,933) having died of diseases so registered.

The rates of deaths per 1,000 appears to be: for districts, 18; for towns, 17.30; the combined rate is 19.42. The average for previous years, from 1876 to 1880, is 20.84.

Probably, if more careful registration were practicable—and there is reason to believe that it is improving—many of these deaths would be relegated to other causes, such as thoracic and other inflammations; but still there can be no doubt that the deaths from fever, and those chiefly of miasmatic origin, would be very great, and it is only necessary to look at the details of this very interesting and able report to ascertain how varied and severe are the phases fever assumes; they are referred to under the designation of intermittent, with hepatic or splenic disturbance, recurrent enteric, etc.

The observations of some of the medical officers are most interesting and instructive. For example, Surgeon-Major Cullen says: "During the months of October and November, the intermittent cases were more severe, and accompanied by hepatic rather than splenic disturbance, and had a marked tendency to recur after apparent recovery again and again. The relapses, as a rule, more severe than the first attack." The Civil Surgeon of Jubbulpore writes: "The intermittent, especially tertian, was the most common form. Besides these, we had under observation the various forms of continued fever, from the mild febricula to the fatal typhoid. I cannot say that I have seen cases of true typhus, although from time to time I have met with all the symptoms save the petechiæ, the prostration, the wasting, the delirium, the hard, dry, brown tongue, the sordes on the teeth and lips. I cannot say that it was ever contagious. Quinine has no curative effect on these cases, beyond merely lowering temperature for a time; the temperature rose again on discontinuing the drug, and even in spite of it when continued." Also: "Cases of true enteric fever were much more common, every symptom being present, singling out the young fresh victims, and causing death in those who were looked upon as robust." Again: "I have never met a case that I could satisfy myself was what is called 'malarious remittent.' Those that answer to the description given in books point to my conception, all the features of one or other form of the continued type."

ıe Civil Surgeon of Nagpore writes: "As in former years, I : seen several cases of enteric fever, some cases of intermittent remittent fevers here very severe, and splenic enlargements mon."

ıe Civil Surgeon of Hoshangabad remarks: "The remittent form I think, been more frequent during the past year than during ›redecessor. I have myself seen a considerable number of very inate cases of this disease, but in none of them was there any on to suppose that the symptoms were those of enteric fever. ro-intestinal irritation, as, also, congestion of the liver and en, are very common concomitants of the fever, but in no case I observe any properly so-called 'enteric' symptoms."

ıe Civil Surgeon of Nimar says: "the majority of the cases of r are of the common, intermittent type, but during the hot ths some cases of vomiting also occurred, chiefly in persons h exposed to heat, such as travellers. These are often classed ›ntinued, but if carefully watched, marked remissions will be ced."

ıe Civil Surgeon of Wardha writes: "In the month of September, after the appearance of cholera, I noticed that with many of remittent cases, violent vomiting and diarrhœa preceded the ng in of the fever. So alarming were these symptoms to the ents, who knew, of course, that there was cholera about, that friends and relatives, when they applied for medical aid, ılly said that the person was suffering from cholera. The ase appeared to be modified, to a certain extent, by the same ences that produced cholera. These cases, if neglected, soon ed into a typhoid-like condition, only that after the first violent chœa, the bowels appeared to become obstinately costive. They l only to strong saline purgatives. I found quinine and stimu- s were absolutely necessary in the treatment of the case."

ıese remarks appear, to me, full of interest and significance in ect of the etiology and pathogenesis of these fevers. The re- n with cholera has been observed by others, and the close mblance of the collapse of cholera and that of fever has been ıently observed. In my Croonian lectures, last year, I referred in connection with a severe form of fever which had recently ailed in Amritzur. I may here remark that whatever the law evalence of fever may be, it is not the same as that of cholera, ver close their relations, in other respects. For instance—

	Cholera Deaths.	Fever Deaths.
1874	14	118,043
1869	57,079	68,999

minution of fever does not involve immunity from or decrease ıolera; indeed there seems, in this respect, to be no fixed rela- as may be seen in the following table—

	Cholera Deaths.	Fever Deaths.
1870	107	81,244
1871	19	84,682
1874	14	118,043
1869	57,079	68,999
1875	14,643	120,484
1876	20,124	149,786
1877	3,418	131,123
1878	40,985	218,577
1879	27,575	135,933
1881	9,140	143,933

ıe remarks on the various phases of intermittent, remittent, inued, enteric, and typhoid conditions made by different medi- officers in this report are also interesting in connection with the tions of variety of type assumed in fevers of miasmatic origin. Evers, in the course of his inspections, noted the occurrence of in cases there, to which this paper is especially intended to , of great interest, and, under the designation of a "New ase," they are referred to in detail in the Sanitary Commis- er's Report. The cases in question appear to have occurred ng the winter season on an elevated region in the district of dha, and the sufferers to have been of the aboriginal—*i.e.*, non- n section of the population. The symptoms of the disease ı to have been intense headache and fever, which did not t until bleeding from the nose, stomach, and bowels, and vomiting ile occurred, after which the body became cold, jaundice, nsciousness, picking of bed-clothes, and death in three or four (no necropsy recorded).

. Evers writes: "On February 20th, I arrived at the village of igaon, and found the Malguzar and inhabitants generally very h alarmed by what they called the "new disease" that had en out here. The village is situated on a mountain range about six miles from Gurumsoor, the highest point (2,086 feet) in the district. It consists of about ninety-six huts, with a population composed chiefly of Mahlis and Kormies, with a few Dher families. There is one good well here, from which the better caste folk obtained their drinking-water. A small mill-stream had also been improvised, and a reservoir thus formed; the water in it seems good, but it is resorted to for bathing and washing, and the village cattle drink from it. Both the well and the tank always contain a supply of water, even in the hot months. The Dhers obtain their drinking-water from pits sunk in the bed of the nullah that receives the leakage from the tank. The Malguzar informed me that, during the past fortnight, three persons had fallen victims to the 'new disease.' The first case was that of his son, 27 years of age. The day before he was taken ill, he had travelled in the heat of the day by cart from Wardha to Malaigaon, twenty miles. It was very hot there. At Masod, eight miles distant, the thermometer rose in a tent to 97°, and at Wardha, during February, the thermometer registered an average of 119.03° in the sun.

"The young man arrived at home apparently well. The next morning he had severe headache and fever; the fever continued the same morning, noon and night, his skin being hot at all times; then followed bleeding at the nose, then vomiting of dark blood, and dark blood passed from the bowels also: then his body became quite cold, his face and the whites of his eyes yellow. The urine small in quantity and very yellow. He became insensible about the third morning, but his eyes remained open, and his fingers were constantly picking the clothes; he never recovered consciousness; he was attacked on the 3rd or 4th of February, and died on 8th or 9th of February. The Malguzar detailed these symptoms more carefully to me, for he was in great grief about the death of his son, and he was fearful lest the villagers might desert and bring ruin on him.

"Hia Gowala, aged 22 years, taken ill on the 12th, died on February 14th. He had been labouring in the fields the day before seizure; he had returned in the evening, taken his usual quantity of food, and gone to bed well. In his case also, the disease commenced with headache and fever; but from the very first he had constant vomiting of green and yellow fluid, and subsequently blood. There was no bleeding from the nose or bowels. He became unconscious very soon, vomited a great deal and picked at the clothes.

"Gannoo Mahli, aged 27 or 28, was taken ill on February 14th, and died on the 19th. He had been labouring in the fields the day previous to seizure, and seemed quite well when he went to rest at night. On the third day he began to vomit blood and pass dark coloured stools; he had symptoms like the Malguzar's son, including high temperature; it is to be presumed he soon became unconscious like the others and died.

"Pandoo, carpenter, aged 28 years, went on February 25th to Dhaga, twelve or thirteen miles, and returned in the heat of the day to Malaigaon on the 27th. He fasted with some religious object until the evening of the 28th, but took his usual food and went to bed seemingly well on that evening. He was taken ill next morning (March 1st). The symptoms described by the hospital assistant agree in most part with those detailed by the Malquzar and others. He died on March 8th, comatose; sent for some of the urine to test for leucine and tyrosine, but did not succeed in getting any; it was passed involuntarily." Dr. Evers says, two other cases occurred after this.

"I examined the well-water, and, judging from its physical character, as well as by chemical reagents, I pronounced it potable. I do not think the drinking-water could have had anything to do with the outbreak; for, had it been so, the disease would have been more general. The "jhiras" from which the Dhers drink are reported as containing water certainly not good in appearance, yet not a single Dher suffered from the disease. All four who suffered were young men; all had been more or less exhausted by exertion and prolonged exposure to great heat; yet it was not during such exposure the attacks occurred, but the next day. Another circumstance to note is, that the attacks occurred in such rapid succession, as to give the disease the semblance of an epidemic; and it was this, I have no doubt, that caused so much alarm. It is certain also that there could have been no contagion in the disease, for none of the relatives, old or young, suffered; and this fact in itself would indicate that it could not have been specific yellow fever. Malarial remittent fever, however, as is well known, sometimes simulates specific yellow fever; when, for example, black vomit and jaundice are present; but here we are met by the statement that the pungent heat of the skin was the same all hours of the day (it is not stated that the thermometer was used), and that only when the hæmorrhage commenced, not only did the body become cool, but abso-

utely cold; and, to restore warmth, friction of the limbs with powdered ginger and oil had to be resorted to. The suddenness, the violence, and the rapidly fatal nature of the disease, serve, in my opinion, to show that it could not have been remittent fever."

The Sanitary Commissioner writes: "Dr. Evers inclines to the belief that the disease may have been acute yellow atrophy of the liver. A case, with symptoms somewhat similar, was treated in the Mayo Hospital in December last. A Eurasian boy, aged four years, was admitted on December 18th. It was stated that he had been suffering from fever for five days. On admission, he had bleeding from the nose, and vomited a quantity of coffee-coloured liquid containing clots of blood; he was pale, and had anæmic patches all over the body. Spleen enlarged; colour of skin intensely yellow; no fever; pulse feeble and small.—19th. Vomited several times fluid containing blood.—20th. One stool, waxy; vomited six times fluid containing clots of blood. Some bleeding from the nose.—21st. No stool; no fever. Vomited thrice. Eruption the same. Died, 4 P.M.

"The assistant-surgeon put this down as a case of yellow fever; and Dr. Brake, the civil surgeon, informs me that the symptoms were precisely similar to those observed in that disease."

In the absence of a more detailed account of the symptoms, and of temperatures during life, and of any description of appearances after death, it is impossible to offer an opinion as to the precise nature of the attacks; but I am inclined to think that it was only one of many ways in which heat and miasmatic influences, malaria and foul water, may affect those who are exposed to them in their intense forms; and I would express a hope that the very able medical officers who have already contributed so much to our knowledge, will add to the obligations they have conferred, by continuing and reporting in detail the observations so well commenced. It is only to be regretted that so able an observer as Dr. Evers had not the opportunity of personally studying the cases he has described from the reports of the Malguzar and of a subordinate, who have furnished but scanty information.

CLINICAL REMARKS ON HYDROPHOBIA.

By J. S. BRISTOWE, M.D., F.R.S.,
Senior Physician to St. Thomas's Hospital, etc.

CONSIDERING how common, on the whole, outbreaks of rabies are in kennels and in districts, and how frequently, therefore, human beings are exposed to the danger of catching hydrophobia, it is a matter of sincere congratulation that hydrophobia remains, as it ever has been, a rare disease; and that it is only at long intervals, if at all, that medical men, even in large practice, have the opportunity afforded them of witnessing its symptoms or of studying its morbid anatomy.

An important reason, of course, why the disease does not readily spread from dogs to man, or from man to man, is that, like syphilis, it can be imparted solely by direct inoculation. It has been proved, also, that only a minority of persons actually bitten by mad dogs contract hydrophobia; the explanation of this fact being, either that the bite has been inflicted through clothes, and the fangs, before they enter the skin, have thus been cleansed from virus; or that the wound is, by the resulting hæmorrhage, washed clean of the poison which has been inserted into it; or that, from some peculiar state of health or idiosyncrasy, the injured person is at the time more or less insusceptible. Something, however, is due to luck; for many persons, I am sure, tempt Providence unwittingly in this matter by harbouring and even nursing rabid dogs which do not chance to bite them.

Two such cases of lucky escape come to my mind. Some years ago, a party of a dozen of us went to North Wales for a holiday; and about seven o'clock (having arrived at our destination shortly before) we were sitting at dinner in a private hotel, in which we had taken apartments. The evening was chilly; a fire was burning in the grate; and a little pet dog was lying on the hearth-rug, having appropriated, as is usual with pet dogs, the most comfortable place in the room. I should think that half a dozen times at least during dinner-time the dog woke up suddenly and treated us to a howl; and on each occasion I attributed it to the fidgetiness of one or other of the children, who were sitting with backs to the fire, and whose chairs, I thought, had disturbed and perhaps hurt the little animal; and on each occasion, therefore, I administered a suitable rebuke. Immediately after dinner, the children were put to bed, and the rest of us adjourned to another room; and no further thought was given to the dog. The next morning, however, it was absent from our breakfast-room, nor did it show up during the day and in the evening, whilst I was having a chat with the landlord, asked him casually where the little dog was that had disturbed o dinner the day before. "Oh," he said, "it ran away this mornin and we don't know what has become of it." It is not a usual thir for a dog to run off as this dog did; and I began to feel a little su picious, and questioned him further about it. I then learnt th the dog belonged to a gentleman who had occupied our rooms f several weeks, and left on the day of our arrival, leaving the d behind him in charge of the landlord, because for the last two three days it had been out of health, snappish, and refusing its foo I obtained a more definite history of the dog's symptoms than I no give (for I have forgotten the details), and, at any rate, qui enough to make me pretty certain that it was suffering from rabi After this, I inquired day by day if anything had been heard of and at the end of a week or so I learnt that, a few days previous it was seen running along some road or in some fields by so labourers, who, concluding from its appearance and actions that was "mad," destroyed it. I may add that, just about that tim rabies was unusually prevalent in the north-western parts of En land. I think there is no doubt that that dog had rabies; and congratulated myself, and I congratulate myself still, on our f tunate escape, for the party consisted largely of children from t or three years of age upwards.

The other case was in the personal experience of two or th young spinster ladies with whom I had a slight acquaintance. Th had a little pet dog, which became ill, and which they nursed w most affectionate solicitude until, at the end of a few days, it di To them the illness and the death appeared very mysterious. Th suspected, indeed, that the dog had been poisoned; and they ha *post mortem* examination made upon it by a veterinary surgeon, w found in its stomach a considerable quantity of its own hair, bits stick, and indigestible rubbish of other kinds. What opinion surgeon formed of the case I do not know; but the ladies were c firmed in their belief that their pet had been the victim of foul p and accused some neighbouring mischievous boys of having c passed its death by poking down its throat the indigestible mater found in its stomach. It is well known that dogs suffering f rabies are in the habit of tearing out their hair and swallowing and that, like some hysterical women and lunatics, they are ap cram themselves with innutritious and even offensive substan My suspicion, thus excited, that the dog had died of rabies, confirmed by other facts which subsequently came to my knowle

My personal experience of hydrophobia is very limited. The case I ever saw was admitted into St. Thomas's Hospital fif or sixteen years ago (when it was in the Surrey Gardens), under care of Mr. Simon, and was published at the time in one of journals. A number of persons had been bitten in that neighb hood by a mad dog, and this was one of the very small number o fortunates that became hydrophobic in consequence. The case impressed on my memory, not only by its own striking incide but by the fact that one of the men who had brought it to the pital, and who had himself been bitten, was so frightened tha straightway went and got drunk, and, from the combined effec drink and fear, came to the hospital the next day barking li dog, refusing water, and proclaiming himself mad. Fortunatel himself, however, as his intoxication subsided, so his symptom hydrophobia disappeared. A second case of true hydrophobia admitted into the hospital shortly afterwards.

Two other cases, the details of which are subjoined, complet sum of my experience of the disease. They were both adm under my care.

The earlier of the two I never saw, for the patient was brou the hospital early in the morning, and died before my attentio been called to her. The case, indeed, was seen only by my h physician; who (though the possibility of the disease being h phobia was suggested by the history, and to some extent b symptoms) seems to have been undecided as to its real natu to the time when death occurred, almost suddenly. The histo the case, and the record of symptoms observed in the hospit narrated below, are not those which the house-physician had b him to guide his judgment. But they comprise many addit important details, derived from the friends and the nurses, aft child's death; when, on collating the facts already before us, i become abundantly clear that we had a case of hydrophobia t with.

CASE I.—A. C., a little girl, 7 years of age, was admitted on 10th, 1878. She had been bitten by a dog, in the face, two m previously. The bite was superficial, bled a good deal, and

uterised within an hour of its infliction. The dog was not known have bitten any one else; but it was thought to be mad, and was lled shortly after.

The patient remained quite well up to the night of June 7th, ıen she screamed a good deal in her sleep. But this had occaonally happened for some years, and little notice was taken of it. ıe next morning (the 8th) she did not care to get up, and comained of pain in the part that had been bitten, and the pain emed to fly about her face. She remained in bed most of the ıy; was "fussy," but good-tempered; and complained of a little in the abdomen, and of pain in the throat when she attempted swallow.. Nevertheless, she took a little solid and fluid food durg the day. She screamed once that night, but slept well. During e 9th, the difficulty in swallowing continued, and towards evening e began to be delirious; she said her aunt was making faces at r, and that a rabbit was looking at her. She remained awake all e following night, talking nonsense, and occasionally (when left one) screaming; but she was obedient, good-tempered, and when oken to, answered sensibly. The pain in the throat continued, but e had managed to take a teaspoonful of jelly from time to time. ı the morning of the 10th she vomited, and at 7 A.M. was brought the hospital.

She was pale, and anxious-looking. She sat, at first, on her ther's knee, but did not remain still for a moment. She spat out the floor, and had in her hand a handkerchief saturated with liva. When offered water to drink, she at first buried her face in r father's breast; but immediately afterwards asked for it, and en took a mouthful quickly, which she swallowed, without appant effort, and then pushed away the mug. This was repeated veral times, and no convulsions were induced. Her mind seemed ear, but she was hasty and abrupt in her speech and movements. hyperæsthesia was observed. She retched violently at times, and mited a little. She complained of pain in the belly, but chiefly of in in the throat. Respirations, rapid; pulse, 180; temperature, 4.2°.

Shortly after admission, a warm bath was administered, which d not seem to trouble her. But afterwards, she rambled a good al in speech; said she had pushed her little brother head foremost to the bath, and had drowned him. She was much excited, throwherself about, screaming at times, especially when she was touched; d attempted to knock and pinch anyone who interfered with her. e had occasional hiccough and retching, and now and then brought a little mucus. Her eyes were bright; the pupils were equal, and lated. There were no abnormal appearances in the throat. She id she had pain all over her head and abdomen. She expressed a sire to pass urine, but only discharged from two to three drachms. ıis was turbid, contained one-third of albumen, and presented, ıder the microscope, hyaline and epithelial casts, free epithelium, d crystals of uric acid and oxalate of lime, but no blood or bloodlouring matter.

At 10 A.M., she asked for milk, but only took a teaspoonful, and en threw her arms about, seemed unable to breathe, and wiped vay the milk with her handkerchief. She was continually wiping vay frothy saliva from her lips. She attempted to get out of bed, apped the nurse in the face, and, when her hands were held, tried bite her. She was much excited, and talking much nonsense. mperature 102.2°.

At 11.30, she had been much quieter during the last ten minutes, d twitching of the limbs and face, especially of the lips, was obrved. A few minutes later, she suddenly became livid, writhed er on her chest, with her head strongly retracted, and died in is position at 11.45 A.M.

Her temperature was 102.6° twenty minutes after death, and the gor mortis was strongly marked at 1.30.

At the *post mortem* examination, nothing was observed with the ıked eye, excepting congestion of the brain and spinal cord.

[*To be continued.*]

DONATIONS AND BEQUESTS.—"A Lady" has offered (through Mr. arding) £1,000 towards the proposed fund for assisting convalescent ıtients of the Birmingham and Midland Hospital for Women.—The ev. Richard Thomas Lancaster and Miss Mary Anne Lancaster, of heltenham, have each bequeathed £500 to the General Hospital and ispensary in that town.—Miss Beckett, of Somerby Park, Gainsorough, has given £500 towards the endowment fund of the Meanood Convalescent Home for Children.—The Norfolk and Norwich ospital has received £300 under the will of Mrs. Cann, of Wrampngham.—Mrs. Muggeridge has given £50 for the furnishing of a ard in the New Chelsea Hospital for Women.

AN INQUIRY INTO THE CAUSES OF THE INCREASE OF CANCER.

BY HUGH P. DUNN, F.R.C.S.

(*Continued from page 710.*)

IT is now necessary to proceed to the consideration of the general mortality amongst the infant population, and its bearing upon the increase of cancer. In the commencement, we may remind the reader that for some time there has been a notable reduction in the death-rate in early life, which in England has been almost annually maintained. Thus, the introduction of sanitary improvements, and other measures for preserving the infant population, has resulted in swelling the ranks of those who survive the exigencies of early life and pass to adult age. Now, what bearing has the knowledge of this fact upon the subject before us? According to Sir James Paget, "cancer is a disease of degeneracy, the frequency of which increases as years increase." Although, as some maintain, there is some difficulty in accepting this statement in its entirety, it is nevertheless beyond dispute that cancer is a disease of at least comparative rarity in early life. It consequently follows that, if more persons than heretofore reach adult age, it is obvious that there must be a numerical augmentation of those who, thus living, become liable to cancer. Perhaps, in proof of this, we should find that the cancer-mortality varies in certain districts according as the infant mortality is high or low; and such inquiries as we have made into this point tend to support the supposition. But, whilst we have proof that no period of life is absolutely exempt from cancer, yet experience still shows that its prevalence is by far the greatest in later life; and, under these circumstances, it is comprehensive enough that the numerical liability, so to speak, of the disease must be coincident with the increment in the adult population; or, to state the same matter differently, if the liability of a person to cancer increases with age, it is not surprising that the disease is exhibiting year by year an increasing mortality, when, by means of the enforcement of sanitary laws and other measures of like importance, a large proportion of children survive the exigencies of their early existence, live to adult age, and enter the period of life during which the disease is most prone to exhibit its greatest virulence. At least, it is only rational to suppose that the diminished death-rate of the infant population has some connection, upon the grounds we have mentioned, with the augmented cancer-mortality.

Now, there is abundant evidence to show that the prevalence of cancer varies largely in the different divisions into which England and Wales have been divided for the purposes of efficient registration; and we now propose to inquire, taking as our guide the various tables in the reports, as to the circumstances to which might be attributed the varying mortality in the respective districts. It was observed by Charles Moore that, in the counties south of an imaginary line drawn across England from Bristol to Peterborough, the mortality from cancer was high; whilst in the counties north of this line the cancer-mortality was low; in other words, that the northern counties of England and Wales appeared, almost without exception, to enjoy a certain immunity from the disease. He also showed that this immunity was chiefly apparent in the north-western division, in which are included the counties of Cheshire and Lancashire. This statement is, even in the present day, with two or three exceptions, incontestable; it is still a fact that in the South of England generally there is a high cancer-mortality, while in the North there is a low one. But I shall presently hope to show that this immunity in question, which the records tend to support, in connection with the northern counties, is, in the face of certain facts, presumably more apparent than real. Putting aside for the present the question of any geographical or climatic differences subsisting between the divisions of England north and south of the line to which we have referred, we have, however, thought it expedient to compare the death-rate of cancer with that of the infant population (under five years), as recorded for the various counties; and, in doing this, the remarkable fact is presented to us, that, with one notable exception (London), the infant and cancer death-rates in the several counties exhibit a relationship which almost renders them inversely proportional. In other words, in the counties in which a high cancer-mortality prevails, in those the death-rate amongst infants will be found to be low; and, conversely, when the cancer-mortality is low, the infant death-rate will be seen to be high. The fact of London being in this respect exceptional, rather, however, than otherwise, tends to support the rule, inasmuch as many alien cases of cancer

are doubtless received in the year, and die within the London district. For the sake of comparison, we have drawn out a table of the infant and cancer death-rates, as recorded, of certain counties, for the year 1880; and it will be seen at once that the fact to which we have referred is curiously expressed.

	Infant Death-rate per 1,000 living.	Cancer Death-rate per 1,000 living.
London	73.8	0.61
Huntingdonshire	47.5	0.80
Lancashire	82.7	0.41
Cheshire	60.5	0.47
Durham	77.2	0.32
Cambridgeshire	53.1	0.79
Norfolk	53.1	0.70
Rutlandshire	50.8	0.69
	Average for England, 64.4	Average for England, 0.52

Or to arrange the table according to the rated Cancer Mortality, it would stand thus:—

Huntingdonshire	0.80	London	0.61
Cambridgeshire	0.79	Cheshire	0.47
Norfolk	0.70	Lancashire	0.41
Rutlandshire	0.69	Durham	0.32

Or on the other hand according to the rate of the Infant Mortality, it would stand thus:—

Lancashire	82.7	Cambridgeshire	53.1
Durham	77.2	Norfolk	53.1
London	73.8	Rutlandshire	50.8
Cheshire	60.5	Huntingdonshire	47.5

We have chosen the above counties by preference, because they have shown either a high cancer mortality or a low infantile one. Let us, however, for the sake of further comparison, turn to the records of Rutlandshire and Huntingdonshire for the year 1879. We find that by far the highest death-rate from cancer in the year occurred in the former county, and the death-rate amongst the infant population was the lowest recorded: in short, the cancer mortality was 0.94 and the infant mortality 32.1. Observe, however, the difference in the following year (1880), for then the cancer mortality fell to 0.69, and the infant mortality rose to 50.8. Surely if this is only a coincidence, it is certainly a remarkable one. Again, the contiguous county, Huntingdonshire, exhibited in 1879, though in a less degree, a similar comparison—for, while the cancer-rate was 0.81, the infant mortality was 39.8, and in 1880 the deaths from cancer fell, while those amongst the infant population rose, as will be seen by referring to the tables. Thus, without deeming it necessary to adduce further evidence of the question, it would appear that there are good grounds for believing that there is some connection between the infantile mortality on the one hand, and the cancer mortality on the other. It behoves us now, however, to inquire into this more closely, and in doing so, to take into consideration climatic or other conditions, the presence of which, might tend to influence, in the respective districts, the records of the death-rates in question. Although the data set forth in the above tables have been derived from the records of a single year, it should not be supposed that we have founded our hypothesis on these and these alone. On the contrary, we were careful to examine the records, and without exception we found the same principle to prevail, and even in some instances to be more clearly displayed than in the year we have chosen. Cancer is said to abound in the healthiest districts and amongst the people who are most robust. Consequently, in districts admittedly unhealthy its occurrences would be presumably less frequent. This statement, however, requires some qualification, for conceivably, if persons in unhealthy climates succumb largely from the diseases of the localities, there must be a reduction of those in whom cancer would be likely to occur. Although, for instance, we are not absolutely certain as to the existence of any consanguineous antagonism between carcinoma and tuberculosis, the former disease is undoubtedly less frequent in the districts in which the latter is prevalent. Again, if we attribute the high infantile mortality in Lancashire to the existence of certain climatic conditions which are inimical to infant life, we may regard the low cancer mortality as either due to the diminution in the number of persons as compared with other counties, who reach adult age; or to the greater prevalence in the county of other diseases to which adults are more susceptible than cancer. For the purpose of testing in what measure either of these propositions is true, let us turn to the records of the death-rate of certain diseases in Lancashire. What do we learn? On comparison with the records of other counties, we find that the mortality from the seven zymotic diseases and of diseases of the respiratory organs far exceeds the recorded mortality from such diseases in any part of England; and furthermore, that the cancer death-rate for Lancashire is not only greater than that of any other county, but in excess of the mortality recorded for England and Wales. The recollection, then, of these facts, together with the prevalence of the high mortality amongst the infant population, compels us to attribute an unhealthiness to Lancashire which may either be due to climatic influences, or to the circumstances of the wondrous industries of which the county is the seat. In connection with this we may quote the opinion of Dr. Farr, as expressed in the Registrar-General's Report for the decennium 1860-1870. Writing in 1875, the year at which the report appeared, he says: "Lancashire has to contend with difficulties in its mines, its manufactures indoors, the dust, dirt, and smoke of the air, the impure water, and the middens, and the crowded populations of the towns. The men suffer severely at the working age; and though the women do not die at the same rate, the mortality of women and of children exceeds that of any other division in the kingdom." Thus then, it seems conclusive that in the face of this evidence, the high general mortality and the immunity from cancer in the north-western division stand in the relation of cause and effect. If the unhealthiness of a particular district is subversive to the prevalence of cancer, a point to which the tables we have referred to lend appreciable support, it is only natural to expect that a high general mortality would be associated with a low cancer one.

In confirmation of this, however, let us again refer to the remarkable records of Rutlandshire for the years we have quoted (1879 and 1880). To what may be ascribed the sudden fall in the cancer-rate and the sudden rise in the infantile mortality for the latter as compared with the previous year in this county? It appears in the Registrar-General's report for 1880, the death-rate amongst the infant population was in excess, owing to the prevalence of summer diarrhœa. Let us then, for the sake of argument, assume that in Rutlandshire the sudden rise in the infant mortality was due to some such cause. But this, if it were so, could not have affected the year 1880, the cancer-rate which, as we have seen, is much lower than in 1879—consequently, we are forced to the conclusion that the death-rate from other diseases must have been higher in the former than in the latter year. On inquiry, we find that especially in two instances this is the case—and the result of this is chiefly shown in the augmented general mortality for the county; for in 1879 the general death-rate for Rutlandshire was 17.8 per 1,000 while, in 1880, it was 19.0. The logical conclusion then from the figures we have adduced appears to me that, as far as statistics are capable of showing, the cancer-rate of a county may generally be accepted as the index of its healthiness. It would seem from the foregoing, that it is hardly necessary to raise the question of the geographical distribution of cancer in connection with the low mortality from the disease in certain districts of England. Yet it has been shown by various writers, that cancer possesses a geographical distribution of a nature so manifest as strongly to confirm the suspicions of its real existence. For instance, the disease prevails most largely in the central parts of Europe. But in the extreme north of this continent, the inhabitants enjoy an almost complete immunity from cancer. It is stated to be unknown in the Faroe Islands, whilst in Iceland in one year it proved mortal in only 37 cases out of 50,000 inhabitants, or in a proportion of 0.07 to 1,000. But without advancing further into this question we may remark that the whole of England is included in the geographical area in which cancer prevails most largely. And the fact that the cancer-rate of counties contiguous to those composing the north-western division, such as Cumberland, Westmorland, and those in North Wales, is not unfrequently above the average, warrants the belief in the absence of any direct influence of a climatic nature in reference to the occurrence of the disease. Now if cancer as a disease is increasing, if year by year its distribution is extending in our midst, in what measure can this increase be attributed to hereditary influences? That cancer does exhibit a feature of here-

itariness, as some maintain, or in a constitutional (so-called) one, s others believe, is beside the question. It only concerns us to ask, , admitting that the general features of carcinoma have during ecent times undergone no alteration, there is any obvious augmen- ition in the prominence of the hereditary character of the disease? ow, here again our deductions must be necessarily those derivable om numbers, for according to Walshe, "whatever be our general eory of hereditary influence, a satisfactory conclusion regarding s connection with cancerous disease can only be obtained by the ell-advised application of the numerical method. But however pplicable the numerical method may be in this instance, we are pposed by the difficulty of putting it in force, and of carrying it the extent of acquiring data in sufficient quantity to render it liable. In other words, in the absence of public records, the inute details bearing upon the hereditariness of cancer are only be found in the note books of those whose position enables them see much of the disease. Charles Moore, by means of the formation supplied him in connection with the history of 101 ncerous persons, was enabled to show, thus far satisfactorily, at the eldest born of a given family are more liable to cancer than e younger; and, by further inquiry, he also ascertained the ar- ngement of families among whom eighty-nine of the foregoing cases cancer occurred. By this means he was able to determine that e largest number of cancerous persons belonged to families of hich there were five children.

Many similar observations have been made with a view of termining the influence of fecundity upon the production of the sease; and Scanzoni, who inquired into the cases of seventy-two omen suffering from uterine cancer, found that in twenty-one stances, or, in by far the majority, the family of the patient con- sted of six. But cannot we derive some information from the nual reports, in order to determine the increase, if any, of cancer means of hereditary influences? Possibly, if we apply the rule at a disease of pronounced hereditariness is prone to assert its esence sooner than later in the offspring. Consequently, if the reditariness of cancer is increasing, the records in the reports would esumably exhibit a gradually augmenting mortality from the disease ring infancy, or the first quinquennium. What, however, do we arn? On referring to the tables, it at once becomes evident, as we ve already shown, that the mortality from cancer during the first inquennium, has, for some years, maintained a very low rate; and, closer inspection we find that, if anything, even this shows signs some diminution. Hence it is clear that, even if the increase of ncer can be attributed, in some measure, to its hereditariness, it es not appear that at the period of life, when, presumably, this fluence would be most apparent, there is any trace of increase. erefore, we may conclude, that either the hereditariness of cancer lfils a very subordinate position in the immediate production of e disease, or that it only becomes manifest under special predis- sing circumstances, the accumulation of which increases pro- rtionately with the advance of age.

The consideration of this subject, however, involves the question whether it is right to hold, that in every case of so-called nstitutional disease, inheritance implies simply a predisposition the disease and not the disease itself? In the absence of direct idence, and in the face of the insufficiency of our knowledge of e life history of cancer, it seems most rational to believe that the heritance of this disease simply implies a predisposition to become ncerous at some period of life at which, so to speak, a concentra- on of other predisposing causes unites to render the manifestation the disease, as it would seem, unavoidable. We confess, owever, to the difficulty of obtaining data upon the subject of the reditariness of cancer. It is, nevertheless, one which, in the ce of facts to which we have drawn attention, seriously mands inquiry, not only upon the grounds of adding knowledge a disease of the inner life, so to speak, of which we know so tle, but upon the higher motives of obtaining facts for purposes public utility, from which the optimist might with reason expect al advantage to accrue. It cannot yet be that we know all of the anner in which cancer is disseminated hereditarily. If not from ncurrent individual experience, surely from numbers we should be le to formulate a better statement of the facts in connection with is subject; and placed, as this island of Great Britain is, in the ntre of the geographical area of the disease, it behoves us to be renuous in our efforts to attack the fell destroyer and besiege his orks, with a view of obtaining, if only for a time, a truce from his enging virulence. A gleam of satire certainly pierces the boasted illiancy of our advanced measures for public health, when, step by ep with, and forming, as it would seem, an integral part of civilisation, a disease of the nature of cancer obtains such a sway in our midst.

We will now close this imperfect sketch of the subject we have attempted to discuss, by embodying, in a tabular form, the conclusion at which we have arrived.

1. In the face of incontrovertible facts, cancer is increasing in England.

2. This increase is due *(a)* to the success attending the legislative measures and other means for the preservation of the infant population, by which a large proportion of persons reach adult age, and the general healthiness of the community is increased: *(b)* to the greater prominence which, in the present day, prevails of the most predisposing causes of the disease—such as the fecundity of women, the prevalence of high nervous tension, and the existence of possibly greater general luxury in the mode of living.

3. The immunity apparently demonstrated by the records as present in certain counties of England and Wales, is presumably, as we have attempted to show, not due to any real declination of the disease, but rather to such causes as can be explained by special local predisposition to other diseases, to which a large proportion of the adult population succumb.

4. In consequence of this, if each district of England and Wales were equally healthy, each would probably exhibit a high cancer mortality.

5. The geographical area of which England and Wales is composed, is insufficient to account directly for interruption in the distribution of cancer as met with in this island.

The writer acknowledges his indebtedness to the following works:—*The Annual Reports of the Registrar-General of England; Clinical Lectures and Essays* by Sir James Paget, edited by Marsh; *On Functional Nervous Disorders*, by Dr. Handfield Jones; *Antecedents of Cancer*, by Charles Moore; *Transactions of the Pathological Society*, the discussion on Cancer, the speeches of Sir James Paget and Dr. Crisp; *The Journal of the Society of Arts*, 1879, on the Distribution of Disease, popularly considered by Alfred Haviland, *On Cancer*, by Dr. Walshe; *On Cancer of the Breast*, by Thomas W. Nunn.

ON TRANSFUSION.*

By J. F. Le Page, L.R.C.P.,Eng., etc.
Fellow of the Obstetrical Society of London.

The operation, to matters concerning which I wish to direct attention, may justly, if not logically, be styled both old and new; old, because it was practised in England by Dr. Lower, of Oxford, and by Sir E. King, in the year 1665—six generations back; new, for the reason that a large majority of general practitioners have never had the opportunity of witnessing it—an operation which is untaught in our schools; which has never received the recognition it deserves; which has not yet attained to its legitimate place in surgery and in obstetrics.

When, from hæmorrhage, our patient having sunk to the lowest ebb, life is flickering, and dissolution apparent, hope is still justified, resuscitation is still possible; and more, it is the very general result of this most important operation. How, then, is it, that its use is almost limited to specialists? Is it not because the general practitioner does not fully realise its precise indications, nor indeed the pathological nature of the conditions which require it?

Let us suppose that we have a patient who, having suffered excessive hæmorrhage, is rapidly sinking. What do we observe? A gasping for air; an absence of pulse; jactitations, and so on. And we say, death is resulting from the draining away of vital fluid. We consider it a very proper thing to attempt to give stimulants, and to supply nutriment by enemata. But what is the result? Our patient dies, and we are satisfied that the case was beyond the reach of human aid.

Surely it is time that the marvellous discoveries in physiology and pathology should open to the sight of the intelligent physician that vista through which he may distinctly discern the relationships existing between effect and cause; the pathological nature of the conditions; and the basis of a rational and scientific treatment. It is utterly futile to attempt to administer stimulants, when the functions of the stomach are altogether suspended, or when it rejects everything; and to inject nutritive enemata, when the absorbent system is completely paralysed, and has lost its faculty of assimilation. Now, in such a patient, the first thing we notice is a gasping for air. But what is gasping? It is an indication that the

* Read at the autumnal meeting of the Northern Branch.

respiratory centre in the medulla oblongata is not duly stimulated; or that, being stimulated, the force is not at hand for it to transmit. Let us note that the natural stimulant of the respiratory centre is carbonic acid, and that, when carbonic acid is in excess in the blood, respiration is abnormally rapid; provided that the force is not deficient, as in sleep, or almost entirely absent, as in the partial stasis of profuse hæmorrhage. No inspiration, as an involuntary act, could, in health, take place, were it not for the presence of carbonic acid in the venous blood traversing the medulla. How, then, does it come that this centre fails after hæmorrhage? In this way: The respiratory centre is the transmitter, at regular intervals, of nerve force to the respiratory muscles; but it is not the mechanism which transforms matter so as to develop that force. Whilst carbonic acid is essential to the inspiratory act, oxygen is equally essential in the generation of that force which the centre transmits. Well, there is a deficiency of oxygen because there is a deficiency of blood in the brain; and what little is there, is in a state approaching stasis. Propel more blood through the cerebral vessels, and what happens? Oxidation goes on; force is developed, which the inspiratory centre, stimulated by the carbonic acid in the blood, rhythmically discharges, and respiration is reestablished.

Again, we notice the absence of pulse after extreme hæmorrhage. Pulse is the wave of propelled fluid dilating the arteries. But what if there is no fluid to propel? The absence of the pulse is the result of the heart's dynamic inability to work when deprived of that on which to spend its energy. Give it blood to propel, and propulsion will follow.

This leads me to the indications to which these considerations point. Oxygen must be sent to the brain, carbonic acid to the respiratory centre in the medulla, and fluid to the heart. And how can we accomplish this? I have adopted this plan in patients who were not actually *in articulo mortis;* and, so far, with complete success. First, place the head low and raise the pelvis, so that blood may gravitate to the medulla; then autotransfuse; that is to say, transfuse the patient's own blood from the extremities to the vital centres. This is done by firmly bandaging both legs and arms, commencing at the feet and hands. At this stage, ether may with very great advantage, as a most valuable means of stimulating nature's powers, be injected intermuscularly; and I venture to suggest that it would be both rational and expedient to inject a minute quantity of strychnine with the ether, for strychnine we know to be a most powerful and certain stimulant of the inspiratory centre. It now becomes our duty to supply the patient with such nutriment as is capable of sustaining life; and to this end, should the stomach still reject liquids, the assimilation of nutritive enemata will meet the case.

Striking as is the success of this treatment, desperate cases do occur in which there is absolutely no hope excepting by placing directly into the circulation new fluid capable of arousing and sustaining life; and in these cases, as in the resuscitation of the drowned, there is ground for hope even after death has practically taken place.

A question of no little importance is that of the form in which the aliment shall be used. There are many cases on record in which *whole* blood has been used with complete success. The same thing may be said of defibrinated blood, and also of saline alcoholic solutions. The objection to the use of pure blood is its tendency to coagulate. Clotting may take place in the heart, in the vein, or in the instrument. How, then, can we avert its coagulation? By the very careful exclusion of air, by preventing cooling of the blood, and by the admixture of a small quantity of ammonia. In the first drawings of my transfusion apparatus, I had a device by which I could inject small quantities of ammonia into the blood as it passed through the instrument. As this involved a more complex mechanism than I desired, I was led to an experiment which, so far as I know, is original. Not only ammonia, but salines generally, retard fibrination; and it occurred to me that a very convenient process would be that of preparing the blood of the giver before it was drawn from his vein. I need not here explain the experiments I made at length; but the deduction was this, that by administering, ten minutes before blood is drawn, as large a dose of a saline with ammonia as can well be borne, fibrination is very materially retarded. I infer that, with the precautions against cooling and the admission of air, this preparation of the blood will effectively remove all danger from clotting.

Defibrinated blood has its advocates; and their grounds of preference are, that all danger of coagulation is avoided, and that it is unnecessary to bring the giver of the blood into the room.

In favour of the saline alcoholic solutions and milk, may be urged the impossibility, which must often present itself, of obtaining blood at the time when alone it can be of any avail; and the fact that they are always available at short notice. Dr. Hodder records, in the *Practitioner* of 1873, the cases of two patients, moribund from cholera, in whom he injected pure milk, in one fourteen ounces, in the other twenty-eight ounces. Both recovered. And here there was not simply a draining of blood to contend with, but a most potent poisonous influence. A teaspoonful of common salt, half a teaspoonful of carbonate of soda, with two teaspoonfuls of alcohol in a pint of water; or even simple water, with a few drops of ammonia in it, may be used. Half the mischief arises from the heart and arteries having nothing to contract upon; and hence we see how it is that these simple fluids answer the purpose. It is, of course, necessary to follow up transfusion by warm enemata of beef-tea, with brandy, and probably a little opium; to keep the legs and body warm, and, as soon as deglutition can be performed, to give brandy and hot water.

The operation itself is performed thus: Transfix transversely a fold of skin pinched up in the course of a vein at the bend of the elbow. Seize the vein and raise it with forceps, which are made for that purpose. Then open by a longitudinal incision. An assistant may now compress the vein with his thumb, whilst a vein is opened in the same way in the giver's arm. Then, having carefully charged the instrument with a warm saline solution, insert the cannulas into the veins; of course, pointing centrally in the patient's and distally in the giver's arm. Now, propel the blood slowly and smoothly, and watch the effect. Six or eight ounces will probably be ample. Then remove the cannulas, apply a compress, and bind with broad tape with figure of eight round the elbow.

Of a certainty, the pouring away in very profuse *post partum* hæmorrhage must be arrested by styptics, or otherwise, before we begin to replenish. Let us not, however, rest satisfied because the styptic is effective in arresting, and in preventing a recurrence of the hæmorrhage: for the patient may sink rapidly from the loss sustained.

In cases of placenta prævia, when hæmorrhage has been profuse death often follows the shock of artificial delivery. I very vividly remember two such cases which have come under my own observation. Here, transfusion before delivery would relieve the extreme depression, and avert a fatal issue.

But, I take it, conditions do exist in which transfusion appears to be indicated where there has been no loss of vital fluid whatever. I refer to those where blood-poisoning exists. Take, for instance, puerperal convulsions. In convulsions with albuminuria, is not the blood unquestionably poisoned? Our ancestors, two generations ago, would have bled, had they recognised this condition; and may not we, from them, take this lesson, pregnant with truth: that venesection, abused and ridiculed as it is in the present day, is a most powerful agent in our hands for good, could we but cast aside the demon, fashion, which so detracts from the innumerable and inestimable benefits our noble profession is ever conferring on our race.

In puerperal convulsions, prostration threatens to be fatal. In bleeding, we necessarily abstract a portion of the poison; by transfusing new fluid, we dilute the poison still circulating. The effect reasonably to be expected, is, that the system rallies from the prostration. And, carrying this thought further, I venture strongly to urge the expediency of venesection and subsequent injection in many other poisoned conditions of the blood; be the poison generated within the body, or received from without.

We know, and recognise, the signs of threatening dissolution; and we should be prepared, with clear and well defined ideas, vigorously to adopt a treatment which may not fall short of the urgent demands of the case, even when an operation, which has hitherto been looked upon as so formidable, is indicated.

I am convinced that the time is not far removed when, to permit a patient to die of hæmorrhage, will be considered little short of culpable homicide; when transfusion will take its proper place in medicine, in surgery, in obstetrics; when many valuable lives will be saved, which would inevitably be lost but for a weapon so potent so effective, in defeating our common enemy, death.

CREMATION.—The late Mr. Henry Seybert, of Philadelphia, was cremated at Washington, Pennsylvania, on March 7th. This is the seventeenth cremation at this place. Mr. Seybert left 60,000 dollars to the University of Pennsylvania, by which bequest it is stipulated that an impartial investigation of modern spiritualism be made.

THE Duchess de Galliera, in consequence of the breach made in her fortune by her agent in Italy, will be shortly compelled to suspend the works of the three hospitals she is building in Genoa. The frauds are said to amount to at least 10,000,000 francs.

ON ALBUMEN TESTS AND PEPTONURIA VERSUS ALBUMINURIA.

By GEORGE OLIVER, M.D.Lond., M.R.C.P.Lond., Harrogate.

During my absence from home, I find that the question of peptonuria *versus* albuminuria in connection with the tests for albumen now on their trial, has been raised in the Journal and talked about. Before reading the article on "Picric Acid as a Means of Distinguishing Albumen from Peptone" which appeared in the Journal of March 31st, I had performed several experiments on albumen and peptone, with a view to discriminate these bodies by the reagents which, last January, I introduced to professional notice in the form of test-papers. The results of these observations will, doubtless, just now be interesting to many, who are working with these and other tests, so as to decide for themselves their comparative range and power, and I will briefly record them without delay, before proceeding to further inquiry.

The peptone was derived from digesting at a temperature of 100°, with pepsina porci or pepsin-essenz (Liebreich), and an acid (hydrochloric or lactic), one or other of the following forms of albumen: (*a*) White of egg boiled for half an hour, or (*b*) albumen purified after the method of Wurtz, (*c*) albuminous urine (ser-albumen). After several hours, eight or ten, a final boil enabled me to filter off a clear solution, which, judging from the negative results obtained by boiling and by nitric acid, was free from ordinary albumen. Peptonised albuminous urine appears to me to be a valuable guide in the inquiry as to whether peptones can be discovered in the urine as well as albumen, for it provides, as a starting point, peptone, derived from serum albumen in the urine itself, and the behaviour of it to the tests can be more safely compared with that of albumen in ordinary albuminuria, than when the peptone or albumen is added to normal urine; and surely, to note accurately the operation of the tests upon the mixtures in different proportions of the same urine—one portion albuminous and the other peptonised—should be the right preparation for the study of this obscure corner. Speaking merely from my own observations, I must confess to have derived a ray of light from these experiments, for they explain certain results in the testing of some urines, which must otherwise have remained unintelligible to me. Two drachms of liquor pepticus (Benger), which requires no acid, or one ounce pepsin essence (Liebreich), with one drachm of lactic acid, should be added to eight ounces of urine. The process of conversion can be followed step by step. With Benger's preparation, the coagulation by heat and nitric acid steadily diminishes, until it ceases entirely; but, when lactic acid is used, even in the small proportion of .12 per cent., heat fails from the first to induce coagulation; but nitric acid (after Heller) is still available as an indication of the progress of the digestion. It is best to neutralise all acid by carbonate of soda before boiling and filtering. Inasmuch as liquor pepticus, diluted as in the urine, after boiling, gives reactions like those of a peptone, it is necessary to boil and filter two drachms of it in eight ounces of water, or normal urine, and to use it side by side of the peptonised urine, as a check in estimating the peptone contained in the latter; but this is not necessary when the digestive selected is pepsin essence with lactic acid.

1. *Peptone.*—An immediate turbidity was induced by the potassio-mercuric iodide, sodium tungstate, and picric acid test-papers (the corresponding solutions were also used for corroboration), but it was most dense with the first. In every case it remained as an opacity without coagulating, and it completely and quickly dissolved up, without collecting into clots, on applying heat, even short of boiling, and as readily reappeared as the liquid cooled. Much less heat was required to clear up the mercuric and picric turbidity than the tungstate one. On the other hand, the potassium ferrocyanide paper gave negative results.

2. *Albumen.*—The precipitates which all these tests give with serum-albumen can be readily distinguished from the peptonic opacity by the application of heat; for, while the latter merely dissolves, the former gather up into clots, and will then either float to the top like clotted cream, or will fall; in either case, the urine is left quite transparent, until the coagula are diffused through it by shaking. After warming—for the result described can be reached without boiling—the dense coagula remain as they were left by the heat, while, as it cools, the urine becomes turbid; then the turbidity collects into flocculent coagula, which, with the heavier ones, fall, and the fluid above is left quite transparent. But the result is different when the peptonised is mixed with the albuminous urine: then the coagula form on heating, and fall, but the supernatent liquid does not become clear; it remains opaque, and the opacity is proportionate to the amount of peptonised urine which has been added. Can we thus readily detect the presence of albumen only in one case, and of albumen with peptone in another? Perhaps, before positively deciding this question, it will be safest to wait for further clinical and experimental evidence. It may appear a small thing to mention—but it may be a matter of practical convenience to be reminded—that about an inch column of urine, or the upper part of a longer column, may be readily boiled, *without the slightest smoking*, by a wax match or candle, providing the tube is held a quarter of an inch above the tip of the flame; the spirit-lamp—cumbrous, and so apt to get out of order—is quite unnecessary; and, besides, the heat can be more carefully graduated, according as warming or boiling is required, by a wax match than by the spirit flame.

Of the four reagents which form the series of albumen test-papers, there is but one which, though precipitating albumen, leaves peptone untouched,—viz., potassium ferrocyanide. I take it, this fact may be turned to useful account: for it is pretty clear that serum-albumen cannot be distinguished from peptone by the use of one reagent only without calling in the aid of heat; while such aid may be dispensed with entirely by employing the ferrocyanic as well as another precipitant; thus, the presence of peptone may be inferred if the potassio-mercuric iodide gives an opacity, while the ferrocyanide test does not, and the latter, though negative as to peptone, is positive as to albumen. Should both bodies coexist, it will be easy to compass that fact, by first precipitating all the albumen by the ferrocyanic test, filtering, and testing the filtrate for peptone by the potassio-mercuric iodide; or, using the latter test only, a match may perhaps decide the matter without the necessity of filtering.

The mercuric test is undoubtedly quite as sensitive for peptone—or the group of bodies that go by that name—as I have proved it to be for albumen in all forms; in both respects, it is unsurpassed or even equalled by any other reagent with which I have worked. Experiments teach me that peptone is not a single body: I have, for instance, obtained evidence that picric acid can leave something which potassio-mercuric iodide can still throw down; while in every case the latter reagent completely cleared away all the peptones, so that, after using it, picric acid induced no further precipitation.

Keeping in view this matter of peptone and the forms of albumen—acid and alkaline—met with in urine, all requiring to be discriminated in various ways and by different tests, very few trustworthy observers will, I think, feel disposed to pin their faith to one or even two reagents, until, at any rate, they have carefully and without bias worked with all of them side by side for some time, and deliberately chosen the most trustworthy in all the various kinds of urine.

ON THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.

By JAMES BLACK, B.A.Cantab., F.R.C.S.,
Demonstrator of Anatomy and Surgical Tutor to the Westminster Hospital.

In reference to the very interesting communication upon the above subject which appeared the British Medical Journal, for April 7th, and in which Mr. Walsham cited three cases of popliteal aneurysm which he conducted to a successful issue, where he had adopted the practice of dividing the femoral artery between two points of ligature placed at rather less than an inch apart, it occurred to me that one possible objection to this practice becoming habitual is that a large branch may be given off from the part of the trunk between the ligatures. Of course, the objection does not hold good where deligation is performed on an artery from which no branches other than the terminal arise, as, for instance, the common carotid; but, in other instances, the exact position of the giving off of even large branches is so extremely variable, that it is quite impossible to be sure that such may not arise from the part of the artery between the points of ligature; the profunda femoris, for example, is said by Quain to most frequently arise from the common femoral at an inch to two inches below Poupart's ligament; and yet, in the comparatively small number of subjects which I have myself seen in the Westminster Hospital dissecting-room, this large branch was found, in one instance, arising as high as the ligament, and in another fully three inches below the same structure. In the latter case, it would be quite likely that the large branch would communicate with the part of the trunk between the double

ligature, when the femoral was deligated at the apex of Scarpa's triangle. It is not uncommon to see some little inconvenience occur from a like practice being adopted by some surgeons in operating on varicose veins, where, after tying the vessel in two places quite close together, the division of the intervening portion is accompanied by hæmorrhage, due to some tributary communicating with this part of the trunk. I have myself seen this arise in an operation on a varicose saphena vein. I do not wish to say that this possible contingency should contraindicate the above method of deligation, or that the advantages to be gained do not more than outweigh the objection; but I cannot but think that the collateral circulation through a large branch, communicating with the part of the vessels divided, between two ligatures, would cause, at least, some embarrassment; for, when an artery is neatly tied, such a very small opening is made in its sheath, that it would be quite impossible to tell whether a branch was given off from the posterior aspect of the trunk; and the first indication that such were the case might be at the moment of division of the vessel.

PATHOLOGICAL MEMORANDA.

CONGENITAL MALFORMATION OF BOTH KNEE-JOINTS.

THE following case has recently occurred in the Guy's Lying-in Charity. M. B., aged 48, the mother of two children alive and healthy, and one child that died young, was delivered on February 28th, 1883, of a full time male child, which was very fairly developed. On looking at the lower limbs, the first thing that struck one was, that the patellæ on both sides were apparently missing, and in their place was, on each limb, a depression. The description of one limb will suffice for both. The movements of the hip-joint were complete. The thigh, instead of being convex, was slightly concave on its anterior aspect. The tibia and fibula were in their normal relative positions. The foot looked forwards naturally, and the ankle-joint was normal. The patella was placed at the back of the joint instead of in front. In the normal position of the patella was the depression above mentioned, which apparently represented the popliteal space, as the continuation of the femoral artery could be felt pulsating here, and there were some tendons on either side of it, analogous to the hamstring tendons. There was also, running down a little to the inner side of the centre of this space, a strong tendon, which was continued downwards to the head of the tibia, and may have been the representative of the quadriceps extensor tendon. Posteriorly, the patella was rather firmly fixed, nearer the femur than the tibia, in a strong tendon, so that the impression at first was that it (the patella) was attached by osseous tissue to the femur. This idea was, however, dispelled on moving the joint. The movements of the knee-joint were perfect but reversed. The tendon in which the patella was fixed was exactly like the ordinary extensor tendon of the thigh. The artery could not be traced below the head of the tibia. It may, I hope, be seen from the above description, that the leg could be flexed on the thigh anteriorly, as much as it would have been posteriorly in the normal state. When the child was first seen, it had the toes of one foot almost in its mouth, which, of course, it could reach easily without flexing the thigh. The child died on the third day after birth, and, unfortunately, the parents would not consent to a *post mortem* examination.

HUBERT SELLS,
Senior Obstetric Resident, Guy's Hospital.

INTRACARDIAC AND PULMONARY CLOTS.

IN the JOURNAL for February 10th, which we have but just received in this colony, there is reported a discussion, at a meeting of the Pathological Society of London, on the formation of intracardiac and pulmonary-arterial clots. Dr. Mahomed referred to the scepticism with which most accounts of the formation of clots before death were received; and the ensuing discussion did not apparently result in any further definition of opinion on the subject generally. Intracardiac and arterial concretions are common, on *post mortem* examinations, here as elsewhere; and the examination of them shows that, putting aside true pulmonary embolism, and embolo-thrombosis, slow *ante mortem* production of fibrinous clot takes place in some cases.

In a recent case, the right auricle was occupied, but not occluded, by a firm white, quasi-fibrous mass, elastic and tough. It had no processes into the veins, but was continued into the ventricle by a diminishing prolongation. This embedded the left flap of the tricuspid valve; it had no further connection with the ventricle, but turned up, still diminishing in size, into the pulmonary artery; gradually becoming red and friable, it appeared to end a little beyond the primary division of the artery. It had no intimate connection with the lining membrane at any point. When it was disengaged from the valve, the latter was normal.

In a case of this kind, apparently no part of the clot is of *post mortem* production, or it would extend into the veins rather than the artery, and would occupy the ventricle as well as the auricle. It also appears unlikely that a *post mortem* clot could so squeeze out all colouring matter as to leave the entire mass of a pearly whiteness; while the striation points to successive coagulations rather than such a formation as occurs when blood is whipped with twigs. There appears to be no room to suppose that a clot, as described, could be due to aggregation behind a precedent embolism; while, the valve being normal, the clot is not produced by accretion on a valvular growth or ulcer. From the condition of the terminal, and probably most recent portion of the clot, it seems likely that, on any increase of the heart's action, fragments might be detached, and form true emboli in the smaller branches; either causing rapid death, with the usually attributed symptoms, or, if life were possible, producing embolo-thrombi, which might extend backward and join the original clot.

A cause for the formation of the clot, in this rather than any other part of the cardio-vascular system, might be found in the aneurysm-like form and condition of an auricle, producing more or less blood-stasis in that cavity, further accretion taking place in the direction of the blood current.

The case described was not seen during life. More recently, in a case of simple diarrhœa, death took place slowly, during twenty-four hours, from gradual failure of the heart's action, there being little disturbance of respiration. Here there was white clot filling and adherent to the whole of the right ventricle, and extending similarly in the artery, but not in the auricle. In a case of acute enteritis, dying a week after onset, the similar clot occupied the right ventricle and artery and left auricle; while, in a like case, there was nothing abnormal about the heart at all.

Berbice, March 12th, 1883. A. D. WILLIAMS, M.B., etc.

OBSTETRIC MEMORANDA.

TWO CASES OF MISSED LABOUR.

ABOUT two years ago, I had a case of "missed labour." Another similar case having occurred in my practice, I will try to recall the former, and incorporate the information.

The first case occurred in Scotland. The precise dates of the menstruation, etc., I have now forgotten; but exact particulars were given by the patient, from which I reckoned the pregnancy to have lasted three hundred and twenty-three days—in fact, nearly eleven months. The curious circumstance was that, at the natural end of term, the patient supposed herself to be in labour, and sent for me; but, as the pains were only false, I ordered a dose of tincture of opium, and heard no more of the case for nearly two months, when I was sent for, and delivered the patient of a child, apparently healthy, after an easy labour. The child, after some slapping and artificial respiration had been used, both breathed and cried; but, after working an hour with it, I had to desist, as it failed to respond to any stimuli. After death, it rapidly assumed a black hue all over; and, besides this, there was considerable desquamation of the cuticle. The placenta was putrid, but came away quite whole. As far as I can remember, opium-eating was supposed to be the cause of the retarded labour.

The second case, which I attended on March 31st, was not so prolonged, but certainly may be taken under the same category. The patient continued to menstruate after becoming pregnant, and thus could only count from the quickening. On January 27th, 1883, she sent for me, supposing she was in labour. However, as I could barely get my finger into the os, I left her. From that time till the labour was artificially induced, she suffered from vomiting and pains in the head and body, and consequently became very emaciated. She expected to be confined in February. However, as the vomiting still continued, I determined to induce labour, as she seemed to have passed the end of term. Accordingly, on the evening of the 31st, I introduced my hand into the vagina, and passed two fingers into the os, which was patulous, but not at all dilated, no "pains" being present. After a little manipulation, I opened up the os sufficiently to insert my whole hand into the uterus; and, finding the fœtus small, and plenty of room, I broke "the waters", seized both legs, and

urned", the child being born in about a quarter of an hour after making the examination, with the greatest possible ease. After ing slapped on the chest, it breathed and cried lustily enough, and o urinated and passed meconium. It was placed on the attendant's ee preparatory to being washed, and was there for a quarter of an ur; but then, on looking at it, life had fled, and blood was oozing m the nostrils. I may mention that the child was old-looking in tures, the skin of the face being pale and pasty-looking; the terior fontanelle almost closed; and that the skin desquamated, d parts of the body became black at once after death. The pla- nta was apparently quite fresh.

Such are two cases which, I think, are rather rare occurrences. th these cases were in multiparæ, each over forty years of age.

J. A. ERSKINE STUART, L.R.C.S.Ed., Healey, Batley.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS. APRIL 5TH, 1883.

RAPID RECURRENCE OF EPITHELIOMA: PAIN CONTROLLED BY GELSEMIUM.

the BRITISH MEDICAL JOURNAL for February 3rd, 1883, page), an account was given of a consultation, which was held on a n aged 42, who was suffering from an epithelioma of the cheek; growth had been removed three years before, and in the interval patient had been quite free from the disease. Mr. Willett erated on February 13th, and freely removed the growth; the pa- nt recovered from the operation without any bad symptoms, and March 5th the wound was in great part healed; for the previous ie or ten days, however, a growth of hard, exuberant granulations m the lower jaw had been noticed; on March 6th, these granula- ns were destroyed with the actual cautery. Subsequently he nt, for change of air, to Highgate; but, on April 3rd, he returned St. Bartholomew's Hospital. The growth had recurred, and eral nodular growths projected from the lower jaw-bone; behind symphysis there was another hard nodule, and, apparently in the stance of the parotid gland, was a hard mass of new growth; patient complained of shooting pains in the jaw, and of loss of sation in the lower lip. This loss of sensation, as well as the n, was probably due to the inferior dental nerve having become olved in the growth.—Mr. WILLETT expressed the opinion, which s concurred in by all his colleagues, that it was hopeless to attempt benefit the patient by operation; the disease had advanced too idly, and extended too widely and deeply. He wished, however, ecially to draw attention to the way in which gelsemium had con- lled the severe pains which had tormented the man before his mission; the pain had come on chiefly at night, and had quite evented sleep. The prescription on the bed board contained twenty nims of the tincture of gelsemium, but this had to be repeated ree times before the full effect on the pain was produced.

Individual susceptibility to the toxic action of gelsemium varies y greatly; but, according to the systematic observations made by . Ringer, the above dose (one drachm) is considerably short of the antity which can usually be borne without unpleasant symptoms. e drug was originally introduced into this country as a remedy neuralgia, especially of the dental nerves, and is indeed occa- nally a wonderful "cure for toothache," even when dependent on ious teeth. The fact that, in the case here recorded, the inferior ntal nerve was apparently involved in the growth, probably accounts the beneficial action of gelsemium.

GLASGOW ROYAL INFIRMARY.

COMPOUND FRACTURE OF SKULL: TREPHINING: SPONGE-GRAFTING.

[Under the care of Mr. HENRY E. CLARK.]

M., aged 26, was admitted into Ward 16, on January 28th, 1882, ffering from a compound comminuted fracture of the right side of e skull, caused by a blow from a bale of goods received while he as engaged in lading in the hold of a ship. Large lacerated wounds tended over the whole of the right side of the vertex and involved the temporal muscle to within an inch of the ear; the longest wound measured about five inches; the temporal muscle was much lacerated. Although the fracture was extensive, the depression was not more than a quarter of an inch in depth, and as the patient showed signs of returning consciousness it was decided not to attempt to elevate, but to await further indications. The temperature at noon on the day of admission was 95.4° Fahr. On the following morning the temperature was normal, the patient had slept well, and suffered little inconvenience. Some loose fragments of bone were removed, silk stitches were used to approximate the edges of the wound, and antiseptic dressings were applied. All went on well till the evening of February 3rd, when the temperature rose suddenly to 105.8° Fahr., the patient became restless and flushed, and complained of much pain in the head and shoulders, and on the following morning it was decided to trephine and elevate. This was done with some little difficulty, as a portion of loose bone had been driven beneath the unbroken part of the skull, and was pressing with its sharp, rough edges against the dura mater. The latter was not lacerated, but was very deeply congested; there was, however, no evidence of suppuration. The temperature on the evening of February 4th was 104° Fahr., February 5th, 102.6° Fahr.; February 6th, 100° Fahr.; and on February 7th, 99° Fahr., after which it was normal. As the gap left in the scalp was very large, it was thought well to try the experiment of sponge-grafting, and on February 9th, a piece of prepared sponge (two inches long and half an inch broad), which had been obtained from Dr. D. J. Hamilton of Edinburgh, was introduced into the wound. At that time it was noticed that there were no granulations, and that the centre of the wound was occupied by organising clot. Granulations sprang up beneath the sponge, and six days afterwards pushed themselves through its pores, and began to appear on the surface. The patient made an uninterrupted recovery, but the process of healing was very slow, and the sponge became detached at one or two points round the margin; elsewhere it appeared to be undergoing solution, and certainly seemed to take no part in the healing process. In consequence of the slowness of healing the patient was not dismissed until April 8th, although for fully a month before that date he had been able to go about the ward, and into the grounds connected with the Infirmary. He again presented himself at intervals, and on the last occasion (October 5th) complained chiefly of pains in the left thigh and left arm, and of loss of power in those extremities. When seen by Mr. Clark at the Sheriff's Court in January of this year, there seemed to be no improvement as regards the paralysis, but the pains had passed away; the wound in the head was firmly cicatrised and the pulsating area was very small.

REMARKS BY MR. CLARK.—Trephining was in this case done early, in the expectation of preventing suppuration, which clearly would have taken place, if interference had been delayed; it is scarcely necessary to point out that in this it entirely succeeded, and it is very probable that the successful issue of the case depended in great measure on this promptitude of action. The sponge-grafting, in my opinion, very seriously delayed the healing process, as the sponge had to be disintegrated and got rid of before the granulations had free growth or the cicatrisation could proceed. This confirms the experience of many who have tried sponge-grafting, and unless there are compensating advantages to be gained, of which I at present am ignorant, I fear there is not likely to be any general adoption of this mode of treatment. The only other point of interest in this case is the subsequent loss of power in the left limbs. As the lesion was distinctly located in the region of the skull corresponding to the upper part of the ascending parietal and ascending frontal convolutions, we have here a not unimportant confirmation of the facts, brought out by experiment on animals, as to the connection of those convolutions with the innervation of the leg and arm.

THREE COUNTIES ASYLUM.

A CASE OF TREPHINING IN DEPRESSED FRACTURE OF THE SKULL, WITH PARALYSIS, FOLLOWED BY A PERIOD OF INSANITY: COMPLETE RECOVERY.

Recorded by GEORGE WHERRY, M.C., F.R.C.S., Cambridge.

ON April 27th, 1882, attendant N., of the Three Counties Asylum, a strong man, aged 25, was sitting in an arm-chair, when a powerful lunatic came up from behind, and struck him on the head with a heavy carpenter's mallet. He was quite sensible a few minutes after the accident, asked "was he done for", and, though faint from loss of blood, insisted on walking to his bed. He stated that he felt loss of power in the left side, momentarily, when the blow was given; but, a few hours afterwards, there was little to

notice, save that he had pain along the left sterno-mastoid muscle; the pupils were equal and active; he was very restless at night. The next day (April 28th), he said he felt well, but had pain and swelling about the neck; he had slept ill.

On April 29th, the morning temperature was 101.2° Fahr.; there was no twitching on the left side of the neck. The bowels were acted upon. During the night, he had had attacks of convulsive twitchings down the left side.

On April 30th, he had what he called "a stroke" (he had charge of epileptics), a convulsive twitching down the left side, which drew his head and arm up towards the middle line of the body; it was over in a moment, and was followed by facial paralysis; afterwards, he had two slight attacks. In the evening, he was very restless, tossing his head about.

May 1st. Temperature, 103.2°. Slight convulsive attacks occurred in the morning; signs of left hemiplegia became manifest, and his speech was thick.

On May 2nd, the temperature was 102.6°. The paralysis of the left hand and arm was more marked, and he was beginning to lose power in the left leg.

Six days after the accident, on May 3rd, Dr. Swain, the Medical Superintendent, telegraphed for Mr. Wherry, who found the patient calm and intelligent, but anxious about himself; he had well-marked left hemiplegia, and considerable fever. There was a compound comminuted depressed fracture of the right parietal bone; the main fracture was deep down in the middle of the wound, and ran from near the right parietal eminence forwards to the sagittal suture. Mr. De Lisle gave chloroform, and the wound in the scalp was enlarged. The fragments of the skull were so driven in, that the trephine was applied in two places before it was possible to remove the nine portions. Hæmorrhage was profuse from a rent in the longitudinal sinus, but ceased on the complete removal of the fragments, when the dura mater, bulging with pulsations into the wound, seemed to stop the hæmorrhage by its pressure. The inner table was more extensively fractured than the outer.

Next day, he expressed himself as pretty comfortable; but, on the evening of the day following (May 5th), his temperature rose to 103° Fahr., and he was delirious and in pain. The wound began to suppurate; the dura mater could be seen pulsating freely. A subcutaneous injection of morphia much relieved him. He continued in this condition, still paralysed, wandering in his mind, either in stupor or delirium, and unable to recognise his wife or friends, until May 9th, when he seemed clearer in his mind, and asked for some fish. On May 10th, he startled Mr. De Lisle by saluting him, military fashion, with the left arm (previously paralysed). He now made fair progress, but had pains all over him, "like electric shocks;" he had rigors on May 20th, and great frontal and occipital aches. The administration of morphia had a peculiarly soothing effect; he usually slept about eight hours after each injection, and awoke refreshed and free from pain. Towards the end of May, he grew depressed and irritable; the pains continued; he had paralysis of the left side, and slightly, also, on the right. On June 13th, fits of convulsive twitchings down the right side occurred, and attacks of unconsciousness for short periods, with dilated pupils; the attacks were rather like epilepsy, and were preceded by great frontal pain.

Now came a period of insanity; there was little pain and no fever, but he became depressed and sullen, did not know his wife or friends, had a vacant demented look, and lost his memory; afterwards, he took a dislike to his wife, and cursed his best friends, wandered about the room, did not know where he was, and passed his water in the bed.

On June 20th, several pieces of bone which had exfoliated from the outer table were removed from the granulating wound, and from this time he gradually improved so far, that, at the end of June, he looked better, and spoke rationally, no longer wet his bed, and was able to sit up daily. His memory was a blank as to his condition from the 15th to the 22nd of June.

On July 8th, he could get up and dress himself, and walk about, but had a vacant absent look, and numbness in his head.

On December 26th, it was noted that he appeared quite well, suffered no inconvenience from his accident, except that preceding an atmospheric depression, he felt a throbbing sensation in the wound, which was now quite healed. He engaged in farming pursuits, and seemed perfectly recovered.

REMARKS BY MR. WHERRY.—The successful issue is, in great part, owing to Mr. De Lisle's unwearied care, and I am indebted to him for valuable notes of the case. Although no rent was found in the dura mater, except at the longitudinal sinus, the fragments of skull removed were so deeply depressed, that the brain must have been bruised, and was probably lacerated. In the treatment, repeated doses of calomel, with ice-bags to the head, proved useful in the early part of the case, but morphia was of the greatest service. The relief which followed the removal of exfoliated bone from the granulating dura mater is worthy of notice. The case illustrates the importance of operation in depressed and comminuted fracture, even when inflammation has set in some days after the accident.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 17TH, 1883.

ARTHUR DURHAM, F.R.C.S., Vice-President, in the Chair.

Occlusion of Vessels by Oil.—Dr. WILKS said that he desired to introduce to the Society Dr. Handfield Jones, who wished to make a communication. That physician believed that in atheromatous conditions of the small vessels of the brain, and presumably also of other organs, the degeneration of the patches of atheroma led to the formation of oily masses within the lumen of the vessel, and so to obstruction.—Dr. HANDFIELD JONES said that he exhibited a number of microscopical specimens and some drawings. The case which he had first carefully examined with reference to this question, was that of a man, aged 48, who had suffered from nervous excitement, fainting fits, and attacks of mild mania for some time before his death; albuminuria was the immediate cause of death. At the necropsy, the heart was enormously hypertrophied, the kidneys were large and slightly granular, and there was general dropsy. The large arteries at the base of the brain were atheromatous, and all the smaller arteries were also the seat of an analogous degeneration; the patches in the smaller vessels consisted of oily and granular matter; occasionally oil-drops occurred alone, and in some sections it was evident that the oil lay free in the lumen of the vessel. some of these oily masses were very large, and, in some cases, a slight thrombotic process seemed to have taken place in their neighbourhood. The degenerative process in the small vessels was evidently the same as that usually recognised in the large vessels as atheroma. The point to which he specially desired to call attention, was the establishment of obstruction of the artery by these oily masses; the areas of the brain beyond were in the same condition as is seen in ordinary thrombosis. He had since examined four other cases and his observations led him to believe that there was no very close correspondence between the amount of atheroma visible to the naked eye in the large vessels, and the amount of these changes to be found in the small vessels.—Dr. CAVAFY inquired whether the serum of the blood had been examined, as, in certain cases of fatty embolism, the blood had been found to be milky from the presence of fat.—Dr. HANDFIELD JONES said that no examination of the blood had been made.—At the suggestion of Dr. WILKS, the specimens were referred to a Subcommittee for report.

Adeno-Sarcoma of Testis, and Secondary Growths in the Viscera occurring in a case of Cardiac Malformation.—Mr. VICTOR HORSLEY brought forward this case, which he said was interesting from two points of view, one physiological, namely, the occurrence of a patent foramen ovale with double pulsation in the neck, and venous pulse as far as the elbows, but no cyanosis; and the other pathological, namely, the occurrence of adeno-sarcoma in the testicle, with extremely rapid growths in the viscera. First, with reference to the cardiac malformation. During life this was suspected owing to (*a*) the extension of the cardiac area of dulness to the middle of the right costal cartilage; (*b*) a loud blowing murmur heard loudest at the costal cartilage on the left side, but conducted up and down the sternum for a little distance; and (*c*) the presence of a venous pulse. A double pulsation was noticed beneath the right sterno-mastoid. A tracing being taken of this (with Marey's tambour) it was found to consist of a carotid wave, followed by a second wave about two-thirds the height of the former. This second wave was proved not to be the dicrotic wave exaggerated, and it was therefore assumed to be the jugular pulsation. At the necropsy the great vessels of the thorax and neck were found to be normal, except that the right external jugular vein was small. The heart presented the following abnormalities:—some hypertrophy of the wall of the right auricle; a patent foramen ovale, of a roundish oval line, one-and-a-quarter inches in diameter; thickening (fibrous) of the tricuspid valve and chordæ tendineae; and union of the segments of the pulmonary valve into a fibrous cone with partial atre-

of the valvular orifice. The debatable point on which discussion was invited was the causation of the venous pulse. Mr. Horsley assumed that it was most probably produced by the auricular contraction. Of previous records in the Society's *Transactions*, in only two cases was a venous pulse noted. In the second place, he discussed the tumours with which the man died. The history of the tumour of the testis was as follows:—The patient was a slightly developed man, who gave no personal nor family history of hereditary disease; he had had pleurisy twice, gonorrhœa once, but had never had syphilis. He was kicked with the knee on the left testicle eighteen months before his death; he suffered intense pain at the time, but took no notice of it for four days; at the end of that time the testis began to swell, and continued to do so up to admission, having grown more rapidly during the last two months. On admission into University College Hospital, the left side of the scrotum was found to be occupied by a firm tumour, fluctuating in its upper third. There was no enlargement of the lymphatic glands. The other viscera, except the heart, were, at that time, apparently normal. The testicular tumour was removed, but the wound, owing to the formation of an abscess just inside the abdomen, never healed. He became jaundiced (growths appearing in liver and lungs), and died of syncope. The tumour of the testis was an adeno-sarcoma, but the whole tumour was riddled with small cystic cavities, lined by columnar epithelium, and containing glairy mucus. The stroma consisted of fibrous tissue, with here and there small masses of sarcoma tissue (mixed round-celled.) The necropsy showed that all the organs were sound, except the heart, lungs, liver, and bladder. The lungs and liver were riddled with masses of new growth, the liver being almost destroyed by the tumour. The lungs were but slightly affected; there was one nodule one and a half inches broad in the upper lobe of the right lung, and a few scattered nodules in the left lung. In both the liver and lung the sarcoma tissue was alone represented, and into this extensive hæmorrhages had occurred, one of which rupturing into the abdomen had caused syncopal death from loss of blood. The sarcoma tissue was the same as that found in the testicle growth, namely, mixed round-celled. In the outer wall of the bladder was a small nodule of the growth. The lymph glands were unaffected, and seeing that the disease in the liver was fully six times as marked as that in the lungs, it seemed to have been improbable that the mechanical, or rather hydraulic, theories of infection in new growths would explain the case. Taken in conjunction with the occurrence of congenital defects in other parts, the case seemed to him to lend support to the theory that the occurrence of new growths was to be attributed to active development, starting up in masses of persistent embryonic tissue included in the tissue of the various organs. Whatever the remoter antecedents, the case was an instance of what was called traumatic malignancy.—Mr. BUTLIN entirely differed from Mr. Horsley with regard to the theory of causation. He could not see any good reason for associating the occurrence of the new growth with the congenital defects. If the new growths had occurred in the parts in which the congenital defects were present, the evidence would have been stronger, but even then not conclusive. So far as he had understood him, Mr. Horsley had apparently ventured to attribute the growths in various parts of the body to a blow on the testicle. The growth was apparently a lympho-sarcoma, and it was certainly curious that no secondary growth in the lymph-glands had occurred.—Mr. HORSLEY, in reply, said that, in using the term traumatic malignancy, he merely meant to infer that the blow on the testicle had started the process of new growth in that organ. Other agencies, such as a low state of health, must be supposed to account for the other tumours. He did not think that the growth was an ordinary lympho-sarcoma, which was a round-celled sarcoma. At any rate, in his experience, the peculiar cystic condition, almost resembling an erectile tumour, was very unusual. The liver was not discoverably enlarged on admission; while he was in the hospital, it was observed gradually to enlarge.

Sarcomatous Ulcer of Back.—Two cases of an unusual form of disease, chiefly of the skin, considered to be most probably sarcomatous, were brought to the notice of the Society by Mr. Davies-Colley and Dr. Frederick Taylor.—Mr. DAVIES-COLLEY said that the specimen he showed was taken from a single woman aged 29, who gave no history of malignant disease or syphilis. She had first noticed, about six months before her admission into Guy's Hospital, a tumour in the gluteal region, and another at the lower lumbar region. The former tumour soon became ulcerated, the ulcer had a red inflamed edge, and in its lower part was covered by a slough of skin. A third tumour subsequently developed in the lumbar region, just below the gluteal ulcer, She was treated with iodide of potassium and mercurials, but without any permanent benefit. She rapidly became emaciated, and died, in an exhausted condition, two months after admission. The *post mortem* examination showed that the subcutaneous tissue at the edge of the ulcer, and at the margin of the tumours, was infiltrated with a soft greyish material, and that there was some softening of the third lumbar vertebra, but no distinct inflammation. All the growths were composed of a delicate reticulum, containing a large number of round nucleated cells; a few of these cells were multinucleated. The growths were apparently not gummatous, and the supposition that they were tubercular was negatived by the absence of tubercular disease in the viscera. He was driven to conclude that the case was one of lympho-sarcoma; but against this view, again, was the fact that the appearance of the ulcer was very unusual, and that at one time it began to heal in its upper part.—Dr. FREDERICK TAYLOR said that his case differed in some important particulars from that above described, for the patient also had inflamation of the pericranium, laryngitis, epididymitis, and certain lesions of the skin, which presented an unusual appearance. The patient, who was aged 42, was a gardener in the country. He first came to Guy's Hospital on account of a condition of nervous disturbance resembling that produced by insular sclerosis. These symptoms had only been present for a few months. There was a peculiar bald patch on one side of the scalp, and the skin there was scaly. He gave no history of syphilis, but improved under large doses of iodide of potassium. Later in the case, a swelling about an inch and a half in diameter, firm, with an abraded surface, appeared on the back, and another on the inner side of the right knee. The iodide was first increased, and then entirely stopped; but the swelling on the back rapidly increased and ulcerated, while that on the lower extremity gradually subsided, and finally disappeared. He had been admitted in the middle of December, and towards the end of that month a number of apparently erythematous patches appeared on his limbs, and some of these sloughed, while others became ulcerated. Shortly after beginning to take calomel baths, which were ordered in January, a large superficial slough separated from the tumour on the back; meanwhile, his nervous symptoms had entirely subsided; and he said if he could only get rid of the place on his back he would be quite well. But, soon after this slough had separated, he began to suffer from pyrexia, albuminuria, œdema of the lower extremities, and died, on February 22nd, from œdema of the lungs. At the *post mortem* examination, no trace of any disease of the nervous system was found which could account for the symptoms noticed in the earlier stage of the case. The skull was thick, and over two areas the pericranium was thickened. The larynx was deeply ulcerated, and there was acute pericarditis and nephritis. The lesions on the skin looked, on section, in places like boils, while in other places there were small sloughs. The tumour of the back was at its base of firm hard material, yielding little juice on section; it had infiltrated all the surrounding tissues. Sections showed that it was made up of large oval or round cells with a fine reticulum. A section of the epididymis, which was enlarged and apparently inflamed, showed that it was infiltrated by a similar small-cell material. The absence of any history of syphilis; the microscopical appearances, which were not those of gumma; and the fact that the testis was not affected, seemed to negative the theory that the disease was syphilitic; there was no reason at all to suppose that it was tubercular, and he was therefore driven to suppose that the case was one of lympho-sarcoma.—The CHAIRMAN said that Dr. Taylor's case had seemed to him, when he examined it at Guy's Hospital, to be a quite unusual form of disease; he had only been able to compare it with two other cases he had ever seen. The one case was that of a young girl, who had been seen by Sir William Gull and Sir James Paget; they had both said that they had never met with an entirely similar case. This girl had a peculiar ulceration and sloughing of the neck; and she died after the ulceration had extended very deeply. The abdominal glands were found to be enlarged; but the *post mortem* examination had not, unfortunately, been very complete. The second case, which this case had recalled to him, was that of a man in whom a large number of small tumours appeared gradually in various parts of the skin, and slowly enlarged. Some of these tumours sloughed, others ulcerated. The man finally died from exhaustion. No disease of the internal organs was discovered. The microscopical examination of the tumours showed that they were more or less distinctly sarcomatous. However, all these cases were unusual, and he would prefer at present to speak of them as nondescript, waiting until the examination of a larger number of cases permitted an accurate classification. —Dr. PYE-SMITH had seen Dr. Frederick Taylor's case, and he had felt quite satisfied that it was not syphilitic; the slough somewhat

resembled that which occurred after carbuncle. He had only met with one case which was at all similar; in that instance, the first symptom was the appearance of a number of little patches in the skin, which at first looked like purpura, but which gradually enlarged and became distinctly sarcomatous. The case had been fully recorded and discussed by Dr. Hilton Fagge in the *Guy's Hospital Reports*.—Dr. STEPHEN MACKENZIE said that the cases recalled to his mind a case which he had seen under the care of Dr. Andrew Clark some years ago. It was that of a man who had large masses of glandular tumours in the neck, and on the front of the chest a large ulcer of peculiar type. The case was considered to be an instance of lymphadenoma or lympho-sarcoma. He had seen another case where there was no ulceration, but where in a man, with anæmia and hæmorrhages in the retina and other organs, hundreds of tumours developed in the connective tissue: these also consisted of lymphadenomatous tissue.—Mr. BENDALL said that a case of this class had been recorded by Mr. Clay of Birmingham. The patient was a man, who presented large flat oval tumours on the chest, back and head; many of these tumours were ulcerated on the surface. While in the hospital, the man had several attacks of erysipelas, though the disease was not prevalent; several tumours disappeared, and some of the ulcers healed under Mr. Clay's treatment. He, however, eventually died. A tumour which was excised during life was found to be confined entirely to the skin, and to consist of a small-celled growth.—Mr. BUTLIN doubted whether these tumours should be looked upon as ordinary malignant tumours, or whether they occupied an intermediate position between them and the infection tumours; some of the facts of the cases certainly seemed to agree very well with the latter hypothesis; in either case the disease might be due to a micro-organism. Cohnheim had raised the question with regard to certain cases of lympho-sarcoma, which had been in certain localities regarded as infectious. Mr. Butlin was quite prepared to believe, indeed, he even now, having in mind what had been lately discovered with regard to tubercle, to glanders, and to syphilis, thought it probable, that some cases at least, of lympho-sarcoma were due to a parasitic organism. He even felt inclined to attribute a similar origin to other malignant tumours.

Hypertrophy of Limbs.—Mr. EVE exhibited two specimens of this condition from different subjects. The first was a foot which had been amputated by Mr. Macnamara. The patient was a woman, aged 24; the foot had been larger than its fellow at birth, but had begun to enlarge with great rapidity about seven months before the operation. The foot was four and a half inches longer than the other, but the great part of the huge bulk to which it had attained was due to an enormous overgrowth of the skin of the sole. The other foot had also been enlarging for about four months; this patient also presented a fibrous epulis; osseous outgrowths from the patella, os-calcis, and first metatarsal bones; and asymmetry of the head, including the brain and tongue. The second specimen was a hand. The patient was a man, aged 34, the enlargement had been noticed at birth, but about a year before amputation the limb had begun to increase rapidly in bulk; the hand was generally and proportionately enlarged. The thickening and increased bulk of the skin appeared to be in both cases due to an overgrowth of the chorion. In these cases the lymph spaces, and the lymphatic vessels were enlarged, but this had not been present in other cases of this class, and was therefore not an essential phenomenon. These two cases followed the general rule of such cases, in that some enlargement had been present at birth, and that in adult life a rapid growth occurred. The relation between these hypertrophies and new growths was probably not a very distant one; a peculiar ulceration had been noticed in some cases; the skin at the margin of the ulcer became much papillated, and an ingrowth of epithelium occurred, but not enough to constitute an epithelioma.

Card Specimens.—Mr. LEDIARD: Spindle-cell Alveolar Sarcoma; Dry Caries of Knee-joint. Mr. WATSON CHEYNE: Bacilli Tuberculosis (in tissues). Dr. FREDERICK TAYLOR: Intestinal Obstruction from Adhesion of Bowel to Mesentery. Dr. ABERCROMBIE: Complete Atresia of right Ventricle of Heart. Dr. G. H. SAVAGE: A Brain with Symmetrical Tumours; A Brain with one half of the Cerebellum absent. Dr. PERCY KIDD: Primary Cancer of Pancreas. Dr. MORRISON: Laryngeal Phthisis. Mr. HORSLEY: Syphilitic Intestine and other organs in a Child: recent specimen.

HER ROYAL HIGHNESS THE PRINCESS CHRISTIAN has consented to open the new wing of the North West London Hospital, Kentish Town Road, some time in June.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 13TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

Removal by Internal Operation of a Pin from the Larynx of a Boy aged 13, in which it had been Impacted Thirteen Months, and had caused Temporary Fixation of the Left Crico-Arytænoid Articulation.—Dr. FELIX SEMON read notes of this case. The patient was a boy aged 13, who, on November 25th, 1881, held a pin-head foremost between his teeth, when, during the act of laughing, it slipped to the back of his tongue, and became fixed in the left side of his throat. No immediate serious symptoms followed; but, during the next twelve months, he had several paroxysms of pain in the left side of his throat, difficulty of swallowing solids, and spasmodic cough. These attacks were separated from each other by perfectly free intervals; they grew, however, more and more severe, and, finally, on two occasions, short and slight paroxysms of dyspnœa were associated with them. The boy was then (October 30th, 1882) brought to St. Thomas's Hospital, and admitted under Mr. Sydney Jones, who examined him under chloroform, and felt the point of a pin through the mucous membrane of the lower part of the pharynx on the left side. Dr. Semon then made a laryngoscopic examination, which resulted in the discovery that the pin was not, as had been so far supposed, impacted in the œsophagus, but in the larynx and that its point only projected into the gullet, where it was seen to project about one-eighth of an inch out of the arytænoid end of the left ary-epiglottic ligament, in close proximity to the base of the left arytænoid cartilage. All the parts in its immediate neighbourhood (left border of the epiglottis, left ary-epiglottic fold, and left arytænoid cartilage) were seen to be considerably tumefied, and the left arytænoid cartilage remained immobile during phonation and respiration. The voice was perfectly normal; there was no dyspnœa. Mr. Sydney Jones consented to attempts at internal removal being made before an external operation was resorted to. After removal of the excessively large tonsils, and after short preliminary practice by means of the laryngeal probe, the boy tolerated the introduction of instruments, and, on December 26th, 1882, Dr. Semon succeeded in seizing, under the guidance of the laryngeal mirror, the pin with a pair of lateral serrated forceps, and extracting it. Its length was found to be one inch and a quarter. There was no reaction after the operation. Four days afterwards it was ascertained by laryngoscopic examination that the immobility of the left arytænoid cartilage formed a prominent feature, and the epiglottis being much better elevated after than before the operation, it was seen that both left arytænoid cartilage and left vocal cord remained, on attempted inspiration, immobile in the position of phonation. There was no dyspnœa, though the glottis only opened to half its normal breadth. On the other hand, on attempted phonation, the right vocal cord completely joined its immovable left companion, and the voice was perfectly normal. The boy was dismissed on the fifth day after the operation from the hospital. Three months after the operation, the mobility of the left half of the larynx had decidedly improved, thought it was still defective compared with that of the right side. Dr. Semon remarked that, as yet, successful extraction through the mouth of foreign bodies after so long an impaction and after the production of such considerable lasting changes in the larynx as were observed in this case, had been but rarely reported. Apart from this, there were two other points of intrinsic interest in the case. The first was the fact that, without any sign of a suppurative process ever having taken place during the time of impaction of the foreign body, yet chronic and important changes had been produced, which distinctly pointed to an inflammation of the perichondrium having formed part of the inflammatory paroxysms spoken of in the history of the case. The process which, in his opinion, had led to these changes, was an adhesive perichondritis, the existence of which form of inflammation, so far as the laryngeal cartilages were concerned, was scarcely mentioned or even admitted in text-books on diseases of the larynx, but to which he had already (in 1880) drawn attention in a paper on the subject published in the *Medical Times and Gazette*. The second and, perhaps, most important point was the fact that so great a change as complete immobility of one-half of the larynx had been produced, and endured for months, without the slightest alteration in either voice or respiration drawing attention to the larynx. Dr. Semon wished to urge this point, not only for the sake of this individual case, or of joint affections of the larynx, but with regard to a point of still greater importance, namely, the diagnosis of not only laryn-

eal, but also cerebral and thoracic diseases. He had shown elsehere (*Archives of Laryngology*, 1881) that there existed a distinct proclivity of the abductor fibres of the recurrent laryngeal erve to become affected sooner than the abductor filaments, or ven exclusively in cases of acute or chronic, central or peripheral esions, which affected apparently either the whole of the centres r the whole of the trunks of the motor nerves of the larynx. In uch cases the laryngeal changes would consist in an immobility of he vocal cord, the muscles of which were supplied by the affected erves, in the phonatory position, *i.e.*, in the position occupied by he left vocal cord in this case. It was evident that a similar abence of all symptoms, subjective and objective, might attend such neuropathic change as existed in this case, in which the immoility was due to mechanical causes; and the natural conclusion rom this was that the absence of all abnormal phenomena did not ustify the inference of a perfect integrity of the parts; in other ords, that limiting the examination of the larynx to those cases nly in whlch certain symptoms imperiously demanded its inspecon meant, possibly, depriving oneself of a very important and aluable aid in arriving at a positive diagnosis. In reply to the resident, Dr. Semon said that he did not think there would e complete reparation, and that no local application would be of alue.

Erythematous Eruption in Enteric Fever.—Dr. WHIPHAM reted the particulars of two cases lately under his care in St. eorge's Hospital, in which an eruption resembling that of scarlana occurred. The first was in a cabman, aged 36, who had been ddicted to drink, but who for twelve months previously to his adission had been a teetotaler. The fever symptoms had commenced urteen days before, but the bowels had been regular and the otions natural. On admission the man complained of sore-throat id headache, and had a bright erythematous eruption on the trunk, gs, and arms. The right tonsil was much swollen. His tongue as thickly coated, his pulse 128, and his temperature nearly 105°. ext day the eruption was more marked on the arms and legs, and had tended to the feet. On the third day after admission the patient ecame very restless and delirious, and the bowels, which had been p to this date obstinately constipated, were opened freely by a rge. The diarrhœa thus set up, though somewhat moderated toards the last, continued more or less up to the time of the man's eath, *i.e.*, four days after his admission. No typhoid eruption was esent. At the necropsy extensive ulceration of Peyer's patches was und. The second case was that of a child, aged 4, who was received to hospital on October 6th, 1882. He had already suffered from arlatina, measles and whooping-cough. Feverish symptoms manisted themselves on the day before his admission, and when he me under observation his temperature was 104.2°, pulse 120. His ngue was red at the tip and edges, and the papillæ protruded from central white coat. On the day after his admission a red eruption was noticed on the child's legs, and he was therefore isolated. ext day the erythema had greatly extended, and was very brilant. The tonsils were red and swollen. The bowels were constited. On October 10th, four days after admission, the eruption id faded considerably. The bowels remained inactive, and a rge of Carlsbad salt was administered, which acted freely. On e 11th, the red eruption had disappeared. On the 13th, the temerature reached 105°, and the pulse 132. The child was delirious, id had fits of screaming. The bowels acted once after castor-oil, e motion being partly formed, and of a clay colour. On October th, characteristic spots of enteric fever appeared, but there never as desquamation at any time. From this date the symptoms were early those of enteric fever, and the child died on the nineteenth y after admission. The *post mortem* examination revealed extenve ulceration of Peyer's patches and great swelling of the mesenric glands. Dr. John Harley, in *Medico-Chirurgical Transactions*, l. lv, had given twenty-eight cases in which scarlatina was accomnied by swelling of Peyer's patches, but in only two of which ceration was found; and also a second series of six cases in which arlatina preceded enteric fever; and he had further narrated three ses of "mixed scarlet and enteric fever." He also quoted two milar cases recorded by M. Forget. Dr. Murchison had said that, many cases of enteric fever, the characteristic eruption was preded by a delicate scarlet rash, and added that "this was not pecuar to enteric fever, but occurred in other forms of pyrexia." Sir . Jenner, speaking of a red rash in enteric fever, said that the disse was mistaken for scarlatina. Dr. Whipham had lately seen a se of variola which was preceded by erythema of the abdomen and ighs. The question was, were these really cases of double poisoning, f mixed scarlet and enteric fevers? The absence of desquamation, and the fact that an erythematous eruption was not uncommon in variola, pyæmia, and other forms of pyrexia, led to the conclusion that they were really instances of enteric fever preceded by erythema, and not mixed cases of scarlatina and enteric fever.—The PRESIDENT asked what explanation could be given of the increased rate of breathing, and what was the probable cause of death in the cases described. —Dr. MAHOMED said that he had seen roseolous eruptions precede several cases of typhoid fever. In the majority of these instances there was a subsequent desquamation of a trivial character. As an exception, however, he had met with a case of enteric fever in which the desquamation was almost as perfect and as free as in a typical instance of scarlet fever. He was in the habit of speaking of four rashes which occurred during the progress of typhoid fever —roseola, rose spots, *taches bleuatres*, and miliaria. Similar red rashes had been observed to precede nearly all forms of specific fever. Their occurrence was well known in cholera and variola: they had been observed occasionally in typhus.—Dr. CAVAFY thought that rashes of an aspect quite similar to those of scarlatina possessed a very wide range in their occurrence. There were the various rashes produced by drugs of different kinds, also those found in association with slight surgical fever, puerperal fever, menstruation. It must be regarded as probable that in all these instances there was some common bond of connexion; this was probably an irritation of the nervous system either by direct traumatic influence or through the blood. In scarlatina he supposed there was paralysis of the vaso-motor centre, due to the action of the poison. In the traumatic eruptions there was immediate irritation of a peripheral nerve. He related an outline of a case that he had communicated to the Clinical Society, in which salicylate of soda seemed to have called forth a remarkable group of symptoms: sore-throat, scarlatiniform rash on thorax, circumscribed erythemata on backs of hands and extensor surfaces of forearms. The rashed faded in a day, and the erythema passed to the formation of herpetic vesicles. Finally there was desquamation of the arms, indistinguishable from that occurring after scarlet fever. The ingestion of quinine had been known to be followed by the development of a scarlatiniform rash. Surveying the subject generally, it would, perhaps, be best to regard the matter as still in abeyance. At all events, he knew of no certain means by which to distinguish such erythemata from true scarlet fever rash.—The PRESIDENT quite agreed with Dr. Cavafy that the nervous system was operative in the production of the erythemata in question. On examination of the chest of nervous females, a diffuse red injection was seen in about seven out of ten cases, especially when the observation was made in front of the window with plenty of light. He was in the habit of recording the various forms which this erythema assumed, and thought that an explanation must be sought in the temperaments and habits of the patients. He was familiar with the presence of the scarlatiniform rash appearing in the actual course of typhoid fever, and had, rightly or wrongly, attributed these to a special affection of the nervous system. He had seen them most frequently in anomalous cases in which the nervous system was specially involved.—Dr. BROADBENT was well acquainted with the delicate erythema which so frequently ran before typhoid fever, but he certainly would never confound this with a true scarlet fever rash. When a well marked scarlatinal rash came out in any part of the course of enteric fever, he always regarded it as evidence of a concurrence of the two separate diseases. He had seen all forms of combination between scarlatina and enteric fever. Dr. Mahomed had recited one case this evening, and he assuredly regarded Dr. Whipham's first case in the same light. He had lately shown at the Harveian Society a man of weak constitution with decided loss of tone, in whom an erythematous eruption, not at all unlike a syphilitic roseola, appeared every time the patient was stripped. There was, in addition, a marked *tache cérébrale*, and the muscular irritability was highly marked, each tap causing a well developed local contraction. —The PRESIDENT added that the erythema medicorum, or doctor's rash, of which he had spoken, sometimes lasted thirty-six hours.— Mr. HERBERT PAGE stated that Hebra had described the cutaneous eruptions as preceding many acute specific diseases, and especially small-pox. Mr. Page had seen an acute papular eruption occupy a large surface of the body, and fade away prior to the appearance of an abundant confluent rash on the face of a severe case of small-pox, in which the patient died about the ninth day. He also mentioned a somewhat similar antecedent which happened in one of his own children.—Dr. WHIPHAM, in reply, said that he had brought the cases forward rather with the view of eliciting the opinions of members as to what was the proper course to be adopted. He thought Dr. Cavafy's suggestion to isolate the patient in a separa-

tion-ward was the right proceeding. He rather came to the conclusion that his second case was not scarlatina, because the brilliant red eruption had not been followed in nineteen days by desquamation. He had nothing to say against the view that scarlet fever and typhoid were frequently concurrent, as Dr. Broadbent held.

A Case of Lateral Curvature of the Spine, illustrating its Treatment without the Use of Mechanical Supports.—Mr. BERNARD ROTH brought this case forward. The treatment employed had been described in the BRITISH MEDICAL JOURNAL of May 13th, 1882. The following was a summary of that paper. 1. The importance of noticing osseous deformity, if any, of the spine and ribs, and whether the patient could be at once restored to the normal position, and, if not, to what extent. 2. If even slight osseous deformity were present, complete cure was impossible. 3. Even severe cases of lateral curvature often had no osseous deformity, and could be at once temporarily restored to a normal position. 4. A patient with confirmed curvature, with or without osseous deformity, was so habituated to the vicious position that his attempts to improve the spine increased the deformity unless instructed by the surgeon. 5. Exercises of the spinal muscles, with or without resistance by the surgeon, while the patient was in the improved position were absolutely necessary. 6. Good positions should be assumed at all times, especially in sitting, by means of suitable chairs. 7. Moderate walking was beneficial. 8. Lying prone or supine was not curative, as the spinal muscles were not strengthened by it. 9. All spinal supports, where the patient could, by an effort, maintain an improved position of the spine, even for a few seconds, were injurious or useless. 10. Swinging by the head did not strengthen the spinal muscles. 11. By avoiding all vicious positions, by good ones being shown and maintained, and suitably prescribed exercises carefully practised, better and quicker results were obtained than by any other treatment hitherto proposed.—*Case.* Miss W., aged 18, a student at the London Academy of Music, was first seen on March 4th, 1882, with this history. Up to four years ago, strong and well, then, without any apparent cause, she began to stoop, and have backaches. Becoming gradually worse, a hospital surgeon of Brighton examined the spine, and, finding curvature, ordered the patient to lie down for two hours daily. At the end of a year, as the patient became worse, an ordinary steel support with arm-crutches was ordered. This had been worn for two years, meanwhile the patient having become more deformed and suffering more. On examination, the patient presented confirmed lateral curvature, the whole spine being convex to the left, the right scapula more than two inches below the left, with considerable exaggeration of the cervico-dorsal antero-posterior convexity, causing poking of the head, flat chest anteriorly, and undue prominence of the abdomen. There was slight permanent rotation to the left of the lumbar vertebræ, and slight increase of the convexity of the left ribs posteriorly. The patient, although so apparently deformed, could be placed in an almost normal position, and maintain it, by a great effort, for a few seconds. The spinal support was ordered to be left off completely, and a few simple exercises shown. December 8th.—The patient was seen for the second time. It was found that the state of the spine was unaltered from the first visit. On December 20th six photographs were taken. Three showed the posterior, lateral, and anterior views of the patient in her habitual position; the remainder, the corresponding views in the best possible position in which Mr. Roth could place her. The contrast between the two sets of photographs was very marked. The improved position always felt very unnatural at first, as in this case. It was maintained that no instrument yet invented could put or keep a patient in the improved position as shown in these three photographs. The prognosis was that she could be so strengthened by three months' daily treatment, that this temporary improved position involving such great effort when the photographs were taken, would become a permanent one without any effort, and that all pain would disappear; that was, practically, a complete cure would ensue, although a slight permanent rotation of the lumbar vertebræ would remain. On December 23rd she began daily treatment. The same prescription of exercises as that quoted from the BRITISH MEDICAL JOURNAL was used. On January 13th the patient passed the whole day without headache for the first time for two years, and on January 16th the dressmaker had to widen her dress five inches across the chest. On examining the back the habitual position was found to be decidedly less abnormal. Her family noticed a decided improvement in her position at home. Her appetite was much better, especially at breakfast. Since January 20th the patient had been practising a prescription of which the "keynote" was a position with the right arm directed upwards, the left arm outwards, while the spine was rotated to the right and slightly flexed laterally to the left. The patient has continued to improve up to the present time, and there was every reason to expect that the prognosis of a practical cure at the end of three months' treatment would prove a correct one. Measurements of the arcs of the different curves in a case of lateral curvature were misleading if a note were not also taken of the improvement which could be effected by the patient's voluntary effort properly directed by the surgeon. Lastly, rough and ready gymnastic treatment, such as advising a patient to swing on a trapeze with one hand higher than the other, or to use a skipping-rope, was not to be compared in efficiency with systematic localised exercises (medical gymnastics) while the patient was placed in the improved position. The latter combined with attention to the avoidance of all injurious positions during the day constituted the most successful and rapid treatment of lateral spinal curvature. The young lady, the subject of the lateral curvature, was exhibited, and went through the various phases of the "medical gymnastics," which had been practised with the view of bringing about a cure. The muscles, when in action in the different movements, came out very strongly. The case seemed to have undergone marked improvement. Photographs taken by the instantaneous method were exhibited, and demonstrated the various attitudes of the patient.

A Case of Tabetic Arthropathy in which the Tarsal Bones of both Feet were involved.—Mr. HERBERT PAGE read the following account. This case was originally shown, in the museum for living specimens, at the International Medical Congress. The patient was a man, aged 30, who, in October 1880, began to have swelling of his right leg and ankle. The foot gradually increased in size, and when first seen, in February 1881, there was great enlargement in the region of the tarsal bones, which were freely movable on one another in any direction. A month later, broken corns appeared on the sole with an ulcer on the big toe. These sores were absolutely painless, as, indeed, was manipulation of his foot—a circumstance which led to the discovery that the patient was the subject of tabes dorsalis, the knee-jerk being absent, and the pupils presenting the "Argyll Robertson phenomenon." There was no ataxia in gait. While under observation, the left foot became affected in a similar way to the right, very rapidly and without pain. Four years previously, he had severe lightning-pains down the limbs, and, two years before, he had an illness called "nervous debility," of which the most noticeable feature was profuse vomiting every day for nine months, which began and ended quite suddenly, without known cause as to its origin or its termination—a true gastric crisis. Attacks of a similar kind had occurred since the patient had been under the author's observation, and each of them had begun with severe rigor, and been marked by the passage of large quantities of blood in the urine, associated, at the same time, with profuse vomiting, diarrhœa, and increased lightning-pain. The patient had now been free from these attacks for some months, and the swelling of the feet had subsided. The feet, however, were strangely deformed, owing to an alteration in the relative position of the affected bones. The other symptoms of tabes dorsalis remained the same, but there was still no ataxy. The history of this case having been given at considerable length, the author avoided speculation about it, expressing the belief that he should not do wrong to be content at present with the clinical study of the disease. He pointed out the rarity of this particular form of arthropathy, only one instance of which had been seen by M. Charcot. Though rare, it had, however, many features in common with the arthropathies affecting the larger joints. He laid stress on the practical importance of recognising these diseases in the surgical wards of hospitals where they were most likely to be found, the common symptoms of ataxy being often absent, and therefore rendering the diagnosis more difficult. One foot of his own patient would in all probability have been removed—so bad was it—had not the cause of the affection been accidentally revealed by the symptoms. The arthropathy had subsided, however, and left a useful though deformed, limb. The occurrence of attacks of paroxysmal hæmaturia was a striking feature in the case, and the association thereof with the other symptoms of a crisis seemed to indicate that it was not less a symptom of the disease than the vomiting, the diarrhœa, and the joint-affections. The history might therefore suggest a new line of observation and inquiry in the study of the cases of paroxysmal hæmaturia or hæmatinuria, whose cause and origin were so often obscure.—Dr. ALTHAUS objected to the adjective "tabetic" on etymological grounds; he said it ought to be tabic or tabedosic.—Dr. BUZZARD thought the remarks of Mr. Page anent the attacks of paroxysmal hæmaturia or hæmatinuria of much import. He had met with no similar case. It was possible the

ases of apparently simple paroxysmal hæmoglobinuria were really ne only manifestations of tabes dorsalis. He had frequently pointed it the remarkable association of the occurrence of the gastric mptoms and the arthropathies. This was illustrated by reference the report of a recent case at one of the provincial medical socie-es. In this instance, also, there was evidence of a healed per-rating ulcer of the foot. Quite recently, he had met with an nomalous case in which the left great toe-nail had become the seat an ecchymosis without any injury; this had caused the separa-on of the nail, and it turned out that precisely the same thing ad happened last summer to the right great toe-nail.—Dr. MAHOMED lated a case of locomotor ataxy, in which the earliest sym-om was atrophy of the optic discs; there were characteristic ains, but no ataxia. In this patient, there was marked poly-ria, as much as 180 ounces being passed *per diem*, of a ecific gravity of 1004. The polyuria was not permanent. Mr. PAGE, in reply, quoted some facts from an American esis, in which spontaneous loss of nails and peculiar change of the e-nails had been observed in a number of cases. Regnaud had so described recurrent attacks of nephritic colic, closely simulat-g the violent attacks usually met with in cases of renal calculi. r. Buzzard's suggestion that paroxysmal hæmaturia might really be ne to tabes dorsalis, in some instances, was further borne out by r. Page's case; for the man had distinct attacks of shivering, hich, had it not been for the collateral facts, might have been attri-uted, as usual, to "cold."

Living Specimens:

Dr. FELIX SEMON showed the case of a woman with Ankylosis of e Arytæno-cricoid Articulations, probably of syphilitic origin. He so showed the boy from whom he had removed the pin; this patient d recovered to a great extent, so that the joint could not now be id to be ankylosed. The impairment of mobility had been of a mporary, and apparently extracapsular character.

Mr. BARKER exhibited his case of Subperiosteal Amputation at e Hip-joint. The patient walked about the room with an artificial mb in a very satisfactory manner.

Mr. CLUTTON brought forward the child in whom he had cured a ina Bifida, by tapping and injecting the cyst with Morton's fluid.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4TH, 1883.

H. GERVIS, M.D., President, in the Chair.

Knotting of Umbilical Cord.—Dr. GODSON exhibited a four months' tus with placenta, showing a knot in the umbilical cord, with rophy of the cord on either side of it, leading, he believed, to the ath of the fœtus.

Dermoid Cyst.—Dr. EDIS exhibited a dermoid cyst removed by m. It was so extensively adherent, that it was difficult to deter-ne whence it had sprung. Both ovaries and broad ligaments were moved with it. The patient recovered.

Hernia of an Uterine Fibro-myoma.—Mr. KNOWSLEY THORNTON owed an uterine fibro-myomatous tumour, weighing eleven pounds d a half, removed by him. The abdomen had been opened some ars previously, but the operator, then finding the tumour uterine, osed the wound. A hernia of the tumour resulted, it became ad-rent and ulcerated, and bled. Mr. Thornton removed it with the erine appendages. The tumour was of the soft kind, and, he ought, might have been cured by removal of the uterine append-es; but it was impossible to close the wound without removing e uterus. He believed the case unique. The patient was doing ell.

Axis-traction Vulsellum Forceps.—Dr. ROBERT BARNES showed essile submucous fibro-myoma, and a new axis-traction vulsellum rceps, which he had devised and used for its removal. By this strument, the tumour was dragged within reach without undue or isdirected force, and room was left for manipulation in front. He ought this application of the principle of Tarnier's forceps would ove of great value.—Dr. AVELING had invented and published rceps of the form permitting axis-traction ten years before Tar-er's forceps of the same form was made known.—Dr. HEYWOOD MITH suggested that these forceps would be better if the blades ere made separable.

Cyst and Tumour of Placenta.—Mr. MARK (for Dr. JOHN ILLIAMS) exhibited a placenta having on its frontal aspect a cyst e size of a Tangerine orange, at the base of which was a tumour, parently fibrous, the size of an almond.

On the "Pressure of the Femora," and its Influence on the Shape of the Pelvis.—The paper, by Dr. CHAMPNEYS, was read. After a brief review of the history of pelvic literature, special mention was made of the study of the fœtal pelvis by Fehling, which showed that many characters previously supposed to be the result of the operation of mechanical influences after birth, were really congenital and antecedent in date to the operation of such influences. The same applied to the rickety fœtal pelvis. It followed from this that the scope of mechanical influences, as hitherto accepted, had to be reconsidered. In considering the influence of the "pressure of the femora," fallacies were pointed out, and all possible sources for this pressure were reviewed. These included: 1. Passive resistances, (*a*) bones, (*b*) ligaments, (*c*) couples. 2. Active operations, (*a*) action of muscles. These were in turn scrutinised, and the conclusion reached that "the action of the muscles joining the femur and the pelvis is a true cause of the 'inward pressure of the femora,' and is aided by the muscles favouring inversion of the foot." A corollary followed, "that use of the lower limbs will increase the 'inward pressure of the femora'." In unsymmetrical pelves, and pelves in which the acetabula are within the line of the body-weight, other consequences followed. These were illustrated by three figures. The phrase "increased pressure on the overweighted side," was shown to include many different factors.—Dr. ROBERT BARNES suggested that one factor in producing flattening of the rickety fœtal pelvis, might be pressure from the attitude of the fœtus, with the thighs doubled up.—Dr. MATTHEWS DUNCAN agreed with the paper in the main. Dr. Champneys had given a valuable sketch of the history of the subject, and his special study of the action of femora as a result of body-weight and muscular force made the paper a great contribution to pelvic literature. He (Dr. Duncan) would not give muscular action a paramount position, and for that still vindicated the great force of body-weight.—Dr. AVELING drew attention to a pelvis in the Society's museum, the shape of which was normal, although congenital dislocation of the hip was present.—Mr. DORAN thought muscular action in the fœtus was a force too slight and intermittent to be capable of altering the shape of cartilaginous bones.—Dr. CHAMPNEYS agreed that gravity was the most powerful of the forces acting on the pelvis. Although the action of mechanics might have been pressed too far, it was impossible, in the face of the malacosteon pelvis, to upset it. He did not think that the fœtal attitude was capable of flattening the fœtal pelvis, for the fœtus floated in fluid, and therefore was not exposed to any inequality of pressure; and its attitude was not, for it, one of constraint.

Case of Labour with Atresia Vaginæ.—This paper, by Dr. FANCOURT BARNES, was read. The patient was aged 21, pregnant for the first time. The vagina was represented by a *cul-de-sac* about an inch and a half deep, at the bottom of which was a pinhole aperture, the orifice of a canal of no larger dimensions, leading into the uterus. This canal traversed about two inches of tissue before reaching the uterine cavity. The patient was anæsthetised, the canal stretched with a Priestley's dilator, then incised on each side with Simpson's metrotome, and still further enlarged by laceration with the finger. Delivery was then accomplished with Barnes's forceps, it being found impracticable to apply Tarnier's. The operation lasted an hour, and was performed under carbolic spray. Mother and child did well.—Dr. EDIS confirmed Dr. Barnes's account of the case.—Dr. HEYWOOD SMITH mentioned a case he had formerly brought before the Society.—Dr. FANCOURT BARNES replied.

The report of the Committee upon the specimen shown by Dr. Wynn Williams at the last meeting was read, to the effect that the tumour was a submucous fibroid.

HARVEIAN SOCIETY.

APRIL 5TH, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Congenital Dislocation of Radii.—Dr. SYDNEY PHILLIPS showed a case of congenital dislocation of both radii. The patient was a girl aged 17, otherwise well developed. The head of each radius formed a well-marked prominence behind the external condyle of the humerus. The elbow-joint could be fully extended, and could be flexed to almost the normal degree, but only with the hand in a semi-pronated position. This action was produced mainly by the supinator longus muscle, and the biceps appeared to be much atrophied. The head of the radius could be rotated to a small extent; and the various prominences of the elbow-joint, as well as the head of the radius itself, were fully developed. The mother of the child stated that the deformity was noticed almost immediately after the birth of the patient. Cases of dislocation of the bones of the forearm were stated (Holmes's *Principles and Practice of Surgery*) to have

occurred from traction on the limb by the accoucheur during delivery; but this did not appear to have been the cause in the present case, as the deformity was symmetrical, and there had been no difficulty in the birth. Congenital dislocations were suggested by Billroth to occur from accumulation of fluid in the capsule of the joint during intra-uterine life; but Dr. Phillips thought that this would not displace the head of the radius with the elbow in its then flexed position. Possibly the radius was developed in the abnormal position.

Tubercular Ulceration of Pelvic and Abdominal Organs.—Dr. A. Q. SILCOCK exhibited a kidney, bladder, and testicle, taken from a patient who had recently died in St. Mary's Hospital. The left kidney was much enlarged, weighing twelve ounces, and very firmly adherent to the perinephritic fat. Scattered through its substance were numerous miliary caseous tubercles, which had in many places coalesced into much larger patches. The mucous membrane of the ureter and pelvis was beset with small circular ulcers, and submucous caseous deposits. A few caseous nodules were found in the right kidney, and both ureters were considerably dilated. The bladder showed a large number of ulcers varying in size from a pin's head to a florin; the larger ones extending deeply into the submucous tissue; the mucous membrane was vividly injected. The prostate was slightly but irregularly enlarged from the deposition of caseous matter in its substance; the vesiculæ seminales and vasa deferentia on both sides being similarly affected. There were a number of small circular ulcers in the mucous membrane of the urethra. The right epidymis was also enlarged and nodular, being for the most part caseous; the skin was adherent to the globus minor, and the tunica vaginalis was partly adherent. A few miliary caseous tubercles were seen in the gland-substance of the testicle near the mediastinum, the connective tissue of which was increased in amount. Microscopically both in the kidney and testis the process was essentially an intertubal growth of a small celled granulation-like tissue, tending to caseation or to the formation of ill-developed fibrous tissue. Tubercular ulcers were present in the intestines, and grey miliary tubercles in the lungs, with extensive recent tubercular pneumonia. The disease, as far as the genito-urinary tract was concerned, seemed to have commenced in the left kidney, and spread therefrom to the bladder, testicle, prostate, and right kidney, the patient eventually succumbing to the pneumonia. The specimens were interesting as showing a complete series, not often obtainable; and attention might be drawn to the fact, that, although not very uncommon, tubercular ulceration of the bladder was not adequately described, or only barely mentioned in most of the modern English text-books of surgery, and clinically was often overlooked.—Dr. PHILLIPS asked the reasons for supposing that the tubercle had progressed downwards from the kidney; he thought the progress always took place upwards from the testicle.—Dr. BROADBENT and Dr. HICKMAN also spoke.—Dr. SILCOCK, in reply, said his reason for supposing the disease to have begun in the kidney and travelled downwards, was that that organ was caseous, while he had never seen a tubercular testis in such an early stage.

Peculiar Disturbance of the Capillary Circulation.—Dr. BROADBENT showed a patient who was suffering from a peculiar disturbance of the capillary circulation. Eight years ago he had a sunstroke, which for a time rendered him insensible; previously to this, he had frequently suffered from pain in the occipital region and vertigo, which since that time had been much aggravated. Seven weeks ago, while looking over a bridge, he was seized with a sudden and violent pain at the back of the head, and intense giddiness, upon which supervened unconsciousness, lasting for fifteen minutes; since that time he had had many similar attacks, as many as three or four a week. He was a man aged 46, somewhat deaf, and with a confused manner when spoken to. The patellar tendon reflex was increased, especially on the left side, ankle-clonus was absent; there was slight loss of sensibility in the lower extremities. On speaking to the patient a blush appeared on the face, which extended over the chest and back, and lasted several minutes, leaving a mottling of the skin, which somewhat resembled roseola. The *tache cérébrale* was unusually well marked, a line of vivid redness appearing in the track of the finger-nail drawn over the skin; myoidema was also present, though not in so marked a degree as when the patient first came under observation. Dr. Broadbent stated that this was a condition occasionally seen when the nervous system was broken down by overwork and strain. The *tache cérébrale* was most frequently seen in tubercular meningitis, but it was often present in other acute cerebral diseases, and sometimes in enteric fever; its recurrence in association with prostration of the nervous system without fever was interesting. He was reminded of cases in which artificial urticaria could be produced by very slight irritation, but he had seen this in robust health, and it appeared to be congenital. Myoidema was most common in phthisis, and in the late stage of enteric fever, and was generally indicative of wasting under fever. In the case before the meeting, however, there was no history of any febrile condition. It might possibly have been due to insufficient food, which, during the siege of Paris, had given rise to myoidema on a large scale. Dr. Broadbent had once seen this condition in a single muscle, the right trapezius, in a case of aneurysm of the aorta.

Antiseptics in Midwifery.—Dr. JOHN WILLIAMS read a communication on "Antiseptics in Midwifery in Lying-in Hospitals and Private Practice." He detailed the means taken at the Hospital for Women and Children, for avoiding septic infection after childbirth. These means were perfect cleanliness in the patients themselves, strict attention to the state of the wards, which were cleaned daily, and were periodically cleared of patients, and disinfected with sulphur; during the act of parturition an antiseptic inunction of the vagina and of the head of the child at its descent during each pain, and, after delivery, daily vaginal douches with warm water. By such means, the mortality of the institution had been much decreased being now one in two hundred.—Dr. MEADOWS remarked on the lower death-rate, but had seen a similar treatment carried out in Russia as long as sixteen years ago. He deprecated the practice of intra-uterine injections, and remarked that the source of septic infection was often from within, a septic poison being bred in the maternal passage, a result of a diseased condition of the secretions.—Dr. HICKMAN thought that washing out of the vagina shortly after delivery, was just as dangerous as intra-uterine injection though, after a few days, vaginal injections became perfectly safe.—The President, Dr. Norman Kerr, Dr. Lamb, Dr. Alderson and Dr. Wells took part in the discussion which followed.—Dr. WILLIAMS, in his reply, remarked upon the enormous number of cases of puerperal fever which, in death-certificates, were returned as peritonitis, pleurisy, or pneumonia. If these cases were taken into account, the death-rate in private practice would be much higher. He believed that the mortality of his hospital patients was half that of private practice.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4TH, 1883.

Surgeon-General JOHN MURRAY, M.D., in the Chair.

Phthisis, Bronchitis, and Pneumonia; are they Epidemic Diseases?—Dr. G. B. LONGSTAFFE read a paper on this subject. The author explained that his object was to examine the Registrar-General's returns in such a way as would make clear their bearing on the solution of the question propounded. As in previous papers relating to summer diarrhœa and the diseases allied to erysipelas respectively, he exhibited diagrams graphically representing the death-rates for England and Wales from the diseases in question, and certain others in various ways allied to them, during a period of twenty-five years; also showing the same death-rates in London for thirty-three years compared with a curve expressing the number of cold days in each winter. One diagram showed that the death-rate curve of phthisis deviated but very little from a straight line, resembling in this respect those for cancer, apoplexy, paralysis, convulsions, and fractures. The curves of tubercular meningitis (hydrocephalus), and to a less degree tabes mesenterica, resembled the phthisis curve. The death-rate from phthisis had fallen 20 per cent. during the last twenty years. The bronchitis curve exhibited considerable fluctuations, but, on the average, it had risen 81 per cent. during twenty years. Pneumonia gave a curve closely resembling that of bronchitis in many respects, but the average mortality had fallen 20 per cent. The total mortality from all diseases of the respiratory organs together with phthisis, showed an increase of 5 per cent., indicating that probably many deaths formerly returned as due to phthisis or pneumonia were now classed with bronchitis. Pleurisy appeared to be more allied to rheumatism than to respiratory diseases. From the curves relating to deaths in London, it appeared that bronchitis and pneumonia corresponded with the coldness of the winters, but not so closely as might have been expected. Phthisis was but little affected. Curves derived from Messrs. Buchan and Mitchell's papers on "The Influence of Weather on Mortality," showing the average weekly fluctuations of the death-rates from various causes in London during thirty years, strongly confirmed the author's conclusions, with the single exception of tabes mesenterica, which gives an entirely different curve from that of phthisis. In another diagram were e

ibited the weekly fluctuations of the deaths from bronchitis and neumonia during the last five winters in London, and their relation o cold; also the same for phthisis during two of the winters. This iagram showed clearly that the death-curve of pneumonia had a eneral correspondence with the death-curve of bronchitis; but it iffered in two particulars: the fluctuations were much less, and hile it rose in the autumn as rapidly, it fell in the spring more radually. In the spring of 1879, there was a prolonged high mor-ality from both bronchitis and pneumonia, out of proportion to the everity of the cold; and during the whole winter 1878-9, the two urves of bronchitis and pneumonia corresponded less closely than n the others. The effect of two hard winters upon the phthisis-nortality was shown to be remarkably slight. It was noted that, or every 1,000 females that died of pneumonia, not fewer than ,460 males died; whereas, in the case of bronchitis, the numbers ere 1,000 females to 1,104 males; and in the case of phthisis, 1,000 emales to 1,046 males. Bronchitis caused nearly three times as nany deaths in proportion to population in Lancashire as in Gloucestershire. The mortality was also very high in Metropolitan Surrey and Middlesex, West Yorkshire, Warwickshire, and Mon-mouthshire. It was very low in Cornwall, Sussex, Norfolk, Extra-metropolitan Surrey, Cambridgeshire, and Gloucestershire. Pneu-monia was most fatal in Lancashire, Monmouthshire, South Wales, West Yorkshire, Staffordshire, Metropolitan Middlesex, and Surrey; east fatal in Sussex, Wiltshire, Hampshire, Buckinghamshire, Oxfordshire, North Yorkshire, and Westmorland. In eight registra-ion counties, pneumonia was found to be comparatively much more atal than bronchitis, viz.: South Wales, Gloucestershire, Rutland, Extrametropolitan Surrey, Bedfordshire, Cornwall, Monmouthshire, nd Cambridgeshire. In ten registration counties, bronchitis was ound to be relatively more fatal than pneumonia, viz.: North York-hire, Warwickshire, Wiltshire, Metropolitan Surrey, Cumberland, Nottinghamshire, Westmorland, Cheshire, Somerset, and Oxfordshire. he author's main conclusions were these. 1. The mortality statistics f England and Wales did not give any evidence in favour of the iew that phthisis is communicable; but they showed, on the other and, that weather had very little influence on the death-rate of hthisis. 2. While bronchitis and pneumonia were both greatly nfluenced by meteorological conditions, it was difficult to explain y those conditions only all the phenomena. 3. Common catarrh as a communicable disease; and it was probable that very many ases of bronchitis and pneumonia might be looked upon as com-lications of that or some similar disease of mild character when ncomplicated. 4. The different incidence of bronchitis and pneu-nonia on the two sexes pointed to some difference in the causation f the two diseases. 5. There would appear to be some common actor in the causation of phthisis and tubercular meningitis.—In ne discussion which followed, Surgeon-General Murray, Dr. Thorne horne, Dr. Mahomed, Dr. Heron, Brigade-Surgeon Scriven, and Mr. hirley Murphy, took part. Surgeon-Major J. B. White read some omments on the subject by Surgeon-General De Renzy, and added ome observations of his own.

REVIEWS AND NOTICES.

EPORT ON VACCINATION IN THE HYDERABAD ASSIGNED DISTRICTS FOR THE OFFICIAL YEAR 1881-82. By C. LITTLE, M.D.

HE report for 1881-82 of Dr. LITTLE, the Superintendent of Vaccination for the Hyderabad Assigned Districts, furnishes exhaustive atistical details of the progress of vaccination in the districts nder his care. The population of the six districts as ascertained the census of 1881, was 2,630,018—giving an average of 164 per-ns to the square mile. Among this population the work of vac-nation was carried on by Dr. Little, aided by a staff consisting of x native superintendents, six head vaccinators, and 58 vaccinators id apprentices, the average number of vaccinators employed during ie season being 54. The total number of vaccinations performed y the Government staff during the year in question amounted to),169, of which 90,058 were primary vaccinations, and 111 were re-accinations. Of the former, 80,930, or 89.8 per cent., were success-il; of the latter 70, or 63 per cent. Of the successful primary accinations 47,457 were in children under one year of age, 32,003 in ildren between one and six, and 1,470 in persons over six. As mpared with the previous years, these figures show an increase of early 7,000 infantile vaccinations; an increase to which Dr. Little aws attention with some natural satisfaction.

In addition to this work of the Government staff, 5,251 vaccinations were performed at the different dispensaries throughout the province. Of these, 5,211 were primary vaccinations—4,624, or 88.7 per cent., being successful; and 40 were re-vaccinations. The dispensary operations show a slight decrease as compared with the previous year. An attempt was made during the year to extend the benefits of vaccination to the hill people of the Melghat, a district not under registration, and after some preliminary trouble with the natives, the vaccinator detached for the duty succeeded in vaccinating 1,134 persons, or 23.2 per 1,000 of the total population.

Taking all these figures together, the aggregate number of vaccinations in Berar during the year 1881-82 amounted to 96,403, as compared with 85,675 in the previous year, and "the total number of successful primary vaccinations was 86,545, against 74,303 in 1880-81."

In describing the details of the work in the several districts, Dr. Little gives some interesting details regarding the attitude of the people towards vaccination, and the success of the operation as a protective against small-pox. We extract in a condensed form the following notes from the special report on the Akola District. In this district some parts, we are told, suffered severely from epidemic small-pox, and in especial, the town of Sonala. Here, amongst a population of 5,130, "there were 28 deaths registered from small-pox, all amongst children."

It is instructive to note in connection with recent expressions of antivaccinists as to "unprecedented" small-pox death-rates that this mortality is at the rate of about 20,000 in a population the same as that of London.

Owing to a report that the people in this village were somewhat opposed to vaccination, Dr. Little himself proceeded there. He explained to a meeting of the head men convened to meet him, "the origin and benefits of vaccination," and pointed out that "it was only the unvaccinated children who had suffered, not a single child that had been vaccinated having taken the disease." After obviating their objection to animal lymph (on the ground that it was against their religion to torture the sacred animal, the cow) by substituting for it humanised lymph, Dr. Little reports that he succeeded in vaccinating 355 children, and he adds significantly, "I do not think that the superintendent will find any difficulty here in future."

Other instances of a like instructive nature are narrated in the report, but want of space forbids further quotation. On the whole, Dr. Little's report furnishes an illustration of the good work done by English civilisation in mitigation of the universal scourge of small-pox.

NOTES ON BOOKS.

Regional Surgery, including Surgical Diagnosis. A Manual for the Use of Students. Part I. The Head and Neck. By F. A. SOUTHAM, M.A., M.B.Oxon., F.R.C.S., Assistant-Surgeon to the Manchester Royal Infirmary, Assistant-Lecturer on Surgery in the Owens College School of Medicine (London: Churchill).—Mr. Southam professes that his work is an attempt to group together the principal surgical affections which are peculiar to each region of the body. Considerable attention has been paid to differential diagnosis, and, where practicable, tables of symptoms have been introduced. It is addressed to the advanced student, already acquainted with the general principles of surgery. The second part will include the Trunk and Upper Extremity; the third will be devoted to the Groin and Lower Extremity. This division of the work into three parts is its least commendable feature. Each chapter treats of the affections of a special organ or anatomical region; the separate paragraphs on each disease are numbered, and the numbers are continuous from the beginning of the work to the end, and do not recommence at the head of every chapter. This is convenient, and aids in preventing repetitions. Thus, in the chapter on affections of the mouth, the figure 128 is appended to a paragraph on diseases of its mucous membrane, among these buccal psoriasis is named, and the figure 133 refers to a complete notice of the same disorder, in the next chapter, on the tongue. As a book of reference, in the study of obscure local disorders, this manual cannot fail to prove of high value. Mr. Southam deserves particular credit for the style in which his work is written. He has shown how condensed descriptions of diseases may be written in readable and grammatical language, without the aid of ellipses, which save the printer no trouble, puzzle the student, and injure the English language.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 21st, 1883.

THE GOVERNMENT MEDICAL BILL IN THE HOUSE OF LORDS.

WE have to record with satisfaction, which the whole profession will share, the passing of the Government Medical Bill through Committee in the House of Lords, under the charge of the Lord President, unmutilated as regards its essential features: viz.:

1. The reconstruction of the Medical Council, and the introduction of direct representatives of the profession.

2. The establishment of a joint examining board in each of the three divisions of the kingdom, for the purpose of carrying out an uniform minimum examination as the sole portal to the *Medical Register*.

3. As regards the penal clauses for the protection of the public and the provision against illegal practice, in respect of which the Medical Reform Committee have during the week made strong representations to the Government, the Lord President proposed an important amendment on Clause 28, by adding to "On and after the aforesaid day, if any person, whether a registered medical practitioner or not," the following words: "who practises for gain, or professes to practise, or publishes his name as practising medicine or surgery, or receives any payment for practising medicine or surgery."

While we write, the debate, of which a full and special report will be found in another column, is still in progress concerning other parts of the Bill: but its passage through Committee with the great principles unaltered is assured. Much will no doubt still have to be done to improve the Bill in matters of detail; but the profession may well be content that the principles for which the Association has so long contended are fully recognised, and have emerged triumphantly from the searching ordeal of this debate in Committee, in which the keen and practised minds of the ablest statesmen of both parties were engaged. The House was exceptionally full, and the greatest interest was plainly manifested in the subject.

To complete the work of the profession, it now remains to carry the Bill through the House of Commons; and to this end petitions from members of the profession, and the exercise of influence on the members of the House of Commons, are essential.

A NEW DEPARTURE IN METROPOLITAN HOSPITAL MANAGEMENT.

UNLESS the rumours which we hear in various directions are wholly misleading, there seems reason to fear that we are on the eve of a financial panic amongst the general hospitals of London. In anticipation of such a crisis, we recently drew attention to the financial condition of the general hospitals of the metropolis, and pointed out that owing, in our opinion, in some degree to want of enterprise and attention to business details, the income of these charities had fallen in four years from £310,000 to £274,000, a decrease of £36,000. If we were to add to this sum the loss incurred at the three endowed hospitals owing to the agricultural depression, the total deficiency on income would approach, if it did not exceed, £60,000 *per annum*. Within the last few days the London Hospital has been appealing at the Mansion House for the enormous sum of £150,000, which they require to supplement their ordinary income during the next five years. A meeting is to be held almost immediately, with the object of increasing the revenue of St. George's Hospital, and the governors of Guy's are at present considering, not how they can increase the area of their work, but what is the smallest number of beds which they are compulsorily obliged to close, owing to insufficient funds to keep them open. Adversity, though a sharp, is very often a useful master. It makes people think; it compels an examination into matters which have too long been allowed to remain uncared for and uninvestigated. So it promises in the case of the metropolitan hospitals to bring about a revolution and to accomplish reforms which have been advocated for years in these columns without effect, and which are fraught with the most important issues to the public and the medical profession.

Almost every hospital committee is now brought face to face with that wholesome taskmaster, a real and pressing deficiency in income. In these circumstances, many hospital managers are forced to consider whether or not it be possible that the indiscriminate medical relief which has been distributed by these hospitals for so many years is not only a mistake, but a scandal? In consequence, the question of payment by patients, both in and out, is now occupying the attention of the committees of three of the largest hospitals in London, and is likely to occupy the attention of others within the next few months. The rate we live at in this nineteenth century was never more eloquently testified than by a knowledge of these facts. It is only six years ago, namely, in 1877, that Mr. Burdett the original advocate of pay-hospitals and pay-wards in this country unfolded his scheme and offered it for public discussion. At that time, excepting in this JOURNAL and one or two others, the scheme was everywhere scouted as chimerical and visionary, and by no class of people was more contempt poured upon it than by the hospital managers themselves. Time, as usual, has altered all this Mr. Burdett is no longer regarded by the hospital managers as the apostle of revolution and destruction, but, on the contrary, as one whose views have proved to be sound in practice, and whose scheme is now believed to be the one of all others which will relieve the hospitals from their present financial difficulties. How this has come about, it is not difficult to see. The Home Hospitals Association for Paying Patients has not only been established and become an acknowledged success, but it is now earning many hundreds a year, whilst giving the utmost satisfaction to the medical profession and the patients who seek accommodation within its walls. At St Thomas's Hospital, the paying wing has brought in an income of nearly £7,000 from patients' payments, and has yielded a profit to St. Thomas's Hospital of something like £1,500 a year, which sum has enabled the governors to maintain about thirty beds free of cost to the Charitable Revenue. At Battersea, the Bolingbroke House Pay Hospital, in conjunction with the Battersea Provident Dispensary, and at the majority of the special hospitals, the system tried proves that the class of people who attend the in- and out-patient departments of the London hospitals are anxious and willing to pay, according to their means, for the accommodation they have received, if only an opportunity be afforded them.

With these facts before us, it is not therefore surprising that the General Hospital managers, having to face an annual deficiency

at least £60,000, turn with almost one accord to the pay-system, as probably the best and readiest means of helping them out of the difficulty. In these circumstances, it becomes necessary to give a word of warning to the medical profession and to hospital managers, for this sudden enthusiasm for the pay-system of hospital relief will be calculated to do more mischief than the existing indiscriminate and free system has already accomplished.

First, then, hospital managers and the honorary medical staff must remember, that a large general hospital was not intended originally, nor is it now suitable, for the accommodation of a class of patients much above those who at present seek relief within its walls. The present financial crisis is due mainly, if not entirely, to the want of understanding of the habits and incomes of the patients who seek relief at the metropolitan general hospitals. This accidental or wilful blindness has been increased by the fact, that nearly every general hospital possesses so considerable an amount of invested property, that the margin between assured income and actual expenditure has been narrowed to a sum which heretofore the committees have had placed at their disposal by the philanthropic public, without great effort on their part. Wherever there has been an absence of endowment, as in the case, for instance, of the American hospitals, and of the special hospitals in this country, there a new and better system of relief has necessarily been established. We say necessarily, because the managers of these latter hospitals have had to consider where they could get their income from, and how it would be possible to make it balance expenditure.

This new system has been on its trial in London during the last five years, and in America for upwards of a century. In both cases, it has proved a success. A knowledge of these facts has led the promoters of a new hospital for North London with three hundred beds to base their scheme upon it; and, after eighteen months' hard work, we are informed that the plan has met with general acceptance. At the present time, it must not be forgotten that, out of a total of 4,579 beds for the whole metropolis, 3,486 are provided by the hospitals situated within a radius of a mile and a half from Charing Cross. This congregation of hospitals in one narrow area has led the committees to believe that they must depend upon others than those who reside in their immediate neighbourhood for the support of these institutions. The situation of the hospitals has, therefore, led to the perpetuation of a twofold evil. It has proved in practice a great hardship to the patients to have to attend these hospitals from all parts of London, owing to the distances they have to travel and the time they have to wait before being attended to, and it has led the committees to adopt a *laissez faire* policy of finance, which, if not altered, must ultimately end in the closing of more than one of these central hospitals.

The remedy will be found in reorganisation and redistribution. This fact has been recognised by the inhabitants of North London, where there is a population of upwards of 1,000,000, and where also, at the present time, there is, for all practical purposes, no adequate hospital accommodation in the district. On the 28th instant, the Duke of Westminster will preside at a public meeting to be held at the Highbury Athenæum, at which, it is stated, there will be at least 1,500 persons present; and the excellent scheme of relief proposed to be carried out in North London will be then and there stated in detail. We propose to defer further reference to this scheme until after that meeting; but we take this opportunity of congratulating the Duke of Westminster upon his acceptance of the presidency of this meeting, and we hope he may become president of the new hospital also, because its scheme of management is calculated to supply what is lacking in the systems in force at the other metropolitan general hospitals, and its success will assuredly secure the needful reforms in these institutions. Each district of London ought to have a hospital placed near its centre, whereat the inhabitants could receive the medical aid they required. Sooner or later, no doubt, this will be the case, and for the present we may leave the question of redistribution with this statement.

Returning now to the introduction of the paying system into the existing general hospitals, we have to consider what reorganisation is necessary.

CONDENSED MILK AS FOOD.

THE French Society of Hygiene has received, through M. Meynet, the report of a committee appointed to examine a memoir by MM. Pellet and Biarel, on the composition and analysis of condensed milk, including also a discussion of the question of milk as an article of general food, especially for newly-born infants. The conclusions arrived at by the "Commission" have been tested and corroborated by consulting the analysis made by M. Chesnel, of the National Agronomic Institution. Also those made at the Municipal Laboratory on analogous products. MM. Pellet and Biarel begin their memoir by furnishing the following analysis.

The analysis of one hundred parts of condensed milk gave the following result—

Water	26.68
Ash	1.70
Lactose	13.80
Crystallised sugar	42.80
Butter and fatty matter	6.87
Nitrogenous substances	7.30
Not estimated, and loss...	1.44
Total	100.00

Thus 100 grammes of condensed milk contain 42.80 of added crystallised sugar; and 31.12 of dry matters contained in milk.

M. Pellet, basing his calculations on known analyses of cow's milk, admits that pure cow's milk contains, on an average, 13.50 of dry residue in 100 grammes. Consequently the condensed milk in question, containing 31.12 dry matter in 100 grammes, is equal to 230 grammes of pure milk. This would be the result of evaporating 230 grammes of milk previously skimmed, and having 42.80 grammes of crystallised sugar added to it. Hence 100 grammes of condensed milk, containing 42.80 grammes of crystallised sugar, and 31.12 of milk solids, represents more than five times 13.50 grammes of dry residue in 100 grammes of pure milk, consequently more than five times 100 grammes of pure milk.

The manufacturers of condensed milk assert that, in order to obtain a fluid similar to the best cow's milk, it should be mixed with four or five times its weight of water. If they are to be believed, 42.80 grammes of crystallised sugar added to the dry residue of 230 grammes of milk, and mixed with water, present, in the same proportion, all the constituent parts of about 500 grammes of milk.

According to M. Pellet's analysis, condensed milk contains 7.31 per cent of casein; hence 500 grammes of artificial milk (made by adding 400 grammes of water to 100 grammes of condensed milk) contains 1.46 grammes of casein in 100 grammes. But, according to an analysis by Berzelius, quoted in Riche's *Elements of Chemistry*, actual skimmed milk contains 2.6 per cent of casein, or 1.14 more than the artificial milk.

The Committee next take into consideration the use of condensed milk as food for infants—a subject which they rightly consider as of the highest importance. The manufacturers of condensed milk allege that, for infants, it should be diluted with seven and a half or even nine times its weight of water. Setting aside the alleged equality in the proportions of sugar and butter, they give the amount of casein in artificial milk, found by adding certain quantities of water and 100 parts of condensed milk: namely, with water 400, the artificial milk contains 1.46 per cent.; with water 500, casein 1.21; with water 600, casein 1.04; with water 700, casein 0.91; with water 800, casein 0.81; with water 900, casein 0.73. Boussingault

and Regnault give, as an average quantity of casein in cow's milk, 3.6 per cent. Berzelius says 3.05. In order to obtain artificial milk, containing casein in the same proportion as cow's milk, it must be prepared with condensed milk and water in equal parts, so that artificial milk shall contain 7.31 of casein, or therefore 3.65 per cent. The condensed milk analysed by M. Pellet was by no means poor in quality; he says it contained nitrogen in the proportion of 1.50 per cent. In five analyses, made by M. Chesnel, of different samples of condensed milk, the average percentage of nitrogen was 1.41. In four analyses of different samples of milk, made at the Paris Municipal Laboratory, the average quantity of nitrogen was 1.19 per cent. The specimens contained show, on an average, water 24.89 per cent.; crystallised sugar 39.45; lactose 14.28; butter 10.44; albuminoids 9.3; ash 1.66.

The following table shows the relative proportion of the constituent parts of cow's milk and artificial milk, prepared with condensed milk, mixed with five parts and ten parts of water.

	Cow's milk.	Artificial milk No. 1. Condensed milk... 1. Water..... 5.	Artificial milk No. 2. Condensed milk... 1. Water.....10.
Sugar.....	0	78.90	39.45
Lactose...	52.70	28.98	14.04
Butter ...	40	20.84	10.42
Casein ...	36	18.98	9.49
Ash	6	3.32	1.66
Water ...	870	848.98	924.94

In cow's milk, the solid products are 134.7; in milk No. 1, 72.12; in milk No. 2, 35.61; not reckoning the sugar.

MM. Pellet and Biarel seem to justify this form of nourishment, containing so large a proportion of water and sugar, by furnishing two comparative analyses of cow's and human milk: one by Doyère, the other by Millon and Commaille. This, they believe, indicates that condensed milk, diluted in the proportion given above, is very similar in composition to average human milk. Thus, Doyère gives the proportion of casein in human milk as 0.34 per cent., and in cow's milk as 3 per cent. Millon and Commaille state that human milk contains 2 per cent. of casein, and cow's milk 25.49 per cent.

MM. Pellet and Biarel add, that cow's milk, compared with human milk, contains: 1. Ten times more casein, a substance rich in nitrogen, and therefore nutritive; 2. Six times more albumen; 3. The same quantity of lacto-protein; 4. Half as much lactose or milk-sugar; 5. Two and a half times as much ash.

With regard to condensed milk reduced to a dry state, they observe that it contains less fatty substances than either human milk or cow's milk, but more sugar than human milk. The proportion of ash is very similar in the two kinds of milk. In the dry matter, nitrogenous principles are present in the proportion of 5.40 per cent., but in the condensed milk from 11.90 per cent., or more than double the quantity.

M. Pellet quotes the analyses of Doyère and of Millon and Commaille as evidence that human milk contains from one to ten times less nitrogenous substance than cow's milk. According to M. Wurtz, the following table shows that human milk contains from three to four times less nitrogenous matter than cow's milk.

	Maximum.		Minimum.	
	Human.	Cow.	Human.	Cow
Butter	7.60	5.40	0.53	1.44
Casein	0.85	4.30	0.00	1.90
Albumen ...	1.90	1.50	0.60	1.09
Lactose	8.20	5.25	5.90	3.90
Salts	0.23	0.88	0.16	0.65

According to Boussingault, the proportion of casein in human milk is 3.8 per cent.; in cow's milk, 3.6. According to Regnault, it is in human milk 3.9; in cow's milk, 3.6; in bitch's milk, 1.6 per cent. According to Littré, human milk contains from 2 to 4 per cent. of casein. Although he certainly never made any analyses, he has doubtless, with his usual accuracy, arrived as near as possible at the truth. Simon, cited by Professor Riche, states that in human milk the proportion of casein, from the day of delivery to the 136th of the child's life, varies from 1.96 to 4.52 per cent.

The "Commission" arrive at the following conclusions. 1. Condensed milk containing sugar, diluted with twice or four times its weight of water, may be considered as an article of food, and in some cases would prove useful. 2. Artificial milk thus prepared is incontestably inferior to good cow's milk. It is a healthy article of food, but only slightly nutritive. 3. The directions given in the prospectus are calculated to mislead the public. Condensed milk, diluted with from six to ten times its weight of water, cannot be classed as an article of food. 4. Newly born infants, which have been suckled for three or four months, may be weaned and fed with good cow's, goat's or ass's milk, not mixed with water, and given in sufficient quantity. Condensed milk containing sugar, diluted with from two to three times its weight of water, may form part of the daily nourishment of such children; but it would be certainly imprudent to use it alone.

INCREASED DURATION OF LIFE IN ENGLAND.

THE question "Has the duration of life in England increased during the last thirty years?" which has been much discussed in these columns during the past twelve months, is answered decidedly in the affirmative by the paper read before the Statistical Society on Tuesday evening last, by Mr. Noel A. Humphreys.

The Registrar-General's statistics abundantly prove that in recent years the death-rates, both of males and females, have considerably declined. This decline has, elsewhere as well as in these columns, been the subject of considerable discussion and speculation, as regards its bearing upon the duration of life. It was pointed out some time since by the Registrar-General that coincidently with a marked decline in the death-rate of children, there has occurred a slight increase in the death-rate of male and female adults. These facts appear to have induced some to call in question the national benefit of a reduction which apparently saves the lives of children in order that they may die at the most useful period of human existence. On this ground also it has been doubted whether the reduced death-rates really signify any increase of the duration of life in England. Even those whose faith in the trustworthiness of death-rates would not allow them to deny that the duration of life in England had increased, asked "what is the kind of life which is increasing, whether it is young life or mature life, or aged life which is being enlarged? Are we young longer, or mature longer, or old longer?" Do we live longer, in fact, or are we only a little slower in dying? These and similar inquiries suggested more or less directly the futility of "all our costly and troublesome hygienic devices." The desirability in the interest both of public health progress, and of the science of vital statistics, of supplying an authoritative reply to these inquiries, appears to have prompted Mr. Humphreys in the preparation of his paper.

After a critical examination of several attempts which have been made to decide the question whether the duration of life in England is longer now than it was thirty years ago, the paper, which was entitled "The recent decline in the English death-rate, and its effect upon the Duration of Life," compared in detail the rates of mortality of males and females in 1876-80, with those that prevailed in the seventeen years 1838-54, which supplied the basis for Dr. Farr's English Life-Table, No. 3. A new outline life-table was then based upon the reduced death-rates of 1876-80, it being clearly pointed out that the life-table method alone gives trustworthy indication of the true mean duration of life.

With the help of this new life-table, Mr. Humphreys was able to calculate what effect the maintenance of the recent reduction

ne English death-rate would have upon the mean duration of life. t is satisfactory to note, moreover, that the decline in 1876-80 was nore than maintained in 1881 and 1882, in which years the unrecedentedly low death-rates of 18.9 and 19.6 were recorded.

By Dr. Farr's *English Life-Table*, the mean duration of life, or nean after-lifetime of males at birth, was 39.9 years, whereas, by ne new table, it becomes 41.9, representing an increase of two years, r an addition of 5 per cent. to the mean duration of the lifetime of nales. The recent addition to the lifetime of females appears to e still more marked. According to Dr. Farr's life-table, the mean uration of life of females was 41.9 years, whereas the new table nakes it 45.3 years, representing the addition of nearly three ears and a half, or more than 8 per cent. to the average lifetime f all females born.

So far, the paper proves that the reduced death-rates signify n important addition to the lifetime both of males and of females. n order, however, to be able to answer such inquiries as, "Are e young longer, or mature longer, or old longer"? it was necesary to determine at what periods of life the additional years f male and female existence are lived. For this purpose, the) years from 20-60 are classed as the useful period of human fe, whereas the years lived before 20 and beyond 60 years, are rmed the dependent period. According to the new life-table, 1,000 ales will live 2,009 more years than they would by Dr. Farr's ble, and the paper shows that 1,407, or 70 per cent. of those ears are lived between the ages of 20 and 60 years; 22 r cent. are lived under 20 years, and 8 per cent. over 60 years. ne increased number of years lived by 1,000 females is 3,405, 65 r cent. of which are lived at the useful ages between 20 and), 18 per cent. under 20 years, and 16 per cent. above 60 years. nus 66 per cent. of the increased duration of human life in Engnd is lived at the useful and productive period, and not more an 34 per cent. at the dependent ages either of childhood or old e. These facts appear to supply a complete refutation of the sertion, with reference to the reduced death-rate, that "the imovement effected by science" consists in a prolongation of the pase endurance of life, rather than an extension of the power of true tality, or any increase of the opportunity for good work and for tellectual enjoyment.

These conclusions should reassure those labouring in the field of nitary reform, whose faith in the national advantage of a reducn in the death-rate may have been shaken by the misinterpretaon of the true import of such reduction. They also afford evidence rongly corroborative of the value of death-rates as means for apoximately estimating the sanitary condition of a population.

We are glad to find that the Statistical Society has once more voted an evening to vital statistics, as it appears to us that, in cent years, too large a proportion of the papers read before the ciety have dealt with financial, commercial, and semi-political bjects, rather than with those which are purely statistical. The votion of last Tuesday evening to the consideration and discussion the recent marked reduction in the English death-rate became an intended tribute to the memory of one who has just passed ay, without having received due acknowledgment of his invaluble services in the creation of a national interest in public health ogress. It was Dr. William Farr who created our system of tal statistics, through which the public was taught the necessity r sanitary reform, especially in our large towns. It was, moreer, the public faith in Dr. Farr as a vital statistician that gave the eight to the mortality statistics issued by the Registrar-General, us making possible the passing of the Public Health Acts of 72 and 1875, from which dates the marked decline in the English ath-rate recorded during the past seven years. We can call to ind no name which deserves to be more intimately identified with e sanitary revival of recent years than that of Dr. Farr. It may hoped that his eminent services in the cause of public hygiene may yet receive fuller acknowledgment than was the case in his life-time.

SEVENTEEN medical men have been chosen members of the Italian Parliament at the last general election. Among them are Drs. Bacelli, Panizza, Semmola, Sperino, and Tommasi-Crudeli.

THE number of students in the medical faculty of the University of Vienna during the session recently ended was 1,750, against 1,412 in the corresponding period of last year.

ON the reassembling of the French Chambers, the Government intend submitting a Bill to raise Dr. Pasteur's yearly pension from 12,000 to 25,000 francs.

AT a recent meeting of the Anthropological Society of Paris, the president announced that the late M. Bertillon had left a legacy for the purpose of establishing a biennial prize of 500 francs (£20) for an essay on demography.

THE Prince of Wales has fixed Friday, June 1st, as the day on which he will preside at the sixty-ninth anniversary festival of the Royal Hospital for Diseases of the Chest. The dinner will take place at Willis's Rooms.

AFTER an absence of some four months, small-pox has reappeared at Leeds. The initial case of the new outbreak has ended fatally. At the date of Dr. Goldie's last report, four cases were under his surveillance.

THE following gentlemen have announced their intention to take part in the adjourned discussion on Diabetes at the Pathological Society on May 1st: Dr. Pavy, Dr. Dickinson, Dr. Douglas Powell, Dr. Frederick Taylor, Dr. Walter Edmunds, Dr. Seymour Taylor, and Mr. Horsley.

AT the meeting of the Council of the Parkes Museum, on April 16th, Inspector-General Lawson, Dr. Frederick Roberts, and Dr. F. Cock, were elected life members; and Dr. William Travers, and Mr. Bernard Roth, F.R.C.S., were elected annual members.

AT a very full meeting of the Metropolitan Open Spaces and Playgrounds Association, held recently, Mr. Ernest Hart in the chair, it was unanimously resolved to memorialise the First Lord of the Treasury in favour of throwing open to the public the enclosed portion of Regent's Park.

AT a meeting of Convocation of the University of London on Wednesday last, Sir James Paget was elected Vice-Chancellor of the University in the room of the late Sir George Jessel. The choice is one which will, beyond doubt, give great satisfaction to the medical profession.

ACCORDING to the *City Press*, the Corporation have resolved to hold an inquiry into the meat-supply of London, upon the same lines as that on fish about two years ago. It is to be hoped that some substantial good will arise out of the investigation of the subject, which is one that concerns the health and the pockets of all classes of the community.

AT the end of an abnormal winter, the Central Meteorological Bureau of France has issued its annual report, which contains some interesting facts. The general warnings were last year verified in 83 cases, and the local warnings in 81 cases, out of every 100; while

of the sea-coast warnings, 100 were quite correct, 65 tolerably correct, and 42 incorrect. This gives a percentage of 80 good warnings, as compared with 67 in 1881; but the Bureau acknowledges that the storm of the 10th of November, one of the worst of the season, was not signalled.

A SYSTEMATIC work on hospital construction and management, containing upwards of fifty lithographic plates and numerous woodcuts, illustrating the most important pavilion hospitals of various countries, has been written by Dr. F. J. Mouat, Local Government Inspector, and Mr. H. Saxon Snell, architect of several metropolitan infirmaries. The first part of the work will shortly be published.

MR. JUSTICE PEARSON gave his decision last week in the case of the Sheffield Waterworks Company against Bingham and others. The question was whether a householder was or was not bound to supply a meter which should accurately measure the water used by him for a bath in his house, and pay for both the meter and the water used. The question was decided against the householder, who was ordered to pay.

THE *Academy* states that the scheme started at Bombay, with the object of securing the services of two or three medical women in that city for practising in the zenanas, has been quickly successful. A capital sum of 40,000 rupees (£4,000) was considered necessary; and twenty-two native gentlemen, mostly Parsees, immediately subscribed the necessary amount.

AT the last meeting of the Council of the Royal College of Surgeons of England, the Jacksonian Prize was awarded to Mr. Anthony A. Bowlby, F.R.C.S., of Warrington Crescent, for his essay on "Wounds and other Injuries of Nerves, their Symptoms, Pathology, and Treatment." Mr. Bowlby, who received his professional studies at St. Bartholomew's Hospital, was admitted a Fellow of the College of Surgeons, June 9th, 1881.

A SPECIAL meeting of the Metropolitan Counties Branch was held on Tuesday last, for the purpose of making regulations for the organisation of the Collective Investigation Committee appointed in January, and also to consider Mr. Hastings' Bill for the Compulsory Notification of Infectious Diseases.

WITH regard to the Collective Investigation Committee, the President, Dr. Bridgwater, informed the members that it had been found that, at the meeting in January, a large Committee had been somewhat hurriedly called into existence, without adequate provision for its proper organisation. At his suggestion, the meeting rescinded the resolution of January 17th, appointing a Committee; and then, having decided that a Collective Investigation Committee of the Branch should be appointed, adopted a series of recommendations for the regulation of the Committee, which had been carefully drawn up by the Council of the Branch.

THE subject which occupied the greater part of the time of the meeting, was the Bill for the Compulsory Notification of Infectious Diseases. Dr. W. Carter of Liverpool, whose labours in regard to the subject are well known to the readers of this JOURNAL, was present by invitation, and, in an able speech of nearly an hour's duration, pointed out the objections to enforcing on medical men the public notification of cases of infectious disease occurring in the course of their practice. Remarks were also made by the President, Mr. Sibley, Dr. E. H. Vinen, Mr. Nelson Hardy, Mr. Ernest Hart, Dr. Hare, and other members; and, finally, the meeting authorised the President to append his name, on behalf of the Branch, to a petition against Mr. Hastings' Bill, based on that adopted by the Parliamentary Bills Committee of the Association. Want of space compels us to defer a more full account of the proceedings till next week.

MR. MUYBRIDGE has, it is announced, issued a prospectus of "a new and elaborate work upon the attitudes of man, the horse, and other animals in motion." As the expense conducting these experiments is very great, Mr. Muybridge naturally waits until he obtains a sufficient number of 100-dollar subscriptions before entering upon them. Each subscriber of the sum will receive a large album containing the photographic results of the experiments. Their scientific and artistic value is so great that we trust Mr. Muybridge will receive sufficient encouragement to put his plan into execution. His address is Scovill Manufacturing Company, Publishing Department, 419 to 421, Broome Street, New York.

UNCERTIFIED DEATHS IN DURHAM.

UNCERTIFIED deaths are alarmingly on the increase in the Chester le-Street rural district. Out of a total of 422 deaths registered last year no fewer than 66 are returned as uncertified. The present mode of registering deaths is described by the local health-officer as "an indisputable sham and delusion." So long as registrars grant certificates for persons to receive money out of a Friendly Society upon the strength of unqualified men, there can be no hope of keeping such persons in check, or of vital statistics ever being made out in a perfect manner.

PROFESSOR VAN BUREN.

THE death of Professor W. H. Van Buren of New York has recently occurred, in his sixty-fourth year. Dr. Van Buren held a leading position in America, and exercised great personal influence in his profession. He was an accomplished surgeon, and a man of much culture and right thinking. He was known and esteemed here, and had many friends in London. In America, and especially in the City of New York, his strong conservative instinct and high professional standard, gave meaning and usefulness to his career, and he leaves a memory much honoured and lamented. As an assistant in early life of Valentine Mott, of whom his wife was a daughter, he linked the present to a past generation of surgeons.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

AT the last meeting, held on March 30th, 1883, Dr. D. Lloyd Roberts president, in the chair, Mr. Holden, of Preston, submitted to the members a scheme for the formation of a fund for the relief of the widows and orphans of medical men in the north-western counties of England. He proposed the formation of a brotherhood which would be alike provident and benevolent; the funds to be raised by donations, and subscriptions of honorary and ordinary members, and from the commuted fees of life members. An entrance fee of one guinea, and an annual subscription of two guineas would, he thought, together with the interest arising from the donations of honorary members, be sufficient to augment the annual income of a widow with children to £50 for herself and £10 for each child. After an animated discussion, it was decided to recommend the appointment of a committee to co-operate with the committee already formed in Preston, to carry out the scheme.

MILK SCARLATINA AT WOLBOROUGH.

ANOTHER instance of the dissemination of disease by the agency of milk is recorded at Wolborough. In endeavouring to trace the spread of an outbreak of scarlet fever, the health-officer discovered that out of sixteen families attacked, nine had their milk from the same dairy. There was good reason for believing that cases of scarlet fever had occurred in the dairyman's family in the preceding month. They were not reported, and being "kept quiet," it is probable that to avoid remark, the milk was taken, as usual, into the

nfected house, and there received the ordinary manipulations from istress to nurse, before being distributed to the customers. Secrecy such cases necessarily prevents the adoption of proper precau-ons. Had cattle-plague shown itself on this dairyman's premises e would have been subject to a severe penalty if he neglected to eport it; and, as the health-officer observes, until the notification f infectious disease is made compulsory, the beginnings of out-reaks must continue to escape attention.

MORTUARY ACCOMMODATION IN THE METROPOLIS.

HE disgraceful condition of the metropolis as regards mortuary ccommodation, which has so frequently been commented upon in hese columns, was perhaps never more strongly emphasised than on aturday last. A woman had died of heart-disease, and an inquiry oncerning her death was held by Mr. Langham at King's College Iospital. The *post mortem* examination was made by Dr. Hassard, n a small room in an upper story, about ten feet long and five feet ide, very dirty and utterly destitute of furniture. Not long since, this entleman had to examine a body which had remained in a common dging-house, for several days, amongst a number of people. After iewing the body, the jury expressed their astonishment that an xtensive district like the Strand did not possess a mortuary, and the roner correctly described it as little less than a public scandal. After me discussion, it was decided to memorialise the Board of Guardians; ut this has already been done. The excuse, that a suitable site annot be found, is far from satisfactory; and until some active steps e taken, scandals of this kind will continue to shock the public. me time since, the Local Government Board called for a return of e existing mortuary accommodation at the disposal of the various cal authorities; but nothing of a practical nature has yet resulted om the inquiry.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A QUARTERLY court of the directors of this society was held on Wednesday, April 11th, at 5 P.M., in Berners Street, Dr. Pitman ice-President, in the chair. Applications were read from fifty-ght widows, five orphans, and three orphans on the Copeland Fund, nd the sum of £1,227 was recommended to be distributed among em in July next. The expenses of the quarter were £40. The eath of a widow was announced, whose first grant had been made 1857, and who had received a total of £1,056 10s. from the society. nother widow no longer required assistance. Three new members ere elected. It was resolved that the following gentlemen should e recommended for election, at the annual general meeting, as ficers to supply the vacancies occurring, viz.: Dr. George Johnson be the Vice-President, in the place of Sir Thomas Watson, deceased; r. Cooper Forster, Mr. Garman, Dr. Garrod, Dr. Grigg, Mr. Freeman, nd Mr. Warrington Haward to be directors, in place of the six nior directors, who retire. It was also resolved that Mr. J. R. pton, honorary solicitor, and Mr. John Croft, F.R.C.S., a benefactor, ould be recommended for election as honorary members. Legacies to e amount of £280 were reported as having been received since the mmencement of the year; £200, less duty, from Mr. Henry Sterry, .P.; and £100 from Mrs. Allnutt, part of a sum left by her late sband for charitable purposes. The annual general meeting was red to be held at 5 P.M. on May 16th.

LEAD POISONING IN FACTORIES.

In a further communication addressed to Sir William Harcourt n the subject of poisoning by white lead, Mr. Redgrave, the Chief spector of Factories, points out another small matter of domestic form which needs the prompt attention of Parliament. Some blic discussion having arisen on the subject, the Shoreditch Guar-ans sent the Home Secretary, last spring, a report of its Infirmary Committee on the frequency with which cases of poisoning by white lead came for treatment. Similar communications were sent from the Gateshead, Newcastle-on-Tyne, Poplar, and Holborn Unions. Mr Redgrave's inquiries into the matter have shown that in some manufactories of white lead very careful and elaborate precautions are enforced on the workpeople. But there are some in which but little care seems to be taken, and Mr. Redgrave says that the temporary illness and permanent disability inflicted on the workpeople far exceed anything that has ever come before the public. A frightful proportion of the men and women employed become ill, and the most elaborate precautions are needful for the preservation of health. Special dresses have to be provided, with respirators covering the mouth and nostrils, and provision is made for baths and hot and cold water, with the requirement that no woman shall leave the works without taking a bath, and none shall take a meal, which is done in a room in a separate part of the works, without thorough washing of hands, face, and feet. It is needful, also, to keep on the works a supply of acidulated drink, and to make rules as to temperature, ventilation, and clothing. Mr. Redgrave says that the manufacturers themselves are quite prepared to see these precautions, which are enforced in the best regulated works, made compulsory on all by Act of Parliament. He suggests a periodical medical inspection of every person employed, as carried out in one manufactory with the very best results, but thinks that it would be carrying legislative regulations too far to insist on such inspection being made universal. The other precautions, however, seem to be essential; though it is easier to suggest new Acts of Parliament, and even to demonstrate their necessity, than it is to show how time can be found to pass them if there is any opposition.

TYPHUS FEVER IN A CONVENT.

A REMARKABLE outbreak of typhus fever at a convent in Hammersmith is the subject of a report just presented to the Fulham Board of Works by Mr. N. C. Collier, the health-officer of the district. Mr. Collier has no doubt done his best with the imperfect information at his command, but the circumstances of the outbreak are in every way so remarkable, that a thorough investigation from the bottom should be at once instituted by the Local Government Board. There is a so-called "home" with 300 or 400 inmates—packed together in rooms "so overcrowded and badly ventilated as to be dangerous to health—in which no less than 27 cases of typhus fever are allowed to occur before any preventive or remedial measures whatever are thought of. Mr. Collier was called in by the medical superintendent of the home for his opinion as to the nature of the disease that existed in it. He there found ten persons—seven children and three Sisters of Mercy—suffering from typhus, and was shown certain other children who were reported to have recovered from the same complaint as the ten persons then ill were suffering from. Mr. Collier could obtain no information as to the dates of the illnesses of the persons who had been attacked, nor could he get any notes as to the particulars of the illnesses. No notes had in fact been taken." Without such information, and owing to the dirty condition of the bodies of the patients, Mr. Collier could not form a diagnosis as to the nature of the fever. The seven children were promptly removed to the Fulham Hospital, but the removal of the Sisters of Mercy was objected to by the mother superintendent. Doubts as to the nature of the disease were set at rest by another case of undoubted typhus occurring at the home, and at intervals two more cases, besides a fourth in the person of a Sister of Mercy. Moreover, the hospital nurse who attended the seven children on the night that they were brought to the hospital, was after the usual period of incubation, seized with typhus fever of a severe character, to which she has since succumbed. Mr. Collier's report is not so full as could be desired as to the sanitary circumstances of this so-called "home." He says he is "not at all surprised at typhus fever

spreading with an atmosphere so polluted, and with such neglect of personal cleanliness," but of the details of this unwholesomeness he gives us no particulars. The whole outbreak is so shocking, and as yet so unexplained that we trust a very strict and searching inquiry will at once be instituted into its origin and spread, and especially into the possibility of so deadly a disease raging unchecked and unheeded by those morally, if not legally, responsible for the welfare of the children placed under their charge.

OVERSIZING OF COTTON GOODS.

In reference to the announcement that Mr. E. H. Osborne, Inspector of Factories for the Rochdale District, and Dr. J. H. Bridges, of the Local Government Board, have been appointed as special commissioners to inquire into the effects of the process of oversizing cotton goods on the health of the operatives employed in their manufacture, it is important to note that, some twelve years ago, this same matter was the subject of exact study at the hands of Dr. Buchanan, the present Medical Officer of the Local Government Board, whose report was subsequently published as a Parliamentary paper. Dr. Buchanan, whilst unable to connect the oversizing with any very definite illness of the workmen engaged in it, was of the opinion that "a slow but certain injury to health" results from the circumstances under which operatives work in mills where oversizing is practised. Even so long ago as 1860, Mr. Simon drew attention to the mischiefs arising from dusty occupations, of which this is pre-eminently one. Writing of the effects of the unavoidable inhalation at each breath of dusty particles, Mr. Simon observed: "Putting aside all question of the immediate inconvenience thus occasioned (which presently ceases to attract the artisan's attention), the gradually accumulating consequences of the habitual irritation of the air-tubes are: primarily, confirmed bronchitis; and, secondarily, in the graver cases, the irreparable destruction of lung-texture. The effects of the dusty workplace are not confined to the lungs; often the stomach gets deranged by the quantity of swallowed dust; often ophthalmia (especially at the margin of the eyelids) is produced; often the voice becomes hoarse; and sometimes there is bleeding at the nose. Not a few operatives desert the occupation in consequence of the misery it occasions them; but new sufferers succeed; and many get a certain degree of acclimatisation, with which they go on, patiently bearing the gradual progress of disease, till presently, in mid-life or soon afterwards, their employment brings them to helplessness or death." No better description than this of the inevitable results to the operatives of the process of oversizing could possibly be given; and, inasmuch as the process in question has no merit except that of swelling the gains of the calico-producer, it may be hoped that the inquiry of Messrs. Osborne and Bridges will result in oversizing being stopped, or at least deprived of its hurtful properties to those who cannot escape connection with it.

THE CHOICE OF BOOTS AND SHOES.

Although much has been said and written in recent years about the physiology of the foot and its coverings, we are afraid comparatively few people are yet to be found amongst us who choose their boots and shoes upon intelligent or even intelligible principles. Although most persons wear their boots both too small and of wrong shape, faults of size are now probably more common than faults of shape. It is not generally recognised that the foot expands in the action of walking, both in length and in breadth. An adult foot in walking often expands as much as a tenth of its length, or about an inch. In breadth, it expands proportionately more; often as much as an eighth, or about half an inch. In choosing boots and shoes, this double expansion ought to be allowed for. It is because this physiological enlargement of the feet in walking is so frequently overlooked, that boots and shoes so often become dangerous contrivances for deforming the shape, and crippling the motions of the feet. A shoemaker usually measures his customer's foot when the person is sitting, and when the measured foot is raised from the ground; and it will be found that, as a rule, he allows only a twenty-fourth part of the length of the foot for expansive increase in that direction during walking, while he generally does not allow anything for expansion in breadth, being content to take the exact circumference of the foot, at one or more points, whilst the extremity is in its unexpanded condition. Boots and shoes of faulty shape are not now so often seen as formerly. Improvement in this direction is probably in great part due to the excellent example which our army shoemakers have lately exhibited. The authorities have happily recognised that the safety of our troops in the field depends upon the shape of their shoes, as well as upon the colour of their clothes. In the army shoe stores at Pimlico, scrupulous attention is now paid to the shape and "make" of soldiers' boots, in conformity with the principles laid down by Camper, Meyer, and other well known writers on the subject. There are eight sizes of length and four of breadth, giving thirty-two sizes in all. The boots are made right and left. The inner line of the boot is made straight so that the great toe is not pushed outwards, and there is a bulging over the base of this toe to allow free play for its large articulation. The toes and the treads of the boots are very broad, so that the lateral expansion of the foot in these situations is not impeded. The heels are broad and low, so that the wearer's weight is not thrown upon his toes. A low heel gives free play to the muscles of the calf, and a broad heel gives a substantial support to the posterior pier of the pedal arch. Dr. Parkes found that the importance of a good boot is known to every soldier. Marshal Saxe wrote, in his *Memoirs*, that there is no article of a soldier's dress more important than his boots, and that battles are won by legs. It is related of the late Duke of Wellington that, on being asked what was the best requisite for a soldier, he said, "A good pair of shoes!" What next? "A spare pair of good shoes!" What next? "A spare pair of soles!"

THE MONASTERIO CASE: ALTERATION OF THE FRENCH LUNACY LAW.

Owing to the abuse of the law of 1838, according to which a person, on the simple certificate of a medical man, may be confined in a private or public lunatic asylum, and in view of the facts proved in the Monasterio case, the French authorities have resolved to modify the law. The Minister of the Interior has submitted a new *projet de loi* to the Senate, the terms of which may be summed up as follows. In order to secure the liberty of individuals, and to protect them against personal interests, intrigues, or vengeance, the medical man attending a patient who may be considered a fit subject for admission into a lunatic asylum, whether public or private, will, in future, in addition to the usual certificate, have to furnish a full report of the case, indicating the symptoms of the malady, the different phases through which it passed, and the state of the patient at the last visit of the medical attendant. The seclusion, or, as it is termed in French phraseology, "séquestration" will at the first be only provisional, and cannot in any case become definitive, without the intervention of the judicial authorities, and the passing through the formalities prescribed by the law. The director of the asylum will be required to forward the report of admission and a copy of the certificate, which will accompany the patient: 1. To the Prefet of the department; 2. To the "Procureur de la République" of the arrondissement in which the patient resides; 3. To the Procureur of the arrondissement where the asylum is situated. Within three days of the reception of the different documents required, the last named magistrate will proceed to the asylum, accompanied by a physician chosen by him, and who will be charged to question and examine the patient. In addition to this formality, the magistrate may, if he judge it necessary, make inquiry, or cause one to be made, at the home of the patient, or

eference to the condition of the family, and on the circumstances hich rendered it necessary to remove the patient to an asylum. he Procureur of the République will then forward written instruc- ons as to the admission or discharge of the patient. All these for- alities must be accomplished within the space of one month.

THE REGULATION OF LONDON TENEMENT HOUSES.

HE meeting held on Friday afternoon last week, under the auspices of ne Charity Organisation Society, to discuss the question of the super- ision of tenement houses in the metropolis, does not seem to have een able readily to make up its mind as to the best remedial easures to suggest. And, in truth, the question is far from being easy an one as might be supposed. Mr. Shirley Murphy and other etropolitan health-officers spoke of the futile efforts that had been ade by their authorities to frame and to enforce by-laws, designed for ne efficient regulation of houses let in lodgings and occupied by mem- ers of more than one family. The mistake into which the authorities ave fallen who have been so easily daunted in attempting to enforce y-laws in this subject-matter has been, that they have not limited ne application of such by-laws to houses where they were really anted—houses, that is, below a certain rateable value, or in which ne rent of each lodger is below a certain minimum. The attempt enforce such regulations as are contemplated by the Local Govern- ent Board's model code, in the case of all houses let in lodgings uld only lead to very undesirable and possibly disastrous results. r. Gibbon, the health-officer of Holborn, was inclined to scout the tion of regulations for tenement houses; but there is one sugges- on of his with which we find ourselves able very cordially to agree, amely, that each tenement house should have a sublandlord, who ould be responsible for the order and management of the house, nd see that it was properly locked up at night. In the best class small property, such a person is very generally employed; and, if his ppointment were made compulsory, nothing but good could result. ord Mount-Temple's proposal that the open staircases of tenement uses should be regarded as part of the public thoroughfare, and, as ich, should be under the control of the police, has the merit of inge- uity; but its legality seems questionable. The greatest difference of pinion manifested during the discussion was as to whether the police the sanitary authority should be responsible for the supervision of nement houses. Mr. Samuel Morley and other ardent philan- ropists would have preferred to leave the matter in the hands of e police. In favour of this view is the fact pointed out by one of e speakers, that, under an old Act of 1851, common lodging-houses the metropolis, which are *ejusdem generis* with the class of tene- ent houses that need regulation, are placed exceptionally under e charge of the Commissioners of Metropolitan Police, though roughout the rest of the country common lodging-houses are der the care of the local sanitary authorities. The metropolitan lice thus have already a staff which is available for the purpose of e inspection of tenement houses, whereas the vestries would have inaugurate and maintain a special night-sanitary service of their n if the duty were imposed upon them. On the other hand, lice supervision would mean the necessity of fresh legislation, ich at present it is idle to think of. Thus, while the meeting doubtedly did good in the public ventilation of what is admittedly natter of serious import, it found itself unable to do more than commend the more general enforcement by the local sanitary thorities of the powers already conferred upon them by Section 35 the Sanitary Act of 1866, as modified by Section 47 of the Sani- y Laws Amendment Act of 1874, with regard to making by-laws the registration, occupation, and wholesomeness of tenement uses. The exercise of the powers given by these Acts and the -laws made under them, if not all-sufficient for the prevention of abuses mentioned at the meeting, would at least have an appre- bly beneficial effect. It is indeed remarkable to what a small extent use has been made of these powers, and how little seemed to be known by those who spoke at the meeting of their extent and aim.

WILLIAM FARR, M.D., C.B., D.C.L.

WE have to announce, with deep regret, the death of Dr. William Farr, C.B., for many years the illustrious head of the Statistical Department of the Registrar-General's Office. Dr. Farr, for a large part of his lifetime, held the first position among vital statisticians in this country, and, indeed, in Europe. He first became connected with the Registrar-General's Office in 1838, when he was appointed compiler of abstracts. He there rapidly showed that genius for statistical inquiry, and for its applications to the statistics of life and death, which distinguished him throughout his subsequent career; and he organised the statistical department of the office. His reports and appended letters to the annual reports of the Registrar-General are documents, which mark successive epochal advances in the science of vital statistics and their application to national progress. The returns which he organised were the admiration of statistical Europe, and have been imitated throughout the world, but nowhere have they yet been equalled, although the models which he framed and furnished have been assiduously studied by all contemporary vital statisticians. It is not too much to say that the figures collected by him, the principles which he deduced from them, and the accomplished skill with which he impressed the doctrines of sanitary law upon statesmen and upon the public mind, have done more to forward the progress of sanitation throughout the world than the labours, perhaps, of any other man who could be named. Farr and John Simon stand side by side as the foremost figures of their time among the heroes of preventive medicine; and the debt which humanity owes to them has been recognised in every other country far more amply than in their own. Among the collateral services rendered by Dr. Farr, was the construction of life-tables illustrating the value of annuities, and laying down the bases for the English insurance companies. As an actuary, or in any other collateral department than that which he chose as an officer of the Government, he might have combined fortune with fame; as it is, he remained for all the working years of his life an underpaid hard-worked subordinate officer of the Government. Others reaped where he sowed, and others wore the laurels which he won; nevertheless the lot chosen by him was as honourable as it was useful. The labours which he underwent for the service of his country and for the good of humanity remain a permanent gain to the race. In no other capacity could he have rendered services so signal; that he was requited with something more than ingratitude, that he was condemned partly by carelessness, and partly by a system of bureaucratic oppression, to comparative obscurity, may have caused him some temporary pain, as it deeply wounded and angered his friends and the scientific public generally. But neglect and suppression of this kind have too long been the fate of the ablest servants of the State in all that relates to the saving of life to make his case singular. He was one of a great band of workers to whom this country and the world at large owes more than is yet known, or than the world is willing to acknowledge. History, directed to the study of social conditions, and to those who have laid the bases for sanitary improvement, will recognise in William Farr a name always to be inscribed upon the rolls of fame in striking and indelible characters. It will designate him as one of the true heroes of his day, and one whose work will live for long years after the very existence has been forgotten of many of those whom in his day the State delighted to honour, while it left Farr unrewarded. The circumstances attending his retirement will be fresh in the memory of most of our readers; the grudging requital of his grand life-work by the slightest honour which it is in the power of the Crown to bestow on any of its public servants, will not be forgotten. But nothing could dim the value of his work, the nobility of his example, his modesty,

his eloquence, his capacity, his unwearying zeal, his brilliant power of exposition, his unfailing courtesy, his patience and gentle kindness, his skill in the discussion of figures, his philosophical power of deduction, and his splendid contributions to the statistical literature of his day. In his earlier life, Dr. William Farr was a medical journalist, and for many years he retained a deep interest in the progress of medical journalistic literature. We were constantly indebted to him, during a large part of his period of office, for most courteous and able assistance in the discussion of subjects of vital statistics; and in Dr. Farr our readers have reason to mourn, not only a medical hero of the highest distinction, but a friend and counsellor, to whose anonymous services they were frequently beholden.

PLETHORA OF PATIENTS AND STARVATION OF FUNDS.

AT the present moment, when the financial condition of our great metropolitan hospitals has become one of the pressing questions of the day, when one institution alone has to appeal to the public to raise £150,000, in order to make up the deficiencies of an income which is less than a third of the expenditure, any scheme which may offer even a partial solution of the question, or may tend to prevent further complication, is well worthy of attention. We believe it to be true that the difficulty of managing the finances of the hospitals in London has increased of late years. Various causes have, no doubt, been at work to produce this result; the slackness of trade which has increased the number of the unemployed and diminished the giving power of the moneyed classes, may, no doubt, account for a good deal; but a more important element is probably the gradual growth of the class which looks to the hospitals for relief in sickness. The poor have been educated to regard the hospital as their only haven; within the walls of these institutions they have been taught to expect every comfort, and even luxury, that skill and money can provide; it is, no doubt, proper enough that such provision should be made for inmates. The evil has been that there has been no alternative between the skilled nursing and comfortable surroundings of the hospital, and the ignorance and misery of squalid homes. When sickness attacks the father or mother in a small artisan household, the discomforts in a few days become indescribable. Among the well-to-do classes, the ignorance of the first principles which should govern the management of the sick-room is extraordinary, and almost incredible; and as we descend in the social scale, there is no improvement in knowledge, and a great deterioration in means. Patients who have once learned the advantages of a hospital are generally anxious again to enjoy them when again suffering from disease. In this way, the hospitals are morally forced to admit a vast number of persons who cannot be nursed in their own homes, simply because there is no one to organise and instruct the willing but ignorant service of relatives and friends. For some years past, efforts have been made in various districts in London and elsewhere to alter this state of things for the better, by providing trained nurses for the sick poor on a well considered system. The largest, and one of the earliest of these efforts was made by the body now known as the Metropolitan and National Nursing Association. The seventh annual report of this Association was presented on April 17th, at a meeting held at Grosvenor House under the presidency of the Duke of Westminster, K.G. The work of the Association is chiefly confined to the districts of St. Giles, Holborn, and St. George's, Hanover Square, but it has recently established a branch at Greenwich, and kindred institutions, the offspring of the parent association in Bloomsbury Square, are at work in Paddington and Holloway. The associations work loyally with the medical practitioners of the districts; and that the excellence of the work done is appreciated by these gentlemen is well shown by the fact that, of the total number of 542 cases nursed from the central home, 320 were sent to the association by medical men. When a case is heard of, a visit is immediately paid by the Lady Superintendent with one of the nurses, the room in which the sick person lies is put into what is called in the report "nursing order," that is, the best is done in the way of ventilation and cleanliness, and for the comfort of the patient that the circumstances permit; the orders of the doctor in attendance as to dressings, applications and so forth, are carried out, a record of temperature and other matters of daily routine is kept in writing for the use of the doctor, and the friends of the patient are instructed. One good point about the scheme seems to us to be, that the Association gives nothing beyond the nursing service; where more material aid is necessary, the help of the parish authorities or of existing charitable institutions is invoked, but the Association does not distribute it, and endeavours in every way to avoid pauperising its patients. This is most important, and requires great tact and judgment on the part of the superintendent, who may have to decide in every individual case how much may be done by the Association for nothing—for, where the family can afford it, a small payment is expected—and when the gift of food and necessaries may be desirable. When dealing with infectious cases, with typhoid fever and diphtheria especially, the co-operation of the medical officer of health is, of course, invaluable to the Association; while, in return, the Association is of the greatest assistance to the officer in his duties as guardian of the public health. This aspect of the work brings us to the verge of an important question; that is, how assistance may best be given in cases of infectious disease regarded as a class apart. The matter was taken up in earnest at Hastings some years ago, and, chiefly owing to the exertions of Mrs. Johnstone, backed by the cordial support of the medical officer of health, a most efficient Sanitary Aid Association has been for some years at work. At Westminster, a similar body has come into existence, and has now been at work for about nine months. We understand that the National Health Society has taken steps to extend this plan widely throughout the metropolis and the large towns of the provinces. The scheme does not include the nursing of patients, and thus is, to a certain extent, less comprehensive than the Metropolitan Nursing Association. It relies more on the principle of self-help; people are to be taught what they ought to do to nurse a patient suffering from an infectious fever, and they will be shown how it is to be done; but the chief duty the Sanitary Aid scheme sets out upon is the prevention of the spread of the disease to other inhabitants of the infected house; a very true and noble application of the proverb that "Prevention is better than cure." To recur, however, to the Nursing Association, we have left one very important point untouched, that is, the cost at which the work is carried on. We see by their reports that the Metropolitan and National Nursing Association has attended 542 patients at a cost of about £1,500, and the Paddington and Marylebone Nursing Association has attended 485 at an outlay of about £650; that is to say, each patient costs the parent institution about £2 15s., the Paddington branch nearly quite £1 7s. This difference is no doubt due in part to the increased expenses entailed by the training of nurses, which is undertaken by the elder body. That the cases were not trifling is shown by the number of deaths, 84 and 74 respectively; a mortality of 158 in 1,027 cases must mean a very large proportion of serious cases among those which survived. With this short outline, we would very seriously commend the study of this aspect of the hospital and similar poor question to all those who are interested in either the one or the other. Further information may be obtained from the honorary secretary of the Nursing Association, the Rev. Dacre Craven, 7 Bloomsbury Square, W.C.; or, with regard to the Sanitary Aid Scheme, from the secretary of the National Health Society, 9 Berners Street, W.

PRESENTATION.—Mr. J. Ismay Atkinson, of Wylam-on-Tyne, has been presented by his friends with a testimonial consisting of a miniature brougham, a silver inkstand, and an illuminated address, as a token of their appreciation of his services during the forty-four years he has practised in Tyneside.

SCOTLAND.

ABERDEEN GENERAL COUNCIL.

THE annual meeting of this body took place last week. The only matter of interest before it was the Universities Bill, which was referred to a committee for consideration and report.

FYFE JAMIESON GOLD MEDAL.

THE memorial gold medal, struck in memory of the late Dr. Fyfe Jamieson, demonstrator of anatomy in the University of Aberdeen, has been gained by Mr. Philip Whyte Rattray, M.A., after a keen competition.

ABERDEEN UNIVERSITY COURT.

THIS court met last week, and *inter alia* it was agreed to concur in the desirableness of an addition to the bursaries for the benefit of students of medicine; and that the court had much satisfaction in recording the recent gifts by Mrs. Marr and Mr. Thompson, of Pitmedden, for that express object. The matter of medical bursaries came before the court on a similar motion, proposed by Professor Struthers in the General Council. The court resolved to meet on an early day to consider the Universities Bill.

THE MORTALITY IN EDINBURGH.

THE weather in Edinburgh during the month of March was exceptionally severe and trying, yet the death-rate for that month was only 19.25, while the average of the preceding five years was 22.11. In the Old Town, the death-rate during the last quarter was 22.27. At a meeting of the Edinburgh Town Council on Tuesday, the Lord Provost directed attention to the fact that the average mortality of the Old Town and of the New Town were the same. This was, he thought, unique, and he hoped it meant improvement in the Old, rather than falling off in the New Town.

UNIVERSITY OF EDINBURGH EXAMINATIONS.

ONE of the busiest months for examiners and professors in Edinburgh has just ended with the second professional examination. At the preliminary examination in March, 476 candidates entered. For the first professional examination in April, over 200 candidates entered; and for the second professional examination, over 290 candidates entered. Of course, this large number at the second professional is largely due to the privilege now possessed by the students of entering for two subjects only. The pass-lists will be published in a subsequent number of the JOURNAL.

THE MEDICAL ACT AMENDMENT BILL.

THE action taken by the Glasgow Extramural Teachers' Association in holding a meeting, and expressing its views on the principles embodied in the new Medical Act Amendment Bill, has been followed by the Glasgow Medico-Chirurgical Society, the members of which met on the evening of the 11th instant, and discussed the terms of the Bill in its relations to the interest of the profession generally. It would be scarcely correct to call the meeting one of the Glasgow Medico-Chirurgical Society itself, for there was a free invitation given to the members of all the other medical societies in Glasgow and its neighbourhood, and it was considered that, whatever conclusions were arrived at, they should be in no way binding on the Society. At the same time they are a valuable indication of the feeling of the profession at large in one of our university towns, where the proposed alterations will make themselves very materially felt. From the nature of the resolutions passed, it may be said that the sense of the meeting was in favour of the necessity of some alteration in the present system of granting qualifications, and that the principle of the proposed Medical Bill is good in so far as it provides for the formation of a conjoined board in each division of the kingdom to examine all candidates seeking registrable licences; but there was a very strong expression of opinion that the constitution of the board as at present proposed needs amendment, and that the profession should have direct representation, not only on the Medical Council, but also on the divisional board.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending April 7th, shows that the death-rate in the eight principal towns was 29.4 per thousand of estimated population. This rate is 7.3 above that for the corresponding week of last year, but 1.0 below that for the previous week of the present year. The lowest mortality was recorded in Paisley, viz., 17.2 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 5.2 per thousand, or 0.3 above the rate for the previous week. Whooping-cough continues to be the most fatal epidemic. In Glasgow, 24 deaths were registered from measles. From acute diseases of the chest there were registered 157, or 43 less than in the previous week. The mean temperature was 45.7, being 8.3 above that of the week immediately preceding, and 1.6 above that of the corresponding week of last year.

THE LORD RECTORSHIP OF GLASGOW UNIVERSITY.

As announced in the JOURNAL of April 7th, the Conservative students have decided to bring forward the Marquis of Bute as their candidate for this office. The nominee of the Liberals is now announced, and is Mr. Fawcett, M.P. One of the chief reasons that have influenced the Liberal Committee in recommending the right hon. gentleman as one specially qualified to be the Lord Rector, is that his long academic experience and parliamentary reputation would be of great service at a time when the Scotch University system is about to undergo considerable revision at the hands of Parliament. Mr. Fawcett has consented to stand, and, if elected, to deliver an address. There is yet another candidate, and that is Mr. Ruskin. He has been selected by the Glasgow University Independent Club, the members of whom are in favour of removing all political elements from the rectorial contest; and, from their address, they seem sanguine of success, especially as they have obtained the consent of Mr. Ruskin to his nomination. The election will take place next November.

IRELAND.

ROYAL UNIVERSITY OF IRELAND.

THE Senate of the Royal University met on Tuesday, April 10th, at the University, Earlsfort-terrace, Dublin. The following members of the Senate were present:—Lord O'Hagan, Vice-Chancellor of the University, Bishop Woodlock, Chief Justice Morris, Sir Robert Lane, Dean Neville, Dr. Moffatt, President of Queen's College, Galway, Mr. Edmund Dease, Dr. Allman, Rev. Dr. Stevenson, Dr. Cruise, Dr. M'Keown, Dr. Lyons, Mr. Greer, Mr. C. T. Redington, and Mr. Scott. The Senate had under consideration a report from the Standing Committee on the Medical Act Amendment Bill, in which it was stated that the Committee had requested a deputation to proceed forthwith to London, for the purpose of endeavouring to obtain such modifications of the Bill as may be found desirable, especially in the interests of the medical graduates and students of the University. The Senate approved the action of the Committee. The examiners appointed last year in connection with the medical examinations were reappointed for a period of one year, with the addition of Dr. Redfern as one of the examiners in anatomy for the same period.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1883.

Thursday, April 19th.

Dr. ACLAND, President, took the Chair at 2 P.M.

President's Address.—The PRESIDENT addressed the Council, referring to the subject which would principally engage its attention during the session—viz.: 1. Alleged or proved misconduct on the part of certain practitioners which had been found to demand judgment under Section 39 of the Medical Act; 2. The report of the Committee on Unqualified Assistants; 3. The report on Professional Examinations, which was directed last year to be forwarded to the Medical Schools. In concluding his address, the President made the following remarks respecting the Medical Acts Amendment Bill.

"The Council will have noticed that allusion has been made more than once to the Medical Bill introduced into Parliament by the Government. Copies of the Bill were forwarded to me for the use of the Council. I therefore beg to be allowed to say a very few words, on presenting it to you, in relation to the progress of legislation in respect of the department of medicine. The disjointed and unsatisfactory state of medical education in the first half of this century had long baffled the endeavours of many honourable men who desired to remedy its defects. After years of discussion the present Council was formed in 1858. At least one great advantage immediately followed. Men who were supposed to represent conflicting interests met together, and after a short time set themselves to the national task of securing a more uniform and better education for all medical students in each branch of the kingdom, of establishing uniformly wise and good examinations, which are the key to modern education, and of diminishing the number of the examining boards in the kingdom. Two Governments carried through the House of Lords Bills which would have completed these and other required improvements. A collateral issue as to the construction of the Council, raised in 1871, obstructed further progress. In the Council, and in the several licensing bodies, any complete combination, and any finality for examination arrangements have been paralysed by this question. For thirteen years, students, teachers, examiners, and institutions have been hindered in the attempts they were making at securing, in one way or another, a sound, permanent, national standard for medical training. Those who have followed the progress of modern biology in all its branches, normal and abnormal, can alone estimate the evil of this suspense. It is quite sufficient to remind you of the names of Brodie, Green, the two Pagets, George Burrows, Thomas Watson, James Arnott, Cæsar Hawkins, Rolleston, the two Woods, Syme, Allen Thomson, Lister, Stokes, William Baly, Sharpey, Parkes, William Lawrence, Teale, Christison, Begbie, Hastings, Rumsey, to recall to your thoughts what a variety of force, what power of goodness, what devotion, what intellect, what public spirit, what self-sacrifice have been during the last twenty-five years thrown within this Council alone into the task of aiming to secure for the next generation, by improved medical education, the welfare of the sick, the health of the nation, the strength of our soldiers and sailors, the progress of natural knowledge, the higher general culture of the medical student, and the social position to be reached by all educated medical practitioners without distinction of place or station. That great improvement has taken place in all these respects, no one who knows our medical students will for a moment question. But, until the settlement of various disputed questions, which Parliament alone can settle, the Council is unable to ensure for either teachers or students the stability of any sound methods of education upon which agreement can be obtained.

"It remains for us, as I said last year, until Parliament see fit to relieve us from the labours imposed upon us twenty-five years ago, to continue to labour as faithfully and efficiently as circumstances permit, and, when relieved, to hand over to our successors such work as we have been able to accomplish for the public good, wishing them, with additional powers and the experience of the past hearty God speed.

"It is possible that this may be the last time that I shall be called upon to address you, except for the most formal business; and, in this case, I would wish my very last words to be the expression of gratitude for kindness accorded to me for twenty-five years from the whole Council, for support during nine years as your President, and to leave a record of strong personal affection to many to whom I have, for so long, owed so much."

On the proposal of Mr. TURNER, the President's Address was ordered to be entered on the Minutes.

The Business Committee and the Finance Committee were appointed.

The following returns were presented, and ordered to be entered on the Minutes: A Table showing the Results of Professional Examinations held in 1882 for qualifications granted by the Bodies named in Schedule A of the Medical Act: a Table showing the number of exceptional cases in 1882 to the Council's Recommendations on Education and Examination: and returns from the Army and Navy Medical Departments of the results of the Competitive Examinations for appointments during the year.

Mr. MARSHALL withdrew a notice of motion which he had given, to ask the sanction of the Council for the proposed scheme of co-operation between the Royal Colleges of Physicians and Surgeons.

A further report of the proceedings will be given in next week's JOURNAL.

THE GENERAL MEDICAL COUNCIL.

"A Man in the Gallery" writes to us:—The opening of the proceedings of the General Medical Council this session had a touching personal interest, in lieu of the political excitement which some had anticipated. I believe that for a long time, in the gallery, I was almost the only member of the medical profession, not summoned and paid to attend, who assisted at the proceedings. The total absence of the medical public from the gallery is indeed one of the most striking commentaries on the falling fortunes and fading interests of the doomed senate. The gallery holds about twenty persons. In times of excitement, I think I have seen half-a-dozen strangers collect to listen to the debates. I was, however, alone to-day in listening to the President's opening, or shall I call it farewell address? With an admirable mixture of resignation with fortitude, he announced himself prepared for any fate. He bade the gladiators who were assembled to do battle for their respective "shops" (as Sir Dominic Corrigan used irreverently to describe the corporations), write upon their banners, "*Morituri te salutant.*" He draped himself by anticipation with mournful dignity in his presidential robe, and announced himself prepared for any fate. He intimated that the Medical Acts Amendment Bill now before the House of Lords sounded the death-knell of doom, and that it was not worth while to struggle against fate, or to prepare any organised opposition. Mr. Marshall had held out some hope of an interesting episode, by challenging the Council to approve that marvellous little compact between his College and the College of Physicians, which has provoked such contemptuous criticism in the medical journals, and may be regarded as still-born; and, following on this, Dr. Quain gave notice of his intention to ask a question on the subject. The worthy Vice-President of the College of Surgeons, however, has withdrawn his notice; but it is much to be hoped that Dr. Quain will put his question in the interests of the profession, which would like to have it answered publicly. Surely the whole matter concerns the Council, and ought to be fought out there, and not in the secret chambers of the colleges.

THE ODOUR OF IODOFORM.—Dr. S. S. Earp, of Indianapolis writes in the *Cincinnati Lancet*: "To discover a substance that would disguise the odour of iodoform, and yet be synergistic, has been a subject that has given the busy practitioner much careful thought. Iodoform is a valuable remedy, yet I formerly came into contact with many patients who absolutely refused to use it, on account of its disagreeable odour. I can testify to the efficacy of the combination of oil of eucalyptus and iodoform, published in *Lancet and Clinic*, October 4th. I have used a similar combination for a year past. In patients suffering from chancroid, I first apply an escharotic, followed by a prescription containing oil of eucalyptus and iodoform; and, in nearly all instances, have had signal success. I prefer the following combination: ℞ Iodoform ʒi; oil of eucalyptus ʒi; bismuth subnitrate ʒss; zinc oxide; ointment of petroleum ʒ Apply locally to parts three or four times per day. I have substituted tannic acid for the oxide of zinc, yet it extracts the albume from the tissues so thoroughly that hardened cakes are formed which are not only disagreeable, but retard the healing process."

BRITISH MEDICINES IN ITALY.

WE have received the following communication on this subject.

"Lord Edmond Fitzmaurice presents his compliments to the Editor of the BRITISH MEDICAL JOURNAL, and is directed by Earl Granville to state that attention having been called to a paragraph in that periodical relative to British patent medicines in Italy, a communication was addressed to Her Majesty's Embassy at Rome on the subject. Lord Edmond Fitzmaurice now encloses, for the Editor's information, an extract of the despatch which has been received from Sir A. Paget in reply."

Foreign Office, April 5th, 1883.

[*Extract.*]

"Rome, March 29th, 1883."

"I have the honour to inform your lordship that the 'Consiglio Superiore di Sanità' passed a resolution last year to the effect that the importation of foreign patent medicines into Italy ought to be restricted, and that an order was consequently issued in December, by the Finance Ministry, to the Customs authorities to admit, in future, only those medicines which are mentioned in the schedule to the French Commercial Treaty and a very few English patent medicines specified in the order itself.

"Under the 56th article of the General Tariff such medicines as 'medicamenti composti non nominati' are admissible under a duty of 120 lire per quintal, at which rate they have always hitherto been admitted.

"The order not being generally known, no immediate protest was made against it. It was not until consignments of foreign patent medicines began to be stopped at the Italian custom houses, and refused admittance on the ground that they were not specified in the French Treaty, that complaints were made by importers having a claim to foreign protection. In consequence of these representations made to the Ministry for Foreign Affairs, the 'Consiglio Superiore di Sanità' has been requested to revise its list of admissible medicines. The Ministry of Finance has at the same time been induced to issue a fresh circular to the Customs authorities, directing them to allow foreign patent medicines to pass, even though not included in the last published lists; and this instruction is to remain in force until the 1st of July next."

ROYAL COLLEGE OF PHYSICIANS.

AT the extraordinary meeting of the College, held April 12th, the minutes of the last meeting were confirmed. A letter was read from the College of Surgeons announcing the acceptance by the Council of that body of the scheme for co-operation with this College in conducting examinations. The representative of the College in the General Medical Council was requested to apply to that body for its sanction to the co-operation agreed to by the two Colleges. The report of the Committee on the Medical Act Amendment Bill was received, and considered clause by clause. Clauses 1, 2, 3, and 4, were agreed to. On Clause 5, the following amendment was moved: "That the College is not prepared, without further consideration, to surrender the privileges and powers which it has enjoyed for centuries, and exercised for the benefit of the public and the profession. That a Committee be appointed for the purpose of conferring with the Government and reporting the results to a future meeting of the College." This amendment was negatived.

Clauses 5, 6, and 7 were then agreed to. The following motion was agreed to: "That a Committee be appointed with power to take all needful steps for obtaining such amendments in the Medical Act Amendment Bill as will embody the recommendations now agreed to by the College, namely:

"1. That on the constitution of the Medical Council (Clause 14) the College should not offer any opinion.

"2. That the College should agree to the principle of a common medical board for each division of the United Kingdom (Clause 9), by whom every candidate, whether male or female, shall be examined in the departments of medicine, surgery, and midwifery, and receive a certificate of competency before admission to the *Medical Register*. Such a medical board for England, the College has for some years past strenuously sought to establish. To the method proposed for electing such medical boards, the Committee see no reason to object, nor to the main functions assigned to them, such as the framing of schemes for medical education and examinations; the appointment of examiners; and the supervision of examinations.

"3. That as regards the constitution of the medical board for England (Clause 9, Sec. 3), the Committee recommend that the College should claim for this division of the kingdom a preponderance of members for the corporations, the chief licensing authorities in England, as is granted in the Scotch Board to the representatives of the Universities, which are the principal licensing authorities in that division of the kingdom.

"4. The endowment and incorporation of the medical boards (Clause 9, Sec. 6), the Committee believe to be alike undesirable; unjust to existing authorities; and unnecessary for the efficiency of the boards in carrying out the objects for which it is proposed to establish them.

"5. The Committee recommend the College to accept the scheme of a separate licensing examination (Clause 26), entitling to registration as registered medical practitioners, provided that the titles of the College be afterwards separately registrable, on such conditions as the College may see fit to determine, with the approval of the Medical Council.

"6. Some provision should also be made in the Bill (Clause 28), to the following effect: On and after the aforesaid day, if any person, whether a registered medical practitioner or not, takes or uses the designation of, or represents himself to be, a physician, unless he be a graduate in medicine of a recognised university, or hold a qualification from a College of Physicians, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds. On and after the appointed day, if any person, whether a registered medical practitioner or not, takes or uses the designation of, or represents himself to be, a surgeon, unless he be a graduate in surgery of a recognised university, or hold a qualification from a College of Surgeons, he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds.

"7. In conclusion, your Committee believe that there are many other clauses in the Bill which may require the careful consideration of the College, but which do not affect the principle of the Bill, and to that alone your Committee has hitherto had time to devote their attention."

The Committee appointed were the President, the Registrar, Dr. Andrew Clark, Sir Risdon Bennett, Sir William Gull, Drs. Quain, Barclay, Maudsley, Ord, and Moore.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

NORTH OF ENGLAND BRANCH.—The spring meeting of this Branch will be held at Bishop Auckland, on Friday, April 27th. Members are invited to give notice to the Secretary, at their earliest convenience, of any papers, etc., they may wish to bring before the Branch.—DAVID DRUMMOND, M.D., Honorary Secretary.—7, Saville Place, Newcastle-on-Tyne, April 2nd, 1883.

MIDLAND BRANCH.—A meeting will be held at Spalding, on Thursday, May 17th. Gentlemen intending to read papers, or to show specimens or cases, are requested to communicate with the District Honorary Secretary, W. A. CARLINE, M.D., Lincoln.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M., on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.—A joint meeting will be held in Worcester, on Tuesday, May 29th. Members having any paper to read or cases to bring forward, are requested to report the titles of such paper or cases to the Honorary Secretary, not later than Thursday, May 17th, after which date a second circular will be issued, giving full particulars of the meeting.—GEORGE W. CROWE, M.D., Honorary Secretary, Shaw Street, Worcester, April 13th, 1883.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held at the Griffin Hotel, Kingston-on-Thames, on Thursday, April 26th, at six o'clock. Members willing to bring forward any communication are requested to give notice to the Honorary Secretary, EDWARD L. FENN, M.D., Richmond.—April 16th, 1883.

EAST ANGLIAN BRANCH.—The spring meeting will be held at Lynn, on Thursday, May 24th, under the presidency of John Lowe, Esq., M.D. Notices of papers and cases to be sent to the Secretaries before May 12th.—W. A. ELLISTON, Ipswich, MICHAEL BEVERLEY, Norwich, Honorary Secretaries.

SOUTHERN BRANCH; ISLE OF WIGHT DISTRICT.—The annual meeting of this District will be held at the Royal Pier Hotel, Sandown, Isle of Wight, on Thursday, April 26th, 1883, at 4 P.M.; Alexander G. Davey, Esq., M.D., President, in the chair. *Agenda:* 1. Annual Statement of Accounts, and Election of Officers. 2. An Address by the President-Elect, James Neal, Esq., M.D. 3. Adjourned Discussion upon Dr. Robertson's Paper (Pulse-Tracings, and their Significance). 4. W. E. Green, Esq.: Tracings of Pulse, showing Compensation of Heart after Rheumatic Fever, in a Case of Aortic Incompetence. 5. Dr. J. G. Sinclair Coghill: Two Cases of Uterine Displacement, illustrating Reflex Phenomena. 6. W. E. Green, Esq., and Dr. J. M. Pletts: Removal of Pipe-stem from Tongue, with Notes of After-treatment. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. *By-law:* "When a member cannot attend whose paper is upon the agenda, it should be sent, before the meeting, to the Secretary, for the purpose of being read and discussed." Subscriptions to the Association for 1883 will be received before this meeting. Dinner at 6 P.M.; charge, 6s., exclusive of wine. Members intending to be present at the dinner are requested to send in their names on or before Tuesday, the 24th instant.—W. E. GREEN, Honorary Secretary.

BATH AND BRISTOL BRANCH.—The fifth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, April 25th, at half-past seven o'clock, J. K. Spender, M.D., President. The following communications are expected: 1. Results of some Surgical Operations—Exhibition of the Patients, F. R. Cross, M.B. 2. Three Cases of Puerperal Convulsions successfully treated by Venesection, J. Fuller. 3. A Case of Lymphadenoma, with Microscopical Specimens, A. J. Harrison, M.B. 4. The Utility of the Bacillus Tuberculosis for Diagnosis, R. S. Smith, M.D.—E. MARKHAM SKERRITT and R. J. H. SCOTT, Honorary Secretaries.—Clifton, April, 1883.

NORTH OF ENGLAND BRANCH.—The spring meeting of this Branch will be held in the Talbot Hotel, Bishop Auckland, on Friday, April 27th, at 2.30 o'clock. The following papers will be read: 1. On Visceral Gout, Dr. Philipson. 2. On Hæmorrhage, and its Treatment by Storing and by Transfusion, with Cases, Mr. J. F. Le Page. 3. Septic *versus* Antiseptic Midwifery, Dr. E. C. Anderson. 4. On Pneumonia coincident with Surgical Injury, Dr. Foss. 5. Note on the Diagnosis of Tumours of the Dura Mater, with Specimens, Dr. Drummond. Dinner at 5 P.M.; charge, 6s. 6d., exclusive of wine.—DAVID DRUMMOND, M.D., Honorary Secretary, 7, Saville Place, Newcastle-on-Tyne.

YORKSHIRE BRANCH.—The spring meeting will be held at the Queen Hotel, Harrogate, on Wednesday next, April 25th, at 3 P.M., when the following will be the business: 1. Discussion on the Registration of Midwives' Bill. 2. Collective Investigation. 3. Dr. Churton: (*a.*) Neglected Cases of Empyema; (*b.*) Bleeding for Nephritis. 4. Dr. C. F. Hutchinson: The Object and Uses of the Sea-bathing Infirmary at Scarborough. 5. Mr. Knaggs: A mode of Treating a Tense Abdominal Cyst. 6. Mr. Jessop: Gangrene of the Foot determined by the Spontaneous Cure of a small Popliteal Aneurysm. 7. Dr. Myrtle: On some Common Affections of the Anus, often neglected by doctors and patients. 8. Dr. J. A. Myrtle: A Case of Erratic Gout. 9. Mr. McGill: Remarks on the after-Treatment of Excision of the Knee. 10. Dr. Oliver: Demonstration of Tests for Albumen. 11. Dr. Cooke: Some Cases of Surgical Interest occurring in Private and Hospital Practice at Scarborough.—ARTHUR JACKSON, Honorary Secretary.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

THE Fifty-first Annual Meeting of the British Medical Association will be held at Liverpool, on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1883.

President: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

President-elect: A. T. H. WATERS, M.D., F.R.C.P., Physician to the Royal Infirmary, and Professor of Medicine in University College, Liverpool.

An Address in Surgery will be delivered by REGINALD HARRISON, F.R.C.S Surgeon to the Royal Infirmary, Liverpool.

An Address in Pathology will be delivered by C. CREIGHTON, M.D., formerly Demonstrator of Anatomy, University, Cambridge.

The business of the Annual Meeting will be conducted in ten sections.

SECTION A. MEDICINE.—*President:* John Cameron, M.D. *Vice-Presidents:* Thomas R. Glynn, M.D.; Frederick T. Roberts, M.D. *Secretaries:* Richard Caton, M.D., 18A, Abercromby Square, Liverpool; Byrom Bramwell, M.D., 23, Drumsheugh Gardens, Edinburgh.

SECTION B. SURGERY.—*President:* Edward R. Bickersteth, F.R.C.S. *Vice-Presidents:* W. Hargreaves Manifold, M.R.C.S.; W. Mitchell Banks, F.R.C.S. *Secretaries:* Rushton Parker, M.B., F.R.C.S., 61, Rodney Street, Liverpool; Edmund Owen, M.B., F.R.C.S., 49, Seymour Street, Portman Square, W.

SECTION C. OBSTETRIC MEDICINE.—*President:* W. M. Graily Hewitt, M.D. *Vice-Presidents:* John Wallace, M.D.; David Lloyd Roberts, M.D. *Secretaries:* John E. Burton, L.R.C.P., 64, Rodney Street, Liverpool; W. C. Grigg, M.D., 6, Curzon Street, Mayfair, W.

SECTION D. PUBLIC MEDICINE.—*President:* T. P. Teale, M.B., F.R.C.S. *Vice-Presidents:* William Carter, M.D.; W. Honner Fitz-Patrick, M.D. *Secretaries:* F. Pollard, M.D., 52, Rodney Street, Liverpool; George Goldie, M.D., 123, Hyde Park Road, Leeds.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* Professor E. A. Schäfer, F.R.S. *Vice-Presidents:* William Stirling, M.D.; Richard Norris, M.D. *Secretaries:* James Barr, M.D., 1, St. Domingo Grove, Everton, Liverpool; A. W. Mayo Robson, F.R.C.S., Hillary Place, Leeds.

SECTION F. PATHOLOGY.—*President:* T. H. Green, M.D. *Vice-Presidents:* E. H. Dickinson, M.D.; Joseph Coats, M.D. *Secretaries:* Frank Thos. Paul, F.R.C.S., 44, Rodney Street, Liverpool; James F. Goodhart, M.D., 27, Weymouth Street, W.

SECTION G. PSYCHOLOGY.—*President:* T. L. [Rogers, M.D. *Vice-Presidents:* G. H. Savage, M.D.; D. Yellowlees, M.D. *Secretaries:* G. E. Shuttleworth, M.D., Royal Albert Asylum, Lancaster; W. Julius Mickle, M.D., Grove Hall Asylum, Bow, E.

SECTION H. OPHTHALMOLOGY.—*President:* T. Shadford Walker, M.R.C.S. *Vice-Presidents:* E. Nettleship, F.R.C.S.; C. E. Fitzgerald, M.D. *Secretaries:* E. A. Browne, M.R.C.S., 86, Bedford Street, Liverpool; C. E. Glascott, M.D., 23, St. John Street, Manchester.

SECTION I. DISEASES OF CHIDREN.—*President:* Samuel Jones Gee, M.D. *Vice-Presidents:* M. G. B. Oxley, M.D.; T. R. Jessop, F.R.C.S. *Secretaries:* H. G. Rawdon, M.D., 42, Rodney Street, Liverpool; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION J. OTOLOGY.—*President:* G. P. Field, M.R.C.S. *Vice-Presidents:* Edward Woakes, M.D.; C. Warden, M.D. *Secretaries:* Thos. Barr, M.D., 10, Albany Place, Sauchiehall Street, Glasgow; R. Williams, L.R.C.P., 82, Rodney Street, Liverpool.

Honorary Local Secretary: Alexander Davidson, M.D., 2, Gambier Terrace, Liverpool.

Honorary Treasurer: W. Mitchell Banks, F.R.C.S., 28, Rodney Street, Liverpool.

TUESDAY, JULY 31ST, 1883.

10.30 A.M.—Church Service at Pro-Cathedral. Sermon by Bishop of Liverpool.
12.0.—Meeting of Committee of Council.
12.30 P.M.—Meeting of the Council, 1882-3.
3 P.M.—First General Meeting: Report of Council and other business. Adjourn at 5 P.M.
8.15 P.M.—Adjourned General Meeting: President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 1ST, 1883.

9.30 A.M.—Meeting of Council, 1883-84.
11 A.M.—Second General Meeting. Address in Surgery.
1.30 to 5 P.M.—Sectional Meetings.
9 P.M.—*Soirée* in the suite of rooms forming the Arts Gallery, the Picto Reading Room, and the Free Library, by the President an Local Committee. To this, ladies will be invited.

THURSDAY, AUGUST 2ND, 1883.

9 A.M.—Meeting of Committee of Council.
10 A.M.—Third General Meeting. Sectional Meetings. Adjourn at 1 P.M.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner in the Philharmonic Hall.

FRIDAY, AUGUST 3RD, 1883.

10 A.M.—Fourth General Meeting. Address in Pathology. Section Meetings.
2 P.M.—Concluding General Meeting.
9 P.M.—*Soirée* by the Mayor of Liverpool, at the Town Hall. To th ladies will be invited.

SATURDAY, AUGUST 4TH, 1883.

Excursions.

FRANCIS FOWKE, *General Secretary.*

London, April 17th, 1883.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a meeting of the Committee of Council, held at Exeter Hall, on Wednesday, April 11th, 1883; Present, Mr. C. G. WHEELHOUSE, President of the Council, in the chair; Dr. W. Strange, President; Dr. A. T. H. Waters, President-elect; Dr. W. F. Wade, Treasurer; Dr. D. Drummond, Dr. M. M. De Bartolomé, Mr. T. H. Bartleet, Dr. L. Borchardt, Dr. A. Carpenter, Dr. C. Chadwick, Dr. J. Ward Cousins, Dr. G. W. Crowe, Dr. A. Davidson, Dr. W. A. Elliston, Dr. B. Foster, Dr. E. Long Fox, Dr. W. C. Grigg, Dr. A. J. Harrison, Dr. C. Holman, Professor G. M. Humphry, F.R.S., Mr. T. V. Jackson, Dr. H. T. Lanchester, Mr. C. Macnamara, Mr. F. E. Manby, Mr. F. Mason, Mr. Rushton Parker, Dr. C. Parsons, Dr. S. Rees Philipps, Dr. E. Rickards, Mr. R. J. H. Scott, Dr. R. C. Shettle, Dr. A. Sheen, Mr. S. W. Sibley, Dr. E. H. Sieveking, Dr. E. M. Skerritt, Dr. A. P. Stewart, Dr. A. Strange, Mr. T. Sympson, Dr. E. Waters;

The minutes of the last meeting were signed as correct.

Read letters of apology for non-attendance from Dr. Arlidge, Dr. Duffey, Dr. Gibson, Mr. Husband, Dr. Eyton Jones, and Dr. Leslie Jones.

Read correspondence between the General Secretary and Mr. Frank Hodges, Honorary Secretary to the Lincoln District of the Midland Branch, respecting one of the candidates for election as a member of the Association.

Also correspondence between the President of Council and Mr. E. P. Hardey, of Hull, Honorary Secretary to the East York and North Lincoln Branch, upon the subject of homœopathy.

Resolved: That the Committee of Council fully approves of the action of the President of Council, and endorses the expressions contained in his communication to the Secretary of the East York and Lincolnshire Branch.

Resolved: That every care has been taken to exclude homœopaths when coming before the notice of the Committee of Council for election, and such care will continue to be exercised.

Resolved: That a copy of the foregoing resolution be sent to each Honorary Secretary of every Branch.

Resolved: That 141 of the 144 candidates, whose names appear on the circular convening the meeting, be and they are hereby elected members of the Association. Of the three not elected, one was declined, one had died, and the third was referred to the Metropolitan Counties Branch.

Mr. Bartleet gave notice that he would move

"That anyone elected a Member of the Association, and subsequently being found to be practising homœopathy or other secret or empirical mode of practice, or afterwards during his membership becoming a homœopathic or secret or empirical practitioner, shall, *ipso facto*, cease to be a member of the Association."

Read resolutions of the Birmingham and Midland Counties Branch, of which the following are copies.

Resolved: "That this meeting, called specially to consider the question, is of opinion that a Medical Sick Benefit Society would be of great advantage to the profession; and, if instituted in connection with the British Medical Association, could be successfully established."

Resolved: "That the Committee of Council be requested to take steps to ascertain the opinion of other Branches upon this subject; and, should that be found to be favourable, to take such other steps as may seem desirable."

Resolved: That the Committee of Council cordially approves of the formation of a Medical Provident Society, and will provide a place of meeting at Liverpool for those members of the profession who may be willing to discuss the propriety of forming themselves into one. The Committee of Council is of opinion that such a society, to be successful, should be originated, supported, and managed entirely by its own members. Under any other circumstances, it would partake of a charitable character, inconsistent with the idea of self-help; and this would be most deleterious, if not fatal, to its permanent success. The Association is precluded by its Memorandum of Association, which, under the Companies' Acts of 1862 and 1867, is unalterable, from expending any of its funds in constituting or managing such a society. It is equally precluded from expending any of its funds in guaranteeing or making up any deficiencies which might arise in such an undertaking. Any effective connection between the Association and the society appears, therefore, to be impracticable.

Resolved: That the Arrangement Subcommittee be asked to provide a room.

Resolved: That a special meeting of the Council be called at Birmingham to consider the report of the Committee of Council on the representation of the Branches in the Committee of Council, and that a special meeting of the Committee of Council be afterwards called to carry out the views of the Council.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date, together with the financial statement for the year 1882, be approved and adopted, and the recommendations carried into effect; and that the financial statement (page 790), as certified by the auditors, be published in the JOURNAL, in accordance with By-law 33.

The minutes of the Journal and Finance Committee contain the auditors' certificate of the quarterly examination of the accounts for receipts amounting to £4,414 8s. 7d., and office payments to £986 7s. 4d.; the sealing transfers in 4 per cent. Railway Debenture Stock for £1743; the recommendation of the publication of a Record of the Collective Investigation Committee in a separate form.

Resolved: That the resolution of the Journal and Finance Committee, January 17th, respecting the constitution of the Journal and Finance Committee, be approved and confirmed, and notice be given of the alteration of By-law 35.

Resolution of the Journal and Finance Committee of January 17th, 1883: That it be recommended that the Journal and Finance Committee shall consist of fifteen elected members, in addition to the President, the President-elect, the President of the Council, and the Treasurer, and that three of the elected members shall retire annually by rotation, and be ineligible for election for the ensuing twelve months.

Resolved: That the minutes of the Arrangement Committee be approved and adopted, and that the Address in Pathology be given on the Friday.

The minutes of the Arrangement Committee contain the proposed programme of the Annual Meeting (see page 788).

Resolved: That the minutes of the Committee for obtaining legislative restriction for Habitual Drunkards, of the 10th instant, be approved, and the recommendation carried into effect.

The minutes of the Habitual Drunkards Committee contain a report on the replies of Boards of Guardians to a circular of the Committee, asking their views as to the detention and care of pauper habitual drunkards.

Dr. Ward Cousins gave notice that he would move the following alterations in the by-laws, at the annual meeting to be held at Liverpool on July 31st next, viz.:

40. Any number of members, not less than 100 residing within, or not less than 25 residing without, the limits of the United Kingdom of Great Britain and Ireland, may form themselves into a Branch of the Association, subject to such Branch being recognised by the Committee of Council.

41. The existing Branches of the Association, as now recognised by the Committee of Council, shall constitute the Branch Organisation of the Association. An outline of such organisation shall be annually published in the form of a chart, showing the areas and distribution of the Branches, together with any other particulars that may be determined upon from time to time by the Committee of Council.

42. Any modification or division of an area of a recognised Branch shall be subject to such modification or division being recognised by the Committee of Council.

43. In the event of any two or more recognised Branches being desirous of uniting to form one Branch, a requisition specifying the particulars and objects of such union must be forwarded by each of the Branches to the Committee of Council. In the event of such union being recognised by the Committee of Council, the recognition shall date from the 1st day of January then next ensuing.

44. Any number of members, not less than 100, residing in a district of a recognised Branch, being desirous of forming within the area of such district a new and separate Branch of the Association, may hold a special meeting of the members residing in such district, and then forward through the Honorary Secretary of the Branch the requisition adopted by such meeting, specifying the particulars and object of the proposed separation to the Committee of Council. In the event of such separation being recognised, the recognition shall date from the 1st day of January then next ensuing.

45. Same as By-law 41.

46. Same as By-law 42.

47. The Honorary Secretary of each Branch shall forward to the General Secretary, on or before the 31st day of March, on or before the 30th of June, and on or before the 31st day of October in each year, a statement of the moneys received by him on behalf of the Association; and, on the 31st day of October in each year, he shall close the Branch account for the current year, and shall give notice that all unpaid subscriptions must be forwarded direct to the General Secretary of the Association. A notice of the annual closing of the Branch accounts shall be inserted in the JOURNAL during the month of October.

Read communication from Dr. Fothergill, of which the following is a copy.

To the Committee of the British Medical Association.

Mr. President and Gentlemen,—In accordance with By-law 43 of the Association, I herewith give you formal notice that, at the annual meeting of the Association for 1883, I shall propose an addition to By-law 12, by virtue of Article 28.

By-law 12: "The Editor of the JOURNAL shall be elected by the Committee of Council, and be remunerated in such manner as the Committee of Council shall think fit."

I shall propose the following addition. "That the editor shall be elected for a period not exceeding five years; but shall be eligible for re-election for a like period."—I remain, Mr. President and gentlemen, yours most respectfully,

J. MILNER FOTHERGILL, Member of the British Medical Association.

March 30th, 1883.

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31ST, 1882.

Revenue Account, or Profit and Loss for the Year ending December 31st, 1882.

DR.]	£ s. d.	£ s. d.
Editor		500 0 0
Sub-Editor		200 0 0
Assistant Editor		200 0 0
Contributors		1,520 0 10
JOURNAL:—		
Printing	3,025 4 2	
Paper	3,004 2 6	
Postage	1,282 13 0	
Address Bands	169 3 5	
		7,481 3 1
Wood Engraving		87 13 0
Reporting		49 1 0
JOURNAL EXPENSES:—		
Editor's Postage £31 13 0		
Postage of Journal Slips 15 12 1	47 5 1	
Boy's Wages	26 17 0	
Newspapers	15 10 4	
Parliamentary Papers	2 10 0	
Telegrams, etc.	8 1 5	
Sub-Editor's Expenses	2 1 0	
Editor's Expenses	15 17 6	
Books of Reference	7 0 6	
		125 2 10
Editor's Clerk		100 0 0
COMMITTEES:—		
Collective Investigation		
Salary of Secretary £83 6 8		
Travelling Expenses 100 0 0		
Printing, etc. 191 2 1	474 8 9	
Parliamentary Bills:		
Registration Midwives Bill	38 11 0	
Scientific Grants, 1882-83	300 0 0	
		812 19 9
Auditors' Fee		63 0 0
General Secretary		600 0 0
Rent		312 14 2
Taxes, Parochial, Gas and Water Rates	132 6 3	
Fire Insurance	16 17 0	
		149 3 3
Miscellaneous Printing		
Printing in connection with Committees, Advertisements, Association Printing, and Journal and Editor's Printing	232 15 11	
Printing, Annual Meeting, Worcester, Daily Journal and Member's Cards, 1882	47 5 6	
		280 1 5
Reprints		41 8 10
Salaries and Wages		634 3 3
Postage		282 6 8
Sundry Office Expenses:		
Travelling Expenses	17 4 10	
Travelling Expenses of Clerks	11 7 11	
Committees	4 14 6	
Commission and Advertising	3 12 2	
Journals Bought	3 2 6	
Sectional Expenses	14 14 1	
Copying and Assistance	293 9 11	
Cleaning Offices	49 1 6	
Sundries and Petty Cash	94 0 8	
		491 8 1
Stationery: Account Books, Ledgers, Pens, Ink, Paper, etc.		208 5 6
Coals		6 18 0
Sundries		37 3 3
Repairs and Alterations		79 0 10
Bank Charges		14 13 1
Branch Charges		1 0 9
Legal Expenses in defending Dr. Ferrier		75 0 0
Plant Depreciation Fund		300 0 0
Premises Redemption Fund		150 0 0
Furniture and Fittings		62 3 6
		14,864 11 1
Subscription losses from death, etc., and Branches		256 18 4
Advertisements, discounts, allowances, etc.		1,167 7 1
Profit for the year carried to Balance Sheet		2,788 0 5
		£19,076 16 11

CR.]	£ s. d.	£ s. d.
Subscriptions		10,057 1 11
Ditto former years		55 13 6
Advertisements		7,223 11 7
Sundry Sales of Journal		908 4 11
Ditto Reprints		52 11 0
Sundries		37 17 9
One year's Dividends on £5,132 0s. 6d. Consols	149 15 11	
Ditto on £2,000 L. & N. W. Railway 4 per cent. Debenture Stock	77 18 11	
Ditto on £1,780 Midland Railway 4 per cent. Debenture Stock	69 7 8	
Ditto on £1,767 G. W. Railway 4 per cent. Debenture Stock	68 17 7	
Ditto on £845 L. & S. W. Railway 4 per cent. Debenture Stock	32 18 9	
		398 18 10
Scientific Grants unused		70 14 11
Discount on Printing and Paper		267 1 3
Sale of Waste		5 2 0
		£19,076 16 11

Balance Sheet, 31st December, 1882.

LIABILITIES.

DR.]	£ s. d.	£ s. d.
Subscriptions paid in advance		566 14 6
Advertisements ditto		160 15 8
Wood Fund		25 0 0
Contributions		543 19 4
Reporting		5 15 6
Engraving		19 6 6
Printing Journal		196 17 0
Paper for Journal		269 18 3
Postage for Journal		27 14 6
Sundries		9 2 0
Miscellaneous Printing		32 7 3
Collective Investigation Committee		58 5 9
Committees		21 0 0
Stationery		39 17 8
Copying and Assistance		16 19 11
Repairs		12 14 7
Rates (Water)		4 14 0
Plant and Type		284 6 6
Plant Depreciation Fund	650 0 0	
Added for 1882	300 0 0	
		950 0 0
Premises Redemption Fund	325 0 0	
Added for 1882	150 0 0	
		475 0 0
		3,720 8 11
Balance on 1st January, 1882	13,887 17 7	
Profit carried from Revenue Account	2,788 0 5	
Balance, being total of excess of assets over liabilites		16,675 18 0
		£20,396 6 11

ASSETS.

CR.]	£ s. d.	£ s. d.
Subscriptions—Amount due		831 9 4
Advertisements—Amount due		1,690 3 5
Sundry Sales—Amount due		93 18 10
Scientific Grants		5 0 0
Due from Hastings Memorial Fund		178 15 0
Alteration of Premises at cost		1,157 11 11
Furniture and Fittings		361 12 10
Plant and Type at cost		1,442 3 4
Interest due on £5,132 0s. 6d., Consols	74 8 4	
Ditto, ditto, £2,000 L. & N. W. Railway 4 per cent. Debenture Stock	48 0 10	
Ditto, ditto, on £1,780, Midland Railway 4 per cent. Debenture Stock	34 10 6	
Ditto, ditto, on £1,767, Great Western Railway 4 per cent. Debenture Stock	34 5 5	
Ditto, ditto, on £845, L. & S. W. Railway 4 per cent. Debenture Stock	16 7 9	
Reserve Fund:		207 12 10
£5,132 0s. 6d. Consols at cost	4,967 10 0	
£2,000 L. & N. W. Railway 4 per cent. Debenture Stock at cost	2,231 7 0	
£1,780 Midland Railway 4 per cent. Debenture Stock at cost.	2,013 1 6	
£1,767 Great Western Railway 4 per cent. Debenture Stock at cost	1,991 6 3	
£845 L. & S. W. Railway 4 per cent. Debenture Stock at cost	999 2 0	
		12,202 6 9
		£18,170 14 3
Cash in hand:		
At London and Westminster Bank	2,215 8 4	
At Office	10 4 4	
		2,225 12 8
		£20,396 6 11

Stewart Fund.

£400 invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

Dr.—1882.		£. s. d.
Jan. 1.	To Balance brought down	50 3 4
	,, Interest one year £400	15 12 1
		£65 15 5

Cr.—1882.		£ s. d.
Aug. 12.	By Cheque to Dr. Vandyke Carter, Surgeon Major I.M.D., for Researches on Spirillum Fever	55 10 0
	,, Balance carried down	10 5 5
		£65 15 5

Middlemore Fund.

£500 invested in 4 per Cent. North British Railway Debenture Stock, in the name of the British Medical Association.

Dr.—1882.		£ s. d.
Jan. 1.	To Balance brought down	53 8 3
	,, Interest one year £500	19 10 5
		£72 18 8

Cr.—1882.		£ s. d.
Aug. 14.	By Cheque to Mr. W. Adams Frost, F.R.C.S., for Essay on Ophthalmology...	63 0 0
	,, Balance carried down	9 18 8
		£72 18 8

Hastings Fund.

£477 invested in 4 per Cent. London and North-Western Railway Debenture Stock, in the name of the British Medical Association.

Dr.—1882.		£. s. d.
April 25.	To Cash	27 18 0
Sept. 1.	,, Transfer from General Account	18 12 0
		£46 10 0

Cr.—1882.		£ s. d.
Dec. 31.	By Balance carried down	46 10 0
		£46 10 0

We have examined the foregoing Accounts with the Books and Vouchers of the Association, and find the same to be correct.

April 2nd, 1883. PRICE, WATERHOUSE & Co.

CORRESPONDENCE.

MR. THOMAS TURNER, LATE TREASURER OF GUY'S HOSPITAL.

SIR,—Although Mr. Turner, lately deceased, was not a member of our profession, he had been so long intimately associated with it, that you will not, I trust, deny me the gratification of occupying a small portion of your space in order to commemorate his name in the JOURNAL. The enormous amount of work performed by Mr. Turner in connection with various institutions and societies might, no doubt, furnish material for an interesting biography; but I am now merely wishing to record his name as having for more than twenty years been Treasurer at Guy's during the height of its prosperity. He had a masterly insight into all the details of the institution, and possessed a complete hold over the financial administration even to the minutest expenditure. But, whilst possessing these admirable administrative abilities, he had, in addition, a remarkable qualification for his office in his constant desire to unite the management of the hospital with the more purely medical organisation. He always regarded the two as intimately bound up together, and never to be placed in opposition. Whatever improvements took place in the hospital he made advantageous to the school; and, on the other hand, any suggestions for improved teaching, by the introduction of special departments for the eye, ear, or skin, he saw would bring a corresponding and necessary good to the public. The registration of cases, or improved facilities for necropsies, although instigated for scientific purposes, were to him also means of heightening the value of a charitable institution.

His recognition of the fact that the fame and utility of a hospital must be due in large measure to the renown of its medical officers, made him, in the very first year of his office, erect a tablet in the chapel to the memory of Sir Astley Cooper; and, a few years later, when a new wing was built, he named the three wards which it contained "Astley Cooper," "Bright," and "Addison." Such an act evinced, more thoroughly than any words he ever expressed, how thoroughly Mr. Turner was imbued with the true feeling which animates the eminent men of our profession; for I have no doubt that, if the great physicians and surgeons whose names I have just mentioned had declared in what way they could have best desired their memory to be conserved, they would have said by associating their names with the institution in which their best days had been spent. Strangers have been known to express their especial gratification on passing into the wards over whose portals were inscribed the names of world-famed men. That Mr. Turner should have done this is sufficient to stamp his character and preserve his memory for ever fresh at Guy's. His residence for nearly twenty-five years at the hospital, and his daily devotion to its interests (in which he was ably assisted by his wife), will ever form one of the best epochs in the history of Guy's Hospital. It would be difficult to find two better people than were Mr. and Mrs. Turner.—I am, sir, yours truly,

SAMUEL WILKS.

Grosvenor Street, April 16th, 1883.

MEDICAL PROVIDENT SOCIETY.

SIR,—I shall have very great pleasure in joining a medical provident society, provided I can obtain the following: 1. A pension when at a certain age; 2. Payment when sick; and 3. At death a certain amount, to be paid to widow or executors. I already belong to an accidental insurance, and I think the formation of this provident society will be the means of doing great good to the profession.—I am, sir, yours obediently,

HENRY JACKSON, M.R.C.S.Eng., L.S.A.Lond., and Medical Officer of Health.

Bear Street, Barnstaple, April 16th, 1883.

SIR,—If I said Dr. Ravenhill took the credit of starting the proposed medical benefit society, I beg to retract that. What I meant to say was, that he and Dr. Clibborn were *given* the credit of starting it, by more than one correspondent on the subject. I am well aware that the idea is an old one, as so many correspondents have informed us of this fact. But all I claim credit for is, that all this correspondence has emanated from a letter I wrote to this JOURNAL and the *Lancet* about last June or July. I am most anxious to see the society fairly started; but I quite think, with Dr. Bain Sincock, that the figures at present brought forward by Drs. Thurston, Clibborn, and others, will frighten many men who would be otherwise most willing and anxious to join. I also should hope that the society would admit every medical man who wished to join, whether he were a member of the Association or not; and I should also hope that all the heads of the profession would subscribe annually to it—I mean those who would not require its benefits; and I do not see why subscriptions should be confined to the members of the profession only. There are many societies or charities, if I may use the expression, much less deserving of public sympathy and the public purse than this; and it would surely not be considered *infra dig.* to accept help from those who are not in the profession.—I am, yours very faithfully,

A. H. BOYS.

Lodway Villa, Pill, near Bristol.

SIR,—By all means put down my name as an adherent to the scheme of a "Medical Provident Society." It has long struck me that such an Association is very much required, for although good health may be regarded as the chief part of the "stock-in-trade" of us medical men, and yet although it has been possible for us to insure against accident or death, hitherto illness has found us without any adequate provision, unless we have private means, or unless we have saved money; though in these days of agricultural and general depression it is very difficult to do so in consequence of so many "bad debts." Of course it is early days to consider the exact working of the fund, but I am of opinion that, in the case of total disablement by illness, the sick-pay should be at least £3 a week.—Yours faithfully,

W. L'HEUREUX BLENKARNE.

Buckingham, April 16th, 1883.

TENTH LIST.

FURTHER letters of adhesion have been received from the following gentlemen:—

W. E. Soffe, East Harling; Mr. C. H. Johnson, Basingstoke; Mr.

J. Penn Gaunt, Alvechurch, Redditch; Mr. J. M. Ryan, Colchester; Mr. John Barr, Richton, Blackburn; Mr. A. de Wynter Baker, Dawlish; Mr. Henry Faulds, Shawlands, Glasgow; and Dr. Gordon, Salisbury.

*** The list is rapidly gaining in numbers; but several hundred adhesions should, we think, be enrolled as a preliminary to practical action, and we shall be glad to continue to receive names.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Hospital Saturday and Sunday Fund.—North Western Association of Medical Officers of Health.—Hope Workhouse Infirmary.

THE total amount of this fund this year is £7,426 12s. 7d., against £7,497 1s. 4d. last year. There is an increase of about £20 in the Saturday collections, and a decrease of £90 in the Sunday collection. The promoters of the fund say they are highly satisfied, as from the bad condition of trade they had feared a considerable falling off.

The annual general meeting of the North Western Association of Medical Officers of Health, was held last week. Dr. J. M. Fox (medical officer of health for mid-Cheshire), the president-elect, in his address, reviewed the position and attainments of sanitary work. Speaking of the official position of medical officers of health, he objected to the attitude of the Local Government Board with regard to the notification of infectious diseases as unwise. The authoritative declaration was, and had been, that any place which desired power for compulsory notification could have it, but that the Local Government Board were not prepared at present to make the provision compulsory upon every sub-division and sanitary district in the country. It had always appeared to him that the question had been allowed to receive very serious and obstructive complication from its being made a material part of the arrangement that its information should come from the medical attendant, and he affirmed that it was not necessary to import the medical attendant into the question at all. He suggested the desirableness of enlarging the functions of offices already existing, such as those of registrars of births, marriages, and deaths, and the relieving officers, rather than the creation of fresh machinery. He afterwards referred to the question of hospitals for the treatment by isolation of infectious diseases.—Mr. Vacher (Birkenhead) exhibited an ingenious instrument, invented by himself, for collecting morbific germs exhaled by the breath.

The Hope Infirmary, in connection with the Salford Workhouse, is now completed, at a cost of nearly £60,000. The energetic chairman of the Board, Mr. T. Dickins, has for some time used every effort to improve the medical administration, by appointing a resident medical superintendent, introducing trained nurses, etc. Certain members of the Board, on the score of economy, have violently opposed this policy, and at the last meeting a resolution was passed, on the motion of the chairman, "That an application be made to the Local Government Board to make an inquiry as to the management of the infirmary." It was felt that this would put a stop to the constant attacks which had been made on the management, and which had so materially interfered with, and obstructed the progress of the committee.

HOSPITAL AND DISPENSARY MANAGEMENT.

PRIVATE DISPENSARIES.

SIR,—I am sorry you consider medical men carrying on this kind of practice guilty of unprofessional conduct. Doubtless, these institutions are rapidly becoming more and more common; and the success so many of them meet with proves that they supply a want amongst those classes for whose benefit they are opened. But the medical men working these dispensaries are for the most part as honourable and jealous of the honour of the profession as their brethren who follow a higher class practice, and prescribe for patients well able to pay large fees. Surely there is nothing derogatory or unprofessional in being a poor man's doctor, and giving advice and prescribing medicine to those unable to afford long doctors' bills; for the greater portion of the patients at a private dispensary are drawn from the same classes that crowd the out-patient rooms of our hospitals; they cannot afford the loss of time and consequent loss of money entailed by waiting for hours at the hospital. Before these dispensaries were opened, they could either go to the hospital, or apply to the parish doctor, or call in a practitioner whose fees they were quite unable to pay; and, by running up accounts, first with one doctor, then with another, till their credit was exhausted, they would manage to get medicine for nothing, in a manner discreditable to them, and hurtful to the dignity of the profession.

We have changed all this. Poor people can come to us, and, for a small sum, have as good medicine as they can get elsewhere for four times the amount; and we can afford to do this because we have no booking nor bad debts, and we do not need to make the rich few pay for the shortcomings of the impecunious many.

If people who speak against our dispensaries would only look at the matter from the point of view of the numerous poor people who are daily relieved by us, they would see things in an entirely different light, and we should be regarded as benefactors to the poor, instead of being represented, as we too frequently are, as harpies preying upon them.

The golden rule in our kind of practice applies to practices of all kinds, viz., to do our best for our patients, to do our work conscientiously and thoroughly, to place the good of our patients first, without regard to our own comfort and convenience, and then we shall reap a substantial and well deserved reward.

I enclose my card, and remain, yours faithfully, P. D.

*** Our correspondent has cleverly avoided the real question at issue, which is not whether good medicine is supplied at the so-called dispensaries or not, nor yet whether those medical men who conduct them are destitute of all honourable feeling, but whether they are engaged in doing what the majority of their brethren consider to be unprofessional. "P. D." does not attempt to deny that the promotors of these private speculations are trading on a name which the public associates with something quite different from an ordinary practitioner's surgery. If he or any other medical man chose to take the smallest coin in the realm for it in his private surgery, the circumstances would be different; but when, in order to attract patients to his house or shop, he places over his door or window the name belonging by right to a public institution, he brings himself so nearly on a par with those notorious quacks who for the same purpose call their places "colleges of health," etc., that we are unable to see much difference. The golden rule should be applied, we think, before the patients enter the establishment, as well as after.

MILITARY AND NAVAL MEDICAL SERVICES.

VOLUNTEER MEDICAL CORPS ORGANISATION.

A large and influential meeting in connection with this organization was held in the Charing Cross Hospital, April 11th. Surgeon-Major Evatt, A.M.D. (the chairman), read a paper, pointing out the advantages to be derived from the formation of a Volunteer Medical Corps on the principle of the Army Hospital Corps. He also suggested that medical students should be trained in ambulance work, and form an integral part of the corps. Mr. Platt proposed, "That in the opinion of this meeting, it is desirable to form a Volunteer Hospital Corps." Dr. Shepherd seconded the proposition, and the following spoke in favour of it:—Lieutenant Maclure, Dr. Squire, Mr. Crookshank, Mr. Casson, Mr. John Furley, and others. Mr. Cantlie proposed, "That a provisional committee, consisting of surgeons representing the London Hospital, surgeons representing the Regular and Auxiliary Forces, and others, be formed to carry the resolution into effect." Mr. Platt seconded the motion. Dr. Maclachlan and others spoke in favour of it. Both motions were unanimously carried.

We understand that Lord Wolseley and other distinguished persons accord their hearty support to the scheme.

DEPUTY Surgeon-General W. G. N. Manley, V.C., lately serving with the Expeditionary Force in Egypt, has been appointed Principal Medical Officer to the Chatham Division. He served with the Royal Artillery in the Crimea from the 11th June, 1855, including the siege and fall of Sebastopol (medal with clasp and Turkish medal). Dr. Manley also took part in the New Zealand War of 1864-66 with the Royal Artillery, volunteering and accompanying the storming party at the assault of the Gate Pah, near Tauranga, on the 29th April, 1864. He was commended in despatches, and awarded the Victoria Cross for his gallantry in this action in nobly risking his own life, according to the testimony of Commodore Sir W. Wiseman, C.B., in his endeavour to save that of the late Commodore Hay, R.N., and others. Dr. Manley having volunteered to accompany the storming party into the pah, attended on that officer when he was carried away mortally wounded, and then with true heroism offered to return in order to see if he could find any more wounded. He was one of the last to leave the pah. Subsequently he served with the field force under General Chute in the expedition from Wanganui to Taranaki, including the march through the bush at the rear of Mount Egmont, and was present at the assault and capture of several pahs (thanked in general orders, and promoted staff-surgeon for "distinguished and meritorious services rendered to the sick and wounded during the operations in New Zealand.") He has received the bronze medal of the Royal Humane Society for swimming to the assistance and rescuing from drowning a gunner of the Royal Artillery, who had fallen overboard while

lisembarking from a steamer in the Waitotar River, New Zealand. He proceeded with the British Ambulance to the Franco-German War of 1870-71, and was in charge of the B. Division of the ambulance, and attached to the 22nd Division of the Prussian Army, accompanying it during the operations consequent on the advance on Orleans, marched with it between 200 and 300 miles during the severe winter weather of November and December, and was present at several engagements. For his services, the gallant officer was thanked by General Von Wittich, Commandant of the Division, and received the steel war medal. At the request of the Crown Prince he was granted by the Emperor of Germany the second class of the Iron Cross, "on account of his devoted and excellent conduct in seeking out and caring for the wounded of the 22nd Prussian Division in the actions of Chateauneuf and Bretoncelles on the 18th and 21st November, and the battles of Orleans and Cravant on the 2nd and 10th December, 1870." He has also received the Bavarian Order of Merit for 1870 and 1871. Subsequently he was present at the memorable siege of Paris, and on the declaration of the Armistice went into the city with supplies for the hospitals. Dr. Manley rendered valuable service during the late campaign in Egypt.

We regret to hear that Surgeon-General Holloway, C.B., Principal Medical Officer at Netley, died of acute bronchitis at his official residence, on Thursday, the 19th inst.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASE.

Sir,—As Dr. Littlejohn has narrowed his notification campaign into a personal attack upon us, and has not, after the lapse of several weeks, either attempted to justify his charges or to withdraw them, we wish to give him notice, through the medium of the JOURNAL that we intend to bring the matter before the Committee of Council of the Association.

Your obedient servants,
W. HONNER FITZ-PATRICK, M.D.
EWING WHITTLE, M.D.

Liverpool, April 14th, 1883.

CLUB-PATIENTS AND WORKHOUSES.

SIR,—Will you, in your next JOURNAL, enlighten me upon the following case? A number of navvies are now employed in making a new line; each one pays a weekly allowance towards a sick fund and medical attendance, and yet, when an accident occurs, they are at once sent to the workhouse. The contractor considers himself perfectly justified in doing so, rather than pay towards the hospitals. Under the circumstances, I cannot see why the parish should be burdened with the expense, but our clerk appears to think otherwise. By answering the above, you will greatly oblige.—Yours very truly,

JUSTITIA.

*** The "sudden or urgent necessity" which is occasioned by bodily accident frequently demands instant relief; and the fact of a pauper being entitled to a weekly allowance from a sick club does not, in any way, release the guardians and their officers from the responsibility of administering the necessary relief, where they find that the pauper is, notwithstanding his title to sick pay, in a condition of destitution. The attachment of sick pay, and the liability of the contractor, are questions secondary to that of meeting the circumstances of destitution. It is clear that there is no legal obligation upon the contractor to subscribe to a public hospital, or otherwise to provide for the relief of his *employés* in case of illness or accident.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ISLINGTON.—The sanitary supervision of a district with considerably over a quarter of a million population, would tax the energy of a health officer with many less claims upon his time than Dr. Tidy has, and if the comparative baldness of the Islington annual reports is to be deplored, it is only fair to draw attention to the difficulties attending the administration of the parish. Dr. Tidy is fortunate in having the services of so trusty and able a lieutenant as Mr. Collingwood, who is the very model of a sanitary superintendent. The Islington statistics of 1881, as reflected in Dr. Tidy's report, call for no special comment. The birth-rate is given at 35·0 per 1,000 of the population (the smallest since 1862), and the death-rate as 18.0 per 1,000, the lowest for "many years." Notwithstanding the rapid increase of the population, the actual number of deaths is less than in any year since 1877. The epidemics of the year were small-pox, measles, scarlatina, and whooping-cough. Measles caused 161 deaths, as against the exceptionally small number of 48 in the previous year. Scarlatina caused 116 deaths, but it was less fatal as an epidemic than in any year since 1873. The epidemic of whooping-cough was comparatively mild in character, causing only 172 deaths, as compared with 299, 229, and 296 deaths in the three previous years. Typhoid fever was somewhat more prevalent than usual during a part of the year; altogether, 75 deaths were attributed to "fever." The renewed activity of small-pox in Islington became first decidedly apparent in December, 1880, and the numbers increased, with some little weekly variation, until the intensity of the disease culminated with 53 reported cases in the first week of June. By the end of that month the decline in the epidemic became apparent, although, as usual, signs of renewed vigour occasionally appeared. The total number of cases during the year was 797, with 129 deaths, or 16·2 per cent. Of 78 unvaccinated persons attacked, 39, or 50 per cent., died. Of the 719 persons said to have been vaccinated (however imperfectly), 90 died, or 12·5 per cent. 522 patients were removed to the various hospitals of the metropolis, and of these 69 died, or 13·2 per cent. 275 patients were treated at their own homes, and of these 60 died, or 21·8 per cent. Dr. Tidy speaks in the highest terms of the usefulness of the camp hospital set up by the vestry at Finchley, and expresses his strong conviction that the step taken by the Vestry was a wise one, and that "it would be still wiser never to be without such an invaluable resource as a camp hospital for use in times of emergency and danger." It must be confessed, however, that the cost of the hospital seems inordinate for the results achieved. In common with other metropolitan health officers, Dr. Tidy regards the transference of the duty of bakehouse inspection from the vestries to the factory inspectors of the Home Office as a retrograde step, and he thinks that what is wanted is "not centralization but registration, which should have been left in the hands of the local sanitary authority, for this it is which would alone absolutely prevent the use of unfit places as bakehouses, as it should also prevent the improper construction of places intended for houses.

OBITUARY.

JAMES KENDALL BURT, M.B., C.M., KENDAL.

THE sad news of this gentleman's death at sea reached this country about three weeks ago, and has been received with much regret by his many friends in Kendal and the Border Counties. Dr. Burt was an Edinburgh graduate of 1873, and soon afterwards commenced practice in Kendal, where his kindly disposition and professional abilities soon obtained for him a high place in public esteem. He was an active member of the Border Counties Branch, and, for the last four years, was one of the honorary secretaries. His interest in the Association and the Branch was very keen; and by the zealous manner in which he did his work, and by his regular attendance at meetings, he contributed much to the flourishing condition of the Association in this district. Soon after the annual meeting of the Border Counties Branch, last July, he went to Edinburgh, preparatory to taking his M.D., for which his thesis had been accepted. When there, he was seized by a severe attack of hæmoptysis. A short residence in the Highlands enabled him to resume work. But further symptoms of lung-disease showed themselves, and he was advised to try the influence of a long sea-voyage. He sailed for Sydney on November 9th. Great weakness showed itself during the passage; and, from the middle of December, he gradually sank, and expired off the Cape of Good Hope on January 2nd, at the age of thirty-four years. Dr. Burt was married to a daughter of the late Rev. J. W. Barnes, Vicar of Kendal, and leaves her a widow with three young children.

ALCOHOL FROM SMOKE.—The latest instance of the utilisation of waste products is that effected at Elk Rapids, Michigan, with the gaseous matter given forth by a blast-furnace in which are manufactured fifty tons of charcoal iron per day. In the case to which we refer, the vast amount of smoke from the pits, formerly lost in air, is now turned to account by being driven by suction or draught into stills surrounded by cold water, the result of the condensation being first, acetate of lime; second, methyl alcohol; third, tar; the fourth part produces gas, which is consumed under the boilers. Each cord of wood produces 29,000 cubic feet of smoke; 2,900,000 feet of smoke handled in twenty-four hours, producing 12,000 pounds of acetate of lime, 200 gallons of alcohol, 25 pounds of tar.—*Stearns, New Idea.*

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

Salary of the Downing Professors.—One of the first cases arising out of the new statutes has just been decided in the case of the Downing Professorships of Law and Medicine. Dr. Latham, the present Professor, applied for the increased emolument granted under the new scheme, but the Council of the Senate held that, by the terms of the statute, the increase of stipend was not intended to begin during the tenure of the present Professor. Dr. Latham's claim was supported by Mr. Rigby, Q.C., with whose arguments, however, the Council of the Senate disagreed. The matter was eventually referred to the Chancellor of the University, who is the arbitrator in such cases, and he gave his decision yesterday against Dr. Latham's claim. The two Downing Professorships will thus for some time be placed at a great disadvantage as compared with the other university chairs.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, April 19th.

MEDICAL ACT AMENDMENT BILL.

Specially reported for the BRITISH MEDICAL JOURNAL.

The Earl of ROSSLYN presented a petition from the Royal College of Surgeons of Edinburgh, generally in favour of this Bill, but praying for certain alterations and amendments therein.

Their lordships then went into Committee on the Bill.

On Clause 3, which provides, "On and after the appointed day a person, whether male or female, who has proved his or her competency in medicine, surgery, and midwifery, by passing such final examination as is in this Act mentioned, and, with the exceptions and reservations hereinafter mentioned, no other person, shall be entitled to have his or her name entered on the *Medical Register* as a registered medical practitioner,"

Lord POWERSCOURT moved to leave out all the words after "appointed day," and to insert:—

"1. The medical registrar shall not register a person in the *Medical Register* unless he or she has obtained the diploma of one or more of the medical authorities for one part of the United Kingdom after having obtained, through a medical board constituted under this Act, a certificate that such person has proved his or her competency, by examination, to be qualified under this Act to practise medicine, surgery, and midwifery.

"2. Each person who has obtained a qualifying certificate under this Act shall, before registration, be attached to one at least of the medical authorities for that part of the United Kingdom in which he or she has obtained such certificate, by obtaining from such authority a medical diploma (whether degree, membership, associateship, or other), subject, nevertheless, to this qualification, that if, on application by any such person to any of the medical corporations for the said part of the United Kingdom, the corporation refuse to attach him or her to such corporation by granting him or her some medical diploma, or demand a fee for so attaching him or her, or otherwise fail to attach him or her within one month after such application, the applicant shall be entitled to be registered in the *Medical Register* without being attached to any medical authority.

"3. Nothing in this section shall oblige a medical corporation to attach a person to such corporation by granting him or her a diploma for the purpose; and a person shall not by reason only of being attached to a medical corporation for the purpose of registration be entitled, except so far as the corporation in their discretion otherwise provide, to any share in the government, management, or proceedings of that corporation, or to any rights or privileges in connection with that corporation.

"4. A medical authority, without prejudice to any other power vested in them, may from time to time, by a statute or by-law made with the approval of the Privy Council, constitute a new medical diploma, to be granted by them for the purpose of attaching to such authority, with a view to registration, persons who have obtained qualifying certificates under this Act; but if any such new medical diploma is constituted by a medical authority for the said purpose, that diploma shall be the only diploma granted by such authority for the purpose of attaching to such authority, with a view to registration, persons who have obtained qualifying certificates under this Act."

Lord CARLINGFORD said he was not able to accept the amendment. It had been framed, he thought, by those who had not seen the amendments that he himself had put upon the paper, otherwise he had every reason to believe it would not have been proposed by the Dublin College of Surgeons. He understood the object the noble lord and those he represented had in view, viz. that under the operation of the Bill the medical bodies should not suffer, and lose their status and their means. He was not desirous—far from it—that the medical bodies should suffer. That the medical authorities, other than the Universities, should suffer and lose their importance and their means, would be a *reductio ad absurdum* of the Bill itself; because, like former Bills, it proposed to make use of these various bodies for the purpose of examinations and for the constitution of the conjoint boards. The object the noble lord had in view had—and this he had every reason to believe was the opinion of most of the great medical corporations of the three kingdoms themselves—been already obtained by the amendments he (Lord Carlingford) had placed on the paper. These amendments amounted to this, that the Bill in its new shape would recognise all the existing titles of all the medical bodies. It would not attempt to create any fresh title—as it did in its old form—which might exercise formidable rivalry to the other existing bodies. He believed the great medical corporations of the country felt that the Bill, as altered, would not endanger their interests; and the plan of compulsory creation was, from their own point of view, no longer necessary. What he was saying applied also to the amendment of the Earl of Milltown, which was, after the word "mentioned," to insert "and has been affiliated to and obtained a medical diploma from any medical authority under this Act." The plan of compulsion was a very awkward one.

The Earl of MILLTOWN said that the College of Surgeons and the College of Physicians in Ireland were exceedingly anxious that the point covered by his amendment should receive consideration.

Lord O'HAGAN was of opinion that compulsory affiliation would constitute a tax upon the students. [*Hear, hear.*]

The Earl of CAMPERDOWN remarked that the question of compulsory affiliation of students to the colleges had been considered at very great length by the commissioners, who decided that compulsory affiliation was impossible. The proposition of the noble opposite (Milltown) would throw a kind of mora restraint and control over the students, and this very argument had been considered by the Commission.

The Duke of RICHMOND inquired what were the changes which it was now proposed to make in the Bill.

Lord CARLINGFORD replied that his amendments would consist of the omission of Clause 26, and the substitution of a new clause for Clause 27.

The amendment of the Earl of Milltown was negatived, and the clauses up to No. 8 were agreed to.

On Clause 9, which provided for the establishment of conjoint medical boards, Lord CARLINGFORD said that this question was one of the most perplexing and thorny parts of a Bill full of these qualities. He had had to consider the comparative representation of the universities on the one hand, and the medical corporations on the other, and he had come to the conclusion that, as the numbers in the Bill did not fairly represent the relative values of the bodies

espect to medical examinations, they could not stand. At the pre-ent time, the universities had a preponderance, which did not ap-ear to him to be desirable. He therefore intended to propose that ach of the English universities should propose one member, which tep would place the medical corporations in a slight majority on he board. In Ireland, however, the turn of the majority should be iven to the universities, because there—unlike England, where the nedical corporations did so enormous a work in the way of medical xaminations—the claims of the two sections of medical authorities vere more nearly balanced. There was an amendment upon the aper proposing to take away from one body the right of registra-ion, and he was regretfully obliged to admit the strength of the rgument in favour of the proposal. The Irish Apothecaries' Hall vould, therefore, be removed from the list of licensing authorities. He should propose that, with one exception, each of the Irish me .ical authorities should return two members to the conjoint board 'he three authorities which would return two members each vould be the Royal College of Physicians, the Royal College of urgeons, and the Royal University; and he should propose that 'rinity College should return three members. The result would be iat the Irish universities together would return five, and the two iedical corporations four.

The Marquis of SALISBURY thought there was ground for com-laint, when, after the medical authorities had considered the Bill nd accepted its proposals, in respect to the representation on the ew board, the Lord President came down to the House, and pro-osed, without notice, an entirely different scheme. The universi-es were a guarantee for a higher class of education for the me-ical profession; and, in lowering their representation, the noble ord had neither increased the value nor the dignity of the new Me-ical Council. The noble lord also appeared to be placing Victoria n the same footing as Oxford, for he had spoken of the "five nglish Universities." If he went so far as to include Victoria, why iould he not embrace the Welsh University?

Lord CARLINGFORD stated that he had made these changes in onsequence of information which reached him after the Bill was rinted.

Viscount EMLY understood the principle on which Oxford and urham had the same representation, but could not see why in Ire-nd three representatives should be given to the university which ad the smaller number of students.

Earl GRANVILLE remarked that it was difficult to justify altogether ny theory of representation. Oxford, however, was vastly inferior London in the importance of its medical degrees.

The Earl of GALLOWAY observed that he had presented petitions om Glasgow on this point. This Bill would give eight representa-ves to the Scotch universities, and three to the medical corpora-ons, in place of the former arrangement, which gave only two to ie universities, and three to the corporations. He did not approve such a preponderance in favour of the universities, and he should ove an amendment on this point upon the report.

Earl CAIRNS said he had been under the impression that the two asses of learned bodies were to possess equal representation on the oard. The London University might be satisfied with only one presentative, if Oxford and Cambridge were to have two ch.

The Earl of MILLTOWN remarked that the medical colleges were aching bodies, rather than examining bodies, so that there were ppreciable differences between the colleges and universities.

The Earl of CAMPERDOWN observed that he could not concur in me of the original proposals of the Bill. The Royal Commission ad left this matter to be dealt with by Parliament, and of course ie three kingdoms must be dealt with on the same principles. Any ttlement should be based on a consideration of what the several odies had done in the past, and what they were likely to do in e future in respect to medical education. He thought they might postpone the consideration of the English boards, and then deal with the Scotch and Irish boards successfully.

The Duke of RICHMOND supported the Bill so far as the English board was concerned; of late years the Universities of Oxford and Cambridge had made great strides in the matter of medical education.

Lord O'HAGAN observed that about 900 medical students were connected with the Royal University in Ireland, and added that it would be unfortunate to establish the proposed distinction between that body and Trinity College.

The Earl of BELMORE said that there was no desire on the part of the Dublin University that any distinction should be made between it and the other university.

Lord CARLINGFORD expressed his willingness to postpone the question of the English board, as he did not wish to take anyone by surprise. He was willing also to accept the proposal of Lord Cairns, and give three representatives to the College of Physicians in Ireland, striking out the Dublin Apothecaries' Hall, and giving three representatives to each of the Irish Universities, and two to the College of Surgeons.

Clause 9 was then amended by the insertion of these provisions.

Lord CARLINGFORD moved a series of amendments, to the effect that, without the consent of Parliament, the Medical Council of the Privy Council should not have the power of striking out of the list any of the bodies contributing to the medical boards.

These propositions having been at once agreed to, the clause as amended was ordered to stand part of the Bill.

On Clause 10,

Lord BALFOUR OF BURLEIGH moved an amendment enabling the final examinations in medicine, surgery, and midwifery to be held at each university by the examiners of the medical board, in conjunction with the examiners of the university. This he proposed, he said, in order to avoid the necessity of a second examination, which was a long and expensive affair, particularly in the case of Edinburgh University.

Lord CARLINGFORD regarded the amendment as fatal to the principle of the Bill.

Lord BALFOUR OF BURLEIGH agreed to withdraw his proposition, and Clause 10 was added to the Bill.

On Clause 14, which deals with the establishment of a Medical Council,

The Marquis of SALISBURY criticised the section, declaring it to be exceedingly novel in its character. If Lord Carlingford's theory that the medical profession should be managed by the medical practitioners, or that they should be represented on its management, was to hold good, it was doubtfnl whether they could restrict their constituency to the bodies mentioned.

The Earl of CAMPERDOWN said it was true this was the first occasion on which it had been proposed to have direct representation of the medical profession on the bodies which governed medical affairs. The profession had demanded to be represented, however, and the Royal Commission had come to the conclusion that the request was a reasonable one, and ought to be received. It had been agreed to on the ground that the members of the licensing bodies and the medical boards were, to a great extent, not in connection with, or not elected by, the medical profession. For instance, take the Colleges of Physicians and Surgeons. The members who would be returned to the English board would be elected by the Fellows, and it happened that a very large number of persons—the general members of the medical profession—who were connected with these two colleges, were not Fellows, and therefore would have no voice in appointing representatives returned by the colleges. The general medical practitioners were a large body of the profession, and, if they had no direct representative on the Council or board, they would have no representation whatever in the government of the medical bodies. It was for this reason that

the proposal had been made. The proposal had seemed to the Royal Commission a very reasonable one, and that it was one the House would do well to adopt. The medical profession were determined that no Bill should pass in which they were not represented on the Council.

Lord CARLINGFORD thought the proposal in the Bill was quite justified on its own merits. It was of the greatest importance that the whole body of the profession should have perfect confidence in the Medical Council, which, for the future, would have much greater power over the profession than it had had hitherto. As to the weight of opinion and evidence on the matter given before the Committee, there could be no doubt. He would give an example, viz., the opinion of Sir James Paget, than whom he could hardly give a higher opinion. Sir James had not, on the merits, been in favour of this proposal, and he had said, in his evidence, that he did not think it necessary; but he also said that, in his opinion, it was exactly one of those cases in which a concession should be made to the united views of the medical profession.

The clause was then agreed to, as were clauses up to and including Clause 20.

On Clause 21, which gives the boards power to visit medical schools, and deprive them of the privilege of being recognised as medical schools, and similarly deprive the examining bodies of their privileges, an amendment by the Earl of MILLTOWN was agreed to, giving a right of appeal to the Medical Council.

The clause, and also clauses up to Clause 27, were agreed to.

On Clause 28, which deals with the misuse of medical titles, Lord CARLINGFORD moved an amendment to the effect that a person should be liable to a £20 penalty "who practises for gain, or professes to practise, or publishes his name as practising medicine or surgery, or receives any payment as practising medicine or surgery" without being duly qualified.

Lord MOUNT-TEMPLE opposed the amendment, as too stringent; but, after some discussion, the clause was agreed to, as were also the remaining clauses.

The Bill then passed through Committee, with amendments.

The Earl of MILLTOWN asked when the report stage would be taken.

Lord CARLINGFORD thought he would be able to take it on Thursday next.

Tuesday, April 17th.

The Case of Surgeon-Major Thorburn.—Lord TRURO brought under the notice of their lordships the case of Surgeon-Major Thorburn, who had been forced to retire from Her Majesty's service with a gratuity of £2,500, in consequence of occurrences connected with the running of a horse of his at Lucknow. The noble lord contended that a meeting of racing stewards at Lucknow and the Calcutta Turf Club had improperly found Mr. Thorburn guilty of causing his horse to be "pulled" at a race, and so prevented from coming in first; that evidence subsequently taken by a court of inquiry completely exonerated him from the charge; but that, notwithstanding such exoneration, the Commander-in-Chief in India advised the military authorities at home that Mr. Thorburn should not be permitted to remain in the service.—Lord MORLEY, while submitting that the House of Lords was not a court of review in such cases, explained that a court of inquiry was not a judicial body, inasmuch as it merely took and reported evidence, but pronounced no decision; that, having received the report of the court of inquiry at Lucknow, the Commander-in-Chief in India had arrived at his decision, which was approved by His Royal Highness the Field-Marshal Commanding-in-Chief and by two successive Secretaries of War, who had read all the papers on the subject.

HOUSE OF COMMONS, Thursday.

Compulsory Vaccination in India.—Mr. P. A. TAYLOR asked the Under-Secretary of State for India whether it was the fact that the High Court of Madras had lately decided a case on Appeal, to the effect that compulsory vaccination is illegal, the judges declaring that it is quite optional to a parent whether his children shall be vaccinated, and that it is not unlawful to dissuade others from suffering their children to undergo the operation.—Mr. CROSS said, in reply to the hon. member, he had to inform him that the decisions of the High Court of India are not officially reported to the Secretary of State for India, and he could find no traces of the case referred to in any of the papers he had seen. He had, however, given instructions to have the case inquired into.

Wednesday, April 18th.

The Artisans' Dwellings Act, 1882.—Sir R. CROSS asked the Secretary of State for the Home Department what steps had been taken by the Commissioners of Sewers under the Artisans' and Labourers' Dwelling Act, 1882, towards insuring the building of suitable accommodation on the ground cleared under the Act of 1875.—Sir W. HARCOURT: The delay in this matter has been due to the fact that the Commissioners of Sewers, in December last, submitted a scheme which was not found to be entirely satisfactory, and the Home Office could not sanction it. On February 28th they submitted a second scheme. That was also unsatisfactory; and on April 10th a third scheme was submitted, which it was found possible to adopt. There will be no further delay in the matter.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 12th instant and, when eligible, will be admitted to the pass examination, viz.

Messrs. A. Ernest Smithson, Bryan Furnivall, E. Tauriel Trevelyan, and W. Henry Booth, students of St. Bartholomew's Hospital; Alfred Crossley H. Kinnersley Bradbury, J. Blackford, and William Rawes, of the London Hospital; J. Stuart Hutton, A. Edward Godfrey, and Sydney Warren, of St. Thomas's Hospital; John Lynes, and A. Smith Loftus, of the Charing Cross Hospital; G. Ezra Halstead, and E. William du Buisson, of Guy's Hospital; P. R. S. Harris, and A. Castriot De Renzi, of King's College; T. Henry Williams, and B. Sloane Lawson, of the Middlesex Hospital; Morgan Hughes, of the Westminster Hospital; and C. Arthur Goullet, of University College.

Three candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months. Out of the 222 candidates examined, thirty-four were sent back for three months, and one for six months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 16th instant, viz.:

Messrs. P. William Maxwell, M.B.Edin., Irvine, Ayrshire, and S. William Brant, M.B.Edin., Milner Square North, students of the Edinburgh School; D. Henry Barley, M.B.Dur., Sheffield, and Isaac Hartley, M.B.Dur., Belmount, Cumberland, of the Newcastle School; E. Dennis Vinrace, L.S.A., Birmingham, of the Birmingham School; J. Howard Bett, M.D.Kingston, Kingston, Canada, of the Toronto School; O. Henry Evans, L.K.Q.C.P.Ireland, Bodederin, Anglesea, of the Dublin School; Alfred Munckton, L.S.A., Wimpole Street, and S. Frederick Money, L.R.C.P.E., Lambeth Road, of University College; J. Jones Rowland, L.S.A., Argyle Square, of the Charing Cross Hospital; P. Couchman Smith, L.R.C.P.E., Watlington, of Guy's Hospital.

Six candidates passed in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and ten candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies, seven for six months, one for nine months, and two for three months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 17th instant, viz.:

Messrs. R. Humphrey Marten, Wolverhampton, and Harry Littlewood, Hempstead, Norfolk, students of University College; G. David Johnston, Camberwell, C. Herbert Thompson, Lambeth, and F. Anthony Floyer, L.S.A., Putney, of St. Thomas's Hospital; J. H. Hywell Williams, L.S.A., Haverfordwest, and C. Hartvig L. Meyer, Cape Colony, S. Africa, of Guy's Hospital; J. W. Chambers Herbert, Swinton, of the Manchester School; Hugh Heald, Liverpool, of the Liverpool School; D. Lewis William, Ferryside, S. Wales, of the London Hospital; Septimus T. Pruen, Osbo Terrace, S.W., of St. Bartholomew's Hospital; and H. Henderson Pinchin, Gravesend, of St. George's Hospital.

Eight gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and two candidates for three months.

The following gentlemen passed on the 18th instant:

Messrs. Francis Cresswell, L.R.C.P.L., Winchmore Hill, J. Norman Vo L.R.C.P.L., Caterham, and J. Yates Bostock, B.A.Cantab., Onslow Gard of St. Bartholomew's Hospital; G. M. Panton Braine, L.R.C.P.L., Be Park, and W. Henry Crago, L.R.C.P.L., Sydney, New South Wale the Middlesex Hospital; W. Edgar Rudd, Lee, and T. Bassell Wi

L.S.A., Putney, of Guy's Hospital; T. Luckman Jordan, Manchester, of the Manchester School; C. Style Humphreys, L.S.A., Chichester, of the Westminster Hospital; P. Percival Whitcombe, L.S.A., Westbourne Green, of St. Mary's Hospital.

Four candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members:

Messrs. Frederick W. S. Stone, L.R.C.P.L., Brighton, student of St. Thomas's Hospital; Harry Groom, B.A.Cantab., L.S.A., Wisbech, of King's College; J. Whitehead Bentley, L.R.C.P.Ed., Manchester, of the Manchester School; W. Edward Bloxam, L.R.C.P.L., Wimbledon Hill, of St. George's Hospital.

Five candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members: seven candidates were referred for six months, and two for nine months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 12th, 1883.

Merrifield, Sydney Sargent, Gascoyne Place, Plymouth.
Short, Thomas Sydney, Edgbaston, Birmingham.

The following gentlemen also on the same day passed their Primary Professional Examination.

Best, William James, London Hospital.
Hearnden, Walter Carrington, Guy's Hospital.
Smith, Stephen Francis, London Hospital.

At the Examination in Arts, held at the Hall of the Society on April 5th, 6th, and 7th, 128 candidates presented themselves, of whom 93 were rejected, and 35 passed, and received certificates of proficiency in general education. In the first division, none; in the second division, the following, arranged in alphabetical order, viz.:

Messrs. W. H. Andrews, T. S. Biggs, F. Boxall, A. Caddy, E. A. Clarke, E. N. H. Davidson, N. M. Davidson, S. B. C. De Butts, H. J. Des Voeux, S. W. Dove, H. D. Duff, T. A. Durrant, C. W. Ensor, W. J. Farren, S. D. Graham, T. D. H. Holmes, W. L. Hubbard, W. H. Hughes, C. E. Hutt, J. H. E. Jarvis, H. W. Lewis, D. W. Liebstein, W. H. McKinstry, J. T. R. Miller, H. Nichol, E. C. Palmer, E. M. B. Payne, E. S. St. B. Sladen, W. S. Smart, H. A. Smith, E. Springett, T. Whateley, W. W. Williams.

Passed in Elementary Mechanics only:

Messrs. B. Walker, and A. W. Waller.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the quarterly Examinations for the Licences in Sanitary Science, held on Thursday and Friday, April 12th and 13th, the following candidate was successful:

Thomas Lane, L.K.Q.C.P., 1883.

At the quarterly First Professional Examination, held on Monday, Tuesday, and Wednesday, April 9th, 10th, and 11th, the following candidate passed:

Thomas Joseph McGrath.

At the usual monthly Examinations for the Licences in Medicine and Midwifery, held on Monday, Tuesday, Wednesday, and Thursday, April 9th, 10th, 11th, and 12th, the following were successful:

For the Licences to practise Medicine and Midwifery.—Campbell Boyd, Tinahely, co. Wicklow; Shepherd Boyd, New Ross, co. Wexford; Michael Carr, Newtownsandes, co. Kerry; Thomas Gibson Henry Hall, Monaghan; Patrick Hoey, Dublin; Andrew John Garvey Kelly, Navan, co. Meath; Edward Emmanuel Lemson, Enfield, co. Meath; Thomas McInerney, Gort; Matthew Joseph McQuaid, Cootehill, co. Cavan; Charles George Drummond Morier, Glasgow; Henry Joseph O'Brien, Villierstown, co. Waterford; James Dwyer Ryan, Dundrum, co. Tipperary.

For the Licence to practise Medicine only.—Powell Hudsmith, Crosby, near Liverpool; Alexander Linton Mackenzie, Bath.

The following Licentiate in Medicine of the College, having complied with the by-laws relating to membership pursuant to the provisions of the Supplemental Charter of 1878, have been duly admitted Members of the College:

George J. O'Reilly, Licentiate, 1875, Keswick, Cumberland.

At a special Examination for the Licences in Medicine and Midwifery, held on Monday and Tuesday, April 2nd and 3rd, the following candidate passed:

George John Morgan, M.R.C.S.Eng., 1863, West Felton, Salop.

MEDICAL VACANCIES.

The following vacancies are announced:

ABBEYLEIX UNION, Kingscourt Dispensary.—Medical Officer. Salary, £80 per annum, and £20 10s. as Medical Officer of Health. Election on April 21th.

BOARD OF TRADE.—Two Sanitary Surveyors. Salary, £300 per annum. Applications by April 30th.

CHILDREN'S HOSPITAL, Birmingham.— Resident Medical Officer. Salary, £80 per annum. Applications by May 3rd.

CHILDREN'S HOSPITAL, Birmingham.— Resident Assistant Medical Officer. Salary, £40 per annum. Applications by May 3rd.

CITY OF LIVERPOOL.—Assistant Medical Officer. Salary, £200 per annum. Applications by May 5th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by May 14th.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Chairman of the Committee of Management.

EAST SUSSEX, HASTINGS AND ST. LEONARDS INFIRMARY, Hastings.—Third Assistant-Surgeon (Honorary). Applications by the 30th instant.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—Dispenser. Salary, £100 per annum. Applications by April 30th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by May 5th.

HOSPITAL FOR INCURABLES, Manchester—Honorary Dentist. Applications to R. Armistead, 11, Lever Street, Piccadilly, by May 1st.

LEIGH LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Applications by April 23rd.

LINCOLN COUNTY HOSPITAL.—House Surgeon. Salary, £100 per annum. Applications by April 23rd.

LIVERPOOL ROYAL INFIRMARY.—Resident Medical Officer. Salary, £100 per annum. Applications to the Chairman of the Committee by April 25th.

LOUGHBOROUGH MEDICAL AID ASSOCIATION.—Surgeon. Salary, £160 per annum. Applications by April 25th.

MADRAS RAILWAY COMPANY.—Medical Officer. Salary, 450 rupees per mensem. Applications to Julian Byrne, Secretary, 61, New Broad Street, E.C., by May 1st.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street.—House Surgeon. Salary £50 per annum. Applications by April 22nd.

PAROCHIAL BOARDS OF STRACHUR AND STRALACHLAN.—Medical Officer. Salary, £80 per annum. Applications to the Rev. H. F. Macdonald, Strachur, Chairman of Stralachlan Parochial Board, by May 1st.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Junior Assistant House-Surgeon. Salary, £50 per annum. Applications by April 26th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Resident Medical Officer. Salary, £105 per annum. Applications by April 30th.

THE ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton.—House-Surgeon. Salary, £80 per annum. Applications by May 16th.

WESTERN GENERAL DISPENSARY, Marylebone Road.—House-Surgeon Salary, £120 per annum. Applications by May 7th.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House Surgeon. Salary, £150 per annum. Applications by May 1st.

MEDICAL APPOINTMENTS.

CAMERON, J. M., L.R.C.S., appointed Assistant Medical Officer to the Hartlepools Friendly Societies' Medical Association.

DOW, H. Boothby, M.D., M.R.C.S., L.S.A., appointed Assistant Physician to the St. John's Hospital for Diseases of the Skin.

FERGUS, S., M.D., appointed Medical Officer to the Armagh Union, *vice* T. B. Martin, M.D., deceased.

HART, P. J., L.R.C.S., appointed Medical Officer of the Coom and Glenflesk Dispensary District to the Killarney Union, *vice* J. J. O'Riordan, resigned.

HAYES, G. F., M.R.C.S., appointed Medical Officer and Public Vaccinator of the Dunster District of the Williton Union.

HENTY, Sydney H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Honorary Surgeon to the Holloway and North Islington Dispensary.

JACKSON, Robert A., L.R.C.P.Lond., M.R.C.S., L.S.A., appointed Surgeon in the X Division of Metropolitan Police.

MARSH, J. J., L.R.C.P., appointed Honorary Surgeon to the Ardwick and Ancoats Dispensary and Ancoats Hospital, Manchester, *vice* W. Yeats, M.D., resigned.

MARSHALL, J., F.R.S., appointed Professor of Anatomy to the Royal Academy of Arts.

O'KELLY, T., M.D., appointed District Medical Officer to the Chipping Norton Union.

RODGERS, J. H., L.R.C.P., appointed Surgeon to the Retford Dispensary, *vice* C. E. H. Rogers, L.R.C.P., resigned.

STEPHENS, W., M.R.C.S., appointed Medical Officer to the Dunfanaghy Union, *vice* J. H. Fergusson, L.R.C.P., resigned.

WINSTANLEY, R. W., M.R.C.S., appointed Assistant Resident Medical Officer to the Victoria Dock District Provident Dispensary, *vice* A. Oakley, L.R.C.P.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATH.

DAWSON.—April 17th, at 26, Rodney Street, Liverpool, Emma, wife of Thomas Dawson, M.R.C.S.Eng.

LONDON HOSPITAL MEDICAL SCHOOL.—The medical and surgical scholarships and the Duckworth Nelson Prize for Medicine and Surgery have this year been awarded as follows: Medical Scholarship, Mr. A. T. Schofield; certificate, Mr. P. C. McD. Howse; Surgical Scholarship, Mr. P. C. McD. Howse; certificate, Mr. G. C. Jones; Duckworth Nelson Prize, Mr. P. C. McD. Howse; certificate, Mr. A. T. Schofield.

PRESENTATION.—Mr. John Simpson, of Marykirk, has been presented by his patients and friends with a pleasing testimonial, as a token of their esteem, after nearly forty years of professional service. The testimonial took the form of an easy-chair and a purse containing 141 sovereigns.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Dr. Robert Lee: On the Relation of Spinal Deformity and Fragility of Bones to Insanity. Mr. Hugh Smith: A Case of Foreign Body in the Pterygoid Fossa. Dr. Day: A Fatal Case of supposed Pyæmia in a Child, associated with Extensive Changes in both Kidneys and Bladder.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Percy Kidd: Two Cases of Congenital Syphilis of the Larynx. Dr. Samuel West: 1. Case of Purulent Pericarditis treated by Paracentesis and by Free Incisions, with Recovery; 2. The Statistics of Paracentesis.

WEDNESDAY.—Hunterian Society, 8 P.M. Adjourned discussion (to be opened by Dr. Stephen Mackenzie) on paper by Dr. Stowers (The Nature and Treatment of Infantile Eczema). Dr. Bedford Fenwick: Medical Common Sense in the Treatment of Chest-Complaints.

FRIDAY.—Clinical Society of London. Dr. Tyson (Folkestone): On a Case of Tubercular Leprosy. (The patient will be exhibited.) Mr. Barwell: On Removal of Large Portions of the Upper Lip without Deformity of the Face. Dr. Southey: On Tachetée, or Erythema Gangrenosum. Dr. Stephen Mackenzie: A Case of Subcutaneous Nodules occurring in a Patient the subject of Syphilis, and with very Indefinite Connection with Rheumatism. Dr. Duckworth: Case of Rheumatismal Cutaneous, Subcutaneous, and Periosteal Nodules. Mr. Clutton will exhibit a case of Spondylitis Deformans.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A CASE FOR GENERAL SYMPATHY.

SIR,—May I venture to direct the attention of the medical profession to the sad case of Dr. Hurford, the circumstances of which are set forth at length in the annexed statement?

Dr. Hurford's case has been brought before the Earl of Derby, who has consented to refer it to the Governor and Council of British Guiana, with the view of ascertaining if a special grant can be made. The Colonial Office, however, point out that the prospects of a grant of even £20 being made are not good because these appointments are conferred upon medical men on the understanding that they have no claim for pension; and, in Dr. Hurford's case, much expense has already been incurred by the colonial authorities. My excuse, if excuse be needed, for directing the attention of the medical profession to Dr. Hurford's case, is its peculiar and exceptional sadness. A capable, earnest, and robust worker is suddenly cut off from his career by an attack of what is probably general paralysis of the insane, which renders him unfit for duty though in the prime of life, and which makes it impossible that he shall ever again contribute to the support of his family. Thus, by an act of Providence, which Dr. Hurford was powerless to anticipate or provide against, his whole family is left in distressing circumstances; and, unless those who have and to spare will come forward and lend a hand, the result must be sad indeed.

I will only add that the Medical Benevolent Fund has given a donation of £20; other friends about £150, in sums of half a guinea and upwards; and that I shall be glad to receive and acknowledge any contribution, however small, towards the fund which is now being raised for Mrs. Hurford and the children.

The following are the facts of the case. Dr. Cedric Herbert Hurford, aged 34, filled the office of house-surgeon for five years at Dr. Stilwell's Asylum, Hillingdon, and, in 1880, he obtained an appointment in the British Guiana Medical Service, and, having married, proceeded to Demerara. At the expiration of two years and a half, through the ill effects of the climate, he became mentally deranged, was compelled to resign his appointment, and, with his wife, to return to England. After three months' detention at Bethlehem Hospital, he apparently recovered, and was discharged. Subsequently, with the assistance of friends, he furnished a house and purchased a small practice, but soon again his mind gave way, and it became necessary to place him a second time in Bethlem Hospital, and to break up the recently acquired home. The opinion of the medical men at the institution is, that he will never be fit for his work again. He and his wife are entirely without means, and there are two children, one aged two years, and a baby nine months. Dr. Hurford's father has but a small Government pension, three of his sisters earn their livelihood as governesses, while his wife has only a mother, with very limited means. The gentlemen whose names appear below have kindly consented to be referred to, and those whose names are prefixed with an * will be happy to receive subscriptions, and see to the application of the money. If preferred, cheques may be paid into the National Provincial Bank of England, Limited, to the credit of W. Cuthbert Quilter and Samuel Lovelock, for the Hurford Fund. *Lady Jane Taylor, 16, Eaton Place, S.W.; *Rev. William Edward Emmet, the Vicarage, West Drayton; Dr. Savage, Bethlem Hospital; Dr. Stilwell, Moorcroft, Hillingdon; Dr. Gilbart Smith, 20, Harley Street, W.; *Mr. Samuel Lovelock, 19, Coleman Street, E.C.; *Mr. W. Cuthbert Quilter, 14, King's Arms Yard, E.C.—I am, sir, your obedient servant,

HENRY C. BURDETT.

39, Gloucester Road, Regent's Park, N.W., April 11th, 1883.

DISINFECTION OF LINEN.

SIR,—In order to be more secure, if possible, from contamination, I send my household dirty linen to a steam laundry (Battersea Park). A short time ago my little boy, aged 6½, had a slight attack of German measles. His nurse, by my directions, saturated the whole of the linen, used by him, in "sanitas" before leaving the nursery, and made a remark in the washing-book as to the child's ailment (German measles). A few days later, a regular lecture from the manager of the establishment was written to my wife, for neglect in not sending for their special cart, etc. To my astonishment, a charge of 15s. was then made for disinfecting the linen of the whole house. I laud the precaution as most praiseworthy; but, if a charge of 15s. is to be made for every time a child has German measles, is it the proper way to get parents to report cases of even small-pox or scarlet fever? On my remonstrance regarding the charge, I am to be allowed a deduction of one-half, because I am a medical man. In my opinion, the sooner this sort of extra charge is done away with the sooner we shall get at the truth regarding infectious diseases. It would be, I think, of great importance if the BRITISH MEDICAL JOURNAL would lay down some plain rules for disinfecting clothing efficiently and at a cheap rate for all laundries, and also instructions for parents as to precautions regarding linen, etc., and so help to lessen the punishment on parents.—Yours faithfully,

COSMO G. LOGIE, M.D., late Surgeon-Major Royal Horse Guards.

47, Queensborough Terrace, W., April 15th, 1883.

The Case of Dr. C. R. Brown.

Mr. Frederick Wallace has received the following subscriptions, which he has forwarded to the Rev. E. E. Crake, Clifton House, Eastbourne, Honorary Secretary of the Fund:

	£	s.	d.
Anonymous	25	0	0
Dr. Martin	1	1	0
Dr. Bisset Hawkins	2	0	0
Dr. Gibbings...	1	1	0
R. Barlow, Esq.	1	0	0
E. Garraway, Esq.	1	1	0
C. E. Winckworth, Esq.	1	1	0
Rev. D. J. Drakeford	1	1	0

*** We have received the following letter from Dr. Pavy, Physician to Guy's Hospital. The enclosed cheque has been forwarded to Mr. Crake.

Sir,—Will you please receive the enclosed cheque for five guineas, to be applied to the fund being raised to meet the calamity from illness which has befallen Dr. Charles Brown of Eastbourne?—Yours faithfully, F. W. Pavy.
35, Grosvenor Street, W., April 18th, 1883.

The Diagnosis of Rötheln.

Sir,—The diagnosis of rötheln is of importance, as it is a trivial disease compared with those which it resembles. I have just had a case of it in a married woman over 30, and I particularly noted the points by which it might be diagnosed on the first day of the eruption. My patient had complained of a sore-throat and soreness of some glands at the side of the neck for three days previous to the eruption. On April 9th, she found herself, on awaking, covered, on her body, upper extremities, face, and neck, with a red rash, the legs remaining unaffected till the third day. The case differed from one of scarlatina both in the appearance of the rash and in the general symptoms. The eruption consisted of spots like those of measles, and was particularly vivid on the face, so as to be conspicuous from a distance, which is not the case in scarlet fever. In spite of having some frontal headache and lumbar pain, she expressed herself as feeling quite well and bright; whereas, in scarlet fever at this stage, there is languor and prostration, and often nausea and vomiting. She had some shiverings, and loss of appetite, and thirst. Temperature 102.2°; pulse 100. In the evening, the temperature had fallen slightly, and next morning was 99.5°, and on the fourth day had reached the normal. From measles, it was distinguished by the absence of coryza, lachrymation, etc., and cough. The spots are like those of measles, but are regularly distributed instead of appearing in patches. The skin felt tense, but there was no itchiness or sensation of burning. The chief diagnostic features of the disease appear to be that it presents the throat of scarlet fever with the eruption of measles, but without the coryza of the latter, and without the depression, rapid pulse, and high temperature of the former. My patient was sure that she had had scarlet fever and measles in her youth. No desquamation has followed.

Of its many names, I hope that rubella will be the one eventually adopted, as the Latin diminutive aptly expresses that it is a disease of little gravity. The sooner "rötheln" is discarded the better, as it is a term that to most Englishmen has no signification, and is of doubtful pronunciation. The most exhaustive article on this disease that I have seen is that by Dr. W. Squire, in Quain's *Dictionary of Medicine*.—I am, sir, yours faithfully,
Tweed Villa. South Norwood, April 16th, 1883. Edmond Shackleton.

Permanganate of Potash *versus* Carbolic Acid.

Sir,—For a long time, I have felt doubts as to the real value of carbolic acid as a disinfectant; and, while thoroughly believing in its antiseptic properties when applied to wounds and poured upon liquids and solids which are liable to putrefaction, I have, on chemical grounds, and as a result of personal observation, placed greater reliance on permanganate of potash as a disinfectant in sick rooms. Lately my attention has been particularly called to this subject, and it appears to me one of great importance; for not only is carbolic acid a most disagreeable agent to most people who have to spend hours in the sick-room, but, in the case of adults with delicate mucous membranes, and especially in children, it excites marked inflammation in the conjunctival Schneiderian membranes and throat when its use has been again resorted to after a temporary substitution of the permanganate. It has sometimes appeared to excite a condition resembling salivation. I have also observed that nurses are less liberal in the use of the acid than of the permanganate. Again, there is every reason to believe that the permanganate yields oxygen to the air. It would be unreasonable to suppose that the acid "carbolic" possessed such a property.

The matter is so important, that I hope, through your kindness, to see it discussed by the readers of your Journal.—Believe me, yours faithfully,
April 13th, 1883. H. M. D.

Dr. McNaught.—Yes; the matter has, we understand, been fully considered as desired.

An Appeal for the Ventilation of Churches.

An American contemporary, *The Christian Weekly*, publishes the following effective, though not strictly grammatical or scientific, appeal to the sexton for the better ventilation of churches.

"O Sexton!

You shet 500 men women and children
Speshily the latter, up in a tite place,
Sum has bad breths, none of em aint too sweet,
Sum is fevery, some is scroflus, sum has bad teeth
And sum haint none, and sum aint over clean;
And evry one of em brethes in and out and out and in
Say 50 times a minnet, or 1 million and a half breths an hour:
Now how long will a cherch full of are last at that rate?
I ask you; say fifteen minnets, and then whats to be did?"

"I put it to your konshens,

Are is the same to us as milk to babies,
Or water is to fish, or pendulums to clox,
Or roots and airbs unto an Injun doctor,
Or little pills unto an omepath,
Or Boize to gurls. Are is for us to brethe.
What signifies who preaches ef I cant brethe?
Whats Pol? What Pollue to sinners who are ded?
Ded for want of breth?"

The Government Medical Bill.

Sir,—I gather, from the pages of the Journal, that a clause is likely to be inserted in the new Medical Bill, in virtue of which registered practitioners who are graduates of a foreign university will be permitted to use the letters M.D., and will thus acquire a legal right to the prefix of Doctor.

I do not wish to question the justice of this arrangement; but it is obvious that, if it become law, practitioners who are not foreign graduates, but who are members of a British college of physicians, will think it scarcely equitable, unless the prefix in question is in like manner secured to them.

Many licensed physicians have declined to seek a foreign doctorate, because they knew it could not be registered, and had no legal value in this country. They have preferred to take a title granted by a legally recognised college of British physicians; and it will be hard if they should suddenly find the much coveted prefix granted to those who have sought honours abroad, and denied to physicians who have kept in the only path legally open to them.

I would venture to suggest that the prefix Dr. should be legally granted to all members of a British or Irish college of physicians. To do this would be to offer a very strong inducement to young practitioners to continue the systematic study of their profession after they had entered on its duties. The case of existing licentiates (many of whom have been encouraged to use the prefix) might be dealt with by admitting them to membership on somewhat easy terms, and thus giving them an undisputed right to the title.—Yours, etc. M.R.C.P.Ed.

Sir,—I would suggest that, under the new Medical Act, some short title, distinctive of the profession, should be given to licensed practitioners, which could be used as a prenomen instead of the "Mr.," which, though originally an academic title, is now in universal use down to the lowest ranks in society. Now that "Dr." has become, by long established custom and precedent, synonymous with medical practitioner, it is obviously the fittest, and one that would not require to be acquired, being already in common use. As an appendix to signatures (a most important requirement for medical men), the letters L.D. would represent "Licensed Doctor," and would not be confounded with M.D., the distinctive sign of a medical degree.—I am, sir, your obedient servant, A Member B.M.A.

Sir,—Cordially concurring in the closing sentence of your leading article in the Journal of the 14th instant, I venture to indicate two or three points of detail that seem to me to need reconsideration.

1. Inasmuch as the Medical Council is to exercise control over the medical boards, the wisdom of the provision in Clause 14, by which the same person may be a member both of Board and Council, seems doubtful.

2. It would be well in Part III to insert words which shall render it clear that the effect of registration as a colonial, or as a foreign practitioner, will be to confer upon the person so registered all the rights of a "registered medical practitioner" in this country.

3. The objection raised by the universities at the interposition of an additional examination in the degree-ward path of their alumni is a real one; but, unless the universities are willing to make this sacrifice (not a very great one), all hope of any genuine reform of medical education and examination must be abandoned.

4. The first of the amendments proposed by the Medical Reform Committee, seems distinctly to be a change for the worse, and looks very much like a sedative to the anxious fears of the corporations. The *élite* of the students will still go to the universities and corporations for higher qualifications; but what possible benefit will accrue to the rank and file, who have shown by success in the State examination their fitness to practise their profession, from compulsory affiliation with one of the universities or corporations? Additional expense seems likely to be the only tangible result, and it is earnestly to be hoped that the Legislature will not entertain the amendment.

5. The remaining amendments suggested by the committee, seem distinctly to be improvements on the original, especially the proposal to expunge the sub-clause requiring an annual registration fee from the medical practitioner.
—I am, sir, yours etc., Francis John Buckell, M.B., B.S.Lond.
Upper Street, Islington, April 17th, 1883.

Sir,—As a member of the British Medical Association, I beg to protest against two of the proposed suggestions to alter the Government Bill, made by the Medical Reform Committee. Not contented with a majority of English representatives in the future Medical Council, who will control the profession by virtue of the power of approval or veto on the essential acts of the boards, the committee now, forsooth, ask Parliament to hand over the direct control of examinations, and the elections of the professional representatives of the three countries to this Council. It is suggested, too, that the boards be not constituted bodies corporate.

The Medical Council had better be given the visiting and depriving of privilege work of the boards, and then the boards would become as nearly nonentities as possible. In other words, as I have in a former letter said, it is intended that the profession be governed from London, and centralisation is not, I trust, to be tamely submitted to.

As regards titles, I would suggest that the simplest course will be for those who have them not to obtain them as soon as possible—not by Act of Parliament, as Mr. Simon would have it. Again, as the Crown is equally interested in the people of the three countries, it should be enacted that the six Crown nominees be selected equally from each, instead of four and a half being allocated to England, one half to Scotland, and one to Ireland, as in the present General Council.—I am, sir, your obedient servant,
Liverpool, April 16th, 1883. A. Drummond Macdonald.

Irregular Coroners' Inquests.

Sir,—Irregularities in the mode of conducting inquests in the provinces, such as referred to on page 630 of the Journal, are, probably, not uncommon. A few years ago, at Stoke-upon-Trent, it was the custom to hold inquests on cases dying in the North Staffordshire Infirmary at a public-house, which was nearly a mile from the hospital. No medical evidence was called, and the jury did not view the body. On the matter being brought under the notice of the Home Office, this practice was abandoned, but it had already been followed for some years.—I remain, yours truly, W. A. F.

Medical Practice in Canada.

Sir,—Is a medical man who is M.D. of a Scotch University, and on the *Medical Register*, entitled to practise and to hold any medical appointments in Canada without having to pass any medical examination?—Yours, etc.,
G. C. M. D.

*** British degrees are recognised in Canada as qualifications for practice.

Diplomas and Fees.

Sir,—I see continually in your Journal cases of medical men complaining of the way our services are being ignored by the general public, and the great tendency to lower our position as medical men and gentlemen; but my firm belief is that we, as a body, especially the juniors, have very much to thank ourselves for such treatment, when each one tries his best to underbid the other; for one man will attend to a case for 20s., another will do the same for 10s., or even nothing, and this the public know full well, and snub us in consequence. We do not hear of this kind of abuse in the law, where stated charges are the custom; and if you were to try any number of respectable lawyers, their charges will be nearly alike; they do not attempt to work under value.

Here is a case in point. There is a young medical man who has lately commenced practice some miles from this town, who prides himself upon his superior qualification of L.R.C.P. London, and tries to make people believe that he possesses the highest qualification in our county, and that we poor L.S.A.Lond. are nobodies; but, in my humble opinion, the L.R.C.P. is merely a licence to practise medicine, the same as the L.S.A., and, after all, merely comes under the heading of General Medical Practitioner. This young man attends midwifery at charges which every right-minded practitioner must call absurd; in fact, beneath the dignity of a surgeon to receive. For instance, I know of one case where he was in attendance for thirty hours, for which he received the magnificent sum of 12s. 6d., out of which he returned to the parties 6s., and also gave 1s. to the midwife. Again, he attended a well-to-do farmer, five miles from his place of residence, last week, and gave two visits and an eight-ounce mixture, for which he charged 7s.

If such absurd charges are made, the profession must be lowered in the eyes of the people, when we ourselves value our services at such rates. I think it is high time the British Medical Association should make stated charges for our guidance.—I am, sir, your obedient servant,

Hugh P. Price, M.R.C.S.E., L.S.A.

Narberth, South Wales, April 14th, 1883.

Scarlet Fever on Board the "Mars."

Sir,—I have only now noticed the paragraph on page 475 of your Journal of March 10th, in which you say that the Dundee Royal Infirmary and the Epidemic Hospital authorities refused to take any of the scarlet fever cases from the training-ship *Mars;* and add, "to say the least, this is strange." The Epidemic Hospital authorities may answer for themselves, if they can. In the case of the Infirmary, there is nothing strange about it. I explained to the secretary of the *Mars*, when he called on me, that the scarlet fever space at the disposal of the Infirmary was already overcrowded.—Yours very truly,

R. Neavrs M'Cosh, M.D.

Dundee Royal Infirmary, March 19th, 1883.

Prevention of Laceration of the Female Perinæum.

Sir,—There is nothing new in this procedure, for German midwives have practised it probably for centuries. Franz Karl Nägele says, in his *Manual of Midwifery:* Heidelberg, 1847, "The midwife must on no account presume to dilate the mouth of the womb, or to pull at the anterior lip of the same, or to dilate the vagina, or its outer orifice, or pull back the perinæum, or anoint the parts with fat. This causes pain and irritation, is of no kind of use, and does harm."

Dr. Hermann Franz Nägele mentions these proceedings of midwives in more precise terms of reprobation.—Yours truly,

124, Fulham Road, S.W., April 1st, 1883. V. Poulain, M.D., M.R.C.S.

Royal College of Surgeons of England.

The following questions in anatomy and physiology were submitted to the candidates at the primary examination on March 30th.—*Anatomy* (Four questions, not more, to be answered.) 1. Describe the dissection by which you would expose the genio-hyo-glossus muscle. 2. Describe the os magnum. 3. Describe the course, relations, and tributaries of the innominate veins. 4. Give the dissection required to expose the tendon of the peroneus longus in the sole of the foot. 5. Enumerate in their relative positions the muscles which are in contact with the capsular ligament of the hip-joint; name those muscles which rotate the femur outwards, and those which rotate it inwards. 6. Describe the fascia transversalis. *Physiology.*—1. What is the composition of the blood?—state the uses of its various constituents. 2. Classify food stuffs in the order of their value as heat-producers—give your reasons for the order in which you place them. 3. Describe the structure of lymphoid tissue, and state where it occurs. 4. Describe the act of deglutition. 5. Explain the mechanism of ordinary inspiration and expiration. 6. Describe the formation and uses of the placenta.

Prescribing Chemists.

Sir,—A chemist residing in another town some distance from here has taken a shop in this place, and placed an assistant in it to carry on the business. The assistant sees patients and prescribes for them in a consulting room attached or adjacent to shop, and attends to accidents, etc. I also have reason to believe he sees patients at their own houses, and sends medicine. May I ask if this is legal, and if there is any way of preventing it?—I am, sir, yours faithfully,

Member.

*** The conduct described above is clearly illegal; and, if witnesses can be procured to prove the facts, proceedings can be taken under the Apothecaries' Act.

Porro's Operations in Italy.

In a recent number, under this heading, the *Medical News* remarked, that "it would be interesting to know how many of the children survived." To this query, Dr. R. P Harris replies: There have been, as far as published in the journals of Italy, 43 Porro's operations in that country, saving 18 women and 33 children. The last 28 operations, dating from May 16th, 1879, saved 14 women, or 50 per cent. This may be considered a fair estimate of the mortality of the operation at the present time in Italy, in making a prospective calculation of the risk. The earlier the operation after labour has fairly commenced, the greater the hope of success.

Celluloid Catheters.

Sir,—I shall feel much obliged if you, or any of your correspondents, will tell me if there is any objection to the use of celluloid catheters by patients who have been taught to pass instruments for themselves? My reason for asking is, because the only celluloid catheters I have seen appeared to have been made without a textile base, such as the gum-elastic ones have, and therefore looked as though they might snap off short. They are flexible enough when new, but will they remain so and not become brittle?—Yours faithfully,

Grenada, W. Indies, February 26th, 1883. H. J. L. B.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. A. E. Livsey, Liverpool; Dr. Herman, London; Dr. R. J. Roulston, Axminster; Dr. A. T. Brett, Watford; Dr. T. Joyce, Cranbrook; Mr. E. W. Robertson, Aberdeen; Mr. Nelson Hardy, London; Mr. Fred. A. Eaton, London; Dr. A. Duncan, London; Mr. R. Gillard, London; Mr. Edward Crossman, Hambrook; Dr. Brand, Driffield, Yorkshire; Dr. Needham, Gloucester; Dr. A. B. Garrod, London; Dr. Imlach, Liverpool; Mr. W. Rogers Williams, London; Mr. W. Dunnett Spanton, Hanley; Mr. W. Alpin, Jersey; Mr. C. H. Phillips, Hanley; Dr. Camille Rousset, Paris; Mr. Alfred Craske, London; Mr. W. E. Soffe, East Harling; Dr. C. Holman, Reigate; Mr. John Clay, Birmingham; Dr. Crichton Browne, London; Our Aberdeen Correspondent; Mr. R. T. B. Cooke, Scarborough; Mr. Andrew Spearing, Shaw; Mr. C. H. Johnson, Basingstoke; Dr. Auspitz, Vienna; Mr. J. Penn Gaunt, Alvechurch; Dr. G. W. Crowe, Worcester; Dr. Cosmo G. Logie, London; Mr. H. R. Mosse, Wandsworth; Dr. A Emrys Jones, Manchester; Dr. H. Boothby Dow, London; Dr. Ewing Whittle, Liverpool; Dr. W. H. FitzPatrick, Liverpool; Mr. Frank Spence, Manchester; Mr. Hugh Price, Narberth; Dr. Sutherland, London; Dr. J. W. Moore, Dublin; Dr. G. Oliver, Harrogate; Dr. Sawyer, Birmingham; Mrs. Codd, West Worthing; Dr. S. Wilks, London; Dr. Oliver, Maidstone; Dr. Styrap, Shrewsbury; Mr. John Barr, Rishton, Blackburn; Dr. C. E. Glascott, Manchester; Mr. W. L'Heureux Blenkarne, Buckingham; Mr. Drummond Macdonald, Liverpool; Mr. J. C. Jackson, Bourne; Dr. McKendrick, Glasgow; Dr. S. W. Smith, Pershore; Mr. J. G. Clendinnen, Coseley; Mr. W. A. Harrison, Pontefract; Mr. J. W. Martin, Sheffield; Mr. F. J. Buckell, London; Mr. Arthur Kempe, Exeter; Mr. Wm. C. Blackett, Durham; Mr. W. De Rosario, Punjab; Mr. T. E. Dove, London; Mr. James J. Marsh, Manchester; Dr. W. J. Kennedy, Penicuik; Mr J. Wheeler, Ilfracombe; Mr. Edmond Shackleton, South Norwood; Dr. J. G. Parsons, Bristol; Mr. W. H. Day, Norwich; Dr. J. E. Bullock, London; Mr. A. F. McGill, Leeds; Dr. Rogers, London; The Secretary of the Ulster Medical Society; Mr. J. H. Buxton, London; Messrs. Brown, Gould, and Co., London; Mr. Edward Wood Foster, Darlington; Professor McKendrick, Glasgow; Dr. E. J. Nix, London; Mr. Lawrence Humphry, Cambridge; Dr. Manson Fraser, London; Our Paris Correspondent; Mr. J. G. Douglas Kerr, Bath; Mr. G. F. Blake, London; Mr. Vallance, Whitechapel; The Secretary of the Society for the Relief of Widows and Orphans; Our Dublin Correspondent; Mr. Simeon Snell, Sheffield; Dr. Boggs, Paris; Mr. C. G. Woodhouse, Leeds; Mr. T. C. O'Leary, Bath; Mr. Sells, London; Dr. W. T. Walsham, London; Dr. Markham Skerritt, Bristol; Mr. Henry Alexander, London; Dr. C. Elliott, Bristol; Dr. G. T. Stack, London; Mr. R. A. Jackson, London; Mr. T. Whitehead Reid, Canterbury; Sir J. E. Eardley Wilmot, London; Dr. W. Carline, Lincoln; Messrs. Heinekens, London; Our Glasgow Correspondent; Mr. F. G. Sadd, Rugby; Mr. E. Rice Morgan, Morriston; Mr. C. G. Wheelhouse, Leeds; Mr. Arthur Jackson, Sheffield; Dr. J. W. Langmore, London; Mr. H. Miles, London; Dr. Channing, Ryde; Dr. R. Wade Savage, London; Dr. Aitken, Rome: Dr. L. W. Marshall, Nottingham; etc.

BOOKS, ETC., RECEIVED.

What To Do in Cases of Poisoning. By William Murrell, M.D., M.R.C. Third Edition. London: H. K. Lewis, 136, Gower Street, W.C. 1883.

Indigestion, Biliousness, and Gout in its Protean Aspects. Part II: Gout, in Protean Aspects. By J. Milner Fothergill, M.D. London: H. K. Lewis, 136, Gower Street. 1883.

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REMARKS
ON
ERTIGO, AND THE GROUP OF SYMPTOMS SOMETIMES CALLED MENIÈRE'S DISEASE.*

By EDWARD WOAKES, M.D.,
nior Aural Surgeon and Lecturer on Aural Surgery at the London Hospital; Senior Surgeon to the Throat Hospital.

E point of view which I propose to submit for consideration in s paper is, that all vertigo is essentially auditory in its seat; that o say, whenever the symptom of giddiness, disturbance of the ilibrium, defective gait, falling, or whatever modification of these y characterise the symptom of vertigo, its immediate occurrence ue to a modification of tension of that part of the labyrinthine l contained in the semicircular canals, and the appreciation by ampullar nerve-apparatus of this change of tension. It cannot n be admitted that vertigo, associated with lesion of the ampullar ve in its course through the brain to its root or hypothetical re, constitutes any exception to this generalisation. If, as will hown, the semicircular canals are the organs of equilibration, and igo the consequence of its disturbance, the organ must be impli- d for such disturbance to become manifest. This statement may redicated of every form of vertigo, however originating. Just ve could not get defect of vision consequent upon disease of the c centres in a subject who had already lost his eyes, so vertigo, ch is defective equilibration, cannot occur if the semicircular als be absent, however much the central distribution of its nerve be involved in disease. The converse of this proposition must rue also.

ne more clearly this idea is grasped, the more successfully shall liscuss the differentiation of auditory vertigo, because we shall ern what there is to distinguish, viz., the causes which disturb functions of the organs of equilibration. These may be classed er two heads. The first includes alterations of tension, either or *minus*, of its contained fluid. There will be found three ls of change of tension: *a*. That produced by direct pressure due cal ear-disease; *b*. That induced by reflex vaso-motor influences; nat in which a combination of both these exists, which comprises great bulk of cases.

ne second class embraces such intracranial diseases as irritate or arb the nerve of the organ, and are central in their origin.

o substantiate this position, it is necessary that certain points be erstood. These are (1) the anatomical construction of the nerve- ly of the semicircular canals, henceforth called the organs of libration; (2) the functions of these organs as indicated by experi- t; (3) the anatomical relations of these organs to contiguous distant regions.

With reference to the *anatomical constitution* of the nerve- ly of the organ, it is to be noted that the latest accounts by è and Duval confirm earlier surmises to the effect that a special of fibres associated with the auditory nerve proper is reserved distribution to the ampullæ of the membranous semicircular ls only. Traced backwards, these fibres are continued into the rior peduncles of the cerebellum, the medulla oblongata, and ibly into the spinal cord, though their ultimate destination is *sub judice*. These ampullar nerves are associated with a hanism which is also peculiar, their peripheral distribution g connected with certain cells developed from the epithelium of ampulla, having hair-like prolongations projecting into the n of the tube in such a way as to appreciate the slightest tion of or change of tension in the endolymph.

r reason for recalling these trite anatomical facts, is to empha- he inference that an organ endowed with a nerve connected a special mechanism may be fairly accredited with the posses- of special functions. In the remaining parts of the internal o such apparatus exists, but, instead, a very special one for Thus, while the nerve of the utricle and sacculus is excited through the medium of crystalline particles known as otoconia or otoliths, the exact function of which organs remains undetermined, that part of the auditory nerve distributed to the cochlea has its special apparatus, the organ of Corti, which, by general consent, is accredited with the function of transmuting the vibrations reaching it into sensations of sound.

With the cochlear nerves we are not now concerned, for it has been demonstrated that the cochlea may be destroyed, but no disturbance of equilibrium ensues.

2. *The functions of the semicircular canals* as demonstrated by experiment. Since the initial investigations of Flourens in 1817, showing that injuries of these organs produced movements of the head, rotation of the body, etc., his experiments have been repeated by a long list of observers, of whom Goltz, Loewenberg, Gellé, and Spamer are among the most recent and reliable. These are in the main all confirmative of Flourens' results. Notwithstanding, Baginsky of Berlin has recently attempted to show that the effects arrived at by his predecessors in this field of research are referable to concomitant injuries inflicted on adjacent tracts of brain-tissue. On this point, the following summary of the latest investigator, Spamer, to my mind effectually disposes of Baginsky's objections, inasmuch as he points out "that the disturbances of equilibrium vary with the canal injured. There is no relation between the amount of disturbance and the amount of cerebro-spinal fluid which escapes when a canal is cut. The disturbances vary with the kind of injury inflicted, being more marked on transverse than longitudinal section. Apart altogether from section of the canals, irritation by different chemical solutions causes marked results; and the effect of touching the canals with a heated point cannot be explained away by any hypothesis of direct injury to the brain such as Baginsky assumes. In his own experiments, the most careful ex amination failed to detect any lesion of the brain, or, if such lesions were accidentally produced, the cases were considered unsuccessful experiments." (*Brain*, January 1882.)

The weight of experimental evidence, therefore, conclusively justifies the assumption that the function of equilibration resides in the semicircular canals, and that interference with this function produces the phenomena of vertigo. By this term is meant not only the loss of the power by which the upright posture is maintained, but also the loss of the capacity on the part of the vertiginous subject to recognise his relationship to the objects surrounding him. The latter is to be regarded as a lighter phase of the attack. The sequel will indicate that many symptoms not included in this definition are associated in varying degrees of constancy with the more prominent symptom, and are dependent upon the anatomical relations of the organ of equilibration, and that giddiness is only the primary, albeit the most pronounced evidence of its disturbance.

We may now search for the channels by which morbid impressions reach this organ, a proceeding which brings me to the third point, viz., the consideration of the *anatomical relations of the region to contiguous and distant organs*.

Respecting those organs the close vicinity of which to the labyrinth favours the advance of any diseased condition present in them towards the latter, the first in importance are the parts of the auditory apparatus designed for the conduction of sound to the internal ear. The tympanic chamber, including the Eustachian tube and its accessory cavities, the postnasal space and the nasal fossæ, are peculiarly obnoxious to morbid states the tendency of which is to implicate the labyrinth. It is unnecessary to insist on the consequences of catarrhal and proliferating processes of the tympanum in producing pressure on the membranes closing the fenestra of the labyrinth, nor on the corresponding result of tubal obstruction, however brought about, these being trite otological facts. We have abundant proof that such increase of intralabyrinthine tension is capable of inducing vertigo, all doubt respecting which may be set at rest by repeating Weber-Liel's experiment of pressing on an exposed stapes. It is not, however, sufficiently recognised, that stenosis of the nasal meatus, is equally potential with direct tubal obstruction in producing middle-ear disturbance, because, if complete, it necessitates buccal respiration, and so abnegates the tubal function. This remark is intended to emphasise the importance of directing attention to the nose when the ear-symptoms are present, as there are a certain number of cases referable to this region alone.

That many of the conditions now glanced at are competent to irritate the tensor tympani muscle, and lead to its spasmodic contraction, seems also clear. The effect of such excessive action is to draw the chain of bones inwards, so pressing on the foramen ovale, with the counterpart effect of Weber-Liel's experiment just referred to. The occurrence of spasm in the muscle in question will some-

he notes which form the basis of this paper were used by the author to luce the discussion on Auditory Vertigo, in the Otological Section at the ester meeting in August last. As now rewritten, the paper was read at unterian Society, January 24th, 1883.

times explain the intermittent and transitory character of the vertigo.

The external auditory canal likewise contributes its quota to the causes which lead to giddiness, as when foreign bodies are located in it. Amongst these are plugs of hardened cerumen, also beads, seeds, pieces of slate pencil, etc., introduced by the curious for the purpose, apparently, of investigating the whither of the orifices of their anatomy; a propensity not entirely confined to the ear, or to the very young. Any of these may cause direct pressure upon the ossicles through the medium of the drumhead, and thus produce tension of the intralabyrinthine fluid. But inasmuch as less tangible irritants, such, *e.g.*, as eczema of the external canal, the presence in it of small insects, penicillum and other fungi, none of which can exert mechanical pressure, are all alike prone to be associated with the symptoms of vertigo—we must seek further for the explanation of their occurrence under these circumstances. This is undoubtedly a reflex phenomenon, the conditions for producing which will be found in the relations of branches of the third division of the fifth nerve. Thus the auriculo-temporal branch of this nerve supplies the external canal with sensory fibres, while another twig of the same nerve passes through the otic ganglion to the tensor tympani muscle. Irritation of the former by any of the above-named causes will readily induce reflex contraction of this muscle, and hence the vertigo.

Passing to the consideration of the relationships of more *remote regions to the organ of equilibration*, and to the influence which morbid states in them exercise upon the function of the latter, we shall find their import to be very real, and the importance of their recognition of paramount value in regard to the question of diagnosis. It will show the bearing of this division of my subject on the questions at issue, first of all to enumerate the associated symptoms of vertigo, and then endeavour to see how far they can be anatomically connected with the semicircular canals. It is desirable to note here that the following category of attendant symptoms is drawn from actual experience extending to upwards of fifty cases of the disease, observed in hospital and private practice; and, further, that the pourtrayal of these, when present in a marked degree, leaves little room for over-colouring or exaggeration.

Referring first to the chief symptom—*vertigo*—this is spoken of indifferently as giddiness or swimming of the head, though no single term will suffice to describe it. It appears under many and varied aspects. Trousseau remarks: "Sometimes, when the individual is standing, everything about him seems to be whirling around; he is obliged to shut his eyes and remain absolutely motionless, for he feels his legs tottering and bending under him, as if he were going to fall; and sometimes he does fall. If he be lying down, he thinks he sees his bed revolving on an axis passing through his head and feet; or it may be that the patient sees himself involved in the rotatory movement. Sometimes the earth appears to open at the sufferer's feet, and he feels himself irresistibly drawn into the chasm. At the same time he is oppressed with an overwhelming terror and sense of dread, which, though fully conscious that his sensations are more subjective than real, he is unable to dispel."

Nightmare.—Anyone realising this state of things will, I think, scarcely fail to recognise the great similarity existing between them and what is popularly called nightmare. I believe this latter state has not met with a satisfactory physiological explanation; and, in submitting my conviction that it is really due to an attack of vertigo occurring during sleep, I shall hope to show that the reasons for so doing have a firmer basis than that of mere hypothesis. At present, I can only briefly anticipate, what will be apparent in the sequel, that nearly all vertiginous subjects have more or less impairment of their hearing apparatus. Children are particularly obnoxious to ear-disease; so much so, that it may be predicated of all those who are the subjects of nightmare, that they are either temporarily or permanently thus affected. Later on, it will be shown how an indigestible meal determines an attack of aural vertigo in persons whose auditory nerve is thus rendered morbidly sensitive, thus furnishing all the links in the chain of evidence by which to explain the occurrence of nightmare by an attack of vertigo coming on during sleep.

Returning to the symptom of vertigo, certain conditions will be found to induce it. In some, stooping, in others, lying down, in others, again, rising suddenly from the recumbent posture, will have this effect. In one case, in which, owing to an extensive loss of the drumhead, a granular mass was seen to involve the stapes, lying on the opposite side increased the giddiness, apparently by bringing the weight of the growth exactly on to the fenestra. Constipation aggravates it. In a certain number of cases, turning the head suddenly to one side determines an attack, probably by checking the even return of blood from the head. Profuse perspiration is a frequent concomitant, especially in the region of the head and face; often also in the hands. In a recent case, the patient fell prostrate whenever a loud sound occurred in his vicinity, such as a railway-whistle.

It is a matter of observation that, even when the patient falls, which is often sudden and always in the same direction in the same case, consciousness is never lost, unless fainting complicate the vertigo. This, however, is very rarely the case; but its physiological possibility will be pointed out shortly. Whenever I have witnessed an attack, the pulse has been rather quickened than otherwise; the face and lips have remained quite natural as to colour, or, if changed at all, it has been in the direction of congestion; though, if fainting occur at the same time, there will be pallor as well as loss of consciousness. Some patients describe the falling as though "the pavement flew up and struck them on the head," thus using the language of the conventional inebriate. This feature is one of absolute and sudden powerlessness—a kind or crumpling up of the body from inability to maintain the equilibrium. As a rule, it passes off as quickly as it happens; and, beyond the mental confusion consequent upon the fall, the patient is able to resume his former occupation in the course of a few minutes.

It will be observed that most of the preceding as well as many of the following conditions point to a hyperæmic state of the head rather than to one of anæmia.

Deafness.—It is to be observed that vertiginous subjects are nearly always deaf, not more than 2 per cent. of my patients having been free from some degree of hardness of hearing. It is true that this fact is not always admitted by the sufferer, until the hearing is tested and the defect pointed out to him. From the point of view now insisted upon, it is obviously of importance to ascertain the state of the ears in every case of vertigo. This symptom—deafness—is very uncertainly influenced by an attack; often it is increased before and afterwards, but one patient stated that his hearing "was cleared up" by a fit of giddiness. In either case, the effect is transient. The point of chief importance to be noted in connection with deafness is that, when carefully investigated, it will be found that this symptom preceded the first attack of vertigo by a considerable period. Obviously, these remarks exclude a small class of cases in which no symptom of the kind referred to has ever happened, until the subject is suddenly smitten with vertigo, and, on recovery, finds that he is deaf in one or both ears. These are instances of apoplexy of the labyrinth; they are, fortunately, rare, though not to be lost sight of in estimating the possible factors of the disease.

Tinnitus is, perhaps, the most distressing accompaniment of vertigo. It varies in degree from slight tidal but persistent sounds to those of a tumultuous storm, in the worst phases of which the patient's life is rendered burdensome. The attempt to explain them, as Burnett has recently done, by attributing them all to vessel-vibrations, is, to my mind, delusive. Depletion often aggravates them, and the bromides more often fail to relieve than prove efficacious. When they are distinctly pulsating, indicating loss of arterial tonus in the circulation of the labyrinth, hydrobromic acid is a specific cure, but it will do little in other cases. A congested state of the venous sinuses of the brain, especially those which receive the blood from the internal ear, is indicated by chattering, chirping, and musical notes. The recumbent posture, tobacco-smoking, and alcoholic excesses induce these; the latter two by impairing the vaso-motor control of the vessels, which indirectly tends to venous engorgement. The lying posture acts in this way by obstructing one or other of the emissory veins. In advanced ear-disease, associated with paresis of the intrinsic muscles, usually local in its source, *i.e.*, impairment of nerve-supply by implication of the latter in the local lesion, it seems more than probable that a tremulous state of the tensor tympani is set up, the vibratile oscillations of which muscle are appreciated as sounds by the ear. Parallel cases are seen in bulbar paralysis, where the muscles of the tongue on the affected side are seen to be in a state of persistent tremor. The numerous factors which contribute to the causation of tinnitus have been already treated of elsewhere, so that it is unnecessary to discuss them further on this occasion.

Headache is a very constant attendant. It is more often occipital than frontal, and extends to the mastoid region. Associated with it is a very constant sense of rigidity and uneasiness in the nape of the neck, passing down towards the shoulders. The head itself cannot be steadied, and would fall over if not supported; once a particular position in each case is usually adopted as the ease

Numbness about the side of the head and forehead, corresponding to the affected ear, is occasionally witnessed.

Stomach.—It seldom happens that severe vertigo exists without a concomitant disturbance of the stomach and intestinal tract. This manifests itself in nausea, culminating in vomiting, and forcibly recalls the intimately allied phenomena of sea-sickness.

In chronic cases, *dyspepsia* is a strongly marked symptom. In fact, the association between "swimming in the head" and a "bilious attack" is so frequent, that both professional and lay observers speak of them as effect and cause, but without any recognition of the organ actually implicated to induce the giddiness, or of the anatomical association between it and the region manifesting the dyspepsia. In this class of patients, I have frequently noted the presence of oxaluria; and it should always be looked for in vertiginous dyspeptics, whose pursuits are studious and whose habits are sedentary. It is necessary to allow the urine to stand for twenty-four hours, to precipitate the crystals. Their presence is due, doubtless, to the maldigestion of sugar and the glycogen derivatives; and I need scarcely observe that its recognition affords important indications for successful treatment. Though the evidence on this point is not as yet conclusive, I believe it will be found that an attack of vertigo may be induced reflexly from irritation of the kidneys, set up by the elimination through these organs of excessive quantities of oxalates; just, in fact, as the presence of certain articles of food in the stomach will, in the susceptible, invariably produce this symptom. Solid butcher's meat has this tendency in a marked degree, especially in advanced life, at which era a return to the diet of infancy is imperatively necessary to avert the attacks.

The *heart* seldom escapes some form of functional disturbance, which greatly enhances the discomfort of the patient. This may take the form of palpitation, præcordial distress, or irregularity of action. These symptoms, though usually ascribed to flatulence or dyspepsia, are distinctly due to implication of certain cardiac factors of the anatomical mechanism, which embrace all the other phenomena of the disease.

The *gait* in vertiginous subjects is liable to be affected, apart from the immediate influence of an attack. These patients are uncertain in their walking powers, often lurching and reeling to one side, without any other sensation of giddiness. These facts should not be left out of consideration by those who may be called upon to decide in a given case, as to whether illness or drunkenness is operating to produce a degree of staggering, which to the lay mind suggests nothing beyond alcoholic excess. This condition is frequent in the later phases of syphilis affecting the labyrinth. One such patient complained of the left foot always feeling as if compressed by a tight bandage. Intense itching of the inside of the foot, and, in another, severe pain in this region, have also been noted.

Mottling of the hands and forearms is met with in nearly every case of severe vertigo. It is a very positive symptom, the blush disappearing on pressure, to reappear when the pressure is withdrawn. It denotes a loss of tonus in the peripheral vessels of the brachial circulation, and possesses this significance, that it visibly pourtrays what is the state of things in the correlated distant areas of the same circulatory system; *i.e.*, the vessels regulated by the same vaso-motor centre, where these areas are removed from direct observation.

Intimately allied with the anatomical relationships just referred to are the *auræ*, which presage an attack of vertigo. These are frequently, but not invariably, met with. Sometimes the sensation begins in the arm corresponding to the worst ear, passes up the side of the neck; and, when it reaches the ear, the patient becomes giddy. Or the sensation commences in the stomach, and follows the same course. Occasionally it assumes the form of a stifling feeling in the throat; or, of a fancied dysphagia. All the foregoing symptoms are quoted from cases, and preceded the attack in the subjects manifesting them.

The concluding group of symptoms, though seen most markedly and persistently in confirmed cases occurring in advancing life, are yet met with as occasional occurrences in the very young, and in quite curable stages of the disease. I have already alluded to the sense of dread, the apprehension of impending evil, exhibited by the subjects of vertigo, and which is quite uncalled for by the surroundings of the patient, and which no amount of reasoning can allay. To some extent, this painful state may be the effect produced upon the mind of the patient by the uncertainty as regards his relationship to space, and the objects about him engendered by the whirl in which he passes his existence. Closely akin to the foregoing is an equally uncontrollable tendency to sobbing and weeping without provocation—a symptom which naturally proves very distressing to the friends and on-lookers. This tendency is occasionally witnessed in young persons with advanced ear-disease. In one patient, a great flow of tears was invariably induced by every attempt to read aloud. There is, moreover, in nearly all cases a great and growing impairment of memory; the patient voluntarily complains of forgetfulness in the trivial concerns of every-day life. In the aged subjects of the disease, where it advances unchecked, this expresses itself in inability to talk correctly. This is not aphasia proper, at least, not in the early stage; but, from simple forgetting of the word required, some other quite irrelevant word is substituted, and thus speech becomes incoherent, and at length unintelligible.

Finally, *oscillation of the eyeballs*, called also nystagmus (*νυσταγμος*, nodding, slumber), has been described by some authors as an accompaniment of vertigo. I have never met with it in the entire category of my cases. Its presence would impart a grave aspect to the case, from the fact that the third and fourth nerves (oculo-motor and patheticus) are by general consent connected with the cerebellum. From the point of view of differential diagnosis, one would be inclined to refer a case of vertigo exhibiting this symptom to central lesion, *e.g.*, tumour of the cerebellum, rather than to causes primarily seated in the auditory apparatus.

One other feature met with in the later stages of the disease requires to be noted here; it is the growing habit of picking and fidgetting with the fingers which these patients exhibit. This symptom is curiously similar in every case sufficiently advanced to exhibit it, and takes the form of tapping with the finger-nails, twirling and twisting any small object in their hands, especially feeling the lappels of the coat or other wearing apparel, as well as a disposition to touch with the fingers any object which may be at hand. Although probably a part of the general restlessness of body which advances *pari passu* with the mental vacuity, I cannot but regard the particular localisation of this restlessness in the fingers as a later manifestation of impaired nerve-nutrition in the upper extremities consequent upon the loss of vaso-motor power to which I have referred the mottling of the skin in this region occurring earlier in the disease. In one case, still under observation, this symptom disappeared under treatment of the affected ear, step by step with the cessation of the tinnitus.

In reviewing the symptoms just detailed, the question naturally arises, how are they produced? Obviously that exegesis will be most acceptable which most clearly embraces the entire category of associated phenomena. There are two hypotheses which have been advanced to solve the enigma before us.

One of these, called the "overflow" theory, has quite recently been largely advocated by Dr. Burnett of Philadelphia, and Dr. McBride of Edinburgh. It maintains that an "overflow" of nerve-impulse may take place between centres situated contiguously to each other in the brain; and that, in fact, such an overflow of impressions does take place from a hypothetical vertiginous centre to the oculo-motor, the vomiting, the respiratory, and the cardiac centres; nay, it may even go further, and induce unconsciousness. It is a relief, however, to find that at present no centre of unconsciousness has been suggested, not even a hypothetical one. This theory, then, proposes to establish that the vertiginous centre, being severely stimulated, "tends to involve the others by overflow of nerve energy." (McBride, *Medical Times and Gazette*, 1881.)

It is impossible, in the space at my disposal, to examine even cursorily the arguments used in support of this view. The hypothetical character of all the inferences, even to the existence of most of these centres, indisposes me to accept it. Nearly all the phenomena adduced in its support are capable of quite other and simpler explanations. Again, it suggests a very poor idea of the isolation of these centres if impressions can so readily overflow from one to another; indeed, one may question the utility of such centres if their impressions be really liable to such decentralisation. Perhaps the best substantiated association is that between oculo-motor phenomena and vertigo induced experimentally—*i.e.*, by causing a rabbit to revolve rapidly; a proceeding calculated to excite oscillation of the eyeballs, as well as any amount of "overflow" among whatever brain-centres the animal so rotated may possess. Such an experiment, I submit, can throw very little light on the disease for, as have said, these are exactly the phenomena we are not called upon to explain, because in the large number of cases I have seen, nystagmus, as experimentally induced, or anything approaching thereto, has been invariably absent. At the same time, one is bound to admit an admirable simplicity in the theory which explains the symptoms grouped around vertigo by assigning centres to each of

these, and then causing the vertiginous impression to overflow, and involve successively the entire series.

The alternative explanation to the preceding, is one which I first promulgated in the year 1878, in a paper read at the Medical Society, on the "Connection between Stomachic and Labyrinthine Vertigo," and which subsequent experience of the disease has tended to confirm. It is based on three considerations, which are practically demonstrable. The first is, that all the symptoms are producible by local ear-disease, and cease with recovery from it; the corollary from which fact is, that in nearly all cases of recurrent vertigo, ear-disease is an established factor. Secondly, in tracing the progress of the symptoms through the life of their subject, unmistakeable evidence is afforded of the progressive decay of brain-centres. This latter phenomenon is not the result of an "overflow" of impressions, but of the failure to respond coherently to impressions because of the starved and altered elemental structure of these centres. Thirdly—and this is the chief contention of my thesis—it is to changes in the vessel which is the chief vehicle of blood to the brain—the vertebral artery—that vertigo, and the phenomena associated with it, are due. This, however, is only a partial statement of the case, because the variations of blood-supply acknowledge a vaso-motor source, and are traceable to the inferior cervical ganglia, which are the vaso-motor centres of the vertebral arteries. The widely dispersed symptoms, already enumerated, become intelligible when viewed in the light of the anatomical relationships of these ganglia. Further, the comparison of the anatomical areas implicated, with the physiological occurrences taking place in them, furnishes evidence of the existence of a physiological law previously unrecognised, and which, there is reason to believe, applies with equal force all over the economy. It is to the effect that the afferent fibrillæ of a sympathetic ganglion which are, for the most part, associated with sensori-motor nerves, are in reflex relationship with the efferent vaso-motor nerves furnished to the arteries from the same ganglion. The sympathetic ganglia, therefore, with their afferent and efferent nerves are to be regarded as exercising correlating, or co-ordinating, functions, in regard of such operations as belong to them, between tissue-areas often widely separated. By referring to the anatomy of the region, it will be seen that the following nerves, are connected with the inferior cervical ganglion. They divide into two groups; some, associated with cerebral or spinal nerves are afferent—*i.e.*, they convey impressions from the tissues to the ganglion. There are, first, numerous fasciculi which enter the vagus, and proceed with it to the lungs, stomach, liver, etc.; secondly, a set of fibres which join the brachial plexus of nerves, and are distributed with them to the upper extremity. The other group comprises fibres which go to the vertebral and brachial arteries, and also the inferior cardiac to the heart; they are efferent as regards the ganglion, and vaso-motor in respect of their function. Hence it follows that tissue-impressions reaching the ganglion through the former group, will be reflected in the ganglion through the medium of the latter group to the vertebral and brachial arteries; as vaso-motor impulses, producing either dilatation of the peripheral branches of the artery, equivalent to hyperæmia of the tissues which they supply, or contraction of the arterioles, with corresponding anæmia in these regions.

Now the internal auditory branch of the vertebral artery is the chief source of blood-supply of the labyrinth, and is beyond all others most likely to give rise to marked indications of such changes in its calibre, because it alone is distributed to an organ capable of proclaiming the disturbed condition of the circulation by so pronounced a symptom as giddiness. When it is considered how largely the vertebral artery is concerned in the blood-supply of the brain, and what important centres depend upon it for nutrition, the wisdom of arranging its distribution so that the very earliest departure from its normal condition shall be thus prominently notified, will become evident. In this way, the organ of equilibration serves a sentinel-like function, to warn us of the state of blood-supply of the brain as a whole. The importance of this aspect of vertigo cannot be overrated, because the concomitant symptoms referable to the higher brain-centres, which in some degree at least occur in nearly every case of vertigo, point to disturbance throughout the tract of brain-substance supplied by this vessel. This fact is verified in old-standing cases, where, in consequence of the changes induced in the coats of the vertebral artery by long-continued dilator influences, one faculty after another is lost, and the patient passes prematurely into a state of hebetude, in which the mind becomes a blank.

It is impossible, in the time at my disposal, to trace out all the anatomical relations of the inferior cervical ganglion, so as to show how each symptom is in turn produced through it. Nor is this necessary, as any one with an elementary anatomical knowledge can do this for himself, now that the clue to the solution of the problem is placed in his hands. Some further observations, however, on the main feature of the problem—the association of vertigo with stomach-symptoms—may be expected.

It has already been intimated that a sensitive state of the nerve-supply of the stomach and primæ viæ (so far, that is, as the branches of the vagus reach), induced by local mischief originating in these organs, will cause dilator waves to pass upwards to the vertebral artery, and give rise to vertigo, by adding to the intralabyrinthine tension; and, further, that this sequence is particularly apt to occur in patients who are already the subjects of varying degrees of deafness, and in whom some increase of this tension has been already occasioned by the pre-existing ear-mischief. Now, it is a strong point with the advocates of the "overflow" theory that, in stomachic vertigo, vomiting presents itself *before* giddiness. Speaking from my experience of actual patients, I have no hesitation in affirming the contrary of this statement. Indeed, vomiting very rarely occurs in them, though the slightest indiscretion of diet will induce severe vertigo. Solid butcher's meat, in a large proportion of cases, will do this. In emphasising this fact—the result of observation of many vertiginous patients—I wish to guard myself against any reflection on the conclusions of those gentlemen whose generalisations are drawn from experiments on the lower animals, and especially to reiterate that so crude an experiment as that already quoted has scarcely a remote bearing on the subject under discussion.

In the necropsy of Menière's classical case, where the unique circumstance occurred of quite a young woman dying with marked symptoms of stomachic vertigo, ecchymoses were found in the membranous labyrinth, as well as exudation into the canals. I have elsewhere quoted cases in which patients, previously sound as regards their hearing power, have remained deaf after a sudden attack of vertigo, obviously from apoplexy of the inner ear, and, in at least one such case, I have known death to supervene some time later, with well recognised symptoms of cerebral apoplexy. Obviously, therefore, no room for doubt remains that the coats of the arterioles may be so far reflexly dilated as to allow, first of all, distension of their calibre sufficient to occasion tension of the intralabyrinthine fluid, and consequent vertigo; and, in severer degrees of dilatation, sanguineous exudation may occur; but, whether originating reflexly as above shown, or locally from disease of the ear, it is evident that, in any case, the particular symptom of vertigo is aural in its seat, and arises from changes in the organ of equilibration, the semicircular canals.

Furthermore, it is of great importance to note that a special debility of vaso-motor centres may be induced by any depressing constitutional cause. Perhaps there is no disease so generally attended with mental annoyance as deafness, the extreme irritability and nervousness of these patients being proverbial. Therefore, ear-disease is calculated to establish that very debility of vaso-motor centres to which I am referring; and the direct outcome of this state is a tendency on the part of the vessels they mediate to respond very readily to distantly seated sources of dilatation, reflexly conveyed to them in the manner detailed. Ear-disease is, therefore, at once the predisposing cause of disturbances of the circulation, and supplies, in the anatomical structure of the internal ear, an organ which, when influenced by these vessel-changes, adds a new set of symptoms, of which vertigo is the most prominent, to the pre-existing deafness. Thus we are involved in a pernicious circle, which commencing it may be in an ordinary catarrh, or an exanthem occurring in early life, tends, after many years of heavily handicapped existence, to dethrone the mental egoism of the individual; landing him prematurely in a state of hebetude, in which little remains to him of life beyond the vegetative functions.

As an illustration, I cannot point you to anyone more striking than the case of Swift, pourtrayed with graphic force in a recent number of *Brain*. It has been my lot to witness several parallel ones, marked by like mental decadence, which I have traced through their many phases during the past fifteen years.

In this way, the conviction has grown upon me that states of long continued vessel-dilatation, from loss of vaso-motor control, favour the induction of changes in the arterial walls akin to what is often called atheroma. This change, whatever be its nature, implies inability on the part of the affected vessel sufficiently to nourish the organs to which it is distributed; and when, as in the case before us, the vessel-tract is the larger part of the brain and medulla, we shall not need to inquire further, in a given case of vertigo, as to the gravity of the issues involved.

ABSTRACT OF A LECTURE

ON

SOME OF THE MORE RECENT FACTS AND OBSERVATIONS CONCERNING THE BACILLUS OF TUBERCLE.

Delivered at the City of London Hospital for Diseases of the Chest.

By G. A. HERON, M.D.,
Senior Assistant-Physician to the Hospital.

GENTLEMEN,—As you know, I have undertaken to address you to-day in response to a request made to me by some of your number. I have been asked to speak to you about a part of the work that has been published concerning the bacillus of tubercle. To give you anything like a full review of this subject in one lecture, would be a task which I do not think anyone at all conversant with its literature would attempt. For that reason, I asked that I might be told upon what points you wished me to touch, and, in reply to that request, I have received an answer which shews me the line you wish me to follow.

You are, of course, all aware, that the bacillus of tubercle was discovered by Dr. Robert Koch of Berlin. He made his discovery known to the medical world in a lecture, given in Berlin, on March 24th, 1882. As a first step in what I have to say to you to-day, I shall endeavour to indicate, in as few words as I can, an outline of portions of Koch's work. I must confine my remarks to what seem to me to be some of the more important points, which his researches and observations have brought so prominently before students of medicine of all conditions. My object in doing this, is to endeavour to bring clearly before your minds the source whence Koch obtained the bacillus of tubercle. It was whilst searching tuberculous tissues with the view of ascertaining, if possible, what that condition meant, that Koch discovered that a certain rod-shaped bacterium was present, sometimes in enormous numbers, but, also, sometimes in very small numbers, in all tuberculous tissues. This rod-shaped bacterium, the bacillus of tubercle as it is called, is now familiar to you all. Koch discovered this organism by submitting those diseased tissues to the action of a certain staining fluid, devised by himself. Here I come to a part of the subject on which you have asked me to speak at some length, for you want to hear about the staining of the bacillus. I need not say more about Koch's own method, for he gave it up when Professor Ehrlich told him of another method, which he had discovered, and Koch at once adopted it, and has used it ever since. There is, so far as I know, no other method but Ehrlich's now in use for staining the bacillus of tubercle. Various modifications of his process have been suggested; but, in all points of importance, it remains as it was given to us by Ehrlich himself. The modifications, which are improvements of this process, aim at giving the staining mixture a uniform co mposition; and several different formulæ have been suggested for that purpose. The one now in use in this hospital, and I have myself used it for some months past, is Weigert's. Its composition is saturated alcoholic solution of fuchsin, or methyline violet, or gentian violet, 11 parts; anilin water, 100 parts. (The preparation of the anilin water, and the use of the staining fluids, were described by Dr. Heron in detail.)

In warm weather good results are to be obtained when the staining process is carried out at summer temperature, and without the use of artificial heat. I should advise you, however, always to stain your specimens while they are exposed, in an incubator of some kind, to a temperature of 98° to 100° Fahr. Want of attention on my part to this important point caused me much inconvenience when the cold weather set in last autumn.

The process I have just described to you occupies some time. It has, however, certain advantages. Not only does it ensure thoroughly good staining of the bacilli, but the specimens, while being stained, may be safely left for from half an hour to ten hours, or even longer, in the fuchsin and anilin mixture, just as the experimenter finds most convenient. There is, however, a more rapid way of staining. The same staining fluids are used. A little of the fuchsin dye is filtered into a watch glass; the specimen to be stained is placed in the fluid, and heat is applied. I have been accustomed to apply the heat by lighting a Bunsen burner, not at the top of the funnel, but at the burner itself. The heat, of course, passes up the Bunsen funnel, and so reaches the watch glass, placed at a convenient height upon a tripod. I find that one minute's exposure to the action of the staining fluid, under these conditions, is sufficient to ensure excellent colouring of bacilli in sputum or in pus. The rest of the process is identical with what I have already described to you. Following this plan, it is easy to stain, and examine with the microscope, a specimen of sputum within ten minutes' time. Most of the specimens of the tubercle-bacillus in sputum and in pus which you see here to-day, have been prepared in this rapid way. In speaking of these staining fluids, I have called the red dye fuchsin. That is the name in use on the Continent for the colouring matter which in England we call magenta.

You must not, however, overrate the importance of this colour test. It is not on such a comparatively trivial observation as that that Koch has founded his claim for the special recognition of this organism. Were it shown to-morrow that half a dozen other bacilli, alike in appearance with the tubercle-bacillus, behave in presence of dyes as it does, Koch's reasoning and conclusions concerning this organism would in no way be affected. They are founded upon his cultivation experiments and their outcome, and not upon a mere colour test.

Now, let us turn again to Koch's early researches. Having examined the organs of many animals, including men, known to have died of tubercle, or which, having tubercle, had been killed for experimental purposes, and having found that the bacterium which we now call the bacillus of tubercle was invariably present in greater or less numbers, Koch came to the conclusion that this organism is the constant associate of the tuberculous process. He next set before himself the task of endeavouring to ascertain the exact relationship of the bacillus to the tuberculous process. With that object in view, he began a series of cultivation experiments. He sowed some tuberculous tissue in a little of the blood-serum, prepared in a certain way, of the ox and of the sheep. The tuberculous morsels thus sown were removed, with every possible precaution against contamination, from the bodies of animals, man included, dead of tubercle. It would be easy to occupy an hour of your time in trying to put before you an outline of Koch's experiments and their results. I can only now state to you, that Koch believes that he has proved that this bacillus of tubercle is not only the associate of tubercle, but that it is the actual virus of tubercle. The last of these two conclusions is, of course, of vast importance when we find it accompanied by the evidence which Koch advances in its support. That evidence is the outcome of the cultivation experiments to which I have just referred. By their means, Koch was able to grow the bacillus of tubercle on the blood-serum of oxen and sheep; and he satisfied himself, by most careful observations, that no known organism was present besides this bacillus. Koch next proceeded to experiment upon animals with this pure bacillus. Every care was taken to insure the introduction of the bacillus of tubercle, and of that organism alone, into the bodies of the animals used. In every instance—and some hundreds of animals were thus experimented upon—tubercular disease followed the injection of the bacillus of tubercle into the animal's body; and, in every case, the bacillus was found in the tuberculous organs of these animals when they were examined after death. The organism injected into these animals, and the organism found in their bodies after death, were identical in appearance; and the bacilli remained the same in appearance, and they retained, apparently, the same virulence, no matter how often they were made to pass from one animal to another.

Gentlemen, that is a very meagre outline of a part of Koch's work. I hope, however, that I have said enough to show you that his work was done with the most laborious care, and that it cannot be set aside by anything short of experimental demonstration of error in its details. Only three days ago, the medical weekly papers contained an abstract of an elaborate series of experiments by Mr. Watson Cheyne, which he has carried out upon the lines laid down by Koch. These experiments and observations confirm Koch's work on tubercle, and even carry the subject beyond the point at which he left it.

Few subjects have raised more discussion amongst medical men than that one which is introduced by the question, "What is tubercle?" Of the many answers which this question has received, probably none has attracted more widespread attention than that given to it by Dr. Koch's researches. Those of us who accept his teaching as true, must look upon every case in which the bacillus of tubercle is found, as tuberculous. During the last twelve months, there has been gradually accumulating a mass of evidence in favour of the view that this bacillus is the constant associate of tubercle.

This evidence comes from observers in the Old World and in the New. It comes from men who work in the dead-rooms of hospitals, as well as from those whose observations are made at the bedsides of the sick; and this evidence is already so strong, that it seems to me we are justified in stating it to be a fact, that wherever tubercle is, there the bacillus of tubercle is also. Whether this organism is the cause of tubercle is another question; and it is not to be expected that men who have spent long years in the study of tubercle, and who have their own views about tubercle, will readily accept Koch's teaching as all true—unless, indeed, their own observations have already prepared them for the acceptance of such views. Of one thing we may feel sure, that the subject will not rest where it is, and that every week will add more and more to the weight of the evidence which must, probably very soon, definitively settle the important question—Has Koch discovered the cause of tubercle? Should that question be answered in the affirmative, then every case in which the bacillus of tubercle is found, must be classed under the head of parasitic diseases; and all discussion as to whether miliary tubercle, chronic phthisis, scrofula, perlsucht, etc., are tubercle, or whether each of them is a distinct disease, must end with the establishment of the fact that they are all due to the parasite which Koch has discovered.

And now, gentlemen, let us turn to another part of the subject. Not only is the bacillus of tubercle found in the dead body, but it is also easily obtainable from certain cases of disease in the living man. It has been found in the breath and in the sputa of persons suffering from tubercular disease implicating the lungs; it has been found in the urine in cases of tubercular disease of the kidney; it has been found in the fæces in cases of tubercular ulceration of the intestines, in that connection enabling a diagnosis to be made between tubercular and amyloid disease, in one published case where, excepting the diarrhœa, the symptoms were not well marked. Lichtheim has recorded the case of a patient who presented the symptoms of acute pneumonia, and in whose sputa the tubercle-bacillus was found. This organism has also been observed in cases of lupus, in freshly-opened scrofulous glands, in synovial degeneration of joints, in the meninges of the brain, in an ulcer of the tongue, and in a previously unopened suppurating knee-joint. These examples suffice for our present purpose; and it is obvious of what vast importance it must be to ascertain the presence or absence of the bacillus of tubercle in such cases. But you have asked me to refer to those cases of lung disease in which we may expect to find the bacillus present in the sputum. The evidence in favour of the belief that this organism is to be found in the sputum of, practically, every case of consumption is now so strong, that I feel warranted in speaking of it as a fact. I have myself found the bacillus in the sputa of one hundred and sixteen patients, all of whom presented, sooner or later, what I regarded as unmistakeable signs of consumption. In the majority of these cases, there could have been no reasonable doubt as to the diagnosis of the disease, for the physical signs of pulmonary phthisis were in them very plainly marked. Now and then, however, I chanced upon a case in which the physical signs were so slight, that I was unable to form a decided opinion about the patient's condition and prospects, until an examination of his sputum showed me that it contained the bacillus of tubercle. With that knowledge in my possession, I cannot now doubt about a patient's condition, for I can but regard the case as one of tubercular disease of the lungs. In certain of these cases, too, an examination of the chest yielded no positive information beyond the fact that the patient was apparently suffering from a pretty sharp attack of bronchitis. The patient's history, and some dulness, more or less marked, over the apex or apices of the lungs, usually suggested to me the probability of the presence of pulmonary phthisis in the majority of such cases; but it happened more than once, that an examination of the sputum and the discovery there of the bacillus of tubercle were the point in the case which fixed for me its diagnosis.

You all know how difficult it often is to distinguish, with certainty, some cases of bronchiectasis from certain cases of phthisis with lung excavation. An examination of the sputum, by Ehrlich's process, will surely fix the identity of such cases; and the same remark applies to some cases of empyema. "Is this patient tuberculous?" is a question often asked in such cases, and it used to be by no means always an easy question to answer.

This method of diagnosis is often, as I have already told you, of great use in cases where the physical signs are very indefinite. Litchtheim, Heller, and others, have recorded instances in which, though they could detect no physical signs indicative of disease of the lungs, the bacillus of tubercle was found in the sputum. If the time at our disposal permitted of it, I should like to dwell at some little length upon such cases as these, for they suggest many questions of interest. We must, however, pass on; and I will only now say, upon this part of the subject, that I have not yet seen a case with absolutely no physical signs of lung-mischief, in which I have detected the bacillus of tubercle in the sputum. Sputum has been sent to me for examination, taken, I was told, from a patient who, at that time, showed no symptoms of lung-disease, and in it there were tubercle-bacilli. Later on, signs of lung-phthisis became well marked in the man's chest, and, *post mortem*, extensive tubercular disease was found to have existed. This patient was under the care of two able physicians, who, I hear, intend to publish the case.

Some of you, I think, were present at a lecture I gave, at the London Hospital, last October, at Dr. Andrew Clark's request. You may remember that I then said, that it seemed to me to be probable, that the presence of the bacillus of tubercle in the sputum would be found useful in prognosis as well as in diagnosis. I was speaking then from my observation of fifty-four cases, in whose sputa I had found the organism; and I said that my experience led me to incline to the belief, that the persistence of a large number of these bacteria in the sputa of a patient indicates a case which will run a rapid course; and that a persistence of few bacilli in the sputa would probably come to be regarded as indicative of a very chronic case. In the end of November, Drs. Balmer and Fräntzel published similar views concerning the prognostic value of the bacillus. They had then found the organism in the sputa of one hundred and twenty patients, so that they spoke from a much larger experience than mine. Crämer, and several others, have recorded like conclusions. On the other hand, Lichtheim of Berne, a very careful observer, though he does not distinctly differ from these views about the prognostic value of the bacillus in cases of phthisis, is doubtful of their correctness. In certain instances of rapidly fatal phthisis, you will find that the sputum is apt to contain little clumps or groups of the bacilli, surrounded by large numbers of these organisms. When this grouping of the bacilli into little masses persistently characterises the specimens of any sputa which you examine, you will, I believe, find that you have to deal with a case which will run a remarkably rapid course, from the time of the appearance of this persistent grouping of the bacilli. My attention was first called to this grouping of the organism by several cases which came under my notice in this hospital, in the summer of last year. Since last November, I have seen only two cases where this peculiarity was persistently present in the sputum. Also, no other observer, so far as I know, has mentioned this point; so that it is, probably, not a common occurrence. All the cases, however, in which I have seen it, have run a very rapid course to death.

And now, let us give a very short time to summarising the results of observations bearing upon the habitat of the bacillus of tubercle in the lungs of the human subject. In cases of phthisis, it is found in the lining of the walls of lung-cavities, and in caseous matters scattered here and there throughout the lung, usually with some evident relation to centres of active disease, but sometimes apparently, more or less isolated. The organism is not found to infest the lung-tissue itself in great numbers, and you may examine section after section of lung without finding a single bacillus. As a rule, all these centres of bacillus-life communicate with the air-tubes; but to that rule there seem to be marked exceptions. That bacillus life may flourish when entirely cut off from all communication with the external air, is a fact which is demonstrated by some of the cases alluded to at the beginning of this lecture.

I cannot do better than give you, in brief, what Mr. Watson Cheyne has said about the appearances in the lung which go along with, and result from phthisis. We have here, under the microscope, a few specimens illustrating some of his results in this line of research. These specimens have been prepared by Mr. Watson Cheyne, and he has most kindly lent them to me for your inspection. (A short *résumé* of Mr. Watson Cheyne's recent work and views in relation to phthisis was then given.)

And now, gentlemen, I must bring these remarks to a close. No one can be more conscious than I am how impossible it is to give, within an hour's time, more than a mere summary of even the points which have occupied our attention to-day. We must leave almost untouched the burning question, for it has now assumed the shape—"Is phthisis an infectious disease?" The consequences involved in the answer to that question are so grave, that every piece of evidence tending to settle it, one way or the other, must be looked at with the closest scrutiny. There are not wanting records of observations tending to answer the question in the affirmative, and, certainly, there is no lack of evidence which is regarded by many as proving that phthisis is not infectious. It seems to

established as true, that this disease does not readily pass from man to man, under the ordinary conditions of life. All our clinical experience goes to prove the truth of that belief. But it does not follow from this that there are not men who possess, in some peculiarity of their physical life, a factor which, under certain conditions, may favour in them the development of phthisis. If that be true, it would follow that at least two factors are necessary to the production of phthisis; one peculiar to the individual man, and, therefore, always present with him in possibly a varying degree of intensity, the other, coming from without, and probably present only under certain conditions. According to the view which now seems to be gaining most adherents, the former of these two factors would be what constitutes the hereditary tendency to phthisis. What physical condition these words imply, is to-day an unsolved problem. Of the second factor, that one which comes from without the body, we are surely amply justified in asking: Is it not this bacillus of tubercle which Koch has discovered? Whatever may be our answer to that question, if it be admitted that two such factors exist and are necessary to the development of phthisis, then it seems to me, that we cannot shut out the conclusion, that for a large proportion of mankind, phthisis is an infectious disease.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture IV.—Respiration: Relation of the Living Tissues to the Gases in the Blood.

Beginning with the researches of Lavoisier (1743-94), the lecturer pointed out that he had never committed himself to the notion of combustion occurring only in the lungs, as he expressly stated that carbonic acid may be formed in the blood-vessels. This view was also strongly urged by the great mathematician Lagrange in 1791. Spallanzani had shown that carbonic acid might be produced by animals, even in an atmosphere of nitrogen or hydrogen. In 1824, W. F. Edwards demonstrated that this carbonic acid could not be due to oxygen previously existing free in the body; and, in 1830, Collard de Martigny suggested that the carbonic acid was secreted in the capillaries, and excreted by the lungs. This view was supported by Johannes Müller and others. In the early part of this century, two theories existed as to respiration; the one, that combustion occurred in the lungs or in the capillaries, and the other, that there was a kind of secretion of carbonic acid by the tissues, which was afterwards separated from the blood by the lungs. In this country, the mistaken notion got into current text-books, that combustion occurred only in the lungs; and thus a third theory was taught, for which, however, Lavoisier was not responsible. To support any theory involving the existence of gases in the blood, proof was demanded; and although for many years the existence of gases in the blood had been recognised, no accurate knowledge on the subject existed.

That the colour of the blood was altered on being shaken up with air was known to Fracassati (1665), Lower (1631-1691), Mayow (1645-1679), Cigna (1773), and Hewson (1739-1774); but the first to show that the increased redness was due to the action of oxygen was Priestley (1734-1804). He also showed that the blood became purple when agitated with carbonic acid. The presence of gas in the blood was first observed about 1672 by Mayow. The lecturer also alluded to an interesting experiment by Leeuwenhoek (1632-1723), published in 1674, in which he obtained air from the blood by a kind of syringe capable of producing a vacuum. Gas was also obtained from the blood in 1799 by Sir Humphry Davy, in 1814 by Nysten, in 1818 by Brand, in 1833 by Hoffmann, and in 1835 by Stevens. On the other hand, John Davy, Bergman, Johannes Müller, Mitscherlich, Gmelin, and Tiedemann failed in obtaining any gas. The first group of observers, either by heating the blood or allowing it to flow into a vacuum, or by passing through it a stream of hydrogen, obtained small quantities of carbonic acid. Sir Humphry Davy was the first to collect a small quantity of oxygen from the blood. John Davy, by an erroneous method of investigation, was led, in 1828, to deny that the blood either absorbed oxygen or gave off carbonic acid. He was shown to be wrong in 1830 by Christison, who devised a simple method of demonstrating the fact.

In 1837, appeared the researches of Heinrich Gustav Magnus (1802-1870), latterly Professor of Physics and Technology in the University of Berlin, who by better methods succeeded in obtaining gases from the blood; in showing that these consisted of carbonic acid, oxygen, and nitrogen; and that the two first-mentioned gases were found both in arterial and in venous blood. This research marked an epoch in physiological discovery, as it threw a new light on the function of respiration.

The lecturer then proceeded to describe the laws regulating the absorption of gases by fluids, showing that the absorption depended on the specific nature of the gas and of the liquid, on the temperature, and on the pressure to which the gas was subjected. This explained the method followed by Magnus, now so well known, namely, that of introducing the blood into a vacuum surrounded by hot water. Magnus naturally supposed that the gases were simply dissolved in the blood, and that respiration was a process of diffusion, carbonic acid passing out and oxygen passing in, according to Dalton's (1767-1844) law of pressures. This view was objected to by Liebig, who seems to have been the first to suggest that the gases were not simply dissolved, but existed in a state of loose chemical combination, which could be broken up by the diminished pressure in a vacuum or by the action of other gases. Liebig also pointed out the necessity of determining accurately the co-efficient of absorption of blood for the gases. This was attempted by Fernet, who published his researches in 1855 and 1857. These showed that neither the oxygen nor the carbonic acid was absorbed by the blood according to Dalton's law of pressures; and he, therefore, concluded that the greater portion of both gases was loosely combined with some matters in the blood, whilst the remainder was dissolved according to the law of pressure. He went further, however, by showing that the carbonic acid was loosely combined with carbonates and phosphates of soda in the blood. In the same year, Lothar Meyer, under the direction of Bunsen, published the results of a similar investigation, in which he directed special attention to the oxygen, showing that the quantity of that gas taken up might be regarded as consisting of two portions, one following Dalton's law, and the other independent of it. Since then, largely owing to the methods devised by Ludwig, Pflüger, and others, the collection and analysis of the gases of the blood have become familiar operations in all physiological laboratories.

The next great step in the history of physiology as regards respiration was the discovery of the important part performed by the colouring matter of the red blood-corpuscles. The lecturer described the general characters of hæmoglobin, first obtained in a crystalline state by Funke. By means of experiment, the lecturer demonstrated the absorption spectrum of blood, discovered by Hoppe-Seyler in 1862, and also further showed the additional discovery announced by Professor Stokes in 1864, that the spectrum might be altered by the action of reducing agents. Professor Stokes was led to investigate the subject from its physiological interest, as may be gathered from his own words: "But it seemed to me to be a point of special interest to inquire whether we could imitate the change of colour of arterial into that of venous blood on the supposition that it arises from reduction." From his observations, Professor Stokes was led to the important conclusion that "the colouring matter of the blood, like indigo, is capable of existing in two states of oxidation." The lecturer then explained how this observation led to the theory that the hæmoglobin is the carrier of oxygen from the lungs to the tissues.

Turning, then, to the respiration of the tissues themselves, he gave a short account of the researches of Spallanzani (1729-1799), as to various tissues absorbing oxygen, and giving up carbonic acid. George Liebig studied the respiration of quiescent muscle about 1850; and, in 1856, Matteucci showed muscular contraction was attended by an increased consumption of oxygen, and an increased elimination of carbonic acid. Since then, Claude Bernard (1859) and Paul Bert (1870) had made numerous observations on this subject, the result being the great conclusion that the living body may be regarded as an aggregate of living particles, each of which breathes in the respiratory medium passing from the blood. The lecturer concluded by pointing out that, in the study of respiration, we have had abundant evidence of the fact that physiology, in the solution of some of her problems, depends entirely upon the methods of chemistry and physics. The air-pump, the mercurial air-pump, the methods devised for collecting and analysing blood-gases, the spectroscope, have all contributed important facts to our knowledge of respiration. This lecture represents the modern aspect of the ques-

tion, and is thus a contrast to the last lecture. It illustrates, even in a more striking manner than the first two lectures, the relations of modern physiology to the physiology of our forefathers. The latter were engaged in observing and explaining the more obvious phenomena, whilst the modern physiologists are pushing their researches further, and are endeavouring to study the hidden phenomena which, like a second order, lie behind these. It need scarcely be added that even the results of modern research are not to be regarded as final, although we see a little further and more clearly than those who went before. There is still uncertainty as to fact and obscurity as to explanation in most departments of physiological science, and not least as regards the function of respiration.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

Lecture II.—On the Structure of Myxinoid Fishes.

The myxinoid fishes include the various forms of Hag-fish and Bdellostoma. They are the only vertebrates which do not possess cartilaginous rudiments of vertebræ, and are the very lowest forms of the order to which they belong. They live in the interior of other fishes, and are consequently parasitic. Their presence in great numbers was discovered in the digestive organs of a cod by Professor Allen Thompson, who showed that their ovum, when ready to be laid, is enclosed in a horny shell of oval form, in many respects similar to that of Elasmobranchs, and that from its ends there project a number of trumpet-shaped tubular processes, which serve, most probably, to attach it to marine objects. Of their development little is known, but, from what we have been able to ascertain, the Hag-fish, when fully formed, does not rise higher in the scale of development than the larval form of *Petromyzon*, or the lamprey, the next form we will have to study. It is, however, specialised enough to enable it to perform its particular purposes of life.

The skeletal structure of the Hag is entirely cartilaginous, and is confined to the head. The notochord, and other more solid portions of its structure, are composed of extremely soft cartilage, apparently of a much more elementary form than is found in other fishes with which we are acquainted. To this form of cartilage, Professor Parker proposes to give the name of *vacuolar tissue*, on account of its peculiar character. Its presence in the Hag he regards as a physiological indication of the low position the animal occupies in the scale of vertebrate development. The parts composed of this tissue are surrounded by a fibrous sheath, which serves to strengthen them. The base of the skull is composed of harder cartilage. The notochord can be traced forwards as far as what corresponds, in the higher vertebrates, to the posterior clinoid processes of the sphenoid. This point seems to mark the termination of the body-axis not only in the Hags, but in all other vertebrates, as the notochord has never been traced further forwards. On each side of the anterior end of the notochord are the basal plates which unite to form the basis cranii, projecting from the anterior margin of which, are two bars of cartilage, one on each side of the middle line of the body; these are called the trabeculæ cranii. Filling up the space between these is a small plate of cartilage, called by Professor Parker the intertrabeculæ cartilage. To the anterior ends of the trabeculæ is attached a small cartilage called the anterior trabecula, which is connected with the perpendicular plate of the ethmoid, and which along with the trabeculæ and intertrabeculæ cartilage, gives support to the fore-brain. The nasal organ is simple, the nose being long and proboscis-like. The septum nose is absent, and there is no segmentation of parts about the face, such as can be named in regular order. The lower jaw is wanting, as are also the labial cartilages. The mouth and nose are surrounded by barbels. There is no suctorial oral ring present, or it is represented only by the broad base of the core of the barbels. There is a backward displacement of the respiratory and circulating organs. The nervous system is remarkable on account of the abortion or suppression of the third, fourth, and sixth pairs of cranial nerves. From this condition of the nerves, it is not surprising to find that the eyes are rudimentary organs. Limbs seem to be entirely absent.

CLINICAL REMARKS ON HYDROPHOBIA.

By J. S. BRISTOWE, M.D., F.R.S.,
Senior Physician to St. Thomas's Hospital, etc.

(*Continued from page 761.*)

Case II.—J. G. T., a law-stationer, aged 43, who was sent to St. Thomas's Hospital by Mr. Sandwith of Wandsworth, was admitted under my care late in the evening of September 30th, 1880.

At the end of July, he was bitten in the hand by a dog, which at the time was not suspected of rabies. For precaution, however, it was given into the charge of a veterinary surgeon, and it died with symptoms of this disease a few days later. The patient then consulted a medical man, and had his wound excised. It healed in three weeks, and he troubled himself no more about the matter. He felt well; and no fear of hydrophobia crossed his mind.

On September 26th, that is, four days before admission, he felt drowsy, and for the first time complained of pain in his bitten hand, and up the corresponding arm. It was a stinging pain, beginning in the scar, and extending thence into the shoulder and axilla. He complained further of a choking sensation in the throat. These symptoms continued, apparently without much aggravation, until the morning of the 30th, when he experienced for the first time a marked difficulty in swallowing fluids. He had gone to the City to business every day, and he went even on the morning of the 30th; but increasing illness compelled him to return home in the middle of the day, when he took a dose of castor-oil, and sent for a doctor. The attempt to drink caused, he said, a stoppage in his breath, and spasms not only in his throat, but occasionally in the extremities. He had no difficulty in eating solids, and was able even to take bread and milk. He vomited once or twice in the course of the day.

The patient, when admitted, had a wild look, but was perfectly sensible, and spoke freely about his condition. He knew that there was a suspicion that he was suffering from hydrophobia, but he said that he did not share this suspicion, that he was not at all frightened, and he attributed the uncomfortable sensation in his throat to an elongated uvula. On examining his throat, the uvula was found long, as he had asserted, but nothing else abnormal was detected. There was no marked accumulation of saliva visible in his mouth or throat. The pupils were equal, dilated, sensible to light. He complained of feeling at one moment hot, at another moment cold. Temperature 99.2°; pulse 80, full and strong. He begged for something to gargle his throat with; but, on attempting to use some alum-gargle that was brought to him, a violent convulsive attack compelled him to desist. He said he felt very thirsty, and that he should like to drink; some water consequently was brought, the first sight of which induced some spasmodic contractions. He persisted, however, in his determination to drink. He brought the glass with manifest effort to his lips on more than one occasion, and on each endeavour to drink, violent paroxysms were excited. He managed, however, with difficulty to swallow a few drops at a time, but when he took a mouthful, it was immediately ejected with violence from his mouth. He was able to swallow solids; and it was found that cold fluids caused much more severe spasms than hot fluids. The slightest draught of cold air, even such as was caused by the movement of the bedclothes, brought on spasms; and for this reason, when he was being exposed for examination, he begged that the windows and doors might be closed. All attempts to swallow or to expectorate the mucus which collected in his throat were attended with slight spasms; and once, when some water was accidentally spilt on the floor, the same result ensued.

In the paroxysms, the muscles of respiration and deglutition were thrown into violent spasms; the muscles of the neck became rigid the face became congested; and frequently the convulsive action extended to the rest of the trunk and to the limbs. He had been somewhat drowsy, and had one or two short naps during the evening. But at midnight he was very restless, and inclined to chatter. He still had a wild look; but he was quite sensible, said he was not at all frightened, and made the remark that we should be disappointed if we expected his case to be anything special. He complained of dryness of the mouth, and was continually crying out for a wet rag to moisten his lips with. The pain in the right arm continued; but there was no sign of inflammation in the neighbourhood of the wound.

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October 1st. He was very restless during the night; but quieted somewhat after a dose of bromide of potassium and chloral—swallowed, though with difficulty, in a little warm water. He expressed himself as feeling better in the morning; and though he acknowledged that he had felt a little frightened at so much fuss being made about him, he still maintained that his case was not serious, and that he should be cured in the course of a few days. During the morning, he frequently complained of pain in the cardiac region, with palpitation, and of nausea, but he was not actually sick. Mucus accumulated more abundantly in the mouth than it had done, and he frequently sat up in bed to expectorate. He remained in much the same condition during the day; and took a little warm pudding, and then swallowed a little warm milk. But towards night, he became much worse. He complained greatly of pain in the cardiac region, and of severe palpitation, and thought that his heart must be affected. Tenacious mucus now accumulated largely in his mouth and throat, which he was constantly trying to expectorate, and which hung in long strings from his lips; and the spasms had become so severe, that he was unable to swallow any kind of liquid. He passed urine on several occasions; and it was noticed that this act did not bring on convulsions, though the splashing of any other fluid would do so immediately. At eleven o'clock at night, I was accompanied in my visit to him by several other medical men. He was then highly excited in his manner, his look was wild, and his eye glanced restlessly about him. He had, in fact, the aspect and manner of a maniacal patient; he was obviously emotional, but he had no delusions; and his talk was rational, excepting perhaps that it was a little disconnected, and that he did not hesitate to express his opinions freely. He still talked from time to time of his condition, and endeavoured to persuade himself and others that he was not suffering from hydrophobia. At one moment he accused me of cruelty to him, because I had not seen him for some hours; the next moment he apologised, and said he really did not mean what he had said, and shook hands with me in a friendly way. Again, he reproached me angrily for having brought so many people with me to see him, and making a spectacle of him; and again he apologised. He was extremely restless; at one moment complaining of feeling very cold, at the next throwing all the clothes off him on account of the heat. It was noted that, during the spasms, his face became congested, and his hands and feet cold and livid. His thoracic and abdominal viscera appeared to be healthy. The urine was of high specific gravity (1046), acid, contained a large quantity of urates, and about one-fourth of albumen; no sugar.

It was determined to put the patient under the influence of curara; and the following notes were taken at intervals during the night, by the gentleman who sat up with him.

11.30 P.M. One-eighth of a grain of curara injected under the skin; no apparent effect. He begged for something to give him sleep. He was sensible, but excited. Much expectoration; mucus hanging in long strings from his mouth.

12.30 A.M. (October 2nd). One-fourth of a grain was injected. Pulse 80. About ten minutes after the injection, he exclaimed: "I feel paralysed; do not leave me until I go to sleep." He remained quiet, with few convulsions for about a quarter of an hour; but he was trying to keep quiet with the hopes of going to sleep. Respirations 48. He then became frequently and severely convulsed; and during the attacks, his eyes were fixed on the ceiling, his head was thrown back, and his body raised from the bed in an arched position, while he continued to beat his chest with his hands with much violence.

1.30 A.M. One-third of a grain was injected. Convulsions almost ceased in the chest and throat for ten minutes; but at the end of that time they returned with their former violence, excepting in the lower extremities. Pulse 100, irregular, fairly strong. He said he had a creeping sensation.

2.30 A.M. Half a grain was injected. At this time, the pulse was regular, and only 64.—2.45 A.M. He was lying quiet. At times, he drew a few deep noisy inspirations, followed by blowing expirations, which gradually diminished in force, depth, and rapidity, until they were scarcely perceptible. Then gradually the forcible respirations returned (Cheyne-Stokes breathing).—3 A.M. He remarked that the injection was again unsuccessful in procuring sleep. Pulse 100, irregular. Perspiring slightly. His legs were not numb, and he could move them freely. At 3.15 A.M., he brought up a large quantity of stringy mucus, which caused violent spasms.

3.30 A.M. Half a grain was injected. The prick of the needle caused general tremors. He moistened his lips frequently with rags dipped in warm water.—3.45 A.M. He was very restless, threw himself about in bed, beating his pillows continually; he got up hurriedly, and then threw himself down again. He said we were only making experiments upon him with the injections, and that so far they were failures. Pulse 92, occasionally intermittent.—4 A.M. He wanted to get up and dress. He took up a newspaper, and read for about ten minutes, when he threw it down, and beat his chest on account of spasms. Arching of the body backwards was present several times. Pulse 116, irregular.—4.30 A.M. He sat up in a chair by the fire, wrapped in a blanket.

4.40 A.M. Three-fourths of a grain were injected. Pulse 132, irregular. Respiration sometimes quick, at others laboured and slow.—4.45 A.M. He expectorated some. Complained of giddiness, and said he longed for sleep.—4.50 A.M. He insisted on his which brought on general convulsions. much; says he is easier.—5 A.M. He out of bed. He staggers very sitting up in bed, and complaining of feeling cold.

5.30 A.M. Three-fourths of a grain were injected. Convulsions followed. Pupils dilated. Pulse 120, full, irregular. Temperature 102.4°. He rambled a little; said the curara had not yet taken effect.—6 A.M. Convulsions were very severe, attended with arching of the back. A little later, he made an attempt to drink a teaspoonful of fluid, which brought on violent convulsions. He then got up and sat on a chair by the fire, and remained there for half an hour or more.

6.30 A.M. One grain was injected. He was much excited, and at first refused to have the injection. Fifteen minutes later, he was complaining of abdominal pain, and tried to be sick. His speech was very abrupt. About 7, he made for the door of the room, and tried to get out. He struck the gentleman with him for trying to prevent him, and said he was not mad.—7.30 A.M. He thought he was at home. He continued under this impression, and at the same time wanted everyone to leave the room, in order that he might be left quiet after the injection. Very weak. He became extremely restless, continually wiping mucus from his lips, complaining of cold and of pain at the epigastrium. A poultice was applied at his request, but he immediately removed it, exclaiming: "It is too heavy; take it off." He asked for his clothes; expressed a desire to see an acquaintance who might help him to go up stairs. A little later he was talking of his wife and family, of the workhouse, and of his business going to ruin.

8 A.M. The injection was repeated.—8.30. Temperature 101.4°. He cried out that he had had no breakfast, that he was cold, that it was cruel, and he begged that a friend might be fetched. Then he had a severe attack of dyspnœa. A little before 9, he again exclaimed: "I'm cold; don't you know what it is to be cold?" He talked also of his family, and was constantly retching. Thought he was in an asylum; got up again and sat by the fire; and struck at anyone who opposed him.—9 A.M. He asked the sister if his wife was coming. "Tell her I'm here. Will she get me something to cover my legs with? Plenty of things upstairs." At 9.30, he had a violent attack of dyspnœa; and about this time he again tried to get out of the room. He had much frothy saliva about his mouth. He did not like strangers to be in the room; and told the house-physician (who had not been near him since late the previous evening) to go away, for he did not want him, and not to touch him.—At 10 A.M., I paid him a visit. He was evidently much weaker, and much more incoherent than he was when I left him the night before. He had spoken of me frequently during the night; but now said: "I will not shake hands with you; you are my servant." He was very anxious to be dressed; and as he had had this desire for a long time, I thought it best to accede. He told me to help him on with his coat, for I was his paid servant. He now believed that he was suffering from hydrophobia.

11.15 A.M. One grain was injected. It had little effect. He had resisted the last two or three injections and consequently they were not administered; but, on this occasion, he was persuaded to submit. He was continually rising from his chair, and walking round the room, though he was too weak to do so without assistance. The convulsions were not so severe as they had been, but the patient was much more exhausted; no numbness or paralysis in legs.—12 noon. He swallowed a little beef-tea, and afterwards some milk; the spasms attending the act were comparatively slight. This was the first fluid that he had been able to take for more than twelve hours. His friends thought he was better; but, though his spasms were less severe, his weakness had increased notably.

12.15 A.M. One grain and a half injected. Pulse very weak and irregular. Face congested; hands cold and blue; he was more sensible than he had been. The spasms, too, have much diminished, and he can drink a little fluid without difficulty. There is much mucus, however, in the mouth, which he has not sufficient strength to get

rid of. He was very restless, at one time getting up and walking about; then asking to lie down again. He gradually grew weaker; the pulse at the wrist became imperceptible; and he died exhausted and unconscious at 12.50 P.M., October 2nd. No priapism or erotic tendency was ever observed.

The *post mortem* examination was made on October 3rd. At that time, the body was extremely rigid, and the surface universally livid. The brain and spinal cord were, perhaps, rather soft, but presented no other naked-eye change. The fauces and larynx were somewhat congested, as also were the kidneys. But nothing else abnormal was discovered.

REMARKS.—I do not think much comment is required on these cases. They were both of them typical in their history and in their symptoms. In both, there was the clear history of a bite by a mad dog. In both, the incubation-period was, as is usually the case, of about two months' duration. In both, pain at the seat of injury was one of the earliest symptoms. In both, the main clinical phenomena were: general hyperæsthesia, with special sensitiveness to cold air and cold liquids, and spasms primarily affecting the muscles of respiration and deglutition; a mental condition resembling that observed in the early stage of acute mania; and rapidly developing asthenia, with extreme feebleness of circulation. Other phenomena, also generally present, were observed here, namely: febrile elevation of temperature, and scanty excretion of urine, which was of high specific gravity, and contained much albumen and abundant crystals of uric acid and oxalate of lime.

Both patients complained of thirst, but both experienced the usual distress in endeavouring to swallow fluids; and, partly on that account, partly because of the abundant secretion of tenacious mucus, were constantly hawking up phlegm, and discharging it from the mouth. It is noteworthy, however, that warm fluids were much less productive of spasms than cold fluids; and that solids could be taken without much difficulty. In the man, too, the inability to drink diminished very much before death.

The spasms were of the usual kind, beginning in the throat and respiratory muscles; and, for the most part, limited to those parts, though occasionally becoming general. In the man, the general convulsions were tetanic, and attended with arching of the back. The final convulsion in the case of the child, also, was tetanic.

The mental condition was of the same kind in both cases. There were hallucinations and delusions, no doubt; but these were, on the whole, slight, and came on late. The patients were rather in the condition of so-called "affective" insanity; the condition, as above stated, which generally precedes an outbreak of mania or melancholia. They were emotional, and variable in mood; suspicious, hasty, apt to take offence, and even to attack those offending them; but amenable to reason, and ready to apologise, and often manifesting feelings of kindness or affection. Their actions and speech corresponded; they were restless, constantly looking about suspiciously, constantly shifting their position, at one moment sitting up, at another lying down, at one moment covering themselves with the bedclothes, at another throwing them off; they had a tendency to chatter without ceasing, to express themselves abruptly and somewhat incoherently, and to make more or less pertinent remarks on persons and things about them, remarks which were sometimes humorous, but not unfrequently offensive. The man, not unnaturally, was much inclined to talk about his own condition; and, as will be recollected, constantly maintained that he was not suffering from hydrophobia. There can be no doubt, however, that, so long as he was able to command his thoughts, this constant denial really expressed his constant fear that he had the disease.

Extreme asthenia was a characteristic of both cases. The man, doubtless, died mainly of the asthenia. But the child, though suffering from excessive exhaustion, died in a convulsion.

No lessons as to medical treatment are taught by either case. In the former, no special line of treatment was pursued; and, in the latter, though curara was employed, it had little effect; and we found out subsequently that it had been in stock for some little time, and that there was reason to believe it had deteriorated in quality.

MOUNTAINEERING in winter is becoming popular, and many people, the *Athenæum* says, will be glad to hear that Mrs. Burnaby (the wife of Colonel F. Burnaby) is about to publish an account of her remarkable ascents, during the past winter, of Mont Blanc, the Aiguille du Midi, Col du Chardonnet, etc., and her adventures in connection therewith. The work, illustrated from photographs taken by the author, will be issued very soon, under the title of "The High Alps in Winter; or, Mountaineering in Search of Health."

TWO CASES OF PLACENTA PRÆVIA.

BY J. MACKENZIE BOOTH, M.A., M.D.,
Physician to the Aberdeen General Dispensary.

THE following are a few particulars of the second and third of three cases* of placental presentation, occurring, singularly enough, in a rather limited midwifery practice within the space of three years. The first of these was that of a married woman, aged 30, to whom, in the absence of a brother practitioner, I was called on January 9th, 1882. She had had one child three years before, the labour being a normal one, and since that time had enjoyed fairly good health. She was now in the eighth month of her second pregnancy, and except that she had frequently suffered from attacks of mental depression, had been well up till this time, when labour-pains suddenly came on, accompanied by severe flooding. She fainted while medical assistance was being sent for. On arriving, I found the os well dilated and relaxed. The hæmorrhage still continued, but the pain had ceased. The placenta was adherent round three-fourths of the cervix, and had evidently been partially torn away from the remaining fourth. A wineglassful of whiskey was administered. Turning was easily effected, and a still-born child delivered, the head passing with some difficulty. Ergot was given, and a compress and bandage applied over the uterus. The mother, though extremely weak for some time, ultimately made a good recovery.

On the forenoon of March 3rd, 1883, I was called to see a dispensary patient, Mrs. S., a woman aged 32, the wife of a poor artisan and the mother of seven young children. She stated that she was in the seventh month of her eighth pregnancy; that, up till a forenight ago, she had been well, and assisting her husband in his work; that then, after carrying home a hundredweight of cork, she had been suddenly prostrated by a severe flooding, which had persisted more or less since; and that, this morning, she had again fainted from an active recurrence of the hæmorrhage. The midwife who had attended her in her previous confinements told me that, in all seven, she had had very easy labours, and was wont to get up, in defiance of her orders, and sit at the fireside immediately after delivery; nor had she ever suffered from this practice. So, thinking she would get better with a little rest, she had on this occasion delayed calling in medical aid till she was considerably reduced by loss of blood.

On vaginal examination, the os would scarcely admit the tip of the forefinger, and the cervix had a doughy feel. The hæmorrhage, though much less active, still continued, but there was no uterine contraction. The pulse was over 100, and very weak. Thirst was intense, and the patient was constantly having draughts of cold water for its relief. The clothes and bedding, which were drenched with blood, showed how profuse had been the previous hæmorrhage. There had been no fœtal movements perceptible for some days. The only article available for the purpose, a pocket handkerchief was introduced as a vaginal plug; perfect rest and oft-repeated liquid nourishment enjoined; and a mixture containing sulphuric acid given to relieve the thirst. The midwife was also directed to have a strict watch kept, in case of a return of the bleeding.

The same evening, about nine hours after, I was hastily summoned by one of the children, who said that her mother was dying. There had been another very severe attack of hæmorrhage, during which the patient fainted, and she was unconscious and pulseless when the midwife arrived. When I reached the house she had rallied somewhat, but was incoherent, and only partially conscious, calling on those around her to give her water to drink and to bathe her face and hands. Examination showed the os to be about the size of a crown piece, part of the placenta protruding, and the uterine tissues much relaxed. Finding the os so dilatable, and considering the persistent and severe discharge, and the likelihood of the child being dead, I determined to attempt immediate version and delivery as the best chance for the mother's safety. The placenta was adherent all round the cervix save at one point in the right anterior quadrant, where it could be pushed aside by the fingers, the adjacent adhesions being torn by the hand as it was being passed up. The membranes being torn, a foot was grasped, but, owing probably to the small amount of liquor amnii, version could not be effected. At this juncture, too, from the presence of the hand in the uterus and the efforts at version, the patient roused up and threatened to get unmanageable, calling on her husband and ordering us to leave her. Chloroform was soon got, and a few whiffs sufficed to dispose of the patient's objections. Turning was then with difficulty enou

* The first is noticed in the JOURNAL of January 8th, 1881, p. 52.

ffected, the left hip-joint being dislocated in the process, and a nale child, which had evidently been dead for some time, delivered, ontinuous pressure on the abdomen being meanwhile exerted. Attached to the cord was only about a fourth part of the placenta, he remainder having got torn off as the child was being delivered. A full dose of ergot having been previously given, the uterus contracted firmly, and the bleeding ceased. The narcosis soon wore off, and all was well save the blanched look and the fast pulse resulting from the antecedent loss of blood. A compress and bandage were applied, and the uterus remained well contracted. After waiting for a time to see that uterine contraction was maintained, and directing that she should be kept perfectly quiet, and stimulants administered should she get faint, I left her. The midwife remained for two hours, during which the patient slumbered, waking nce or twice and having a drink of milk and water. At midnight he was visited by the student who was to assist in the conduct of he case, and he found her still doing well. Three hours after, while her husband was watching by her, she insisted on sitting up o have a drink, and almost instantly swooned away in her husband's arms, expiring in a very short time, in spite of various efforts t stimulation. As too frequently happens in dispensary cases, the elatives, although pressed to grant a *post mortem* examination, ositively refused to do so.

As to the course of procedure in this case, delivery was urgently emanded, and I hoped that after this was effected, the patient would ecover from the effects of the previous hæmorrhage. The buoyant ental condition of this patient presented a striking contrast to hat of the two former cases of placenta prævia, with which I had deal, where fits of despondency and gloomy forebodings were requently present during the term of the pregnancy. Here the opeful condition and habitual hardihood of the patient induced her o refrain from calling in medical aid till after a fortnight of severe emorrhage; thereby lessening her chances of recovery and increasing the danger of fatal syncope.

CLINICAL MEMORANDA.

CONGESTION OF THE BRAIN, WITH CONVULSIONS, SUCCESSFULLY TREATED BY VENESECTION.

HE following interesting case, which has just happened in my prace, satisfactorily proves that the old disused custom of depletion at certain times and in properly diagnosed cases, the only availble treatment; and, if judiciously employed, will most likely save fe, as was evidenced by the results.

I was hastily summoned to a young man, aged 21, who had accientally fallen into a canal, and was supposed to be suffering from he effects of his immersion. I found, on my arrival, that his wet othes had been changed. He lay upon a couch on his back; the rface of his body was warm; the skin dry, and in its normal conition; his breathing slow; his face and neck swollen and conested; his pupils semidilated, not contracting under the stimulus of strong light; his jaws firmly locked; he could not swallow, as a aspoonful of water ran out of his mouth when given; pulse 100, ow and intermitting; and there was likewise constant spasmodic vitching of the right arm. He could not be aroused from his coma; ven tickling the soles of the feet gave no indications of consciousess; there was no paralysis nor rigidity of any part of his body. ustard plasters were applied to the front of the chest and to the ape of the neck. After a time, he became very violent, opening id shutting his mouth, forcibly protruding the tongue, and enleavouring to bite his arm, which he seized between his teeth, and would have been severely injured had he not been prevented by rcible restraint, it taking several strong men to hold him down uring the paroxysms; his face and neck becoming more swollen id turgid, and the convulsions more frequent and urgent every inute.

I concluded that nothing would relieve him except free depletion, hich was at once performed in the usual situation on the left arm. he blood ran very slowly at first, but after a time more freely; it as very dark-coloured, which condition continued until the necesry quantity was obtained, the lips becoming blanched, and the lse more regular. He commenced yawning, and then talking; omited twice, bringing up some half-digested food; and upon ing asked, "said he never felt better in his life," and wished to e down, as he felt very sleepy. Somewhere about twenty-five or thirty ounces of blood were drawn, but the exact quantity was not known, as a common hand-basin was used for the purpose. He was put to bed, when he slept for two or three hours, after which he awoke much refreshed, and was apparently quite well. He slept well all night; and next morning came to see me, having walked about half a mile. He said he was much better, but the spasmodic twitching of the right arm still continued.

He gave the following account. Two days previously, he had attended some races, and had been induced to drink more beer than was good for him, having been an abstainer; he had likewise been engaged in wheeling coal from a barge, which he found very heavy work, not being used to it. The sun was, during this time, bright and warm, with a strong north-east wind blowing. He found, on getting up next morning, that his right arm was in continual motion; he could not hold it still. He thought he had delirium tremens; but he still continued at his work, feeling giddiness in his head, gradually increasing in intensity; he commenced dancing about and performing other antics, not being able to control or direct his movements. He saw the water before him, and all the time thought he was moving backwards, and away from it, when he really was going forward. At length he fell in where its depth was sixteen feet. He found himself at the bottom, and everything he saw appeared enormously enlarged; he came quickly to the surface, and clutched at some reeds, and by the assistance of those present gained the bank, when he became perfectly insensible, and knew no more.

A. C. SHOUT, M.R.C.S., L.A.S.

THERAPEUTIC MEMORANDA.

NITRITE OF AMYL AND NITRO-GLYCERINE IN URÆMIC ASTHMA.

THE brief notes I give below illustrate the value of nitrite of amyl and nitro-glycerine in one of the sudden and distressing, though perhaps rare, phases of chronic Bright's disease—viz., uræmic asthma. Nitrite of amyl, acting, probably, through the vaso-motor nerves, relaxes the arterioles, and thus reduces blood-pressure. As it is very volatile, on the score of economy and convenience, I always carry some of Martindale's capsules in my bag, and these are very handy for immediate use. Nitro-glycerine is said to have much the same action as nitrite of amyl, and, according to Dr. Mahomed, its great superiority over amyl lies in its gradual and more lasting effect, and the more convenient manner of prescribing it, and it can be taken regularly two or three times a day, or oftener, one minim of a one per cent. alcoholic solution, being the usual commencing dose. It is also made up in chocolate tablets, each containing one-hundredth part of a minim; but its action when given in this form is not so rapid as that of the alcoholic solution.

M. P., aged 55, retired from business May 4th, 1882. He had been ailing for two weeks, but had been about. He had noticed swelling of his legs towards night for two months, and his face had swollen occasionally for the last month. He had always been careless of his health, and if he got wet, an event which happened not unfrequently, he would never change his clothes. He was taken suddenly ill in the evening whilst out walking, about a mile from home, and had to be taken home in a cab. On visiting him at 10 A.M., I found him sitting up in bed, gasping for breath, countenance distressed, and of a sickly pallid hue. Pulse feeble; temperature 98°; tongue pale and sodden; expectoration frothy, with some little blood intermixed; moist *râles* over whole chest, back and front; urine abundant, clear, containing one fourth of albumen. At 2 P.M. I found his condition and posture unchanged; he could only speak a few words before he had to stop for breath. He inhaled three minims of nitrite of amyl (a capsule broken in a handkerchief). Within a few minutes his breath was easier, and he was able to recline in bed, for the first time since the attack came on, before I left the house. I then put him on nitro-glycerine, one-hundredth of a minim thrice a day.

May 5th. He was lying easily in bed, breathing quietly, and expressing himself as feeling quite well; he said he was only waiting till I came before he got up. I cautioned him unavailingly that his life hung by a thread, and that he could only hope to continue it by the strictest obedience. On the 6th he still remained in the same improved condition. The next day he refused to take any more medicine, but promised to stay in the house, a promise which he did not keep. On the 16th he had another attack, and died quietly within thirty-six hours, the urine being loaded with albumen.

A. SHEEN, Cardiff.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF EXCISION OF CANCER OF THE RECTUM.

(Under the care of Mr. WALSHAM.)

W. S., aged 47, a strong, healthy-looking countryman, was admitted into Pitcairn Ward on September 18th, 1882, under the care of Mr. Walsham, having been sent to him by Mr. A. R. Anderson of Nottingham for the removal of a carcinomatous rectum. The patient stated that, till five months ago, he felt perfectly well, except that he suffered from occasional attacks of diarrhœa. Since then, he had been losing flesh and strength, diarrhœa had been more or less continuous, and of late he had been accustomed to pass from five to fifteen motions daily. Three months before admission, he first noticed pain in the rectum and blood in his stools.

At the time of his admission, he had a constant feeling of weight at the anus, and, immediately after passing a motion, felt as if he wanted to pass another. He denied ever having had syphilis or other venereal disease, and there was no family history of cancer. The anus was patulous, and two external pile-like excrescences of skin, of the size of filberts, projected from the right margin. About an inch from the anus, and extending from two to two and a half inches upwards, was a hard, nodular, lobulated growth, involving, with the exception of a narrow apparently healthy strip of mucous membrane on the left side, the whole circumference of the bowel. Along this strip, the finger could be passed up the bowel beyond the growth, and there the parts felt healthy. There was, however, a cord-like induration under the mucous membrane on the right side, which seemed to reach for about another inch upwards. The whole growth appeared freely movable, and was separated from the anus by nearly an inch of healthy tissue. An examination caused considerable pain, and was followed by an escape of blood and foul-smelling slime. There was no urinary trouble; the urine was clear, acid, and non-albuminous; the viscera were healthy. The motions were loose, but contained lumps of solid fæces.

On September 21st, Mr. Walsham removed the growth, together with the lower three and a half inches of the rectum. A catheter having been introduced into the bladder, a posterior incision, as recommended by Denonvilliers, was made. Two deep lateral incisions, meeting in front, were then carried round the margin of the anus, and, the lateral and posterior connections having been rapidly separated by the finger with an occasional touch of the knife, the rectum was carefully dissected from the structures with which it was in relation anteriorly. The anterior wall of the rectum, with the growth, was now divided in its long axis, and, whilst the right half was removed by the écraseur, the left was severed by curved scissors, bleeding vessels being secured as divided. After the removal of the growth, the cord-like induration before mentioned on the right side could be distinctly made out, extending about an inch higher in the course of the bowel. The mucous membrane, which was healthy, having been separated from this, the cord-like mass, which probably consisted of infiltrated lymphatics, was freed from the surrounding parts with the finger, and a stout silk ligature tied round it, by means of which it was drawn still lower into the wound, and another ligature placed upon it as far up as possible. Hæmorrhage during the operation was very moderate. The wound was washed out with cold water, but no dressings or sutures of any kind were applied. The growth presented the ordinary characters of rectal cancer, and ulceration on its mucous aspect had already begun. On recovering from the effects of the ether, the patient was found to be suffering from hardly any shock. He was ordered twenty minims of liquor opii sedativus at once and to be kept well under the influence of opium for a few days.

September 22nd. He passed a good night. The temperature was 99.6°; the pulse, 104. He passed urine freely, and complained of no pain, but there was slight tenderness on pressure in the right iliac fossa. Liquor opii sedativus (ten minims) was ordered to be given every three hours, and the wound was to be syringed out every hour with a weak solution of carbolic acid.

September 23rd. He had passed a good night. The temperature was 100° Fahr.; the pulse was 116. There was still slight tenderness over the sigmoid flexure; the abdomen was not distended. He took plenty of nourishment.

September 24th. There was less tenderness in the iliac fossa. The pulse was 92. The temperature was 99° Fahr. Into the wound, which was discharging freely, a large drainage-tube was introduced, and linseed-poultices were applied.

September 26th. The bowels were opened at mid-day. The pulse was 92, and the temperature 99° Fahr. The wound was healthy, and there was no pain.

On October 3rd, syringing with weak Condy's fluid was substituted for carbolic acid, as the urine showed traces of carbolic acid.

October 30th. The wound was rapidly granulating. A large tube to prevent contraction was ordered to be worn for an hour or two at a time daily. From this date, the patient rapidly convalesced, and was discharged on November 16th, 1882. The wound was then still not quite healed. On December 19th, he was seen by Mr. Anderson, who reported that he was still progressing satisfactorily, with no return of the disease.*

REMARKS BY MR. WALSHAM.—The case seemed a very favourable one for excision. The patient was only forty-seven years old, and appeared to be in excellent general health. The rectum was freely movable; the finger could be passed beyond the cancerous mass, and there appeared every probability of removing the whole growth. At the operation, the diseased portion of the gut was divided in front as well as behind; and the two halves severed from the bowel above separately, the right by the écraseur, the left by the scissors. The latter method seems preferable, as it allows the operator to see that healthy tissues are being cut through; whereas, if the écraseur be used, there is some danger of the cord slipping, and the division being made partly through diseased structures. The crushing and bruising of the parts, moreover, by the écraseur often makes it difficult to determine whether the whole of the disease has been removed. In the use of the scissors, no danger need be apprehended of hæmorrhage, as, with Denonvilliers's posterior incision, the parts are so thoroughly exposed and under control that each bleeding vessel can be secured as successively divided. No sutures were used, either to attach the bowel to the edges of the wound, or to bring any part of the latter together; and the wound was syringed out with weak carbolic lotion every hour. These points have been insisted upon for ensuring free drainage and the thorough cleansing of the wound; and there seems to be no doubt of their efficacy in preventing septic peritonitis or general pyæmic infection. The early introduction of a large tube was effectual in preventing the contraction which has proved to be a source of trouble in some of the reported cases.

SHEFFIELD GENERAL INFIRMARY.

SPINAL CARIES: PARAPLEGIA: TREPHINING: RELIEF OF SYMPTOMS OF PRESSURE.

(Under the care of Dr. BANHAM and Mr. ARTHUR JACKSON).

[Reported by Mr. CHARLES ATKIN.]

AN intelligent healthy-looking boy, aged 12, was admitted on April 28th, 1882, suffering from paraplegia. His mother had shortly before died of rheumatism. His father was healthy. He had had the ordinary infantile complaints. There appeared, on inquiry, to be no strumous predisposition in the family. He was healthy up to Christmas, 1881, when he found that his left leg "dragged in walking." This was soon followed by a similar affection of the right; he became rapidly worse till a month before his admission, when he found that he could not use his legs at all. On questioning, he remembered being struck in the back three years before with half a brick; it made him cry at the time, but he never mentioned it to his relations, and soon forgot all about it.

On admission, it was found that both lower limbs were helpless, wasted, and flaccid; sensation was normal. There was exalted faradic contractility and sensibility, and increased tendon-reflex. His motions were passed normally, but he had to strain for a quarter of an hour before he could micturate. There was no swelling or tenderness to be detected in the back. He could bear his spine to be jolted, and hot and cold sponges did not distress him. For the next two months, his symptoms gradually grew worse, till he passed his urine continuously in bed, lost all control over his sphincters, became unable to turn himself in bed, and was truly in a pitiable state.

* Since the case was sent for publication Mr. Anderson has informed me that the patient is dead. He was unable to give me any particulars as to the cause of his death.—W. J. W.

The wasting had increased, but, instead of the legs being flaccid, and lying helpless, they were now drawn up in a state of tonic contraction, any attempt to straighten the toes, ankles, or knees giving him great pain. He lay on either side, but was quite unable to move himself. Any attempt at faradism caused him to cry out loudly; galvanism he never felt; there was an exaggerated tendon-reflex on both sides, and ankle-clonus, both tests giving him pain. Sensibility was much diminished, and his feet were blue and cold. There was no spasm. He had no defined line of anæsthesia, but his impressions at the part pricked in the lower abdominal and dorsal regions were not always correct. The special senses were unaffected.

About two or three months after admission, a prominence was discovered in his back, corresponding to the lower dorsal spines. As his state became progressively worse, drugs and galvanism having no effect, Mr. Jackson, to whom the case had been for some time transferred, determined to explore the spinal canal at the seat of curvature, and see if he could remove the pressure on the cord; this was thought to be probably due to some inflammatory deposit on the back of the bodies of the vertebræ, which, having caused erosion of the vertebral ligament, had collected outside the theca in the form of pus.

The operation was performed on December 14th, 1882, with full antiseptic precautions. An incision three inches and a half long was made over the lower dorsal spines. The laminæ and spinous process of a vertebra (the ninth) were removed; and the dura mater was laid bare, but not opened. No pus was found, but the spinal cord rose to the opening made in the bone.

The day after the operation, the temperature reached 102° Fahr., but fell during the next two days to 100° Fahr., where it remained for three weeks, with slight nocturnal elevations; after that it was normal.

The wound was dressed for the first time on December 26th, twelve days after the operation, and the sutures were removed.

On January 10th, fifteen days after the last dressing, the wound was again examined, and was found healed.

A week after the operation, the boy was able, for the first time since his admission, to micturate properly, and when he desired; he had control over his sphincters, for which result alone the operation had been of great value. The painful tonic contractions of his leg- and thigh-muscles had quite disappeared, and he was able to draw his knees up against his abdomen, and slightly move his toes. Faradic contractility was, however, much diminished, though sensibility remained. He could distinguish with accuracy the point pricked with a pin at any part over each leg. His sensations also to touch, pressure, and temperature were normal.

DERBYSHIRE GENERAL INFIRMARY.

SARCOMA OF FEMUR: AMPUTATION AT HIP-JOINT: RECOVERY.

(Under the care of Dr. CURGENVEN.)

[FOR the following notes we are indebted to Dr. BENTHALL, House-Surgeon.]

H. S., aged 36, a labourer, was kicked, five years before admission, on the outer side of the left thigh, and he had ever since, on and off, suffered from pain, attributed often to sciatica or rheumatism. Six weeks before admission, he felt (while walking) the thigh suddenly fail him; and he was attended by Mr. Rice, surgeon, of Derby. The swelling of the thigh rapidly increased in size, and after three weeks he was persuaded to enter the Infirmary. On admission, on October 12th, 1882, it was noticed that there was slight shortening and eversion of the limb, and that any movement caused great pain. The great swelling of the thigh was most marked towards the middle and outer sides, and at its most prominent part were two hard prominences of bone. The patient consented to an exploratory incision being made, and the prominences were found to be the fractured ends of the femur, between which the finger passed into a mass of broken-down soft growth, some of which was removed for examination, and found to be composed of small spindle-cells.

On October 21st, the patient having consented to the operation, Dr. Curgenven, assisted by Messrs. Baker and Dolman, amputated at the hip-joint. Lister's abdominal tourniquet was used, and digital pressure made on the anterior flap before the femoral was tied with carbolised silk. Very little blood was lost. The operation was performed under the spray, and the stump dressed with carbolic gauze. The subsequent progress of the case was good, but an attack of erysipelas and a troublesome sinus prolonged his convalescence.

REMARKS.—In the BRITISH MEDICAL JOURNAL, November 26th, 1881, p. 855, is the record of a case of recurrent fibroid tumour of the thigh, in which Mr. Curgenven amputated at the hip-joint. We are informed by that gentleman that the patient enjoyed immunity for two years; the growth then recurred in the stump, and the patient died on April 9th, 1883, two years and five months after the amputation of the thigh. No *post mortem* examination could be made; but, from external appearances, Mr. Curgenven was unable to discover any signs of malignant disease, except in the stump and inguinal region. "It is interesting," he adds, "to note that, after amputation at the hip-joint for sarcomatous disease of the thigh, the disease should be found returning more than two years after the operation."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 24TH.

JOHN MARSHALL, F.R.S., President, in the Chair.

Two Cases of Congenital Syphilis of the Larynx. By PERCY KIDD, M.A., M.D.—The ages of the patients were fifteen and eighteen at the time of observation, but symptoms developed at the ages of fourteen and thirteen respectively. In the first case, when laryngitis seemed to have appeared a few months previously, great improvement followed the administration of iodide of potassium. On the contrary, in the second case, where the laryngeal disease was of five years' standing, webbing of the vocal cords and polypoid excrescences in the larynx existed, and here no benefit could be expected from internal remedies. CASE I.—A boy, aged 15. Family history indefinite. Mother said to be subject to "rashes." There was a history of cough and shortness of breath for nine months. Three months previously, the boy's breathing had become stridulous, and shortly afterwards some dead bone came away from his palate. For three days, his breath had been very short, and he had lost his voice. *Present state.*—Patient is small for his age; speaks in a hoarse whisper; upper incisor teeth distinctly pegged; corneæ clear. No cutaneous eruption or scarring. Chest small; superficial veins distended; supraclavicular spaces drawn in during inspiration. Very slight dulness at both apices, and weak bronchial breathing. Breath-sounds generally feeble. Marked scarring of soft and hard palate; scars whitish; surrounding tissue dull red. Larynx: mucous membrane throughout of a dull red colour. Vocal cords red and thickened. Ventricular bands and aryepiglottic folds swollen, partially hiding vocal cords. Movements of vocal cords diminished greatly; abduction and adduction very imperfect; considerable stenosis of the glottis from swelling of parts and fixation of vocal cords. Rapid improvement under iodide of potassium and inhalations of benzoin. Recovery with slight degree of chronic laryngitis and partial fixation of left vocal cord. CASE II.—A girl, aged 18. Family history negative. Onset of symptoms—sore-throat and hoarseness—at the age of thirteen. The patient attributes the throat-affection to some medicine she was given while an in-patient at the French Hospital in Leicester Square, soon after her symptoms developed. Reasons were given for doubting this. This patient has been hoarse for five years. *Present state.*—Chest shows no sign of disease. Lateral incisor teeth somewhat pegged. Palate, pharynx, and left tonsil marked with whitish scars. Larynx: epiglottis thickened and bent backwards towards the larynx: margin irregular and jagged, as if partially eaten away; mucous membrane of epiglottis pale; no present ulceration. Vocal cords adherent to one another at their anterior extremities by a web of a reddish-grey colour. On the left cord, at its posterior third, is a small conical outgrowth. The posterior part of the right ventricular band is occupied by a roundish red swelling, which projects downwards and hides part of the corresponding vocal cord. The left ventricular band, at its anterior end, is thickened. The vocal cords are pinkish, and move freely. Eyes: slight divergent squint. A high degree of myopia is present. The right eye shows a large patch of choroiditis in the position of the yellow spot. Fundus of left eye healthy. This patient had been exhibited at a previous meeting of the Society.—The PRESIDENT said it was interesting to see laryngitis occurring so late in the history of cases of congenital syphilis, and suggested the cause, the age, and the treatment, as the topics which it would be desirable to discuss.—Dr. FELIX SEMON believed the cases related

to have been certainly syphilitic, as shown by the characteristic nature of their lesions, which were not found in tuberculous cases or in cases of injury by corrosive fluids. It was more difficult to say whether they were the result of congenital disease. The late age at which they had appeared was against this view. He had himself, within the last few days, seen a case of acquired syphilitic laryngitis at the age of 17. That deep lesions did occur in congenital syphilis, however, he had now learnt; they had been overlooked frequently; but when the Pathological Society had mentioned such cases as a desideratum for exhibition, many had been shown. He had twice seen inherited syphilis affect the larynx in two members of the same family, which seemed to show that in certain types of constitution it had a preference for especial parts. Tuberculosis, also, had been shown to affect the larynx in certain families. As to the question of treatment, he quite agreed with Dr. Kidd that it was best to leave such cases alone. He had tried the splitting of the web of membrane with a galvano-cautery, and endeavoured to keep the parts separate during the healing of the wound, but without success.—Mr. R. W. PARKER had been interested in the causes of laryngeal obstruction in young children, and had found some cases where it was caused, not by ulceration, but by a papillary growth, such as was often seen round the anus, and went by the name of mucous tubercle. These, which at first had seemed sufficiently severe to be likely to call for tracheotomy, had yielded to mercurial inunctions.—The PRESIDENT remarked that care should be taken to distinguish between what was ordinarily called mucous tubercle and the growths in the cases Dr. Kidd had shown; for the mucous tubercle belonged to an earlier and more intense stage of syphilitic poisoning, as was shown by its yielding to mercurial treatment, whereas potassium iodide was suitable to the growths in Dr. Kidd's cases. He suggested that the reason for the late appearance of the laryngeal affection in these cases, supposing them to be cases of congenital syphilis, might very probably be the changes which occurred in the larynx at the time of puberty; the parts which were in a state of development being in so far liable to be the seat of any new outbreak of the poison. The early ravages of syphilis were superficial, the later were deep, and that might perhaps contribute to the escape of the larynx from its effects until puberty.—Dr. PERCY KIDD found it difficult to believe that, as Dr. Semon had suggested, the syphilis had been acquired, and not hereditary; for, if so, it must have been acquired at the age of 11 or 12. The central choroiditis and pegged teeth added much, he thought, to the proof of inherited syphilis.—The PRESIDENT added a few words to deprecate the use of the galvanic cautery in such cases. It had been an instrument which he had had the honour to introduce, but he admitted its deficiencies, and said that in any attempted operations in cases of this kind should certainly prefer the use of the knife.

Purulent Pericarditis treated by Paracentesis and by Free Incisions, with Recovery. By SAMUEL WEST, M.D.—A boy, aged 16, had a large pericardial effusion. The symptoms became so urgent that paracentesis was performed. Pus was obtained. Three days later paracentesis was again performed, and subsequently the pericardium was laid freely open, evacuated, washed out, and a drainage tube inserted. The temperature never rose, and the boy recovered completely in five weeks, the only feature of interest being an attack of general urticaria, which came on about a week after the operation, and lasted three or four days. In support of the diagnosis, a case of Sir J. Risdon Bennett's was referred to, in which what was supposed to be mediastinal cyst was frequently punctured, but proved to be on *post mortem* examination a case of chronic pericardial effusion. The points of clinical interest discussed were: 1. The absence of any special signs to indicate the nature of the effusion; there was no friction to be heard before the operation, or mill-wheel sound characteristic of hydro-pneumo-pericardium after the free incision; 2. The operation (which was by preliminary puncture by a small trocar and cannula, and subsequently by free incision), and the place selected for puncture, viz., the fourth intercostal space, immediately below the left nipple; 3. The amount of the fluid evacuated, viz., fourteen ounces by the first tapping, and about two quarts by the free incision; 4. A peculiar epigastric prominence, noticed before paracentesis, which disappeared after operation; 5. The attack of urticaria; 6. The pulsus paradoxus, which was constant up to the time of the free incision, but ceased immediately after that. A short account was then given of the only other recorded case of incision of the pericardium for purulent pericarditis by Professor Rosentein of Leyden, which also recovered.

The Statistics of Paracentesis Pericardii, By S. WEST, M.D.—The history of the operation was briefly related from its first suggestion by Riolan in 1649. Its practical introduction was traced to Dr. Rovers of Barcelona, who operated successfully in two cases in 1819. In 1841 there was a remarkable series of cases in an outbreak of scurvy in Russia, in which the pericardial effusion was composed mostly of blood. Nine were operated upon and six recovered. In 1854 Trousseau's essay was published upon some cases of his own and of M. Aran, which revived interest in the subject. In 1866 Dr. Clifford Allbutt introduced the operation to this country, and it was performed by Mr. Wheelhouse and Mr. Teale. Rosenstein, in 1871, made a great practical advance in operating by free incision with drainage. A complete list of the recorded cases up to date was given in a tabular form, with the addition of several cases hitherto unpublished, making 79 cases in all. Of these, 56 had been in males, for which no reason could be assigned, and they had been uniformly distributed over the early ages of life. Phthisis and pleurisy had been associated with 23 cases, rheumatism with 11, scurvy with 9, general dropsy with 5, injury with 3; in 12 cases there had been no associated disease. The fluid had been in 58 cases serous, in 12 purulent, in 9 bloody. The amount evacuated had been in 46 cases less, in 33 cases more than a pint. It was not rare to evacuate as much as two or three pints. The largest quantities had been found in the scorbutic cases, and from one of these about 10 pints had been evacuated. It had been sometimes observed that great relief was given by the withdrawal of one or two ounces, and that this had been followed by the absorption of the rest of the fluid. Dieulafoy's careful experiments had led to the selection of a place in the fifth left space, about an inch from the sternum, as the safest point for puncture. The following conclusions were drawn. 1. Paracentesis pericardii is not only justifiable, but an operation which may be safely undertaken with ordinary precautions, for only one case is recorded in which the operation was in itself fatal, and, with this exception, all the patients were greatly relieved by the removal even of small amounts of fluid, and many recovered completely who would probably have died had the operation not been performed. 2. The most suitable place for puncture is, in ordinary cases, in the fifth left intercostal space, one inch from the edge of the sternum; but, if the pleura be adherent, the puncture may be made safely much further out, and even in the sixth space. 3. The instrument employed should be a trocar and cannula, with or without aspiration. 4. The operation may be performed with advantage, not only in the pericardial effusions of rheumatic or primary origin, but also in those which occur in the later stages of general dropsy, if it should appear that the fluid in the pericardium is adding to the difficulties under which the heart is placed. 5. Purulent pericarditis is best treated on general principles, like empyema. 6. The pericardial sac may be safely opened and drained. 7. This treatment, moreover, appears to be the only one which offers the slightest hope of recovery. 8. The results do not seem to be as unfavourable as those of empyema, for the walls of the cavity are better able to contract rapidly, and thus permit its complete obliteration.

Mr. HULKE hoped he should not be intruding on a subject of special interest to the physicians, if he made one or two remarks on the case which had been so admirably treated by Dr. West. He considered it more advisable to dissect down carefully to the pericardium before any incision was made; and, if a trocar and cannula were employed, he advised very cautious use of them, and that the trocar be frequently withdrawn, to form an opinion of the parts reached. He had himself, after medical consultation, in a case which was believed to be one of pericardial effusion, once inserted a trocar and cannula somewhat boldly, and the withdrawal of the trocar had been followed by a jet of blood, which gave him great anxiety, but happily relieved the patient. A subsequent *post mortem* examination showed him that he had punctured the right ventricle, and that the case was one of universally adherent pericardium.—Dr. T. H. GREEN expressed some doubt as to whether the diagnosis of pericardial effusion should have been made in a case where no pericardial friction was heard, and in which the cardiac dulness did not extend higher than the upper border of the third rib, as was shown in Dr. West's diagrams. He advised preliminary exploratory puncture as in pleural effusions, but said the relief to be expected in the draining of the pericardium was less than in cases of empyema, for the cause of death in chronic pericardial effusion was rather the damage done to the cardiac muscle than the pressure of the pericardial fluid.—Dr. SOUTHEY congratulated Dr. West on his results, and remarked that the origin of the purulent pericarditis in his case was obscure; it certainly was not rheumatic, and there seemed to be no history of any such injury as sometimes set up purulent pericarditis after several weeks. He was inclined to suppose that the suppuration had not begun in the pericardium, but

had extended into it from a neighbouring abscess; and in that case the low level which the upper border of the dulness reached would be explained. The dyspnœa and orthopnœa, he admitted, were sufficient grounds for interference; and he inquired if any difficulty of breathing had been noticed over the lower lobe of the left lung, such as was usual in cases of large pericardial effusion. He quite agreed with Mr. Hulke in advising cautious procedure and dissection before incision. Dr. West had mentioned one case only in which paracentesis had been immediately fatal, and he imagined that that was a case which they had both seen together; but he quoted a case of Bouchut's, and another within his own knowledge, in which there had been death within a short time. The pulsus paradoxus in these cases had first been noticed in an essay by Kussmaul in 1869.—The PRESIDENT remarked that the old methods of procedure, which were sometimes by excision of a portion of the sternum or costal cartilages, were shown to be quite superseded. The soft elastic area at the epigastrium, which Dr. West had mentioned, pointed somewhat to a diagnosis of mediastinal tumour; and the rapid closure of the wound in thirty days was hardly to be expected if the incision had been in the pericardium and there had been constant motion of the heart to prevent healing. He asked if there had been any signs of endocarditis, or any cerebral symptoms, so common in purulent pericarditis.—Dr. S. WEST expressed himself as having felt guilty of timidity rather than of boldness in his treatment of the case; and that was perhaps not unnatural, as he had previously only seen one case of paracentesis pericardii—the same, he believed, as that to which Dr. Southey had referred; and there death had been immediate. The trocar and cannula used in his first tapping had been very small, and had been introduced very cautiously; it had only been thrust in up to its hilt when he had convinced himself that it was in a free cavity. There were some cases in which a correct diagnosis of pericardial effusion was almost impossible; and in some of these the right ventricle had been punctured, as in the case Mr. Hulke had related. He had not entered these cases in his tables. Often no harm had followed; and, indeed, in America, there were several cases in which the right ventricle had been intentionally tapped, and the operation had given some relief. Laceration of the ventricle, rather than mere puncture, had proved the fatal injury. He had not been surprised at the absence of pericardial friction in his case; nor had he felt it a point hostile to his diagnosis, for he imagined that, when he first saw the case, the effusion was too great to allow any rubbing together of the pericardial surfaces. The upper limit of dulness which he had marked in the diagnosis was the limit of absolute dulness, and, he thought, was quite consistent with large pericardial effusion. That death was due in such cases to the pressure of the fluid on the heart, rather than to the degenerate state of the heart's muscle, as Dr. Green had suggested, was shown by the relief afforded by the evacuation of the fluid. The pulsus paradoxus was not characteristic of pericardial effusion, but occurred in other cases where there was fibrous thickening in the mediastinum; and recent experiments had shown that it was due to mechanical pressure on the inferior vena cava, by which the complete filling of the heart was prevented. The condition of the epigastrium in his case was similar to that in Dr. Allbutt's case, which was one of undoubted pericardial effusion, and argued against his case having been really one of mediastinal tumour. He had observed no endocarditis, but did not feel that that was any argument against the pericardial nature of the case; for endocarditis would only be expected, as Dr. Southey admitted, in a rheumatic case, and he had not anything to lead him to suspect that his case was rheumatic.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, APRIL 2ND, 1883.

JOSEPH WALKER, M.D., President, in the Chair.

Abnormal Dentition.—Some interesting specimens were exhibited by Messrs. Hutchinson, Stocken, and Corbett.

The Development of the Lower Maxilla.—Mr. J. B. SUTTON read a paper on this subject. After showing that great differences of opinion had existed amongst anatomists as to the mode of development of the lower jaw, even so recent an authority as Professor Humphry considering that it was usually formed from one centre, Mr. Sutton described its growth from six centres, illustrating his description by means of specimens. The first centre to appear was that which formed the greater part of the body of the bone; next came centres for the condyle, coronoid process, and angle, then one in front known as the "mento-Meckelian." These united, and then on the inner side of the mass thus formed (the dentary), a thin plate of bone appeared, at right angles to it, and quite distinct. This was the "splenial," and above it supported the dental follicles, whilst below it were Meckel's cartilage and the inferior dental nerve. A little later, the splenial sent down a process from its inner edge which enclosed the nerve, uniting below with the outer plate, or dentary, with which it also united by its outer edge above the nerve. The descending process of the splenial formed the inner wall of the maxilla, and a growth upward from it formed the inner wall of the alveoli. After the fourth month, all trace of the separate parts was lost, and the bone assumed the condition which it presented at birth. Mr. Sutton next referred to Serre's "*loi de conjugaison*"—*i.e.*, that foramina in bones are always formed by the apposition of two or more distinct bones, or of two or more distinct centres of ossification, and showed that this afforded strong and firm evidence of the compound origin of the lower jaw, which was fully confirmed by the results of actual investigation. Lastly, he pointed out the homologies of these centres in the compound jaws of fishes, amphibia, and reptilia, showing that those parts which in man united at so early a period that their very existence had been doubted, in some of the lower vertebrata remained separate throughout life, and that thus the evidence of comparative anatomy also tended strongly to confirm the compound origin of man's lower jaw.—A short discussion followed.

Spontaneous Fracture of the Teeth.—Mr. ALFRED COLEMAN related the particulars of four cases which he had met with in the course of his practice, in which fracture, or splitting of teeth had occurred without any apparent assignable cause, and referred to others recorded in the Society's *Transactions*. It had been suggested that the splitting was due to accumulation of gases in the pulp-cavity; but he (Mr. Coleman) thought it was in some way connected with the calcification of the pulp, which he had found to be a constant concomitant, and he gave some reasons in support of his hypothesis.—In the discussion which followed, all the speakers were of opinion that, in these cases of so-called spontaneous fracture of the teeth, the accident was always due to some form of mechanical violence, but that the real cause was overlooked or forgotten, owing to the fact that a considerable time might elapse before any symptoms appeared to call attention to the fracture. Cases were related by Messrs. Charles Tomes, Hutchinson, and Horn, in which there had been complete absence of symptoms, for periods varying from three months to nearly two years after the occurrence of such accidental fractures. Mr. Hutchinson also suggested that the calcification of the pulps, which was generally present, was due to irritation set up by the fracture, and was, therefore, a result of the accident, and not the cause of it.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, FEBRUARY 21ST, 1883.

ANGUS FRASER, M.D., President, in the Chair.

Is the Germ-Theory of Disease a Verified Hypothesis?—Dr. SIMPSON, Medical Officer of Health for Aberdeen, read a paper on this subject. He said that it was the fashion at present to put down a large number of diseases, both in medicine and surgery, to the effects of micro-organisms, which, like larger parasites, such as trichinæ and echinococcus, produced disease by their presence. There were such micro-organisms without doubt, and it was from the discussions regarding their relations to fermentation and putrefaction that the present germ-theory had arisen. Supposing the germ-theory to be true, it did not follow, therefore, that disease was allied to fermentation or putrefaction, for these changes took place in dead, whereas disease occurred in living matter. There was no doubt that micro-organisms could live in the body, but the question was, "were the changes called disease produced by them?" Professor Lister was the first in this country to give a practical bearing to the germ-theory, and his results supported it. Operations, especially on joints, were performed with truly wonderful success when compared with former results. But in spite of spray and carbolic dressing, micro-organisms existed in the serum and pus of wounds; they were present in the pus of sweet wounds. Virchow had never found any particular difference in the pus under the antiseptic and the old treatment. Professor Ogston had found micro-organisms in all suppurating wounds. Carbolic acid had never been proved to be a destroyer of germs, at least in the form used as dressing; and the spray seemed useful or otherwise according to the state of the atmosphere, it being most effectual when the air was comparatively

pure, but next to useless when the air was blowing from certain quarters and bringing abundance of germs. Cotton-wool itself needed disinfection, and this could be done only by exposing it to great heat. Lister's success depended on something else than the exclusion of germs. This was seen by comparing his results with the results of others not using antiseptic measures, such as Spence, Keith, Sir W. Fergusson, etc. Good hygiene, general cleanliness, fresh sponges, etc., had all their share. Listerism had done good service, but it had not effected the destruction of the germs as expected. The germ-theory did not, however, stand or fall by the success of any particular kind of treatment, such as Lister had brought forward, for improvements might yet be discovered which would do away with all forms of micro-organisms. Professor Ogston had shown that micrococci had a very intimate connection with acute abscesses, pyæmia, etc.; and, as these micrococci existed naturally in the body and in the intestines, he assumed that they were inactive then, because the vitality of the part had to be lowered before they could act; but if that were so, why were not people in a weak state of health subject to a kind of spontaneous origin of such diseases? and those suffering from ulcers of the stomach or intestine, or large indolent ulcers of the leg, poisoned by micro-organisms? Many experiments had been performed by cultivating micro-organisms and injecting the culture-fluid into animals. The evidence was conflicting, the balance of evidence appearing to favour their harmless nature. One experimenter injected septic bacteria into the peritoneal cavity of a rabbit with no bad effect, and in another experiment allowed air from a *post mortem* room to pass through the subcutaneous tissue of a rabbit without producing any injury. Other experimenters had allowed bacteria within certain limits as to quantity, to be injected into the veins without injurious results, the blood remaining fresh for any length of time if not exposed to air. Another experimenter again, after exposing septic fluid to 140°C. (=284° Fahr.), a heat which killed all the germs, and keeping the cooled fluid for a long time without any bacteria having been produced, injected the filtered fluid into an animal with fatal effect; bacteria actually developing in the blood, or at the seat of the wound. In some other experiments, it was found that a temperature of 250° Fahr. would not destroy the bacteria of a very virulent septic fluid, but that at that temperature the septic power of the fluid was destroyed. The fact of old putrid fluid being less virulent than fluid recently putrid, while both swarmed with micro-organisms, indicated that they were not the cause of virulence. If fresh animal juice were added to the old, activity was restored, to be again lost in a short time; thus showing that the poison, though particulate, was either decomposed by exposure, or volatile. There were animal alkaloids which had been obtained from putrefying corpses, and these were of different degrees of poisonous activity according to the time the process had been going on. Chemists also had found in septic blood an alkaloid very similar in its properties to atropine. Dr. Simpson considered that it had been proved that bacteria were present alike in poisonous and in non-poisonous fluid, and that they could be injected into the living tissues without harm; and that the actual poison had in the form of an alkaloid been isolated, and had induced the poisonous effects without the bacteria; and, moreover, it had been proved many years ago that the living tissues themselves could secrete a poison when simply irritated even by germicides like iodine—a peritonitis from injection of this having been produced, which by inoculation could be communicated to other animals. The bacillus anthracis had no peculiar form to distinguish it from others which had been proved to be harmless. Pasteur's vaccine for anthrax was in his hands a great success, but in other places this success had not been equalled, and Koch and Klein had not been yet able to lessen the virulence of the organisms by any cultivation. The subject of spores had been greatly matter of contention, some having asserted that they were formed only at certain temperatures, others denying this; others, again, considering them indestructible, and still others denying this. It seemed from all these statements there were no grounds for the assertion—at least as yet—that anthrax was a parasitic disease. It was known that cholera was induced by a non-vital poison. Syphilis was another contagious disease which was hereditary. If it were due to a bacillus, this must go down from one generation to another. When there was so little proof as to organisms causing such diseases as anthrax, septicæmia, etc. (diseases which could occur as often as the poison was introduced), there was still less ground for supposing that bacilli were the cause of the more common infectious diseases—*e.g.*, small-pox, scarlet fever, measles, etc. If these were caused by micro-organisms, there must either be a different kind for each, or the organisms must be capable of playing many parts. No special constant micro-organisms had yet been found in these diseases. Micro-organisms were always present, but epidemics were not; and this could not be because there was nothing for the micro-organisms to work on. The cause of their spread was not dust-laden air, or widespread aërial influences, or germs in the air. In the epidemic of typhus just over in Aberdeen, he had tested the air for germs under most favourable circumstances, but had found nothing close to the beds of infected patients which he did not find in other places where there was no typhus. He believed that epidemics, whether in man or in animals, were traceable to contact; and that any set of cases was derived from a set anterior to them. They might, under certain conditions, arise spontaneously. The progress of disease of epidemic character, such as cholera, had been by the most accurate observers traced step by step along the roads of travel. The fact that bacilli could be cultivated outside the body was an argument against their being the cause of disease; for, as they could thrive outside, it was difficult to understand why there were not epidemics all over the country having no connection with each other. He had had specially under his care typhus, scarlet fever, and measles; and had examined the blood in many cases, at all stages, and many times in the same patient, and had never been able to detect any micro-organisms. If contagious diseases were due to germs, why did they not go on multiplying; and, if got rid of, why could they not induce the disease a second time? This was said to be owing to their requiring a special kind of food, which was never again supplied, or from the parasites producing in the body such a change as was entirely incompatible with their mode of life. But it was difficult to suppose the existence of such a food, which seemed so unimportant to the body as to be done quite well without; and there was no evidence of any change having been produced in the blood of the nature supposed. There was a great difference here from what took place in fermentation. There the yeast-cell grew till the whole fermentable liquid was turned into alcohol, and, if more fermentable liquid were added, the process would still go on but this could not be so in the human body, for, if there were a sugar or other fermentable substance there, the process would have to go on for ever, for the material, being always renewed, could never be exhausted. The period of incubation could not be explained by the theory of micro-organisms; for if, as stated by Cohn, the bacteria had so great a power of quick multiplication, why should the incubative period be so slow and so irregular? Again, when the virus of small-pox was inoculated, the disease showed itself sooner and milder than when taken naturally; but this was not like the action of micro-organisms, which would act equally, however they got to their favourite soil. It was well known that quantity was important in vaccination, and that five marks gave a far greater immunity from an attack of small-pox than one. This could not be the case were micro-organisms the cause. The parasitic theory of disease did not solve the problems with which physicians and surgeons had to deal. Dr. Simpson could not see, in anything that had yet been advanced, any reason why he should embrace the germ-theory, and throw over the deductions long made from clinical experience.—Dr. A. FRASER agreed with Dr. Simpson that the question of the bacilli was as yet but a hypothesis. Trichinæ, echinococci, etc. did not act as the bacilli were supposed to do; for they (trichinæ, etc.) produced disease invariably, whereas bacilli did not do so. Thus, Algerian sheep were not susceptible of charbon whereas French sheep were. The diseases said to be caused by bacilli looked more like the effects of poisoning. Thus, belladonna produced little effect in one case, and much in another. Chemical compounds produced great effects, but not the same effect on every one. Vaccination would not take in every one, or on every occasion. Opium could be cultivated so as to be tolerated in very poisonous doses. Dr. Simpson had not mentioned some American experiments on diphtheria, where, when everything was removed except the bacteria, no disease followed. But this was very much a case in point. The state of the patient was as much the cause as anything else. The bacteria were only carriers. Physicians were asked to believe that tubercle was an infectious disease, in defiance of clinical observations long carried on. Much stronger proofs were required of the truth of the hypothesis than had yet been put forward. We should not be in a hurry to throw over all clinical experience, because some microscopical observations seemed to throw doubt on it.—Dr. JACKSON thought he had had cases of phthisis which produced a very bad effect on those in attendance on the phthisical patient; but this might have been from the unhealthy surroundings.—Dr. WRIGHT had been greatly impressed with the value of Listerism, when the subject was first announced, by seeing its good effects in a case of cold-abscess with symptoms of blood-poisoning. Again, he had seen

Dr. Ogston fail in nearly every case of ovariotomy before, and succeed n every one since using Lister's appliances. He had been staggered y seeing Mr. Lawson Tait's statistics, and was inclined to pause, as e had had to learn and unlearn many things about this question. Dr. impson had said infection was not caused by the air, but in this he iffered from him. He did not think the so-called zymotic diseases ere always transmitted. Whooping-cough was sometimes epidemic nly in one town. There was some occult influence at work more nan bacteria would explain.—Dr. McKENZIE BOOTH thought that, bacilli were not the cause, they were the carriers. He did not nink Pasteur's experiments had been controverted. The tubercle-acillus had been demonstrated by many, whereas none had been een in sputum from other affections, and thus its presence had ecome pathognomonic.—Dr. MACGREGOR considered the germ-neory true. It explained to him the phenomena of disease. Each ver had a specific cause, and a specific period of incubation. yphus, for instance, grew in the system, feeding on something in ne body, and after a time fever was produced, and an eruption. had been objected that persons became accustomed to poisons—uch as opium. He believed the same was true regarding germs, for ney might be borne by custom.—Dr. GARDEN was inclined to agree ith the author of the paper. Pure biologists said all these organ-ms were so like as to be undistinguishable—in fact, that they were l the same. He considered that bacteria did no harm. Lister's neory had yet to be verified by long experience. Statistics proved at the results of antiseptic operations had not been so much better nan others, as had once been supposed. In fact, so far as he could e, the hypothesis spoken of in the paper had not been verified by inical experience. He himself had got as good results as had been otained under the full antiseptic method, by proper general hygienic easures, and when the constitution was good. In cold-abscesses, had seen some cases fail under the strictest Listerism. He be-ved the air did carry infection. He could not otherwise explain any things—as, for example, how, in the time of jail-fever, those rsons only caught it from prisoners who were in a direct line from em—a draught blowing directly from the prisoner to the person terwards taken ill.—Dr. SIMPSON replied.

ANCHESTER MEDICAL SOCIETY: ORDINARY MEETING.

WEDNESDAY, MARCH 7TH, 1883.

D. J. LEECH, M.D., President, in the Chair.

The Treatment of Phthisis by Iodoform.—Dr. DRESCHFELD has ntinued his observations since his first communication (BRITISH EDICAL JOURNAL, 1882, vol. ii, p. 169). The favourable opinion en formed has been further strengthened by the results obtained. f sixty-four cases of confirmed phthisis, more or less advanced, id concerning to a great extent out-patients at the Manchester firmary, thirty-four cases only had been under treatment sufficiently ng to be available for the purposes of this communication. Of ese thirty-four cases, four were in so far advanced a condition at the iodoform was only borne in the form of inhalation, but ve no results; two cases were complicated with amyloid disease, id here also the iodoform was useless. Of the remaining twenty-ght cases, ten showed either no improvement or only a temporary provement (increase of weight, improvement of appetite, decrease cough and expectoration); while the physical symptoms showed alteration at first, but afterwards the phthisical process gradu-ly advanced, and associated again with loss of flesh, night-eats, etc. Of the remaining eighteen cases, some showed slight t steady improvement, broken only temporarily by a fresh cold or me complication, such as gastric catarrh, pleurisy, etc.; whilst in x cases the improvement was most marked and beyond all expec-tion, the increase in weight amounting in one case to fourteen unds, in another to ten pounds, and in a third to eight pounds, in e month. The physical symptoms also improved; the sputa, wever, continued to contain tubercle-bacilli. The iodoform treat-ent was also tried in six cases of incipient phthisis. Of these, o had only been under treatment a very short time. Of the four maining cases, two showed no improvement; one was at once nefited; cough and expectoration entirely ceased; the apex-catarrh sappeared; and the patient felt now perfectly well. In the cond case (reported in the BRITISH MEDICAL JOURNAL, February th, under A. S.), the treatment was equally successful—only, how-er, after having been continued for a longer time. There being almost entire cessation of cough, it was difficult to obtain any uta; one specimen, however, was obtained, and this was found free om bacilli, whilst before they were found abundantly. Two cases of laryngeal phthisis, treated both internally and by inhalation, and also locally by the application of iodoform-powder to the ulcers, gave satisfactory results; the ulcers cleared and became smaller, and the general condition improved. The iodoform was given in the form of pills (one grain of iodoform, two grains of croton-chloral, one minim of creasote), and in the form of inhalation (twenty grains of iodoform, twenty minims of oil of eucalyptus or ten minims of creasote, and half an ounce each of rectified spirit and of ether). The inhaler used was one devised by Dr. W. Roberts, consisting simply of horsehair matting, to the inner side of which was attached some flannel or cotton-wool; and on this the inhalation-mixture was dropped. The cost of the inhaler was about threepence. Where the pills were badly borne (especially in women), the iodoform was added to cod-liver oil. In very young children, iodoform inunction, made with olive-oil or vaseline, was to be recommended; while older children seemed to take iodoform, either as powders or in small pills, very well. The good effects of iodoform seemed to consist in the following: 1, increase of weight; 2, increase of appetite; 3, diminution of cough and expectoration; 4, diminution or even total cessation of night-sweats; 5, the temperature was often a little lowered. No symptoms of iodoform intoxication had ever been seen. Several medical men, who had tried the iodoform treatment, had also obtained very satisfactory results.

Fracture of the Skull, with Conjugate Deviation of the Eyes.—Dr. GEORGE THOMPSON showed J. L., aged 14, who had suffered a simple depressed fracture of the skull in the left infero-postero-parietal area. The symptoms after injury were those characteristic of cerebral irritation. Consciousness was not completely recovered until six weeks after injury, when conjugate deviation of the eyes to the right was observed. This was so great as to cause both pupils to disappear behind the canthi, and made the boy practically blind. Both pupils reacted to light, and the right eye distinguished the light of a taper placed immediately in front of it. The facts seemed to Dr. Ross, who was consulted five months after the injury, to point to spasmodic deviation, and therefore to some source of irritation near the centre for the movements of the eyes on the left side of the brain. The depression being near the supposed seat of irritation, trephining was suggested by Dr. Ross, and performed by Dr. Thompson. Two spicula of the inner table were found to be impinging on the brain-surface, and were removed. There was prompt improvement in the deviation after the operation, and in a few weeks it entirely disappeared.

Case of Muscular Atrophy.—Dr. ROSS showed a case of what at first sight appeared to have been an example of progressive muscular atrophy. The case was that of a woman aged 30, and the symptoms consisted chiefly of repeated attacks of paralysis, with wasting of the muscles of the forearm and hand, alternating with periods during which complete restoration of motor power had taken place. The patient stated that this was her seventh attack, and she was now rapidly recovering. The affected muscles manifested the typical "reaction of degeneration." Her sister was similarly affected for the first time a short time ago; she was under the care of Dr. Roberts, and subsequently of Dr. Dreschfeld, and had made a complete recovery. The occupation of both sisters was that of "cotton-balling," which rendered necessary a very continuous use of the hands. Dr. Ross conjectured that this case must be classed along with the cases of muscular wasting described by Sir William Gull and others, in which a cavity was formed in the central part of the spinal cord, and which, from the nature of the lesion, have been named periependymal myelitis by Hallopeau.

Notes on Typhoid Fever.—A paper with this title by T. NIVEN, M.B., and ALEXANDER WALKER, M.D., was read by Dr. Niven. Various subjects were discussed, such as the great importance of not overlooking or misdiagnosing mild cases of typhoid, diphtheroid affections in typhoid and allied fevers; the great probability, on the grounds of symptoms, pathology, and etiology, that scarlet fever is communicated, like typhoid, by fæcal matters; the aërial infectiousness of typhoid, and the temperature-curve of this fever. Some important points in treatment were then touched upon. A few remarks were added on the etiology of the recent epidemic at Newton Heath.

INTERMEDIATE MEETING.

WEDNESDAY, MARCH 21ST, 1883.

D. J. LEECH, M.D., President, in the Chair.

Removal of Scapula.—Dr. BALL showed J. H., aged 3, who was admitted into the Stockport Infirmary on March 7th, 1877, for a

sarcomatous tumour of ten months' standing, springing from the left scapula. In excising it, it was found necessary to remove all the scapula with the exception of the glenoid cavity, the acromion, and coracoid processes. Rapid recovery took place. He was readmitted September 2nd, 1879, with a return of the growth from the remaining portion of the bone. The tumour, with the rest of the scapula, was excised. In ten days, he was well enough to be sent home. When shown, he was in good health, and there was no trace of any return of the growth. The movements of the joint were good, except that the elbow could not be raised above the level of the shoulder, and in circumduction the elbow fell.

Acute Atrophy of the Liver.—Dr. TOMKINS mentioned a case of acute atrophy of the liver, giving the history of the case as follows. A young healthy man was suddenly attacked with nausea, vomiting, and headache, followed by vomiting of dark matter, rapid prostration, slight jaundice, and delirium, the illness terminating fatally in twelve or thirteen days. At the necropsy, the liver was found to weigh only 23 ounces; the bulk of it was red in colour, and to the naked eye had the appearance of ordinary nutmeg-liver. There were two nodules in the right lobe, about the size of a filbert, of a dirty yellowish colour. The heart, brain, kidneys, and lungs appeared normal. The spleen weighed 8 ounces; it was dark and soft. No structural change was apparent. Beneath the pericardium and various parts of the peritoneum covering the duodenum, were some small extravasations of blood, The gall-bladder contained a small quantity of bile; the bile-ducts were patent. The colon contained a large amount of hardened pale scybala. The urine was deeply tinged with bile, and contained tyrosin. Sections of the liver showed extensive destruction of the lower cells in the red part, apparently most advanced immediately around the hepatic veins; at a further distance, the cells were healthy. In the yellow part, the destruction of liver-structure was complete, nothing remaining but a kind of fibrous trabeculæ containing a few broken-down cells and much granular material. The most interesting feature in the case was the presence in the capillaries and smaller arterioles of the liver of large numbers of micro-organisms of a comparatively large size. These were well seen in the photographs shown.

Ruptured Femoral Aneurysm Cured by Ligature of External Iliac Artery.—Mr. F. A. SOUTHAM showed a man, aged 38, who was admitted last November into the Manchester Infirmary with an aneurysm of the femoral artery. When the patient had been in the hospital about a month, rupture of the sac occurred suddenly, and the aneurysm became diffused. The external iliac artery was ligatured without delay, and recovery took place without a single bad symptom. The effused blood rapidly became absorbed, and there was never the slightest indication of any tendency to gangrene. The patient, who was shown, had recovered complete power over the limb, and was able to walk without assistance. With the exception of a little thickening about the upper part of the thigh, all evidence of the aneurysm had completely disappeared.

Progressive Pernicious Anæmia.—Drs. RANSOME and MULES described a case of progressive pernicious anæmia treated by transfusion. The retinal changes, increase of richness of the blood in corpuscles after transfusion, and other physiological and pathological conditions, were noted in the paper.

ACADEMY OF MEDICINE IN IRELAND: OBSTETRICAL SECTION.

FRIDAY, FEBRUARY 23RD, 1883.

JOHN DENHAM, M.D., President of the Section, in the Chair.

Exhibition of Specimens.—Dr. J. S. POOLE showed, for Dr. Kidd, the uterus, heart, and lungs of a puerperal woman, who died suddenly on the sixth day. The *post mortem* examination, conducted by Mr. P. S. Abraham, showed a small abscess at the junction of the right Fallopian tube with the uterus, opening into the peritoneal cavity. Here the vermiform appendix and an epiploic appendage were seen adherent. The right ventricle of the heart was largely transformed into fat; the left ventricle was hypertrophied, with but little degenerative change; the valves and auricles were healthy. A large clot was seen *in situ*, completely blocking a primary branch of the right pulmonary artery for about one and a half inches.—Dr. J. S. POOLE also exhibited an anencephalous fœtus, the second-born of slightly premature twins, the first of which was born healthy and living.—Dr. J. R. KIRKPATRICK showed an uterus and appendages with large fibroid tumour in the anterior wall.—Dr. WM. C. NEVILLE exhibited for Dr. H. MACNAUGHTON JONES: 1. A fœtus and placenta of the sixth month, in which delivery, complicated by deformed pelvis and transverse presentation, was effected by version, with removal of detruncated head by perforation and craniotomy forceps; 2. A large fibroid polypus, which sprung from the cervix uteri and filled the vagina; it was removed by the écraseur and obstetric forceps with perineal laceration; there was also a dermoid tumour of bladder from the same patient; 3. An unilocular ovarian cyst, and a multilocular ovarian cyst, both removed by operation.

Living Specimen.—Mr. STORY showed a patient who had a symmetrically placed supernumerary finger growing from each hand. A brother had a similar deformity.

Metria.—Dr. ATTHILL read a paper on metria (so-called puerperal fever). He said that our knowledge of the various affections included by the Registrar-General under the term metria, still far from perfect, had of late been steadily increasing. It was now all but universally conceded (1) that there was no such single disease as puerperal fever properly so called, that is, a specific disease in the same sense as scarlatina or small pox; (2) that inoculation and absorption of septic matter conveyed from without formed a not unfrequent cause of one form of metria, viz., puerperal septicæmia; and (3) that puerperæ frequently became self-inoculated by poisonous material generated within their own bodies, either by the decomposition of retained clots or shreds of membranes or placenta, the resulting fever being by some called puerperal sapræmia, in contradistinction to septicæmia. He held that the septicæmic form of metria could only be communicated from one puerperal woman to another by the actual transfer of the pathogenic matter, either by the hands of an attendant, or the nozzle of a syringe, sponges, napkins, etc., but not by the medium of the air. To two points he drew special attention: the frequent occurrence of metria in puerperal women preyed upon by remorse or mental distress; and the occasional outbreak of a very fatal, infectious, and essentially epidemic form of metria which, he believed, could not be due to septic absorption. The influence of remorse and mental distress in predisposing to the disease was well seen in the high mortality attending puerperality in women who had been seduced; and if such cases were excluded, he thought that the mortality of the Rotunda Hospital would only amount to one-half its present rate. Her fretting and a quickened pulse were the earliest symptoms of danger, a severe form of metria manifesting itself after twenty-four hours. These cases of metria were usually due to self-inoculation, the putrid matter finding a ready inlet because of the deficient *post partum* contraction of the uterus in such patients. Occasional outbreaks of an epidemic and very infectious form of metria were also known to occur, the disease spreading widely among the inmates of a hospital. He could not accept Dr. Evory Kennedy's explanation of these outbreaks as due to the aggregation of puerperal women, nor could he admit their septic origin, since septic material was not communicable through the air. He held, rather, that these outbreaks, occurring simultaneously with epidemics or other zymotic fevers, were really examples of these zymotics, specially modified by the physiological state of puerperal women. The infection of erysipelas could thus induce an attack of infectious metria in a puerperal woman; while, conversely, such a form of metria could impart erysipelas to her offspring. In the summary, scarlatina grafted on puerpera might result in metria and not in scarlatina. This infectious form of metria tending to assume an epidemic character, was therefore to be considered as consisting of specially modified cases of the prevalent zymotic disease. As strengthening this view, Dr. Atthill noticed the fact that, in his experience, bronchitis or pneumonia occurring in a puerperal patient was likely to be complicated by abdominal symptoms of the same kind as those which were seen in puerperal septic fever. These views he exemplified by a history of such an epidemic of infectious fever, occurring in the Rotunda Hospital in August last, and which, in the author's opinion, depended for its origin and infectious character upon an imported case of typhoid fever in a puerperal patient. The outbreak was completely stamped out by closing and thoroughly disinfecting the hospital for a fortnight. The severe symptoms and rapidly fatal course of the epidemic form of metria, differed essentially from the more insidious and less powerful progress of puerperal septicæmia, on the characteristics of which he dwelt at length, emphasising the good prognostic import of a furred, as opposed to a glazed and cracked tongue, during its progress. Diarrhœa, he thought, was in such cases by no means to be considered an unmixed evil. In discussing the treatment of the different forms of metria, he observed that, while all but useless in the epidemic form, it was often of great service in the septicæmic cases. He formulated the following conclusions as founded on his experience.—1. A disease of

highly infectious nature, differing essentially in its symptoms and course from that the result of septic poisoning, and capable of being propagated in the same manner as other zymotic diseases, occurs from time to time among puerperal women. 2. This disease originates from the introduction into the system of a puerperal woman of the infection of some well-known zymotic disease, such as erysipelas, scarlatina, typhus, and probably typhoid fever, the action of the infection being modified by the peculiar state of the system and of the blood which exists in puerperal women, and that it therefore develops in them an apparently totally different disease. 3. The disease thus originating can be stamped out with as great ease, and by the same means as are known to be efficacious in the case of ordinary zymotic diseases. He was satisfied, however, that the majority of cases of so-called puerperal fever are the results of septic poisoning; such form of the disease not being capable of spreading through the air.—Dr. McVEIGH had seen a case in which nervous shock from the sudden news of the Phœnix Park murders had seemed to him to be the exciting cause of puerperal fever.—Dr. POLLOCK had lately been called to see two cases of fatal metria, occurring in the same district, and attended by the same midwife. Both began, soon after labour, as an erysipelatous rash over the gluteal regions; and he subsequently learned that the midwife's daughter was suffering from erysipelas during the time in her own house.—Dr. HENRY KENNEDY had formerly seen many cases in the Rotunda Hospital, in which the sickness had preceded labour, and he had made *post mortem* examinations in many fatal cases. He usually found the inner surface of the uterus in a state of slough, with but slight appearance of peritonitis. The tissues mostly attacked were the cellular tissues, which, commencing in the pelvis and spreading up behind the kidneys, were always in a state of complete slough.—Dr. FRASER recommended that hands, instruments, etc., used about a puerperal woman should be cleansed first in a solution of Condy's fluid, and then in one of oxalic and sulphurous acids.—Dr. KIDD recognised the epidemic and the septicæmic or pyæmic forms of the disease. The former usually began outside hospitals and spread into them. The last epidemic in the Coombe Hospital had followed only after the disease had been everywhere prevalent around them. At the same time, typhus was very prevalent. The cases of epidemic metria were very rapid, very fatal, and commonly showed symptoms of the disease before or during labour. He had recently been consulted about a lady who had contracted this form of puerperal fever before labour, and who had only survived delivery by a little more than twenty-four hours. She exhibited well-marked puerperal symptoms, abdominal pain, tenderness, vomiting, diarrhœa, and fever. Dr. Atthill had succeeded so easily in stamping out the outbreak which he had described, that he (Dr. Kidd) felt some difficulty in thinking that those cases depend on epidemic rather than on local causes. He had always found it very difficult to eradicate a genuine epidemic of metria. During the last Coombe epidemic, that hospital was closed and thoroughly disinfected; yet, on reopening, the epidemic again broke out. Again, the newly admitted labour-patients were transferred to the entirely separate gynæcological hospital, which was fitted up for them, and there fever also appeared, and deaths occurred; nor did re-admission into alternate beds in the freshly disinfected and whitewashed labour-wards put a stop to the epidemic, which died slowly away of itself. This form often occurred concurrently with epidemics of scarlatina and erysipelas; but he could not state the exact relation between them. When a certain epidemic constitution prevailed, all sorts of zymotic diseases flourished. He did not accept Dr. Atthill's view, that these different diseases could result in one another, that, if they sowed typhus, they would reap scarlatina or metria. As in cholera, the first cases of the epidemic were most virulent; after a time, some and then more patients beginning to recover. The majority of septicæmia cases were, he believed, autogenetic.—Dr. MACAN said that, of late, the belief had been gaining ground that this disease arose simply from septic poisoning. The connection between puerperal fever and such other fevers as scarlatina was not proved, and led only to confusion. On the other hand, it had been clearly shown that there existed a close connection between it and erysipelas, amounting almost to proof that it was, as Virchow had said, a kind of internal erysipelas. When puerperal fever occurred in a hospital, it was carried in a variety of ways from patient to patient, and thus the epidemic broke out. The difficulty of then getting rid of the septic poison became very great. The disease was easily carried, and in this way spread. He disbelieved in the miasmatic theory of its spread, and held that autoinfection was very rare compared with altero-infection. The puerperal wounds were closed before the lochia or retained membranes were likely to become fœtid. Treatment of acute septicæmia was almost hopeless, though he employed antiseptic washings of the uterus. Prophylaxis was chiefly to be regarded. Doubtless the capacity for absorbing septic poisoning was greatly influenced by the nervous condition of the women.—Dr. NEVILLE had difficulty in accepting Dr. Atthill's view, that prevalent zymotics might give rise to a peculiarly epidemic form of metria. If typhus or scarlatina gave rise to puerperal fever, he saw no reason why lying-in hospitals should ever be healthy, since the students attending them daily attended also the fever-wards of general hospitals. The general practitioner also attended all sorts of cases, including midwifery; and although it might be so, it had not been proved that his midwifery mortality was, on that account, above the average. Could puerperal fever, itself derived from scarlatina, infect a third person with scarlatina? Such a case had never been recorded. The majority of cases attacked during an outbreak were primiparæ—a fact which could be foretold on the septic theory, but which could not be explained on the modified zymotic one.—Dr. ATTHILL, in reply, said that Dr. Kidd had observed cases in which women had been attacked by the fever before labour. He thought that, in such cases, the fever was caused by the infection of scarlatina, typhus, or erysipelas, specially modified by the woman's physiological condition. He did not say that all these diseases had a common virus, but he did believe that they might all cause an epidemic form of metria. This form of the disease, he did not think, was more frequent in primiparæ than in others. He believed it spread equally through a hospital, as in the example he had given. It was quite distinct from the septicæmic form, which chiefly attacked primiparæ, and of which 75 per cent. of cases were autogenetic.

REVIEWS AND NOTICES.

THE STUDENT'S GUIDE TO DENTAL ANATOMY AND SURGERY By HENRY SEWILL, M.R.C.S. and L.D.S., formerly Dentist to the West London Hospital. Second Edition. London: J. and A. Churchill. 1883.

THIS second edition of Mr. SEWILL'S work shows careful revision, whilst much of it has been re-written and amplified where necessary. The author states that, in its preparation, he has had the advantage of the assistance of Mr. A. Underwood, whose recent labours in elucidation of the phenomena of caries are well known. Seven years have elapsed since the first edition was issued, and the work of those years has been incorporated in this useful little volume. The first chapter describes the anatomy and histology of the teeth, in which the author holds the view respecting Nasmyth's membrane which has been adopted by most authorities, and has lately been confirmed by the researches of Mr. Charles Tomes—viz., that it is a thin layer of cement, modified in structure, and homologous with the thick coronal cement found on the teeth of herbivorous animals. In the second chapter, the development of the teeth, from the early weeks of intra-uterine life until their full formation, is described with sufficient minuteness. Next, the growth of the jaws, and the eruption of the teeth of the first and second dentitions, are recounted; and the inutility of the operation of lancing the gums in infants, prior to the passage of the tooth through the contracted bony orifice of the alveolus, is dwelt upon, whilst it is noticed that it may reasonably be expected to afford relief in cases where the advancing tooth can be distinguished beneath the indurated, tense, and swollen gum. The various treatments that may be adopted in cases of painful eruption of the wisdom-teeth are fully detailed; and the non-eruption of imbedded teeth, as well as the anomalous appearances occasionally made by them, are also noticed.

Next comes a lengthy chapter on abnormally formed teeth, and irregularities of the teeth. Syphilitic and honeycombed teeth; the conditions styled dilaceration and germination; and supernumerary teeth, are described. Irregularities of the teeth are divided into two great classes: those in which teeth occupy abnormal positions in well-formed jaws; and those associated with malformation, either of the alveolar border or of the body of the jaw. In regard to the treatment required for the malposition of teeth, it is remarked that there need be no hesitation in extracting temporary teeth, the removal of which is necessary for the cure of irregularities, as it does not cause (contrary to popular belief) subsequent contraction of the jaw. Irregularities due to malformation of the alveoli, or of the body of the jaws themselves, and their treatment by extraction, by regulating plates, and "actual torsion" of the misplaced teeth, of which latter plan the author is evidently not particularly ena-

moured, are described at length ; whilst the great benefits which may be produced by well-devised apparatus accurately adapted to the end in view, particularly in young persons whose jaws have not ceased to grow, are shown to be comparatively easy of attainment in periods of time not too prolonged.

Caries of the teeth is fully discussed, and is shown to be a process of disintegration commencing invariably at the surface, and proceeding inwards, affecting dentine more rapidly than enamel, and due entirely to external agencies. Its onset is favoured, and progress hastened, by certain structural defects in the enamel and dentine, which are soluble in acids; whilst, in some diseases of the oral mucous membrane and some derangements of the general health, acids, principally malic, butyric, and acetic, the products of chemical change and fermentation, are produced around the teeth, or are eructated in some gastric disorders, in quantities sufficient to dissolve the enamel and dentine. But acids alone do not produce caries, living organisms are also active agents in the process, and these consist of micrococci, bacteria, and the fungus leptothrix buccalis. The general diseases, and conditions of the digestive tract in which caries is most commonly found ; its progress, and the symptoms accompanying it, particularly the pain in various degrees, are all sufficiently noticed. The treatment of caries occupies a large space, commencing with the preventive treatment, under which heading cleanliness — tooth-powders, etc.—various diseases that affect the buccal secretions, and extraction where great crowding of the teeth exists, are mentioned. Then come descriptions of the treatment of incipient caries by filing and polishing, followed by those of the operation of filling decayed teeth, and of the various devices to which the dentist may have to resort during the excavation, drying, and filling, and of the materials used in filling—gold, tinfoil, amalgams, cements, etc.—and of the various instruments employed.

Exposure of the pulp, and the diseases of this portion of the tooth, are naturally considered after the section on caries ; irritation, acute inflammation and gangrene, chronic inflammation and polypus, and the treatment of these conditions, are all fully detailed. In the next section come descriptions of dental periostitis, acute and chronic, alveolar abscess, periostitis and necrosis of the maxillæ, dental exostosis and necrosis, and absorption of alveoli and of roots of permanent teeth, and of the plans of treatment adapted to these various maladies. Diseases of the gums and oral mucous membrane, including ulcers of the tongue and lips, in so far as they are due to the irritation of ragged teeth; abrasion, erosion, and mechanical injuries of the teeth ; salivary calculus and tartar; morbid growths connected with the teeth, including odontomes, cysts of the jaw — simple and dentigerous, epulis, and osseous tumours of the jaw ; and diseases of the antrum, with the treatment suitable to each of these conditions, are described in regular succession.

A small chapter is devoted to the pivoting of teeth ; and another to neuralgia and other affections of the nervous system due to dental diseases ; whilst the final chapter of the book deals with the extraction of teeth, and the casualties that are liable to ensue from the operation. There are seventy-eight illustrations interspersed amongst the letterpress, and serving to elucidate points in the text.

From the above description of this little work, it will be seen that it does not make any reference to the question of false teeth and the modes by which they may be adapted to the mouth in the various cases in which they may be required ; information on these points must be sought in works on mechanical dentistry, with which this book makes no pretence to deal. Nor is the general practitioner likely to require assistance in such matters, which belong particularly to the department of the dentist. On all those points, however, with which the medical practitioner, especially in country districts where dentists are not found, should be conversant, this book supplies the information which is likely to be required ; and does so in a precise and definite manner, without any padding, which is peculiarly valuable to the hard-worked man, who grudges the time that has often to be spent in arriving at the knowledge of which he is in quest. The very moderate price, too, at which the book is published is commendable ; and this second edition will probably be found, on the score of its increased usefulness, to be even more sought after by the medical practitioner and student than was its predecessor. Accurate and precise information, conveyed in few and simple words, and based on the most recent scientific teachings, characterise Mr. Sewill's book. To the *Student's Guide to Dental Anatomy and Surgery* the further praise must be recorded that it does not travel into other points than those which are quite germane to the subject of the title, a principle that all writers of text-books should observe.

A Synoptical Guide to the Study of Obstetrics. By Robert Barnes, M.D., Obstetric Physician and Lecturer on Obstetrics to St. George's Hospital. Smith, Elder, and Co. 1883.

The motive of this work is excellent, and we need hardly say that a teacher and practitioner so philosophical, practical, and experienced has succeeded in setting forth the cardinal points in a terse yet luminous manner. As the author says, the work will prove valuable to the student by serving as a map showing the extent and subdivisions of the territory he has to travel through. It will tell him what to seek in the text-books he may select. It will serve as an aid to his memory, refreshihg his knowledge when preparing for class and other examinations. He may thus at a glance discover the points upon which his knowledge is defective. By interleaving this synopsis, the student may increase its value by the addition of notes taken in class, in reading, and by his own reflections. The scheme of the work is thoroughly scientific. It shows that the true foundation of sound obstetric knowledge is the same as that of general medicine and surgery—namely, physiology in the largest sense. The firm grasp with which the author holds this principle is partly expressed in two aphorisms. The first affirms that "Pregnancy is the great test of bodily soundness;" the second is, "Pathology is physiology working under difficulties;" and the wisdom embodied in these aphorisms will become manifest in proportion as they are accepted as guides in study and clinical observation. The work is avowedly constructed as a help to students; but the most advanced practitioners will find in it new views and suggestions full of scientific interest and capable of clinical application. No living teacher is more honourably identified with improvements in obstetric practice than the author. This synopsis, a model of condensation, will increase the interest with which the *Systematic Handbook on Obstetrics* is expected. The author is engaged, on this work, in conjunction with Dr. Fancourt Barnes and Professor Milnes Marshall, and it is now going through the press.

NOTES ON BOOKS.

On a Form of Loss of Memory, occasionally following Cranial Injuries. By Joseph Bell, Surgeon to the Royal Infirmary, Edinburgh. Oliver and Boyd, Edinburgh. 1883.—This little reprint calls attention to an old phenomenon, which has been remarked before, but the full importance of which, both medically and philosophically, has hardly been appreciated. Mr. Bell, and Mr. Savory, whom he also quotes, have noted a number of cases of severe concussion and cranial injury, in which, apart from all other effects, they have observed that the patient had no record of the events which happened within a limited space of time immediately before the accident. This loss of a small section of memory is quite consistent with perfect power of recalling all more distant facts, and with unimpaired memory and mental power after recovery. Further, it is well known that nothing analogous is found in cases of unconsciousness produced by anæsthetics, in which the patient takes up the thread of memory, with singular exactness, at the very instant at which it was broken. This curious lacuna in memory is worth noting, for it has a decided medical and legal importance. For example, Mr. Bell had a miner suffering from severe cranial fracture, who utterly forgot the Saturday and Sunday preceding the morning of the accident. If the possible obliteration were ignored, everyone would conclude, both for medical and legal purposes, that the poor man was drunk the whole time; but, in fact, Mr. Bell was able to prove that he had been entirely sober. So, again, in a court of law, a learned gentleman of fifty, shaken and stunned by the upset of a coach, would hardly be believed, in a contested case, if he said he did not remember the period of time that led up to the accident, although he argued the metaphysical bearings of the fact with Mr. Bell three days after the event. It is partly to arouse suggestions on the psychological explanation of such facts, that this paper has been reprinted; and they are obviously suggestive. So far, all the cases specially noted seem to be cases of considerable general shock—sometimes with, sometimes without, serious local injury. General structural deterioration is apparently excluded by the subsequent history. The guess is naturally suggested that, as memory implies the revival of a record, and as the power of recall or revival for other parts of the record is not in such instances impaired, the events of a certain space of time before the shock are somehow not recorded. They have, of course, been present to consciousness, each as it arose ; and therefore have, no doubt, effected each its normal

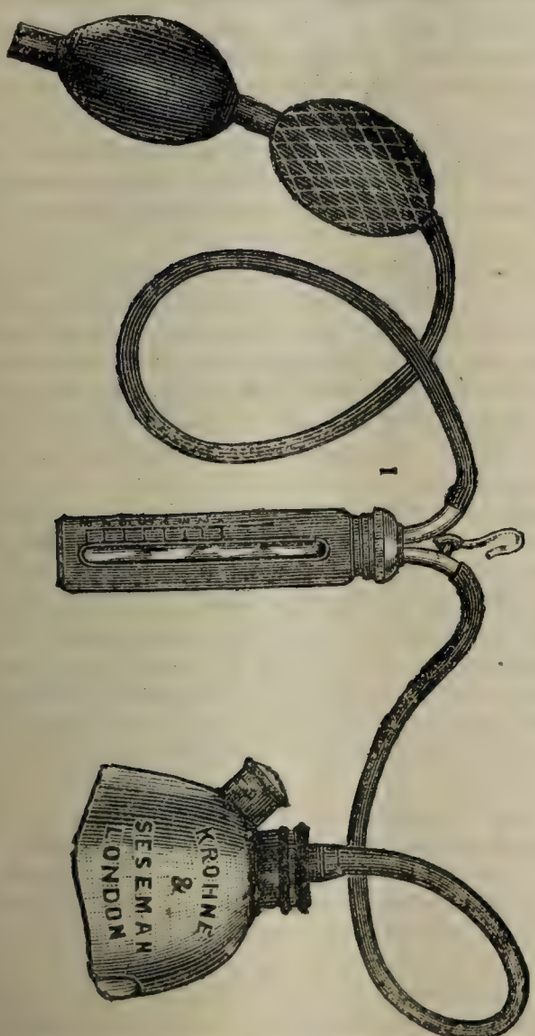
brain impression, accompanied by some kind of molecular change. Mr. Bell suggests the conclusion that, besides this primary molecular change, some further process is needed to make it permanent, as a photographic negative needs a certain amount of exposure. The hint is interesting, but it seems open at present to some objection. The analogy, of course, is crude. The negative requires exposure because the necessary chemical change is gradual and cumulative. But Saturday's facts are not still happening on Monday. It is, perhaps, conceivable that brain-cells, or molecular groups of some kind, do duty in rotation; and that, when a particular chain of them has passed through a focus of sensory or other impression, it ought to rest for a certain period before it may pass again. If so, a severe general shock may, so to speak, wake up the resting cells, and so far injure them as to make them either useless altogether, or at least incapable of normally responding to the recent stimuli, when they reappear. The subject, of course, lends itself to guessing. But it should be remembered that there are many facts which tend to show that, so far from facts once within consciousness being easily obliterated, it is more probable that they are never obliterated at all; but that the slightest of our past experiences might, by the appropriate, be revived after any lapse of time—as in the well-known case of the Breton servant-girl, who spoke excellent Chaldee in the delirium of typhoid, because, years before, she had heard the curé, whom she served, reading aloud in that language.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

JUNKER'S ANÆSTHETIC APPARATUS.

By KROHNE AND SESEMANN, Duke Street, Manchester Square, W.

THE above apparatus, by which an anæsthetic is not only administered economically, but also in regulated dilution, being now much used both in England and elsewhere, we, its original makers, believe that a full description of its construction and proper method of employment may be acceptable to the readers of the JOURNAL. The apparatus consists of three main parts: A bottle holding about two ounces, closed by an air-tight fitting top, through which two tubes are made to pass, a long one, connected with a Richardson's bellows, and a short one, connected by means of India-rubber tubing with a vulcanite face-piece. The bottle for holding the anæsthetic fluid is covered with leather, and the lower half is graduated for eight drachms. The face-piece is provided with an inspiratory and an expiratory valve.



When using the apparatus, from four to six drachms of chloroform or bichloride of methylene should be poured into the bottle according to the expected duration of the operation; it is then suspended from a button-hole in the coat of the administrator. By each compression of the bellows about 4.33 cubic centimètres of fresh air is forced through the long tube into the fluid, and escapes impregnated with the vapour in proportion to the contents of the bottle, through the short tube into the face-piece.

During the use of this apparatus, fresh air impregnated with fresh narcotic vapour is brought into the face-piece with each compression of the bellows, and if the latter be correctly timed, so as to correspond with each inspiration, the whole of the vapour is inhaled, and on each expiration the exhaled air escapes through the valve and at the edge of the face-piece, so that the patient does not inhale his own breath. The patient has not to breathe through this apparatus as is the case with most inhalers. An air-tight fitting face-piece is therefore not required, and the free and natural breathing of the patient is not interfered with. The required amount of narcotic vapour is brought before his nose and mouth by compressing the bellows at each inspiration, and the additional amount of air necessary to fill the lungs enters freely at the inlet valve and at the edge of the face-piece.

The administrator has complete control over the anæsthetic, the quantity of supply being regulated by the quality of pressure of the bellows and amount of fluid in the bottle.

The following table shows the proportion of anæsthetic fluid evaporated by 100 compressions of the bellows = 433.238 cubic inches of air—

Chloroform (Duncan and Flockhart). Temperature, 65° Fahr.

With	8	drachms	in bottle,	120	fluid minims	are	evaporated;	or 1	part in 1,000
,,	7	,,	,,	120	,,	,,	,,	1 ,,	,,
,,	6	,,	,,	110	,,	,,	,,	1 ,,	1,090
,,	5	,,	,,	100	,,	,,	,,	1 ,,	1,200
,,	3	,,	,,	75	,,	,,	,,	1 ,,	1,600
,,	2	,,	,,	50	,,	,,	,,	1 ,,	2,400
,,	1	,,	,,	25	,,	,,	,,	1 ,,	4,800

Bichloride of Methylene. (Robbins and Co.)

With	8	drachms	in bottle,	120	fluid minims	are	evaporated;	or 1	part in 1,000
,,	7	,,	,,	100	,,	,,	,,	1 ,,	1,200
,,	6	,,	,,	80	,,	,,	,,	1 ,,	1,500
,,	5	,,	,,	60	,,	,,	,,	1 ,,	2,000
,,	4	,,	,,	50	,,	,,	,,	1 ,,	2,400
,,	3	,,	,,	40	,,	,,	,,	1 ,,	3,000
,,	2	,,	,,	30	,,	,,	,,	1 ,,	4,000
,,	1	,,	,,	20	,,	,,	,,	1 ,,	6,000

Anhydrous Ether. (Robbins and Co.)

With	6	d ac' ms	'n bottle,	215	fluid minims	are	evaporated;	or 1	part in 558$\frac{4}{8}$
,,	2	,,	,,	95	,,	,,	,,	1 ,,	1,263$\frac{3}{8}$

It will be noticed, that as the quantity of fluid in the bottle decreases, so does the amount of evaporation, thus a proportionately increasing dilution of the vapour with air is going on from the first. Taking into account that the quantity of air supplied by the bellows with each compression is but from $\frac{1}{15}$th to $\frac{1}{18}$th part of air required by an adult for one inspiration, the amount of narcotic vapour used in proportion to the quantity of air which enters the face-piece through its valve and sides, is incredibly small. Experience has proved that this small quantity is sufficient to maintain anæsthesia throughout severe and prolonged operations, the administrator having full control over the supply, and no waste of the anæsthetic, so annoying to the operator and the administrator, can occur.

The merits of this apparatus have long been recognised at the Samaritan Free Hospital. It is especially recommended by Sir Spencer Wells in his work *On Ovarian and Uterine Tumours*, page 277. For sixteen years no other apparatus has been employed at that hospital, for the long operations so frequently performed there.

THE quarantine restrictions imposed upon vessels arriving at Natal from Capetown, in consequence of the recent small-pox epidemic, have now been abolished.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 28th, 1883.

THE MEDICAL COUNCIL, THE PROFESSION, AND THE GOVERNMENT MEDICAL BILL.

THE present aspect of affairs, in connection with Medical Reform, differs absolutely from all that has preceded it. The Government and the profession are now, for the first time, united in an earnest effort to settle the long agitated question; and to improve, in the interest of the public, the education, attainments, and, above all, the examinations of candidates for medical practice, by the establishment of conjoint examining boards, formed by representatives of all the medical authorities existing in each division of the kingdom, under the supervision and control of one central Medical Council as the "supreme medical authority," exercising a general control over everything relating to medical licensing, and taking the necessary steps to insure equality in curriculum and examination among the three divisional examining boards.

The President of the General Medical Council, in his recent opening, but in all probability, valedictory address, reiterated the unfounded, but long since exploded statement, that the conjoint scheme would have been established in 1870, but for the opposition of the Association to the Bill of that date, because it did not provide for the reform of the constitution of the Medical Council by the addition of direct representatives of the profession. It is quite true, that the profession desired representatives in the Council, in the proportion of one-half of the number of the representatives of the universities and corporations, in order to bring its influence to bear and to make its voice heard in the Council of its own creation. It, therefore, exercised pressure on the Government, and petitioned Parliament against the partial and piecemeal legislation which was then attempted, and, happily, with success; for, though the delay in legislation has been long, wearisome, and disheartening, the continued discussion on the subject, the introduction of different Medical Bills, the submission of all the Bills to a Select Committee of the late House of Commons, the evidence taken before that Committee during two sessions of Parliament—above all, the appointment of the Royal Commission by the present Government, and the exhaustive inquiry conducted before it, which resulted in the admirable Report on which the Lord Privy Seal is now basing legislation—have proved that that delay has solved the perplexing problems which beset the vexed question of medical reform.

It would be a boon to the profession and to the public, it would insure the working of the new Medical Act in all its integrity, if the noble Chairman of the Royal Commission, the Earl of Camperdown, who showed such thorough mastery of the subject during the discussion of the Medical Bill when passing through Committee in the House of Lords, could be induced to fill the office of President of the new Medical Council, and with his tact, knowledge, and courtesy, guide the deliberations not merely in the word, but in the spirit of the recommendations of the Commission. No one can now doubt that the withdrawal of the Bill of 1870 was a fortunate event; for, under it, old and effete corporations would have been perpetuated, consecrated, and virtually embalmed; they would have continued to send to the Medical Council delegates directly commissioned to look after their individual interests, while new vigorous and growing bodies like the Victoria University, Manchester, would have remained unrepresented. The correction of both these anomalies has now been provided for. Those medical authorities, whose *raison d'être* is at an end, will die out and make room for fresh institutions. Further, the whole future of the profession would have been handed over to a medical council in which the general body of the profession reposed no confidence, and it would have been monstrous and indeed almost incredible that medical legislation should have taken place in direct opposition to the declared views of the profession interested in the legislation. It is possible that the great power of the Association might alone have sufficed to throw out the Bill; but it must always be borne in mind that the Scottish and Irish authorities were equally arrayed against it, and determined to wreck it, and the late period of the session, at which the Bill was brought down to the Commons, enabled them to take steps which would have arrested it in the absence even of all action on the part of the Association.

Further reference to this point, which is a mere side issue, can no longer serve any useful purpose; suffice it that in the Report of the Royal Commission and in the Bill of the Government based upon it, we have ample compensation for the protracted trials and disappointments we have endured. Let the hatchet between the Association and its adversaries be now buried, and let us devote the remainder of this article to the Government Bill, merely premising the satisfaction we feel that the attempted binary conjunction of the two English Royal Colleges which, if effected, we have always maintained, would have proved inopportune, inefficient, and in working impracticable, has turned out abortive; for the resolution respecting it, which was to have been submitted to the General Medical Council, in accordance with a notice placed on the agenda, was not brought forward. In fact, the work of the Council has been in great measure devoted to the subject of unqualified assistants, one of considerable interest to the profession, and to cases where registered men have been before the law courts for improper professional conduct.

The Lord Privy Seal holds by the report of the Commission which recommends that those who have succeeded in passing the conjoint examination of one of the three divisional boards, shall be at once admitted to the *Medical Register* without affiliation to a medical authority. The Commissioners trusted, however, that medical men would not be content with a bare licence to practice, but that they would continue to belong to one or more of the universities or medical corporations.

To promote this object of the Commissioners, and, we believe, to conciliate the opposition, amongst other bodies, of the Royal College of Surgeons of England, the Lord Privy Seal has decided to insert in the *Medical Register* the names only, without any annexed title, of the medical practitioners who have obtained the certificate of a divisional board. The title of Member of the Royal College of Surgeons will be registered. The College is satisfied with this arrangement, which will, therefore, the whole question of title having been reconsidered, possibly be accepted by the other corporations.

The framing of schemes to secure an uniform curriculum and examination has been materially modified by amendments of the Lord Privy Seal, and is much improved in the Amended Bill. The schemes will still be framed by the divisional boards, but under the distinct supervision and control of the Medical Council. The allocation of the funds has also been altered. They are divided into "Medical Board Funds" and "The Medical Council Fund." The disposal of the Medical Board Funds will rest with each division board. These alterations go far to further the objects sought

the suggestions of our Medical Reform Committee under these heads.

A somewhat obstinate fight as to the relative representation of the different medical authorities on the divisional boards occurred in Committee. The Colleges contend for the majority, on the ground of the superior number of their members; but, as such superiority may be accounted for by the facilities offered to obtain their diplomas, the University degree, though more coveted, is granted to fewer men; the smaller numbers being the result of higher education. In the interests of higher education, the universities should, we think, have a proportionately weighty representation on the divisional boards. This is a battle between universities and corporations, into which the Association need not enter, as it will not affect the conjoint examining system.

In Clause 27 of the Amended Bill, the penal clause is, as was stated in our last issue, considerably strengthened; and, by Clause 69, existing titles are saved.

Considering the present existence of twenty separate diploma-conferring bodies in the United Kingdom, and the conflicting interests which consequently beset medical legislation, the present effort of the Government to place the medical profession in a satisfactory condition is worthy of all praise, and certainly deserves the warm support of the profession.

THE GENERAL MEDICAL COUNCIL.

THE General Medical Council, as instituted under the Medical Act of 1858, commenced what will probably be its last session, on Thursday, April 19th. The session ended on Thursday of this week, having lasted seven days. Of the members there were absent Mr. Teale, in consequence of illness; the Rev. Dr. Haughton, on account of the pressure of duties in Dublin; and Dr. Banks, who formerly represented the Queen's University in Ireland. Sir William Gull, as we have already mentioned, has resigned his seat as one of the Crown nominees for England; and his place has been filled by the appointment of Dr. Matthews Duncan.

The usual statistical reports from the Medical Departments of the Army and Navy, and the returns of passes and rejections at the medical examining boards throughout the kingdom, were received; and, with regard to the latter, instructions were given to the Registrar to compile a table of percentages of rejections at each board for the last four years. A return was also presented, showing the results of education for the dental licence, with and without curriculum. This led to some discussion, in consequence of the large number returned by the Irish College of Surgeons in which a curriculum of education had not been required; and it was proposed that all examinations for the dental licence *sine curriculo* should cease after December 31st. It was explained, however, that the Irish College admitted only persons who were actually on the *Dental Register*, and were desirous of obtaining a licence from one of the corporations. It was generally felt that this desire to improve their position should not be discouraged; and it was decided to allow such persons to continue to present themselves for examination.

A notice of motion had been placed on the agenda paper by Mr. Marshall, to the effect that the Council should declare its approval of the scheme of conjoint examinations recently agreed on by the Royal College of Physicians in London and the Royal College of Surgeons of England. This was, however, withdrawn.

Mr. Macnamara brought forward a proposal that the Council should resolve itself into a Committee for the consideration of the Medical Acts Amendment Bill now before Parliament. A good deal of discussion took place, and ultimately the motion, although not strictly speaking negatived, was not adopted, the numbers voting for and against it being equal. The President gave his vote against the motion, but did not give a casting vote. Afterwards, it was agreed that Wednesday last should be devoted to the discussion of any amendments to the Bill, of which due notice should have been given by members of the Council. Accordingly, several notices of amendment were given in by Mr. Macnamara, Dr. Aquilla Smith, Dr. Quain, Dr. Haldane, and other members. On Wednesday, the whole time of the Council was occupied with other matters, and the discussion of the Bill was deferred to the following day. At the meeting on Thursday, several amendments were proposed; but most of them were withdrawn by tne proposers.

An elaborate report was presented by the Committee which was appointed last year to consider the subject of the employment of unqualified assistants. The Committee had received expressions of opinion from a large number of practitioners throughout the country. These were summarised in a carefully prepared statement by the Chairman of the Committee, Dr. King Chambers, which was appended to the report. An important letter from Dr. William Ogle of the Registrar-General's Office, commenting on a statement that that office failed to prosecute in cases of false certificates of death, formed another appendix. After a careful discussion, the Council adopted, in accordance with the suggestion of the Committee, a series of resolutions condemnatory of the employment of unqualified assistants, except as pupils and dispensers, acting under the direct superintendence and control of the principal.

The Pharmacopœia Committee presented a report, stating that they had made arrangements with Messrs. Redwood, Bentley, and Attfield, to prepare a new edition of the *Pharmacopœia*. Appended to the report was a letter to the committee, from the above-named gentlemen, discussing the changes which, in their opinion, should be made in the work. The report of the committee received the approval of the Council.

A long letter from Dr. A. H. Jacob, alleging that fictitious certificates of attendance at lectures and hospital practice were granted in Dublin, and that persons employed during the day, in various occupations, were allowed to attend at evening lectures at some of the medical schools, was read, and gave rise to some discussion. Several of the members thought it would be a hardship to young men employed as clerks, etc., who might be desirous of entering the medical profession, to deprive them of the opportunity of obtaining medical instruction; and Mr. Macnamara and Mr. Turner especially stated that, within their knowledge, gentlemen who had attended courses of medical instruction under the difficult circumstances of being obliged at the same time to follow other pursuits, had become distinguished. A resolution to define the precise meaning of the term "four years' study" was proposed, but, after discussion, was withdrawn; and it was afterwards agreed that Dr. Jacob's letter should be sent to the Branch Council for Ireland, for inquiry into the allegations contained therein, and for report.

Much of the time of the session was occupied in the investigation of charges made against registered practitioners. The first case, that of Mr. R. A. S. Prosser of Birmingham, who was accused of having spoken in a highly unbecoming manner of Mr. O'Leary, a brother practitioner, had been investigated by the English Branch Council, who, by the advice of the Solicitor to the Council, Mr. Farrer, decided that there were no grounds for dealing with him as "guilty of infamous conduct in a professional respect."

Of the other cases, that of Mr. William Hoar was of a most serious and painful character. Mr. Hoar, who was for many years a well-known and highly respected practitioner at Maidstone, was some time ago the co-respondent in a case of divorce, he having been the medical attendant of the plaintiff's family, and having led the wife astray. He was found guilty, and was sentenced to pay a large sum as damages. The Council, having fully considered the case, and heard Mr. Hoar's solicitor, decided that he had been guilty of infamous conduct, and ordered his name to be removed from the *Medical Register*.

Another case in which a similar decision was arrived at was that of Mr. A. A. Sadgrove, who was accused of having falsely pretended to be in possession of professional qualifications which he did not

possess, with the view of obtaining an appointment under a railway company.

Two registered practitioners, Mr. T. Gray and Mr. W. H. Dry, were accused by the Medical Alliance Association of having habitually signed certificates of death, in cases which had been seen only by their unqualified assistants. In each case there had been a conviction in a police court for one offence of the kind, and no evidence with regard to other cases was produced. The Council passed in each case a resolution, expressing strong disapproval of the conduct of the persons accused, but stating that it was not considered necessary to remove the names from the *Register*. Both Mr. Gray and Mr. Dry have been engaged in practice for a long series of years in their respective localities, and appear to have hitherto borne excellent professional and social characters.

The President having presented to the Council an admirable oil portrait of Sir Benjamin Brodie, who was the first to fill the office of President at the appointment of the Council in 1858, an unanimous vote of thanks was given to him.

The report of the greater part of the proceedings appears in other pages of the JOURNAL. We shall next week give a more complete report of the proceedings of Wednesday, and an account of the discussion with reference to the Medical Acts Amendment Bill.

CONTAGIOUS DISEASES ACTS.

IN the House of Commons, on Friday, April 20th, Mr. Stansfeld moved: "That this House disapproves of the compulsory examination of women under the Contagious Diseases Acts;" and the motion was carried by 182 votes against 110, a majority of 72. This is in direct opposition to the recommendation of the Select Committee of the House, which sat for three sessions, and reported in August last.

The compulsory examination was the point most strongly contested; and the Committee would have gladly dispensed with it, had not they been convinced from the evidence that it was the very essence of the system. They expressed their "opinion that, if abandoned women could be induced by any method to submit themselves to medical supervision and care, it would be unjust and unwise to continue the system of compulsory periodical examination. But while the medical witnesses who support the Acts and understand their administration assert that the process is necessary, the opponents, when asked to suggest any other means by which prostitutes in subjected districts could be induced to submit themselves with regularity and promptness to the supervision and treatment necessary for their health, have failed to do so. If any such means could be devised and brought into operation, your Committee would not hesitate to recommend the abolition of compulsory periodical examination. No such means being shown to exist, they recommend its maintenance."

On Monday last, Lord Hartington announced, in answer to Lord Randolph Churchill, that he was in communication with the First Lord of the Admiralty and the Home Secretary as to the measures to be adopted in order to give effect to the resolution of the House on the previous Friday. The result is not yet announced. Lord Hartington and the Home Secretary are strongly in favour of the Acts, as, also, is Lord Northbrook. Mr. Childers said, in the debate, that the Acts had certainly been effective as "far as the army and juvenile morality were concerned. These results had been brought about by the police system which had been established, and he believed that it would be a great misfortune to withdraw that system." But he dislikes compulsory examination, and votes against the Acts. Mr. Osborne Morgan, the Judge Advocate-General, who ably and impartially took the lead in the examinations on the side of the Acts on the Select Committee, made an able speech in their favour. Which way the rest of the Government may incline, does not appear, but may be easily guessed.

While waiting the issue, however, it may be well to point out what Mr. Stansfeld's resolution means if carried out unconditionally, without supplementary reformatory and curative agencies. Government hospitals, capable of benefiting a large number of patients, will be closed; the system of special police will be abolished; and the unfortunate women will relapse into their old state of disease and degradation. Juvenile prostitution, which has been practically abolished, will reappear in all its horrors. Solicitation will again become rampant in the streets of the protected towns. The hundreds of women who have been reclaimed from prostitution, or dissuaded from entering upon it, by police influence, will receive, from the officials employed of late years under the Acts, no more friendly warnings. Mr. Childers may talk about preserving the special police system, but obviously the police must go, for their occupation will be gone. He affirms that the Acts have, to a great extent, accomplished their object as regards the health of the army; he affirms their beneficial influence on juvenile morality; he gives, in fact, from official knowledge, the strongest evidence in their favour, both from the medical and the moral point of view. It remains to be seen what practical effect will be given to the logical conclusions from these premises.

The opponents might, perhaps, be induced to concede the compulsory detention, if compulsory periodical examination were given up, but the value of the concession would be problematical. Compulsory detention would be certain greatly to deter voluntary application. The worst and most reckless would not apply until they could no longer live by their calling, and until they had already done incalculable mischief. Those who would apply would belong to the better and more hopeful class, who were anxious to escape from their degraded position, and to pass into refuges and homes; and these would require no compulsion to keep them in hospital until cured.

But there is another point in favour of periodical examination, which has never, we think, been sufficiently strongly put. It is the ignorance of the women themselves that they are in a condition to communicate disease. This is constantly the case in the earlier stages of primary syphilitic sores, whether indurated or not; in slight relapses of secondary syphilis, of secondary patches on the os uteri, and the discharges arising therefrom. These together constitute a large proportion of cases; they are most dangerous as regards contagion, and the more so that the women themselves are unconscious of their condition. They can be reached in no other way than by periodical examination.

There is yet another point worthy of notice; women have a great objection to apply to lock hospitals. They infinitely prefer to be treated as out-patients at the general hospitals and dispensaries. The result is a sufficient alleviation of their disease to enable them to practise their calling with a minimum of inconvenience, and for a much longer period. It is affirmed by highly competent medical observers, that there are no greater promoters of venereal disease than the hospitals and dispensaries which treat venereal cases as out-patients on so large a scale, in London, Liverpool, Hull, and such like large towns, and this is what will again happen in the protected towns, if these Acts are repealed.

But the question is not yet done with; 182 votes do not represent two-sevenths of the House of Commons, and probably not more than one-tenth of the opinion of the whole country, while probably almost every possible vote was mustered by the opponents of the Acts. In the subjected towns, where the question is thoroughly understood in all its bearings—public opinion, on the part of the magistracy, municipal authorities, clergy, and population generally, is almost unanimous in their favour.

Sentimental philanthrophy has done many perilous things; but should it succeed now, it will never have done anything more fraught with the gravest danger, than by thus cutting away the chief existing agency by which children may be saved from unspeakable

degradation, by which those scarcely their seniors may be warned in time, and by which those who have already fallen lower may find means of restoration to a position in which they may not fear to look their neighbours in the face. It is of serious omen that these frightful consequences have been faced without adequate provision, and in obedience, apparently, to political expediency and hustings considerations, by a House of Commons which has only asked to be delivered from a noxious agitation and a political pitfall, at the cost of untold suffering to innocent women and children, and by the sacrifice of agencies of which the beneficent moral and physical operation has been fully proven. Such reaction is lamentable enough; but the student of history will console himself with the knowledge that such waves of reactionary sentiment and fanatical retrogression are incidents in all past records of progress, so that the law of social progress has been aptly figured as the law of the pendulum. But never, perhaps, was the inherent weakness of our system of party government more lamentably perceptible than in this sacrifice of the innocents to the ignorant sentimentality of the friends of free trade in disease. They have fallen victims to a schism in the Liberal party; of this, the analysis of the voting is conclusive.

DR. HABERSHON will deliver the Harveian Oration at the College of Physicians this year.

THE Rochester and Chatham Hospital for Infectious Diseases, built at a cost of £7,000, has been opened by the Bishop of Rochester.

SEVERAL children have been poisoned near Carmarthen through eating hemlock leaves, which they gathered from the hedgerows as they were returning from school.

MADAME CELLINI has been enabled to hand over to Mr. Dobbin, the secretary of the Brompton Hospital for Consumption, the sum of £674, as the proceeds of the recent concert given by her at Dudley House.

DR. MATTHEWS DUNCAN has been appointed by the Crown to the seat on the General Medical Council, vacant by the resignation of Sir William Gull.

SELLING diseased meat and horseflesh is becoming common in the market at Warrington, according to the town clerk. Yesterday the magistrates sent a butcher to prison, for two months with hard labour, for having in his possession a calf unfit for human food.

THE Emperor of China has received the permission of the Government of India to send a certain number of youths to India, with a view to their studying European medicine and surgery at the Medical Colleges.

DR. C. THEODORE WILLIAMS is announced to deliver two lectures at the Brompton Hospital on May 2nd and 9th, on the subject of the Relations of the Bacillus Tuberculosus to Phthisis. These lectures will be open to all members of the medical profession.

THE library of the Obstetrical Society has been removed from 91, Regent Street, to 54, Berners Street, W.; where all communications should be addressed. The library will be reopened on May 2nd, 1883. The hours of attendance are: Monday to Friday, 1.30 to 4 P.M. Saturday, 9 to 11 A.M.

THE Crown Prince and Princess of Germany, in accepting a fund collected in Germany on the occasion of their silver wedding, have resolved to devote it to the promotion of the welfare of the people, and especially to the improvement of existing sanitary conditions.

THE Committee of the American Medical Association on the subject of establishing an Association Journal, on March 17th met in Chicago, and nominated Dr. N. S. Davis editor, and Chicago as the place of publication of the journal, which is to be issued weekly, more or less upon the model of the BRITISH MEDICAL JOURNAL.

ANOTHER Birmingham potted meat manufacturer has been sentenced to three months' imprisonment with hard labour, for being found in possession of 150 pieces of diseased horseflesh and pork, which were in course of preparation into potted meat and sausages. The horseflesh was œdematous, and the pork was from an animal which had died of swine fever.

WE have received from the Director of the Criminal Investigation Department the following description of a young foreigner who is in the habit of calling upon medical men, representing himself to be a Russian student, asking for assistance, supposed for the purpose of committing a felony. He gives the name of Gould, aged 27; height, 5 ft. 7 in.; complexion, hair, and moustache (slight) fair; slight build, broad shoulders; dress, dark clothes, black felt hat; respectable appearance. Men of this suspicious type are very familiar to members of the medical profession.

THE progress made in the passage of the Government Medical Bill renders it unlikely that we shall hear more of the combined scheme so injudiciously brought forward by the two colleges. Many of the provisions of the scheme were, as we have already pointed out, most objectionable, and would doubtless have provoked a strong opposition on the part of the teaching bodies, had it not been felt from the first that the Government Bill would render the movement of the colleges futile. We understand that, if the combined scheme had been submitted to the Medical Council, the medical professors and lecturers at the Victoria University would have presented a memorial praying the Council not to sanction it.

A SOCIOLOGICAL Section has been established in connection with the Birmingham Natural History and Microscopical Society, for the study of Mr. Herbert Spencer's system of philosophy. The section originated, *Nature* says, in a wish to unite, for the purpose of mutual help, those who were already students of Mr. Herbert Spencer's system, but were unknown to each other, and to introduce to the synthetic philosophy those already engaged in some special biological study, but as yet unfamiliar with the principles common to all departments of natural history. Mr. Herbert Spencer, who is already an honorary vice-president of the society, has expressed his cordial approval of the work proposed to be done by the section, adding some valuable suggestions.

COLONEL BURNABY.

THE weakness and tendency to syncope, which were causing some anxiety to Colonel Burnaby's attendants are now diminishing. The pneumonic condition is passing off, and the heart's action has increased in strength. Although some time must necessarily elapse before complete recovery, Dr. Collins is satisfied with the progress made during the last few days.

THE NEW ITALIAN OBSTETRICAL SOCIETY.

THE Italian society of obstetrics, gynæcology, and pædiatrics, was formally inaugurated in the Royal University of Rome, on March 19th last. The council is composed of Professor D. Chiara, president; Professor E. Pasquali, vice-president: Professors L. Mangiagalli, and P. Negri, secretaries; Professor Pietro Pelizzari, treasurer. The meeting was largely attended, and the new society is already assured of success. The society will meet in 1884 at Turin, at the time of the Italian Industrial Exhibition.

LECTURES TO NURSES.

DURING the winter session which has just closed, a second series of systematic lectures to nurses, upon nursing the sick and wounded, has been given by some of the honorary officers of the Queen's Hospital, Birmingham, in the theatre of the charity. The lecturers were Dr. Sawyer, Dr. Carter, Mr. Bennett May, Mr. Priestley Smith, and Mr. Jordan Lloyd. The lectures were well attended and much appreciated. At the end of the course, the nurses were examined in the subjects dealt with, and certificates were awarded to successful candidates.

NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

A DINNER was held at Willis's Rooms on Wednesday last week. His Royal Highness the Duke of Albany presided. In pleading the cause of the hospital, His Royal Highness stated that it was a truly national institution; it received patients from all parts of the kingdom. Subscriptions were announced by the secretary to the amount of £1,200. Dr. Sinclair Coghill said the hospital had been one of the first to treat patients on the separate system. Some excellent music, directed by Herr Ganz, contributed to the enjoyment of a pleasant evening.

THE SHEFFIELD GENERAL INFIRMARY.

AT a recent meeting of the weekly board, a letter was read from Mr. Walter Brown, offering, on behalf of Mrs. Overend of Retford, the sum of £10,000 to be invested, and the income spent in sending patients to convalescent hospitals on their discharge from the infirmary. This munificent gift was accepted with sincere thanks to the generous donor. By this noble gift, over one hundred patients will be able to recruit their health annually at the seaside and elsewhere, and the weekly board and the staff will have at their disposal means of restoring health and strength to the suffering poor which will be invaluable.

DEATH UNDER CHLOROFORM.

A LADY, well known in private circles as an accomplished amateur musician, who frequently performed in public for charitable objects, died at Inverness, on the 10th instant, whilst under the influence of chloroform. The anæsthetic was administered in order that three decayed teeth might be painlessly extracted. At the patient's own request, chloroform was administered in the usual manner, and two teeth in the lower jaw were successfully extracted. The last tooth to be removed was an upper molar; in the process of its extraction, the lady showed signs of returning consciousness by lifting up her hands; but she immediately afterwards expired, apparently from syncope. The deceased, on several previous occasions, had had teeth removed whilst under the influence of chloroform.

THE PARKES MUSEUM OF HYGIENE.

HIS Royal Highness the Duke of Albany, K.G., President of the Parkes Museum, has fixed Saturday, May 26th, for the opening of the museum in its new premises, 74A, Margaret Street, Regent Street. This museum is the only permanent collection of sanitary appliances in the country, and contains the only public library devoted to works on hygiene and kindred subjects. The Council, by the outlay of a considerable sum of money, raised principally by subscriptions among its own members, has rendered the new premises well adapted for the purposes of exhibition, and the reading-room is commodious and well lighted. The great object of the museum is to subserve purposes of instruction; and, with this end in view, lectures and demonstrations will be given at frequent intervals, and special facilities will be granted to teachers of hygiene or cognate subjects, who may desire to make use of the collection.

NATIONAL SMOKE ABATEMENT INSTITUTION.

WE have received a copy of the memorandum of association of the above institution, which has been incorporated to carry out the work of the Smoke Abatement Committee. As a result of the labours of that committee during the past three years, it is satisfactory to record that marked progress has been made, both in the scientific knowledge and mechanical means necessary for the abatement of smoke. Towards its further labours in promoting the sanitary and economic objects involved, this association is now incorporated under official authority as one of public utility, and, by its articles, exclusively devoted to such purpose. The seven founders who sign the articles, to meet the requirements of the case, are the Dukes of Westminster and Northumberland; Lord Mount Temple; Sir Frederick Pollock Bart.; The Right Hon. Sir Lyon Playfair, K.C.B.; Sir Hussey Vivian, Bart.; and Mr. Ernest Hart. The offices of the institution are at 44, Berners Street, and the annual subscription is one guinea.

HOSPITAL MANAGERS.

AT the recent annual meeting of the University College Hospital, ther were present, says the *Philanthropist*, excluding reporters, only the chairman, the secretary, and two other gentlemen. The difficulty that consequently arose of passing the various resolutions was soon overcome, for they were submitted *en bloc*, and the entire proceedings of the annual meeting of this great hospital were perfunctorily rushed through within five minutes. It is much to be regretted that the majority of the subscribers consider that their duty ends with subscribing to the funds, and that they should take so little active interest in the affairs of this important and useful institution, wherein last year over 20,000 out and nearly 3,000 in-patient were treated. Our contemporary refrains from chiding, and would rather leave its readers to form their own opinion of a committee who cannot spare time to attend and transact the business, which at least should be important, of the annual meeting of the hospital in which they ought to be, and we suppose they are, interested. It expresses, however, the opinion that the lack of public interest in these gatherings is partly due to the insufficient exertions of secretaries and managers to secure a good attendance, but chiefly to the apathy of the public themselves.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

DR. GARSON will deliver a course of thirteen demonstrations on the comparative anatomy of the integumentary, respiratory, and circulatory systems of the vertebrata in the museum of the College during the ensuing summer session. The course will commence on Tuesday, May 1st, at 4 o'clock P.M., and be continued at the same hour on each succeeding Tuesday, terminating on July 24th. All students and visitors to the museum are invited to attend. The subject will be treated of in the following order:—*Integumentary System*—1. May 1st, Fishes; 2. May 8th, Amphibians and Reptiles; 3. May 15th, Birds; 4. May 22nd, Mammalia. *Respiratory System.*—5. May 29th, Fishes and Amphibians: 6. June 5th, Reptiles and Birds; June 12th, Mammalia. *Circulatory System.*—8. June 19th, Fishes; 9. June 26th, Amphibians; 10. July 3rd, Reptiles (arterial system); 11. July 10th, Reptiles (venous system); 12. July 17th, Birds; July 24th, Mammalia.

PROFESSIONAL ETIQUETTE IN EGYPT.

THE recent appointment of a public analyst on the sanitary board at Cairo has very justly given great umbrage to the medical members of that board, Dr. Grant Bey and Dr. MacDowell. By Article 11 of the Khedival decree of January 3rd, 1881, it is provided that the sanitary board is empowered to grant licences to medical practitioners, chemists, and midwives, without the possession of which licence they cannot be allowed to exercise their profession or vocation. Notwithstanding this regulation, which it appears is still in force, the Egyptian Government has thought fit to appoint the in-

dual in question, who possesses no diploma or license whatever, to e responsible post of public analyst, whose duty it is to make ccurate analyses of everything submitted to him in the interest of ie public health. There can be no two opinions of the correct titude of Dr. Grant Bey and Dr. MacDowell in the matter. Their ourse of conduct is in perfect harmony with professional feeling nd etiquette, and will be approved by the profession at large.

THE CAIRO SANITARY BOARD.

HE *Phare d'Alexandrie* of April 13th has the following article on ie subject of the Sanitary Board at Cairo, to which we have just eferred. The *Phare* states that the Sanitary Board is in a thorough ate of disorganisation. Several of its members no longer attend ie sittings, and consequently things go anyhow. This condition of atters is due to the recent introduction into the Board of a mem- er who is neither a medical man nor a chemist, and whom his col- agues consider as not possessing a single quality necessary for eing present at and taking part in the deliberations of the Board. he *Phare* goes on: "We do not constitute ourselves as judges of ie question; but it is evident that a sanitary board should be com- osed of medical experts, otherwise Figaro's remark would be but oo applicable, "An arithmetician was wanted, and the post was iven to a dancer." This state of affairs has heretofore existed in gypt, but it had been affirmed that it was changed a long time nce. We once more repeat that we heartily sympathise with, and the rofession here will entirely approve of, the worthy and dignified atti- ude in this matter of Dr. Grant Bey and his army medical colleague.

PRIVATE BILL LEGISLATION.

F we may judge from the Report of the Committee of the House f Commons on the Heywood Corporation Bill, the new standing rder is working well which makes it obligatory on Private Bills ommittees to report specially to the House as to the manner in which ey have dealt with the local proposals. The standing order itself as reproduced in the report recently presented to the Parliamentary ills Committee by its Chairman (see page 588), and there are easons for hoping that, through its exercise, much greater uniformity Private Bills legislation will be effected, together with much reater publicity as to the extent of the new powers asked for by ach corporation. We should like, however, to see the recommenda- ions of the Local Government Board upon each Bill, as to the man- er in which they have dealt with the Board's proposals, added to the eport of the Committee, in order that an independent judgment ight be formed as to the wisdom, or otherwise, of the Committee's ecisions. It is also, we think, in the highest degree important, and erely equitable, that citizens and public bodies interested should ave a *locus standi* before the Committee, and be entitled to protest gainst oppressive conditions.

THE MASON SCIENCE COLLEGE.

HE position, progress, and work of the Mason Science College, hich now forms part of the Birmingham Medical School, as re- orded in the annual report, just issued, mark the substantial re- ources and the steady development of the young institution. The umber of students at the close of the session 1881-82 was 462, as ompared with 181 at the close of the previous, which was the first ession of the College. The statement of accounts for the year end- ng September 30th, 1882, shows that the endowment and gifts ogether amount to the munificent sum of £191,145, to which will e added a further considerable sum upon the realisation of the ounder's estate. The deficiency on the year's operations amount to £6,948, of which £6,108 may be considered as a portion of the first utlay in the proper equipment of the College, leaving £840 as the eal deficiency between regular income and expenditure. In future ears this will be partly, if not wholly, met by the added income from fees of the increasing number of students, by the larger rents that will be obtained from various properties as they fall in, and from other sources. The Council view, with regret, the narrow margin that is likely to exist unless the present endowment is supplemented by other gifts. For the advancement of knowledge, whether of professors or students, all modern resources should be attainable, unchecked by fear of insufficient income. During the past year 3,988 new volumes have been added to the library, of which number 3,670 were presented. The total number of volumes now in the library is 12,881, forming a fair collection of works of reference on the practical sciences.

DR. FARR.

DR. LEONE LEVI, writing to the *Times*, says: "A great luminary, who lightened the arduous and recondite paths of statistical science, has just departed from among us. Dr. Farr was a recorder of the common facts of births, deaths, and marriages, but by a wide induction he made those facts impart lessons which almost created the science of sanitation, while they enlarged and established the principles of medical science. We shall mourn his loss at the Statistical Society, of which, for so many years, he was an active and distinguished member. For forty-two years he was a member of its Council, for twelve years its treasurer, and for two years its president. But a larger society will lose him—humanity itself—whose interests he so well served. Dr. Farr was not a dry statistician. His papers were, indeed, replete with facts, rich with mathematical lore, and remarkable for close reasoning, yet the language he used was always characterised by lucidity, simplicity, and common sense. Upwards of twenty papers by his pen will be found in the *Journal of the Statistical Society*, and he contributed also to the *Transactions* of the British Association for the advancement of Science, of the Social Science Association, and of the Royal Society. Quetelet and Farr were the foremost lights at the International Statistical Congress, and his great labours in the preparation of the English Life Tables placed Dr. Farr on a level with our foremost actuaries. Dr. Farr was certainly an ornament to the Civil Service, and, with great justice and truth, Major Graham concluded his last report in 1879 by saying: 'To his scientific researches and reports I attribute any reputation that may have accrued to the General Register Office of England and Wales from the time he accepted office in this department.'" This graceful tribute from one of the most accomplished statisticians cannot fail to be read with great interest, and will be estimated at its true value. There is reason to hope that some steps will be taken to increase, by voluntary subscription, the scanty provision left for Dr. Farr's daughters, who, owing to the failure of an insurance company, are, we deeply regret to learn, left in reduced circumstances.

SIR T. SPENCER WELLS, BART.

THE gracious mark of favour which has been conferred upon Mr. Spencer Wells has long been anticipated, and will certainly be most warmly approved by the universal voice of the profession. The occasions on which the favour of the Crown have been shown by the conferring of dignities and honours on members of our profession, for reasons unconnected with personal service to the Sovereign or connection with the Court, have not been very numerous in the annals of the profession. The terms in which Her Majesty's pleasure has been conveyed to Mr. Wells are in themselves a title of nobility, signifying as they do that the honour of baronetage has been conferred upon him for his distinguished services to the profession to which he belongs and to humanity at large. Nothing could be more gracious or better deserved than this tribute to the signal service which Mr. Spencer Wells has rendered to the women of his own and of future generations. At the recent distinguished gathering at Grosvenor House of a large number of the most eminent representatives of the Profession, over which Mr. Spencer Wells presided with

his customary courtesy and kindness, Dr. Andrew Clark, possibly in anticipation of the coming honour, which had long cast its shadow before, referred to the fact that the eminent station to which Mr. Spencer Wells had attained in the healing art, and the vast services which he had rendered in the saving of life, had been recognised throughout the world, and awaited only that recognition from the Crown which was certainly their due in his own country. This recognition will be gratefully welcomed, not only by his many friends and admirers, but by the whole profession, who hail this act as a crowning mark of favour conferred at the moment when Mr. Wells occupies the highest official position in the Royal College of Surgeons of England, and on stated grounds which officially recognise the claims to such honours of men who have, by their services to society and the devotion of their lives to the relief of humanity, left a mark upon their generation, and sown the seeds of future good. In these times, when the State requires the devotion and the service of its best citizens for such work, and when progress is no longer to be measured by successful wars, Court-service, or statecraft, the honour itself, and the terms in which it has been announced, are alike of good augury. The Crown has for many years now been advised by able, conscientious, and independent thinkers in the distribution of such honours. That they have been somewhat charily awarded is hardly a matter of regret or reproach: they have certainly never been more worthily conferred than in this instance; and it will be the hope of the whole profession that Sir Thomas Spencer Wells may, in the many working years of useful and honoured professional life which must be anticipated for him, continue to enjoy the affection, esteem, and respect which a well spent and most useful career have earned for him, and which his personal qualities of kindness, generosity of character, and active professional sympathy in all worthy objects, have enhanced and confirmed.

SIGNS OF THE TIMES.

FROM the east end and from the west end, the cry of the hospitals is the same: "We need more money, and unless we get more money, we must reduce the number of our beds." The London Hospital has just issued an urgent appeal for a Maintenance Fund. From this it appears that the annual expenditure is £47,000, while the assured income is only £14,300. In 1878, by means of a special effort, a committee raised a Maintenance Fund for five years; but this has now come to an end, and it is necessary to renew the effort. The London Hospital is the largest institution of the kind in the kingdom. It stands in close proximity to the great city warehouses, the docks, and the river; and in the midst of a population which is particularly liable to accidents and injuries. There can be no doubt about the importance of the work it is doing; still the funds are very deficient. At the west end of the metropolis an influential meeting has just been held in aid of St. George's Hospital. The Duke of Westminster lent his spacious rooms in Grosvenor House; the Duke of Cambridge occupied the chair; the venerable Lord Shaftesbury moved the first resolution. There can be no doubt of the importance of the work that is being done; still the funds are very deficient. On the other hand, a meeting of medical men was lately held at Greenwich, under the chairmanship of Dr. Alfred Carpenter, to urge upon the Committee of the Royal Kent Dispensary the importance of introducing a paying, or a provident, system. The Lewisham Self-supporting Dispensary is working well, and there can be no reason why the Royal Kent Dispensary should not be placed upon a somewhat similar basis. The action which is being taken at Greenwich is only the expression of a feeling which is becoming very general throughout the profession, namely, that the charitable element in medical relief has been carried too far, and that what we want now, are measures of self-help. At a recent meeting of the Preston Medico-Ethical Society, it was resolved to call the attention of the Board of Management of the Preston Infirmary to the abuse of the charity, by persons in the receipt of good wages. Though wages have increased forty or fifty per cent. within the present generation, and though the general condition of the working-classes has improved enormously, we are still following the lines which were laid down a century or more ago. It is no wonder, if dispensaries and hospitals alike find it necessary to alter their methods of procedure. Those who can read the signs of the times, have no difficulty in seeing that changes similar to those which are now proposed at the Royal Kent Dispensary must, ere long, be introduced into all the general dispensaries within the metropolitan area, and that the committees of our general hospitals will have to turn their attention to paying wards, and to out-patient departments established on a self-supporting basis.

WORD-DEAFNESS AND SOUL-DEAFNESS.

AT a meeting of the Physiological Society, Berlin, on March 9th, Dr. Du Bois Reymond in the chair, Dr. Wernicke gave a short sketch, reported in *Nature*, of the illness of a patient who fell sick exhibiting all the symptoms of a cerebral tumour except epileptic attacks, and who manifested a disturbance of speech that was characterised by Dr. Wernicke as a "sensorial aphasia," and by others as "word-deafness." A sensorial aphasia consists, according to Dr. Wernicke, in the fact that the patients, though in possession of a large vocabulary, no longer understand the meaning of words that they use these confusedly, and so that their speech is quite muddled; moreover, they do not comprehend what one says to them at all, so that it is impossible to arrive at an understanding with them. The patient in question soon succumbed to an intercurrent disease, and it was possible to make a thorough dissection of the brain, which exhibited a bilateral affection of the cerebral cortex at the first temporal convolution. An accurate dissection of the ear showed that the deafness that had been observed during life was not brought about by any disease of the sound-conducting apparatus, but that it was rather to be regarded as a central deafness conditioned by the disease of the cortex of the first temporo-sphenoidal convolution, in which, as Dr. Wernicke made probable so long as ten years ago, the terminal expansion of the auditory nerve has its seat. Now the local disease of the brain-cortex, and the consequent observed disturbances in hearing and speech, correspond to the manifestations of "soul-deafness" that were experimentally produced by Dr. Munk in animals by extirpation of the auditory sphere (*Hör sphäre*), and, consequently, establish the results of experiments on animals as true for man also. The total deafness of the patient had only set in at a later period towards the end of the disease, when the affection of the brain had passed from the cortex into the deeper structures and had destroyed the acoustic fibres. The physiological import of the above case consists in the clearly proved limitation of the disease to the first temporo-sphenoidal convolution in a case where the clinical phenomena corresponded accurately to those of "soul-deafness."

THE SALE OF NARCOTICS BY DRUGGISTS.

A SAD case, illustrating the evils of counter-practice, and the dangers attending the sale of potent proprietary medicines, is reported from Brighton, where an inquest was recently held on the body of a child that died from the administration of an overdose of morphia. The child, which was healthy, and eighteen months of age, was unwell on Easter Sunday, with the symptoms of a cold. Instead of calling in their ordinary medical attendant, the parents—persons in a respectable position in life—went to a druggist, and asked for a cough mixture for a little boy eighteen months old. A mixture was given containing two and a quarter ounces, and was labelled, "One teaspoonful to be taken three times a day." Each drachm contained the hundred-and-twentieth of a grain of salt of morphia, and one twenty-fourth of a grain of tartarated antimony. There was no poison-label on the bottle, nor was any caution given as to the dan-

erous nature of its contents. A teaspoonful of the mixture was dministered at half-past seven in the evening, and another at idnight. Next morning, at half-past eight, when the parents woke, the child was dead. Dr. Ross, who made a necropsy, found o disease; only such congestion of the viscera as is observed after eath from narcosis. He was of opinion that death had resulted om an overdose of morphia. It was ascertained that each dose dministered was a double dose, the teaspoon used being one which eld, as many modern teaspoons do, two fluid drachms. Further, he mother, after she had given the first dose of the medicine, had dministered a Steedman's powder, which would contain one-twelfth f a grain of opium, to the child, which, in this manner, had taken, ithin a period of four and a half hours, and in three doses, the equiva- nt of one-twenty-fourth of a grain of morphia. The composition of he medicine was verified by Dr. Stevenson, acting for the Home ffice, and by Mr. Jago, for the chemist. The coroner, in charging he jury, said there had been great carelessness in the way the ixture was served over the counter. It behoved chemists and ruggists, in dealing with drugs of this potent description, to be ore careful; and, if they labelled the bottles so many teaspoon- ls, they should tell the people more precisely how much they should ive. The jury returned a verdict that the child died from an over- ose of morphia and antimony, through the injudicious administra- on of various medicines, and added that they were of opinion that hemists, in administering potent drugs, should give more detailed nd clear instructions as to their use. In this, our readers will cor- ially concur. To say the least, to dispense over the counter ghteen large doses of morphia for a child of tender years, with uch indefinite instructions as were here given, without any word f caution, seems to us a matter for grave comment.

SAVING LIFE IN MINES.

A CIRCULAR has just been issued from the Home Office, directing he attention of mine-owners to the advantages of the Fleuss ap- aratus, which is a contrivance for enabling men to live in an respirable atmosphere, as a valuable means for diminishing the ortality resulting from colliery explosions. The circular gives an ccount of the successful employment of this apparatus in rescuing mprisoned men from Killingworth Colliery, and in exploring the orkings of the Seaham Colliery, after they had been closed in con- equence of an exhalation of fire-damp. The Seaham mine was the cene of a terrible explosion on September 8th, 1880, when one of he seams of coal became ignited, and the colliery had to be herme- cally sealed up for about eight months. At the end of that time, hen the stoppings were partially removed, the workings were found o be filled with fire-damp. In order to ascertain if the fire in the ine were extinguished, so that ventilation might be safely re- umed, an exploring party of three men, each furnished with the leuss apparatus and a lamp fed from an oxygen reservoir, safely enetrated the disused workings for a distance of a quarter of a ile, and they successfully repeated and extended explorations on her occasions. In April 1882, one of the shafts of Killingworth olliery fell in and stopped the ventilation of the mine, while a body workmen were below in the workings. The three explorers who ad before been employed at Seaham, aided by the Fleuss appara- us, penetrated the gaseous workings of the mine, and rescued the hole of the imprisoned men, some of whom had already lost con- iousness from the inhalation of narcotic gases. The apparatus to hich the Home Secretary thus strikingly directs attention was riginally invented for the use of divers, as a means of enabling en to remain for considerable periods under water without any mmunication with the air above. Fleuss, however, soon recog- sed the adaptability of his instrument to other uses—such as the equirements of persons exposed to mephitic gases, as in the case miners placed in danger by explosions; or of mine-explorers ideavouring to penetrate gaseous workings, for the rescue of life or other purposes. The apparatus essentially consists of a copper cylinder, capable of holding four cubic feet of oxygen at a pressure of sixteen atmospheres, together with a carbonic acid filter, in the form of a metal box, containing caustic soda packed with tow. A person about to enter an irrespirable atmosphere carries this appli- ance upon his back, like a soldier's knapsack, and it is brought into connection with his mouth and nostrils by means of a tube attached to an air-tight mask for the face. The vitiation of respired air, by the abstraction of oxygen and the substitution of carbonic acid gas, is practically reversed by the ingenious instrument of Fleuss, which withdraws the carbonic acid gas and renews the oxygen as quickly as it is consumed. The breath of the wearer of the apparatus, in- stead of being allowed to go free, is carried by an outlet tube into the reservoir of caustic soda, and there gives up its carbonic acid gas; the remaining nitrogen of the expired air is passed into the oxygen cylinder, where it takes up its proper proportion of oxygen, and is conducted by an inlet tube, ready to be breathed again, to the mask and respiratory passages of the explorer. This instrument will work for a period of from three to four hours. The nitrogen of the original air-supply remains unchanged, and it serves again and again as a vehicle for conveying oxygen to the lungs and carbonic acid gas from the lungs, until the supply of condensed oxygen in the cylinder is exhausted, and until the caustic soda filter can take up no more carbonic acid gas. The apparatus is now recommended to the mining world upon the authority of the Home Secretary. It pro- mises to prove of great value in saving property, as well as in pre- serving life. The circular adds: "Conclusive practical proofs have been furnished of the readiness and efficiency with which the Fleuss apparatus can be applied to the saving of life after coal-mine explo- sions; and illustrations unhappily continue to be afforded, from time to time, by coal-mine disasters, of the great service which this ap- paratus would render, if it were readily available for employment on the occurrence of such accidents. The Secretary of State is anxious that the value of this apparatus should be made known to owners of coal-mines and others interested in coal-mine operations, and that the various colliery districts should participate in the advantages of this important invention. But for this purpose organisation is neces- sary. The system upon which lifeboat stations have been organised and developed with such beneficial results might, it is thought, be applied without difficulty to the creation in mining districts of stations where the Fleuss apparatus should be stored in sufficient numbers, and maintained in readiness for immediate use; and where the instruction of men from the surrounding coal-mines in its use should be systematically carried out. A rescuing party could thus be speedily on the spot after the occurrence of an accident in a particular district in which a station had been esta- blished."

EYESIGHT OF SCHOOL CHILDREN.

A LECTURE on the effect of reading and writing on the eyesight of young children, was recently given at Berne by Professor Pflüger. The lecturer first called attention to the portentous fact that more than one half of 45,000 children lately examined in Germany were found to be suffering from defective vision. In some schools, the proportion of the short-sighted was as high as seventy to eighty per cent., whilst, in the Heidelberg Gymnasium, every lad in the school had bad eyesight. This lamentable state of things arose from insufficiently lighted schoolrooms, bad print, and bad paper, the method of writing in vogue, and ill-contrived desks and forms. The burdening of children with too many lessons, and the conse- quent restriction of their hours of play, is a still more potent cause of defective vision. In order to solve the vexed question of the influence of German caligraphy on the eyes of those who adopt it, the Government of Würtemburg, some time ago, appointed a com- mission, consisting of three schoolmasters and three physicians, to investigate the matter, and make a report. In the opinion of these

gentlemen, the mere writing is least among the causes which unfavourably affect children's eyesight. They found that, while comparatively few children write with their backs bent towards the left, fully eighty per cent. give their back, when writing, a right inclination. The latter position tends to produce a permanent elevation of the right shoulder, and ultimately causes curvature of the spine. In the schools they visited, the commissioners actually found twenty per cent. of the boys, and from thirty to forty per cent. of the girls suffering from more or less pronounced curvature due to this cause. The difference between the two sexes is probably due to the fact that lads, besides being more energetic in play, are more rationally clad than girl scholars. As to position in writing, the distance between the desk and the eyes ought to be about 25 centimètres (nearly 10 inches); yet it was rarely, indeed, that the commissioners met with any children who could keep their eyes at this distance from the paper. Many of them found it necessary to bring their faces within seven centimètres (2.75 inches) of their copy-books. The general conclusion of the commissioners, as of Professor Pflüger, is that of all the evils enumerated, the worst, and those most in need of reform, are the seats and desks at present in use. The professor further remarked that only ten per cent. of the children examined were naturally short-sighted, and that, as among wild races defective vision is almost entirely unknown, the trouble in question is peculiar to modern civilisation and the existing system of teaching. Professor Pflüger expressed the fear that he was like one crying in the wilderness, the prevailing tendency being to lay on the children of this generation still heavier burdens, and to force their minds to the lasting injury of their bodies.

THE CHOICE OF CLOTHES.

MUCH has lately been said and written to show that the demands of fashion should yield to the laws of physiology in matters of dress. Public attention has been prominently and frequently directed to certain well recognised reforms in garments, especially in those of women, which are of indisputable importance. The proposed improvements have mainly had reference to the shape and size of articles of apparel, and have chiefly been designed to prevent certain baneful constrictions and compressions, certain unscientific distributions of weight, and certain impediments to healthy movement and growth, which fashion has favoured, but which are obviously in the truest sense unphysiological; but it must not be forgotten that, in human dress, intelligently adapted to its essential utilities, the materials of garments must be wisely chosen, and that the texture and colour of clothes have as important bearings upon the health and happiness of their wearer as the mere "make" of his apparel. On these points, hygienic science has established certain definite and reliable conclusions. Whatever else may be said about clothes, their primary object is to protect against hurtful variations of cold and heat; all their other uses are either derived from, or are subsidiary to, their essential purpose. If utility strictly rule, it is clear that the material, texture, thickness, and colour of clothes must be governed in accordance with their bearing upon the protecting function of dress, and that these must be specialised in conformity with experience to meet the necessities of different climates, and the requirements of various occupations. With regard to protection against extremes of simple cold, as distinguished from cold winds, wool is much superior, for equal thicknesses, to either cotton or linen. For protection against very extreme cold, besides wool, leather or waterproof clothing is useful. Wool is especially adapted for underclothing; when protection against cold is particularly aimed at, all underclothing should be of this material. Against cold, cotton and linen, for equal thicknesses, are about equal in protective power. For protection against cold winds, leather and India-rubber, according to Dr. Parkes, for equal thicknesses, take first rank; wool the second; cotton and linen taking the lowest places. For protection against extreme of heat, in the form of direct solar rays, the texture of clothes is practically immaterial; protection from this danger depends chiefly, if not entirely, upon colour. White has the greatest protecting power, then grey, yellow, pink, blue, and black. For hot countries, white clothing is the best; next comes dress of a light grey or dust-coloured shade, like the Indian "khakee." In the shade, Dr. Parkes found that the protecting effect of colour against heat is not marked. Here the thickness and the conducting power of the material are the conditions which affect protection. With regard to the absorption of perspiration, the hygroscopic properties of woollen fabrics are well known. The water penetrates into the woollen fibres themselves, and distends them (hygroscopic water), and also insinuates itself between the fibres (water of interposition). In absorbent power for watery fluids, wool is greatly superior to either cotton or linen; it has been found that the hygroscopic absorption of woollen fabrics, as compared with those of cotton and linen, is at least double in proportion to weight and quadruple in proportion to surface. This observation applies to cotton fabrics made of cotton fibres as ordinarily prepared. Cotton fabrics made of fibres so dressed as to become "absorbent," as in those made for surgical dressings, would probably equal, if they did not surpass, woollen materials in hygroscopic affinity. Amongst the subsidiary functions of clothes are the effects of various dress materials upon the absorption of odours, and in protection against malarial emanations. These considerations respectively assume especial importance in some occupations and in some countries. Odours probably mark the diffusion of minute material particles. Their absorption by articles of apparel has been found to depend partly upon colour and partly upon texture. Stark's observations show that the power of absorption of odours by dress fabrics, so far as colour alone is concerned, is in the following order: black, blue, red, green, yellow, white. So far as texture is concerned, the absorption of odours has been found to be in proportion to hygroscopic absorption. Woollen materials take up odours best. With regard to the protective influence of various dress materials against the effects of malarial emanations, the late Dr. Parkes wrote: "It has been supposed that wearing flannel next the skin lessens the risk of malaria. As it is generally supposed that the poison of malaria enters either by the lungs or stomach, it is difficult to see how protection to the skin can prevent its action, except indirectly, by preventing chill in persons who have already suffered from ague; but the very great authority of Andrew Combe, drawn from experience at Rome, is in favour of its having some influence; and it has been used on the west coast of Africa for this purpose, with apparent good results."

SCOTLAND.

EDINBURGH EYE DISPENSARY.

MR. T. F. S. CAVERHILL, M.B., has been appointed Assistant Surgeon to the Edinburgh Eye Dispensary by the trustees and governors of the institution.

LECTURESHIPS IN EDINBURGH UNIVERSITY.

IN the Faculty of Medicine in Edinburgh University there are now two recognised lectureships; viz., that of Mental Diseases, held by Dr. Clouston, Physician-Superintendent of Morningside Asylum; and that of Diseases of the Eye, to which Dr. Argyll Robertson has just been appointed. The latter appointment has, of course, necessitated the resignation by Dr. Argyll Robertson of the lectureship on the same subject in the extramural school—an appointment he has held for many years, with much acceptation to successive generations of students who have attended his course of lectures on a subject which, although of vast importance, is, curiously enough, not one of the compulsory subjects in the curriculum.

THE DEGREE OF LL.D. IN GLASGOW UNIVERSITY.

r the graduation ceremony in Glasgow University, to be held on iday, the honorary degree of LL.D. will be conferred on Wm. irner, M.B.(London), Professor of Anatomy in Edinburgh Uni- rsity; the western university thus reciprocating the honour done e of its own professors by Edinburgh last week. The same degree ll also be conferred on D. Hack Tuke, M.D., Editor of the *urnal of Mental Science;* and on George Fleming, Army Veter- ary Inspector, and President of the Royal College of Veterinary irgeons.

THE RECTORSHIP OF EDINBURGH UNIVERSITY.

HE present Rector of Edinburgh University, Lord Rosebery, having clined to be again nominated for the Rectorship, the Liberal Associa- on of the University after having considered the claims and quali- ations of various eminent men for the office, decided to invite the ght Honourable G. Otto Trevelyan, M.P., to become the candidate the Association. Mr. Trevelyan having been communicated with, sent the following reply to the President of the Association:— It is with great pride and gratification that I hear from you of the nour which has been done to me by the general committee of e University Liberal Association. It is not for me to question eir judgment by selecting me as a candidate, and I can only ex- ess my gratitude in placing myself at their disposal." The nomi- tion, preliminary meetings, and election take place in the month November, usually sufficiently early to prevent the excitement of is contest from interfering seriously with the pre-Christmas por- on of the session.

FIFE AND KINROSS ASYLUM.

R. ARTHUR MITCHELL, Commissioner in Lunacy, in his report to e Board of Lunacy on the Fife and Kinross Asylum, states that ace last visit the number of patients admitted had been unusually rge, a fact probably accounted for, in part at least, by the low rate board charged for pauper lunatics. Had it not been for the eater number of patients admitted, the large number of dis- arges would have resulted in a considerable reduction of the total mber of patients on the register. As it was, an undesirable and necessary increase had thus been prevented. The action of the edical Superintendent (Dr. Turnbull), in accomplishing the board- g of incurable and harmless pauper lunatics, for whose care and eatment the costly appliances of a fully equipped asylum were necessary, could not be too highly commended. It prevented the eless enlargement of the buildings, and at the same time placed e patients in the circumstances most conducive to their happiness. he state of the wards and the condition of the patients were re- rded as highly satisfactory, and the impression left by the inspec- on was very pleasing.

SPRING GRADUATION CEREMONIAL IN EDINBURGH.

N Friday, April 20th, the annual graduation in Arts, Divinity, and cience in Edinburgh University took place in the large Synod Hall the United Presbyterian Church, Castle Terrace (it is to be hoped at the efforts being made to raise funds for a suitable graduation all in the new university buildings will render it unnecessary to go far afield for a suitable meeting-place). The Lord Chancellor of e University (Lord President Inglis) presided, and conferred the egrees. The spring graduation is not of the same interest to the edical profession as the August graduation, when medical graduates re capped; but that of Friday possessed considerable interest from e number of graduates in Science in the department of Public ealth, and from the fact that the degree of LL.D. was conferred on m. Tennant Gairdner, M.D., Professor of Practice of Physic in the niversity of Glasgow, and a distinguished alumnus of the uni- ersity which did him honour on Friday. The degree of D.Sc. in ublic Health was conferred on Archibald Campbell Munro, M.B., B.Sc. The degree of B.Sc. in Public Health was conferred on Wm. Edward Bailey, M.B.; James Crombie, M.B.; Francis W. Grant, M.B.; Wm. Atkinson Harrison, M.B.; Henry Aubrey Husband, M.B.; and Wm. Robert Smith, M.B. The degree of M.D. was conferred on Petrus Jacobus Relief, M.B. and C.M. of 1880; and the degrees of M.B. and C.M. on Wm. Alexander Mackay and Thomas Wood. Professor Williamson, of Owens College, also had the degree of LL.D. conferred on him. The address to the graduates at each ceremonial was, on this occasion, delivered by Professor Masson. A large number of candidates received the degree of M.A.

TREATMENT OF FLOATING KIDNEY BY FIXATION.

WE are informed that Dr. David Newman, of Glasgow, has performed for the first time in this country, the operation of nephroraphy. The operation was performed in the following manner. The kidney was exposed by a vertical incision in the right loin, immediately external to the outer edge of the quadratus lumborum, and extending from the lowermost rib to the crest of the ilium; the capsule of the kidney was opened, and stitched to the edges of the wound; and two cat-gut sutures were passed through the cortex of the kidney, the muscles, fascia, and skin, and secured externally by buttons. The patient suffered from severe symptoms, and was treated for several years without success; but, since the operation, the symptoms have entirely disappeared, and she has now almost recovered from the effects of the operation, which was performed three weeks ago.

HEALTH OF THE PRINCIPAL SCOTTISH TOWNS IN MARCH.

IN the 8 principal towns in Scotland, there were registered during the month of March the deaths of 2,908 individuals, of whom 1,459 were males and 1,449 were females. After making due allowance for proportional increase of population, this number is only 19 under the average for the same month during the preceding ten years. The respective mortality in each town per 1,000 of its population was, in Edinburgh and Aberdeen, 20; in Perth 22; in Paisley 24; in Greenock 26; in Leith 29; in Dundee 30; and in Glasgow 33. Of children under five years of age, the deaths of 1,126 were registered; this was equal to 41.1 per cent. of the entire mortality, and the respective percentage of each town was—in Perth 22, in Aberdeen 30, in Edinburgh and Paisley 34, in Dundee 41, in Glasgow and Greenock 45, and in Leith 46 per cent. Zymotic diseases caused 17.7 per cent of all the deaths; this rate, however, was exceeded in Dundee and Glasgow. Whooping-cough is, as usual, debited with the highest mortality, having caused 7.5 per cent. of the entire mortality, while, in some towns, it was as high as 12.8 per cent. in Dundee, 12.1 per cent in Perth, 9.6 per cent. in Paisley, and 7.6 per cent in Glasgow and Leith. Of 53 deaths due to fever, 15 were returned as typhus, 35 as enteric, and 3 as simple continued fever. Of the deaths from typhus, 6 were in Edinburgh, 2 in Glasgow, 4 in Dundee, 2 in Aberdeen, and 1 in Greenock. Of 83 deaths due to measles, no less than 74 were registered in Glasgow. Diarrhœa caused 37 deaths, scarlet fever 35, diphtheria 32, croup 26, and metria 7 deaths. To cardiac diseases, the large number of 166 deaths was attributed, to apoplexy 62, to paralysis 77, to hydrocephalus 52, and to premature birth debility 77 deaths. Phthisis pulmonalis caused 10.5 per cent. of the entire mortality, while inflammatory affections of the respiratory organs other than those already referred to) contributed 755 deaths, or 26.0 per cent. of the entire mortality. Of 90 deaths due to violent causes, 7 were of suicidal origin. Seven females at the time of their death were over 90 years of age, the oldest of whom, 96 years of age, was, as usual, a widow. As to the meteorological conditions during March, the chief feature was the extraordinary coldness, and this was more remarkable as February and the early portion of April, were warm. The mean temperature in March was actually less than in any of the Registrar-General's registered years, the nearest approach being in 1867, when, curiously

enough, there was also a warm February and warm April. As to details, the mean barometric pressure was greater by 0.140 inch, and its monthly range greater by 0.308 inch; the mean temperature was less by 3.9°, and its daily range greater by 1.6°; the mean humidity was less by 3, the same in number of days less by four, and in depth of inches, less by 0.72 inch, and the wind pressure greater by 0.76 lb. than the average for the same month during the preceding 26 years The least mean temperature, 35.7°, was recorded at Perth, and the greater, 37.1° at Paisley. The least snow or rainfall was at Glasgow, and the greatest at Aberdeen.

IRELAND.

An outbreak of typhoid fever has taken place in Londonderry No. 2 District, which, it is believed, has been disseminated by a contaminated milk-supply.

The late Dr. John Wilkinson, who was connected with the Limerick County Infirmary for many years as visiting surgeon, has left a sum of £1,000, free of legacy duty, to the Medical Benevolent Society of Ireland.

OUTBREAK OF FEVER.

In consequence, as alleged, of some defects in the sanitary arrangements of the National School at Ballykennelly, an outbreak of fever has taken place among the children attending, and also in the neighbourhood of the school. The school has been closed and thoroughly disinfected, while the cases of fever have been removed to the hospital at Youghal.

DEATH OF A MEDICAL PRACTITIONER BY DROWNING.

On last Tuesday, the 24th instant, Dr. T. B. Barton, surgeon to the Donegal Infirmary, lost his life in the river Foyle. The deceased gentleman was bringing home a canoe which he had purchased; but, unfortunately, a gust of wind caught the sail which he had hoisted, and the canoe was overturned. He endeavoured to swim to the shore; but, becoming exhausted by his efforts, he sank, and was drowned.

THE MEDICAL BILL.

The Council of the Dublin Branch have adopted the following resolution with reference to the proposed constitution of the Medical Board for Ireland, and have taken steps to bring the subject under the notice of the members of the House of Lords. The King and Queen's College of Physicians and the Royal College of Surgeons in Ireland are, we understand, equally opposed to any medical authority having an unequal representation on the Board. "That the President and Council of the Dublin Branch of the British Medical Association emphatically and respectfully protest against any of the Irish medical authorities having a greater number of representatives than another on the Medical Board for Ireland—as laid down in Clause 9, Subclause 5, of the Medical Acts Amendment (H. L.) Bill, as amended in Committee—inasmuch as the representatives of different bodies on a Board having the distribution of moneys should be, in the opinion of this Council, equally balanced."

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The election of a Professor of the Theory and Practice of Physic in this College, in the room of Dr. James Little, resigned, will be held on June 2nd. Dr. Arthur Wynne Foot and Dr. John William Moore, both physicians to the Meath Hospital, are announced as candidates for the vacant professorship. Dr. Foot is at present Lecturer on the Practice of Medicine in the Ledwich School of Medicine, and Dr. J. W, Moore is lecturer on the same subject in the Carmichael College of Medicine. Mr. Henry Gray Croly has resigned his seat on the Council of the College, in order to become a candidate at the annual election for the examinerships on Tuesday next. Messrs. Franks, Kilgariff, and Ormsby have also signified their intention of being candidates, in addition to the outgoing members. For the seat on the Council vacated by Mr. Croly's resignation, Mr. William Stoker is a candidate. Mr. Stoker is one of the surgeons to Jervis Street Hospital, and lecturer on surgery in the Ledwich School of Medicine, neither of which institutions is at present represented on the Council of the College.

DUBLIN LADIES' SANITARY ASSOCIATION.

The second annual general meeting of this Association was held last Monday, Sir Robert Kane, F.R.S., presided, and Her Excellency the Countess Spencer honoured the meeting with her presence. The chief aims of the association being to improve the physical condition of the poor, and to dispel the ignorance of the laws of health that exists amongst all classes, its work consists principally in affording means of instruction in sanitary knowledge, and in direct personal efforts among the poor. The report presented to the meeting showed that the association had made considerable progress in the work. Lectures on sanitary subjects have been given; and others on the proper management and feeding of children, etc., have been arranged for, as also evening lectures for artisans. Rooms have been taken in a poor district, which are open once a week for the sale of soap, brushes, cleansing materials, etc., at wholesale prices; and are used also for health lectures, cooking, classes, savings banks, lending library of sanitary pamphlets, published by the Ladies' Sanitary Association; and a sewing class, undertaken by a member of the committee, and prizes are given for clean rooms in certain houses in the districts that are visited by members of the committee. Cases of nuisance are reported by these ladies to the district superintendent, and by them to the proper authorities. Several such cases have been reported and promptly remedied. The committee regret the apathy that has been shown both by the poor and rich in their work. They contend that sanitation is clearly a question for women; and until they recognise their individual responsibility with regard to sanitary reform, statesmen and legislators will labour for it in vain. When they do we shall hear no more of blood poisoning in our great houses, or of such a local outbreak of typhus among the people as occurred in Dublin the other day. Some good unquestionably, has already been effected by the association, and the Committee cannot believe that sanitary work, so invariably successful elsewhere, should fail in Dublin. It is needed by all alike, and all alike of every creed and class can join it. Little interest has been felt in it so far, but the high death-rate of the city proves to clearly that it is needed, and if the details, especially in the district work, seem unimportant, and often are distasteful, they will cease to seem so, if it be remembered that

> "Who sweeps a room as for God's cause,
> Makes that and the action fine."

The Provost of Trinity College moved the adoption of the report which was seconded by Mr. Maurice Brooks, M.P., and carried unanimously. Other resolutions were proposed, and spoken to by the President of the King and Queen's College of Physicians, Dr. Mapother, and other gentlemen.

Vaccination Inquiry.—A committee meeting was held on Thursday, March 29th, in the Council Room, Exeter Hall, Dr. C. R. Drysdale in the chair. A portion of the large correspondence was read. Dr. Cresswell Rich, the Secretary of the Reception Committee for the annual meeting of the British Medical Association, Liverpool, had desired to bring the vaccination inquiry to the knowledge of the profession and the public through discussion at the annual gathering. Dr. C. R. Drysdale stated he would read papers on the subject at the above annual meeting, and that of the Social Science Association. Several important donations of books and pamphlets were received.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1883.

Thursday, April 19th.

DR. ACLAND, President, took the chair at 2 P.M. He announced that he had received letters expressing regret at inability to attend from Mr. Teale, on account of illness, and from the Rev. Dr. Haughton, on account of important duties in Dublin. Dr. Banks was also absent.

President's Address.—The President delivered the following address.

Besides the ordinary duties of the Council, three special subjects demand your attention at this, its thirty-fourth meeting. It is not necessary that any one of these should long detain you. Since it was not desirable to defer their consideration till a later period of the year, I have thought it well to arrange the present meeting so that it might be easily concluded before the summer session begins in the several medical schools.

The three subjects are as follow:

(1.) Alleged or proved misconduct on the part of certain practitioners, which have been found to demand your judgment under Section XXIX of the Medical Act;

(2.) The report of the Committee on Unqualified Assistants;

(3.) The report on Professional Examinations, which you directed last year to be forwarded to the medical schools.

I. The cases of alleged or proved misconduct of practitioners, which have been found to demand your judgment, are, I regret to say, five in number. They are not alike.

The first is the case of Mr. Prosser, M.R.C.S.Eng., L.S.A., against whom the President and Fellows of the King and Queen's College of Physicians in Ireland have made the charge that, should certain facts be proved to be as stated by Mr. O'Leary, L.K.Q.C.P.Ireland (who had been committed for manslaughter on a charge wherein Mr. Prosser had given evidence in June, 1880), then the conduct of Mr. Prosser, socially and professionally, deserves to be termed "infamous." The Branch Council for England, to whom the case was referred on July 6th of last year, acting under Clauses 1 to 5 of Chapter XIV of the By-laws of the Council, have come to the conclusion that there are not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect. The Branch Council will accordingly lay before the Council the evidence of the case, together with the opinion of the solicitor to the Council, and their own resolution thereupon.

The second case is one of a different character, and bears upon a subject of wider significance than that of a charge against an individual. This will hereafter come before you in another shape. It is that of Mr. Thomas Gray, M.R.C.S.Eng. and L.S.A., who, having been charged by the Medical Alliance Association with systematically giving false certificates of the cause of death in cases where he had never seen the deceased persons in their illness, was convicted at the Thames Police Court in the single case of a false certificate as to the death of Minnie Lucy Wadsworth. No further evidence can be obtained than that bearing on this one instance, and the case, therefore, against Mr. Gray rests on this single conviction. The Council will be called upon to decide whether, on that conviction, they will remove the name of Mr. Gray from the *Register*, under Section XXIX of the Medical Act. He has been summoned to appear before you to-morrow.

The third case is that of Mr. Hoar, M.R.C.S., who, having been co-respondent in a suit tried before the Divorce Court, was found guilty of adultery, and damages were assessed at £5,500. The co-respondent was in the relation of family medical attendant to the respondent and her husband. This circumstance separates it from the cases in which no such professional relation existed, and which, therefore, are only amenable to the ordinary civil actions at law. Mr. Hoar has been summoned, under Clause 4, Section XIV, of the By-laws, to appear before the Council to-morrow at 3 o'clock.

Fourthly, Mr. Arthur Augustus Sadgrove has been summoned to appear to-morrow before the Council, on account of a conviction before the Wallingford magistrates, and in respect of an accusation made by the Faculty of Physicians and Surgeons of Glasgow, to the effect that he had claimed diplomas which he was not entitled to use, and in respect of other facts which will be laid before the Council in a report from the Branch Council for England. It will be for the Council to decide whether the facts adduced bring Mr. Sadgrove within the scope of the 29th Section of the Medical Act; and if so, whether the Council will see fit to remove Mr. Sadgrove's name from the *Register*.

The fifth case, that of Mr. Dry, is another which relates to the signing of false death certificates. Mr. Dry has been also summoned to appear.

It has to be here noted, in respect of the judicial duties of the Council, that a practitioner whose name had been erased from the *Register*, under Section XXIX of the Medical Act, has presented a petition by which he seeks restitution to the *Register*. Up to the present time this power has been exercised by the Council in four out of the thirty-seven cases in which names have been removed from the *Register* for criminal offences or professional misconduct. Some doubt was, at your last meeting, expressed as to whether it is within the terms of the Act to restore a name so removed. Counsel's opinion, that the power to restore does exist, will be laid before you. It will be for the Council to consider whether it sees fit on this occasion to exercise this power, as it has done in the before-mentioned four cases.

I have been led thus briefly to sum up these cases, partly because, in a Bill now before Parliament, changes are proposed in the power and in the mode of procedure in respect of the judicial duties of the Council. The changes are, in principle, these two. 1. It is made certain in the Bill that the Council may remove from the *Register* for a fixed period the name of a practitioner, whom it does not consider to deserve the extreme punishment of permanent civil disability, as such; whereas, as I have said, it has been held to be doubtful under the existing Act. 2. A power of appeal is granted against the decision of the Council to the High Court of Justice, in such manner as may be determined by rules of Court.

These changes will, I doubt not, approve themselves to the Council. I mention them here because if, on the contrary, the long experience of the Council should seem to call for any modification in the proposed amendments, in respect of an onerous office of peculiar delicacy imposed on us by Parliament, it would be clearly the duty of the Council to make such conclusion known to the Government for the improvement of the clauses in question.

II. The next business to which your special attention is this year invited, is the report of your committee on Unqualified Assistants, appended to which is a statement of the documentary evidence on which it is mainly based, with a letter from Dr. William Ogle, of the Registrar-General's office.

This subject is closely connected with that of false death certificates, just now alluded to in the case of Gray, It is a many-sided question, affecting largely the health and well-being of the poor throughout the country, and one which has to be handled with great care. That grievous abuse exists cannot be doubted. The case of Mr. Gray, which has been alluded to, is, without any reasonable doubt, only one of many the particulars of which are never known. The statement, which has been prepared by the Chairman of the Unqualified Assistants Committee, teems with evidence as to the relation which the habit of employing unregistered practitioners bears to the safety of the sick, to the education of medical students, and to the habits of a certain number of registered practitioners.

It is easy to see that the three special subjects which come to-day before the Council in the ordinary discharge of its duties, are closely connected. They will hereafter demand dispassionate inquiry and careful consideration with respect to the methods of instruction, and the opportunities afforded in the several schools and hospitals, both in this country and abroad, in training young medical men. Persons well qualified to judge differ much as to the value, for the purpose of learning the practice of the profession, of apprenticeship, of residence with country practitioners, and of employing students in towns, either during their pupilage or after it is ended. In one respect probably all will agree that, when pupils and teachers act with singleness of purpose for the real good of the sick, when the pupils have had a good previous education, and are of exemplary personal character, when the masters and teachers are conscientious in the care they bestow alike on the pupils and on the patients, the best results for all three—teacher, pupil, and sick—may, and habitually do, follow. Anyone acquainted practically with the conscientious labour and benevolence of many teachers and students in the great cities of England, Scotland, and Ireland, knows that

good untold is hourly done, and blessing poured on giver and receiver alike, by sending students among the sick poor. Witness, as examples, the well known lives of Alison and Stokes, both when they were youths and when they were men.

The subject, therefore, of employing "unqualified men" as assistants will have to be fully weighed before pronouncing against carefully directed methods of employing students, on account of the misconduct of some few legally qualified practitioners. On the other hand, the Council will not be deterred from considering such changes in the law as the important letter from Dr. William Ogle seems to suggest.

III. Copies of the report on professional examinations, drawn up by Professor Gairdner, Mr. Stokes, and Mr. Teale, together with the remarks of the bodies visited, and the resolution of the Council thereon, as directed by you, were sent by the Registrar to all the medical authorities and medical schools of the United Kingdom immediately after your last meeting.

Under this third head, I am led to observe that a considerable change of power is proposed in the Bill to which I just now referred, in respect of the teaching in the medical schools. By Clause 21 of the Bill, it will be the duty of the medical boards in the three branches of the kingdom to inquire into the sufficiency of the arrangements for teaching, by inspection or otherwise, in all recognised medical schools. It is impossible to exaggerate the importance of the provision contained in these few words. Those schools only will be recognised which reach the adopted standard of educational requirements; and those which do not reach it will cease to be recognised. It is well known to members of the Council that the opportunities are very different in different institutions, and that, when once a so-called school is established, it may attempt to teach over a range of subjects for which it has not adequate means, and which are better taught elsewhere. Small schools even undertake functions of scientific teaching which are best performed in the universities. They may also profess to have the clinical opportunities which can only belong to hospitals that, either from size or situation, have large choice of varied and typical cases, or, as in Germany, have special relations to the municipalities. I venture to say that a combination of some schools, like the combination of colleges recently adopted in the University of Oxford, might be easily effected, and be of the greatest service. The power of inquiry, distinctly given to the Medical Council by the new Bill, into the plant and method of schools, was held not to exist under the Medical Act of 1858.

The committee appointed last year to inquire into and report upon the deficiency of subjects for anatomical and surgical teaching and examination, has not completed its inquiries.

The subject of the preliminary examinations will be brought before you in a report by a committee appointed for the purpose at the last meeting.

It is not without interest to note here that, in the returns from the Army and the Navy Medical Departments, it appears that, whereas in the year 1864, out of 49 candidates for the navy, only 28 passed and 21 failed, 16 being found deficient in anatomy, 4 in medicine, and 14 in surgery, none who went in for the examination last year were found to be deficient in any subject; and whereas, in the year 1864, out of 151 applicants for places in the medical department of the army, 31 failed, 12 having failed in anatomy, 14 in surgery, and 23 in medicine, in 1882, 60 out of 69 candidates passed so as to qualify.

Before quitting the subject of our educational arrangements, I had intended to have called to your notice some points connected with the conjoint scheme of examination, which, after many difficulties and much discussion, had been elaborated by all the licensing bodies in England; which received your sanction in 1877; and which has never come into operation; and then to have named other and more recent attempts made in the same direction. But circumstances have arisen which make it undesirable thus to occupy you on the present occasion; nor is this to be deplored, since, if the Bill, which is this day to be considered in Committee of the House of Lords, become law, all such agreements will be of no effect, and they will leave leave behind them nothing save the lessons of experience, and therefore of much labour, expended not wholly in vain.

The Pharmacopœia Committee will present a report stating the steps which have been taken in the revision and preparation of a new edition of the *Pharmacopœia*.

IV. The Council will have noticed that allusion has been made more than once to the Medical Bill introduced into Parliament by the Government. Copies of the Bill were forwarded to me for the use of the Council. I therefore beg to be allowed to say a very few words, on presenting it to you, in relation to the progress of legislation in respect of the department of medicine. The disjointed and unsatisfactory state of medical education in the first half of this century had long baffled the endeavours of many honourable men who desired to remedy its defects. After years of discussion the present Council was formed in 1858. At least one great advantage immediately followed. Men who were supposed to represent conflicting interests met together, and after a short time set themselves to the national task of securing a more uniform and better education for all medical students in each branch of the kingdom, of establishing uniformly wise and good examinations, which are the key to modern education, and of diminishing the number of the examining boards in the kingdom. Two Governments carried through the House of Lords Bills which would have completed these and other required improvements. A collateral issue as to the construction of the Council, raised in 1871, obstructed further progress. In the Council, and in the several licensing bodies, any complete combination, and any finality for examination arrangements have been paralysed by this question. For thirteen years, students, teachers, examiners, and institutions have been hindered in the attempts they were making at securing, in one way or another, a sound, permanent, national standard for medical training. Those who have followed the progress of modern biology in all its branches, normal and abnormal, can alone estimate the evil of this suspense. It is quite sufficient to remind you of the names of Brodie, Green, the two Pagets, George Burrows, Thomas Watson, James Arnott, Cæsar Hawkins, Rolleston, the two Woods, Syme, Allen Thomson, Lister, Stokes, William Baly, Sharpey, Parkes, William Lawrence, Teale, Christison, Begbie, Hastings, Rumsey, to recall to your thoughts what a variety of force, what power of goodness, what devotion, what intellect, what public spirit, what self-sacrifice have been during the last twenty-five years thrown within this Council alone into the task of aiming to secure for the next generation, by improved medical education, the welfare of the sick, the health of the nation, the strength of our soldiers and sailors, the progress of natural knowledge, the higher general culture of the medical student, and the social position to be reached by all educated medical practitioners without distinction of place or station. That great improvement has taken place in all these respects, no one who knows our medical students will for a moment question. But, until the settlement of various disputed questions, which Parliament alone can settle, the Council is unable to ensure for either teachers or students the stability of any sound methods of education upon which agreement can be obtained.

It remains for us, as I said last year, until Parliament see fit to relieve us from the labours imposed upon us twenty-five years ago, to continue to labour as faithfully and efficiently as circumstances permit, and, when relieved, to hand over to our successors such work as we have been able to accomplish for the public good, wishing them, with additional powers and the experience of the past, a hearty God speed.

It is possible that this may be the last time that I shall be called upon to address you, except for the most formal business; and, in this case, I would wish my very last words to be the expression of gratitude for kindness accorded to me for twenty-five years from the whole Council, for support during nine years as your President, and to leave a record of strong personal affection to many to whom I have, for so long, owed so much.

Mr. TURNER moved, Mr. MARSHALL seconded, and it was resolved: "That the President's address be entered on the minutes."

Committees.—The following committees were appointed. *Business Committee:* Dr. Fitman (Chairman), Dr. Aquilla Smith, and Dr. Haydane. *Finance Committee:* Dr. Quain (Chairman), Dr. Fitman, Dr. Aquilla Smith, and Dr. Scott Orr.

Results of Examinations.—A table showing the results of professional examinations for qualifications granted in 1882 by the bodies named in Schedule A of the Medical Act, was presented, and was ordered to be entered on the minutes. The following is a summary of the table: [I = First Examination; II = Second Examination; III = Third Examination; P = passed; R = rejected.] The figures after the designation of the degree or diploma denote the number of examinations to be passed before obtaining it.

Royal College of Physicians of London.—Licence (3): I, R 1, P 377; II, R 37, P 23; III, R 23, P 113.

Royal College of Surgeons of England.—Membership (2): I, R 3, P 783; II, R 257, P 403.

Apothecaries' Society of London.—Licence (2): I, R 73, P 134; II, 76, P 161.
University of Oxford.—M.B. (2): I, R 7, P 9; II, R 8, P 8.
University of Cambridge.—M.B. (4): I, R 32, P 68; II, R 23, P ; III, Part 1, R 11, P 29; Part 2, R 1, P 35. M.D. (1): P 5. S. (1): R 1, P 3.
University of Durham.—M.B. (2): I, R 31, P. 32; II, R 7, P. 12. D. (Essay): P 11. M.C. (1): R 7, P 12. M.D. for Practitioners fifteen years' standing (1): R 8, P 10.
University of London.—M.B. (3): I, R 111, P 120; II, R 63, P 62; , R 11, P 41. M.D. (1): R 2, P 28. B.S. (1): R 4, P 11. M.S.): P 2.
Royal College of Physicians of Edinburgh.—Licence (2): I, R 14, 4; II, R 51, P 166.
Royal College of Surgeons of Edinburgh.—Licence (2): I, R 2; P ; II, R 14, P 33.
Faculty of Physicians and Surgeons of Glasgow.—Licence (2): I, 52, P 48; II, R 54, P 67.
Royal Colleges of Physicians and Surgeons of Edinburgh.—Licence Medicine and Surgery (2): I, R 96, P 118; II, R 141, P 180.
Royal College of Physicians of Edinburgh and Faculty of Physians and Surgeons of Glasgow.—Licence in Medicine and Surgery): I, R 14, P 5; II, R 19, P 23.
University of Edinburgh.—M.B.; also M.B. and M.C. (3): I, R 7, P 230; II, R 154, P 202; III, R 39, P 183. M.D. (Thesis): R P 34.
University of Aberdeen.—M.D. (by promotion): P 32. M.B. and C. (3): I, R 31, P 56; II, R 19, P 72; III, R 25, P 55.
University of Glasgow.—M.B. and M.B. (Old, 3): I, R 5, P 5; R 80, P 19; III, R 19, P 8. M.B. and M.C. (New, 4): I, R 96, 112; II, R 141, P 70; III, R 29, P 87; IV, R 9, P 71. M.D. (2): . M.D. (Thesis): R 2, P 15.
University of St. Andrew's.—M.B. and M.C. (3): II, P 2; III, P M.D. (1): R 1, P 8.
King and Queen's College of Physicians in Ireland.—Licence in edicine (2): I, R 3, P 8; II, R 32, P 88. Licence in Midwifery): R 3, P 83.
Royal College of Surgeons in Ireland.—Licence (7): I, R 109, P 1; II, R 40, P 116; Final, R 40, P 116. Licence in Midwifery (1): 7. Fellowship (3): I, P 17; II, P 17; III, P 17.
Apothecaries' Hall of Ireland.—Licence (2): I, R 23, P 40; II, R P 31.
University of Dublin.—M.B. (4): Half M.B. Examination, Anany and Physiology, R 17, P 40; Botany and Materia Medica, R , P 31; Physics and Chemistry, R 16, P 23; II, R 7, P 40. M.C. hesis): P 1. M.D. (Thesis): P 13. B.C. (5): R 10, P 28. L.C.): P 1. L.M. (4): P 2.
Royal University of Ireland.—M.B. (3): III, P 1. M.D. (3): I, 97, P 176; II, R 64, P 124; III, R 48, P 69. M.C. (1): R 43, 66.

The Registrar was directed to prepare a table of percentages of ections, in continuation of that given by him in 1879.

Exceptional Cases.—A table was presented, showing the number exceptional cases that occurred during the year 1882, under ause 20 of the Council's *Recommendations on Education and xamination*, together with a statement of the action taken thereon the several licensing bodies. The Royal College of Physicians London reported 8 cases, admitted to the pass examination for e licence, with degrees of Colonial, Indian, or Foreign Universis, after full course of study required, and satisfactory general ucation. The Royal College of Surgeons of England reported 16 es of exception, in all of which the candidates produced certifies of study at some Indian, Colonial, or Foreign University. In e Faculty of Physicians and Surgeons of Glasgow, exception was owed in the case of a Colonial graduate. In the University of inburgh, there were 4 cases; one had studied three years in Calta and one year in Edinburgh; two others, two years each in lcutta and two years in Edinburgh; and one had studied two rs in Calcutta and three years in the University of Edinburgh. were registered during their period of study in Edinburgh. e Apothecaries' Hall of Ireland reported that three cases had n remitted to the Branch Council for Ireland, and had obtained tificates of registration. The University of Dublin reported that r candidates had been allowed to take the M.B. degree within a rter period than that occupied in the Council's twentieth recomndation. The remaining bodies reported that no exceptional es had occurred. The table was ordered to be received and ered on the minutes.

Returns from the Medical Departments of the Army and Navy.—A return was presented from the Director-General of the Medical Department of the Army, showing the degrees, diplomas, and licences of candidates for commissions who presented themselves for examination on February 19th, 1883; showing the number that did and did not pass. The following is a summary: Total number of candidates, 69; found physically unfit, 1; failed to appear at examination, 6; withdrew during examination, 4; passed for number of vacancies, 15; qualified, but unsuccessful for a place in vacancies, 43. A similar return was presented from the Director-General of the Medical Department of the Navy, respecting candidates who presented themselves on February 19th, 1883. The following is the summary: Total number of candidates, 31; found physically unfit, 2; failed to appear at examination, 2; failed to obtain a place, although qualified, 13; retired, 2; successful, 12.

Dr. PITMAN moved, Mr. MARSHALL seconded, and it was resolved:

"That the returns from the medical departments of the army and navy be received and entered in the minutes, and that the thanks of the Medical Council be returned to the Directors-General for their courtesy in furnishing these returns."

Alleged Professional Misconduct.—A report was presented by the English Branch Council on the case of Mr. Richard A. S. Prosser, of Birmingham, which had been referred to that council last year by the General Council. The report contained, besides a copy of the evidence, a summary by Mr. Farrer, the Solicitor to the Council, and his opinion thereon. He stated that complaint was made by the President and Fellows of the King and Queen's College of Physicians in Ireland that "at an inquest held on the body of Ellen Alley, at the Coroner's Court, Moor Street, Birmingham, on June 10th, 1880, Mr. Prosser swore to having made a *post mortem* examination of the body, and to having examined the kidneys and all the abdominal viscera; and that he also swore that the kidneys were healthy, and gave his opinion that death was caused by the negligence of the medical practitioner who had attended her the day but one before her death; that on this evidence Mr. Edward Hyacinth O'Leary, L.K.Q.C.P.I., was committed for manslaughter by the coroner; that a subsequent *post mortem* examination having been conducted by James MacLachlan, M.D., and Robert Saundby, it was shown that the kidneys had not been disturbed from their place, and that the examination of the other viscera had been most incomplete, and that when this fact was disclosed before the Stipendiary Magistrate's Court, on June 23rd, the prisoner was discharged, and the Grand Jury threw out the Bill at the Warwick Assize." The College also expressed its opinion that, "should the facts be found on inquiry to be as stated, the conduct of Mr. Prosser, socially and professionally, deserves to be termed infamous, and requests the Council forthwith to make due inquiry into the case, with a view to exercising their power, under Section 29 of the Medical Act, as to erasing from the *Register* the name of Mr. Prosser." Mr. Farrer stated that he had carefully considered the case, and had perused the depositions taken before the coroner, also those taken before the magistrates, and was of opinion that the charge against Mr. Prosser was not proved; and that there were not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect.

The following was resolved by the Branch Council on the report:

"That the Branch Council, in accordance with the resolution of the General Council of July 6th, 1882, having obtained the information contained in the preceding statements and considered these statements, and having also heard the opinion of the Solicitor to the Council, resolve that there are not grounds for finding Mr. Prosser guilty of infamous conduct in a professional respect."

It was moved by Dr. PITMAN, seconded by Mr. MARSHALL, and agreed to:

"That the foregoing report be received and entered in the minutes."

Dr. PITMAN moved, and Mr. MARSHALL seconded:

"That the foregoing report be adopted."

Dr. LYONS moved as an amendment, and Dr. AQUILLA SMITH seconded:

"That Mr. Farrer, the Solicitor to the Council, be requested to attend this Council, and be asked to give his reasons for the statement made in the last clause of his report on the case of Mr. Prosser."

The amendment was negatived, whereupon the following amendment was moved by Dr. AQUILLA SMITH, and seconded by Dr. LYONS:

"That the report by the English Branch Council on the case of Mr. Prosser be referred back to that Branch Council, in order to obtain a copy of the report of the *post mortem* examination made by Messrs. MacLachlan and Saundby."

This amendment was negatived. The original motion was then put to the vote and agreed to.

Application for Restoration of a Name to the Register.—A communication was read from a person whose name had been removed from the *Medical Register*, requesting that his name be restored to the *Register*. Strangers having been requested to withdraw, on motion put from the chair, it was resolved: "That the Council do not feel that they would be justified in complying with the application."

Examinations of the College of Preceptors.—Two communications from the College of Preceptors, showing the results of the Preliminary Examinations for medical students and others, held by this College, were submitted to the General Council by the Executive Committee. At the examination in September 1882, the number of candidates who presented themselves for examination was 223. Of the total number examined, 74 (or about one-third) obtained certificates qualifying for registration as medical students, and three passed in "elementary mechanics of solids and fluids," as a separate subject. Of the 146 who failed to obtain qualifying certificates, 18 passed in all the obligatory subjects, but did not obtain the minimum aggregate of marks necessary for a place in the second division of the second class, as required by the Medical Council. Of the remaining 128 rejected candidates, 35 failed in one obligatory subject; 29 failed in two, 20 failed in three, 42 failed in four (and more) obligatory subjects. At the examination in March 1883, the number of candidates examined was 234. Of the total number examined, 81 (rather more than a third) obtained certificates qualifying for registration as medical students. Of the 153 who failed to obtain qualifying certificates—46 failed in one obligatory subject; 23 failed in two, 25 failed in three, 45 failed in four (or more) obligatory subjects; while 14 passed in all the necessary subjects, but did not obtain the minimum total of marks required for a place in the second division of the second class.

Dr. STORRAR moved, Mr. TURNER seconded, and it was resolved:

"That the foregoing communications from the College of Preceptors be received and entered in the minutes, and that the thanks of the Council be accorded to the College of Preceptors for their important information."

Removal of a Qualification from the Register.—The registrar was directed to remove from the *Medical Register* the qualification of member of the Royal of College of Surgeons of England, formerly held by Mr. Bentham P. Morison of Adelaide, South Australia, who had been convicted of an offence which, in the opinion of the Council of the College, rendered him unfit to remain a member. The case, with a similar one, had been brought under the notice of the College and of the Royal College of Physicians of Edinburgh by the South Australian Branch of the British Medical Association.

Friday, April 20th.

Dr. ACLAND, President, took the chair at 2 P.M.

Removal of a Name from the Register.—The Council took into consideration the case of Mr. William Hoar of Maidstone, who had been summoned to answer a charge of infamous conduct in a professional respect. The report on the case, as laid before the Branch Council for England by Mr. Farrer, the Solicitor to the Council, was to the effect that Mr. Hoar, a medical practitioner in Maidstone, and the personal friend and family medical attendant of Mr. F. S. Stenning, availed himself of his position as such medical attendant to create disunion between husband and wife. The mode in which he appeared to have proceeded was this: he told the husband that his wife was too delicate for him to live with her as a husband, and suggested to the wife that her husband did not care about her, inasmuch as he did not live with her as a husband, and, by playing off one thing against another, he managed to alienate the affections of the wife, and to commit adultery with her. On Mr. Stenning finding this out, he told his wife that she must leave the house; and she went away, but, instead of going to her friends, as she said she would, she went away with Mr. Hoar. She was traced from one place to another, and ultimately proceedings were taken by the husband in the Divorce Court against the wife as respondent, and Mr. Hoar as co-respondent; and, at the trial in June 1882, the jury found that the respondent and co-respondent had been guilty of adultery, and assessed the damages against the latter at £5,500. The evidence in support of the charge was laid before the Council. Mr. Gardner Hastings, solicitor, appeared on behalf of Mr. Hoar. Strangers having been requested to withdraw, Mr. Hastings was heard; and, on motion put from the chair, it was resolved:

"1. That William Hoar, M.R.C.S.Eng., L.S.A., is judged, after due inquiry, to have been guilty of infamous conduct in a professional respect.

"2. That, as it has been proved to the satisfaction of the General Medical Council that William Hoar has been guilty of infamous conduct in a professional respect, the Council does, by this order in writing, direct his name to be erased from the *Medical Register*, and gives orders to the Registrar to erase his name accordingly."

Charge against a Registered Practitioner.—The Council next proceeded to investigate the case of Mr. Arthur Augustus Sadgrove of Didcot. The charge against him was thus stated by Mr. Farrer, the Solicitor to the Council.

"It will be seen from the statement of the Faculty of Physicians and Surgeons of Glasgow that the name of this gentleman, who is registered with the above qualification only (Lic. Apoth. Hall, Dublin, 1880), appears in the *Medical Directory* of the year 1881 as 'Licentiate of the Royal College of Physicians of London,' 'Licentiate of the Royal College of Surgeons of Edinburgh,' and 'Licentiate of the Apothecaries' Hall, Dublin,' but that he was not a Licentiate of the Royal College of Physicians of London, nor of the Royal College of Surgeons of Edinburgh, and that the former of those Colleges had instituted a prosecution against him in respect of his assumption of the title of Licentiate of that College, for which offence he was fined on conviction by the Wallingford magistrates. That he had twice appeared before the Board of Examiners of the Faculty for examination, in January 1880 and July 1881, and had in both cases been rejected. That at the period of his first appearance for examination, a diploma of the Faculty, which had been prepared for a licentiate who had passed at a former period, was taken without authority from the repository in a room in the Faculty Hall, and that to this room Mr. Sadgrove (in common with the other candidates examined at that period) had access. That Mr. Sadgrove had exhibited to at least two persons in his neighbourhood a document which, as those persons allege, was stated by him to be a diploma of that Faculty, and that their description of the document, so far as it went, tallied with that of a genuine diploma of the Faculty. In both cases, the exhibition of the document was made in connection with an attempt to obtain or to retain a medical appointment. The fact that the persons to whom the document was exhibited held the positions respectively of clergyman of the parish, and manager of a company for whose *employés* Mr. Sadgrove was acting as surgeon, appeared a sufficient guarantee that they were not likely to be mistaken in regard to what they stated. That the circumstances following on the exhibition of this document to the manager of the company were somewhat remarkable. This gentleman intimated to Mr. Sadgrove his intention to write to the Faculty on the day of his interview with him, with the object of satisfying himself with regard to the genuineness of the document shown to him. A letter was written and posted on that day, addressed to the Faculty of Physicians and Surgeons, Glasgow, inquiring whether Mr. Sadgrove held the licence of the Faculty. This letter never reached the Faculty, nor was it received by any person connected with the Faculty. Nevertheless, a letter, in reply, was in due course received by the manager of the company, having the printed heading 'Faculty of Physicians and Surgeons, Glasgow,' and purporting to be signed by Mr. Duncan, the Secretary of the Faculty, to the effect that Mr. Sadgrove was a licentiate of the Faculty, and duly qualified to practise surgery. That letter was a forgery, and was not written by anyone connected with the business of the Faculty. The paper on which it was written, the heading, the handwriting, and the signature were of a kind foreign to anything known in the office of the Faculty. In view of the above facts, and of others pointing in the same direction, the Council of the Faculty were of opinion that they would be chargeable with a dereliction of duty towards the public and the profession did they shrink, at whatever cost and with whatever result, from instituting a criminal prosecution against Mr. Sadgrove. He was accordingly charged at the instance of the Faculty with forgery and fraud at common law. He was arrested in the office of the Secretary of the Faculty in Glasgow, on presenting himself a third time for examination, and was brought before the Justices of the Peace for the county of Berks at Wallingford, and was committed for trial at the Reading Assizes. He was tried at those Assizes in January 1882. A considerable part of the indictment was thrown out on technical grounds, and the verdict was one of acquittal. The Branch Council for England have investigated the case, and are of opinion that, though Mr. Sadgrove was acquitted of the charge of forgery and fraud, there are other circumstances in his conduct of which the General Medical Council can take cognisance, but in respect of which he is not amenable to a court of law."

The evidence in regard to the charge was given in an append

Mr. Sadgrove attended, and was heard. Strangers having been requested to withdraw, on motion put from the chair, it was resolved:

"That the further consideration, in Mr. Sadgrove's case, of the subjects of the offence for which he had been summoned to appear, be adjourned till Tuesday, April 24th, 1883, at 2 P.M., in order that he may have an opportunity of satisfying the Council as to the two following points: (*a*) As to a letter of date September 10th, 1881, stated to have been written by 'A. Duncan, Secretary to the Faculty of Physicians and Surgeons of Glasgow.' (*b*) As to the allegation that he had falsely claimed to be a Licentiate of the Faculty of Physicians and Surgeons of Glasgow."

Unqualified Assistants.—A Report of the Committee on the employment of unqualified assistants by registered practitioners, together with the documents appended thereto, was ordered to be received and entered in the minutes. (See next page.)

Preliminary Examinations.—A report was presented by the Committee on Preliminary Examinations, appointed in the last session of the Council. They reported that the Registrar had been instructed to send a circular to each of the bodies contained in Section IV of the "List of Examining Bodies whose Examinations fulfil the conditions of the Medical Council as regards Preliminary Education" (excluding therefrom the examinations in Germany and the Circuit of Dorpat), asking for information on the following points with respect to their examinations recognised by the Council: 1. Percentage of highest marks; 2. Percentage of pass marks; 3. Number of candidates at examination referred to; 4. Copies of the examination-papers set. The registrar has diligently carried out his instructions, by not only sending, on July 13th, 1883, a circular letter to all the bodies concerned, but likewise, on October 10th, 1882, a second letter to such of them as had not answered his former one. A list of the bodies from which communications had been received, with their answers to the questions addressed to them, was given as a table prepared by the Registrar. The Committee had carefully revised the list of bodies whose examinations are set forth in Section IV of the Council's Regulations in regard to preliminary education. Most of those bodies who had not sent answers to the Registrar's letters had been recently put on the list after satisfactory inquiry by the Executive Committee; and the Committee recommended that certain examinations should be retained in Section IV. The list comprised the entrance examinations of the Universities of Calcutta, Madras, Bombay (including Latin in each case) and New Zealand; the Preliminary Examinations of Ceylon Medical College (primary class) and the University of Otago; the Matriculation Examinations of the Universities of McGill College (Montreal), Bishop's College (Montreal), Toronto, Trinity College (Toronto), Queen's College (Kingston), Victoria College (Upper Canada), Fredericton (New Brunswick), King's College (Nova Scotia), Halifax (Nova Scotia), Melbourne, Sydney, Adelaide, and the Cape of Good Hope; the Responsions at King's College (Nova Scotia); the Matriculation and Sessional Examinations of Dalhousie College and University (Halifax); the Examination in Department of Letters in the University of California; the Examination for the Degree of Associate of Arts (including Latin and Mathematics) of the Tasmanian Council of Education; the Voluntary Examinations (to include all subjects required) of Christ's College, Canterbury (New Zealand); the Examination for a degree in Arts of the University of the Cape of Good Hope; the English Certificate for Students of two years' standing, and Latin Certificate or "Testamur," of Codrington College, Barbadoes; the Gymnasial Abiturienten Examen, and other corresponding Entrance Examinations to the Universities, in Germany and other Continental countries; and the Examinations of Maturity in the Gymnasia of the Circuit of Dorpat.

Dr. STORRAR moved, Mr. MARSHALL seconded, and it was resolved: "That the Report be adopted."

Report of the Pharmacopœia Committee.—The following Report of the Pharmacopœia Committee was ordered to be received and entered on the minutes.

The Pharmacopœia Committee appointed at their first meeting, on July 8th, 1882, a Subcommittee, with power to take such steps as they thought necessary towards preparing a new edition of the *Pharmacopœia*, and to submit a report to a future meeting of the General Committee. The Subcommittee have reported that they held two meetings since their appointment; and that they have communicated with Professors Redwood, Bentley, and Attfield, as to undertaking the duty of preparing a new edition of the *Pharmacopœia* under the direction of the Committee. These gentlemen have submitted to the Pharmacopœia Committee a report, which, with certain modifications recommended by the Subcommittee, has been approved of, and, as so amended, is appended hereto. The Committee have arranged that the remuneration to Messrs. Redwood, Bentley, and Attfield is to be £800; this sum to include the cost of any experiments requiring to be made, also the correction of the press, and the preparation of an index, the work being carried through the press to the satisfaction of the Committee and the Medical Council.

The Committee, in conclusion, beg to state that it is their intention to apply to the several medical authorities, to the Pharmaceutical and Chemical Societies, and to such persons as may be likely to furnish useful information, with a view of making the work as complete and perfect as possible.

Report by Professors Redwood, Bentley, and Attfield, on the Revision of, and suggested Alterations in, the British Pharmacopœia.

To the Pharmacopœia Committee of the Medical Council:

Gentlemen,—Having received your instructions to proceed with the revision of the *British Pharmacopœia*, we now, in accordance with the suggestions made in our joint letter of November 7th, enter into a more detailed explanation than we previously gave of the changes that seem to be required, and which we submit for your consideration. Assuming that the general arrangement of the matter contained in the *Pharmacopœia* is satisfactory, we have principally directed our attention, in the first place, to the questions of chemical nomenclature and notation, to the mode of representing quantities in describing various processes, and to some other questions which underlie the whole of the descriptive matter of the work; and, secondly, to the substances referred to under the various heads, to the desirability of omitting any of these, or of adding to their number, of altering any of the processes for their production, where such are given, and generally of improving or altering the descriptions by which the articles referred to are specified and defined.

Chemical Nomenclature.—By a slight alteration, principally in the terminal syllables of some of the Latin and English names applied to chemical compounds, these may be rendered more consistent, not only with the views now generally entertained by chemists, but also with the names applied in the *Pharmacopœia* to other chemical substances. Thus, instead of using the names sulphate of potash, nitrate of ammonia, carbonate of lime, etc., it is proposed to substitute those of sulphate of potassium, nitrate of ammonium, carbonate of calcium, etc.; and these names would be respectively Latinised as potassii sulphas, ammonii nitras, calcii carbonas, the abbreviated mode of expressing which, it will be observed, will not differ from that hitherto adopted in medical prescriptions. The substituted names are strictly consistent with those hitherto and still applied to corresponding salts of iron, lead, zinc, etc.; therefore, with regard to these latter, no alteration is required.

Symbolic Notation.—The use of symbolic formulæ in describing chemical compounds has the great advantage of defining their composition more exactly than the mere use of names is usually capable of doing, and, on this account, such formulæ have been freely used in the *Pharmacopœia*. At the time at which the present *Pharmacopœia* was being prepared, a change was taking place from an old to a more modern system of chemical nomenclature, including a change in the values of many of the symbols used to represent chemical elements; and, as it was not then thought desirable at once to discard old names, with their appropriate symbolic formulæ, these were retained, while, at the same time, a concession was made to the more modern views, by representing well defined chemical compounds according to the new as well as the old system of notation. As the former has now become fully established, and as it is proposed to use the more modern nomenclature, we suggest that the old notation should be omitted. We may remark here that, since the publication of the *Pharmacopœia* in 1867, its definitions of the strength and compositions of medicines have acquired additional importance in consequence of their being frequently referred to as authorised standards by which to estimate the quality of substances sold under the names there given. Such reference is sometimes made in the carrying out of modern legislation, and especially of the Sale of Food and Drugs Act, in connection with which some of the symbolic formulæ of the *Pharmacopœia* have been applied in a sense they were not intended to bear, and it will be necessary in such instances to give to the formulæ a more qualified meaning. Thus, for instance, under the head of *Potassæ tartras acida*, the appended symbolic formula was intended merely to represent and define the composition of cream of tartar in a state of chemical purity, in which it is never met with in commerce. The action of the tests subsequently referred to recognises a certain departure from chemical purity, but, as this is indefinite, while the other is precise and absolute, there has been room here for difference of opinion, which it is desirable to avoid.

Method of representing the quantities of ingredients to be used in the preparation of medicines.—If all those engaged in preparing, prescribing, and dispensing medicines were familiar with and accustomed to use any one system of weights and measures, no more simple or better method could be desired for indicating the relative quantities of ingredients to be used in processes than that of specifying the quantities with relation to the recognised standards of such system. Practically, however, it is found that while the intercommunication of the inhabitants of all civilised nations is increasing, and while the importance of medical men and pharmacists of different nations being able readily to perceive the relations in composition and strength of the medicines they respectively use, is strongly urged and generally admitted, there is no system of weights and measures that all are familiar with, and unfortunately, the different systems that are in use, do not readily admit of a simple comparison of their several integers. Even with reference to the national system of this country we find the following statement in the preface to the *Pharmacopœia*: "It must be admitted that the absence in the present system of any denomination of weight between the grain and the avoirdupois ounce of 437.5 grains, and the fact that the ounce is not a simple multiple of the grain, are grave defects; still it has not been thought desirable to make any change in this respect at present, especially as no practical inconvenience appears to be experienced *in preparing* by means of these weights the medicines ordered in the *Pharmacopœia*." And again, it is stated: "The Council are not insensible to the advantages that would result from the adoption of one uniform system of weights and measures, to be used alike for all substances and in all countries, and they observe with satisfaction the efforts which have been made for the realisation of this object; but considering the paramount importance of avoiding errors in preparing and dispens-

ing medicines, they cannot recommend that, in such operations, a system should be adopted which has been as yet but little used, and is to a great extent unknown in this country; and on this account they have not employed the metrical system, even as an alternative, excepting in the processes for volumetric estimations, which are so arranged that the same solutions may be made and used either with British weights and measures or with those of the metrical system." These statements appear to us, in their general bearing, to be applicable now with almost as much force as they possessed at the time at which they were written, and under that impression, and with the view of facilitating and promoting the more general use of metrical weights and measures, which the extension of a scientific education among pharmacists also tends to promote and facilitate, we have suggested and recommend that wherever applicable in the description of processes in the *Pharmacopœia*, proportional parts should be substituted for specific weights and measures. This method has already been adopted in the German and also in the *United States Pharmacopœia*. In Germany its adoption was greatly facilitated by the practice, always pursued in that country, of weighing liquid as well as solid medicines. In the United States, as in this country, it has been usual to measure liquid medicines, but with the exception of a few special preparations, the *United States Pharmacopœia* now orders the proportions of both liquids and solids to be adjusted by weight, and in such cases merely indicates proportional parts. We do not recommend so great a change as this would involve in the *British Pharmacopœia*, but think that, with few exceptions, parts might with advantage be substituted for specified weights and measures, using the term "parts" to represent parts by weight, and "fluid parts" to indicate the volume of the specified number of parts of the same value of water. The Committee have resolved that the present and the proposed methods be both used in the New Edition of the *Pharmacopœia*. It will thus be seen that in describing or interpreting a process by this method, all the proportional numbers applied to that process must refer to one and the same denomination of weight or measure. In our previous communication, we explained that there are measure-glasses in general use, graduated to represent the volumes of various quantities in grains or ounces, or other parts, by weight, of water, by the employment of which much of the difficulty that might be otherwise experienced in applying this method will be removed. In the great majority of cases the quantitative relations of ingredients in the processes is simple, and the application of the new method would be obvious and easy, but there are some processes that would require to be reconstructed, and in a few instances it will be necessary to slightly change the existing proportions of ingredients. There are even a few processes to which, as now given in the *Pharmacopœia*, the method is inapplicable. The only cases of this description, however, are those of the "enemas" and the "inhalations," the formula for each of which is given in the form in which it would be prescribed for use. These might be left as exceptional cases.

We anticipate the following advantages from the adoption of the proposed method.

1. The use of proportional numbers will tend to the simplification of proportions in compounded medicines. 2. The proportions given being equally applicable to either of the two systems of weights and measures, this will gradually lead to the more general use of the metrical system. 3. The processes of the *British Pharmacopœia* will be more intelligible to medical men and pharmacists abroad who are accustomed to use the metrical system exclusively, and that this will gradually lead to the assimilation of medicines bearing the same names as ordered in different pharmacopœias.

In describing medicines under the names officially adopted, we think it desirable to include synonyms as far as possible. We also think that extent of solubility is a character in many substances that should be specified, where it can be given on reliable authority; and we would suggest that where temperature is indicated, it should be expressed according to the Fahrenheit scale, with the corresponding degrees, Centigrade, added within brackets.

Having thus alluded to questions which relate generally to the proposed mode of constructing the descriptive representations of the medicines which it is the special object of the *Pharmacopœia* to define, we proceed to offer a few remarks with reference to the extent to which it appears desirable to omit any, or to add to the number, of the medicines at present described, or to alter any of the processes or verbal descriptions and definitions of the various substances treated of in the *Pharmacopœia*. In doing this we must confine ourselves at present to a slight and general reference to medicines which might be omitted or introduced, reserving our opinions with reference to specific substances until we have had more extended opportunities for investigation, and especially for conferring with your Committee, and receiving suggestions from you as well as from those medical and pharmaceutical authorities which you may think it desirable to consult. We have already expressed the opinion that very few, if any, of the medicines at present described in the *Pharmacopœia* seem to call for exclusion, and that it is not desirable to introduce new remedies that might be proposed on slight or speculative grounds. There are, however, valuable remedies which have been brought into notice since the present edition of the *Pharmacopœia* was published, and which, having become established in medical use, it will no doubt be considered desirable to include among official medicines. There are also preparations intended for special modes of administration, such as solutions for hypodermic injection, to which additions might be made.

With reference to the alteration of processes and of descriptions and definitions of the substances treated of in the *Pharmacopœia*, we may speak in more decided terms, being satisfied that there is room here for improvement, involving much experimental work. The proposed alteration in the mode of representing quantities in the several processes will of itself entail a vast amount of work, not only of calculation and reconstruction, but of preparation of the various products, to ascertain the effects of any slight alteration of proportions that may be made. Similar changes, involving an equally great amount of work, will be required in connection with the chemical processes generally, and for extending and rendering more complete the application of chemical tests.

With reference to the vegetable materia medica, very great advance has been made since the issue of the *Pharmacopœia* in 1867, so that all the articles describing drugs of vegetable origin will require complete revision as regards their botanical sources, synonyms, reference to figures, characters and tests, and many will have to be entirely rewritten. These changes will, however, in no degree interfere with the general character of the work as at present designed, but only make it scientifically accurate, and render the diagnosis and determination of the purity of such drugs a matter of but little difficulty.—We are, yours faithfully, T. REDWOOD, ROBERT BENTLEY, JOHN ATTFIELD, 17, Bloomsbury Square, January 5, 1883.

Removal of Qualifications from the Register.—The Registrar was directed to remove from the *Medical Register* the qualifications of Licentiate and Licentiate in Midwifery of the King and Queen's College of Physicians in Ireland, formerly held by Mr. Robert Gray of Armagh, his name having been removed from the roll of Licentiates of the College.

Portrait of Sir Benjamin Brodie.—The President having presented to the Council a portrait of Sir Benjamin Brodie, the first President, it was moved by Mr. MARSHALL, seconded by Mr. TURNER, and agreed to unanimously:

"That the best thanks of the Council be given to the President for his gift of the portrait of Sir Benjamin Brodie, the first President of the Council."

Qualifications under the Dentists' Act.—A Table showing the results of Professional Examinations held in 1882 for qualifications granted under the Dentists' Act, was ordered to be received and entered on the minutes. The following is a summary:—Royal College of Surgeons of England (licence), with curriculum, rejected 1, passed 21; without curriculum, rejected 1: Royal College of Surgeons of Edinburgh, with curriculum, passed 1; without curriculum, rejected 3, passed 5: Faculty of Physicians and Surgeons of Glasgow, with curriculum, passed 1; without curriculum, rejected 5, passed 3: Royal College of Surgeons in Ireland, without curriculum, rejected 15, passed 45: University of Harvard, with curriculum, rejected 5, passed 3: University of Michigan, with curriculum, rejected 3, passed 32.

Saturday, April 21st, 1883.

Dr. ACLAND, President, took the chair at 1 P.M.

Unqualified Assistants.—The following report of the Committee on the employment of Unqualified Assistants by registered practitioners was read.

One hundred and eighty-eight letters and other communications on the subjects referred to the Committee have been laid before, and circulated amongst, the members of the Committee by the Chairman. An abstract of the most relevant portions of these documents has been prepared by the Chairman in the form of a "Statement" founded on them, which is appended to this Report.

The Committee has held five meetings, in the intervals of which the documents above referred to have been passed round to each of the members.

The Committee has also had the advantage, at one of their meetings, of the personal attendance of Mr. R. H. S. Carpenter, Honorary Secretary to the Medical Alliance Association, who, at considerable inconvenience to himself, gave evidence by word of mouth, accompanied by documentary proofs, of the prevalence in the metropolis of certain practices, to the adoption of which in the provinces the greater part of the writers of the above-named letters bear witness.

From the evidence collected by the Chairman, and from such other information as we have, we find it clearly established as fact that the employment of unqualified assistants on duties which ought only to be devolved on persons legally qualified is an abuse which prevails extensively in England and Wales, and that general practice on a very large scale (as in regard of masses of mining and manufacturing population) is often thus carried on in great part by unqualified persons whom members of the profession engage as assistants, and employ as if they were qualified.

We cannot but believe that, through this abuse of the employment of assistants, much injustice is done to the public, as regards the quality of medical service they are entitled to expect when they apply to a member of the medical profession, and that, again and again, the profession has very serious discredit brought on it through the incompetence of persons who are thus allowed to practise in its name. We do not think it requisite to dwell on particular facts which are stated to us in illustration of those results of the system. We prefer to insist on the consideration that the system must inevitably tend to produce such results, and that, in relation both to the public and to the profession, it is in principle unjustifiable and dishonest.

We take as our principle, that no member of the medical profession can rightly employ anyone who is not a member of the profession to act for him as his deputy or substitute in any function which involves an exercise of professional discretion or skill. We are of opinion that any such substitution (wilfully made) of unprofessional for professional service, in practice conducted for gain, is of the nature of a fraud on the public, and ought, therefore, at least in its grosser forms, to be made subject to legal penalty. We are further of opinion that, where such substitution is habitual,

an only be regarded as systematic wrong practised by the employer with a view to gain; and that such conduct, whether punishable or not punishable as a public offence, ought to be punishable under the laws and by-laws of the profession, as conduct professionally disgraceful.

In submitting our opinions as above, we desire particularly to advert to two classes of cases to which they are not meant to apply. First, as regards certain subordinate functions which are ministerial o professional practice, and do not in themselves require an immediate exercise of professional skill or discretion—such functions as habitually and properly fall within the province of the dispenser, or nurse, or dresser, acting under skilled direction, and such as, when he system of apprenticeship was still in force, used often to be more or less devolved upon the apothecary's or surgeon's apprentice—it is not any part of our intention to suggest that an assistant employed only for uses such as those (with or without clerical work) should be required to be a person with legal qualification to practise. Secondly, we do not in any way propose, and, indeed, would most earnestly deprecate, that measures aimed at the abuse f unqualified assistants should be allowed to interfere unnecessarily with the induction of pupils into professional practice, or to hinder such induction within its proper limits. The principle ought, however, in our opinion, to be clearly understood, that the pupil is not privileged to do any professional act except in the presence and under the immediate guidance of the legally qualified practitioner who is teaching him, or, if acting in the absence of his teacher, is only to perform particular subordinate acts which his teacher has expressly directed and limited, and has satisfied himself hat the pupil is fully competent to perform.

We beg leave to draw the attention of the Council to the representations made in our Chairman's statement, and in Dr. William Ogle's remarks, which follow it, to the effect that in certain instances unqualified persons, practising on their own account, have as their accomplices members of the profession, who, by acting as "covers" for them on occasions when certificates of causes of death, and various other professional certificates, have to be given, shield hese pretended assistants from inconveniences which the law intends to attach to their position. By doing this, they virtually abet n imposition on the public. Though conduct of that sort is not trictly within the terms of the reference made to us by the Council, ve think it sufficiently within the spirit of the reference to require us to express our opinion upon it. We therefore beg to say that, in our judgment, it is misconduct of equal culpability with that which has been more particularly referred to us. As regards the public, and as regards the profession, it is but another form of the same lishonesty; and it seems to us that both forms have to be judged by the same standard of right and wrong. The fundamental intention of the Act which gives legal status and unity to the medical profession of the United Kingdom is, "that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners;" and the man who, as a member of the profession, would frustrate that intention by assisting unqualified persons o pass with the public as qualified, abuses his professional privilege, to the detriment of the profession and the public, and in our opinion deserves to be deprived of his professional status.

Lest we should appear to have taken too severe a view of the class of professional offences to which our Report relates, we beg leave to bring under notice of the Council the judgment which the Legislature pronounces on analogous offences when committed in he profession of the law. The terms in which such offences are dealt with in Section 32 of the Statute 6th and 7th Victoria, cap. 73, which regulates the practice of attorneys and solicitors, are as follows:—"And be it enacted that, if any attorney or solicitor shall wilfully and knowingly act as agent in any action or suit in any court of law or equity, or matter in bankruptcy, for any person not duly qualified to act as an attorney or solicitor as aforesaid, or permit or suffer his name to be anyways made use of in any such action, suit, or matter, upon the account or for the profit of any unqualified person, or send any process to such unqualified person, or do any act thereby to enable such unqualified person to appear, act, or practise in any respect as an attorney or solicitor in any suit at law or in equity, knowing such person not to be duly qualified as aforesaid, and complaint shall be made thereof in a summary way to any of the superior courts wherein such attorney or solicitor has been admitted, and proof made thereof upon oath to the satisfaction of he court that such attorney or solicitor hath wilfully and knowingly offended therein as aforesaid, then and in such case, every such attorney or solicitor so offending shall and may be struck off he roll, and for ever after disabled from practising as an attorney or solicitor; and in that case, and upon such complaint and proof made as aforesaid, it shall and may be lawful to and for the said court to commit such unqualified person so acting or practising as aforesaid to the prison of the said court without bail or mainprize, for any term not exceeding one year."

Before concluding this Report, we think it our duty to state to the Council that, while conducting the inquiry committed to us, we have repeatedly had representations made to us on a point which is of concern to medical education. We find it frequently alleged, as an excuse for the improper employment of unqualified assistants, that the subordinate who is without professional title may often be of more convenience to his employer than a legally qualified assistant would be; that not only his inferiority of social rank carries with it some elements of such convenience, but, still more, that many unqualified assistants are abler for certain of the duties which have to be done than many who have a statutory qualification would be.* Especially it is stated that the freshly licensed men are often unfamiliar with midwifery, and with the routine of dispensing and surgery-attendance. It does not in any degree appear to us that the argument to which we refer is valid, or even pertinent, as an excuse for the offence committed. If the practitioner needed his assistant only for uses which might rightly be fulfilled by a person without legal qualification to practise, clearly he would be under no obligation to prefer the professional licentiate, and might at his discretion engage any unlicensed person whom he found better suited to such uses. But unqualified assistants evidently do not exist in their present number with a view only to legitimate uses; and indeed their existence, as a sort of profession, seems to depend in great part on the fact of their being so largely used for purposes which are not legitimate. It appears to us that, in proportion as this is the case, each unqualified assistant is more or less excluding from employment some junior member of the profession; and that, apart from any question of the pecuniary earnings thus diverted from the qualified to the unqualified practitioner, the abuse tends to deprive junior members of the profession of very valuable opportunities of early experience, and thus to aggravate the very evil which is alleged to be the apology for its existence.

The educational evil, according to the statements which we have received, is, that many freshly licensed men who offer themselves for employment as qualified assistants are strikingly in want of those particular elements of education which an assistantship under favourable auspices would supply, and which formerly, under the system of apprenticeships, used to be acquired as a matter of course in the early stages of the education of all who were destined for general practice. It is not for us, as a committee on the uses and abuses of unqualified assistantships, to enter on the purely educational questions which may be suggested by the statements which we quote; and we confine ourselves to indicating the educational consequence which in our opinion would result from a rule, strictly enforced, that assistants without statutory qualification must not be employed as deputies in professional practice. If that illegitimate use of the unqualified man were stopped, the legitimate use would in many cases not suffice to make it worth while to retain him, and circumstances would often make it indispensable that a qualified assistant should be appointed in his stead. We think it certain that in this way there would by degrees result a greatly diminished demand for unqualified assistants, and a correspondingly increased demand for assistants of the other class; subject, however, to the important condition, that the legally qualified assistant would be expected either to have already learnt, or else at least to show himself very ready to acquire, those accomplishments of a subordinate kind in which he is now said to be frequently deficient. We think it probable that, with the circumstances thus changed, the medical student of the future, if intending to follow general practice, would commonly not consider his course of study complete unless he had devoted at least some two or three months to learning, as a pupil, the ordinary routine of an unqualified assistant's duties, as formerly learnt by the apothecary's apprentice;

* As regards the comparative efficiency of qualified and unqualified assistants, we should, of course, expect that the freshly licensed qualified assistant would, in certain respects, compare disadvantageously with the person who had made "unqualified assistantship" his profession, and had had some years of experience in it; but we presume that the respects in which the legally qualified person might fail to show himself the superior would not be those in which professional skill and discretion are required (for in those respects the unqualified assistant could not, except by gross abuse, have acquired the experience on which to found superiority); and it evidently would not be admissible that, for any greater efficiency which he may have as a dispenser or surgery-assistant, he should be deemed a proper substitute for his employer in the responsibilities which are distinctively professional.

and that, for the purpose in question, general practitioners would very often be asked to receive as pupils. for some such limited time, students who might well desire to utilise those opportunities of learning which in former times attached to the system of apprenticeships.

In conclusion, we submit to the Council the following recommendations:

1. That the Council ask for legislation to the effect that any registered practitioner, practising for gain, who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act, to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person shall be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner.

2. That communications be entered into by the Council with the Registrar-General with the view of procuring such amendments of the Registration Act as will diminish the present frequent evasions of the Registration Act in the certification of causes of death.

3. That the Council formally resolve that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purpose of any law or lawful contract, will, if brought before the Council, be regarded by the Council as charges of infamous conduct under the Medical Act.

Appended to the report was an elaborate statement drawn up by the Chairman of the Committee, Dr. T. K. Chambers, founded on the evidence laid before the Committee. It embraced the following topics: (1) Rise and Progress of the system of employing Assistants; (2) Characteristics of Unqualified Assistants; (3) Uses of Unqualified Assistants; (4) Abuses of Unqualified Assistants; (*a*) Unqualified Assistants are made agents in Dishonourable Pecuniary Dealings; (*b*) Unqualified Assistants are left in Sole Charge of Patients; (*c*) Encouragement is given to the issue of False Certificates and to Forgery; (*d*) The Employment of Unqualified Assistants lowers the Character of the Profession; (*e*) The Employment of Unqualified Assistants is an impediment to Systematic Education; (5) General Remarks. Another appendix was in the form of a letter from Dr. William Ogle, of the Registrar-General's Office, commenting on a remark in the Chairman's statement, as to the apparent unwillingness of the Registrar's department to prosecute in the case of false death-certificates. Dr. Ogle's letter seemed to exonerate the department to a great extent.

The Council resolved itself into a Committee of the whole Council for the consideration of the Report.

Dr. CHAMBERS moved the adoption of the first recommendation appended to the Report. The Committee had found that unqualified assistants might be divided into four classes. 1. The first class comprised students *in statu pupillari*, acting under the superintendence of a medical practitioner. The assistant of this class generally lived in the house, attended to the surgery, and attended to patients under the direct superintendence of the master; he received no salary, but often paid the master, and received instruction. 2. Closely allied to this class, was the unqualified assistant with a salary, who resided at the house of the principal, and drew teeth, attended cases of midwifery, and did dispensing and dressing; he assisted his principal by enabling him to give his attention to the more serious cases, but was bound to report on all cases seen by him. 3. There was the non-resident unqualified assistant, who took charge of cases coming to the dispensary, and only called in his master to the serious cases. He carried on the practice on his own responsibility. Here a strong line of demarcation was drawn; the assistant of this class kept the cases to himself, and only called in the master as a sort of consultant. This assistant received a salary. 4. In this class, the assistant received all the money from the patients, and only called the master in as a cover to his practice. Here the ordinary relations of master and servant seemed quite changed. The Committee had not been able to find any abuses as regards the class of pupils. They had had their attention directed by many correspondents to the question of education. It was said that legally qualified assistants were often not sufficiently educated in matters of general practice. This question, however, was too wide to be considered at present. The resolution did not propose to interfere altogether with qualified assistants; it drew a line at the delegation of professional duties to them, and did not interfere with the proper teaching of pupils.

Mr. SIMON seconded the motion.

Mr. COLLINS had had something to do with assistants and apprentices. The resolution seemed to be very general and stringent. If a practitioner took an apprentice, it would bring him under very severe censure if he sent his pupil to attend a case of fever or measles. As regarded paid unqualified assistants, it would be unjust to many of these if the resolution were carried into effect at once.

Mr. SIMON said it was not desired to stop the legitimate employment of pupils in the manner mentioned by Mr. Collins; but it was necessary to draw a line somewhere, and it seemed that this should be where the exercise of professional discretion and the employment of medical skill came into action. He would protest strongly against any practitioner being allowed to entrust a case of fever entirely to an unqualified assistant.

Dr. AQUILLA SMITH said that the subject had been considered very carefully by the Committee. The general practitioners had themselves created the class of unqualified assistants which was so objectionable. It was not desired to interfere with the legitimate employment of pupils; but the main point was, that the resolution threw blame on practitioners who delegated professional duties to their unqualified assistants.

Dr. PITMAN asked whether the Society of Apothecaries was not in the habit of granting certificates to assistants.

Mr. BRADFORD said that a special clause in the Apothecaries' Act of 1815 required the Society to examine young men as to their qualifications to act as assistants. The examination was in pharmacy and chemistry, and was intended for compounding and dispensing assistants. No doubt these had a legal status, so far as their examination went.

Mr. MACNAMARA said that the proposal was extremely stringent; but there could be no doubt that all would be anxious to put an end to the trade in unqualified assistants, which inflicted much misery on the sick poor. There was surely, however, no intention of preventing a medical man from sending his apprentice to look after a case of abscess or of fever, under his superintendence. Every surgeon in practice was often obliged to send a pupil to attend to patients; and if, for example, an artery suddenly bled, he would be at hand to seize it and arrest the bleeding. The employment of unqualified assistants in the more objectionable form was unknown in Ireland.

Mr. TURNER complimented the Committee on the great care they had bestowed on the subject. He agreed, however, with Mr. Macnamara and Mr. Collins that the motion was not quite satisfactory it would require more explanation and amendment. As regarded the special provision, there were two classes of assistants which came under it; those who went to the principal to be taught, and those who went to do work without receiving instruction. This distinction was not sufficiently brought out. Should not these two classes be placed on a separate footing? He also questioned whether, in the first part of the motion, the exigencies of practice among the poor were sufficiently regarded. In some cases, the employment of unqualified assistants enabled better aid to be given to the sick poor. He had been struck with the evidence given by "medical herbalist" before the Royal Commission on the Medical Act. He did not know previously that there was such a systematic organisation of medical herbalists in Great Britain as was there described. The report of the evidence contained a list of ninety-two persons, no one of whom was a registered practitioner, who practised largely among the artisan class; and not only in individual cases, but in connection with friendly societies and associations, and employers of labour. These persons professed to go through a certain amount of education and examination. If it were made too difficult for a practitioner to avail himself of the services of an unqualified man acting under his superintendence, the sick artisans would be thrown more and more into the hands of the herbalists and such-like persons.

Dr. STORRAR would refer to the case of a country medical man with widely spread practice, and having an unqualified assistant who, perhaps, had studied one or two years at a medical school. If the practitioner were unavoidably absent for a day, or a day and night, and a patient sent for him, was the assistant to be debarred from acting as his education and intelligence indicated? Why should a druggist be allowed to give medicine, and an unqualified assistant be prevented from doing so? The Council should not ask for more than could be reasonably expected. As regarded the herbalists, their practice was not limited to the poor. The practitioner should be allowed the legitimate use of assistants who might not be legally qualified.

Dr. HALDANE said that the employment of unqualified assistants was unknown in Scotland. At the dispensaries, pupils were sent out to attend the sick poor at their homes; but they were not paid.

Dr. AQUILLA SMITH believed that there would be no want of

alified men to act as assistants, if the employment of unqualified istants were prohibited. Many of the qualified were now deved of situations by the unqualified men. He did not think the olution too stringent.

Dr. HUMPHRY said the question was a very important one. From own experience, he approved of allowing pupils to take partial urge of cases, as a means of both assisting the master and inucting the pupil. He thought also that sufficient regard had not en paid to the benefit to practitioners produced by old unqualified istants. The employment of younger qualified men would require quent changes; for they were often very unfit, and required more truction than older unqualified men. The operation of every h measure as that proposed should not be sudden; otherwise, would cause great inconvenience to the practitioners in the ntry.

After a few remarks from Mr. SIMON, Dr. CHAMBERS, and the ESIDENT, the resolution was carried in the following amended m:

'That the Council ask for legislation to the effect that any regised practitioner, practising for gain, who knowingly and wilfully putes a person not registered or qualified to be registered under e Medical Act, to professionally treat on his behalf, in any matter quiring professional discretion or skill, any sick or injured person, all be subject to the same legal liabilities as a person who falsely presents himself to be a legally qualified medical practitioner: but th special proviso that such enactment shall not hinder any duly gulated training of pupils in medical schools or otherwise by legally alified practitioners, nor the use of trained pupils in partially ating the sick or injured, under the direction, supervision, and sponsibility of such practitioners, nor any legitimate employment nurses, midwives, or dispensers."

The other recommendations of the report were, on the motion of . CHAMBERS, seconded by Mr. SIMON, adopted in the following m:—

"That communications be entered into by the Council with the gistrar-General with the view of procuring such amendments of e *Registration Act* of England as will diminish the present fre-ent evasions of the Act in the certification of causes of death."

"That the Council record on its *Minutes*, for the information of se whom it may concern, that charges of gross misconduct in the ployment of unqualified assistants, and charges of dishonest llusion with unqualified practitioners in respect of the signing of dical certificates required for the purposes of any law or lawful ntract, are, if brought before the Council, regarded by the Council charges of infamous conduct under the Medical Act."

The Council having resumed, the resolutions passed in Committee re received and adopted.

Monday, April 23rd.

Dr. ACLAND, President, took the chair at 2 P.M.

Report of Pharmacopœia Committee.—Dr. QUAIN moved, Dr. GUILLA SMITH seconded, and it was resolved, that the report of e Pharmacopœia Committee be adopted, with the addition, after e figures £800 (see page 837, column 2, line 4), of the words "for ich they now ask the sanction of the Council."

Deficiency of Subjects for Anatomical Teaching.—The Committee this subject reported that they sat and freely considered the eral questions involved, but they were not prepared to report, d asked leave to sit again. They also reported that they had reested Mr. Marshall to act as honorary secretary. On the proposal Dr. LYONS, seconded by Dr. HUMPHRY, the report was opted.

Report of the Finance Committee.—The report of the Finance mmittee was presented, and on the motion of Dr. QUAIN, seconded Dr. PITMAN, was ordered to be recorded, entered on the minutes, d adopted. It was to the following effect.

The Finance Committee reported that the income of the General d Branch Councils for the year 1882 (ending January 1st, 1883) d been £7,164 7s. 11d., an amount which exceeds by £655 the inme for the year 1881. The expenditure during the year 1882 had en £4,820 10s. 1d., which was above the expenditure of 1881 by 3 16s. 1d. The Committee had, however, the satisfaction of reting to the Council that the excess of income over expenditure the year 1882 amounted to £2,343 17s. 10d. The excess of inme over expenditure for the previous year, 1881, was £1,722 13s. 11d. e chief item of expenditure wherein there had been an increase ring the year 1882, was that of the fees to members of General uncil, which amounted to £461 9s. 6d., a result due to the greater length of the Council's last session. In the house expenses there had been a slight increase of £26 13s. 2d., owing mainly to repairs effected, and to expenses connected with the ventilating-apparatus in the Council room. The principal item of diminished expenditure for the year 1882, as compared with 1881, was in the visitation of examinations. The sum contributed in 1882 to complete the amount expended on the visitation of examinations was £467 10s. 9d., as compared with a sum of £920 19s. 6d. expended in 1881 on this visitation. The late visitation of examinations had now cost a total sum of £1,388 10s. 3d. A further decrease of £20 was also to be noted on account of salaries, wages, etc. While, therefore, the total increase of expenditure in respect of certain items was £552 11. 3d., the total decrease in respect of other items amounted to £490 11s. 3d., showing, on the whole, an increase in expenditure of £62. In the receipts for the year ending January 1st, 1883, of the Dental Registration Fund, £718 7s. 5d., there was an increase of only £27 11s. 3d. over those of 1881, while the expenditure, £1,227 18s. 10d., had been greater by the sum of £129 11s. 7d., attributable to its share of the increased expenses of General Council's session, leaving the deficiency of income for the year £506 2s. 1d., compared with a deficiency of £457 11s. 1d. in 1881. Pursuant to instructions given to them at the meeting of the English Branch Council in 1883, the treasurers had made an additional purchase of £1,500 Consols, in the names of the trustees of the Branch Council, thus making a total now invested under this trust of £30,500 Consols. During the year also a sum of £1,200 had been invested by the Scottish Branch Council, making a total investment of £3,200; and the Irish Branch Council had increased its investments by £150, bringing up its total under this head to £1,869 17s. Thus the total amount now invested by the three Branch Councils was £35,569 17s.

New Member.—Dr. Matthews Duncan was introduced, and took his seat as a member of Council, nominated by the Crown, in the place of Sir William Gull, resigned.

The Medical Acts Amendment Bill.—Mr. MACNAMARA said that he considered it his duty to bring under the notice of the Council some points in the Bill now before Parliament. He was one of those who entertained a conviction that the Council would be abrogating its functions and justifying all the adverse remarks that had been made regarding it, if the members shrank from considering certain portions of the Bill. The Bill involved two classes of principles; those having reference to the construction of the Council, and those referring to changes in education and examination. He thought it would be beneath the dignity of the Council to discuss the question of its reconstruction. It had, under great difficulties, discharged most arduous duties, but it had been the subject of censure by gentlemen who were quite unacquainted with the details of medical education in this country. Some of these, when giving evidence before the Royal Commission, acknowledged that they had not been engaged as examiners, or as lecturers or clinical teachers; and yet they had the complacency to criticise the action of the Council. Referring to the list of past members of Council mentioned by the President in his address, he would add to it Dr. Apjohn, who had taken an active and useful share in the formation of the Pharmacopœia; Dr. R. Carlisle Williams, a man who, beyond others, had sacrificed himself to the duties of his profession; and Mr. Hargrave, a most upright and honourable man. One clause in the Bill gave him great satisfaction; it was that which indicated a fixed period for the meetings of Council. Some years ago, Dr. Haughton and he had tried unsuccessfully to have a fixed period of meeting established. On the present occasion, the time of meeting was inconvenient to Irish members; Dr. Haughton was unavoidably absent, and he (Mr. Macnamara) was only present at a sacrifice not only of money but of professional duties. He thought it highly desirable that legislation on medical reform should be carried out, and that attempts at improvement in education should not be constantly paralysed by legislative alarms. That the Bill contained some matter that was good and some that was dangerous, could not be gainsaid. One thing was clear; if the Bill passed, the power of conferring degrees and licences entitling to registration would be removed from the corporations, whose direct breadwinning function would thus be obliterated. Some criticised not only the Council but the corporations also, and spoke of their selfish interests. What were the facts? Under the by-laws of the Royal College of Surgeons of Ireland, it was provided that nothing in the way of profit should be divided among the fellows, members, or licentiates. The object was to establish a library and a pathological and an anatomical museum. The College had thus conferred a direct benefit; as practitioners could study in the library, and obtain information in the museum which would be useful to their patients. He would

leave it to others to speak of the Hunterian Museum of the College of Surgeons of England; but would only say that injury to it would be second only to the loss of the library of Alexandria. It was the duty of the Council to suggest improvements in the Bill. The first thing which he would suggest was, that all persons seeking registration should be affiliated to one of the licensing bodies. It might be objected that this was selfish. But a benefit would be conferred on the public and on the profession by such affiliation; it would bring the practitioner under allegiance to his College, and would publicly have a beneficial influence on his conduct through life. For this affiliation, a moderate fee should be paid, which should be applied to the support of the institution. As the Bill stood, a more deadly blow to the elevation of the profession could not be given. The Council had striven hard to improve the general education of students, as a means of raising their social position. But what inducement would a man have to pass such an examination as that of the University of London, if he were allowed to register simply under the examination provided in the Bill? One half of the attraction of the University degree would be removed. Patients would not trouble themselves about the matter; so long as a man was a medical practitioner, they would not inquire what degrees he possessed. Another matter which required amendment was the proposal to put "any person of full age" on the medical board; it should clearly be "a registered practitioner." The power proposed to be conferred on the Privy Council was also a very serious matter; but he saw no objection to their acting on the report of the Medical Council. The object of the Bill being to establish uniformity, he objected to the words "as far as practicable." This left a large loophole for evasion; and it would be better to require the Medical Council to see that the education, examination, and other matters were uniform. If the medical board of one division of the kingdom required a lower curriculum than the others, there would be competition, and this would be in a downward direction. Again, the Crown was to have the power of appointing six members of the Council; but there was nothing to prevent them from all belonging to one division of the kingdom. The practice hitherto in force had worked well. Another matter requiring attention was the form of the *Register*. In the Bill as it originally stood, there were to be two columns; one for "medical qualifying titles," and the other for "medical higher titles," evidently with the object of encouraging men to go on to higher qualifications; but in the Bill as amended, this was omitted, and it was provided that there should be three lists in the *Register*. He wished that there could be a means of placing degrees in Arts on the *Register*. With regard to the moneys received, he would suggest that they should be apportioned to the medical board in each division of the kingdom in proportion to the number of candidates examined, to be distributed among the medical authorities in that part of the kingdom for the public purposes of such authorities. He thought he had given sufficient reasons for taking the Bill into consideration; but if any further reason were required, it was that, for the sake of English-speaking persons, the language of the Bill should be amended. Thus, it was proposed to admit "persons of both sexes" to the *Register;* as if an accession of hermaphrodites to the profession were anticipated. He moved: "That the Council resolve itself into a Committee of the whole Council for the consideration of the provisions of the Medical Act Amendment Bill, as amended and ordered to be printed on April 10th, 1883."

Mr. COLLINS seconded the motion.

Dr. AQUILLA SMITH supported the motion. There were some clauses in the Bill with regard to which the Council should express an opinion. If it did not do so, it would seem as if it approved entirely of the Bill. The financial question was an important one. He had always been of opinion that the funds should be all invested in the names of the Trustees of the General Council. At present, the money which came direct to the Council was not sufficient for the expenses, and it was requisite for the Branch Council to advance money. The proposal that the same person might be both secretary and treasurer was bad, and the Council had early made a standing order to prevent such an arrangement. Another reason for amending the Bill was the constitution of the Council as proposed in the amended Bill. The Council should express an opinion on the omission of the Apothecaries' Hall of Ireland. He would be willing to consent to the exclusion of the body, if the same thing were done with the Society of Apothecaries, in London. The pharmaceutical societies did all that was necessary in regard to the education of apothecaries. If the Council allowed the Bill to pass *sub silentio*, there was danger that it would be inferred that they had no just grounds for objection to any part of it.

Mr. COLLINS said that there were about 2,400 registered practitioners in Ireland, of whom 900 or 1,000 belonged to the Apothecaries' Hall. There were, in that country, 800 or more dispensaries, the medical officers in many of which had to be acquainted with the means of ascertaining the purity of the medicines used by them, and to dispense them. It was a grave thing, to propose to refuse to the Apothecaries' Hall of Ireland representation in a body which was intended to provide for examination to general practice, and, among other things, to ascertain the pharmaceutical qualifications of the practitioner. The Apothecaries' Hall of Ireland ought, in his opinion, to be represented on the medical board.

Dr. HUMPHRY said, that to consider the Bill in committee would occupy a great deal of time, and he doubted whether it would do any good. He feared, indeed, that more harm than good might be done.

Dr. HALDANE, Dr. PETTIGREW, Dr. HERON WATSON and Dr. LYONS supported the proposal to discuss the Bill, and Mr. SIMON opposed it. Mr. MACNAMARA having replied, and the PRESIDENT having stated that he could not support the proposal, the motion was put to the vote; and, the votes for and against being equal, it was not carried.

Mr. MACNAMARA required that the names and numbers of those who voted for and against the motion respectively, and of those who did not vote, be taken down. *For*, 9: Dr. Pyle, Dr. Storrar, Dr. Haldane, Dr. Watson, Dr. Pettigrew, Dr. Aquilla Smith, Mr. Macnamara, Mr. Collins, Dr. Lyons. *Against*, 9: The President, Dr. Pitman, Mr. Marshall, Mr. Bradford, Dr. Chambers, Dr. Humphry, Mr. Turner, Mr. Simon, Dr. Fergus. *Did not vote*, 2: Dr. Quain, Dr. Matthews Duncan. *Absent*, 3: Dr. Scott Orr, Rev. Dr. Haughton, Mr. Teale.

Alleged Insufficiency of Term of Medical Study.—Correspondence respecting a statement by Mr. Berry of Wigan, that a practitioner in that town had been registered with the licence of the King and Queen's College of Physicians in 1881, the date of his registration as a student being 1879, was ordered to be entered on the minutes. The correspondence contained the following report from the Inspection Committee of the King and Queen's College of Physicians.

"Mr. George Abbott's application for permission to be examined for the first examination for the licence to practise medicine was dated March 25th, 1881. It was approved by the Inspection Committee, and signed by Dr. Walter G. Smith, the Chairman. On April 4th, 1881, Mr. Abbott passed the previous examination. His schedule was re-dated September 27th, and was approved by the Inspection Committee on October 4th, 1881, when he obtained permission to present himself for the final examination for the licence to practise medicine. On both occasions, Mr. Abbott stated that he had been for four years engaged in the study of medicine, a statement which was confirmed by his producing a certificate of attendance upon clinical lectures in the Liverpool Infirmary in the twelve months from October 1877 to October 1878. It is true that none of his lecture certificates were dated further back than October 1877. The Inspection Committee are of opinion that Mr. Abbott's case illustrates the very unsatisfactory manner in which the registration of medical students is at present carried out."

The Irish Branch Council, to whom the above communication was furnished by order of the Executive Committee, passed the following resolution:

"That, in the opinion of the Branch Council, the Inspecting Committee of the King and Queen's College of Physicians in Ireland should have inquired into the date of George Abbott's registration before admitting him to their examination for licence."

Attendance on Lectures by Medical Students in Ireland.—A communication on this subject, addressed to the Registrar by Dr. A. H. Jacob, was read. The following are some of the principal portions of the letter.

"SIR,—Since the last meeting of the General Medical Council, circumstances have arisen which induce me to call attention to practices prevalent in Dublin which, I believe, are in the nature of an evasion of the requirements of the Council, in regard to the duration and scope of medical study.

"It is probably within your recollection that on the 18th of July, 1879, the Rev. Dr. Haughton moved "That the Council do . . . . inquire what precautions are taken . . . . to secure that the certificates . . . . guarantee . . . attendance on the part of the holders on lectures, dissections, laboratory work and hospital work, and are not merely receipts for money paid.' In the debate upon this motion, Dr. Haughton is reported to have said: 'It has come to my knowledge that certificates have been issued in cases in which there has been no attendance at all.' On the succeeding day, July 19th, 1879, it was resolved by the Council: 'That the Branch Council for Ireland have its attention drawn to the foregoing statement, and that they be requested to inquire . . . . and report thereon to the Council at its next meeting.'

"The report of the Branch Council for Ireland was presented on July 16th, 1880. It laid before the Council, *in extenso*, the replies of six Dublin medical schools, and ten Dublin clinical hospitals, to the question: 'What precautions have been adopted to ensure the *bonâ fides* of the certificates issued by them?'

heir several students?' but it expressed no opinion, and offered no recommen-ation thereon, and the Council does not seem to have taken any further action n the matter. . . . .

"As a matter of fact, I am in a position to assert that the statement of the Rev. Dr. Haughton, above referred to, was true to the fullest extent, and that it s notorious that in Dublin certificates of 'diligent' attendance could be ob-ained, and were obtained in any number, from certain schools and hospitals by ayment of the fee, and without any real attendance, for confirmation of which tatement I beg to refer you to second paragraph of a letter from Carmichael ollege, and to the fact that the Rev. Dr. Haughton—in his capacity of Medical Registrar of Dublin University—had, in consequence of these practices, refused, or some years, to recognise the certificates issued by a certain Dublin medical chool.

"These practices it is difficult for any licensing body to prevent, because it sually possesses no information respecting the circumstances under which the ertificates presented by any individual candidate for its licence are granted to im. Two years ago, however, positive proofs came into my possession that everal persons had passed one or other of the examinations of the Royal College f Surgeons in Ireland, to which they had been admitted on production of all he requisite certificates of 'diligent' attendance at lectures, dissections, and ospital, they being, in fact, so circumstanced that attendance on any material ortion of these courses was physically impossible, inasmuch as they were en-aged from morning to evening, for every working day of the medical session, n offices, banks, and shops.

"About this period, the Ledwich School and Carmichael College (the latter f which immediately afterwards discontinued the practice) commenced to ad-ertise that they would provide lectures from 7 P.M. to 10 P.M. in the evening, uch instruction being available for clerks, shop assistants, and other students whose entire day was employed in engrossing business avocations, and the Council of the Royal College of Surgeons, having protested against this system, and communicated its protest to the General Medical Council, eventually adopted a code of regulations for the specific certifying of attendances, and passed an ordinance refusing to receive the certificates of any school which gave ectures at night. . . . .

"The promulgation of these resolutions by the Royal College of Surgeons dis-closed the extent to which fictitious certificates were in use, for no fewer than 94 students, who were stated by their representatives to be all so engaged as to be unable to attend medical study during the day, presented a memorial to the College demanding that the resolution of the Council should be rescinded. I have no reason to suppose that the issue of fictitious certificates has been to any extent discontinued, except with regard to those students who intend to seek their qualifications from the Irish College of Surgeons or Dublin University.

"That the certificates issued in respect of medical study limited to the even-ing hours must, in many cases, be fictitious, will be manifest on consideration of the hours set apart in all Dublin schools and hospitals for medical instruc-tion. Hospital *clinique* begins about 9.20 A.M., and goes on continuously until after 11 A.M.; operations are performed, and clinical lectures delivered, usually from 10.30 A.M. to 11.30; and the extern department is visited, case-dressing performed, and autopsies made from 11.30 to 1 P.M. It is hardly necessary for me to ask, of what educational value are the certificates of 'diligent' attend-ance on this daily work presented by a student who may, possibly, have written his name in the attendance book at 9.15 A.M., but who must be at his business in office or shop before 10 A.M. at the latest. Again, I would point out that it is hardly physically possible for a student, after the closing hour of his place of business, and allowing time for his evening meal, to give, within three *Anni Medici*, an attendance for an hour each upon the minimum number of lectures required for his licence, even if his attendance upon special studies, his instruc-tion in vaccination, his private teaching, and his reading are omitted from the calculation. . . .

"I therefore respectfully invite the Council to declare that the issue of ficti-tious certificates is not tolerated by it, and that a nominal attendance, at night, upon the course of medical study, by students who are engaged all day at other engrossing avocations, is an evasion and not a compliance with the recommend-ation of the Council, which declares, 'The course of professional study . . . . . shall occupy four years . . . . passed at a recognised school. . . .'"

Mr. MACNAMARA said that in Dublin hospital work was conducted from 9 to 10 A.M., and at 10 A.M. operations were performed. The object was to do the hospital work early, so as to enable the students to proceed to the anatomical hall at 11, and then to the lectures, which went on from 1 to 5 P.M. The gentlemen referred to in Dr. Jacob's letter were engaged during the day as clerks in banks and other houses of business. The College of Surgeons of Ireland had refused the certificates of several of these candidates; but they were admitted elsewhere, and the only result was a loss to the College. It must be observed, however, that some of the best candidates at the College examinations had been educated in the way of which complaint had been made.

Dr. HUMPHRY asked whether, in Dublin, each teacher certified for himself, or whether some one person certified *en masse* for the whole schools.

Mr. MACNAMARA said that each professor and lecturer certified for his own class. The great majority of pupils went first to the College of Surgeons, and afterwards to the College of Physicians. The University of Dublin had tried in every way to secure the attendance of students; but some classes were very large, and it was difficult to ascertain the attendance accurately.

Dr. CHAMBERS said that there was another class of students who, being employed in the day, attended evening lectures: he referred to unqualified assistants. He had known a case in which one of these passed a preliminary examination, continued to act as an unqualified assistant, got some one to instruct him, went to another part of the kingdom, got his schedule signed, and obtained a diploma.

Dr. SMITH said there was a school in Dublin, in which it had long been the practice to sign the sheet of attendance at the end of session without due inquiry.

Mr. SIMON said that the question was a very important one. It was, whether it was not a substantially fictitious studentship, when a man, pretending to be a student, was engaged in another career. There might be individual instances in which a man, by long study and distinguished ability, might attain the necessary knowledge while engaged in other occupations; but the meaning of the recommendations of the Council respecting four years of study was plainly that, during that time, such professional study should be the real occupation of the student. He moved:

"That for the purposes of the Council's Recommendation 21, and of regulations by which the licensing authorities may desire to give effect to it, the 'four years' required to be spent in professional study must be four years during which professional study shall have been adequately followed by the candidate as his true industry and the main occupation of his time, and that the Council would not be prepared to count as part of their four years' curriculum any considerable time during which a candidate had given most of his industry to other pursuits, as, for instance, if he had been regularly engaged for the greater part of each day in the duties of some non-medical calling followed by him for a livelihood."

Dr. QUAIN seconded the motion, the further consideration of which was adjourned.

The Medical Acts Amendment Bill.—It was moved by Dr. HERON WATSON, seconded by Dr. PETTIGREW, and agreed to:

"That the Council do proceed to consider, on Wednesday at two o'clock, motions of which due notice shall have been given with regard to the provisions of the Medical Act Amendment Bill (as amended in Committee)."

Percentages of Registrations.—A table, prepared by the Registrar, pursuant to Council's instructions, in continuation of a similar table, was ordered to be received and entered in the minutes.

Tuesday, April 24th.

Dr. ACLAND took the Chair at 2 P.M.

Charge of giving a False certificate of Death.—The Council investigated the case of Mr. Thomas Gray of Mountague Place, Poplar. The report of the Solicitor to the Council stated that complaint had been made by the Medical Alliance Association that Mr. Gray was guilty of systematically giving false certificates of the cause of death in cases where he had never seen the deceased persons in their illness; and a copy of a conviction at the Thames Police Court of having made a false certificate in the case of a child named Minnie Lucy Wadsworth, when Mr. Gray was fined £5 and £2 2s. costs, accompanied the complaint. No further evidence had been produced or could be obtained than the above, so that the case stood on that conviction. The child had been attended by a person named Bell, an unqualified assistant of Mr. Gray; and Mr. Gray himself had not seen the case.

Mr. Gray attended, accompanied by his solicitor, Mr. George Lewis, who addressed the Council on behalf of his client. He said that Mr. Gray had been in practice forty years, and was universally respected. Up to two years ago, the assistant had been in the habit of giving certificates with his own name "for Thomas Gray." In the present case, Mr. Gray believed that the attendance of his assistant—a man who had been with him ten years—justified him in signing the certificate; and the mere fact of his having improperly signed the certificate was hardly enough to render him liable to be found guilty of "infamous conduct in a professional respect." Since March 1882, Mr. Gray had given no certificates of death except after personal attendance. Mr. Lewis concluded by expressing, on the part of Mr. Gray, his regret that he had done anything which could expose him to the censure of the Council.

Strangers having withdrawn, the Council deliberated in private, and adopted the following resolution:

"That Mr. Thomas Gray, having been convicted at the Thames Police Court of making a false certificate concerning the death of a child whom he had not seen, but who had been attended by his unqualified assistant, the Council intimate to Mr. Gray their marked disapproval of his conduct, but, in the exercise of their discretion, do not think it necessary now to remove his name from the *Medical Register*."

Strangers having been re-admitted, the PRESIDENT read to Mr. Gray the foregoing resolution.

The Charge against Mr. Sadgrove.—The Council resumed consideration of this case, adjourned from the preceding Friday. Mr. Sadgrove attended, and, in answer to questions, declared that he had no

knowledge of the letter stated to have been written by "A. Duncan, Secretary to the Faculty of Physicians and Surgeons of Glasgow." He presented a petition, acknowledging his fault in alleging himself to have qualifications which he did not possess; and pleaded for forgiveness, on the ground chiefly of having a wife and six children to support.

Strangers having withdrawn, the Council deliberated in private, and passed the following resolutions:

"That Arthur Augustus Sadgrove, Lic. Apoth. Hall, Dublin, 1880, is judged, after due inquiry, to have been guilty of infamous conduct in a professional respect.

"That, as it has been proved to the satisfaction of the General Medical Council that Arthur Augustus Sadgrove has been guilty of infamous conduct in a professional respect, the Council does, by this order in writing, direct his name to be erased from the *Medical Register*, and gives orders to the Registrar to erase his name accordingly."

Strangers having been re-admitted, the PRESIDENT read to Mr. Sadgrove the foregoing resolutions.

Dr. LYONS moved, Mr. TURNER seconded, and it was agreed to:

"That it be remitted to the Executive Committee to take such steps as may seem advisable to trace the letters signed 'A. Duncan,' which have appeared in Mr. Sadgrove's case."

The Council then adjourned.

Wednesday, April 25th.

Dr. ACLAND, President, took the chair at 2 P.M.

Examinations in Dentistry sine Curriculo.—Dr. STORRAR moved, and Dr. FERGUS seconded:

"That, in the opinion of this Council, the Examinations in Dentistry *sine curriculo* should cease and determine after December 31st, 1883."

After discussion, an amendment was adopted limiting to persons already on the *Dentists' Register* the right of being admitted to examination *sine curriculo* for the purpose of obtaining a licence from one of the examining bodies.

Professional Study.—The Council resumed the consideration of the motion proposed by Mr. SIMON, and seconded by Dr. QUAIN, at the close of the meeting on Monday.

Dr. MATTHEWS DUNCAN moved, and Mr. TURNER seconded, the following amendment:

"That the Council, having had its attention drawn by the letter of Dr. Jacob to the use of fictitious certificates, objects in the strongest manner to their issue by teachers and their use by candidates for licences. They recommend that no certificate be granted to a student who has been absent from more than one-fourth of the lectures required in any course; and direct that this be added to the Council's Recommendations on Education and Examination."

After discussion, both the motion and the amendment were withdrawn.

Charge of giving a False Certificate of Death.—The Council investigated the case of Mr. W. H. Dry, a registered practitioner, against whom a complaint had been lodged by the Medical Alliance Association. The case was in its main features similar to that of Mr. Thomas Gray.

The Council, after deliberation, passed a resolution similar to that adopted in Mr. Gray's case.

Dr. Jacob's Letter.—Mr. TURNER moved, Mr. SIMON seconded, and it was resolved:

"That Dr. Jacob's letter be referred to the Irish Branch Council for such inquiry as they may find needful, and for report."

Personation at Preliminary Examinations.—The following resolution passed by the Executive Committee was ordered to be received and entered on the minutes.

"That, with reference to the subject of personation at the Preliminary Examinations of the several bodies, referred to the Executive Committee at the last meeting of the General Council, they are not at present prepared to report."

Dr. AQUILLA SMITH moved, Mr. MARSHALL seconded, and it was resolved:

"That the resolutions based on the Report of the Committee on the Employment of Unqualified Assistants by Registered Practitioners, which were passed by the Medical Council on the 21st of April, 1883, be transmitted to the Lord President of the Privy Council."

"That the Resolution of the Council, marked *(b)* in the Minutes of April 21st, 1883, be referred to the Executive Committee to communicate with the Registrar-General."

On Thursday, the Council had under notice a series of amendments on the Medical Acts Amendment Bill now before Parliament. A full report will be given in next week's JOURNAL.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—A meeting will be held at Spalding, on Thursday, May 17th. Gentlemen intending to read papers, or to show specimens or cases, are requested to communicate with the District Honorary Secretary, W. A. CARLIN, M.D., Lincoln.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M., on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 3, East Circus Street, Nottingham.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.—A joint meeting will be held in Worcester, on Tuesday, May 29th. Members having any paper to read or cases to bring forward, are requested to report the titles of such paper or cases to the Honorary Secretary, not later than Thursday, May 17th, after which date a second circular will be issued, giving full particulars of the meeting.—GEORGE W. CROWE, M.D., Honorary Secretary, Shire Street, Worcester, April 13th, 1883.

EAST ANGLIAN BRANCH.—The spring meeting will be held at Lynn, on Thursday, May 24th, under the presidency of John Lowe, Esq., M.D. Notices of papers and cases to be sent to the Secretaries before May 12th.—W. A. ELLIS, Ipswich, MICHAEL BEVERLEY, Norwich, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at the Kentish Hotel, Tunbridge Wells, on Thursday, May 17th, at 3.15 P.M. Dinner at 5.30 P.M.; charge, 6s., exclusive of wine. Dr. Ranking will take the chair. Mr. Abbott will read a paper on Collective Investigation and Note-taking. Members desirous of making any communication to the meeting should send immediate notice to the Honorary Secretary, JENNER VERRALL, 95, Western Road, Brighton.—April 25th, 1883.

"COLLECTIVE INVESTIGATION RECORD."

E material accumulating in connection with the Collective In-tigation of Disease is becoming too large for the pages of the URNAL. It is therefore thought better to limit the publication in JOURNAL to abstracts of the more important matter, notices, etc., l to print in a separate form—or "Record"—the several papers, moranda, cards, reports, and other documents relating to the sub-t. Thus, while the members of the Association will be kept ormed, through the JOURNAL, of the progress of the investiga-n and of the results obtained, the whole material will be collected ether in a form convenient for reference. It is also felt that the blication of such a "Record"—especially if it can be done from ie to time at more or less regular periods—would materially assist giving a status and permanence to the investigation, would inspire reased confidence in the movement, and would further induce mbers to co-operate in the work when they found that the results their labours were thus produced, and assigned a definite place medical literature.

It has been determined, therefore, to issue, early in July next, an volume, of 100 to 150 pages, containing the addresses of Sir lliam Gull, Sir James Paget, and others; some accounts of the re important meetings that have been held in connection with subject; the cards and memoranda on the various diseases now der investigation, and others about to be undertaken; papers d other contributions relating to collective investigation of dis-se; the Report on the Investigation into the Communicability of thisis, which will then be ready; and other matters.

The price of the number to members of the Association, post free, ll be 1s. 6d.; to those who are not members 2s.

Members and others who desire to receive the number are re-ested to signify the same by note or post-card addressed to the neral Secretary of the Association, 161A, Strand.

G. M. HUMPHRY, Chairman of the Committee.

CORRESPONDENCE.

IE MEDICAL SERVICE AND THE CLIMATE OF CYPRUS.

SIR,—The enclosed paragraphs, with regard to the climate of prus, have been brought before my notice; and they contain such oss misstatements, and are so misleading, that I feel it only right give the true facts of the case.

First, with regard to the civil medical officers, I may say that, up the date of my leaving the island, at the end of June last year, t a single medical officer had either died or been sent home inva-ed; and of those officers of the Army Medical Department who rved as civil surgeons in the various districts prior to the ap-intment of civilians, I believe the same statement holds good.

At several out-stations, the English medical officers have un-ubtedly been replaced by Levantines; but this has been done on count of the peculiar necessity which exists for retrenchment in is island—the services of these gentlemen being obtainable at a uch lower rate than those of Englishmen. It was also considered at it would be of great advantage to the inhabitants to have edical advisers who were perfectly familiar with their own nguage.

The remarks as to the method of obtaining the death-rate, and as the high mortality and sickness amongst English civilians, are rfectly without foundation. I was in Cyprus for nearly two years id a half, and, during that time, only two deaths, so far as I am ware, took place amongst English civilians; namely, two ladies, th of whom died of complaints which were in no way referable the climate; and the sickness-rate in the island is certainly no gher than, if as high as, that to be found in any other Mediter-nean station.

In any calculations that have been made with regard to the death-te, the troops have always been excluded; and, in 1881, the rate mortality in the Larnaca district (which may be regarded a fair mple for the island) was equal to less than 19 per 1,000 living. think further comment is unnecessary.—I am, etc.,

FRED. W. BARRY, M.D., late Sanitary Commissioner to the Government of Cyprus.

Whitehall, April 21st, 1883.

[The following are the paragraphs in question; they appeared the *Echo*.]

"A correspondent, writing to us from Cyprus, says that nearly all the English medical officers sent there have either died or have left the island invalided; Greeks and Arabs, who are proof against fever, taking their places. It is true that the death-rate is comparatively low, but the figures are got at in this way.

"The soldiers, who number about twenty times as many as all the other English in the island, are quartered on the slopes of Mount Olympus, where, no doubt, it is healthy enough; but the civilians have to live where their duty takes them—in the towns and low ground generally—and there, among them, the rate of sickness and death is frightfully high. When, however, they are lumped with the soldiery, a very low death-rate is obtained."

MILITARY AND NAVAL MEDICAL SERVICES.

THE ARMY HOSPITAL CORPS IN EGYPT.

WE learn from a correspondent that the presentation of medals for the campaign in Egypt to the officers and men of the Army Hospital Corps serving at Alexandria, took place on the 9th instant. The detachment, three officers and 115 non-commissioned officers and men, paraded in the grounds of the Mustapha Pasha Palace, Ramleh, recently opened as the military hospital of the district. The whole of the medical officers were also present.

The principal medical officer, Deputy Surgeon-General T. W. Fox, M.B., in addressing the corps, before proceeding to attach the medals to the breasts of the recipients, said: "I have much pleasure in presenting you with the war medals for the recent campaign. You have well earned them by hard work on the field and in the hospitals, and may you long live to wear them. The general good conduct and character of the corps and your good services in Egypt under great difficulties, are well known. The Commander-in-Chief in Egypt, after his recent inspection of this hospital, expressed himself as greatly pleased with all he saw. I feel sure that we shall always do our best to maintain the good name and efficiency of the Army Medical Department and Army Hospital Corps."

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

DUTIES OF LOCAL AUTHORITIES AS TO BURIAL OF POOR PERSONS.

SIR,—I would be much obliged for an expression of opinion on the following. A man working in this district, without a permanent home, a native of a neighbouring county, is found in the canal, and is removed to the nearest inn, where subsequently a coroner's jury return a verdict of "suicide whilst in a state of temporary insanity." The sergeant of police communicates with deceased's friends, who, in reply, plead inability to bury. In the meantime, the landlord of the inn applies to the relieving officer for pauper burial. The latter says it is no business of his, and refers his applicant to the inspector of nuisances, who in turn applies to me, as medical officer of health, for instructions.

The local authority having no mortuary, I authorise burial at their expense, as by this time (two days, including Sunday, have elapsed) the corpse is, to my mind, a nuisance requiring removal. How stands the law in the case? Should not the relieving officer have caused the body to be buried? or should it have been treated as in the case of bodies washed ashore, and be buried by the overseers?—I am, sir, yours, etc., MEMBER & M. O. H.

*** The question here raised has always been one of considerable difficulty. The relieving officer was quite within his instructions in saying that it was no business of his, since the guardians have no funds at their disposal for the interment of bodies found in such circumstances. If the relieving officer had effected the burial, it would have been open to the district auditor to have surcharged him or the guardians with the cost. The overseers could not legally have buried the body, as their power relates only to bodies washed ashore by the sea. A similar incident occurred only a few weeks ago in Northamptonshire, and the guardians memorialised the Local Government Board as to the very defective state of the law in this respect, but with what result we are not aware.

DURHAM RURAL DISTRICT.

REFERRING to our remarks on page 745, Mr. Blackett draws our attention to the fact that his report for 1882 includes a table containing the death-rate from each of the more important diseases for the six years ended 1882. But what we objected to was the absence of any statement or table showing the total number of zymotic deaths in the district during the year just ended, which was necessary for the purposes of useful comparison with the zymotic mortality of the two preceding years.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, April 26th.

MEDICAL ACTS AMENDMENT BILL.

Specially reported for the BRITISH MEDICAL JOURNAL.

THE Earl of KIMBERLEY presented a petition from the Apothecaries' Company in Ireland, praying that they may be reinstated in the Bill.

On the order that the report of amendments to this Bill be received,

Earl GRANVILLE drew attention to what had been said by the noble Marquis the Chancellor of the University of London, on the last stage of the Bill, with regard to the University of Oxford.

The Marquis of SALISBURY: I beg the noble Earl's pardon. He calls me the Chancellor of the University of London. I have not yet that honour.

Earl GRANVILLE said he was glad to withdraw the observation. He had received the following letter from Professor Acland with regard to the University of Oxford. "My Lord,—I venture, with reference to the relation of Oxford to the profession of Medicine, to which allusion was lately made in the House of Lords, to state this much to your lordships. For medical education and for the advancement of Medicine there are three quite separate parts: 1. General philosophical education, as represented by the old *Literæ Humaniores*; 2. The study of the natural sciences, which lie at the foundation of all knowledge of disease, whether in man or animals; and 3. The actual study of disease itself. Formerly, Oxford could only attempt the first. In the last thirty years, the University has laid the foundation of complete theoretical and practical study of the second, or of biological science considered in the widest aspect. And it leaves only at present the study of disease to the vast opportunities of the metropolitan hospitals and schools. I hope and believe, therefore, that Oxford will in the future supply highly trained and scientific youths to the great clinical schools in a way and to an extent she has never done before; and that, in the view of national education for the profession of Medicine, and of present changes, the influence of the University will be of great public advantage, and greater than she has even had before.—I have, etc., (Signed) H. M. ACLAND." He (Earl Granville) had not one single word to say against any statement in the letter, although he still adhered to what he said on Thursday last.

The Marquis of SALISBURY said he was not in the least disposed to contest the position of the London University in this matter. It had a claim on them, inasmuch as it provided for the education of a large number of those who went to it, and made successful exertions for the promotion of natural science, which "lay at the root of all medical culture," as Dr. Acland said. The noble marquis went on to criticise the amendments proposed by the Lord President of the Council, when he was called to order.

Lord CARLINGFORD said he had not yet moved his amendment. He would, however, do so now. His first amendment related to the constitution of the English Medical Board, which question was discussed when their lordships were in Committee on the Bill. He (Lord Carlingford) had thrown out a suggestion which was not very well received, and particularly not well received by the noble marquis opposite. He had now another proposal to make, which was that the number of representatives given by the Bill as it stood to the five Universities of England should not be altered, but that the two great medical colleges—viz., the Colleges of Physicians and Surgeons—should receive an addition of two members, being one each. He confessed he had found, during the course of this Bill, the greatest difficulty in understanding the enormous and vital importance that appeared to be attributed by the medical authorities in the three countries to the exact numbers which they should have the right of returning to these medical boards. It appeared to be supposed, on the part of the united university authorities on the one hand, and the united corporate authorities on the other, that the question of who should have a majority on the boards was one of the greatest importance. That was a conclusion at which he (Lord Carlingford) had found it impossible to arrive. He did not believe the interests and views of one of these sets of authorities would be supreme and exclusive merely because that set of authorities happened to have a majority of one on the conjoint board; nor did he believe that the interests and views of the other set of authorities would be sacrificed merely because they happened to be in a minority, perhaps of one. Still, the matter was of some importance, and certainly of very considerable importance, in the eyes of these authorities; and, after having given the best consideration in his power to the whole matter, he had come to the conclusion, and he had to propose it to the House, that there was sufficient reason for increasing by two, as he proposed, the number of representatives to be returned by the two great medical corporations. The Government desired that the Universities should retain a very powerful influence upon the Board. Nothing could be more wholesome and more important than that influence, and that influence under his proposal they certainly would not lose; but, on the other hand, it was evident that in this country it was the two great medical corporations who performed the lion's share of the duty of examination and licensing the candidates for the medical profession. That view had been pressed on him, he was bound to say in the strongest possible way, by many of the most eminent, and he might say the most illustrious, of the medical profession. This view had also been the view of the Royal Commission, presided over by a noble lord behind him. There could be no doubt that the part played by their two great medical corporations in examining and licensing for the medical profession was out of all proportion greater than that which was played by the universities. He was happy to find that one of the English Universities, which had had a great deal to do with this question, and performed the largest part in the examination and licensing of candidates for the medical profession—namely, the University of London—was satisfied with the proposal which he had put upon the paper. He hoped that might be the case with the other bodies. It was well to remember that, while the educational influence of the Universities was most important and useful, and would be exercised to the fullest degree by the large number of members which they would return to the conjoint board, the object of the board was not that of providing the highest standard of examination or of education, because the conjoint boards would have nothing to do with the honours of the medical profession, but would only be concerned in maintaining a sufficient average or rather minimum standard for all the young men who were to be admitted to the right to practise medicine. The two great medical bodies, with their immense experience on the subject, he thought had a right to a very powerful voice on the conjoint boards. It was impossible, of course, in a matter like this to satisfy everyone; but his proposal, he was sure, was as reasonable a one as could be made.

The Marquis of SALISBURY complained that Lord Carlingford had not arrived at a decision in this matter at an earlier period, and had not given the bodies interested some notice of what he was going to do. In Committee, the noble earl had not proposed his last amendment until they were absolutely assembled, and now the present proposal had only been laid on the table at the last meeting of the House. There had been no time to obtain the opinion of the important bodies who were affected by the amendment. In the absence of any information from these bodies, however, he (the Marquis of Salisbury) did not offer any opposition to the proposal at this stage. The Apothecaries' Society of London, to whom the election of a member he admitted had been assigned, was not an educational body of a very high order, and the Victoria University of Manchester, to whom also the election of a member had been given, had as yet done nothing. It had nothing but a future before it, and he therefore imagined that the Colleges of Physicians and Surgeons would be better pleased by transferring those two members to them. [*Hear, hear.*]

Lord CARLINGFORD next moved that the number of members composing the Medical Board in England should be increased from fifteen to seventeen, the object being to give effect to the previous amendment. This was agreed to.

The Earl of CAMPERDOWN said it was no light task to propose to do away with existing interests; but if a victim were to be offered up in accordance with the theory of the noble Marquis, he thought the Apothecaries' Society in England had a much stronger claim for consideration and existence than had the Apothecaries' Society in Ireland, which had already disappeared from the Bill. He was glad to hear that the compromise which had been proposed was likely to be accepted, as he considered it to be a very good one.

The amendment was carried without a division.

The Earl of GALLOWAY said the four lines of amendment which stood in his name were practically the same thing, inasmuch as they all turned upon the same point. What he desired to point out was that, at the present moment, the medical corporations in Scotland had a majority of one over the Universities. The Bill proposed that in future, the members of the Universities should be eight, and

e medical corporations three, and under such circumstances, the ter, not unnaturally, thought that their interests were being rificed. He thought, from what had fallen from the Lord esident of the Council, that it would not be unfair to that the universities, instead of being in the minority, ould be, in the future, in the majority, but that that ajority should only be one. That was the practical effect of the endments which he had placed upon the paper. There would be me difficulty in choosing as to which of the medical corporations ould get the advantage. It would, he considered, be the wisest policy add one to the Faculty of Physicians and Surgeons of Glasgow, which as especially of a surgical character, and the other to the College of ysicians of Edinburgh. Then came the question as to the deduc- ons to be made to universities. The University of St. Andrew's self really had no claim whatever entitling it to be direct- represented; and he also had been assured that, with gard to the University of Aberdeen, that one member would be nple.

The Duke of RICHMOND said he was afraid that the information btained by his noble friend had emanated from a gentleman who ad not taken proper pains to inquire into the matter; and for his vn part, he strongly objected to the University of Aberdeen being tered from two to one.

Lord BALFOUR of BURLEIGH, in opposing the amendment, said e believed the representation of the universities and medical cor- orations in Scotland could be defended on several grounds. In the rst place, it was recommended in the report of the Royal Commis- on that the universities of Scotland should have a preponderating, nd a largely preponderating, representation upon the board in cotland. He therefore thought that the universities were teaching s well as examining bodies; whilst the medical corporations in cotland had done nothing more for the medical students than xamine them. They did not teach them at all; and therefore the niversities, he thought, had a greater interest than a body which mply examined them. There was another reason why the interest f the universities was stronger. Complaints had been made about the xamining bodies in Scotland. For his own part, he would not xpress any opinion upon the matter, but simply say that, if any harge of improperly admitting students to become medical practi- ioners had been brought home to any Scottish examining body, it ertainly had not been to the universities. He therefore thought hat the amendment should not be accepted; and, with regard to he University of St. Andrew's, that seemed to be regarded as a fair niversity for everyone to have a peck at. He sincerely hoped that he Lord President would not accept the amendment. [*Hear, ear.*]

Lord CARLINGFORD said he could not admit, with the noble earl pposite (Earl of Galloway) that the Scotch medical authorities vere in any way upon a par as to the part they played in medical natters in Scotland with the great medical corporations in England, nd he was quite sure that such was not the view of medical opinion n Scotland. He should, therefore, be unable to support the amend- nent of his noble friend.

The amendment was negatived.

On the motion of Lord CARLINGFORD, an amendment was, with- ut comment, agreed to, providing that any revocation or alteration f a clause, in pursuance of the section, should not be of any alidity until it had been approved by the Medical Council, and onfirmed by the Privy Council.

An amendment was also agreed to without discussion, providing hat Her Majesty might, from time to time, revoke and renew any rder made in pursuance of the section; and that on the revoca- ion of such order as respected any British possession or foreign country, such possession or country should cease to be one to which he Act applied, but without prejudice to the right of any persons whose names had already been entered on the *Register*.

Lord ABERDARE proposed an amendment, providing that it should e lawful for any registered medical practitioner who had passed a final examination, to use, if he thought fit to do so, after his name, he title of licentiate in medicine, surgery, and midwifery, or any letters indicative of such title. He said that the effect of this amendment, if carried, would be to restore the Bill, with one slight variation, to its original position in respect to this question, when it was presented to the House. He considered that nothing could be more modest than the request embodied in the proposal, which merely meant that all those who had passed the examination and received the licence should be allowed to bear the title of licentiate, and that such a title should be accessible to men who did not choose to attach themselves to any particular society. This proposal was so reason- able that it seemed hardly to require any argument in support of it, nor was it easy to understand what ground anybody could have for opposing it. A licence, after all, was but the first step in the career of any medical man, and he could not see why there should be any objection to a man being allowed to assume the title of licentiate when he had really obtained that title.

The Earl of CAMPERDOWN was sorry that he could not agree to the proposal which his noble friend had made, and that he was obliged to ask the House not to accept it. He did so on very broad grounds. There were already in existence sixty-two or sixty-three medical titles under charter or under statute, and he hoped the House would not add a sixty-third or sixty-fourth. The object of the creation of these medical boards, and of this licence, was to ensure that there should be sufficient knowledge of surgery and medicine on the part of the person licensed; but there was certainly no intention on the part of those who had brought forward the Bill of establishing a corporation for the purpose of giving titles. It would be perfectly open for any person who passed this examination to call himself, if he chose, by the name of licentiate of the Medical Council, but it was quite a different thing from creating a new statutory title, and affixing in the *Register* certain figures to every name which appeared in it. There was another reason why the amendment should not be assented to. The great corporations felt very acutely that the creation of more medical titles was likely to interfere in an unfair manner with the titles now existing. Those titles had been of great value in themselves, and they had given admission to the *Medical Register;* but if the present proposal were agreed to, their value would be lessened, and misapprehensions would arise as to the real value to be attached to them. In these circumstances, it would, in his opinion, be a misfortune to add to the number of titles now in existence; and he asked the House not to agree to the amendment.

Earl CAIRNS also hoped the amendment would not be embodied in the Bill, as he believed it meant more than was apparent at first sight. There was no doubt whatever that degrees for the faculties of medicine emanated from the Crown; but, as the Crown could not personally examine the candidates for them, it delegated the duty to certain bodies, who acted in place of the Crown. He did not understand that it was the object of this Bill to interfere in any way with the rights of those who held these degrees. The object of the measure was to secure a proper degree of knowledge in those who practised medicine, and he trusted that this new proposal would not be assented to.

Lord CARLINGFORD agreed with what had been said by both the noble lords who had last spoken, and was unable to accept the amendment. He was not personally responsible for the insertion of the original clause in the Bill, but, on further consideration of it, he saw very good reasons for omitting it, and he was not prepared to restore it now. He might say that he had had to resist proposals for what might be called compulsory creation. Having resisted such pressure, he thought it better not to create in the Bill a new statutory title of this kind. It was to be remembered that the Bill proposed to adopt and use for the purposes of the medical board all the existing medical authorities, and it was highly desirable that, without the strongest reason, nothing should be done by the measure which would impair the usefulness of those bodies.

The amendment was negatived.

Replying to the Earl of MILLTOWN,

The Earl of CAMPERDOWN stated that, under the Bill as drawn, registration of degrees in arts was allowed. He did not know whether it was the intention of the Government that such degrees should be registered under the Bill, but such certainly was the case.

After the mention of some verbal amendments,

Lord CARLINGFORD moved the addition of the following proviso: "In estimating the amount of the fees to be charged by each medical board for its final examination, a distinction shall be made between so much of the fee as is leviable for the purpose of supplying funds for defraying the administrative expenses of the board, and so much as is leviable for the purpose of defraying the expenses of the maintenance of museums and libraries; and the fees to be paid by university graduates, or persons holding university certificates of having passed the examinations at their university qualifying for admission to the final examination of the board, shall not exceed the portion of the fee leviable, as aforesaid, for the purpose of supplying funds for the administrative expenses of the board."

The amendment was carried.

Lord CARLINGFORD then moved an amendment, to provide that in case of existing medical authorities, members should be returned

to the medical board by the same system as that which now prevailed with reference to the return of members to the Medical Council; and that, in case of any new authority, they should be returned in the manner to be directed by the Privy Council.

The amendment was agreed to without discussion, as were several other amendments of small importance.

The Earl of CAMPERDOWN said that the funds of the Branch Council were to be transferred to the Medical Council, and when the medical boards came into existence, they would have no funds to meet expenses; and he therefore proposed an amendment to provide that the Medical Council should, out of the funds received from the Branch Council, advance to each medical board such funds as would be required to meet expenses, on being satisfied as to the terms of repayment. This last proviso was, of course, to prevent extravagance.

The amendment was agreed to; and, the report of amendments having also been agreed to, the House adjourned.

HOUSE OF COMMONS, Friday, April 20th.

The Contagious Diseases Act.—On the motion to go into Supply, there was a discussion of some length on the working of the Contagious Diseases Acts, started by Mr. Stansfeld, who brought against what he described as iniquitous legislation an elaborate indictment, contending that it had neither checked disease nor promoted morality.—Mr. O. MORGAN on the other side—who, however, said he had no mandate to speak for the Government—defended the Acts, contending, from the evidence before the recent Committee, that they had effected enormous good, physical and moral; that there was practical unanimity in their favour among the professional and respectable classes in the localities affected, and that no effectual substitute had been suggested for them.—Colonel STANLEY, who also approved the Acts, and accepted a share of responsibility for the administration of them, called on Lord Hartington to state the views of the Government.—Mr. ROGERS and Mr. G. RUSSELL spoke against the Acts.—Mr. O'SHAUGHNESSY, as chairman of the Select Committee which has sat four years on the subject, defended its report at length.—Mr. C. BENTINCK severely censured the false statements by which the agitation had been supported.—Lord HARTINGTON informed the House that the members of the Government, who were divided at the general election on the subject, had not been able to come to any agreement among themselves upon it. Those who, like himself and Lord Northbrook, were responsible for the efficiency of the Army and Navy, were in general disposed to support the Acts. So also was the Home Secretary; but other members of the Government, not brought so directly into contact with the working of the Acts, could not see their way to being responsible for the continuance of the system. Consequently, there was no option but to treat it as an open question, and the Government, therefore, could not give the House any guidance on the motion. But as long as the Acts remained on the Statute Book it would be the duty of the Government to see that they were efficiently administered. He hoped that Parliament would not consent to abolish the present system until at least some efficient substitute had been suggested in its place.—Sir S. NORTHCOTE animadverted on the singular attitude of the Government, and insisted that they were bound to tell the House what they intended to do. To leave the matter in its present position would be injurious to the public service, and the House ought to know whether these Acts were to be swept away or whether the dissentient members of the Government would be content with recording a vote against them.—Mr. WHITBREAD spoke strongly in favour of the motion.—Mr. GORST enforced Sir S. Northcote's request that the Government should state its views, and, as Mr. Gladstone was not in his place, moved the adjournment of the debate.—Mr. CHILDERS explained his own opinion, to the effect that, although he believed the Acts had done much good, he did not regard personal examination as an essential part of the system.—Mr. ALAN EGERTON and Mr. ACLAND spoke, after which Mr. Stansfeld's resolution, condemning compulsory examination, was carried by 182 to 110.

Monday, April 23rd.

The Contagious Diseases Acts.—Lord R. CHURCHILL asked the Secretary of State for War, whether it was the intention of Her Majesty's Government without delay to introduce a Bill to give effect to the resolution arrived at on Friday last relative to the Contagious Diseases Acts. He further asked whether it was the intention of the Government, pending further legislation, to continue to enforce the existing law, or whether they would consider themselves entitled to exercise a dispensing power, and to issue instructions to the authorities to take no further prosecutions under the Acts.—The Marquis of HARTINGTON: I can only say to-day, that I am in communication with the First Lord of the Admiralty and with the Home Secretary as to the measures to be adopted in order to give effect to the resolution of the House on Friday last. I hope shortly to make a statement on the subject, but I would rather ask the noble lord to postpone the question for a few days.

THE CONTAGIOUS DISEASES ACTS.

IN consequence of the division on Friday night, the Government will, it is believed, propose a measure with reference to the Contagious Diseases Acts on the same lines as the Bill which was brought forward in 1872. There will, however, be a considerable resistance to a Bill which would overthrow the existing system; and it is, therefore, not at all certain that it will pass this session. In the event of the Government not being able to pass a Bill on the subject of these Acts this session, they will, it is stated, withdraw the votes required for carrying them into operation. This course would practically render the Acts inoperative.

SIR,—As I find that my silence during the discussion of Mr. Stansfeld's motion has been not unnaturally misinterpreted by my professional brethren, who expected me to say something in defence of the Committee of which I had been a member, and in favour of Acts which I believe to have worked well, will you allow me a few words of explanation? I rose several times in the course of the evening to catch the Speaker's eye, but without success; and when I endeavoured, at the close of the debate, to say a few words, "the evident sense of the House" inflicted the *clôture* on my intended remarks. At that late hour, I only wished to express in the briefest possible terms my emphatic dissent from the opinion enunciated by the Chancellor of the Exchequer, to the effect that the Acts could be successfully carried out *minus* the compulsory examination.—I am, sir, your obedient servant, ROBERT FARQUHARSON.

House of Commons, April 25th.

OBITUARY.

ARCHIBALD ALEXANDER, L.R.C.S.ED.,

LATE DEPUTY INSPECTOR-GENERAL OF HOSPITALS.

MR. ALEXANDER, of Boydstone, Ayrshire, died last week at Cheltenham, aged 71. He was the only son of the late Major Alexander Alexander of Boydstone, by marriage with Grace, daughter of Mr Angus M'Alister of Loup, Argyllshire, chief of the clan. He received his professional education at the University of Edinburgh and became a Licentiate of the Royal College of Surgeons of Edinburgh in 1832. Having an inherited taste for a military life, he entered the Army Medical Service, and was appointed Assistant Surgeon to the 4th Hussars in 1835, became full Surgeon in 1845 was promoted to the rank of Surgeon-Major in 1858, and placed on the half-pay list in 1862. He afterwards was made a magistrate of the county of Ayrshire. In 1853, he married Agnes, daughter of Mr. Crawfurd of Cartsburn, Renfrewshire.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 19th, 1883.

Langston, John James, Grantham, Lincolnshire.
Squire, Edward Herbert, Wivenhoe, Essex.
Thorburn, William, Moss House, Rusholme, Manchester.
Tomalin, William John Clarkson, 24, York Road, Northampton.
Tyler, Alfred Joseph Reeve, 1, New North Road, N.

The following gentleman also on the same day passed his Primary Professional Examination.

Harris, John Henry, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

BOARD OF TRADE.—Two Sanitary Surveyors. Salary, £300 per annum. Applications by April 30th.

BRIDGWATER INFIRMARY.—Dispenser. Salary, £50 per annum. Applications to Mr. John Coombs, Honorary Secretary, Bridgwater.

CHILDREN'S HOSPITAL, Birmingham.—Resident Medical Officer. Salary, £80 per annum. Applications by May 3rd.

CHILDREN'S HOSPITAL, Birmingham.—Resident Assistant Medical Officer. Salary, £40 per annum. Applications by May 3rd.

CITY OF LIVERPOOL.—Assistant Medical Officer. Salary, £200 per annum. Applications by May 5th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by May 14th.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Secretary by May 26th.

DERBY COUNTY ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications to the Medical Superintendent, County Asylum, Mickleover, near Derby.

EAST SUSSEX, HASTINGS AND ST. LEONARDS INFIRMARY, Hastings.—Third Assistant-Surgeon (Honorary). Applications by the 30th instant.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary £100 per Annum. Applications, etc., post paid, and marked Eastern Dispensary, to the Hon. Sec., Rev. Conway Joyce, M.A., 6, Richmond Hill, Bath, by May 7th.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—Dispenser. Salary, £100 per annum. Applications by April 30th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by May 5th.

HOSPITAL FOR INCURABLES, Manchester—Honorary Dentist. Applications to R. Armistead, 11, Lever Street, Piccadilly, by May 1st.

MADRAS RAILWAY COMPANY.—Medical Officer. Salary, 450 rupees per mensem. Applications to Julian Byrne, Secretary, 61, New Broad Street, E.C., by May 1st.

NORWICH FRIENDLY SOCIETIES MEDICAL INSTITUTE.—Medical Officer as Resident Surgeon. Salary, £150 per annum. Applications to W. C. Brundell, Pitt Street, Norwich.

PAROCHIAL BOARDS OF STRACHUR AND STRALACHLAN.—Medical Officer. Salary, £80 per annum. Applications to the Rev. H. F. Macdonald, Strachur, Chairman of Stralachlan Parochial Board, by May 1st.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Applications by May 8th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Clinical Assistant for one year. Applications by April 30th.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, Charing Cross, W.C.—Assistant Surgeon. Applications to the Committee of Management, by May 2nd.

SALOP INFIRMARY, Shrewsbury.—Resident House-Surgeon. Salary, £100 per annum. Applications to the "Board of Directors" by May 19th.

ST. MARY'S HOSPITAL, W.—Ophthalmic Surgeon. Applications by May 19th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Resident Medical Officer. Salary, £105 per annum. Applications by April 30th.

THE ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton.—House-Surgeon. Salary, £80 per annum. Applications by May 16th.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Chair of Anatomy. Applications by May 1st.

WESTERN GENERAL DISPENSARY, Marylebone Road.—House-Surgeon. Salary, £120 per annum. Applications by May 7th.

WEXFORD UNION, Bridgetown Dispensary.—Medical Officer. Salary, £100 per annum, and £15 as Medical Officer of Health. Election on May 7th.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY AND FEVER HOSPITAL.—House Surgeon. Salary, £150 per annum. Applications by May 1st.

MEDICAL APPOINTMENTS.

POWELL, John, L.R.C.P., appointed Junior Assistant Medical Officer to the Joint Committees Asylum, *vice* A. D. Maitland, M.R.C.S., resigned.

BUSH, E., L.R.C.P., appointed Medical Officer of the Workhouse to the Thame Union, *vice* T. W. Lee, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

BALLANCE—SMART.—On April 24th, at St. Mary's Church, Bryanston Square, by the Rev. J. D. Ballance, vicar of Horsford and St. Faith's, Norfolk, uncle of the bridegroom, assisted by the Rev. J. G. Pilkington, vicar of St. Mark's, Dalston, Charles Alfred Ballance, M.S., M.B.Lond., F.R.C.S.Eng., of 56, Harley Street, Cavendish Square, W., and St. Thomas's Hospital, eldest son of the late Charles Ballance, of Stanley House, Lower Clapton, to Sophia Annie, only child of the late Alfred and Annie Elizabeth Smart, of the Priory, Lee Road, Blackheath.

BRAND—FERGUSON.—At Fetteresso Parish Church, on the 24th instant, by the Rev. John Watt, Alexander Theodore Brand, M.B. and C.M.Aberd., Driffield, Yorks, to Amelia (Amy), third daughter of the late W. B. Ferguson, C.E., Aberdeen.

HUSBAND—BRADSHAW.—On April 19th, at St. Mary's, Charlcombe, Bath, by the Rev. T. L. Wheeler, M.A., assisted by the Revs. J. R. Husband, B.A., and E. T. Stubbs, M.A., Rector, Walter Edward Husband, L.R.C.P., of Manchester, to Lucy Evelina Augusta Berkeley, only daughter of the late Captain Lawrence Augustus Bradshaw, R.A., and grand-daughter of Captain R. A. Bradshaw, R.N.

DEATHS.

ADAMS.—On April 24th, at Brooke House, Upper Clapton, Mary Gertrude Adams, aged 3 years and 3 months.

DAVIDSON.—April 23rd, at 29, Cassland Road, Hackney, Gertrude Marian, wife of Charles Davidson, F.R.C.S.Ed., aged 25.

HOLLOWAY.—On April 19th, at Netley, Surgeon-General James Lewis Holloway, C.B., A.M.D., son of the late Benjamin Holloway, D.L., and J.P., of Lee Place Charlbury, Oxon, aged 57 years.

TUKE.—April 20th, at Springfield, Bournemouth, Samuel Tuke, M.R.C.S., eldest son of Dr. D. Hack Tuke, of London, aged 26.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. Sir Joseph Fayrer; A Case of Dysentery and Hepatic Abscess: Recovery after Spontaneous Opening of the Abscess through the Lung. Dr. Cros (of Paris): Plessimetry as a Means of Diagnosis.

TUESDAY.—Pathological Society, 8.30 P.M. Adjourned Discussion on Diabetes.—Speakers: Dr. Seymour Taylor, Mr. Victor Horsley, Dr. Frederick Taylor, Dr. Dawson Williams, Dr. Dickinson, Dr. Pavy, Dr. Douglas Powell, Dr. Edmunds. Mr. Stanley Boyd: Tubercular Ulcers of the Tongue (living specimen).

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Mansell-Moullin and others. Dr. Rasch: A Case of Extra-uterine Pregnancy resembling so-called Missed Labour. Dr. Braxton Hicks: On the Behaviour of the Uterus in Puerperal Eclampsia, as observed in two Cases. Dr. Herman: A Case of Acute Gangrene of the Vulva in an Adult, with Remarks.—Epidemiological Society of London, 8 P.M. The office-bearers for the ensuing session will be nominated. Deputy Surgeon-General Ewart, M.D.: On the Causes of the Excessive Mortality among the Women and Children of the European Army of India.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. Broadbent: Two Cases of Solution of Calculus in the Kidney and Bladder. Mr. G. P. Field: The Treatment of Catarrhal Deafness in Children.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE BRITISH MEDICAL JOURNAL.

SIR,—I am a weekly reader of the BRITISH MEDICAL JOURNAL, yet I was unaware that your valuable services were to be so gracefully recognised as at the recent great professional meeting at Grosvenor House.

The BRITISH MEDICAL JOURNAL is a literary pleasure; it is powerful through your energy; it not only faithfully records the theories, the deeds, and the experimental knowledge of those who stand in the temple of Æsculapius, but I am sure that it is exercising a social and salutary influence unique in medical literature.

The interest in your articles on social, sanitary, temperance, and economical questions, extends beyond the circle of our profession, and ramifies widely in Society, which thus sees that our aspirations are not limited by professional selfishness, but are prompted by a desire to "do good unto all men."—I am, sir, yours faithfully,

EDW. WOOD FORSTER, Member of the Victoria Institute.

7, West Terrace, Darlington, April 18th, 1883.

*** We have received numerous letters of kindly congratulation and comment on the occasion of the recent presentation, many of them intended for publication. While making grateful acknowledgment of these courteous and welcome communications, we trust our inability to publish them will not be supposed to arise from any want of appreciation. We have also to thank Mr. *Punch* and many other contemporaries for their most kind and deeply felt words of sympathy and approval.

ERRATA.—In the report of the Clinical Society, published at page 772 of last week's BRITISH MEDICAL JOURNAL, first column, ninth line from the bottom of the page, it is stated that, on January 13th, Mr. Roth's patient, who had, three weeks previously, commenced his treatment for lateral curvature of the spine, passed the whole day without *headache* for the first time for two years. The word in italics should have been backache.

AN APPEAL.

SIR,—A member of our profession, well known to us, who has been obliged through deafness to relinquish his practice at Potter's Bar, is now without resources, and very anxious for employment.

His wife, the daughter of a medical man, one of the founders of the Medical Benevolent College, is a lady of most exceptional qualifications, who could take charge of any public institution, with superintendence of children, nurses, and the household, whilst the husband could supervise and attend to correspondence, and keep an eye on the sanitary state of the building. All who know them feel how specially they are qualified for the work proposed.

It is in the hope that your readers may be able to suggest or discover some suitable post, that we venture to ask you to give publicity to this letter.—I am, etc.,

E. SYMES THOMPSON.
JOHN GAY.

RED GAS-LAMPS.

SIR,—There is a doctor in this town who displays two large red gas-lamps outside his house, with his name thereon, presumably for the purpose of advertisement. May I ask you, sir, for your opinion upon the matter, as to whether you think it decent or professional, and if it is not tending to degrade the medical man in the eyes of the public?—I am, sir, yours truly, M. T.

*** The use of red lamps by medical men seems to be a survival of the custom of distinguishing shops by sign-boards, which was at one time universal, and was doubtless common among apothecaries. It is a custom possibly "more honoured in the breach than the observance" at the present time, but we are not prepared to say that it is unprofessional, nor that anyone who follows it deserved to be gibbeted.

A. T. had better apply to a job-master, as we think the information which he can obtain from this source is likely to be more accurate than that he would obtain by applying to the editor of the BRITISH MEDICAL JOURNAL.

EPITHELIOMA OF THE LOWER LIP IN WOMEN.

SIR,—With reference to this subject, as there is a letter in the JOURNAL of April 14th from Dr. J. O. Wilson of Huntly, N.B., I beg to say that I have under care at the present time a woman, aged 58, with this disease. Whether it is caused by smoking or not, I cannot say. She is, however, in the habit of doing so, and has been for many years; leading one to suppose that this is the case. This is the only case in a woman I have ever seen, but I have seen many the other sex.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.—The gentlemen retiring from the Council of the Royal College of Surgeons in July next are, we believe, Messrs. John Birkett, Prescott Hewett, and J. Cooper Forster. The two first-named gentlemen, who have held the highest offices in the colleges, will not, we understand, seek re-election; but Mr. Forster, the Vice-President, will, of course, again offer himself, and no doubt be re-elected. The only candidates we have yet heard of are, Mr. Alfred Baker of Birmingham, a former member of the Council, Mr. Reginald Harrison of Liverpool, Mr. Macnamara of the Westminster Hospital, and Sir William Mac Cormac of St. Thomas's Hospital.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. Albert Kisch, London; Mr. Alfred Roper, Croydon; Mr. H. Benton, Brompton; Mr. T. Jenner Verrall, Brighton; Mr. Nelson Hardy, London; Dr. Crichton Browne, London; Dr. Robinson, Dublin; Dr. G. A. D. Mackay, Greenock; Mr. Robert Birch, Newbury; Dr. G. Dean, Dublin; Mr. J. H. Oates, Dewsbury; Mr. William Taylor, Cardiff; Mr. A. Spearing, Shaw, Oldham; The Secretaries of the Harveian Society; Mr. G. E. Stanger, Nottingham; Dr. R. F. H. Cooper, London; Dr. Styrap, Shrewsbury; Mr. K. W. Millican, Kineton; Dr. A. Sheen, Cardiff; Dr. A. Hill, Birmingham; Dr. Charles Orton, Newcastle-under-Lyne; Mr. Shirley F. Murphy, London; Dr. Macpherson, London; Mr. Bernard Roth, London; Dr. Fancourt Barnes, London; Dr. Montrose Pallen, London; Mr. C. F. Coxwell, London; M.R.C.S.; Mr. Arthur Cooper, London; Mr. J. A. Erskine Stuart, Healey; Mr. James Law, London; Dr. A. H. Robinson, Hull; Mr. W. W. Hardwicke, Rotherham; Sir Joseph Fayrer, London; Dr. Taaffe, Brighton; Dr. Guye, Amsterdam; Mr. W. Alpin, Guernsey; Dr. W. H. Barlow, Harpurhey, Manchester; Mr. Benjamin Clark, London; Mr. A. C. Shout, Chelmsford; Mr. Eastes, London: Mr. John S. Wills, Thorncombe; Dr. Henry Habgood, Eastbourne; Mr. Mulville Thompson, Newport, Shropshire; Dr. C. F. Coxwell, London; Mr. Luigi Vincenzo Mapei, Golborne; Dr. F. Ernest Pocock, London; Mr. H. Behrend, London; Mr. Francis Vacher, Liverpool; Mr. G. H. Cable, Greenwich; Mr. R. H. C. Hunter, Battersea; Dr. W. Dale, King's Lynn; Dr. Imlach, Liverpool; Dr. E. Symes Thompson, London; Mr. John Gay, London; Mr. T. Whitehead Reid, Canterbury; Mr. O. Vincent, London; Mr. F. H. Davies, Hanwell; Dr. R. Wade Savage, London; Dr. Leech, Manchester; Mr. R. M. Craven, Southport; Mr. Henry Meymott, Ludlow; Mr. T. M. Stone, London; The Secretary of the Church of England Temperance Society; Mr. W. J. Walsham, London; Dr. McKendrick, Glasgow; Mr. C. Roberts, London; Mr. G. Armstrong, Liverpool; Dr. R. H. Nicolls, Navar; Dr. W. H. Robertson, Brixton; Dr. J. Alexander, Paignton; Mr. Alfred Craske, London; Dr. T. Farquhar, Harrogate; Dr. Rogers, London; Mr. John Fryer, Dewsbury; Mr. T. C. Beatty, Seaham Harbour; Mr. Hugh Redmayne, Ambleside; Dr. Sawyer, Birmingham; Dr. F. W. Barry, London; Mr. C. R. Illingworth, Clayton-le-Moors; Sir J. E. Eardley Wilmot; Mr. W. Bain, Stockport; Mr. J. W. Hopkins, Eccleshall; Mr. E. D. Kirby, London; The President of the Pharmaceutical Society; Dr. W. J. Simpson Ladell, London; Mr. F. Boswall Watson, Liskeard; The Director of the Criminal Investigation Department; Dr. J. A. Campbell, Carlisle; Dr. W. A. Brailey, London; Dr. Cosmo G. Logie, London; Dr. Tripe, London; Dr. J. Swift Walker, Hanley; Mr. T. G. Wadlow, West Ponton; Dr. A. Emrys Jones, Manchester; Mr. Thomas Laffan, Cashel; Mr. George H. Wyse, Bray, Ireland; Mr. R. G. Osborne, Netley; The Secretary of the University of St. Andrew's; Mr. R. J. H. Scott, Bath; Dr. Churton, Leeds; Dr. Quinlan, Dublin; Dr. Willoughby, London; Mr. E. A. Brickwell, Sawbridgeworth; Mr. William Cox, Winchcombe; Mr. John Reid, Rochdale; Messrs. Loeflund and Co., London; Mr. R. Prosser White, Wigan; Dr. J. Spottiswoode Cameron, Huddersfield; Mr. W. Crookes, London; Mr. William Odling, London; Dr. C. Meymott Tidy, London; Mrs. Crake, Eastbourne; Mr. A. W. Wallace, Parsonstown; Dr. A. H. Carter, Birmingham; Mr. D. H. Menzies, Glasgow; Mr. Alfred Teevan, London; Professor F. Barff, London; Mr. H. E. Spencer, York; Dr. Fairlie Clarke, Southborough; Messrs. Sampson Low, and Co.; Mr. J. W. Davies, Ebbw Vale, Monmouth; Mr. Charles Penruddocke, Whitcombe; Captain Douglas Galton, London; Mr. A. G. Klugh, London; Dr. Matthew Hay, Edinburgh, etc.

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LECTURES
ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

TRACT OF LECTURE V.—MUSCULAR TISSUE: ITS PROPERTIES AND MODES OF ACTION.

lecturer first gave a short account of the phenomena attending ular contraction presently known to physiologists. These are tially chemical changes—the production of heat, electrical tions of potential, and motion. He divided the history of the ons of physiologists regarding muscular motion into three s—namely, the speculative, the histological, and the experi- al. The older anatomists attributed motion, not to the fleshy, o the tendinous portions of muscle. About 1660, Robert Hooke 5-1703) suggested that muscular fibre consisted of a series of les placed end to end; and that, by the inflation of these les, movement was effected. About the same period, Mayow 5-1679) gave a chemical explanation of muscular contraction— ly, that the "nitro-aërial spiritus" united with salino-sul- eous particles chiefly in the muscles, there causing a kind of entation, and producing animal heat. The fibrous structure of le was described by Nicolas Steno (1638-1687), and by Croone 64. In 1680, Borelli's great work, *De Motu Animalium*, ared, in which he elaborated by geometrical methods what may lled the vesicular hypothesis. Following him, John Bernouilli I -1748) supposed that the vesicles were inflated by the red l-corpuscles, which he described as little bladders full of elastic under pressure. A contemporary, Keill (1673-1719), gave a more rate explanation of a mechanical kind, depending on the iple of attraction then recommended to scientific men by the ant generalisations of Newton (1642-1727). Indeed, Newton elf supposed that muscular movement might be excited by tions of the ether in the nerves communicated to the ether in nuscular vesicles. This view was strongly urged by Cowper, in *Myotomia Reformata*, published in 1724. The lecturer here ed out the danger of using fanciful analogies in the explana- of physiological phenomena, as shown by these mechanical theses. Leuwenhoek (1632-1723), in letters to Robert Hooke, the first to describe muscle as seen by the microscope. He the fibres, recognised the striation, and describes a membrane unding the fibrillæ. From his drawings it is clear that, from mperfection of his simple microscopes, he did not see that the s were striated through their whole length, and it is probable the membrane he describes was not the true sarcolemma, but ective tissue. De Heide and Muys, contemporaries of Leuwen- , made similar observations, about 1714. Muys supposed the læ to be tubes communicating with the capillary vessels, and movements occurred by fragments of broken blood-corpuscles g forced into these. No progress was made in knowledge of the ture of muscle till 1778, when Prochaska (1749-1820) de- ed the fibres and striation with great clearness. In 1781 ana made similar investigations, and described muscle as con- ng of fasciculi and fibres. He described the primitive fibres as l cylinders, marked externally with transverse lines or bands at l distances. He also said the filaments lay side by side, and not twisted together, and he first pointed out that neither the llary vessels nor the nerves ended directly in the muscular fibres, exploding the idea that any kind of fluid passed from the one e other. Whilst knowledge was thus being accumulated regard- the structure of muscular fibre, physiologists were obtaining er views as to its special properties. The term "irritability," nated with Francis Glisson (1596-1677), who was professor of ic at Cambridge for nearly forty years. He thus defines irrita- y as distinct from sensibility: "*Irritatio est perceptio, sed sen- est perceptio perceptionis.*" Following him, Baglivi (1703), orter (1731), Winter (1746), and F. Hoffmann (1750), used irri- ity in the same sense; but one and all of these failed in recog- g the property as one inherent in muscular substance. This reserved to the great Swiss physiologist, Albrecht von Haller 8-1777). The lecturer gave a short account of the life of er. According to him, irritability was a *vis insita*, a susceptibility of movement in muscular fibre, inherent in the very constitution of the fibre, and not supplied to it by the nerves. This view was strongly combated by Whytt (1714-1766), who explained muscular contraction, not by the rational *anima* of Stahl, but by the supposed existence of a sentient principle residing in the nerves of the part. The lecturer showed how the controversy between these schools advanced physiology, by obliging the Hallerians to recognise that contractile movements occurred in other tissues than in muscle alone, whilst the neurologists recognised the great importance of the ganglionic system of nerves. He then showed how Haller's doctrine had been accepted by physiologists generally. The experiments of Valli in 1793, of Fowler in the same year, of Nysten in 1811, and of John Reid in 1835, all showed that a stimulus applied to muscular substance alone, caused contraction without the intervention of nerves. The *vis insita* of Haller was a metaphysical conception of the same kind as that of the vital principle of the older authors. Haller and his followers supposed it to be a special principle in the muscle, a δύναμις, in virtue of which it responded. Such a phrase explained nothing, and, as stated by Fletcher, it was in ridicule of this that Dean Swift represents the action of a smoke-jack as depending on a meat-roasting power, and that of a fiddle on a tune-playing power. Molière also made his candidate for a physician's diploma reply to the question, *Quare opium facit dormire? Quia est in illo virtus dormitiva, cujus est natura sensus assoupire.* Still, Haller's hypothesis was a great advance, especially when the metaphysical notion was abandoned, and the term irritability expressed merely a fact, without assuming the existence of a special principle.

John Hunter (1728-1794) explained muscular contraction by assuming the existence of a vital force. The lecturer showed that Hunter attached great importance to the functions of elastic structures in the mechanism of the body, but Hunter did not seem to be aware of the elasticity of muscle itself. Bichat (1771-1802), in his short lifetime, contributed largely to physiology by directing special attention to the functions of tissues; and in his work *Anatomie Générale*, published in 1801, divided muscles into two groups, those of animal life, and those of organic life. He attributes these functions to muscle, extensibility, contractility, and sensibility. There is no mention of elasticity.

About this time, from 1780 to 1800, the discovery of oxygen naturally led physiologists to attach great importance to this element. Thus we find A. Fothergill, in 1782, suggesting that, in cases of suspended animation, the lungs should be inflated with dephlogisticated air, that is, with oxygen. Following him in 1790, Girtanner actually identified irritability with oxygen. The notion of the fundamental phenomenon of life at this period was that of combustion.

In 1809, William A. Wollaston (1766-1828) discovered the muscular sound, and made the important generalisation "that each effort, apparently single, consists in reality of a great number of contractions repeated at extremely short intervals." Thus Wollaston, by a kind of intuition, anticipated the modern view of the condition of tetanus.

The lecturer then alluded to various investigations into the structure of muscles, made by Everard Home and Bauer in 1818, by Hodgkin and Lister in 1832, by Skey in 1837, and Mandl in 1839. Even up to this period, the prevalent opinion, first given by Hales in his *Hæmostatics*, and afterwards repeated by Prevost and Dumas in 1825, was that, when muscular fibres contracted, they were thrown into zigzag bands. This was first questioned by Richard Owen and Arthur Farre, and was finally shown to be incorrect by Allen Thomson. Then, in 1840, appeared the classical research on muscle by William Bowman, which undoubtedly marked an epoch in the physiology of muscle, not merely on account of the new facts contributed, but by being a basis and starting-point for the researches of recent histologists. Mr. Bowman also showed that a wave of contraction passed along a muscle from the stimulated point. The lecturer then alluded to the steps by which physiologists came to the opinion that the sarcous elements of Bowman manifested properties similar to the sarcode of simple animals, a name first given to it by Dujardin in 1835. He alluded to the influence of the cell-theory, and more especially to the use of the word protoplasm by Hugo von Mohl in 1844.

In 1842, Liebig speculated as to the changes in muscle from a chemical point of view. Adhering to the hypothesis of a vital force, he assumed that it governed the chemical operations occurring in the body. Energy was liberated by the decomposition of muscle-substance, whilst heat was obtained by the combustion of non-nitrogenous matters. This view was objected to in 1845 by Mayer of

Heilbronn, who argued that the chemical changes in the muscles were not different from those occurring in dead matter. On theoretical grounds also, he concluded that muscular action was not attended with great destruction of nitrogenous matter. Subsequent experiments have proved this to be the case, showing that muscular activity is not followed by an increase of nitrogenous matters in the excretions, but by an increase of non-nitrogenous matters, particularly carbonic acid.

Since 1840, our knowledge of muscular action has been gained chiefly by experiment. Schwann was the first to measure the force of muscular contraction. Weber, in 1846, showed that muscles possess elasticity, and that the elasticity is diminished as the muscle contracts. He also made the important discovery that tetanus is due to a rapid series of short contractions, fused together by the elasticity of the muscle. In 1846, Wertheim investigated the elasticity of muscle. In 1850, Von Helmholtz devised the myograph, an instrument which in its various forms has been of immense service in physiological research.

The lecturer then showed a number of experiments, illustrating the single contraction curve, the tetanic curve, and the method of studying muscular work. He also demonstrated the period of latent stimulation. Next, he referred to the researches on the mechanical work of muscle by Weber, Von Helmholtz, Fick, Heidenhain, and others. Von Helmholtz, in 1848, was the first to make accurate measurements of the heat produced by contracting muscle.

The lecturer referred very briefly to the chemical researches of Kühne (1859) and others as to the chemistry of muscle. Finally, he showed how Hermann had devised a theory to account for the phenomena of muscular contraction.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

Lecture III.—On the Early Development of the Lamprey.

The ripe ovum of the lamprey is a slightly oval body, about one millimètre in diameter, formed of an opaque, nearly white yolk, invested by a membrane of an inner perforated and an outer structureless layer. There seems to be a pore perforating the inner layer at the formative pole, which may be called a micropyle. Enclosing the egg-membrane, there is a mucous covering, which causes the egg, when laid, to attach itself to stones or other objects. Impregnation is accomplished by the male attaching itself by its suctorial mouth to the female. The couple then shake together, and at the same time emit from their abdominal pores ova and spermatozoa. The segmentation of the ova is total and unequal, resembling that in the ova of the frog. The upper pole is slightly whiter than the lower. A segmentation-cavity is found very early, and is placed between the small cases of the upper pole and the large ones of the lower. The roof is formed of a single row of small cells. At the sides of the segmentation-cavity there are several rows of small cells, which gradually emerge into the larger cells of the lower pole. Segmentation is followed by an asymmetrical invagination, which leads to the formation of a hypoblast like that of the frog. A small circular depression forms near the border below the segmentation-cavity. The top of this is formed by the infolding of the small cells, while the floor is composed of the large cells. This pit is the commencement of the mesenteron. It soon becomes deeper, and forms a well-defined tube running in the direction of the segmentation-cavity; this latter gradually becoming smaller, and finally obliterated. The external opening, which eventually closes, is arched over by a prominent lip. Simultaneous with these changes, the small outer or epiblastic cells gradually spread over the yolk-cells. The growth of the yolk-cells is as in normal types of epibolic invagination. By the time the segmentation-cavity is obliterated, the whole yolk is enclosed by the epiblast, which is composed of a single row of columnar cells. During these changes, the mesoblast is formed as two plates from the primitive hypoblast. These plates are triangular in form, and are situated one on each side of the middle line. When the mesoblast is fully formed, the lateral parts of the hypoblast grow inwards underneath the axial part, so that it becomes isolated as an axial cord, and is next enclosed between the medullary cord and a continuous sheet of hypoblast below. Here its cells divide, and it becomes the notochord. The notochord is thus formed out of the axial portion of the primitive hypoblast. The medullary plate forms as a streak extending forwards from the blastopore over fully one-half of the circumference of the embryo, about the time when the enclosure of the hypoblast by the epiblast is complete. The medullary plate first contains a shallow median groove; along its line, the epiblast becomes thickened, and forms a kind of keel projecting inwards towards the hypoblast. This becomes more prominent, and the groove in it disappears, and it becomes separated from the epiblast as a solid medullary cord. The embryo is now of an elongated form, and the medullary cord forms a ridge on its closed surface. At the lip of the blastopore, the medullary cord is continuous with the hypoblast, thus forming the rudiment of the mesenteric canal.

After the formation of the neural cord, the cephalic portion first becomes distinct, forming an anterior protuberance free from yolk, and at the same time the mesoblastic plates begin to divide into somites. Shortly afterwards, an axial lumen appears in the centre of the neural cord. With the growth of the embryo, the yolk becomes entirely confined to the posterior part of the embryo; the embryo itself becomes spirally coiled.

After hatching, the body is somewhat curved, the posterior extremity being thick with the yolk, while the anterior is thin. The larva exhibits only slow movements, and is not capable of swimming. On the ventral side of the head is placed the oral opening, leading into a large stomodæum, which is still without connection with the mesenteron, but prolonged a considerable distance under its anterior part. Behind the stomodæum is the branchial region of the mesenteron, which is laterally attenuated on each side into seven or perhaps eight branchial pouches; these extend outwards nearly to the skin. Between the pouches are placed mesoblastic segments which enclose a central cavity. One segment is placed behind the last, and two in front of the first persistent pouch. This pouch is situated in the same vertical line as the auditory sac, and seems to be the hyobranchial cleft. At the front end of the branchial region of the mesenteron is a thickened ridge of tissue, which, at the opening of the passage between the stomodæum and the mesenteron, forms a partial septum between the two, and is called the velum. On the ventral aspect of the branchial region is a sac extending from the anterior end to the third cleft. At first, it constitutes a groove opening into the throat above; but soon the groove becomes narrowed into a groove placed between the second and third permanent branchial pouches. The sac in the adult forms a glandular mass below the branchial region, and is equivalent to the thyroid gland in higher vertebrates.

ON SOME POINTS IN THE REPARATIVE SURGERY OF THE GENITAL TRACTS.

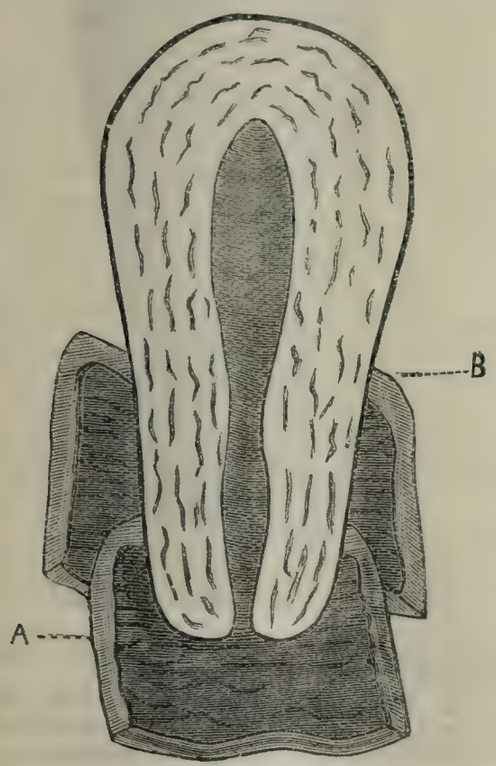
By MONTROSE A. PALLEN, A.M., M.D., LL.D.,
Professor of Gynæcology and Operative Midwifery in the New York Post-Graduate School of Medicine, etc.

It is proposed, in the first part of this paper, to consider a condition of the cervico-vaginal spaces which is most constantly associated with displacement, dysmenorrhœa, dyspareunia, and sterility. Arrest of development (certain normal transitory embryological states becoming fixed conditions in infantile life), or a failure of the second formative development of puberty, is the usual cause of this condition, although excessive developmental impulse quite frequently determines an increase of one or more of the factors of copulation, generation, or parturition.

Wherever there is a defect in symmetrical anatomical and physiological correlation of the generative organs, some abnormity is present to indicate either arrest or excess of embryogenic impetus. The symmetrical relationships and internections of the vagina, bladder, rectum, uterus, oviducts, and ovaries cannot be disturbed without protest upon the part of one of these organs, or possibly the whole of them. For the re-establishment of the symmetry and correlation of the congenital disorders of place and function, I have made certain surgical procedures successful, based upon the belief that there were possible plastic operations which might overcome teratological (fixed transitory embryonic) states. An understanding of the development and functions of the vagina will explain how its faulty implantation produces either an apparent, not a

avaginal elongation of the cervix uteri, a false hypertrophy and identia; or how the converse may ensue (the so-called infantile x) when there is a false supravaginal hypertrophic elongation.

he usual treatment for intravignal cervical elongation has erto been amputation. Clinical observation has demonstra- the correctness of this treatment in *true* hypertrophic elonga-, but in the *apparent* (B Fig. 1) form of the lesion such pro- ling is actual mutilation, even if we exclude the immediate and ote dangers of hæmorrhage, peritonitis, septicæmia, permanent



g. 1.—A Histological fusion, or normal vaginal implantation. B Faulty implantation of the vagina, or the anomaly of excessive dimension.

lodgment of the uterus, and sterility. Should the woman not be de sterile by the amputation, the parturient after-complications serious.

The vagina—an organ of mixed functions, intermediate in sition—is formed by the hollowing out of a membranous ır, the cloacal septum between the bladder and rectum, at about eighth week of conception, at which period the uterine and rinal cavities are continuous. Sometime about the fifth month, ese two organs are materially distinct; and, if no arrest of deve- ment take place, or no increased formative action be manifested, implantation of the vagina upon the cervix (A Fig. 1) (histo- ical fusion) is such as to cause the proper pubertic congulation be about one hundred and sixty degrees, and the correlations place symmetrical.

The normal fusion of the vagina being higher on the posterior an on the anterior cervical segment, it is folded upon itself pos- iorly, the pelvic extremity being agglutinated with the peritoneal in Douglas's pouch. The dip from the bladder anteriorly is ich less than posteriorly, although there are marked falciform ocesses horizontally thrown around the cervix. The general im- antation of the vagina around the cervix is that of an inverted ne folded upon itself, with greater space posteriorly. The sup- rting and sustentative functions of the vagina depend upon the rrounding connective tissue, as well as its attachments to the lvic fasciæ from and around the bladder (the pubo-vesico-uterine raments of Hyrtl), and the processes and dissepiments of mus- lo-serous tissue blended with the sacro-lumbar ligaments.

When no increase, either of vascular, muscular, or connective tissue kes place, the vagino-cervical fusions are mutually supporting and stentative; and it is only when the correlations of place and order e destroyed by pathogenetic causes, that we are called upon to eat postpubertic lesions, whilst congenital abnormities constantly quire surgical interference.

The intravaginal dip of the cervix uteri in the average-sized illiparous woman is about six lines, and in the mother somewhat ss, but with a corresponding increase in length of the supra-vaginal portion, the isthmus, and the fundus. In the nullipara, the length of the cervical and uterine cavities during the intermenstrual period is a fraction over two inches and a half, and something less than three in the child-bearing woman. Any marked increase beyond these lengths is indicative of *hypertrophic elongation of the cervix, subinvolution, the presence of a neoplasm, or hyperplastic formations.*

The persistence of the normal measurements in totality, notwithstanding an excessive elongation of the intravaginal cervix (B Fig. 1) indicates a faulty implantation of the vagina above its normal site of histological fusion.* *The deduction, then, is, that amputation of an elongated intravaginal cervix, however great it may be, when the measurements of the cavities do not exceed three inches, is a mutilation, and should not be made until other procedures have failed.*

When the converse implantation of the vagina ensues (the measurements being as in the other condition), the "infantile neck" exists, which is a misnomer, because, during infancy, the neck is in excessive development as compared with the body of the uterus. This formation is abnormal (teratological), as the actual condition is an implantation of the vagina *too low down upon the cervix*, giving it an intravaginal dip of rarely more than one or two lines. This condition is the anomaly of *defective vaginal dimensions*, in contradistinction to the other as the anomaly of *excessive vaginal dimensions.* For the anomaly of defective vaginal dimension, no surgical procedure has as yet been successful for its rectification, although an operation, the converse of one to be described for excessive vaginal dimension, might be done by sliding the pelvic extremity of the vagina higher up, and fusing it on the cervix.

Amputation of the cervix uteri, made fashionable by Huguier, and further popularised by Chassaignac's system of écrasement, like many other surgical procedures, has been more enthusiastically recommended than rationally performed. Since the use of the galvano-cautery loop has become so general, we have been even more prone than ever to take off the cervix. Whatever the method, and however skilfully performed, except for malignant disease and true supra-vaginal hypertrophy, cervical amputation is to be avoided.

There are a number of cases recorded, where the peritoneal cavity was opened by the écraseur: one by Marion Sims, who saved his patient by stitching the wounded surfaces together with silver wire; one by Breslau, where the section was followed by extrusion of the intestine; one by Biefel, where death from peritonitis ensued after an opening into the bladder; one by a Parisian surgeon (reported by Blanquinque), where death ensued on the same day from hæmorrhage and peritonitis; one by Langenbeck, where the peritoneum was wounded; one by Meadows, who described another; by Peter (the French translator of Bennet), who mentions another. Why such an accident takes place during écrasement is readily understood when we recollect that, in all cases of true hypertrophic elongation, the peritoneum is commonly dragged down with the cervix, sometimes as low as the sacculated bladder, nearly always in the retro-uterine space, and may even be drawn out of the vulva. In faulty vaginal implantation (excessive dimension), Douglas's pouch may be drawn down below the plane of the recto-vaginal septum. Therefore, lest the general recommendations of Huguier and the more modern surgeons be carried out, to amputate the cervix, I wish to eliminate those cases wherein such an operation should never be performed. The immediate dangers of hæmorrhage, peritonitis, and traumatic enterocele, as well as the remote trouble of sterility, and roaming uterus with permanent deformity, are contra-indications that should make us pause. Any substitute is welcome, particularly if its theory be based on true rational grounds, and its performance prove a success.

The substitute for amputation consists in a circumsection of the mucous membrane covering the elongated intravaginal cervix, together with a severance of the same above the vaginal implantation, in order to "telescope" and attach the lower to the upper margin of the denuded cervix. *The rule in the performance of this operation is, for those cases where the longitudinal diameter of the cervico-uterine cavity does not exceed three inches* (Fig. 1), *but where the intravaginal portion of the cervix is so long as to interfere with either locomotion, sitting, coition, menstruation, or conception.* In other words, this operation is peculiarly adapted to all cases where the anomaly of vaginal dimension exists, where the implantation of the vagina is fused too high upon the cervix.

A very remarkable instance of excessive vaginal implantation is

* A possible condition of incudiform uterus, with hypertrophic elongation of the cervix, might present such symptoms, although I know of no such case.—M. A. P.

described by Martini (Ludv. Martini de Biberach, *Die Unfruchtbarkeit der Weiber*. Erlangen, 1864, p. 66), where the posterior fornix was attached to the very top of the uterus.

When this *vagino-cervicoplasty* is determined upon, the patient should be etherised or anæsthetised from nitrous oxide gas, placed in the left lateral semiprone position, a Sims's speculum introduced, and the cervix steadied by a tenaculum, which is handed to an assistant. Two lines of division of the mucous membrane are swept around the cervix by means of a bistoury with its cutting edge at right angles to the shank, and then stripping off the mucous membrane with scissors curved on the flat, and the lower margin of this surface denudation should be about two lines from the os externum posteriorly, and about three anteriorly. The upper margin should have a parallel sweep extending higher anteriorly than posteriorly. The breadth of the denudation varies from ten to thirteen lines (according to indications) (Fig. 2), which deprives at least seven-tenths of

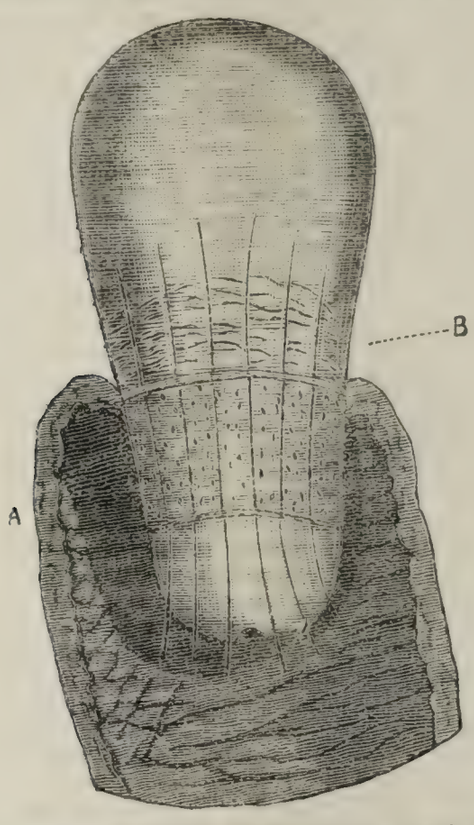


Fig. 2.—A Circumcervical denudation. B Showing the separation of the covering of the supravaginal cervix.

the intravaginal cervix of its mucous membrane. The hæmorrhage is usually but slight, although one is liable to meet with an abnormal implantation of the circular artery, which, if divided, must for obvious reasons be ligated or twisted at either orifice. When all bleeding has ceased, the next step of the operation must be made with great caution, as exact adaptation is of great importance, and, therefore, we should see each division of the submucous connective tissue. A tenaculum is inserted into the upper edge of the raw surface, and the mucous membrane detached upwards from the cervical structure (B Fig. 3) (by means of scissors curved on the flat, cutting with the concavity towards the cervix), and a separation made all around, varying from three to eight lines in depth according to the greater or less length of the cervix. The bleeding is usually checked by the application of sponges wrung out in iced alum water, although occasionally it is necessary to twist or ligate a branch of the circular artery. After the parts are cleansed, and all oozing has ceased, the silver wires are passed from above downwards, from without inwards on the upper flap, and from within outwards on the lower flap. These sutures are very easily passed by means of fish-hook shaped needles, trocar-pointed, having an eye sufficiently large to admit of the passage of a No. 29 wire. When the wires are adjusted, eight or nine in all, the parts are drawn together, and the apparently elongated cervix is shortened and covered (telescoped) by the vagina, being actually lifted and attached to the upper denuded and detached sheath. (Fig. 3.)

This proceeding has been made seven times for various conditions resulting from elongated intravaginal cervix. Five of these operations have been published in the *American Journal of Obstetrics* (1874), and the *New York Medical Record* (1879). The other two operations were as follows.

Case VI.—Mrs. X., aged 29, married for five years, sterile a

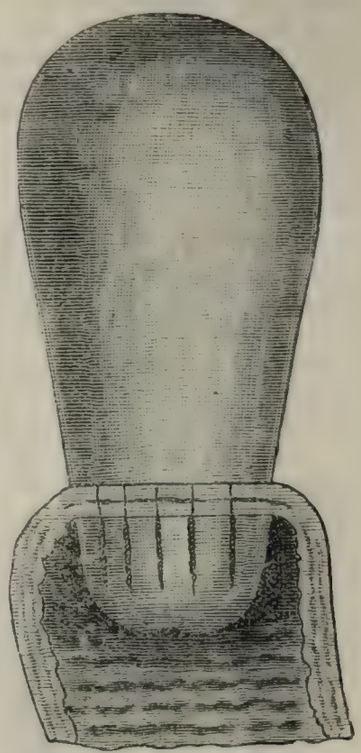


Fig. 3.—Showing the margins brought together, and the elongated cervix telescoped above the abnormal vaginal implantation.

dysmenorrhœic, presented herself to the New York University Medical College Clinique for treatment in November 1879. An examination revealed a long acuminated intravaginal cervix, fifteen lines in length, the uterine probe marking two inches and eleven lines from the external os to the fundus. The uterus was down in retroversion, and the recto-colic flexure much distended with accumulated fæces. After a couple of weeks' preparation, to establish the bowel functions, the operation of *vagino-cervicoplasty* was made in the College amphitheatre. The wounds healed nicely and the sutures were removed on the eleventh day by Dr. Von Lundohr, the *chef-de-clinique*. This patient, who had been sterile for five years, conceived early in 1880, and was delivered of a healthy female child (in Sacramento, California, whither she went from New York) in January 1881. In this instance the cervix uteri was telescoped into the vagina above; and, when insemination was made the germinating fluid entered the cervical canal instead of being discharged, as formerly, into the posterior vaginal *cul-de-sac* behind the cervix, which was evidently the cause of sterility. This is the second case wherein sterility has been overcome by this operative procedure. The other case was shown (prior to conception but subsequent to the operation) to the New York Obstetrical Society in 1879, six months after the *vagino-cervicoplasty*, but Dr. Potter, of New York, has since reported her delivery of a child.

Case VII.—Mrs. Z., aged 37, widow for nine years, excessively dysmenorrhœic and highly nervous, presented herself in October 1880. Examination revealed a very much distended vagina in consequence of the presence of a very large Hodge's pessary "to keep the uterus up." The intravaginal cervix was thick, hard, and pulpy, reddish in colour; from the external os a thick tenacious mucus purulent discharge oozed. She had chronic intracervical catarrh in consequence of the obstruction of the circumcervical blood-vessels caused by the pressure of the pessary, which likewise developed vaginal catarrh. The pessary was removed; the patient kept quiet for a couple of weeks, pending which the vagina was frequently blanched by an almost excessive use of hot water, and the intracervico vaginal circulation freed of distension, by removing through the hæmorrhoidal vessels all intestinal obstruction by means of salines. Two weeks more were allowed to supervene without any special treatment, save moderate rest in the horizontal position and one hot vaginal douche at bedtime. The result of this method of proceeding reduced the circumferential size of the cervix, materially softened it, and rendered its colour almost normally

e endocatarrh diminished, and the endometrium was barely sen-
ve to the probe, which revealed a longitudinal diameter of three
hes and one line, with the intravaginal cervix of fourteen lines
. In December 1880, the operation of *vagino-cervicoplasty* was
de, which resulted in bringing about a shortening of the intra-
inal cervix to less than five lines, with an amelioration of the
roversion, sufficient to do away with the use of a pessary. The
menorrhœa is better, as is the hyperæsthesia; and now, twenty-five
nths after, the patient may be said to be decidedly progressing to
ecovery that will be lasting. Certainly her condition is vastly
ter than before.

Seven successful operations for the relief of a condition hitherto
ated by amputation (which is mutilation), is testimony well
rth considering, more particularly as a failure could only result
he formation of cicatricial tissue, whence the mucous membrane
l been denuded. In presenting these seven cases, let me hope
t the procedure will be considered worthy of trial, and that plas-
reparative surgery will do away with another operation that has
its object, not reconstruction, but ablation of tissue.

The second part of this paper is another sequence of the study of
functions and construction of the vagina, more particularly with
ard to its sustentative and sustained properties. All fallings of
uterus from the slightest prolapse to the completest procidentia,
essarily involve more or less folding of the vagina upon itself; and,
uld the substructure, the perineal conjunction, be absent, the pro-
s of vaginal folding ultimately becomes complete inversion. Without
necessary amount of time to properly discuss the relations of
inal dislocations to the perfect integrity of the perinæum, I pro-
e to formulate certain propositions which will be discussed in a
ure paper.

. Should there be perineal laceration, even if the uterine struc-
e and circumuterine spaces be perfectly normal, the organ, sooner
later, necessarily sinks in the pelvis, most frequently in retro-
sion.

2. All perineal lacerations, from a simple submucous muscular
ndering (of the *transversus perinæi*, *sphincter*, and *levatores ani* con-
ctions), to a rent that extends into the bowel, necessarily beget
inal dislocation, primarily as a slight, later as a complete recto-
e, to be followed by a prolapse of the anterior wall, causing
throcele and cystocele.

3. Urethrocele and cystocele seldom occur spontaneously; they
ue from pressure above (very rarely), or they follow from peri-
al sundering or laceration. I have never seen a case of cystocele,
even much urethrocele, that was not associated with some pro-
se of the posterior vaginal wall.

4. All operative procedures for the *suspension of a prolapsed uterus*
st be directed mainly to the posterior vaginal wall, because it arches
on the perinæum below and the uterus above, serving chiefly as a
umn of support. The anterior vaginal wall, being straight and
orter, serves rather for the support of the urethra and bladder,
d being adherent to the pubo-vesical spaces, it prevents the full
dder from rolling the uterus in retroversion.

5. Operations restoring the integrity of the perinæum and pos-
ior vaginal wall, usually develop symmetrical correlations of the
nal. In cases of complete procidentia, a perinæum restored by
stic procedures which strengthen the recto-vaginal septum will
entuate in a permanent cure, a condition I have never seen in mak-
g operations confined strictly to the anterior vaginal wall.

These propositions assumed, I feel satisfied that very many
ccessful issues of *perinæo-vagino-plasty* prove that the theory upon
ich the operation was based is correct, viz., that the conjunction
the transversus perinæi, sphincter ani, pubo-ischio-coccygeus,
d levatores ani muscles, (described, but never actually demon-
ated as the perinæum) is the true and correct foundation upon
ich the posterior vaginal wall rests, and that the *support rendered*
the connective tissue in front of the rectum is but secondary, in
nsequence of the variable calibre of the bowel. The anterior
lumn of the vagina is straighter and shorter, and, as before said,
ainly supports the bladder and urethra; but the posterior vaginal
lumn, added to the masses of blood-vessels furrowing the peri-
inal connective tissue, tends to support the uterus; therefore,
hen the basement support of the vagina (perinæum) gives way, it
lds down upon itself, and drags the uterus in retroversion. I
ould state *en passant*, that I exceedingly doubt the efficacy of the
-called ligamentous support of the uterus, farther than that the mis-
med structures (broad ligaments) serve as vehicles for carrying
asses of erectile tissue and blood-vessels; and that in the healthy
male the uterine body maintains its normal plane, or it is lifted,
it is depressed therefrom, in consequence of plenitude or empti-
ness of these same blood-vessels. Furthermore, I am disposed to think that all misplacements, except from direct or mechanical causes, depend upon fracture or destruction of the connective tissue in the circumuterine spaces, because of pathological changes in the blood-vessels.

In retroversion, rectocele, and cystocele, from perineal laceration, and in all forms of procidentia, where we cannot re-establish normal vascularity and erectility, the plastic operation about to be described presents an efficient and satisfactory remedy that *literally increases the strength and usefulness of the pelvic floor.* (C, Fig. 9.)

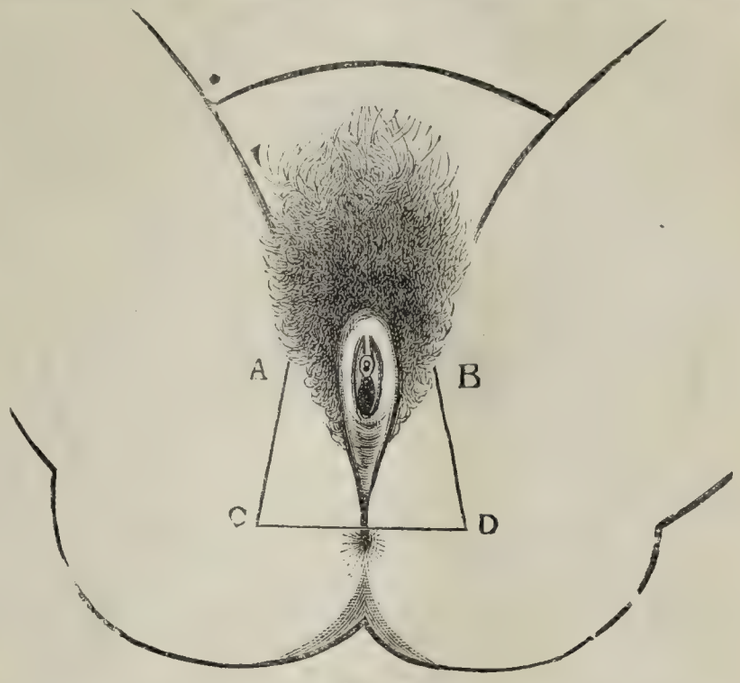


Fig. 4.

Perinæo-vaginoplasty consists in the forward projection of an everted flap taken from either side of the vulva and the ischio-rectal spaces, which throws the new posterior vaginal wall, as well as the perineum, well up on the vulva (Fig. 5). For complete laceration of the perinæum into the bowel the base line (C, D, Fig. 4) may cross the the anal aperture. For simple pre-anal rupture, as represented in Fig. 4, in partial or complete procidentia uteri, the dissection of the flap from the base line (C, D,) may be carried up on a line above the recto-vaginal conjunction (Fig. 9).

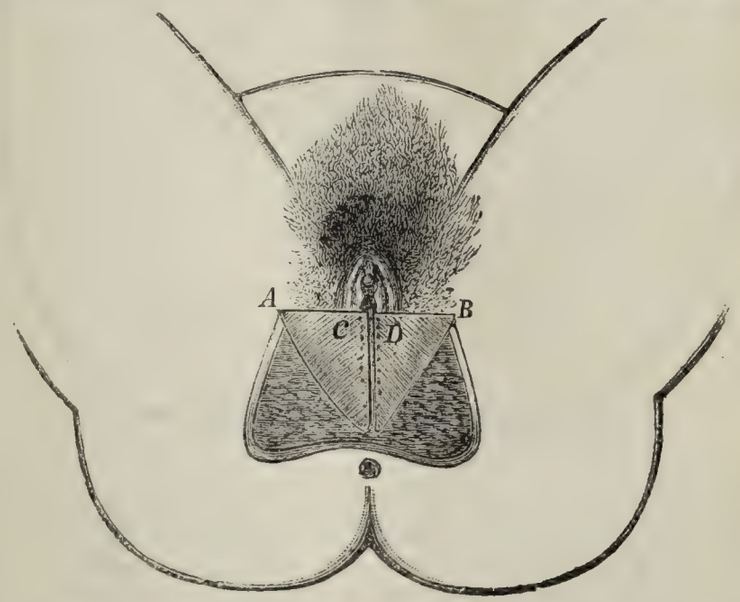


Fig. 5.

In performing the operation, the patient (anæsthetised) must be placed in the lithotomy position for the male, and, after shaving off the hairs, two lines of incision, involving only the skin, are made from either side of the vulva (A, B), commencing at a point about three-fourths of the distance from the anus to the urethra; and,

extending to a point just within either ischial prominence (C, D), the base of the flap is then formed by a transverse incision from C to D. The flap is dissected from C to A and D to B, by means of scissors curved on the flat; the edges are then inverted and stitched together with numerous closely adjusted fine silk threads, *tied on the vaginal mucous membrane*, like intestinal sutures in the bowel (Fig. 5), and

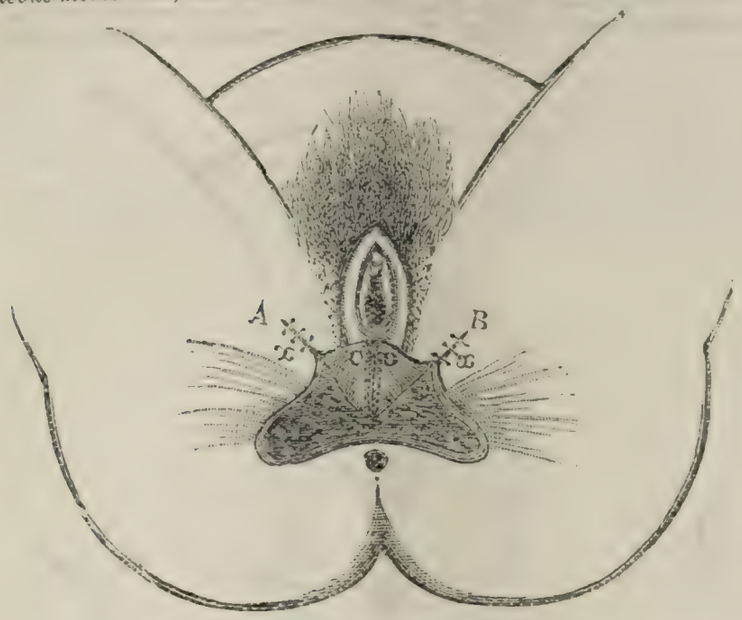


Fig. 6.

which cut out in the course of three or four days. The vulvar margins of the wound are then snugly approximated (Ax, Bx, Fig. 6)

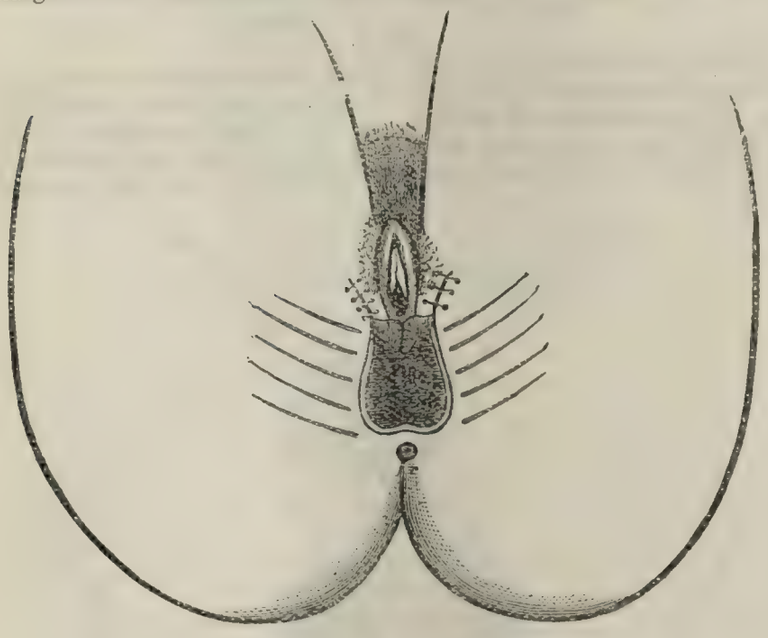


Fig. 7.

with three, four, or five silver wires, which preserve the genito-cruro perineal folds. From five to seven silver wires are then passed through the skin fully an inch from the margins (Fig. 7) of and behind the denuded spaces. No one of these sutures should be *in front of the raw surface, but between it and the rectal wall.* This rule is most important, because of the absolute necessity of an even and regular adaptation of the dissection. When all oozing has ceased, and the parts are thoroughly cleansed, the wires are drawn tightly and twisted, as in any other perineal operation, with the addition of folding in or pocketing the projection (Fig. 8). The wires are cut long, with their ends brought together and clamped with a shot. This operation, or rather a part of it, was originally suggested to me by the late Professor John T. Hodgen of St. Louis, Missouri, as a procedure for the relief of perineal laceration. He, however, did not pocket the projection, but left it out of the surface adaptation to mummify and shrivel. I made the first three operations under the advice of Dr. Hodgen in 1872 (before he eve operated himself); but, in 1874, I devised the procedure just de-



Fig. 8.

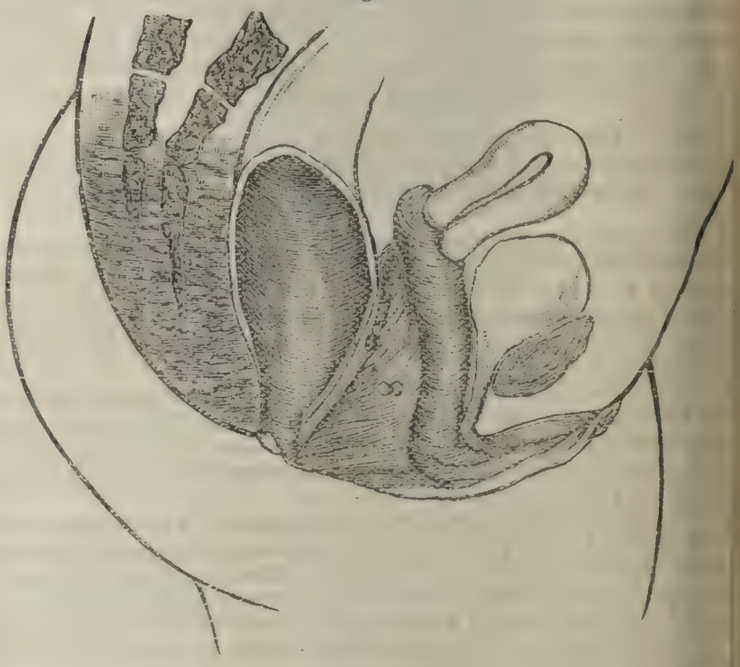


Fig 9.

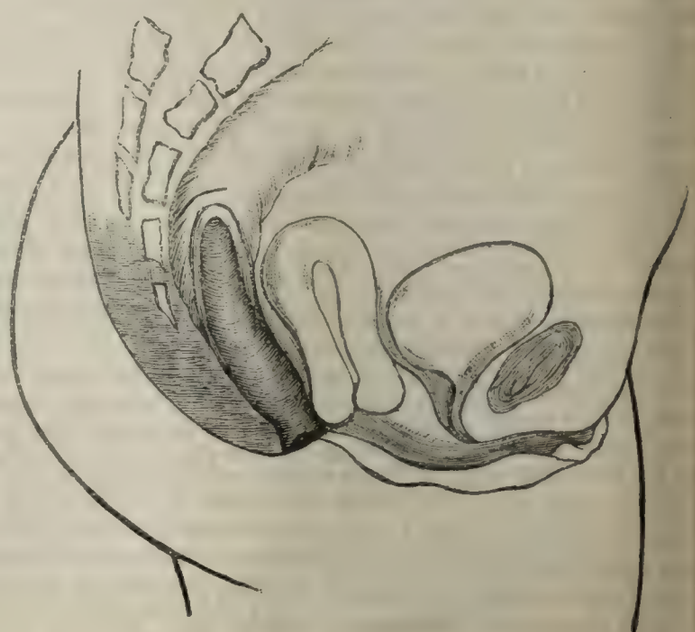


Fig. 10.

ed, and since then have made more than seventy successful ations for perineal sundering, including the pre-anal, perineal, perineo-anal lacerations, as well as six for partial and (Fig. 10) com- procidentia. The two last cases for complete procidentia were e in the amphitheatre of the New York University Medical College, the patients then removed to their homes in an ambulance. cases were most satisfactory; one in a woman aged 63, who suffered from complete uterine extrusion for nearly twenty s, the other in a woman aged 71, who had carried her womb in ng between her thighs for thirty-four years. It is now quite years since the last was operated upon, and more than forty ths since the former. Both women are well.

PERIMENTS ON THE INFLUENCE OF DRUGS ON THE EXCRETION OF UREA AND URIC ACID.

EDMUND ALLEYNE COOK, L.R.C.P.Ed., L.R.C.S.Ed., etc.

fluence of a Close Atmosphere on the Excretion of Uric Acid.—e variations in the amount of uric acid excreted having been ed, while particular attention was directed to evenness of habit diet, etc., and without the administration of any drug, it was ght probable that a close confined atmosphere had an effect on excretion. The following estimations bear on this subject.

Date.	Urine.	Sp. Gr.	Urea.	Uric Acid.
vember 7	45 oz. acid clear pale	1020	432 grains	10 grains
,, 8	45 ,, ,, ,, ,,	1020	430 ,,	7 ,,
,, 9	41 ,, ,, ,, ,,	1023	439 ,,	22.5 ,,
,, 10	51 ,, ,, ,, amber	1020	480 ,,	24.3 ,,
,, 11	36 ,, ,, ,, ,,	1022	428 ,,	11.9 ,,

uring this period, no drugs were administered, and every effort made to keep the diet and exercise exact. The low estimation ovember 8th in uric acid was obtained from two exactly corre- ding experiments, and is the lowest amount obtained in any nty-four hours during which observations have been made. On evening of the 8th, two hours were spent in a close room lighted as, in company with twelve grown people. The meeting was a mittee meeting; there was no excitement; and, although there much speaking, very little was done by the observer. A restless t followed, and a headache which continued next day. The e collected on the 9th showed an enormous increase in uric acid, but little in urea. The headache continued until the evening he 9th, a most sleepless night following; and, during the 9th, nces extra water and 6 ounces extra tea were taken. The urine ection of the 10th showed an increase of urea, and an even larger ss of uric acid; the weather was clear and bright throughout, the usual exercise was persisted in. The above results are given n extreme instance of the effect of a close atmosphere; and this th of exposure under the conditions mentioned was never tried in.

hen the conclusion was once rendered probable that the close osphere must have been the cause of the variation of uric acid, that the headache and discomfort, if not a result of the presence xcess of uric acid in the system, were coincident with it, the fact always noticed that a close atmosphere for even a comparatively t period was sufficient to increase the amount of uric acid in the t day's urine collection, although no headache might result, and such an exposure to close atmosphere was sufficient to disturb experiment which was in progress.

lthough such an atmosphere as that breathed during the two rs indicated must have contained a large deficiency of oxygen, it ld be far too much to conclude that that deficiency of oxygen the cause of the excess of uric acid in the urine. The fresh air ld contain oxygen, nitrogen, aqueous vapour, and a trace of car- ic acid; while the breathed and vitiated atmosphere would con- less oxygen, nitrogen, more aqueous vapour, large quantities of onic acid, and organic material from the various lungs in action; the last item may act as an absolute poison. Moreover, an ani- can breathe in an atmosphere containing many times the amount carbonic acid normally present in fresh air; but, in such an osphere, the blood is freed in a less and less degree of the car- ic acid produced as respiration continues; and it may be not so ch the deficiency of oxygen, as the presence of this excess of car- ic acid in the blood, which causes an increased excretion of uric l, perhaps in consequence of the carbonic acid combining with alkali with which such uric acid would otherwise combine, *i.e.*, diminishing the solvent power of the blood for uric acid. The ess of urea in the urine collection of the 10th can hardly be ac- nted for on the plea of increased disintegration of tissue.

The Influence of Extract of Meat on the Excretion of Uric Acid and Urea.—The following is a summary of the experiments.

Date.	Urine.	Sp. Gr.	Urea.	Uric Acid.
December 4	54 oz. clear acid pale	1022	100 grs.	14.5 grs.
,, 5	41 ,, ,, ,, amber	1022	472 ,,	12.7 ,,
,, 6	40 ,, ,, ,, dark	1022	534 ,,	28.0 ,,
,, 7	34 ,, ,, ,, ,,	1024	455 ,,	18.4 ,,
,, 8	45 ,, ,, ,, pale	1020	432 ,,	14.0 ,,
,, 9	31 ,, ,, ,, amber	1026	— ,,	14.6 ,,

The diet on December 4th was normal in every way, the urine collection of that morning having been 54 ounces, and having contained 14.5 grains of uric acid. On the 5th, the urine collection was 41 ounces, and contained 472 grains of urea, and 12.7 of uric acid. On this date, with a normal diet, exercise, etc., a solution of Liebig's extract of meat was taken after the meal at 2 P.M. It was made by dissolving half an ounce of the extract in 12 ounces of water, and flavouring with salt. This solution was taken in place of, and not in addition to, the usual water, so that the total fluids consumed remained at 45 ounces; in the evening, a more than ordinary feeling of thirst was experienced. The urine collection of the 6th amounted to 40 ounces, and was dark but clear; gave 543 grains of urea and 28 grains of uric acid. On the morning of the 6th, there was on awaking very severe headache, similar in every way to that occasioned by the two hours of close atmosphere, and chronicled in preceding experiments; this headache persisted all day. Only 6 ounces of urine were passed between 8 A.M. and 5 P.M. on the 6th; but, after taking tea at the latter hour, a free flow of urine took place, and the headache diminished. The urine passed after the tea was taken had a specific gravity of 1030 when cold, the usual gravity of the urine passed at that time being 1008. The specific gravity of the 6 ounces passed during the day was 1028; that of the night was not taken, but the total collection of the 7th was 1024 sp. gr. The headache continued until the morning of the 7th, and was too intense to lightly provoke again, and therefore this experiment was not repeated. The urine collection of the following day was 45 ounces, yielding 432 grains of urea and 14 grains of uric acid.

It has been noted by Dr. F. Womack that creatin may be oxydised by purely chemical processes to uric acid. I do not know the details of the experiments, nor have I seen them in print, but I believe them to be correct in result; and as extract of meat contains creatin as well as other nitrogenous compounds, it may well be that an oxydation process takes place in the animal economy when this article of diet is administered, and thus the increase of uric acid obtained in the above experiment is accounted for. The dose taken was a fairly large one, but cannot be said to have been too concentrated. Had an increased amount of liquid been taken, the resulting headache and discomfort might possibly have been less, but in that case the result would not have been so fixed, and it certainly points strongly to the avoidance of continual administration of beef-tea or solution of extract of meat as an invalid diet. Dr. R. Neale, in a short article in the *Practitioner*, November 1881, draws attention to the fact that Masterman showed how analogous to urine is the composition of beef-tea, etc., and insists with emphasis upon the amount of harm which may be done with these fluids under the supposition that they can strengthen the weakened frame. The above experiments strengthen this record; for, if half an ounce of Liebig's extract of meat administered in twenty-four hours can so increase the uric acid, what effect must it have upon the state of gouty or rheumatic individuals?

Spirit of Nitrous Ether on the Excretion of Urea and Uric Acid.—The influence of spirit of nitrous ether on the excretion of urine is generally supposed to be so well known that no experiments with it might be deemed necessary. Its action is said to be diuretic or diaphoretic, and the one action is supposed to be the complement of the other. Dr. F. B. Nunneley, however, in some experiments published in the *Practitioner* for 1870, vol. v, page 372, found that it only slightly increases the flow of water and decreases the solids. The circumstance which more immediately prompted personal experiments with this substance was the consideration of some experiments on its action on ordinary urea and sulphur ureas published in the *Deutsch. Chem. Ges. Berz.*, 1871, by A. Claus, and the known fact that a solution of nitrous acid will decompose urea into nitrogen and water. And it was thought that, if the diuretic action of nitrous ether were well established as a constant effect, and if its administration were followed by a decrease of urea and uric acid, then it might receive application as a remedy for gout.

Further, nitrite of amyl and other nitrites are known deoxydisers of the blood, or, more exactly, tend to combine with the hæmoglobin and prevent its normal action as a carrier of oxygen; and, reasoning from analogy, nitrite of ethyl ought to have a similar action, and

experiments with it might strengthen or weaken the theory that uric acid is a product of deficient oxydation.

Date.	Urine.				Sp. gr.	Urea.	Uric Acid.
October 25th	38 oz.	clear	acid	amber	1023	482	11.5
,, 26th	41 ,,	,,	,,	,,	1018	447	11.0
,, 27th	42 ,,	,,	,,	,,	1018	443	10.8
,, 28th	30 ,,	,,	,,	,,	1029	424	12.6
,, 29th	49 ,,	,,	,,	,,	1013	426	10.6
,, 30th	24 ,,	,,	,,	dark	1030	340	15.0
,, 31st	30 ,,	,,	,,	,,	1021	330	lost.
Novemb. 1st	34 ,,	,,	,,	amber	1028	345	16.6
,, 2nd	30 ,,	,,	,,	,,	1030	392	13.3
,, 3rd	30 ,,	,,	,,	,,	1030	447	9.6

On October 27th, after three days during which the urine was fairly normal, and no drug had been administered, at 2 P.M., just before a meal, a drachm of strong nitrous ether was taken in four ounces of water. This solution of nitrous ether was equal to three drachms of spirit of nitrous ether, B.P. At 4 P.M. a headache commenced, which was not relieved till 8 P.M. The usual amount of liquid was taken, and no extra exercise or perspiration was present to account for any diminution of urine; yet the urine, passed up to 8 A.M. on the 28th amounted to 30 ounces only, the urea being 424 grains and the uric acid 12.6 grains. On the following day, 80 minims of the same sample of nitrous ether, equal to half an ounce of spiritûs etheris nitrosi B. P., was taken in divided doses, the diet and exercise as usual. The bowels were confined. The urine equalled 49 ounces, and the urea was 426 grains, the uric acid 10.6 grains. The following day, the like dose was repeated in the same way, and the urine passed equalled 24 ounces, specific gravity 1030, urea being 340 grains, uric acid 15 grains. The next day no drug was taken, and the urine was 30 ounces, of 1021 gravity, the urea being 327 grains; the uric acid was not estimated, in consequence of an accident. Again, on the 31st, with no drug or abnormality of diet or habit, the urine collection of November 1st was 34 ounces, gravity 1028, the urea 338 grains, uric acid 16.6. Bowels regular. On November 1st, again no variation; and the urine collection of the 2nd gave 30 ounces, 1030 gravity, urea 387 grains, uric acid 13.3; and that of the 3rd, 30 ounces, 1030 gravity, 447 grains urea, and 9.6 uric acid. The average of the urine of the three days on which the drug was administered shows a deficiency of urine, a decrease of urea, and an excess of uric acid to some extent, which seemed to have no cause except the medicine ingested. The amount of urine voided for the next three days, and its content of urea and uric acid, seemed to indicate some influence of the medicine continuing beyond the period of ingestion, and lasting three days. The weather was bright and frosty throughout.

Experiments with this drug were discontinued until December 10th, when the urine equalled 41 ounces, and on the 11th 31 ounces.

Date	Urine				Sp. gr.	Urea	Uric acid
December 12 ...	32 oz.	acid	clear	amber	... 1024 ...	409 grains ...	14.8 grains
,, 13 ...	41 ,,	,,	,,	pale	... 1019 ...	416 ,, ...	19 ,,
,, 14 ...	40 ,,	,,	,,	,,	... 1020 ...	447 ,, ...	17 ,,
,, 15 ...	38 ,,	,,	,,	,,	... 1025 ...	406 ,, ...	17.6 ,,
,, 16 ...	45 ,,	,,	,,	,,	... 1020 ...	377 ,, ...	15.7 ,,
,, 17 ...	45 ,,	,,	,,	,,	... 1023 ...	480 ,, ...	15.7 ,,
,, 18 ...	30 ,,	,,	,,	dark	... 1025 ...	431 ,, ...	11.6 ,,

On December 11th, after a period of non-medication, and during which the diet was maintained, 90 minims of the same sample of nitrous ether were taken in 3 doses. In the evening a slight headache occurred, and in the morning following an increased headache. The urine collected on December 12th amounted to 32 ounces, amber, 1024 gravity, and the urea amounted to 409 grains, the uric acid being 14.8; the liquid taken equalled 49 ounces. The weather cold and wet. On the 12th, the 90 minims of nitrous ether were repeated in the same manner; weather continuing cold and wet. There was a feeling of heat, and restlessness, and headache; but no increase of temperature; no change of water or diet was made, except onions as a vegetable at the midday meal. The collection of the boiled 13th gave 41 ounces, 1019 gravity, which yielded 416 grains urea, and uric acid 19 grains. On the 13th the doses of nitrous ether were again administered, as also on the 14th, and the amount and content of the urine collection are given in the table.

All along the nitrous ether produced a feeling of depression, and the weather had been continuously dull and depressing; the pulse was practically not affected, but in no case was there an immediate flow of urine after taking the dose; the calls to micturate were more frequent, probably owing to irritation. The 14th was the last day of the administration of nitrous ether. It had all been taken in the concentrated form, diluted with water, to avoid the administration of the spirit contained in ordinary spirit of nitrous ether, which might have confused the results, already complicated enough. It was thought advisable to cease the administration, because the period seemed long enough, and some slight irritability of the bladder began to be felt. The results on this occasion differ greatly from those of the former, and there seemed nothing reasonably to account for any difference except the markedly different weather. When the administration ceased, the urine excreted rose to 4[illegible] ounces on the 16th and 17th, and the uric acid diminished; and on the 18th was near normal.

These two sets of experiments are evidently wanting in correspondence, and a further set is desirable. There are various points of difference not explicable, and the only points left out of doubt are (1) that nitrous ether is in no sense a diuretic by itself, nor a diaphoretic, and in this the results agree with those of Dr. Nunneley; (2) that it has a tendency to increase the amount of uric acid eliminated. If a solution of nitrous acid in water be mixed with a solution of urea at a medium temperature, a decomposition will occur, and urea and nitrous acid will be converted into water and nitrogen. Such a decomposition may go on in the body to some extent, and thus less urea may appear in the excretions; and certainly this would account for the fact that nitrous acid or nitrites have never been found in urine, although nitrates have been frequently detected after their administration.

THE PICRIC ACID TEST FOR ALBUMEN.

By GEORGE JOHNSON, M.D., F.R.S.,
Professor of Clinical Medicine, Senior Physician to King's College Hospital.

In the present communication, I propose to refer to some practical points regarding the use of picric acid as a test for albumen, to which my attention has recently been directed. Within the last week, I have been applied to by two practitioners, graduates of the University of London, for an explanation of the following difficulty which each had met with. A specimen of urine was shown to contain albumen by heat and nitric acid; in one, the albumen was very abundant. But when picric acid solution was gently poured on the surface of the urine, in one case there was no indication of albumen while, in the other, which contained much albumen, there was a coagulum, which was redissolved. Now, both these gentlemen have misunderstood, and therefore misapplied, my direction for detecting a very minute quantity of albumen (see BRITISH MEDICAL JOURNAL, March 9th).

It should always be borne in mind that, in testing for albumen the *picric acid must be in excess*. A few drops of a saturated solution of picric acid in a highly albuminous specimen will form a coagulum, which is quickly redissolved; and this explains the fact that one of my correspondents, who poured the picric acid solution on the surface of highly albuminous urine, got an indication of albumen, which soon disappeared. When urine contains much albumen, it should be mixed with its own volume of the picric acid solution; and in testing a fresh specimen, it is better to begin by adding an equal volume of the test liquid.

One difference between picric acid and nitric acid as tests for albumen is, that whereas an excess of nitric acid, especially when the urine is heated, will entirely redissolve the previously precipitated albumen, no excess of picric acid will redissolve the precipitate which it has once formed in an albuminous solution. Picric acid solution on the surface of the urine is applicable only for the detection of a minute trace of albumen. For this purpose, in the paper read at the Clinical Society, I advise that a column of urine four inches in height should be poured into a six-inch test-tube, and upon this one inch of the picric acid solution. The result is that the upper layer of the urine is mixed with about its own volume of the test liquid; and if albumen is present, the stained portion of the urine is instantly rendered more or less opalescent, and thus contrasts with the unstained and transparent urine below. If the picric acid solution were allowed to flow so gently on to the surface of the urine as merely to come in *contact* and not to *become* mixed with its upper portion, the albumen, if present, would not be detected, or it would be indicated only after an interval of some minutes, when the two liquids had become mixed by slow diffusion. There must be an actual mixture in about equal proportions, and not merely contact of the two liquids, to ensure the action of the test.

The slight opalescence caused by the picric acid solution in a sample of urine which contains a mere trace of albumen is always increased by the application of heat. So that, if the flame of a spirit-lamp be applied to the upper part of the opalescent column, this will become more opaque than the lower part, which had not been exposed to heat. I now invariably apply heat to a specimen

ıe which has been rendered opaque, or more or less coagulated, picric acid; my chief reason for this practice is to ascertain if tones ever appear in the urine. In a paper published in the 'RNAL, March 31st, p. 614, I have shown that, whereas the albuıous precipitate with picric acid is rendered more opaque and erent by heat, the precipitate which picric acid gives with pepes is entirely redissolved by heat, considerably below the boiling nt. During the last few weeks, I have met with two specimens urine in which a precipitate caused by picric acid was redis-ved by heat. The first specimen was brought to me by a friend ɔ, having read my paper before referred to, thought that he had ɔovered an example of peptonuria. Picric acid gave a copious cipitate, which was entirely redissolved by heat. Clearly, there-e, the urine was not albuminous. Fehling's solution did not give violet tint which it invariably brings out when added to a solu-ı of peptones; and, under the microscope, the precipitate was nd to consist of amorphous urates, globular masses of urate of a, and small crystals of uric acid.

'he other specimen was from a private patient of my own. The ne contained a trace of albumen, as shown by heat and nitric l. With picric acid, there was a copious precipitate, which was great part redissolved by heat. The greater part of the precipi-e again was shown by the microscope to consist of urates and c acid.

'he microscope alone would serve to distinguish the precipitate ısed by picric acid with peptones, with urates, and with albumen pectively.

'he precipitate recently thrown down with artificially pre-ed peptone appears under the microscope quite homogeneous, and e from solid particles; but when the precipitate, having been dis-ved by heat, reforms on cooling, it seems to consist of numerous y minute, apparently globular particles, in which the so-called runonian movement" is very active. The microscopic appear-ɛes of uric acid and urates are so well known as to need no de-iption.

'he precipitate produced by picric acid with albumen presents ɛgular clusters of granular material, which appear much larger l more opaque after the application of heat. According to my ɔerience, a deposit of uric acid and urates is about as rare a re-t of adding picric acid to urine as a similar deposit caused by ric acid; and hitherto I have met with no specimen of urine in ich the presence of peptones has been indicated. A deposit own down by picric acid and redissolved by heat, may pretty ely be assumed to consist of urates, but in any case of doubt, the dition of Fehling's solution and the microscopic appearances will once serve to distinguish between precipitated peptones and ates.

One of my correspondents above mentioned found that "on adding few crystals of picric acid to a highly albuminous urine, they l not dissolve, but simply caked together, and shortly fell to the ttom of the tube." The explanation is, that each crystal became cased in a film of coagulated albumen. This would not have ɔurred if the acid had been pulverised, as it always should be when ed in the dry state.

N A NEW AND SIMPLE METHOD OF APPLYING AIR-PRESSURE TO WOLFF'S BOTTLES.

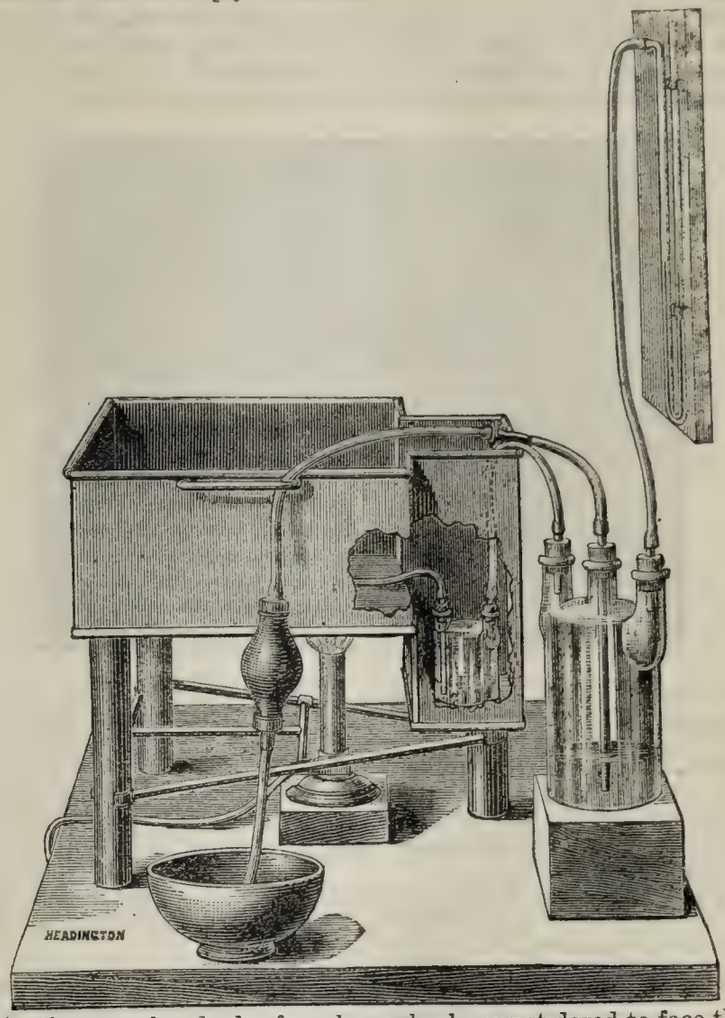
By WILLIAM FEARNLEY, L.R.C.S.Ed.

IE injection of blood-vessels plays so important a part in micro-opic anatomy, healthy and morbid, and the present way of ɛcting it by the syringe is so difficult to acquire, and, when quired, so uncertain in its results, that an exceedingly simple and ficacious way of doing it will be hailed with satisfaction by the ofession.

The method of Ludwig has always been acknowledged as superior injecting by the syringe, except for the one great obstacle—ap-ying the necessary pressure—which had to be effected by elevating ıd depressing huge water-bottles, or by connecting the air-pressure ɔttle with a water-tap, and regulating the pressure as best one ɔuld, thus rendering the pressure almost as uncertain and irregular ɜ the thumb-pressure of the syringe.

My method is to apply the pressure with an ordinary Higginson's ıema-syringe, as shown in the annexed engraving.

So even and delicate is the pressure by this method, that one arm f the mercurial manometer must be closely watched if movement of ıe mercury is to be seen at all, whilst one entire compression of the barrel of the syringe raises the manometer a measured inch; so that, in injecting a small animal, such as a rabbit, for instance, a pint of water is amply sufficient.

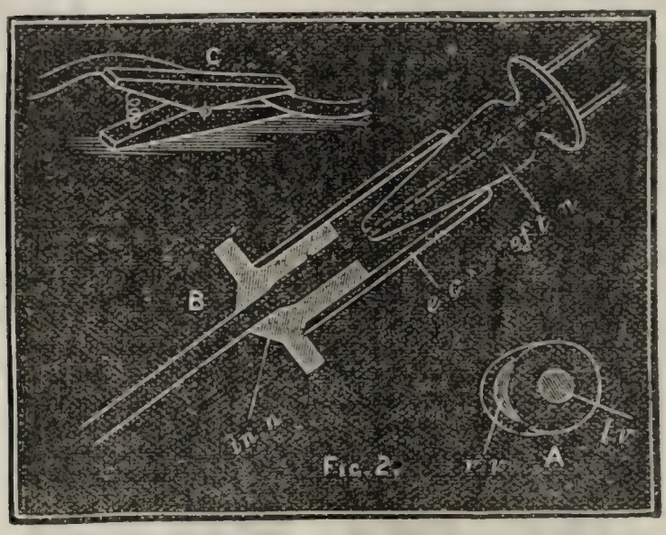


As there are hundreds of workers who have not dared to face the difficulties and expense of injecting with the syringe, and have also never tried Ludwig's method, the following description may be acceptable.

Suppose we decide upon injecting a rabbit, or a guinea-pig with Carter's carmine and gelatine mass, our steps are these. The bath is filled with warm water (which saves time), and a Bunsen's burner is applied beneath it to heat the water not below 100° Fahr., and not much above 110°. Then, supposing we have our mass ready, we fill a sixteen-ounce Wolff's bottle with it, and secure the corks thoroughly, and place it in the deeper of the two departments of the bath. Not only must the mass bottle be always well immersed, but on no account is the efflux tube for a moment to be allowed to get above the warm water, or the mass congeals, and there is a block. Our next step is to chloroform the animal, and, immediately it is dead, to open the thorax with scissors, making an oval opening with its long axis across the thorax, taking care to keep as far as possible from the root of the neck, to avoid severing arteries that would give rise to leakage and waste of the mass. We now snip open the pericardium; seize the apex of the heart, and cut it off, when we see the right and left ventricles, as in A, Fig. 2. I use a nozzle, as in B, Fig. 2, which has an elastic collar (*e.c.*), which is plugged by a nozzle, as here shown.

We now insert a nozzle as large or larger than the aorta, and, of course, for the arterial system, insert it in the left (round-holed) ventricle, until it appears well in the aorta. We now tie the heart-substance tightly round the nozzle with floss silk, or darning-worsted, the former being the better. On no account is hard string or thread to be used, as it either cuts the soft parts at the time of applying it, or when pressure becomes great. We now, to keep the water in the bath clear, wash out the thorax, and lift the animal into the bath, and, after allowing it to be in the hot water five minutes or so, we apply an inch of mercury pressure (*i.e.*, a measured half-inch of either arm of the manometer), when, on removing the clamp on the efflux tube, C, Fig. 2, air-bubbles are expelled; then comes the carmine mass, when we at once make the connec-

tion, as seen in the diagram B, Fig. 2. Air in the connection to interfere with the flow of the fluid is impossible, as all air is displaced previously by the hot water. By seizing the animal's head with the left-hand, and using our right hand in working the Higginson's syringe, the pale mouth is seen to blush, then to gradually acquire a dark red colour. We commence with a pressure of an inch of mercury, and gradually increase it up to six or even eight



inches; or, taking one arm only of the manometer, from half a measured inch to four inches. This method is so simple, that I have never spoiled a single animal; indeed, one of the most famous preparers of microscopic objects, who has injected for years with the syringe, declared he had never seen an animal more beautifully injected than the very first animal (a guinea-pig) I injected by the above method. Organs are also easily injected by this method, especially when *in situ*.

The engraving is from a photograph of my apparatus, and the apparatus itself may be procured of Messrs. Swift and Son, 81, Tottenham Court Road, W.

OBSTETRIC MEMORANDA.

A PECULIAR SYMPTOM ASSOCIATED WITH RETROVERSION OF THE UTERUS.

A LADY, who has had a reducible femoral hernia on the right side for some years, sent for me on account of a pain in the left groin, which she first experienced the preceding morning, shortly after she had risen. The pain occurred at irregular intervals, varying from five to twenty minutes. It did not last more than a minute, was severe and darting in character, and was aggravated on exertion. She felt it at a point corresponding to the external abdominal ring, and it shot down the left thigh. She could cover the seat of pain with the tip of her finger. When I visited her, the intervals were shorter, and the pain had increased in intensity. She herself thought it was an internal hernia, as she had never felt anything like it previously. On palpation, nothing abnormal could be detected, neither was there any tenderness on pressure.

The patient was aged 48, very nervous. Pulse and temperature were normal. There were no gastric or intestinal symptoms, except obstinate constipation. She had had ten children. The last menstruation occurred two years ago. Lately, she suffered from a slight leucorrhœal discharge. There were no bladder symptoms or backache. On examination by the vagina, the cervix uteri was found in close proximity to the symphysis pubis, and the fundus pointing to the concavity of the sacrum. The cervix was slightly abraded. Having rectified the malposition with the uterine sound, I introduced into the vagina a Hodge's pessary, to prevent a recurrence of the displacement, which gave immediate, and, so far (three weeks), permanent relief.

REMARKS.—What I wish to direct attention to is the peculiarity of the pain, its intermittent character, its site, and, I believe, its rarity. As regards the causation of this symptom of uterine displacement, the probable explanation is that, the round ligaments being dragged upon by the dislocated womb, the pain is initiated by the involuntary movements of the patient communicating an impetus to the uterus. The fact of the pain being greatly exaggerated on exertio strongly corroborates that hypothesis. Why it should be confine to the left side was, I have no doubt, due to the loaded state of th rectum pushing the uterus to the right, and thereby increasing th tension on the left round ligament. Two other interesting feature of the case are that the intervals were shorter and the pain increase in severity on the second day of occurrence. The former, I thinl was due to the greater restlessness of the patient, while the latt may be explained if the deviation had been gradually produce The tension on the uterine supports is not so great in the first second degree of retroversion as in the third. The symptom ma be of considerable importance in the differential diagnosis of an tumour in the inguinal canal.

WILLIAM BAIN, L.R.C.P. and L.R.C.S., late Senior Resident Medical Officer, St. Mary's Hospital, Manchester.

KNOTS IN THE UMBILICAL CORD.

ON March 31st, I was sent for in great haste to attend a Mrs. in her sixth confinement. In consequence of the *apparently* une pected length of her pregnancy and her prodigious size—for, by h own calculation, she had reached her forty-fifth week from conce tion—my anxiety caused me to respond most promptly to the su mons, and within a quarter of an hour I was at her bedside—on just in time to hear the rupture of the membranes and a copio discharge of liquor amnii, immediately followed by the natu and unaided exit of a fine girl. The umbilical cord was twi around the neck, was twenty inches long, and had a knot six inch from the umbilicus, sufficiently tight to require careful unfastenir but clearly not to impede the circulation of the cord. I am certa this knot was formed *in utero*, and prior to the birth; but how? note in the JOURNAL of April 21st that Dr. Godson exhibited fatal complication of this kind at a meeting of the Obstetrical Socie of London. My patient was the wife of a mechanic, and had con quently much household work, and had exerted herself very mu during the last three months of her pregnancy.

BENJAMIN CLARKE, F.R.C.S., etc., Upper Clapton

SURGICAL MEMORANDA.

SUCCESSFUL CASE OF BULLET-WOUND IN THE KNE JOINT TREATED ON CONSERVATIVE PRINCIPLES.

SINCE the proper treatment of gunshot-wounds of the joints, a especially of the knee-joint, is a matter which may be said to still *sub judice*, I have deemed it proper to lay before the prof sion generally the following case of successful treatment on c servative principles.

On the morning of December 30th, 1881, I was called, at 8.30 A., to see W. Harrison, engine-driver, a married man, aged 31, passenger R.M.S. *Nubian*, outward bound to Port Elizabeth, South Africa. I found him lying on the saloon floor, looking very pale, and eviden in a state of considerable prostration. On inquiry, it appeared th the patient had been struck in the left leg by a bullet from a volver, which one of his fellow-passengers had allowed to go accidentally. It seems, from the account of the bystanders, th Harrison was standing about four yards off from the man who h the pistol, the latter being in the act of showing the weapon to so of his comrades, when the charge exploded, and the ball stru Harrison on the knee-cap of the left leg. Upon examination found a small opening, about the size of a threepenny-piece, nea on the centre of the skin covering the patella, from which a qu tity of synovial fluid was oozing. Upon pressure over the inside the knee-joint, just below the inner condyle, the patient winc and declared that the ball was lodged there. By firm pressure could detect a small, hard, rounded nodule at that point; a upon probing the wound, I was led to the conclusion that the nod in question was nothing else than the bullet. Examination means of the probe showed that the patella had not been fractur but that the ball had grooved it in its course.

After a brief consultation with two medical friends (Drs. H man and Viljoen), I determined to cut down upon the bullet and extract it. The patient was a strong healthy man, and this inclin me to try the operation without the use of any anæsthetic. Af washing the part with carbolised water, I made an incision, abo an inch and a half long, midway between the inner edge of t patella and the inner condyle, and cut deeply till I could feel t bullet with the tip of the little finger. The ball had lodged wit

capsule of the joint, which I had to lay open, a quantity of novial fluid escaping at the time. I could now feel the bullet tinctly, and was able to extract it speedily by means of a pair of ceps. It was originally of a conical shape, but had been much ttened on its upper aspect by striking against the bone. The ient bore the operation well. After extracting the ball and inging out the wound with carbolised water, a single straight int was applied to the back of the limb, which was bandaged. e wound was left open, with a piece of lint dipped in carbolised laid over it as a covering. Dry cold was at once applied in the m of ice-bags, after the patient had been brought into the ship's spital, in which hygienic arrangements as to ventilation, etc., re carried out as thoroughly as circumstances would permit.

On the evening of December 30th, the day of operation, the pulse s 80, temperature 99°; on December 31st, the morning tempera-e was 103°, falling in the evening to 100°. On January 3rd, 82, the ice-bags were discontinued, the temperature not having od as high as 100° for forty-eight hours. On the evening of nuary 4th, the knee felt hotter, and there was a little local red-ss. On the 5th, the temperature rose to 100° in the evening, but ver rose so high again. I found him on the 6th singing to his mrades in hospital, and ordered him at once to keep quiet, renew-g the bandages, which had become loose. On January 13th, I sub-tuted water for carbolic dressing. On January 18th, I sent the tient ashore at Port Elizabeth, and ordered him not to remove e bandages or splint until I saw him again. On the 22nd, I sited Harrison ashore, removed the splint, and bandaged the leg d knee, allowing him to move about on crutches, with the left ot supported by a tape passed round the neck.

Since my return to this colony—a period of nearly four months om the occurrence of the accident—I had an opportunity of meet-g Mr. Harrison. Upon examination, I found no swelling or ten-rness about the knee; and he informed me that he went to work the 15th of February, and since then he experienced no stiffness other inconvenience in the injured knee; in fact, the case is per-tly cured.

DAVID A. M. FINLAY, L.R.C.S.I., etc.,
Late Surgeon N.R.M.S. *Nubian*, Cradock, Eastern Province, South Africa.

CLINICAL MEMORANDA.

DEATHS UNDER ANÆSTHETICS.

HE question recently raised by Dr. Jacob and Mr. Patterson, whether e deaths, during the induction of anæsthesia, to which they refer, ere attributable to the anæsthetic agent or to the shock of the eration, is highly important, though not exactly new. Prior to e introduction of anæsthetics, as is well known, persons occasion-ly died during the performance of operations, simply from the ock.

Early last year, I recorded, in the *Lancet*, a striking case of this nd, in which death resulted from the shock of extracting a tooth, anæsthetic having been employed. But when a person, who has een anæsthetised, dies during the performance of an operation, the uestion is not so simple: then it is, as a rule, impossible to discriminate a certainty between these two causes of death. In consequence of is difficulty, the fatal result is attributed to shock in a surprisingly rge number of cases; and clumsy administrators find herein a con-enient harbour of refuge. Though a coroner's jury might be satis-ed with such an explanation, I think the probabilities, in most cases, re against its being the correct one. There is no evidence to show at the induction of anæsthesia predisposes to shock; rather the ontrary. We know for certain that the toxic effect of anæsthetic gents is of itself a sufficient cause of death, for many persons have ied from this cause before the commencement of any operation; ut as to the production of shock, during the performance of operations n anæsthetised persons, we have absolutely no means of judging. How illogical, therefore, thus to attribute these deaths to a proble-natical cause; and to ignore the very obvious and sufficient one, of whose presence alone we can be certain!

Further evidence against the theory of shock, as a frequent cause f death, under such circumstances, may be found in this fact: that f several persons similarly diseased, at least as many of those anæs-hetised die before the commencement of the operation as subse-quently. Compare, for instance, the following case, which has ecently come under my notice, when the fatal result occurred during he performance of an operation, with cases when death supervened rior to any operative interference.

This patient, a female, aged 52, came under treatment in an exceedingly weak and exhausted condition, with cancer of the rectum, causing incessant vomiting and other symptoms of subacute intestinal obstruction of five days' duration. Shortly after admission, she was anæsthetised with ether—Clover's hot-water apparatus being employed—for the purpose of opening the colon in the left loin. The bowel was easily exposed in the usual way, when the patient died suddenly before the operation could be further proceeded with.

At the *post mortem* examination, twenty-one hours after death, a slightly ulcerated cancerous growth was found, springing from the walls of the rectum, three inches above the anus, and completely encircling the gut, into which it projected, leaving a passage only just large enough to admit a goose-quill. Immediately above this stricture, there was a small perforation of the gut, evidently not of very recent date, since it had been completely repaired by the agglutination of some coils of small intestine and mesentery. This perforation was probably the cause of the general peritonitis observed, which also appeared to be of some standing—perhaps a week. The whole gastro-intestinal tract was full of fæcal matter. There were no secondary deposits; but some of the adjacent lymphatic glands were enlarged. The surfaces of both lungs were bound to the chest-wall by old fibrous adhesions. Both were congested, especially the lower lobes. The air-passages, even to the smallest bronchi, contained fluid fæcal matter, which was probably forced into them during the process of artificial respiration. The right side of the heart was gorged with blood, and contained some small fibrinous clots; the left side was contracted, and contained a little clot and some fluid blood. The valvular and muscular structures were healthy. Both kidneys were congested, but not otherwise altered. The other organs examined presented no noteworthy changes.

W. ROGER WILLIAMS, F.R.C.S.,
Surgical Registrar, Middlesex Hospital.

A CASE OF DIABETIC COMA.

J. S., AGED 26, a navvy on the tramp, was brought into the Newbury Union Infirmary on February 28th. In the course of a few days, he was found to be suffering from diabetes. He could give no account of the duration of the disease, and did not seem to view his extreme thirst or the large amount of urine that he passed as anything unnatural. He was dieted on milk, beef-tea, eggs, meat, and green vegetables. Once during the month of March, he was very drowsy for three or four days. This, however, quite passed off.

On April 20th, he was again very drowsy, being roused with difficulty. This drowsiness gradually passed into a state of coma, in which I found him on April 23rd, at noon. He was at that time lying on his back in a state of profound coma. His mouth was partially open; there were sordes on the teeth. The breath was very offensive, but it had a distinctly sweet odour, being likened by the nurse to the smell of burnt sugar. The eyes were partly open; the conjunctivæ insensitive to the touch; the pupils small and equal, not acting to light. The body was warm to the touch, the temperature in the axilla being 99.4° F. The radial pulse was imperceptible; the heart's action was extremely weak, being 128 in the minute. The breathing was peculiar, being deep and sighing for several successive inspirations, and then almost imperceptible for many seconds. About a pint of urine was drawn off by the catheter, and it presented the following characteristics It was light in colour; specific gravity 1016; the presence of sugar was shown by both Trommer's and Moore's tests; there was a slight trace of albumen; the addition of liquor ferri perchloridi made the whole of the urine milky, and gave rise to a brown colour at the bottom of the test-tube. The treatment I adopted was to inject warm water into the rectum; but the patient died twelve hours afterwards.

ROBERT BIRCH, L.R.C.P., Newbury, Berks.

THE MEDICAL ACTS AMENDMENT BILL.—The following resolution has been adopted by the President and Council of the Dublin Branch of the British Medical Association: "That the President and Council of the Dublin Branch of the British Medical Association, emphatically and respectfully protest against any of the Irish Medical Authorities having a greater number of representatives than another on the Medical Board for Ireland, as laid down in Clause 9, Sub-clause 5, of the Medical Acts Amendment (H.L.) Bill, as amended in Committee; inasmuch as the representatives of different bodies on a board having the distribution of moneys should be, in the opinion of this Council, equally balanced."

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

EAST LONDON HOSPITAL FOR CHILDREN.

TWO CASES OF PERFORATING ULCER OF THE STOMACH: DEATH: NECROPSY.

By J. Scott Battams, M.R.C.S., Resident Medical Officer.

Cases of perforating ulcer of the stomach, though more common, probably, than published records might lead one to believe, are yet sufficiently rare and important to merit a brief record. The two following cases came under my observation within a month of each other. Helen S. had been housemaid in the East London Hospital for six months, and was seized with signs of perforation on January 5th, and died within twenty-four hours. C. B. had only been engaged to take her place ten days, when she had a similar attack on February 1st, and died on the 6th. In both cases very little information throwing any light on the nature of the illness could be obtained at the time. The following rather scanty particulars were obtained chiefly from the parents and fellow-servants of the two girls.

Case I.—Helen S., aged 20, was a well nourished, healthy looking girl. The family history was good. She had pleurisy nine years earlier, and was a patient in the City of London Hospital for Diseases of the Chest, Victoria Park, for six months; she was said to have undergone an operation there (the scar on the left chest was still well seen). Since then, she had always seemed a strong healthy girl. She was at home at Christmas, and seemed in perfect health; the catamenia were not always regular, and sometimes a period passed. Menstruation was generally painful and rather scanty. Her mother thought it was nearly due at the time of this attack. She suffered from leucorrhœa, and often complained of pain in the left side, especially if she caught cold. Before she came to the hospital she used occasionally to be sick, nearly always just before a menstrual period. Her appetite was never very large, but there was no vomiting or pain after food. She had never suffered from hæmatemesis or melæna.

On January 5th, 1883, she had a larger supper than usual about 8.30 P.M. She seemed in perfect health, and an hour before the attack was "larking" in the kitchen. At 10 P.M. she was stooping to take off her shoes, when she was seized with violent pain in the abdomen. Mr. Flaxman found her much collapsed, complaining of great abdominal pain, and vomiting urgently. Her pulse was flickering, and her face and extremities rather cold. The abdomen was distended and tender more or less all over. A dose of chlorodyne was given, and hot fomentations applied. She continued in this state during the night, rolling about with pain, and vomiting. Once, in the absence of the attendant, she got out of bed with the intention of taking a hot bath.

In the morning she was vomiting rather thick greenish fluid, but no blood. Two enemata had been given, but there had been no action of bowels. She was much collapsed; the expression of her face was anxious, the eyes sunken, and surrounded by dark areolæ, and the skin was of a leaden hue; the pulse was 120 and very thready; the temperature was 98° (it never exceeded 99°). The respirations were 56, and entirely thoracic; the alæ nasi were dilating; the abdomen was distended and tympanitic, and the natural markings were effaced. It was everywhere tense and tender, and quite motionless in respiration. She was sensible, and said the pain was not localised, but general and constant. There were no signs of hernia, and nothing abnormal could be detected on examination by rectum or by vagina, though it caused her great pain. The lips were drawn up; the tongue was slightly furred and a little dry; the urine was passed in small quantities unconsciously. There was great thirst, but she vomited any fluid she took; the heart-sounds were very feeble. Dr. Eustace Smith, who saw her, diagnosed acute peritonitis, possibly from perforation of the vermiform appendix. She was ordered two grains of opium pill every two hours, and, as the vomiting continued, peptonised enemata in brandy.

The pain became easier, but she lapsed into a drowsy wandering condition; the pulse became more flickering, and finally failed. A cool sweat stood on her face; she vomited thick brown grumous material, which was not fæcal. A few minutes before death she tried to turn over, her face became of dull leaden hue, and she said she had cramp in her hands; in twenty-four hours after her first seizure, she died.

Necropsy.—The abdominal cavity contained about one pint of dirty brownish fluid. The intestines were much distended, deeply injected, and greasy to the touch. The coils were everywhere adherent to each other, and coated here and there with yellow lymph and the pelvic cavity was almost lined with a thick layer of lymph. The ovaries were large, of a livid black colour, and felt like a mass of large veins; they appeared as if they contained extravasated blood; muco-pus could be squeezed from the Fallopian tubes and uterus. The stomach was rather dilated, and contained about ten ounces of yellowish brown grumous fluid. There was a perforating ulcer on the anterior wall about two inches from the lesser curvature, and near the cardiac end. It was the size of a sixpence on its mucous surface, and less than a split pea on its peritoneal. It looked like an eversion of the mucous membrane, and the opening externally was "punch hole" in character. The left lobe of the liver was adherent to the stomach in the neighbourhood of the perforation by recent lymph; on separating this, the contents of the stomach welled up through the opening. There was slight thickening round the ulcer, but no sign of extravasation or hæmorrhage and only some congestion of the mucous membrane between the ulcer and the lesser curvature.

Case II.—Clementina B., aged 16, but looking much older, was of delicate appearance, with pale face and dark areolæ round the eyes. Her mother and sister suffered much from "biliousness." A maternal uncle was very gouty, and the grandfather died of rapid phthisis. She had typhoid fever very severely when seven years old. The catamenia were always profuse and painful, and she always looked ill at the time; there was no leucorrhœa. For six months her mother had noticed her looking ill, and that there was often some swelling about the abdomen. Her appetite had been very bad for weeks; she often refused her dinner, and frequently vomited before breakfast. The patient stated, when pressed, that her meals often caused her pain directly after taking them, and that she frequently vomited her food with relief to the pain. She never vomited blood and there had been no melæna. She had not appeared to lose flesh. The bowels had been constipated of late. She had been noticed to turn pale at times without apparent reason. The catamenia were due the week this illness began. For two years before coming to the hospital, she was scullery-maid in another hospital; the work was heavy, and she often stood for hours in damp clothes. Except once for a severe cold, she never needed any treatment there. Two days before this illness began, she had a sudden attack of severe pain in the abdomen after lifting a heavy tray.

On February 1st, at 3 P.M. (two hours after dinner), she was combing her hair, when she was suddenly seized with violent pain about the umbilicus. Dr. Donkin, who was in the hospital at the time, saw the patient with Mr. Battams. She was looking ill and distressed, but not markedly collapsed. Her abdomen was rigid, rather distended, and seemed very tender, but she did not localise the pain. Her pulse was rapid and small. She did not vomit, though she felt inclined to do so. Her bowels had not acted that day, and the motion was constipated the day before. There was no hernia. She complained of much pain during the night; her temperature was 101° Fahr., and she vomited once.

February 2nd. Her face was anxious and distressed. Her eyes were rather sunken, the abdomen was distended and quite motionless in respiration, and she could not bear any pressure. The legs were not drawn up; she passed a fair quantity of urine, but micturition was painful. The pulse was 140, small and compressible. The temperature was 99° Fahr. The rectum, which was full of fæces, was cleared out by an enema and the finger, and a grain of opium pill was given every two hours.

February 3rd. She vomited twice during the night, but slept little, and was still drowsy. The temperature was 101° Fahr., but she seemed in less pain.

February 4th. She vomited a pale green fluid four times during the night. The pulse was 120, and very thready; she had been taking Brand's essence, and ice to suck when she felt sick. The vomiting became more frequent, and the face more pinched. Enemata of Carnick's beef peptonoids, with opium and brandy, were then given every two or three hours. Morphia was also given hypodermically, and mustard-poultices were applied to the epigastrium. The vomiting ceased for several hours. She gradually became weak and slightly delirious, the vomiting returned, and she died at 5 A.M. on February 6th.

The necropsy was made by Mr. Parker. There was no fluid in the

toneal cavity. The intestines were a little distended, lightly erent to each other, and considerably injected. There was a very e yellow lymph here and there, chiefly in the right iliac fossa. stomach was distended, and its anterior surface was found to dherent to the right lobe of the liver for about three inches, to the adjacent left lobe to a similar extent. On separating the lobe, it was found that the adhesions entirely shut off a perforg ulcer from the peritoneal cavity. The adhesions formed a ed round ring on the under surface of the left lobe, and seemed recent formation. The stomach contained dark brown grumous d. The ulcer was on the anterior wall, about two inches from the er curvature, and near the cardiac end. It was as large as a lling on its inner aspect, and had a bevelled appearance; the ernal opening was of the size of a sixpence, and more cleanly cut. ere was no thickening or puckering. Opposite the ulcer was an ected patch of mucous membrane two inches square. The ovaries re small, and two or three follicles were seen on their surfaces as ge as peas. There was considerable anteflexion of the uterus.

EMARKS BY MR. J. SCOTT BATTAMS.—These two cases have ne points in common, and in some respects they differ. Both ients were housemaids, working fairly hard, constantly on the ve, and lifting heavy weights. They were plainly and sufficiently , and lived in healthy surroundings. Both girls were under ; and in both the menstrual period was nearly due. The uterorian functions were abnormal in both. In the one, profuse and nful menstruation occurred; in the other, the flow was scanty t painful, and leucorrhœa was present, and at the necropsy the st intense ovarian congestion was found. The situation and aracter of the ulcers were almost identical in both cases. They cupied an exceptional position, but the one most favouring perration. In neither case had advice been sought for dyspeptic mptoms. There was an absence of hæmatemesis and melæna in th. The two girls differed much in general appearance, and in alth. Clementina B. had looked ill and pale for a long time, and emed old beyond her years. She had, as we afterwards discovered, ffered from dyspeptic symptoms, more or less pronounced, for nths; and, though she never sought advice, such symptoms ould have received careful treatment.

In striking contrast was the previous condition of Helen S.; she oked in robust health, and, up to her sudden seizure, had had no rewarning symptoms. Immediately before the attack she seemed unusual health and spirits. Most rapidly fatal maladies hang t their danger signals well ahead, but in this case, without warng of any kind, and in the midst of apparent health, the girl was ruck down by a malady, insidious in its course, and rapidly and pelessly fatal in its termination. It needs no very vivid imination to conceive such a case involving grave medico-legal sues.

The diagnosis of these cases, at their onset, was by no means sy or certain; and the patients themselves were not in a condition give much assistance. However, there were several suggestive mptoms. In both cases there existed severe abdominal pain, dden in its onset and not specially localised. The state of collapse as well marked in the first case, and to a less extent in the cond. The abdomen, even at this period, was distended; there as also general tenderness, even to light pressure; and immobility respiration. Urgent vomiting was coincident with the sudden ttack of pain in the first case, and followed the attack by some ours in the second. The pulse was 120 to 140, and "thready," and retained this character throughout; there was never that "wiry" ondition often associated with peritonitis. May not the absence f this character in the pulse be a diagnostic point in favour of eritonitis from perforation?

To practitioners of small experience, like myself, such cases must lways press home important lessons. It must be very important to s, and no less momentous to our patients, to be very careful, and ery slow, if necessary, in forming a diagnosis. In by far the reater number of cases where a doubt is permissible, it is better or the welfare of the patient to accept the worst conclusions, and ct accordingly. To mistake an aggravated case of flatulent colic, or instance, for a severe and fatal condition, and to prognose acordingly, may be damaging to the reputation of the physician, if o reservation have been made; but the treatment based on such rroneous diagnosis cannot harm the patient much. To diagnose nd treat a perforative peritonitis as a case of severe colic, and to omfort the friends with the more favourable prognosis, is as lamaging to the patient as to the reputation of the practitioner. Such cases also remind us how important it is not to neglect even trivial dyspeptic symptoms in girls of this age and station. There can be no doubt that Clementina B., had she been a lady, would have sought advice; and it is probable that perfect rest, a carefully regulated diet, and appropriate medicinal treatment, might have prevented the fatal issue.

There was no distinct evidence, in the second case, of escape of the contents of the stomach into the peritoneal cavity; the peritonitis may have been caused by transudation, without absolute rupture of the ulcer. It was interesting to note in this case how much nature had done to prevent extravasation; but the adhesions formed with the liver would no doubt have readily given way, had any but the slightest movement been allowed. It is evidently of the first importance in such cases to ensure the most absolute rest. The patient should not be allowed to rise from the recumbent posture, or even to turn in bed.

It seems to me that, if one could be fairly certain that a perforating ulcer was the cause of the peritonitis, it would be wise to give neither food nor remedies by the mouth. If vomiting be severe, the opium, in whatever form it may be given, is rejected with the food, and valuable time is lost. Morphia, given hypodermically, appears to arrest the vomiting and relieve pain more quickly than opium given by the mouth. When the desire to vomit comes on, it is wise to give small pieces of ice to suck, and to urge the patient to resist the desire if possible.

The rectum and lower bowel should be cleared out by a small enema gently given, and lumps removed by the finger or scoop, if necessary; this leaves the patient more comfortable, and the bowel free for the administration of enemata.

"Beef peptonoids" (Reed and Carnick's) were found very useful in the second case for the preparation of enemata. Opium and brandy were given with each, and they were well retained. Possibly the condition of the bowel in these cases favours retention of enemata, but whether they are as readily absorbed I cannot say. I venture to recommend a trial of this beef-extract for rectum-feeding in children. In two children, under 2 years of age, suffering from diphtheria, I found enemata prepared with it well retained, when others were rejected.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 1ST, 1883.

J. W. HULKE, F.R.S., F.R.C.S., President, in the Chair.

DEBATE ON DIABETES.

DR. SEYMOUR TAYLOR said that he had recently examined the organs in four cases of diabetes. In three cases, the kidneys showed changes which he considered characteristic; they were large and congested, there were extravasations into the glomeruli, slight intestinal fibro-nuclear growth in the convoluted tubules, and cloudy swelling of their epithelium. The epithelium was easily detached from the basement membrane. Stained with iodine, he found, as Frerichs had said, that the tubules appeared of a rich brown tint; this was attributed to the presence of glycogen. The liver was congested, and the pressure of the blood had produced atrophy of the liver-cells. In two cases, he had carefully examined the spinal cord, brain, and sympathetic ganglia, but had detected no morbid change beyond hyaloid thickening of the coats of the blood-vessels; he had never met with the vacuolations described by Dr. Dickinson. The difficulty of successfully hardening and mounting specimens of the nervous system for microscopical examination was so great, that he was inclined to believe that many of the appearances regarded as morbid might be due to the method of preparation. He thought the disease was probably functional.

MR. VICTOR HORSLEY had examined the medulla oblongata in three cases of so-called typical diabetes mellitus, each case dying comatose. In none was any marked condition to be found, save congestion; there were no hæmorrhages. In one of these cases the liver and kidney showed well marked cloudy swelling. The secondary importance of this condition was proved, he thought, by the experiments lately made, in which glucose injected into the system (rabbits were the animals employed) caused cloudy swelling and disintegration of the renal epithelium. In view of the extreme variation among the results of research into the morbid anatomy of diabetes, he suggested that no such distinct disease existed, but that aberration of function acting not only centrally, but peripherally would bring about the symptoms supposed to indicate a specia disease.

Dr. FREDERICK TAYLOR had paid attention chiefly to two points in connection with diabetes, namely, the morbid anatomy of the nervous system, and the fatal termination of the disease. Some years ago he had published, in conjunction with Dr. Goodhart, the results of an examination of the central nervous system in nine cases of diabetes; they had been unable to find in these cases the morbid changes described by Dr. Dickinson. Dr. Taylor now exhibited a number of these specimens for the judgment of members of the Society. He considered the majority of the specimens were practically healthy, and that only one case showed anything that deviated much from the usual standard. He thought that no constant change had as yet been found as the central lesion of diabetes, and that the account of degeneration and decay of the nervous system was not justified by what had hitherto been seen. Unusual thickness of the walls of vessels, and large size of vessels, might be part of a general condition. A large central canal was to be otherwise explained than by vascular engorgement, and was not peculiar to diabetes; while the condition called miliary degeneration was, he thought, certainly the result of reagents. Dr. Taylor had not seen varicose dilatation of vessels in his specimens, nor evidence of degeneration of the nervous tissue. There remained the presence of orange semi-crystalline bodies about the vessels, and in the perivascular spaces, which were abundant in one of the cases; but he considered it still unproven that they indicated a congestive state of the nervous system, which could be regarded as the cause of the disease. Recently he had examined four other cases, and, though two were much spoiled by reagents, it was quite clear they had not undergone any such degenerative changes as were described. Dr. Taylor next referred to the mode of death in diabetes, and pointed out that the proportion of fatal cases which occurred in consequence of the curious group of symptoms called "diabetic coma" was a very large one. Of fifty-three cases dying within the last ten years at Guy's Hospital, thirty-three died comatose; and in seventeen of these there was no lesion of the viscera, while in three the lesions were inactive, and could not have contributed to the result, and in ten the coma supervened in the course of pneumonia or phthisis. He had evidence that neither the theory of fat-embolism, nor that of acetone in the blood, satisfied all cases; and he referred to the frequency of severe abdominal pain as an initial symptom, an important fact, as it might give rise to a diagnosis of perforation or peritonitis. Dr. Taylor also exhibited microscopic sections of the pancreas, which was almost entirely converted into fat from a case of diabetes. It was on record that the pancreas had been occasionally atrophied, or otherwise altered in diabetes. At Guy's Hospital, some alteration had been found in five cases during the last ten years. Twice it was merely described as small or wasted; three times, including the case exhibited, it was fatty.

Dr. DAWSON WILLIAMS had examined the registers at University College Hospital for ten years, but the number of fatal cases of diabetes available for report was small. He referred to a group of six cases, occurring in young people, which had certain symptoms in common. Well marked coma, accompanied in four cases with extreme dyspnœa was the immediate antecedent of death in five of the cases. In three of the cases there was some phthisis pulmonalis present, but in none was any distinct evidence of tubercular disease found elsewhere. In two cases, albuminuria was a constant symptom during the whole time the patients were under observation. No constant *post mortem* appearances had been recorded; in two cases the puncta cruenta were stated to be more numerous and prominent than natural; in one case, the perivascular spaces were said to have been enlarged; in one, some swelling at the tip of the calamus scriptorius, and congestion of the membranes in the neighbourhood, were noticed. A few details with regard to two of these cases were given, in which the onset of the fatal dyspnœa and coma was immediately preceded by sudden violent abdominal pain, brought on, in each case, apparently by the administration of an enema. It was thought that an examination of the Registrar-General's Returns favoured the idea that diabetes was becoming a more common disease. Thus, the number of deaths registered as due from diabetes had risen from 537 in 1862, to 1,059 in 1880, an increase of 49 per cent., while the increase in the total number of deaths from all causes was only about 20 per cent.; again, the death-rate from diabetes was 24 per million in 1850, and 41 per million in 1880; whereas the death-rate from all causes was almost the same (it was, in fact, a little lower in 1880 than in 1850). The number of deaths from diabetes, compared with the total number of deaths, had also advanced about 30 per cent. The table published by Dr. Dickinson, in his work on diabetes, which showed the number of deaths from this disease at each decade of life, during the decennial period 1861 to 1870, was graphically exhibited, and compared with a similar chart which had been prepared from the Registrar-General's Returns for 1871 to 1880. It resulted from this comparison, that the incidence of diabetes at the various ages had not materially differed in the two decennial periods. It was greatest in the decade of years between the ages of fifty-five and sixty-five in both sexes, but the preponderance in this decade was much more marked in men than in women; this difference between the sexes, however, was less marked in the second decennial period than in the first. How far the relative greater mortality among women in the decade of years between twenty-five and thirty-five was due to any connection between diabetes and child-birth, such as Dr. Duncan had suggested, there was no evidence to show; indeed, only six cases of diabetes had been registered, in ten years, in women dying within one month after child-birth.

DR. DICKINSON said that he did not propose to refer in detail to the criticisms and contradictions to which his statements, and theories had been submitted by various speakers, but would recount the results of his own observations. He thought it might fairly be presumed, or accepted as a postulate, that diabetes was not a disease without a pathology, but that it depended on changes in the permanent structures, since it persisted, notwithstanding entire change in the environment of the individual; he could not accept the idea that a disease, so regular and so fatal, could be merely functional. He had recently submitted four more cases to examination, and many of the specimens he now showed were derived from them. The appearances found in these cases were strongly confirmatory of the opinions he had formerly announced. Originally he had set to work with a very wide scope, examining all the organs, but had soon found that the brain promised the best results. His earliest observations had been made many years ago, and he was free to confess that, notwithstanding all the care he had exercised, he had not allowed sufficiently for the variations which the cavities and channels of the brain presented, independently of special cerebral disease, and he thought that some exaggerations and misconceptions having this origin, might have tended to cast doubt more widely than was deserved. With regard to the appearances he had noted he would refer first to the brain; to rough examination it generally passed as natural, though it was generally hard in texture, often injected, and, more rarely, marked with extravasated blood on the surface. On section, pores, in a cribriform arrangement exaggerating the ordinary puncta vasculosa, were often conspicuous in the centrum ovale and the white matter underneath the lateral ventricles. In parts presenting such peculiarities to the naked eye, the microscope usually showed dilatation of the blood vessels, extravasation of blood in a small amount, enlargement of the perivascular spaces, and alterations in the perivascular sheaths and nervous matter bounding the cavities. In some of the specimens he now showed, portions of the blood-vessels (arterial) were notably dilated for short lengths. In others, the spaces around the blood-vessels often contained such quantities of blood-pigment in large grains or conglomerations, as to be fairly presumed to be morbid; and in yet other instances, blood-corpuscles could be easily seen. These changes had been found in the deep perivascular canals, in the pia mater of the medulla oblongata, and in the central brain-tissue. In fifteen brains from diabetic patients, he had found extravasated blood in seven; perivascular changes, thickening of the sheath, and erosion or degeneration of the circumjacent nervous substance, had been invariably found. The walls of the cavities were often superabundantly sprinkled with grains of blood-pigment; and in many cases the nervous matter at their surface was rendered translucent and gelatinous by some degenerative change. The cribriform enlargement of the perivascular channels of the white matter of the centrum ovale was frequently noticed, though it was not peculiar to diabetes. The spinal cord was seldom or never quite natural; erosions were often seen at the base of the anterior fissure; and in a few cases the grey matter of the horns had become translucent. The dilatation of the central canal, which had been the subject of some criticisms from Dr. Frederick Taylor, had only been noticed in two cases; but in these it was a very striking phenomenon. With regard to the change to which the name miliary sclerosis had been applied, he was not certain that it was morbid. He had carefully examined the sympathetic system in many cases, with results that were almost purely negative; the ganglia of the prevertebral cord, the intervertebral ganglia, and the semilunar ganglia, were generally found to be healthy. The lungs frequently presented a caseating pneumonia. The liver was always injected, vessels of every denomination being loaded with blood. The kidneys had been found to present all the phases of tubal, and

netimes of interstitial nephritis. The general result of his in-iry went to show that the lungs and kidneys were only affected :ondarily, but that the liver was more essentially concerned; and th reference to this, he mentioned the occasional presence of jaun-:e with severe diabetes; but the chief interest centered in the rvous system, and especially in the brain. The perivascular anges in the brain were, in his experience, never absent, though ey were not constant as to the parts of the brain affected, being dely and somewhat irregularly scattered, so that, to find them, ey must be somewhat generally sought for. He thought it im-rtant to cut the sections by hand, and to choose those portions ly which showed the naked-eye alterations mentioned above. e changes could not be regarded as peculiar to diabetes, though maintained that in diabetes they were constantly present. anges of the same kind had been found in tetanus, in chorea, in drophobia, and in insanity. The cause of this dilatation of the ssels, extrusion of their contents, and alteration of their channels, as very imperfectly known in any of these cases. Against the inion that the changes in the brain seen in diabetes were the sult of the circulation of morbid blood, must be set the testimony clinical experience that the disease continually began as the con-quence of a mental impression or cerebral state, than which there as no fact with regard to diabetes better declared. Dr. Dickinson ncluded by expressing the hope that the investigation might be rther pursued by others, and suggested that the observations in estion would be a fit subject for examination by a committee of e Society, offering to submit his own specimens to such a com-ittee, or to any pathologist who was interested in the subject.

Dr. PAVY said that his remarks would be chiefly directed to the emical questions involved, and especially to the condition of the ood. He was free to agree with Dr. Dickinson that there was a thological anatomy of diabetes, but he felt confident that the pri-ary condition was a chemical fault. He had recently been making, conjunction with two trained analysts, a series of researches on e physiology of the carbo-hydrates, and the results he had ob-ined gave an entirely new aspect to that subject. The group of dies included in the term carbo-hydrates were found in both the imal and the vegetable kingdoms; they were all bodies which, in the esence of certain ferments, underwent changes. Diastase, the fer-ent of saliva, that of the pancreatic juice, and that of the intestinal ice, all produced the same result when they acted upon starch, con-rting it, first, into a series of principles known as dextrins, and finally to maltose; the action of these ferments could go no further, they uld not produce glucose. The process of conversion was attended y increasing hydration: thus starch might be said to consist of velve atoms of carbon combined with ten molecules of water; hereas maltose, the final result of this fermentative action, con-sted of twelve atoms of carbon combined with eleven molecules of ater. The dextrins, which intervened between starch and maltose, resented intermediate degrees of hydration. Starch had no power of educing cupric oxide, and it was precipitated by alcohol, whereas the extrins were not precipitated by alcohol, and had the power of re-ucing cupric oxide; the amount of this power varied according to he degree of hydration. Thus, if the reducing power of glucose was epresented by 100, that of maltose was equal to 61, and that of the arious dextrins varied from about 20 to 50. Starch, dextrin, or altose, acted on by heat in the presence of sulphuric acid, was con-erted into glucose. The analytic process of which Dr. Pavy had vailed himself was based on these facts. The liquid which was to e analysed was divided into two parts; one part was immediately ested, and its power of reducing cupric oxide estimated; the other alf was treated with sulphuric acid, and so converted into glucose; nd, the amount of glucose being known by the amount of cupric xide reduced, on comparing the two results, the exact condition of he carbo-hydrate in the original liquid as to its degree of hydra-ion was known. Glycogen was a misnomer, inasmuch as the body nown under this name was, in its chemical behaviour, identical with starch; it was the analogue or congener in the animal body of he starch found in vegetables. Now, though it had been shown that ll the ordinary ferments of the body could only bring starch into he condition of maltose, yet the carbo-hydrate found in diabetic rine was glucose, the more highly hydrated principle. The glu-ose-forming ferment existed only in the liver under certain condi-tions. In health, in the alimentary canal, in the liver, and in the circulatory system, the action upon the carbo-hydrates was the re-verse of that gradually increasing hydration above described. He had found, by experiment, that, from the mucous membrane of the alimentary canal, a ferment was obtainable which converted glucose into maltose; cane-sugar, not into glucose, as was formerly sup-posed, but into maltose; and starch either into maltose or a dextrin of low cupric-oxide-reducing power. Portal blood contained maltose and dextrins, and, under proper conditions, the liver was capable of converting maltose and dextrins into glycogen. More than this, he had evidence which showed, that, in the liver, by an action of the same nature as that which moves the carbo-hydrates from one to the other in the carbo-hydrate group, they were, under certain circumstances, carried out of the group altogether, and converted into some body which was insusceptible of being converted into glucose by sulphuric acid. He was convinced that, when carbo-hydrates were taken by a healthy person, they were converted, not into glucose, but into a dextrins, or maltose, and subsequently carried out of the carbo-hydrate group altogether. This was the process of assimilation of the carbo-hydrates in a healthy person, but, in a diabetic person, this power was lost; starch and sugar in them were converted into glucose, and appeared in the blood, from which it was eliminated by the kidneys; even on a purely meat diet, a person suffering from a severe form of diabetes excreted glucose; this could only occur through the splitting up of a nitrogenous molecule into urea or similar products, and glucose. For this to occur, there must be a glucose-forming ferment; such a ferment existed in the liver, but only under certain circumstances. When the liver was supplied with blood which was thoroughly venous, it converted carbo-hydrates into maltose; but, if the blood were imperfectly venous, or partook of the nature of arterial blood, the resulting body was glucose; it could be shown, by a number of different methods, that an excess of oxygen in the portal blood led to glycosuria. These facts threw great light on the cause of diabetes, and had convinced him that it was due to a dilatation of the arteries of the chylopoietic viscera, brought about by vaso-motor paralysis. Experiment had shown that this dilatation actually occurred. Mere congestion of the liver was not an efficient cause; there must be an afflux to it of blood not properly venous, and such an afflux there was in paralysis of the vaso-motor system; for, as the well known experiment on the rabbit's ear showed, section of the sympathetic caused such a modification in the circulation that the blood, when it reached the veins, still had the arterial characters. If there were a limited amount of vaso-motor paralysis, the diabetes was not severe; in such cases, nothing very marked might be observed with regard to the tongue, but, as the cases advanced, the tongue became involved, it became intensely red and injected, that is, exceedingly hyperæmic; here, he thought, there was an ocular demonstration of the theory he advanced; if the chylopoietic viscera were in the same hyperæmic condition as the tongue, then they were in a condition which must result in glycosuria. Dr. Pavy referred, at length, to the case of a lady, aged 55, who, in October 1881, consulted him on account of diabetes, from which she had suffered for six months; under treatment, by a restricted diet and codeia, she improved, and, on December 5th in the same year had ceased to pass sugar. In August 1882, she wrote to say that she had, in spite of adhering to the restricted diet, again begun to pass a large quantity of urine; this she attributed to domestic trouble; on examining the urine, however, it was found, though she passed eight or nine pints in the twenty-four hours, to have a specific gravity of 1004°, and to contain no sugar. The case had become converted into one of diabetes insipidus. He interpreted this to mean that the area of the vaso-motor paralysis had been altered; under treatment, by valerian and a modified diet, the urine, in this case, again became normal in quantity and in specific gravity. In young subjects, diabetes was a progressive disease; at an early stage, the glycosuria might be arrested, but it returned, and finally ceased to be amenable to treatment. There was no doubt that there was some nerve-lesion in diabetes; and, holding the opinion he had expressed, he would strongly urge those who had turned their attention to the pathological anatomy of the nervous system, to make careful examination of the vaso-motor system.

Dr. DOUGLAS POWELL observed that the debate had been useful in indicating more especially the necessity for experimental inquiry into induced living pathology and in physiological chemistry in order to throw more light upon diabetes; in both these respects Dr. Pavy had redeemed the Society from the reproach of having had no contribution of the kind. He believed that the results of Dr. Pavy's valuable and novel researches would dovetail with those of Dr. Dickinson, showing the existence of nervous lesions. He would beg to second Dr. Dickinson's suggestion that a committee be formed to report upon the microscopical specimens from the nervous system brought forward both on the present and on any future occasions. Dr. Powell was himself convinced that most of Dr. Dickinson's specimens were examples of positive lesions; whether the result or the cause of the comatose state, was a separate question. Dr. Powell

believed that the idea still prevailed that a causal affinity existed between phthisis and diabetes, this view he thought due to confusing cases of diabetic phthisis—if any such disease existed—with cases of phthisis occurring in the course of diabetes. In his own experience of chest diseases, diabetes was infinitely rare, and in five or six years' experience at the Brompton Hospital, with an average of thirty cases of phthisis of various sorts, degrees of activity, and stages, constantly under observation, he could recall no case. He had, through the kindness of his colleagues and the friendly labours of the resident staff, obtained the results of the examination of the urines of 165 cases of phthisis of various kinds, and 65 cases of other chest diseases now in Brompton Hospital; the specific gravities varied from 1010° to 1035°, but in no instance had sugar been found. He would like to have similar statistics in diabetic cases, not of course in the last stage, for some form of pulmonary disease closed the scene in a large proportion of all chronic maladies. He believed phthisis and diabetes to have nothing in common, they were not interchangeable by inheritance, and did not merge into one another, save in so far that, of course, some form of phthisis might arise in the course of an exhausting disease such as diabetes, but in no specific sense.

The PRESIDENT said that the interest of the discussion had proved that the choice of the Society had been wise. Though definite lesions had been found in the abdominal and thoracic viscera, and in the brain, yet the grouping of these anatomical changes did not prove, with absolute conclusiveness, that they had any causal relation to diabetes. Dr. Pavy's communication was very important; but the question remained, If there be this vaso-motor palsy, what is its cause? The suggestion made by Dr. Dickinson, and seconded by Dr. Douglas Powell, seemed to him a good one, and he had no doubt that the Council would be able to arrange for such a committee.

Microscopical Specimens.—Microscopical preparations of the organs in cases of diabetes were exhibited by Dr. DICKINSON, Dr. SEYMOUR TAYLOR and Dr. FREDERICK TAYLOR.

Tubercular Ulcer of the Tongue.—Mr. S. BOYD showed a man, aged 47, the subject of phthisis in both lungs, who presented a small tubercular ulcer with sharply cut edges, in the middle line of the under surface of the tongue.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 27TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

Lepra Tuberculosa.—Dr. W. J. TYSON read notes of this case. R. C. S., aged 16, was born in Ireland, and, when two months old, went to India, and remained there until he was six, then returned to Ireland, and had not since been abroad. His family history gave no clue to his case. He was quite well until two years ago, when the present condition of his face first began to show itself. *Present condition*: He was physically strong and fairly well made; height, 4 feet 8½ inches; his hair was reddish, and his eyes were blue. Mentally, he did not seem dull. The appearance of the face was characteristic of the disease, and had a somewhat lion-like appearance; the skin was soft to the feel, thickened, and of a brownish-red colour; on his chin, and just underneath it, were about a dozen small elevations (tubercles), varying in size from a mustard-seed to a pea. On the trunk in front and behind, there was a yellowish-brown mottling. The chest and abdomen were healthy; no albumen was in the urine. Just below the right buttock, there was a patch of flattened tubercles, and over the left olecranon, a softish mass of the size of half a walnut. The hands were generally cold, and the skin covering them thickened; around each wrist-joint there were a few tubercles; the skin over the feet was red, thickened, and scale-like in appearance. All the joints were sound. The voice was hoarse, but this condition had only existed quite recently. There was no anæsthesia of the skin. His diet did not seem to have been abnormal.—In reply to the PRESIDENT, the reader of the paper said that he had not been able to trace any history of nervous disturbance in the case, nor of syphilis nor tubercle.—Dr. SOUTHEY observed that the case was one of great interest. The boy presented the general tubercular nodules, with thickening of the skin over the wrist, usually associated with this form of leprosy. Two or three years later, he would be found to lose sensation at the tips of his fingers; the digits would become immobile and less flexible, and it was not uncommon, as Dr. Tyson had observed, for such patients at this stage of the disease to mutilate themselves by cutting off their fingers, owing to the little sense of feeling in them. Such a form of leprosy should be distinguished from anæsthetic leprosy, in which red and thickened patches of skin were observed, the insensibility commencing at the centre, and proceeding peripherally to gradually greater and greater extent. This form never resembled tubercular leprosy, nor were its sequelæ so regularly manifested. Albuminuria in the latter form was sequential to the changes denoted as occurring in the fingers, and afforded indication of granular degeneration of the kidneys.—Mr. JAMES STARTIN drew attention to the youth of Dr. Tyson's patient, and the presence of slight ulceration at the edge of the ears in this case, and remarked that any information as to syphilis or diet in connection with the case would be of interest. He seemed to have no disease of the mouth or palate. The thickening of the ulnar nerve found in the case was commonly seen in the subjects of the disease. He had seen a patient so afflicted after ten years' residence in India.—The PRESIDENT inquired if any search for bacilli had been instituted by Dr. Tyson.—Dr. SOUTHEY further asked if frequent micturition had been a symptom of the case, and explained that he ascribed the existence of granular kidney to a prevalent development of intercellular tissue in the bodies of these patients; the same morbid process occurred also in their livers.—Dr. DYCE DUCKWORTH remarked on a similar case.—Dr TYSON expressed great doubt as to being able to find out any further details of the history of the case. He did not regard the slight ulceration of the ear adverted to by Mr. Startin as of any significance such ulceration in this situation was common among children. He had not himself noticed the thickening of the ulnar nerve, nor had he made any investigation in respect to bacillus. Frequent micturition was not a feature of the case.—On the motion of the PRESIDENT, Drs. Southey, Thin, Dyce Duckworth, and Tyson were nominated a committee to inquire into the presence of, or absence of bacilli in this case.

A Case of Removing a Large Portion of the Upper Lip Without Deforming the Face.—Mr. RICHARD BARWELL read notes of this case. G. S., aged 61, much addicted to smoking short clay pipes, came under Mr. Barwell's care with that singularly rare disease, epithelioma of the upper lip. The growth was close to the corner of the mouth, but did not involve the commissure, and was so extensive, that at least two-thirds of the lateral half of the lip would have to be removed in eradicating the disease. Such extensive excision must have disfigured the man very considerably unless means of prevention had been adopted. The following operation was devised, and performed November 4th, 1882. The base line of the triangle requiring removal was measured, and an equal line marked by a superficial incision extending from the corner of the mouth directly outward. The other sides of the triangle, also measured, were similarly traced from this line downwards towards the ramus of the jaw. Thus was traced outside and below the mouth a triangular space exactly like that to be removed from the upper lip, but reversed. The first, the horizontal, incision was now deepened down to, but not into, the mucous membrane; then the two lateral limbs of the triangle were incised through all tissues into the mouth, and some bleeding vessels were twisted. The thick tissues of the flap were dissected from the mucous membrane leaving to the horizontal incision, to which, the extreme point being sacrificed, it was stitched, thus giving to that part a red border. The next step was the excision of the epithelioma along the lines already traced and measured. The edges of the lower of what may be called the complementary triangle were now brought together with twisted suture. In doing this, it is to be noted that the horizontal base line of the complementary triangle was necessarily shifted inwards, and coming to lie above the lower lip, took the place of that part of the upper lip which had been removed with the cancer. The new red border, made by turning up the mucous membrane of the cheek, imitated the natural red of the lip. The edges of the wound in the upper lip were now brought together with hare-lip pins, and the new mucous edging sewn with horsehair, both to where it joined the old and at the commissure of the mouth. When all was complete, no deformity was left. The man recovered rapidly, and when seen two months after operation his mouth was as nearly perfect in form as previous to operation nor did its movements appear in any way irregular or constrained. Dr. ANDREW CLARKE suggested the possibility that the appearance of cancer in the lower lip after the operation was due to the irritation induced, and which he said might be taken as an instance of successful meeting of growth over development.

A Case of Tachetiée Symmetrical Gangrene.—Dr. SOUTHEY read particulars of this case. Frank Nash, aged 9 (admitted in Matthew Ward, St. Bartholomew's Hospital, November 25th, 188

s much emaciated, his hair thin and falling off, abdomen empty l retracted, skin dry; and he was in a curious, excitable, semi- irious mental state. He presented a gangrene of the tip of his nt index finger, all his extremities felt cold, and he had insomnia. pulse was 148, very feeble. Respirations, 32. Temperature 99°. heart beat with feeble impulse, in the normal situation. There s no increase of normal cardiac dulness; no cardiac murmur; no rsical signs of lung disease. Neither liver nor spleen transcended ir normal limits. His appetite was bad; he had had no sickness; bowels acted once daily; the tongue was clear and moist; mic- ition gave no pain; the urine was scanty, not abnormal, chiefly sed with his stools. *Course and Progress.*—After a few days the mb and second finger of the same (right) hand were similarly olved, became first red and throbbed, then livid, and finally grened. On December 5th, an exactly similar spot occurred on pinna of the right ear, and on the extremity of his nose, and tip of the middle finger of his right hand. A little later, subcu- eous mottlings (tachetées) appeared all over his trunk and bs, and developed into a raised rash, like urticaria tuberosa, or thema tuberculatum. The spots first itched, then became painful l tender, but gradually subsided, leaving only some pigmentation nark their sites. Finally, all the fingers and thumb of the right nd gangrened and slowly separated, and the thumb, index, and le finger of the left hand. He passed into a condition of most reme prostration, with broncho-pneumonia of both lungs, and y very slowly and gradually recovered from it. In January, 2, a new and interesting clinical feature was manifested, namely, ermittent true hæmaturia, bloody urine being passed alternately h normal-coloured non-albuminous urine. Some days distinct od-cells were passed with the urine; on others, blood colouring tter without blood-cells; on others, albumen with blood enough to e the blood reaction only. Oxalate crystals were present in great ndance when the hæmaturia was abundant, and *vice versâ*. No e casts were ever noticed. All symptoms of urinary disorder appeared in July, 1882, when the child was discharged well, but h the loss of his fingers. He had been seen several times since. e author next cited some parallel examples of this malady, which referred to vaso-motor disturbance.—The PRESIDENT asked if history of rheumatic gout could be traced in this case? He was iliar with such forms of gangrene in this connection.—Dr. JTHEY said he knew of nothing in the history to justify him in affirmative reply, and referred to the account of a very similar e to his own, published in 1804, from the pen of a French physi- n, Reynaud.—Dr. BARLOW said he had never seen so severe a e of the disease as that described by Dr. Southey, but he had n two or three which were less severe. As Dr. Southey had ob- ved, the most important feature they presented was not the gan- ne, but the vaso-motor disturbances. In one case, within his n experience—that of a man aged 35, who had been generally arded as rheumatic—the attacks, which usually occurred during ter, were ushered in by pain in the lower extremities, which was owed by the appearance of bluish-red patches on the integu- nts. When first seen by Dr. Barlow, he had just suffered an ack, and there was a distinct patch on one trochanter, while one was the subject of local gangrene, and all his toes were blue. two other cases observed, in female children, 3½ years old, the acks occurred between September and April, being rare in summer, l were in the latter case associated with sudden changes in tempera- e. In one child the lower limb affected was intensely painful and ck from above the ankle to the toes when seen, and pre- ted a most alarming appearance. It remained thus for about ee hours, and then passed off, the child seeming quite well again. e had several attacks of the kind in the legs and forearms. The acks occurred on cold days in the other case also, and on several asions were accompanied with violent stomach-ache, while, two three hours subsequently, dark-coloured urine, containing hæma- , oxalate-crystals, and albumen, would be passed, but only once er each attack. Dr. Barlow considered that the disease presented ny points in common with that known as paroxysmal hæmaturia. was a disease of winter, and was usually preceded by a condition sleepiness; its resemblance to ague-attacks was not well marked, there was no sweating stage observable, the cold stage being the ncipal one. He had elicited from the mother of the patient pre- ting typical paroxysmal hæmaturia that the child's finger-ends w distinctly blue during the attack, and, so familiar was the pearance, that no especial heed was paid to it. Dr. Barlow thought t the application of cold was a more rational treatment than the ployment of warmth, being led to this opinion from his know- lge of the effects produced by cold in the treatment of frost- bites. He mentioned the case of a child which—a sufferer from paroxysmal hæmaturia, and accustomed to be washed in warm water —was submitted to the influence of cold water, with good results. The constant current applied down the back had been employed by Reynaud, with a view to diminish the irritability of the vaso-motor centres, and with success. A patient of his own had described how this treatment was the only one which had done him much good while in St. Bartholomew's Hospital, and the method was certainly worthy of extended trial. There was no confirmation forthcoming of the association of rheumatic gout with the disease in his cases. Mr. Hutchinson, however, had described a connection between end-joint arthritis and Reynaud's disease, and a patient under his (Dr. Barlow's) care might be taken to confirm this opinion. —Mr. CRIPPS took exception to the definition of Dr. Southey when calling the affection a "blood" disease. He, himself, regarded it as an essentially local complaint, and the gangrene as its principal feature. Such cases were analogous to frost-bite, to the production of which no special bodily condition was necessary, but simply exposure. Children who were attacked by symmetrical gangrene would be bound to have suffered from chilblains, which were an indication of enfeebled circulation dependent on a weak heart. He cited the case of a young woman who had been affected with chilblains, when living in reduced circumstances. She gave birth to a child, after which event she developed symmetrical gangrene, with the result that she lost both lower extremities. He did not agree that it was right to apply cold or evaporating lotions to gangrened limbs. Brodie's treatment, by wrapping the limb in cotton-wool and keeping it covered, was wiser. Opium was the most reliable drug to employ; given freely in small but divided doses.—Dr. BARLOW pointed out that he had not recommended the application of cold in the treatment of gangrene, but in these cases of local asphyxia.—Dr. MAHOMED had seen two cases similar to that mentioned by Dr. Southey. In one intermittent hæmatinuria had existed, and crystals of oxalates were found in the urine. He explained that this frequent association of intermittent hæmatinuria with symmetrical gangrene effectually separated such cases from those dwelt on by Mr. Cripps; and, moreover, the patients in the former cases were not necessarily endowed with a feeble circulatory apparatus. A few male patients of his own had suffered from the disease in a more or less chronic form for seven or eight years. The fingers presented a gangrenous appearance, which varied with the weather, but was not improved by treatment. The tips of two or three fingers had been quite lost. In summer time the hand was quite useful.—Mr. SYMONDS referred to several cases within his own experience, which possessed features in resemblance with those previonsly discussed; they had lost the tips of ears and fingers, and were now quite well.—Dr. SOUTHEY accepted Mr. Cripps's correction of the term "blood-disease," and substituted for it the description of a general disease, with local manifestation. Reynaud's account of it as being a vaso-motor disturbance was probably accurate, but the etiology was very obscure. As a rule, local asphyxia was the final stage arrived at as the result of the disease, the tendency to go on to gangrene being unusual. In one case, that of a woman, three fingers were seen, on two separate occasions, to become quite purple, and, even during observation, colour and sensibility were restored.

With the consent of the respective authors, the papers, of which the following are abstracts, were taken as read.

Subcutaneous Nodules Occurring in a Patient the Subject of Syphilis, and with very Indefinite Connection with Rheumatism.—Dr. STEPHEN MACKENZIE exhibited this case. The patient was a married woman, aged 40, who had never had any important illness till three years ago, when she apparently had syphilis. She came under care for a tertiary syphilide, and, during examination, it was discovered that she had several subcutaneous nodules. In all, eight had been detected, which varied in size from a hemp seed to a split pea. The skin over them was natural, and they were all movable. They caused no pain, except when pressure was made on them. Two were situated along the posterior border of the ulna, and the remainder, with the exception of one in the gluteal subcutaneous tissue, beneath the skin of the thumbs and fingers. The first she noticed about two years ago, and it had increased in size. None that she had observed had disappeared. As regarded rheumatism, the only symptoms which could be in any way construed as due to this disease, were some pains in the legs eight years previously, for which she used a liniment. She had never had chorea. There was no evidence of heart disease, nor of arthritis, present or past. The physical characters of the subcutaneous nodules were exactly those of the nodules described by Drs. Barlow and Warner in connection with rheumatism and allied affections. The interest in the case lay

in the very indefinite, if at all existing, connection between the nodules and rheumatism. The patient had not suffered from any distinct rheumatic symptoms, nor was there any family tendency to that affection. The association of the nodules with the syphiloderm might be fortuitous. The duration of one of the nodules was greater than in any of the series of cases recorded by Drs. Barlow and Warner. The longest time they had noticed nodules to persist without diminution was five months.

Rheumatismal, Cutaneous, Subcutaneous, and Periosteal Nodules.—Dr. DYCE DUCKWORTH furnished the following report: M. F., aged 38, a married woman with one child, came under Mr. Langton's care at St. Bartholomew's Hospital, in December, 1882, for the treatment of multiple fibrous nodules on the arms and legs. She was active and robust, with fresh, rather florid complexion, and fair hair. Her teeth were nearly all decayed and lost. The history was that "a lump" first came on the right elbow in September, 1879, another on the right knee soon followed, and others had appeared on the limbs from time to time. They were found in the several positions hereafter mentioned. *Right Ulna:* A large tumour (size of a penny), freely movable, not adherent to the periosteum. Below this, two others, much smaller, adherent to the periosteum. None over the radius. One firmly attached to the anterior ligament of the wrist; one in the palm of the hand; and one on the third phalanx of the little finger. *Left Ulna:* Four inches below the olecranon, one small slightly movable tumour, not adherent to the skin. None on the radius. On the palm of the hand, six small nodules, adherent to the skin. *Right Leg:* One over the lower angle of the patella, movable, not attached to the bone, about the size of a penny. Another, two inches below the patella, much firmer, freely movable, adherent to the skin. Numerous small ones on the crest of the tibia, to within five inches of the ankle, firmly adherent to the periosteum. Several over the upper part of the fibula, firmly adherent the periosteum. No nodules were found on the scalp, scapulæ, spinous processes of the vertebræ or feet. The tumours were very painful, and ached more in cold weather. There was no personal history of rheumatism or of chorea in this patient. Her mother, however, was rheumatic, and a sister had had three or four attacks of rheumatic fever. Examination of the heart revealed nothing of note. There was, perhaps, doubtful roughness of the first sound at the apex. Iodide of potassium was given, and during the past three months there had been a gradual reduction in the size of the nodules, and some of them had become softer. Having regard to the clinical features of this case, and to the family rheumatic predisposition, Dr. Duckworth ventured to call these nodules rheumatic in their nature, and he believed that further study of these cases showed that there were several types or varieties of them. This case, as well as that one exhibited by him at the beginning of this session to the Society, illustrated a form met with in adults in which the nodules were very persistent, and were also attached to the skin and periosteum. Amongst the first cases brought forward by Drs. Barlow and Warner, the nodules were found to be commonest in children and young persons, to be subcutaneous, not to have any periosteal attachment, and not to last more than a few weeks or months. In this instance, the nodules had lasted for two years and six months, and in the other for one year and six months.

The following living cases were shown: Spondylitis deformans; Tubercular ulceration of the hard palate; Tubercular leprosy; Rheumatismal nodules.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 4TH, 1883.

D. J. LEECH, M.D., President, in the Chair.

Rupture of Brachial Plexus.—Dr. Ross showed a case of rupture of the brachial plexus in a young man, aged 19. The patient's left arm was caught, nine months ago, by the strap of a revolving wheel of large diameter; he was lifted from the ground by the entangled arm, and fell on the opposite side of the wheel. He was at first stunned, but, on recovering consciousness, it was found that his left arm was completely paralysed. All the muscles of the hand, forearm, and arm, as well as the sternal portion of the pectoralis major, were completely paralysed and atrophied. The clavicular portion of the pectoralis major, the pectoralis minor, the internal and external rotators of the humerus, and the latissimus dorsi were spared, while the serratus magnus on the left side was enfeebled, but not paralysed. The skin of the inner, of the upper two-thirds of the anterior, of the whole of the outer, and of the whole of the posterior surfaces of the arm, were nearly as sensitive on the left as on the right side, and the sensitive area extended posteriorly to an inch and a half below the elbow. There was complete anæsthesia of every form of cutaneous sensibility below the specified areas. Sensibility was supplied to the inner surface of the arm most probably by the inter-costo-humeral nerve, and to the remaining sensitive areas of the arm by the cervical plexus and the communicating branch from the fourth nerve to the brachial plexus. The patient also manifested on the left side relative contraction of the pupil, diminished palpebral aperture, flattening of the cornea, diminution of the intra-ocular pressure, and five months after the injury, a slight relative increase of the temperature in the left external auditory meatus. Dr. Ross also showed a case of goître, in which the tumour pressed upon the cervical sympathetic nerve on the right side, and in which the oculo-pupillary symptoms were well marked.

Naso-Pharyngeal Tumour: Osteo-plastic Section of Superior Maxilla.—Mr. HARDIE related the particulars of a case, showing the patient and the tumour. The growth blocked the right nostril, and had lobules projecting into the pterygo-maxillary and zygomatic fossæ. It had existed, to the patient's knowledge, four years, and had reduced his health much by hæmorrhages. Mr. Hardie drew attention to his method of displacing the upper jaw-bone to get access to the base of the skull. Instead of sawing through the whole thickness of the bone, he turned down its anterior surface, the portion of bone so displaced being included in an incision through the malar bone, the lower border of the orbit, and the nasal process of the superior maxilla. The finger being then thrust into the nostril, the inner wall of the antrum gave way readily, and the prolongations of the tumour were successively pulled out of their bed. The attachment to the base of the skull was then carefully severed with a raspatory. The bone was then replaced, a suture being inserted into the border of the orbit to retain it *in situ*. The patient made a good recovery, without deformity. Professor Dreschfeld found the tumour to consist of fibrous tissue, with a large proportion of small spindle-cells.

Tumour growing from the Base of the Skull in a Man who had suffered Excision of the Superior Maxilla in Boyhood: Removal.—Mr. HARDIE also showed this patient, together with the tumour. The patient had the scar of Fergusson's incision for removal of the superior maxilla, but it could not be ascertained for what affection the operation had been performed. A rounded fleshy tumour was found occupying the situation of the removed bone, and projecting largely into the mouth between the alveolar border which still remained and the soft palate. The finger being pushed up behind the latter, it could be ascertained that the tumour was attached to the superior wall of the pharynx; but no definite knowledge was gained as to its precise origin. An incision was made through the old cicatrix from the angle of the mouth to the zygoma, and the soft part reflected. The outline of the tumour was then traced with the finger. It was found to be attached to the internal pterygoid muscle, a portion of which was removed, to the soft palate, which was also removed on the corresponding side, to the pterygoid plate, to the back of the pharynx, and to the base of the skull. These attachments were separated with a raspatory. A large branch of the internal maxillary artery was divided, and gave some trouble. The patient made a rapid recovery. Professor Dreschfeld reported the tumour to be a myeloid sarcoma. Mr. Hardie, in his remarks, stated that he regarded this tumour as having sprung from the basilar process; and that, under ordinary circumstances, it would have presented the usual features of a naso-pharyngeal tumour; but that the direction of its growth and its rounded shape had been determined by the absence of a large portion of the superior maxilla. The extensive attachment to surrounding parts he looked upon as secondary.

Effects of Electric Light on the Eye.—Dr. EMRYS-JONES made a few remarks on the effects of the electric light on the eye, and related two cases of acute conjunctivitis, with intense pain and profuse lachrymation, that occurred to two engineers while experimenting on the arc light. He had seen no ill effects from the incandescent light.

Chronic Oöphoritis.—Dr. SINCLAIR read a paper, the chief object of which was to discuss a series of cases in which operative treatment had been resorted to. Before entering on a consideration of the cases, it was necessary to call attention to the large number of people affected with chronic ovaritis, and to the extreme suffering and inconvenience therefrom resulting. A peculiarity of these cases was their liability to periods of exacerbation and of remission, so that, even while a medical man was pluming himself on his successful treatment of one of these patients, she might be under the care of another. An important feature of them was their almost invariably septicæmic or puerperal origin—a fact of consequence

ards their treatment. All other useful treatment was either ex-tant or operative. The prevailing modes of treatment might be is classified : 1. The proceedings and therapeutic agents which y be reasonably expected to prevent further mischief; these are, t, general and functional; the use of bromide of potassium and various sedative drugs, and certain forms of bath, to relieve n and prevent functional activity. 2. The proceedings and the-eutic agents which may be reasonably expected to produce more schief, including a number of manipulative proceedings and in-umental supports. 3. Proceedings and therapeutic agents which y be reasonably expected to produce no appreciable effect one y or the other. After these and other preliminary remarks, six es in which one or both ovaries had been removed were dis-sed; and, on the whole, the result of the operations was con-ered encouraging.—Discussion of the paper was postponed to the t meeting of the Society.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, FEBRUARY 2ND, 1883.

G. M. HUMPHRY, M.D., F.R.S., President, in the Chair.

llection of Officers.—Professor Humphry was unanimously re-ted President for the coming year. Mr. James Hough was ted as Vice-President; Dr. Bacon was elected as Honorary asurer and Secretary, and Mr. Marmaduke Shield as joint retary.

ase of Diabetes treated with Codeia.—Dr. BRADBURY narrated a e of diabetes mellitus, under his care in Addenbrooke's Hospital, efited by the administration of codeia. The patient was a malt-, aged 69, who came under treatment in September 1882, with a ory that he had had no previous illness of importance, and had n temperate, robust, and remarkably stout. About two and a years back, he had noticed that he passed an excessive quan-of water; he then began to suffer from neuralgic pains about left eyeball, slight dimness of vision, loss of flesh, hunger and st. He then came into the hospital for some months, and was ted with salicylic acid. After some improvement was maintained about twelve months, early in 1882 he began to have a recurrence he symptoms. In September 1882, it was reported that vision been entirely lost in the left eye, and much impaired in the t. Sharp darting pains had occurred in the limbs during the three months, and had affected the lower limbs with great rity. He had also suffered from giddiness. There were signs ataract in both eyes, with whitish patches in both retinæ, but æmorrhagic patches. The gait was peculiar, as he walked with rt strides and some hesitation, and a difficulty in turning round. sation in the limbs was normal. Patellar, spermatic, abdominal posterior scapular reflexes, were quite absent. The urine had a ific gravity of 1037; it contained a large quantity of sugar, but albumen. For seven days, he was allowed the ordinary hospital , and no drug was given; the daily average of urine was 84 ozs., there was no change in the symptoms. For the next twenty s, his diet was restricted to meat, greens, eggs, tea, brown bread, ter, and beef-tea, the daily average of urine being 52 ounces, slight improvement being noted in the pain in the limbs. During next seven days, half a grain of codeia was given daily, and the ly average of urine was 48 ozs. Then for ten days a grain of eia was given daily, and the average of urine was reduced to 45 . From November 1st to December 8th, the dose of codeia was grain and a half daily, and the average of urine was 40 ozs. ring this period, the pain was to a great extent lost, and the sight roved in the right eye, and perception of light returned in the . After December 8th, until he left the hospital, he took two ins of codeia daily, and passed on an average 33 ozs. of urine. ring the whole of his stay in the hospital, the specific gravity of urine was scarcely at all affected, varying from 1034 to 1038, his weight varied from 12 st. 9 lbs. to 12 st. 12 lbs., but was not cted by the treatment. When discharged in January 1883, the ort was that the man had for some weeks been free from pain; sight had improved to a slight extent in the right eye; that the ence of patellar reflex continued, and that the gait had not im-ved, though this latter symptom was attributed to the deficiency in it.—Dr. BRADBURY said, in reply to the discussion which followed, t the case was especially interesting, on account of the presence nervous symptoms, and the marked improvement in them and in polyuria by the treatment adopted. He had only that day seen ther case in consultation in which there was much the same gait, oting pains in the legs, and a complete absence of the knee-phe-nomenon. In this case, there was a gouty history; and Dr. Bradbury said he had under his care a gentleman who had had several attacks of gout, had now difficulty of walking, and in whom the patellar reflex was totally abolished. In none of these cases was there any ataxy. A close relationship may exist between gout and glycosuria, and these cases usually ran a somewhat protracted course, quite different from the diabetes occurring in young persons in whom there was no gouty history.

On a New Method of Treating Chronic Glaucoma.—Mr. GEORGE LINDSAY JOHNSON (London) read a paper on the above subject, based upon the more recent investigations into its pathology.

Congenital Syphilis of the Calvarium.— Professor HUMPHRY showed the calvarium of a child, presenting what are regarded as the effects of congenital syphilis, lately presented to the Museum by Dr. David Lees, who read a paper on the subject before the Society last year. It exhibited great vascularity, some bony deposit, and tabes at a few points. The parts at and adjacent to the centres of ossification had, as is not unfrequent, escaped; and this immunity Professor Humphry thought might be attributed to the greater tension of the periosteum over these more prominent regions. The father of the child had been the subject of syphilis.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MARCH 21ST, 1883.

ANGUS FRASER, M.D., President, in the Chair.

Poisoning by Salicylate of Soda.—Dr. FRANK OGSTON read a report of this case, which had been under the care of Dr. Robertson and himself. G. W., a moulder, aged 29, had for some days before January 4th last, complained of pains considered rheumatic. On getting up that morning he felt severe pain in the right side, and returned to bed. His wife sent to a druggist for six powders, each containing fifteen grains of salicylate of soda (which she had heard of as a cure for rheumatism), and gave one powder, an hour and a half after which time he fell asleep. After he had slept about two hours, he was roused up and had some dinner, but felt very drowsy, and went back to bed and fell asleep immediately. His wife tried to waken him three hours after this but failed, and then sent for Dr. Robertson, who saw him in about an hour, and found him comatose, with laboured stertorous breathing; respiration 12, and pulse 45 per minute, temperature 98.5. The pupils were contracted and insensitive to light; the face, neck, and ears were of a dark purple tint; perspiration was standing out in large beads; the extremities were cold and clammy. The urine was of specific gravity 1020. No albumen. Mustard to the back of the neck, heat to the trunk and legs, and ice to the head were tried without effect. He was seen again by Dr. Robertson three hours afterwards (10 P.M.), when the only changes were great weakness and increased rapidity of pulse, the beats being 100. At 1 A.M. next morning the pulse was 130, the respirations 10, and breathing very laboured. There was no special change after this till his death, at 2.30 P.M. of the same day —sixteen and a half hours after the powder had been taken. A *post mortem* examination was made thirty hours after death. Rigor mortis was well marked; the pupils were slightly dilated; the face was livid; there was dusky redness over the top of the chest and shoulders, with the veins distended and showing through the skin. The belly was swollen and greenish; the front of the body was brown-red; the back deep purple, in parts almost black, with vibices here and there. The lobes of the ears were blue-black; the finger-nails and tips were bluish; red fluid was issuing from the nostrils. There were no marks of injury. The scalp and bones of the skull were deeply congested. The cerebral sinuses were turgid with dark loosely clotted blood. The blood-vessels of the surface of the brain were gorged with blood. More blood was found in the brain than normal. The papillæ at the base of the tongue were swollen. Red fluid was found in the gullet and about the top of the larynx. The gullet and larynx were congested and purple. The left ventricle of the heart was empty; there was a little clotted blood in the left auricle. The right cavities were enormously distended, with dark loose clotted blood; the valves were normal. The lungs were filled with dark clotted blood (apoplectic), and contained no air. A small, partly cheesy, partly chalky knot was found in the left, and a cartilaginous cicatrix in the right apex. The liver, spleen, and kidneys were full of dark loosely clotted blood. The substance of the heart, liver, and kidneys, was of a greyish yellow colour, and firmer and tougher than usual. The stomach was greatly distended, and contained about a pint of yellow pulpy matter, apparently pea-soup. Its mucous membrane was thinned and softened with large

dark patches of ecchymosis near the larger end, and smaller bright red punctate ecchymosis over all its surface. The small intestines were greyish green, and distended with gas. There was limited hyperæmia at various points, but no enteritis or peritonitis. The urinary bladder and gall-bladder were distended with normal contents. The veins of the neck were distended with dark loose clotted blood. The blood was generally thinner than usual, and of dark plum-colour. The five remaining powders were examined, and found to consist wholly of salicylate of soda, giving the characteristic violet colour with a solution of perchloride of iron. The deceased died from comato-asphyxia, and the *post mortem* appearances corresponded with the symptoms observed during life. The condition of the heart, lungs, liver, spleen, and kidneys, was as usual in asphyxia, and the condition of the brain and blood-vessels within the head as in coma. Besides all this, there were marks of irritation along the gastro-intestinal tract; the papillæ at the base of the tongue were swollen; the gullet and larynx were congested; the mucous membrane of the stomach was softened, and ecchymosed. The liver and kidneys had traces of commencing inflammation, as seen in phosphorus-poisoning. One of the weakly irritant poisons seemed to have caused all the symptoms. Salicylate of soda had not been found in the viscera, nor in the blood, and the urine had, unfortunately, been lost. The usual symptoms of poisoning by salicylic acid or salicylate of soda were heat and irritation in the papillæ of the tongue, pain, nausea, colic, and general irritation of the gastro-intestinal tract, when given in too large or too concentrated doses. Disturbances of the circulation were not in this case very well marked, and this was quite consistent with salicylate poisoning. The temperature also was not inconsistent, as experiments had proved that small doses lowered, though large elevated the temperature. Small doses had been found to make the respiration slow; and coma to an extreme degree had been seen in some cases. The administration of salicylate of soda was contra-indicated in cases of disease of the kidneys, and the question suggested itself whether the pain complained of was not due to congestion of the liver, and whether the congestion did not contra-indicate the salicylate. There were, however, no morbid appearances seen in the liver further than commencing granular degeneration of the cells, and this seemed more likely to have been produced by the poison itself, than to have been there before its administration. The cerebral congestion which, along with many other nervous troubles, was a common effect of salicylate, should, perhaps, have been more fully noticed, especially when the unusual state of the heart was taken into consideration; but it was difficult to form any conclusion as to the connection between the two.—Dr. HALL had used salicylate of soda largely, but had never seen any bad effects. In one case, where thirty grains had been given, he had seen some nervous symptoms somewhat analogous to quininism, such as pain in the head, vertigo, affections of vision, etc.—Dr. MACGREGOR doubted if Dr. Ogston's case were really a case of poisoning. Might it not have been a case of acute congestion of the lungs proving quickly fatal?—Dr. MCKENZIE BOOTH also doubted whether the case was one of poisoning at all, and not rather of death from natural causes.—Dr. GARDEN thought that if death had been caused by the dose of salicylate not being sufficiently diluted, then he should have expected more marked appearances of irritation in the mucous membrane of the œsophagus and stomach. Besides, there would have been found traces of the salt in the stomach. In order to the case being made out there had to be excluded (*a*) death from natural causes (*b*), morphia or opiate poisoning; and some positive proof would have been required of salicylate of soda in such a very moderate dose being capable of proving fatal to a young healthy adult. On the whole, it looked to him more like death from natural causes.—The PRESIDENT had seen cases of sudden death from mischief in the lungs, where the patients had complained of little till very shortly before death. Could the powder have been morphia, with a small quantity of salicylate of soda as an impurity? He had found from experiment that a mere trace of salicylate gave a very marked re-action with the iron test. On the whole, he thought Dr. Ogston had not made out his case.—Dr. F. OGSTON replied, and endeavoured to combat the various arguments adduced against the case being one of poisoning.

EXPLOSIVE HYPOPHOSPHITES.—The *New York Medical Record* reports that, as Dr. H. Giffard of Syracuse, was engaged recently in triturating a mixture of hypophosphite of lime, three parts, and hypophosphite of soda, one part, the compound exploded like gunpowder, the fine particles flying into his face and severely burning his eye. His injuries are likely to result in the loss of his left eye.

REVIEWS AND NOTICES.

UEBER DIE MILZBRANDIMPFUNG. KASSEL UND BERLIN. By Dr. R. KOCH. Theodor Fischer. 1883.

IN this pamphlet, Dr. KOCH replies to the attack made on him by Pasteur at the late International Congress of Hygiene at Geneva, showing that the different conclusions at which he and the Frenchman arrived were to be explained by their respective methods of procedure.

His demands are these: proof of the parasitic character of each individual infectious disease; cultivation of the micro-organism, when found, on the pure method (*Reincultur*); and reproduction of the disease by inoculation of the micro-organism. The method is well known, and its practicability has been brilliantly shown in the case of tubercle-erysipelas and anthrax.

Pasteur, on the other hand, is convinced of the parasitic nature of all communicable diseases, and does not consider such proof as necessary. This is well seen in his treatment of what he calls *la nouvelle maladie de la race*. No importance is attached by him to the selection of the animal to be experimented on; it is inoculated with crude material, viz., the saliva of a dead body. He did not find the micro-organisms of rabies, if there be such, but merely a bacterium which he quite gratuitously assumed to be that of a new disease, whereas the phenomena to which it led were none other than the well known septicæmia of the rabbit. He fell into the same error in his researches on the typhoid of the horse. Pasteur's faulty interpretation of the phenomena of disease are explicable only by the fact of his not being a medical man.

Dr. Koch opposes to Pasteur's assertion that he discovered the etiology of anthrax, the fact that his own publication appeared in 1876, while it was not until a year later that Pasteur published anything on the subject.

On the causation of natural infection, the views of the two in vestigators differ essentially. Pasteur maintains that, in the decom posing carcases of beasts who have died of anthrax and been buried spores are developed which, brought to the surface by worms wit their casts, adhere to fodder and infect the cattle, if the fodder b thorny or their mouths be in any part abraded. This theory Koc has contested in his essay on the "Etiology of Splenic Fever," in th *Mittheilungen aus dem K. Reichsgesundheitsamt.*

The greater part of the work is occupied with a criticism of Pasteur views on the mitigation of the virus and the means of obtainin immunity thereby.

Pasteur applied the experience he had had of the mitigation o the virus of the so-called fowl-cholera to the *Bacillus anthracis*, an succeeded in so far weakening its activity that cattle survived infe tion by it, and acquired immunity against the infection of the mos virulent anthrax. He then advised, in order to attain this imm nity with the least possible risk, a double inoculation, first with greatly mitigated virus, *premier vaccin*, and later with one le weakened, or *deuxième vaccin*.

Pasteur's design to extend the application of the results achiev by him in the two above-named diseases to all infectious disease is proved, by the experience of erysipelas, relapsing fever, and tub culosis, to be impracticable. Even in the case of anthrax, the la of immunity, in Pasteur's sense, cannot be maintained, for Loeffl Gotti, Guilebeau, and Klein, have shown that no such immunity obtained in the case of guinea-pigs, rats, mice, or rabbits; and m himself can he attacked more than once. It is only among she and cattle that any immunity is conferred by preventive inocu tion; and with these it remains to be proved that the results o weigh the immediate risks, and how long the immunity persists.

To decide these questions, the Imperial Board of Health und took a series of experiments, the results of which are now, for t first time, made public. The bacilli were, according to Pasteu own directions, cultivated in neutralised meat-broth, at a tempe ture of 42° or 43° C. Injections of the "first vaccin" were witho any appreciable effect in the sheep experimented on; but a num died of anthrax after the "second". Of six sheep who, having be according to Pasteur's directions, twice "vaccinated" and protect were afterwards inoculated with unmitigated virus, one died. L results were obtained in several other places.

Pasteur's theory as to the entrance of the bacillus by breaches the oral mucous membrane, produced by coarse fodder, was m the subject of numerous experiments. Soft food, potatoes hollo out and stuffed with infective matters, were carefully introdu into the mouths of sheep; so long as the infective matter contai

bacilli only without spores, no ill effects followed; but when spores were present, whether the matter were fresh or had been dried for over a year, the animals died invariably in a few days.

Eight sheep, who had been "twice vaccinated," were inoculated with matter of proved activity taken from spontaneous cases of splenic fever. One died in two days. Twelve days after this, the seven survivors, who had thus been thrice inoculated, twice with mitigated, and once with natural, virus, were given food containing spores; and, within two days, two of them had died of splenic fever.

Dr. Koch, therefore, asserts that, from the uncertainty and short duration of such immunity as these inoculations afford, as well as the danger to which not only the animals themselves, but those who have not been inoculated, and human beings in contact with them, are exposed, Pasteur's protective inoculation cannot be looked on as of any practical value.

At the same time, he does not deny the possibility of transforming one description of bacillus into another nearly allied, or even of pathogenic into innocent organisms, and *vice versâ*, but demands that a much more exact demonstration of such change must be given before it can be accepted as a scientific fact.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

POCKET URINARY TEST-CASE.

Mr. Hawksley, of 357, Oxford Street, sends us an urinary test-case, which will be found very convenient for the pocket. Its dimensions are 5 inches by 3½ inches, and 1 inch in depth. It contains the following apparatus: a gravimeter, a small bottle containing powdered picric acid, and another holding solid caustic potash in one-grain pieces; a small bottle containing methylated spirit, which is converted into a lamp by removing the cork and inserting the wick, which is packed in a short glass tube; a test-tube 4½ inches long, which is graduated into half-drachms and drachms, by means of which a quantitative analysis of sugar up to the amount of two grains per ounce may be made with the picric acid and potash test; a small tube containing the ferric acetate standard, indicating the proportion of ¼ gr. sugar per ounce; a small brass measure for the picric acid, and a perforated brass plate, which serves as a test-tube stand. A pocket in the lid contains coloured test-papers, and brief printed directions for using the various tests for albumen and sugar.

NEW SURGICAL PIN.

By John Ward Cousins, M.D.Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

I beg to introduce to the notice of the profession a new bandage and dressing pin, with the hope that it may prove an useful though humble addition to the common necessaries of every-day practice. During the last few years, safety-pins have been largely used in many hospitals, and some surgeons and nurses carry a supply with them for every emergency. The safety-pin, however, is by no means a perfect contrivance for surgical purposes; for, in its application, it is often troublesome to fasten and unfasten, and it is very liable to slip into the folds of a bandage, and thus to cause delay in its removal. The surgical pin which is represented in the engraving is specially adapted for surgical work, and possesses qualities which



will be appreciated by surgeons, accoucheurs, and nurses. It is handy in introduction, safe in position, and capable of instantaneous removal. This simple contrivance is in the form of a spring-pin, which is converted into a novel instrument by the addition of a special shield and a short handle. It is manufactured in stout pin-wire, and midway between the spring and the shield a convenient handle is produced by giving the metal a loose double twist. The handle is the special feature; it gives complete control over the pin, assists in directing the point, and renders both its introduction and withdrawal easy and instantaneous. When in position, by the aid of the handle, the point can be instantly protected; and then, by raising the shield with the handle, the pin is at once unfastened, and can be readily removed. In this way, ease and rapidity of application are secured; and these qualities render the new surgical pin far more handy than any other kind of bandage and dressing holder. For hospital work, it will be found a valuable little innovation; and it is also well adapted for dressers and surgeons in the field, in all the appliances of immediate surgery. It is manufactured by Messrs. Kirby, Beard, and Co., of London and Birmingham, in several convenient sizes. The largest pins are especially suitable for chest and abdominal rollers; and they will prove also an excellent substitute for the tapes which are fixed to the ends of the India-rubber bandages now so universally employed in practice.

JUNKER'S ANÆSTHETIC APPARATUS.

Sir,—I see in your issue of to-day an account of the above apparatus. I have had some experience with it, and cannot give it the praise Sir Spencer Wells does. Unfortunately for the reputation of this apparatus, we are only blessed with two hands; one hand is required for the compression of the bellows, and the other hand is made use of in holding the face-piece *in situ;* and no hand is left to feel the pulse with; and I must say I should be very sorry to give either chloroform or bichloride of methylene to a patient with this apparatus without maintaining a constant watch over the pulse, notwithstanding what Lister says. A very efficient modification of Junker's apparatus was introduced some years ago by Mr. Mills (senior administrator of anæsthetics at St. Bartholomew's Hospital). The face-piece was replaced by a flexible catheter or soft leaden tube, which is inserted either into the nostril or into the mouth; and in long operations about the mouth, as removal of the lower jaw or tongue, a constant supply of chloroform is given to the patient, with the double good result of keeping the patient thoroughly "under" and not inconveniencing the operator. This apparatus of Mr. Mills's has been in use at St. Bartholomew's for some years, and has met with universal approbation.—I am, sir, yours very truly,

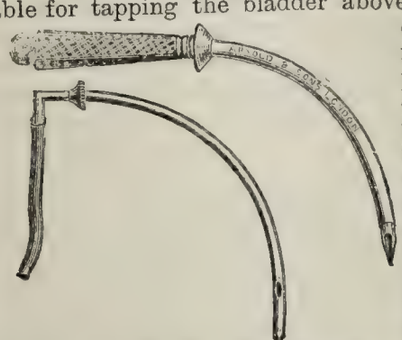
Ernest Clarke, M.B., B.S., late House-Surgeon and Assistant Administrator of Anæsthetics to St. Bartholomew's Hospital.

Blackheath, April 28th, 1883.

A NEW INSTRUMENT FOR SUPRAPUBIC PUNCTURE OF THE BLADDER.

By T. Frederick Pearse, M.D., Liphook.

This consists of a trocar and cannula made of a size and shape suitable for tapping the bladder above the pubes, and of a specially constructed silver catheter to fit in the cannula. The cannula is provided with rings, so that it can be tied in position like a tracheotomy-tube. The catheter is made to accurately fit the cannula, its point extending about one inch beyond the point of the cannula into the bladder. The external portion of the catheter is bent at a right angle, for the purpose of fitting on a piece of India-rubber tubing, and is provided with a shoulder, to prevent its slipping down the cannula into the bladder.



The object of the instrument is to prevent the patient's clothes and bedding from being soiled, as occurs under ordinary circumstances, from the almost constant discharge of urine through the artificial opening, by providing a sort of artificial urethra, which can be opened or closed when desired. By its means, the patient is enabled to get up and move about soon after the operation, without fear of soiling his linen.

The instrument has been made for me by Messrs. Arnold and Sons of London.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 5th, 1883.

UNQUALIFIED ASSISTANTS.

THE report of the committee of the Medical Council, on the above subject, is in many respects a remarkable document. It affords, in the first place, a striking illustration of the advantage which is certain to accrue by the admission of direct representatives of the general practitioner to the Council, not merely in the fact that, in order to gain information on this subject, the committee had to apply to Mr. R. H. S. Carpenter and others of his class, but still more in view of the additional authority which would be imparted to any decision of the Council affecting the rights of men in general practice, if they knew that their own chosen representatives had agreed to such decision. In quite another direction, too, this report contains evidence of the urgent need for reform of the present system, since it accepts as undeniably true the statements that "many freshly licensed men who offer themselves for employment as qualified assistants, are strikingly in want of those particular elements of (medical) education which an assistantship, under favourable auspices, would supply," and that "especially it is stated that the freshly licensed men are often unfamiliar with midwifery, and with the routine of dispensing and surgery-attendance;" and this, be it remembered, after a quarter of a century's supervision of medical education by the Council. We hardly know which most to admire, the simplicity of the confession, or the ingenuity of the attempt to fix the blame upon the employers of unqualified assistants.

The committee starts by laying down an excellent principle—viz., that no member of the medical profession can rightly employ anyone who is not a member of the profession to act for him as his deputy or substitute in any function which involves an exercise of professional discretion or skill. This principle does not carry it far, however; for, if impartially applied, it would prevent students in the medical out-patient rooms of hospitals from being deputed to prescribe for diseases, dressers in the casualty rooms from being permitted to treat fractures or pass catheters, and obstetric pupils from being sent out to attend confinements by themselves, and this is very far from being the wish or intention of the committee. It would be interesting to learn how, in the case of large hospitals with hundreds of students, it is proposed to carry out even the modification of this principle—viz., "that the pupil is not privileged to do any professional act, except in the presence of the legally qualified practitioner who is teaching him, or, if acting in the absence of his teacher, is only to perform particular subordinate acts which his teacher has directed, etc.," and how it will be possible to distinguish between such subordinate acts done, say in the out-patient room, and similar acts done, perhaps by the same student, in the private practitioner's surgery.

We quite agree with the committee, that the proper limits of an unqualified assistant's duties are dispensing, book-keeping, and such like subordinate matters, and that to commit the entire care of patients to him, either in branch practices or so-called dispensaries, is, and ought to be considered, distinctly unprofessional. That, however, is a long way from saying that it ought to be made illegal. It is a case, we think, for the colleges and universities to exercise control over their licentiates, rather than one for the Medical Council to take up judicially, since no court of justice in the kingdom would uphold the decision (if given) that a registered practitioner who employed unqualified assistants was thereby guilty of "infamous conduct in a professional respect."

It is to be regretted that the subject of unqualified persons practising on their own account with accomplices in the profession who act as a "cover" to them, should have been mixed up in this report with what is admittedly a totally different question, the relations of the parties in this latter case being more like those of partners than of principal and assistant. When it is found possible to get the House of Commons to pass an enactment making the practice of medicine, surgery, or midwifery, by unqualified persons illegal, then, and not till then, the Council may hope to obtain the power for which it asks to punish those who aid and abet such unqualified persons.

The resolutions finally agreed to by the Council show that, while even the most extensive employment of unqualified assistants is not at present considered to be "infamous conduct in a professional respect," it will, if the Council's existence be prolonged, be made so if possible; and that, in the meantime, all charges of misconduct in that respect will be considered as bringing the person complained of under the risk of having his name removed from the *Medical Register*. There could hardly be a stronger argument in favour of granting an appeal from the decisions of the Medical Council to the High Court of Justice, as it is proposed to do in the Bill now before Parliament.

THE VACCINATION QUESTION IN PARLIAMENT.

FOR reasons with which Mr. Hopwood will not sympathise, we regret that it was not possible to lay the ghost of the agitation in Parliament against vaccination once and for all on Tuesday evening. Mr. Hopwood is, no doubt, entitled to the condolence of the House of Commons for the unexpected manner in which his carefully hoarded evening was snatched from him; and honourable members will probably, therefore, be lenient should he raise the question again, as he threatens to do, upon the Estimates. We may expect then to hear once more the well worn stock arguments of the uselessness and mischief of vaccination, and passionate clamours for the unrestricted liberty of the subject to spread small-pox at his discretion.

Sir Charles Dilke might have spared much valuable Parliamentary time, if he had chosen to avail himself of the exceptional opportunity afforded him on Tuesday of announcing the views of the Cabinet on the question. But he deliberately clothed himself with a garb of mystery as to the intentions of the Government, and sternly checked the curiosity of those who tried to get him to declare himself. So many rumours have been current as to the attitude of the Ministry, that this putting off of the question is greatly to be deplored.

Sir Charles Dilke can hardly flatter himself that if he is silent now he will not again be challenged on the subject. On the contrary, his reticence will be taken to mean that the Government have one more subject which they regard as an open one, of which they have no collective opinion: in fact, that what the Ministerial organ prophesied as to their intentions was correct. If it be that the Ministry have determined to let Parliament decide the future of the vaccination laws without any official guidance, it would on every ground be better to say so at once, in order that proper measures of precaution may be adopted against a chance victory being snatched by the antivaccinators in the early morning of one of the last days of the Session. If, on the contrary, they have determined to reassert the principle of the Bill for

sale of Vaccination-indulgences, introduced by Mr. Dodson in 1880, hey must surely have very short memories for the tempest of dis-pproval with which that ill-judged measure was promptly received. t was rumoured at the time that Mr. Dodson, in announcing the lecision to abolish multiple penalties, had forgotten that there were Acts of Parliament in the way, and regarded it as a matter for his own discretion. The watchful Lord Randolph Churchill undeceived him on this point, and the Vaccination Bill—about which there was never any real enthusiasm—had necessarily to be brought in as the ogical sequence of Mr. Dodson's indiscreet admission. This time, however, the question has been seriously debated in the Cabinet, and it is highly desirable that this decision should be announced without delay, and in unambiguous language.

THE UNIVERSITY OF CAMBRIDGE AND SALARIES OF PROFESSORS.

WE cannot be accused of indifference to the relation of the old universities to our profession; but, having taken time to inform ourselves of the state of the case between Professor Latham and the Council of the Senate of the University of Cambridge (noticed in our last issue), we think a contemporary, in its excess of zeal, was led last week to a rather hasty decision in censuring the University. We do not for one moment deny our sympathy to Professor Latham; but he will pardon us for saying that his case is not altogether so hard as at first sight appears, inasmuch ashe receives, besides his stipend, curtailed though it be, a certain allowance for a lodge, and the students' fees. We need not discuss the legal technicalities of the case, as to the interpretation to be put on the new statutes framed by the late University Commission; these have been argued by lawyers, and the Chancellor has given his judgment, which is final, that Professor Latham has not the claim he thought he had. In his fly-sheet, he says, "I think I have said enough to show that, in respect to the University, the Downing Professorship of Medicine has a distinct 'claim for exceptional treatment'." As the Chancellor has decided against Professor Latham under the special statutes urged, the only way in which the University can accede to the "claim for exceptional treatment" is by supplementing the Professor's stipend from the University chest. This plan was really carried out a short time since in the case of the late Plumerian Professor, when, as in the case of the Downing Professorship, the rental of the lands from which the stipend was derived fell off seriously in consequence of agricultural depression. The question therefore arises, whether the University can and will adopt this plan again. They will, no doubt, be guided by the funds at their disposal, the needs of the medical school, and the work done by the professor. Of the first we are not in a position to speak, but assume it must be taken in relation with the second point, on which, we are glad to know, the University is fully in earnest. The Council of Senate have, so to speak, declared urgency for the Professorships of Physiology and Pathology, and are anxious to obtain the benefit of Dr. Humphry's offer to take the Professorship of Surgery without stipend. As evinced in the discussion, in the *Reporter*, of this condition, the words "without stipend" are misleading to those unacquainted with all the facts. The acceptance of Dr. Humphry's offer involves the election of a new Professor of Anatomy at double his present salary. Now, on the last point it may seem invidious to speak, but the needs of the school override personal considerations. Professor Latham has been giving lectures on materia medica and therapeutics with great credit to himself and benefit to the class; but he has not a great laboratory of experimental research to direct, such as have the Professors of Physiology and Pathology, for example; nor such a large class of practical workmen under his care, as have the Professors of Anatomy and Chemistry. These considerations must be weighed in any apportionment of the funds at the disposal of the University. Our only hope is that, in the interests of a vigorously growing school, it may have funds enough for all.

AMERICAN pork has a bad reputation on the Continent. The Greek Government has now forbidden its importation into Greece. It is already forbidden (from fear of trichinosis) in Germany, France, and, we believe, Spain.

THE profession will see, with satisfaction, that a hereditary distinction has been conferred on the eldest son of the late Sir George Jessel, Master of the Rolls, and Vice-Chancellor of the University of London, in recognition of the eminent public services of that distinguished man.

WE have received from Mr. D. H. Menzies, 11, Bothwell Street, Glasgow, a copy of a crayon portrait of Professor Lister, which he has just published. The portrait has been executed by Riminocgy, and is a very characteristic likeness.

THE Medical Act Amendment Bill was read on Wednesday for the first time in the House of Commons. It is now being printed in its amended form.

AT the last stage of the Medical Bill, in committee in the House of Lords, the Apothecaries' Society was—in deference it is stated to representations in high quarters, from eminent medical authority—omitted from the authorities to be represented on the amended Medical Bill, on the motion of Lord Salisbury.

THIS long impending blow appears to have been so little anticipated by the authorities of the Society, that they had, we believe, taken formal steps to increase the number of representatives assigned to them on the Council. They thought they ought to have three representatives.

SO little does the country generally appreciate their painful position, that we notice that one of the great daily papers merely observed that the Bill passed through its final stage "with unimportant amendments." The apothecaries will, however, once more represent their claims in the House of Commons, after Whitsuntide.

IT is stated that, had Mr. Hopwood found the opportunity of moving, on Tuesday night, his resolution on the vaccination law, the Government would have supported Dr. Cameron's amendment which declares that "whilst it is inexpedient to abolish compulsory vaccination, the vaccination laws might with advantage be amended in points of detail." It is probable that the resolution will be moved on the Estimates.

AN AMBULANCE FOR HYDE PARK.

AT an influential meeting held at the house of Mrs. Priestley, arrangements were made for supplying a small ambulance, to be placed at the Lodge at Hyde Park Corner, to provide against the frequently recurring emergencies of accident in Hyde Park. Sir T. Spencer Wells, Mr. Frederick Harrison, Surgeon-General Mackinnon, C.B., Mr. Ernest Hart, Mr. Furley, and others, were present in support of the object; and Mr. Mitford intimated, on behalf of the First Commissioner of Works, that official assent would be given, and provision for housing the ambulance made. It was stated that the number of accidents occurring are much more numerous than supposed, amounting, on an average, to nearly one a day—some of them, of course, slight, but others being occasionally very serious. A subscription-list was opened for obtaining the funds necessary for providing the ambulance.

THE Exhibition of the Royal Academy, which opens on Monday next, contains some interesting work by Sir Henry Thompson and Mr. Evershed. There is an excellent bust of Dr. Diamond and one of Dr. Langdon Down, also a fine engraving of the portrait of Dr. Quain by Maclise. There are very few studies from the nude, and the figure studies generally are distinctly below the mark. The anatomical schools of the Royal Academy seem to fail to impress English artists with due interest in the study of the nude figure. We do not remember any occasion on which the Academy pictures were of so frivolous a character, and in which a higher order of subjects and of studies of the classical school was so utterly neglected. The landscapes and portraits are as usual numerous, and a few of them very good. On the whole, the exhibition this year is rather below the usual standard of interest. At the Grosvenor Gallery a higher range of effort may be noticed, but without any very notable success. Among the medical portraits exhibited are Mr. Herkomer's fine portrait of Dr. Garrod, and Mr. Holl's portrait of Mr. Ernest Hart, painted by subscription for presentation to his wife.

THE GERMAN HOSPITAL.

AT the annual dinner of this hospital, on Tuesday last, at Willis's Rooms, Count Munster presided, and subscriptions for the year to the amount of upwards of £4,000 were announced. Sir William Siemens, in proposing the health of the lay officers of the institution, said he hoped to see, before long, the establishment of a paying ward, as at St. Thomas's Hospital. This suggestion met with general approval. Dr. Weber returned thanks on behalf of the medical staff. Sir Julius Benedict and Herr Wilhelm Ganz provided some excellent music.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

ON Thursday of last week, their Royal Highnesses the Princess of Wales and Princess Christian paid a visit to this hospital, where they remained nearly an hour. Attended by the matron, they visited nearly every ward on the first and second floors, and the chapel. After the inspection, they signed the visitors' book, expressing their great satisfaction with all that they saw. This hospital is accessible, under regulations, to gentlemen desirous of attending midwifery practice as pupils; and also affords training to nurses, of whom, up to the end of last year, one hundred and fifty had been instructed in the institution.

DRINK AND DISEASE.

MR. CHARLES AUSTIN writes to point out that recently a majority of the House of Commons has decided: 1. That it is right, and an imperative duty of the State, to enable the majority to prevent the minority from having the opportunity of drinking beverages perfectly harmless in themselves, lest harm should be done by drinking these too copiously: 2. That it is wrong, and an intolerable invasion of personal liberty, for the State to enable the majority to prevent the minority from having the opportunity of spreading a disease understood to be of the most frightful kind, and entailing consequences of indefinite duration. He asks: "What do you, or what can any man, think of politicians who, in one and the same week, solemnly endorsed these two propositions with their vote, in their character of representatives of the sense and convictions of the community?" His personal opinion is extremely unfavourable to the honesty or the penetration of the majority who are thus indifferent to the logic of legislation.

TYPHUS FEVER AT NAZARETH HOUSE.

WE understand that Mr. John Spear, one of the junior medical inspectors of the Local Government Board, has been deputed to make the investigation into the circumstances of the outbreak of typhus fever at Nazareth House, Hammersmith, of which we gave particulars on the 21st ultimo. Mr. Spear had considerable experience of typhus in his northern home at South Shields, where he was for a number of years medical officer of health; and his report as to the actual nature of the disease which attacked the inmates of the Home will, therefore, be awaited with interest. In view of the exceptional nature of the outbreak, it is to be hoped that some means will be taken to issue the inspector's report without the vexatious delays that usually occur in the publication of such documents. We observe, in Sir Charles Dilke's answer to Mr. Daly, a serious discrepancy as to the sanitary condition of the place. Mr. Collier's language was very precise and explicit as to the dirt which he found prevailing in the Home. Yet Sir Charles Dilke announced, in Parliament, that "the rumour that the sisters had neglected cleanliness was quite unfounded, and that the amount of space given to the children was ample and sufficient." Evidently some widely different standard of cleanliness must have been adopted by the two inquirers into the outbreak.

ST. GEORGE'S HOSPITAL.

IN an article headed "Signs of the Times," published in our last number, we referred to a meeting held on April 21st (St. George's Day), at Grosvenor House, to bring before the inhabitants of western London especially the wants of St. George's hospital, and the serious falling off of late years in the support necessary to the maintenance of that large medical charity. H.R.H. the Duke of Cambridge, who presided, made an eloquent appeal on behalf of the hospital. He pointed out that, while the medical administrative efficiency of the institution had been kept up to the fullest extent, "there had been a gradual diminution since 1876 in annual and life subscriptions, the falling off in the annual subscriptions being upwards of £600 a year." There were also lessened subscriptions on other accounts, making in the whole a seriously lessened income, by which the future of the hospital is rendered precarious, and its present usefulness endangered. His Royal Highness expressed the opinion that St. George's hospital, in common with other great general hospitals in the metropolis, had suffered financially from the competition of special hospitals.

DIPHTHERIA IN A LONDON SUBURB.

DR. MORELL MACKENZIE has sent us some particulars of an epidemic of diphtheria, which he has lately had an opportunity of observing in one of the London suburbs. He is of opinion that in this case, as in one recently reported by him in the JOURNAL (January 20th), milk was the vehicle of the poison, although the evidence on this point is not so conclusive as it was in the outbreak at Hendon, In the present instance, the disease had existed in a mild epidemic form in the neighbourhood for some months, but in the second week of April it suddenly broke out with great severity. Sixteen persons were attacked within a few days of each other, five of the cases proving fatal. In a district containing over 10,000 inhabitants there are, of course, many dairies; but of the nine families which suffered, all received their milk-supply from the same dairy, whilst six of them obtained it entirely, two principally, and one partially through the same vendor. The houses occupied by these families lie widely scattered, whilst the drainage of the locality is excellent, and the water fairly good. The water used for washing the milk-cans was the same as that supplied by the ordinary mains, but it was ascertained that the cistern from which it was drawn stands in the cow-house. Setting aside the possibility of direct contamination of the milk by some one connected with the dairy, of which there is no evidence here, the questions which arise in cases like this are—whether the poison is conveyed by the use of impure water; whether one of the cows was suffering from an affection capable of producing diphtheria in the human subject; or whether the sudden severe outbreak may have been merely due to the transmission through the atmosphere of the poison from pre-existing cases.

TYPHOID FEVER AND INFECTED MILK.

THERE appears to be, in various parts of the country, a fresh crop of epidemics, due to the use of infected milk. Not long ago we had to speak of such an outbreak at Wolborough; another—particulars of which are not yet available—is reported at Gateshead; and a third has just occurred at Exeter. The facts in each instance are of the familiar type. Cases of typhoid fever are discovered in houses which have no community of circumstances, except that they are supplied with milk from the same dairy. Inquiry reveals a case of disease at the dairy, or in its vicinity; the water-supply of the dairy is found to be from a source exposed to surface-soakage and excremental pollution; and there is usually also a suspicion that the water, though nominally used only to "cleanse the cans," has also been surreptitiously added to the milk itself. Dairies being for the most part situated outside municipal limits, this supervision becomes therefore the affair of the quarter sessions, and not that of the sanitary authority. Except in one or two cases, when the magistrates have had the sense to appoint the local officers of health as inspectors of dairies, it is hardly too much to say that the Orders of Council dealing with this matter are a dead letter. The health-officer of Exeter, Dr. Woodman, in reporting to the Town Council the circumstances of the epidemic, suggests that "steps should be taken to have all dairies supplying a town periodically inspected and reported on." Evidently this is a first principle of effectual hygienic machinery, and it is little short of a national scandal that the present mockery of legislation as to regulation of dairies should be permitted to continue.

SOWING POISONED GRAIN.

AT this season, when seeds are being sown, it is opportune to point out the risks to human life and the heavy legal penalties which may be incurred in consequence of the sowing of poisoned grain. A contemporary remarks that some people can never be taught common-sense excepting by means of a criminal prosecution. A farmer who appeared before the Carmarthen magistrates last week, in answer to a charge of having sown poisoned grain, appears to belong to this unfortunate class of persons. His excuse for adopting so reprehensive a practice was, that he was anxious to get rid of the crows which visited his farm. It did not occur to him that the grain might possibly be eaten by pigeons and other birds which contribute to the food-supply. He might therefore have killed some of his neighbours as well as the crows. The latter are no doubt very troublesome to the cultivators of the soil, but the best way to prevent their doing serious mischief, is to adopt the good old plan of employing small boys to scare them. The penalty for sowing poisoned grains happens to be a heavy one, and the defendant ought to think himself fortunate in being let off with a fine of only half the amount which the Bench were empowered to impose. As his experiment for making short work with the crows, however, has cost him altogether £6 or £7, he will not be inclined to try it again. As the Chairman of the Bench informed him, he had not only broken the law, but had displayed a sad deficiency of common sense. Fatal consequences have been known to result to persons after feasting upon birds which have eaten poisoned grain. It is, therefore, necessary that farmers so culpably ignorant as to follow the practice adopted by the defendant should be taught the nature of their folly by a substantial penalty.

INTERNATIONAL CONGRESS OF COLONIAL MEDICAL PRACTITIONERS.

IT is proposed to hold at Amsterdam in September, in connection with the International Colonial Exhibition, a Medical Colonial Exhibition and a Congress of Colonial Medical Practitioners. The following questions have been decided on for discussion at the Congress. 1. Quarantine: reporters, Dr. De Chaumont, Professor of Hygiene at Netley; Dr. Van Leent of Amsterdam; and Professor Don Rafael Cervera of Madrid. 2. Special Education of Colonial Medical Practitioners: reporter, Colonel Becking of Utrecht, formerly Superintendent of the Medical Department in the Dutch East Indies. 3. Hygiene of Insalubrious Professions, Occupations, and Trades in the Colonies: reporters, Dr. Da Silva Amado, Professor of Hygiene in the Medical School of Lisbon; and Dr. Van Overbeck de Meyer, Professor of Hygiene in the University of Utrecht. 4. The Modifications which certain Diseases, especially Infectious Diseases, undergo under the Influence of Tropical Climates: reporters, Dr. Walther of Paris, Inspector of the Medical Department of the French Navy; and Dr. Norman Chevers of London, formerly Professor of Medicine in Calcutta. 5. Phthisis in the Colonies and in Tropical Climates: reporter, Dr. B. Carsten of The Hague, Assistant-Inspector in the Medical Service. 6. The Treatment of Exotic and Tropical Diseases in Temperate Climates: reporters, Sir Joseph Fayrer, M.D., of London, Physician to the Secretary of State for India; Deputy Surgeon-General Dr. Joseph Ewart; and Dr. Le Roy de Méricourt of Paris, Principal Medical Officer of the French Navy. The Congress will be presided over by Dr. Stokvis of Amsterdam; Dr. Guye will be vice-president; and Dr. Van Leent general secretary. It will be held on September 6th, 7th, and 8th.

"THE ROYAL RED CROSS."

THE Queen having taken into consideration the services rendered by certain persons in nursing the sick and wounded of the army and navy, and resolved specially to recognise individual instances of special devotion in such service, a Royal Order appears in the *Gazette* of last week, creating a decoration designated "The Royal Red Cross." It is to consist of a cross, enamelled crimson, edged with gold, having on the arms thereof the words "Faith, Hope, Charity," with the date of the institution of the decoration, the centre having thereon the Queen's effigy. On the reverse side, the Royal and Imperial cipher and crown is to be shown in relief on the centre. The Cross is to be attached to a dark blue riband, edged red, of one inch in width, tied in a bow, and worn on the left shoulder. The decoration may be worn by the Queen Regnant, the Queen Consort, or the Queen Dowager of the United Kingdom of Great Britain and Ireland; and it will be competent for the Sovereign to confer the decoration upon any of the Princesses of the Royal Family of Great Britain and Ireland; also upon any ladies, whether subjects or foreign persons, who may be recommended by the Secretary of State for War for special exertions in providing for the nursing, or for attending to sick and wounded soldiers and sailors; also upon any nursing sisters, whether subjects or foreign persons, who may be recommended by the Secretary of State for War, or by the First Lord of the Admiralty, for special devotion and competency which they may have displayed in their nursing duties with the army in the field or in naval and military hospitals. In order to make such additional provision as shall effectually preserve pure this honourable distinction, it is ordained that, if any person on whom such distinction shall be conferred shall by her conduct become unworthy of it, her name shall be erased, by an order under Her Majesty's sign manual, from the register of those upon whom the said decoration shall have been conferred.

THE REGISTRATION OF MIDWIVES.

IN his report to the vestry of Kensington for the four weeks, March 25th to April 21st, Dr. Dudfield states that in his second report for the current year he referred to a local outbreak of puerperal fever in the practice of a midwife. At that time he knew the particulars of four cases, two of which had proved fatal. He had intended to submit in his third report a history of the outbreak, so far as he had been able to ascertain the facts. He did not do so, however, because the vestry, taking into consideration the gravity of the facts, decided to refer his report to the Law and Parliamentary Committee, and

directed that, should the committee be of opinion that a *prima facie* case against the midwife were made out, the facts should be submitted to the Public Prosecutor. The committee considered the cases, and arrived at the conclusion that a *prima facie* case had been made out, and the facts of the several cases were therefore submitted on March 6th to the Public Prosecutor. That evidence and a complete history of all the cases were then supplied to the Director of Public Prosecutions at his own request, in order that he might determine whether the facts were of such a nature or not as to call for a criminal prosecution. The Public Prosecutor finally, on April 6th, decided not to institute any proceedings against Mrs. G—, the midwife. These four cases of puerperal fever occurred in the midwife's practice between January 14th and February 7th. It is possible that there were others which Dr. Dudfield was unable to trace. Two of these women died, the first on January 19th, five days after her labour; the second on February 19th, ten days after delivery. The two others were still under medical treatment on March 1st, six weeks after delivery. The above history, the elucidation of which reflects much credit on Dr. Dudfield, affords one more reason for the speedy enactment of a registration board for midwives. It demonstrates in a startlingly clear light the utter freedom from control of any kind, which, unfortunately for the poorer classes of this country, English midwives possess. It is seldom that anyone has the energy and public spirit to thoroughly sift and set forth the details of puerperal epidemics. Nevertheless, they are continually occurring, and we know that the only remedy against this state of things lies in the passing of the Midwives' Registration Bill.

HOSPITAL SATURDAY IN BIRMINGHAM.

LAST Saturday, the usual annual collection of the contributions of artisans to the medical charities of the town was made in Birmingham, which was the birthplace of the Hospital Saturday movement. Last year the total amount contributed was £4,888, and this was a larger sum than any previously yielded in the town from the same source. Of that amount, the sum of £3,774 was paid into the bank on Hospital Saturday proper, while the remainder, namely £1,114, came in during the succeeding few weeks. This year the proceeds of the movement show a very substantial increase. During the special day of the collection the total sum received was £4,220. If this satisfactory increase be proportionately maintained in the contributions yet to come in, the collection this year will reach an aggregate sum of £5,465. Since the inauguration of the collection in Birmingham ten years ago, through the efforts of Mr. Sampson Gamgee, the sum of £40,000 has been contributed by the work-people of the town through the Hospital Saturday organisation, and distributed amongst the local medical charities. For several years the contributors gave their shillings and their sixpences, representing a portion of their Saturday's work; but great as were the amounts handed in, experience suggested improvements whereby the collections could be largely increased. The Hospital Saturday Committee, a thoroughly representative body of men, explained the advisability of a system of weekly collections of one penny being adopted in every workshop and manufactory, pointing out that the aggregate amount thus obtained would exceed that which would be otherwise raised by a simple collection on any particular Saturday. Many firms adopted the suggestion, with the result of amply verifying these anticipations. The committee have done their best to educate the working classes into universally adopting the penny a week system, and special endeavours have been made this year to extend the scope of the movement.

THE LOCAL GOVERNMENT OF LONDON.

MR. GLADSTONE has stated that the "further postponement of the consideration of this subject is a serious public evil and inconvenience;" but he does not see his way to even thinking about the possibilities of introducing his promised Bill until another measure, now exciting more immediate attention, has been finally disposed of. The problem of the proper and economical municipal government of four millions of people, spread over an area of seventy-five thousand acres, is unique, and the effectually grappling with it will need the highest statesmanship. No Bill is likely to be more canvassed, both as to principles and details. Powerful interests are already arrayed against it, whilst it is yet without form and void; and the instant that it acquires a definite entity, opposition in other directions will be certain to spring up. Not even the *clôture* will prevent long and laborious debates upon its several clauses; and, in the end, the Government may feel themselves obliged to throw overboard an important principle rather than to sink the ship altogether. For this reason, if for no other, we regard it as important that the Bill should be introduced and circulated at once, in order that it may receive without delay the outside criticism to which it must sooner or later be subjected. The advantage to the Government of this course would be, that they would be better able to measure the nature and extent of the criticisms of their proposals, and to consider at leisure the concessions that may safely be made to popular opinion, since on the Bill the Cabinet has declared to stand or fall. To the public the advantage would be still greater. It would permit mature and deliberate, as distinct from hasty and undigested, consideration of the ends and objects of the new municipality; and it would enable the existing authorities to marshal their forces, and combat effectually, whatever parts of the Bill might be regarded as susceptible of improvement. Otherwise, when the Bill does at length reach a second reading, we shall have scrambling debates, endless amendments, injudicious concessions, and probably, in the end, a mangled, spineless Act, that will make confusion worse confounded.

DIPHTHERIA SPREAD BY MILK.

TOWARDS the close of last year, an outbreak of diphtheria, presenting somewhat unusual characteristics, occurred at Devonport, and the Medical Department of the Local Government Board was compelled to yield to an urgent request from the Town Council that an investigation might be made into the circumstances attending the outbreak. Dr. H. Franklin Parsons was selected to undertake the inquiry, and his report contains many points of interest. In the first place, the outbreak differed from many others in its incidence upon persons of high social position. Members of the families and servants of professional men, and more especially of officers in the army and navy, including those in the highest command in both services, were the only class of people attacked. In but one single instance was a tradesman's family attacked, and no case is known to have occurred among the large working-class population. At the date of the inspection, the number of known recent cases of the disease was thirty-one, of which five had proved fatal. The houses in which diphtheria occurred were of the better class, mostly in elevated and open situations; and there was nothing peculiar in their sanitary condition to account for the occurrence of the disease nor, except in a very few instances, was there a known exposure to infection from a previous case. It was observed, however, that the greater number of persons affected with diphtheria obtained their milk from a particular dairy, upon which, in consequence, suspicion had fallen. Of the twenty-nine persons who were attacked in December, all were supplied from this dairy, with two exceptions, and one of these had certainly, and the other probably, had milk on some occasions from the same source. The dairy in question has a large trade in Devonport and Stoke, supplying about 256 houses containing 347 families; and it is estimated that the customers who fetch milk from the shop would raise the number of families to nearly 500. There are other dairies doing a large business in the same place; but their customers, with some doubtful exceptions, entirely escaped. On visiting the farm whence the milk was ob-

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ained, Dr. Parsons found no abnormal conditions. It was noted, owever, that a well had been closed at the suggestion of the local ealth-officer, though it was explained that the water was only used or washing carts. Two men were employed in the dairy; but neither mong them and their families, nor among lodgers in the same ouses, could any recent sickness be discovered. The residents at he milkshop—five adult persons—were also stated to have all been n good health; but next door a case of diphtheria had occurred arly in December. In a narrow back yard behind the shop the ilk-cans were washed with town water boiled in a small outhouse. rom this outhouse the water-closet is divided by a partition; and, n pouring benzoline into the drain of the next house, in which a ase of diphtheria had occurred, the smell was perceived in this ater-closet. It seems not unreasonable to suppose that the in-ective matter may have gained access to the milk by the wiping ut of the cans with cloths which had hung up in the narrow close ack yard, and had contracted impurities from the atmosphere. he small proportion of customers attacked, however, shows that ny contamination of the milk by infective material could have only een partial and occasional in its occurrence. In view of the pecial incidence of the disease upon families of the well-to-do, and f the condition of the milkshop premises, it is suggested whether he cream, standing as it did the longest time in the shop, might ot have been especially the vehicle by which the infection was nveyed; but Dr. Parsons met with no facts to corroborate this ew. It is significant, however, that many of the persons attacked ere constitutionally liable to sore-throat. A chronic ulceration of he throat, a ragged tonsil, or an enlarged mucous follicle, would aturally afford more lodgment to infective material, and a fitter soil r its development, than a healthy and unbroken mucous membrane.

SCOTLAND.

THE RECTORSHIP OF EDINBURGH UNIVERSITY.

HE Right Honourable Sir Stafford Northcote, Bart., M.P., has con-nted to become the Conservative candidate for the office of Lord ector of the University of Edinburgh, in opposition to the Right onourable G. Otto Trevelyan, M.P., who has accepted the nomina-on of the Liberal Association of the University. The election takes ace in November next.

SICK CHILDREN'S HOSPITAL, EDINBURGH.

URING the month of April, 67 patients were treated in the Royal ospital for Sick Children, Edinburgh; of these, 28 were new cases lmitted during the month. In the out-door department, 753 cases ere treated as dispensary patients, of whom 10 per cent. were from e country, fully 20 per cent. from Leith, and the remainder from dinburgh.

BEQUESTS TO MEDICAL CHARITIES.

HE Edinburgh medical charities (as well as many other charities) ve benefited largely by the bequests of the late Miss Paterson, of , Minto Street, Edinburgh. To the Destitute Sick Society she left 300; to the Royal Infirmary, £400; to the Sick Children's Hospital, 200; and the Royal Maternity Hospital, £200. By her death, so, the legacies left by her brother in 1881 also became payable. ey are: Royal Infirmary, £500; Destitute Sick Society, £300; ck Children's Hospital, £300.

THE BENCH AND MEDICAL EVIDENCE.

ADERS of the JOURNAL may remember that one of the Scottish lges some months ago expressed an opinion regarding medical idence in the witness-box, which was far from flattering to the ofession, or possibly far from just to it. A pleasant sort of repara-n has, however, recently been made by the same judge, Lord Deas (one of the most venerable on the Scottish Bench) in a murder case recently tried before him in Glasgow. He complimented one of the medical witnesses (Dr. James Wallace of Greenock) on the cautious and intelligent evidence given by him in this case, in which the trial was of two men for murdering two gamekeepers and in which conviction was secured and sentence of death passed on both.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending April 21st, show a death-rate in the eight principal towns of 27.5 per thousand of estimated population. This rate is 4.3 above that for the corresponding week of last year, but 0.4 below that for the previous week of the present year. The lowest mortality was recorded in Aberdeen, viz., 16.7 per thousand; and the highest in Glasgow, viz., 33.8 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 4.8 per thousand, or 0.1 above the rate for the previous week. The prevailing epidemics were whooping-cough and measles—deaths from measles being most common in Glasgow, and those from whooping-cough in Glasgow and Dundee. There were registered 133 deaths from acute diseases of the chest, or 29 less than in the previous week. The mean temperature was 45.1°, being 3.3° below that of the week immediately preceding, and 1.1° below that of the corresponding week of last year.

GRADUATION CEREMONIAL AT GLASGOW UNIVERSITY.

THE winter session of the University of Glasgow was brought to a close on April 26th by the ceremony of graduation, which took place in the Lower Museum Hall. There was a large attendance of the general public. Honorary degrees of D.D. and LL.D. were conferred on a number of gentlemen, among the recipients of the latter being Professor Turner of Edinburgh University, and Dr. Daniel H. Tuke of London. The prizes and honours were afterwards distributed to the successful students; and, in the course of their remarks, all the Professors spoke highly of the work of the classes during the session. Principal Caird presided, as usual, on the occasion, and brought the proceedings to a close by a short address, in which he very naturally seized the opportunity of referring to some of the alterations contemplated by the proposed Universities (Scotland) Bill; and, from the tenor of his remarks, it is clear that they do not meet with his approval.

GLASGOW UNIVERSITY COUNCIL.

THE half-yearly meeting of the General Council of Glasgow University was held on April 25th. One of the first matters of business was a report on a scheme lately set on foot for the establishment of General Council Bursaries in the University; and so far the results of the efforts made in this direction have been very encouraging, nearly £3,000 having been already received. It is hoped that, by thus increasing the number of bursaries open to competitive examination, together with the compulsory entrance examination recently decided on, much may be done to bring about increased efficiency in those preparing for university careers, and so indirectly to improve the standard of secondary education throughout the country. The other business before the Council was the important one of considering the report of the committee on "The Universities (Scotland) Bill." This report was drawn up under several heads; but, speaking generally, it expressed disapproval of the proposed legislation on the grounds, first, that the financial arrangements proposed by the Government were quite inadequate, and involved some injustice to Glasgow University in particular; and, secondly, that it is unwise to vest such great powers in the hands of a body of commissioners. Considerable discussion followed the reading of the report, but it was eventually approved of by the Council.

HEALTH OF GLASGOW.

FROM the report of the Medical Officer of Health, for the fortnight ending April 14th, it appears that there were 646 deaths registered, giving a death-rate of 33 per thousand living, which is less by 3 per cent. than the previous fortnight. The decrease is due to a diminished mortality in the infectious diseases of children. The number of deaths from pulmonary disease was 255, so that the mortality from this class of diseases is at the high rate of 13 per thousand living, and constitutes 39 per cent. of the total deaths. There were 8 deaths from fever, while the mortality from whooping-cough has fallen from 50 to 35. Measles, however, is spreading rapidly over the city, and is very prevalent in the western district, where 17 of the total 38 deaths have been registered. Dr. Russell very properly impresses on the masters of schools the necessity of being specially observant of the absences of their pupils, so as to exclude the other children belonging to infected families, and to insist on abstention from attendance for a sufficient time of those who have been sick. There were two cases of small-pox registered within the city, and from the dates of their sickening, it seems probable they derived their infection from a common source; but the closest inquiry has failed to bring them into any kind of proximity or relationship. Another city case was that of the chief officer of a large steamship, among whose crew there had been an outbreak of small-pox during the voyage from Bombay, where the disease is rife. The vessel first touched at Liverpool, where she landed two of the cases.

IRELAND.

THE Limerick Boat Club recently gave a dramatic performance in aid of Barrington's Hospital in that town, when upwards of £100 was obtained for a very deserving charity.

DUBLIN MEDICAL STUDENTS' CLUB.

A SUCCESSFUL musical and dramatic performance was given last week by the members and friends of this new club, which seems to be making satisfactory progress.

THE MAGISTRACY.

ON the recommendation of the Right Honourable the Earl of Charlemont, K.P., Lieutenant of the County Tyrone, the Lord Chancellor has been pleased to appoint Dr. Henry of Pomeroy to the commission of the peace for the county. Dr. Henry is dispensary medical officer of the district, and has held his position for half a century, with credit to himself and advantage to the public.

ULSTER HOSPITAL FOR SICK CHILDREN.

ON April 23rd, the Rev. Dr. Porter, President of the Queen's College, Belfast, delivered a lectur on "Northern Egypt and Eastern Palestine," in St. George's Hall, Belfast, on behalf of this charity. The Mayor (Mr. David Taylor, J.P.) presided, and the lecture was made highly instructive and interesting to the large audience which assembled to hear it.

THE LATE DR. T. B. BARTON.

THE body of Dr. Travers B. Barton, Surgeon to the Lifford Infirmary, who was drowned while sailing his canoe from Derry to Lifford on the Foyle on April 25th, was not recovered until the 30th ultimo. Though the Foyle was dragged frequently, the body, having become deeply imbedded in mud at the bottom of the river, was not recovered till the date mentioned, when it was lifted in a drag net Deceased was only twenty-seven years of age, and was successor to the late Dr. Little in his appointment. During his short career in Lifford he had gained many frlends, and had given great promise of distinction in the practice of his profession. He was recently elected a member of the North of Ireland Branch, and we understand that, only a short time before this accident, he had intimated that he would read a paper at the next meeting, and that he intended to be an active member.

THE STEWART BEQUEST.

THE late Dr. Henry Hutchinson Stewart of Dublin, the founder of the Stewart Institute for Idiots, by his will empowered his trustees to allocate the residue of his property, after the payment of certain annuities and bequests, to such charitable purposes (educational or religious, and without regard to sect or party) as they should think proper. The trustees sought the assistance of the Master of the Rolls for Ireland, Sir Edward Sullivan, in the disposal of the property, amounting, it is stated, to about £18,000, and he has sanctioned the grant of a sum of £2,000 to the Stewart Institution, the remainder to be divided between the University of Dublin and the Royal University of Ireland, for the endowment of medical scholarships in these universities.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE College held a meeting last Tuesday, pursuant to charter, to elect examiners for the ensuing year, when the undernamed gentlemen were elected: To examine candidates for Letters Testimonial and Fellowship, Messrs. Edward A. Stoker, Edward S. O'Grady, Henry Gray Croly, William Thomson, Robert S. Swan, William Frazer, Benjamin G. M'Dowel, and P. S. Abraham. To examine candidates in Ophthalmic Surgery, Mr. Arthur H. Benson. To examine candidates in Midwifery, Messrs. Henry Croly, William J. Smyly, and John J. Cranny. To examine candidates in General Education, Messrs. Henry J. Tweedy, Frank J. Davys, and Robert Morton. The changes in the above list from that of the past year are that Mr. H. S. Croly succeeds to the vacancy caused by the death of Mr. Richardson. Mr. Benson replaces Mr. Swanzy, now an extern examiner in Ophthalmic Surgery in the University of Dublin; and Mr. Morton replaces Mr. Malone.

HEALTH OF DUBLIN; QUARTERLY REPORT.

THE births registered in the Dublin registration district, during the quarter ending March 31st, amounted to 2,700, being equal to 30.9 per 1,000; and the deaths to 3,066, or 35.1. Omitting the deaths (80) not chargeable to the district, the rate was 34.2 per 1,000. The table giving a list of the occupations of the persons whose deaths were registered during the quarter, which has been appended to the quarterly summary of the weekly returns since 1880, has been omitted from the present report, and instead thereof has been substituted a table so constructed as to show the relative mortality in the various classes of the population of the Dublin district, based on the census return of 1881. From this table it will be observed that the deaths in families of the "professional and independent class" were equal to an annual rate of 24.6 per 1,000 of the persons in that class; in the "middle class" the death-rate was 29.0 per 1,000; among the artisan class and petty shopkeepers," it was 28.2; and in the "general service class," and the "inmates of workhouses," combined, it was 44.8. Zymotic diseases caused 364 deaths, being 141 over the number for the preceding quarter, but 63 under the average for the first quarter of the ten years, 1873-82. Of these, 153, or 42 per cent., were caused by whooping cough, 117 from fever, and 42 from diarrhœa. Deaths from diseases of the respiratory system numbered 836, or 27 per cent. of the deaths from all causes; the deaths in this group, including 589 from bronchitis, 126 from pneumonia, and 20 from croup. The deaths of 231 children were attributed to convulsions. To phthisis 378 deaths were due, to mesenteric disease 57, and to cancer 46.

AT a recent special meeting of the Hospital for Sick Children Newcastle, Dr. Wicks was re-elected a physician of the hospital for three years.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1883.

Wednesday, April 25th.

DR. ACLAND, President, took the chair at 2 P.M.

Examinations in Dentistry sine Curriculo.—Dr. STORRAR moved, "That, in the opinion of this Council, the examinations in dentistry *sine curriculo* should cease and determine after December 31st, 1883." In 1882, the British Dental Association had presented a memorial to the Council, expressing the opinion that the time had come when examinations without a curriculum of study should cease. It had been provided by the Council in 1879 that the Royal College of Surgeons of Ireland should be permitted to admit candidates *sine curriculo* up to August 1881; that time had passed, and the examinations were still continued. This had caused a very aggravated feeling among distinguished members of the dental profession. He read portions of a letter from Mr. Tomes, who believed that the value of the licence in dentistry was greatly lowered by the manner in which it could be obtained in Ireland. It was stated that several of the Irish licentiates had failed in passing the examination of the Royal College of Surgeons of England. Referring to the statistics, he said that, in 1882, the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow had examined 16 candidates, and had rejected 8; while the Irish College had examined 60, and rejected 15. He did not think that this was creditable to the College, or beneficial to the profession of dentistry. He wished to deal temperately with the matter, but the state of things was one which should not be allowed to continue. He thought that the best plan of dealing with the case was by the resolution which he proposed, which allowed sufficient time.

Dr. FERGUS seconded the motion.

Mr. MACNAMARA, while he had great respect for Mr. Tomes, would not admit his competency to judge of examinations at which he was not present. It was said that 15 candidates out of 60 were rejected; but the right way to put the statement was, that 25 per cent. were rejected. In 1879, it was clearly the opinion of the Council that the enforcement of the curriculum would be a hardship to dentists in practice. The Royal College of Surgeons in Ireland had resolved to admit, up to August 1881, persons who had been five years in practice as dentists; but they had also determined that any person on the *Dentists' Register* should be admitted, if he desired to pass out of the mass of persons registered without any diploma, to examinations under certain conditions. The examinations were strictly limited to dentists already on the *Register*. Each applicant must produce certificates of good moral and professional character, signed by two dental licentiates of the Irish College, or by two members of the Odontological Society or of the British Dental Association. If accepted, he was subjected to a searching examination. He thought that, when it was known that, out of 586 persons examined, 109 had been rejected, the examination would not be said to be of a low character. If a person having obtained the licence in this manner broke the rules, the Council admonished him; and, if he did not cease from his misconduct, his licence was cancelled. As regarded persons who were successful at one examination being rejected at another, this might depend on the state of the examiner's or of the candidate's stomach, or on other circumstances. A candidate had come before the Irish board, holding a number of dental qualifications, including that of the English College of Surgeons; and he was rejected. The value of the qualifications which the candidate held was not therefore to be underrated; but perhaps his examiner had hit on the wrong subjects for him—there being, no doubt, a concurrence of fortuitous atoms in examinations.

Dr. FERGUS agreed with Mr. Macnamara that a certain time should be allowed to enable dentists registered without examination to pass into a higher class; but he thought that the time had been sufficient. He had not intended to single out any particular body for animadversion, but he thought that examinations *sine curriculo* should cease in all the examining bodies.

Dr. HUMPHRY thought it reasonable that men on the *Dentists' Register* should be encouraged and stimulated to acquire knowledge and pass a good examination. He thought that the action of the College of Surgeons of Ireland was right; the requirements were fair; and he saw no reason to suppose that the examination was otherwise than good. There were two classes of men on the *Dentists' Register*—those who had passed an examination, and those who had not; and an opportunity should be afforded to men in the latter class to pass to the other if they could. He moved as an amendment:

"That, in the opinion of this Council, the examinations in dentistry *sine curriculo* should be limited to persons who are already on the *Dentists' Register*."

Mr. MARSHALL seconded the amendment, which, after some remarks from Mr. Simon, Dr, Quain, Dr. Aquilla Smith, and Dr. Heron Watson, was put to the vote and carried. It was also carried as a substantive motion.

Attendance on Lectures by Medical Students in Ireland.—The Council resumed the consideration of this subject; Mr. SIMON'S motion being, by permission, brought forward in the following form.

"That, for the purpose of the Council's Recommendation 21, and of regulations by which the licensing authorities may desire to give effect to it, the 'four years' required to be spent in professional study must be four years during which professional study shall have been adequately followed by the candidate, as his true industry and the main occupation of his time; and that, in the opinion of this Council, much caution ought to be used in admitting as part of the four years' curriculum any considerable time during which a candidate had given most of his industry to other pursuits, as, for instance, if he had been regularly engaged for the greater part of each day in the duties of some non-medical calling followed by him for his livelihood."

Mr. TURNER thought that the motion scarcely met the points raised in Dr. Jacob's letter—nominal attendance on lectures, and the granting of fictitious certificates. It dealt only with the first of these; but there ought to be a distinct declaration on the part of the Council respecting fictitious certificates. It was a great offence to issue a false certificate of death, and it should be an equally great offence for a lecturer to certify attendance when a student had not attended his course of instruction. All agreed that study should be such *bonâ fide;* that the student should not give the bulk of his time to other pursuits. But the Council should not throw obstacles in the way of men who desired to enter the medical profession, but who were obliged to obtain their livelihood during their course of study. He had met with many instances of this kind in Edinburgh; and he could name men who had studied under such circumstances, and who held distinguished positions. One gentleman was a clerk in a bank during his studentship; he obtained leave to attend certain courses, and obtained his degree, and was now a Fellow of the Royal Society. Another, who had been a distinguished student, was a writer of paragraphs for a newspaper. There were men who could work diligently as students, and at the same time earn their living by other occupations; and he would be sorry to deter such men. He would ask Mr. Simon to supplement his motion by an expression of opinion as to false certificates, and to express it so as not to throw impediments in the way of such men as those to whom he had referred.

Mr. SIMON said that the Council had laid down the rule that the curriculum of medical study should be of four years' duration. If half the time were spent in yachting and other amusements, they would not accept it; and he did not see how it could be accepted if it were spent in the pursuit of non-medical occupations.

Dr. MATTHEWS DUNCAN said that the resolution would be useless, unless it were possible to ascertain how each student spent his time. Many who professed to be students gave less time to their studies than those who studied medicine while following other occupations. He did not think it right that a man who worked hard to maintain himself during his studentship should be refused, while one who spent his time in yachting was allowed. The words "adequately followed" in the motion had no meaning. The Council had not, and he hoped it would not have, any right to inquire what the student did with his time, except by testing him at the examinations. Those poor fellows who would be injured by the motion often made the best students and the most distinguished graduates. Dr. Jacob's letter, however, should not be allowed to pass aside without making a substantial and valuable addition to the Recommendations of the Council. The giving of false certificates was unknown in England and Scotland; and it ought to be stamped as disgraceful and dishonourable. He moved as an amendment:

"That the Council, having had their attention drawn, by the letter of Dr. Jacob, to the use of fictitious certificates, object in the strongest manner to their issue by teachers, and their use by candidates for licence. They recommend that no certificates be granted

to a student who has been absent from more than one-fourth of the lectures required in any course, and direct that this be added to the Council's 'Recommendations on Education and Examination.'"

Mr. TURNER seconded the amendment.

Mr. COLLINS said that there had been in Dublin a Committee to investigate the subject of fictitious certificates. Certain resolutions had been passed, but there was great difficulty in carrying them out. He thought that a strict supervision of schools and hospitals by inspectors would be the best means of checking false certificates. There was very little difference between the giving of fictitious certificates of attendance to pupils and the issuing of false certificates of death.

Mr. MACNAMARA thought that Dr. Jacob had dealt with the subject somewhat as a *bête noire*. One of the schools referred to, which had given certificates to evening students, had among its lecturers some of the most eminent names in Dublin; and he was quite sure that they had never issued false certificates. Some of the most brilliant candidates in Dublin had been evening students. This school had given up the practice; another school continued it, so that students had an opportunity of attending evening lectures; but it was quite an assumption to say that the school had issued fictitious certificates. He had been informed that lectures were delivered in the evening in London.

Dr. STORRAR said that it would not do to inquire how certain men got their certificates. He did not think that the Council could go behind the certificates issued by the medical teachers. The examining bodies stood between the student and the Council, and it would be impossible for the Council to supervise the conditions under which the teachers gave certificates. He objected to the specification of a certain proportion of lectures in Dr. Duncan's amendment; it might be interpreted to mean that the student was required to attend only three-fourths of the course. He had seen many abuses of the certifying system, and believed there was no remedy but such searching examination as would prevent the possibility of cramming. He recognised the evil of fictitious certificates, but saw no means of preventing them, except, perhaps, by bringing the teachers who gave them before the Council as guilty of infamous conduct.

Dr. HUMPHRY would not wish to pass any stringent resolutions. The Council had better refrain from laying down regulations as to the length of courses or the number of lectures to be attended, and they must trust to the discretion of teachers and students.

Dr. CHAMBERS said that, as an examiner at Oxford and Durham, he never inquired whether the schedules of attendance on lectures were signed or not. He thought them quite useless; and would not vote for any proposal which would imply regulation of them by the Council.

Dr. LYONS agreed with Dr. Jacob as to the evil of fictitious certificates, but thought that he had taken an extreme view with regard to night lectures. The two things were quite different. There were many distinguished men, not only in Dublin, but in London and Edinburgh, who lectured in the evening; such, for example, as Sir Astley Cooper. No doubt, the evening lecturers gave great facilities to the class of men referred to by Mr. Turner, for whom he felt much sympathy. He hoped the Council would not throw obstacles in the way of men who were desirous of entering the medical profession, and were obliged at the same time to earn their living by work.

After some remarks from Dr. AQUILLA SMITH, Mr. SIMON, and Dr. MATTHEWS DUNCAN, both the resolution and the amendment were withdrawn.

Mr. TURNER moved, Mr. SIMON seconded, and it was resolved:

"That Dr. Jacob's letter be referred to the Irish Branch Council for such inquiry as they may find needful, and for report thereon."

Charge of giving a False Certificate of Death.—The Council investigated the case of Mr. W. H. Dry of Rodney Road, Walworth. The report of the solicitor to the Council stated that

Complaint was made by the Medical Alliance Association that Mr. Dry kept a dispensary in the Kingsland Road, which had for some years been conducted by a wholly unqualified assistant named Upfield; and that, in 1879, Upfield was fined £10 for pretending to be a surgeon; and on September 9th he was again fined £10 for giving a false certificate, and his employer, Mr. Dry, was also fined £10 for making the said false certificate.

Mr. John Terry, solicitor, attended on behalf of Mr. Dry, and stated that he had been in practice fifty years, and that this was the first complaint made against him. The assistant had been apprenticed to Mr. Dry twenty years ago, but had failed to pass his examinations, and had since continued to act as an assistant. A neighbouring medical man had been called in before the death of the child, and had agreed to get a certificate from Mr. Dry. There was no intention of fraud.

The Council deliberated in private, and adopted the following resolution.

"That, Mr. William Henry Dry having been convicted at Worship Street Police Court of making a false certificate concerning the death of Henry James Ault, a child whom he had not seen, but who had been attended by his unqualified assistant, the Council intimate to Mr. Dry their marked disapproval of his conduct, but, in the exercise of their discretion, do not think it necessary now to remove his name from the *Medical Register*.

Personation at Preliminary Examinations.—The following report of the Executive Committee was read; and after some remarks from Mr. MACNAMARA and Dr. HUMPHRY, was ordered to be received and entered on the Minutes.

The Resolutions regarding Unqualified Assistants.—It was moved by Dr. AQUILLA SMITH, seconded by Mr. MARSHALL, and agreed to:

"1. That the resolutions based on the report of the Committee on the Employment of Unqualified Assistants by Registered Practitioners, which were passed by the Medical Council on the 21st of April, 1883, be transmitted to the Lord President of the Privy Council.

"2. That the resolution of the Council, marked (*b*) in the Minutes of April 21st, 1883, be referred to the Executive Committee to communicate with the Registrar-General."

Thursday, April 26th.

Dr. ACLAND, President, took the chair at 2 P.M.

The Medical Acts Amendment Bill.—Dr. HALDANE moved:

(*a*) "That the constitution of the Medical Board of Scotland, as laid down in Clause 9 of the Medical Act Amendment Bill (as amended in committee) is unsatisfactory, and should be amended." (*b*) "That the authorities should be directly represented in the Medical Council."

Referring to the Government Medical Acts Amendment Bill, he said, it was manifest that if it should become law, the working of it would depend very much upon the Medical Council, and upon the local medical boards. It was upon the latter point that he desired to say a few words. The powers of the local boards were very great; in fact, almost everything connected with licences and examinations was under their control. They had power to inspect schools of medicine and all licensing bodies; and if they saw fit, they might recommend that schools be closed, and that power be taken from the bodies which conferred licences. They had also the appointment of the examiners for all the final examinations. Those powers were very great, and it was, therefore, of the highest importance that such boards should be elected as were likely to be impartial. No doubt there were somewhat contending interests in the medical profession; and it was important that the board should be constituted in such a way as that no interest should have a vast preponderance over any other. The constitution of the boards in England and in Ireland was essentially the same. In England there was a proportion of eight members elected by the universities and seven by the corporations, giving the universities a slight preponderance. In Ireland, as the Bill was amended, it was proposed that six should be appointed by the universities and five by the corporations, the board consisting of eleven members. In Scotland the number was the same as in Ireland, eleven; but the distribution was very different, eight members being selected by the universities, and three only by the corporations, giving the universities a complete preponderance. In England, the universities had a slight preponderance over the corporations, but they were very differently situated from the Scottish universities. The English universities were not essentially teaching bodies. In Oxford, there was practically no medical school; in Cambridge, there was an admirable school, but not one which could come into competition with others; the University of London was purely a licensing body; the University of Durham was practically neither a teaching nor a licensing body; and the Victoria University was still in its infancy. The Scotch universities, on the other hand, were essentially great teaching bodies. A large proportion of the students obtained their education only in the universities; and it was upon the class fees that the emoluments of the professors almost entirely depended; they, therefore, had every reason to desire that as many students as possible should flock to them. What, it might be asked, was the reason for the proportion of university representatives in Scotland? It could not be

that the universities were older teaching bodies than the corporations, because the contrary was the fact. Till about the middle of the last century, there were no professors of medicine in the universities. A certain number of the Fellows of the Colleges of Physicians and Surgeons did teach; and until the medical faculty was established, the university professors were taken from those bodies. Again, the reason of the proportion of university representatives could not be that there was any very great numerical preponderance in the number of graduates as compared with those who were licensed by the corporations. During the last year, the Royal College of Physicians and Surgeons, Edinburgh, gave 180 double or complete qualifications; the Royal College of Physicians and the Faculty of Physicians and Surgeons, Glasgow, gave 23—making, in all, 203. The Scotch universities gave a total of 309, showing a considerable preponderance as to double qualifications. But as the law stood, the corporation could give single qualifications. It was only within the last year that the Scotch universities had ceased to give single qualifications. A larger proportion of such qualifications had been given by the corporations than by the universities. Taking an average of five years, the corporations gave 2,030, whereas the universities gave only 1,299. It should, further, be borne in mind that all these corporations had a very extensive constituency in the country, numbering many hundreds. In the third place, he did not imagine that the cause of the disproportion to which he alluded was that the examinations were inferior in the corporations as compared with the universities. No doubt the qualifications granted by the universities involved, and should involve, higher scientific education than the mere licence to practise. Accordingly, the first professional examination in the universities was considerably higher than that of the corporations, inasmuch as it required a knowledge of natural history and botany. But it was with the final examinations that the public had chiefly to do, and he did not think it would be found, on comparison, that the examination carried out by the corporations was inferior to that of the universities. It would appear from the minutes of the Council that the average rejections at the College of Physicians, Edinburgh, in 1882, amounted to 21 per cent.; at the Royal College of Physicians and Surgeons, Edinburgh, where the qualification was a double one, the proportion was 43.9 per cent.; and at the College of Physicians, Edinburgh, and the Faculty of Physicians and Surgeons, Glasgow, it was 45 per cent. He did not compare that with the proportion of rejections at the universities; he simply pointed out the fact that a very large number of those who came up for examination to the various bodies he had mentioned were rejected. It might be said that the corporations had the worst candidates, and on that account there was a larger proportion of rejections. There might be a certain amount of truth in the statement; but, at all events, it was clear that the corporations exercised a great amount of care, rejecting, as they did, half the candidates who came before them. From his experience as an examiner, he ventured to state that he considered that the final examination of the corporations was quite as good as that of the universities. The real meaning of the vast preponderance given to the universities was a desire to bring them round to support the Bill. The universities of Scotland were very important bodies, and made themselves felt politically; and he believed that the Government thought that there was no great probability of the Bill passing if the universities were to oppose it. The next question was what would be the result, if the Bill passed in its present form, upon the corporations? He thought that one or two historical facts might indicate what the result would be in regard to the College of Physicians of Edinburgh, and, no doubt, other bodies. Two hundred years ago, the Royal College of Physicians of Edinburgh obtained its charter. At that time, the University of Edinburgh was important as a general educating body, but it was nothing as a medical body; it had no schools, and it did not teach any part of the medical sciences, only granting a few degrees in medicine annually. A charter was obtained in the time of Charles I, and the University had sufficient influence to get two remarkable clauses inserted in it. The first was, that the college to be founded should never be allowed to be a teaching body; and the second was, that every graduate of a Scotch university should be able, on presenting his diploma, to go to the College of Physicians, and demand to be made a licentiate. Until the last charter of the College, obtained about twenty years ago, any man, no matter what might be his character, if he possessed an university diploma, could, on the payment of his fee, demand acceptance as a licentiate. After the passing of the Medical Act of 1858, the larger number of university graduates, whom they would rather be without—advertising men, for example—applied to the College, and received its licence. Much later, they had another example of the fact that the feeling of the universities was very much as it had been nearly 200 years before. By the Medical Act of 1858, the College had the undoubted power of granting licences, which previously, owing to disuse, had been a matter of some doubt, to other than university graduates. That was strongly opposed by the College of Physicians itself, which consisted of university and non-university students; and so powerful were the university set, that the power of granting licences to other than university graduates was only carried by a majority of one, clearly indicating what the feeling of the University towards the College was, namely, to keep it in a state of subordination, and to allow none but graduates to become licentiates. He believed, therefore, that if the Government Bill passed in its present form, the tendency would be to aggrandise the universities and at the same time to depress the corporations. Then there was another important point in reference to the constitution of the board, and he referred to it especially because the board would have to select all the examiners. The result would be that the nomination of the examiners for all Scotland on medical subjects would be in the hands of the universities; it would, in fact, leave the examiners very much in the position in which they were at present. A great deal had been said as to the liberality of the universities in admitting extra or additional examiners, who acted together with the professors; and it was argued that that was a perfect safeguard to the students. That looked very well, but in reality it did not work altogether as might be expected; because the appointment of the additional examiners was in the hands of the university itself; they were not appointed by any independent body, but by the University Court, and the result was, that as a rule no man was appointed an extra examiner who was not congenial to the professors; they never thought, for example, of appointing rival lecturers; although it had happened once or twice, it was certainly not the rule. In many cases the additional examiners had been assistant professors; and under those circumstances it was manifest, considering the great disparity of age and position, that they could not take an equal part in the examination. That was felt so much by the students, that in many cases they were afraid to go up unless they had attended the lectures of the professors. Another result of the proposed constitution of the board, would be that the Extramural School of Medicine would be in no short time completely extinguished. That body consisted of thirty-eight members who were independent of one another, not being incorporated. They lectured upon all the subjects of medicine, not only on all the subjects of the University curriculum, but on a great many other topics—such as diseases of the ear and of the eye, insanity, diseases of children, syphilis, etc. Within the last year or two, courses of lectures had been opened in the University, one on insanity, and the other on diseases of the eye, and the extra-academical lecturers had been selected for the purpose. The Extramural School was a very important body. It allowed the students to hear the opinions of different men on the same subject, and to supplement their education. Indeed, it had proved highly beneficial to the University itself. There had been times when important subjects were lectured upon by inefficient professors; and, no doubt, had there not been good extramural teachers, the University must have fallen off to a great degree. At one time, the teaching of anatomy was at a low ebb, when, fortunately for the University, Dr. Knox was an extramural teacher and conducted classes, which were crowded with students. Another important point in connection with the Extramural School was, that it was a nursery for professors. A man had there the opportunity of showing what he was fit for. As a rule, the extramural lecturers had been selected as professors; and, in cases where they had been cast over, it had not always been for the benefit of the University. If the Bill were carried in its present form, the school would be extinguished. Even at present, it had a certain difficulty in maintaining its existence. There was naturally a great *prestige* attaching to the universities, and the accommodation was much better than the lecturers could furnish out of their own resources; it therefore had a considerable struggle to live, because it was severely handicapped. No doubt, four classes might be attended at the Extramural School, but practically the plan did not work altogether as was expected; because there was a fear on the part of the students, that, if they went to any other professor's classes, it might go hard with them at the examination; and he knew, as a matter of fact, that there had been professors who had attended the classes of others. Some professors divided their classes into two, and the students often thought that they had to attend both, whereas it would be better if they could take one course from one man and another from another. Another abuse had also crept

in—namely, that some of the lecturers had no text-books, the students being told that they could be examined upon the lectures. There was a strong feeling amongst the professors in the University against the Extramural School, and some of them had made no secret of their desire to see it completely destroyed. Not only would the destroying of the Extramural School be a blow to the School of Edinburgh, it would be a great blow to the University itself. That was a short outline of his objections to the proposed constitution of the board. He should be satisfied if the proportion was as in Ireland—six members being elected by the universities and five by the corporations; but, as the Bill at present stood, the constitution of the board would, in his opinion, be most unjust to the medical corporations of Scotland.

Dr. HERON WATSON seconded the motion, reserving his observations till a later period.

Dr. PYLE desired to correct a statement of Dr. Haldane with reference to the University of Durham. There were 130 medical students attending the lectures at the University, and 30 or 40 graduates in medicine were passed during the year.

Dr. PITMAN moved as an amendment, "That the Council do not express an opinion on the question." He said he took exception to Dr. Haldane's motion because it was first on the programme, and was one of very many which followed, of nearly the same tendency; and he was anxious to ascertain the opinion of the Council as to how far it was their desire to discuss questions which, in his judgment, were not strictly within its province. He did not say that it might not happen that, upon a medical Bill introduced into either House, some important question would arise concerning the rights of the profession or the public at large, as to which it might be the duty of the Council to make a representation to the Government. But Dr. Haldane's motion was not of that character. He had listened with great attention to Dr. Haldane's speech, but he had heard nothing in it that had led him to alter his opinion. No exception was taken to the establishment of medical boards, but simply to the constitution of the medical board in one particular division of the kingdom; and the objection was taken on the part of the two corporations in that division. Dr. Haldane did not represent all the medical authorities there, but he simply asked the Council to express an opinion upon an *ex parte* matter affecting the interests of a part of the Scottish medical authorities. The Council was asked to express an opinion that the constitution of the medical board for Scotland as laid down in the Government Bill was unsatisfactory. He (Dr. Pitman) could scarcely believe that it was unsatisfactory to a large number of those who were represented on the board. He did not know whether it was unsatisfactory to the Universities of Edinburgh, Glasgow, Aberdeen, and St. Andrew's; it certainly was unsatisfactory to the Colleges of Physicians and Surgeons in Edinburgh. If those medical authorities were not at one upon the question, if the universities entertained the opinion that the constitution was satisfactory, and if the colleges believed that it was not satisfactory, the Council was asked to judge between the different medical authorities in Scotland; and he supposed they would have to fight over again a battle, which he would not designate in terms that had been before used, between the universities and the corporations in one or other division of the kingdom. In deciding that question, the Council would certainly be placing itself in a very unpleasant position; and, in his opinion, the Colleges of Physicians and Surgeons would also be placed in an unpleasant position. If the Council were to decide the question adversely, in what position would those two corporations find themselves? They would find the Council pronouncing that the constitution of the medical board for Scotland was satisfactory. It might be said that they were right in taking up the discussion of the question as a part of the Bill, and that the reason for so taking it up was based upon what had been done upon former occasions, the Council having always considered it right to discuss medical Bills that affected the medical profession. He did not dispute the right of the Council to do so if they thought proper; but it was a question of propriety, and he thought it was improper because, as Mr. Simon had said, the Government had not thought fit to ask their opinion. If they had wanted the opinion of the Council, it would have been asked; and as yet it had not been asked, and he presumed that it was not required. Unless, therefore, some very strong reasons could be shown why they should make a representation to the Government upon the question, their opinion being unasked, he thought they would be acting very improperly in passing Dr. Haldane's motion; in fact, in his opinion, it would be somewhat impertinent. The discussion of the question was no part of their proper duty. Their duties were defined under the Act of 1858, and the discussion of medical politics was not one of them. He, therefore, strongly objected upon principle to the discussion of any details whatever in the Bill. He had taken exception thus early in order to show that he was entirely opposed to the discussion of any of the details of the Bill. Dr. Haldane, in his speech, had sought to make out that the Scotch corporations had a grievance because they were not sufficiently represented upon the medical board. The English corporations believed that they had a somewhat similar grievance, but what course did they adopt? They did not go to the Council, and beg, through their representatives, that the strength of the Council might be exercised upon the Government for the purpose of advocating their special interests; they went to the Lord President of the Council, and represented what they believed to be their grievances. His lordship listened carefully to the representation, and he believed that some modification in the original Bill would be made to meet their requirements. Why had not the Scotch bodies done the same? Surely they were capable of representing to the Government their view upon the details, if they thought proper. The Council were not the proper persons to interfere in the matter. He should be sorry to see the Council taking up an *ex parte* interest. He thought he had said enough to justify the step he had taken in the matter, but it would be well understood that, as Chairman of the Business Committee also, he was somewhat jealous of the way in which the time of the Council was spent; and, as one of the treasurers, he was also careful as to the expenditure of money. He thought that neither the time nor the money of the Council ought to be expended in discussing the question introduced by Dr. Haldane. He hoped that the decision of the Council would show that they were determined not to go outside their proper duty, although this or that body which considered that it had a grievance appealed to them for support.

Dr. HUMPHRY seconded the amendment.

Mr. MACNAMARA said that, as the member who had been guilty of introducing the subject under consideration to the notice of the Council, he desired to say one or two words in reply to Dr. Pitman. Dr. Pitman had said that he was jealous of the expenditure of the time and money of the Council, but he had shown a singular want of judgment in moving his amendment. The question had been discussed and voted upon by the Council a few days ago, when it was unanimously agreed that the Medical Bill should be taken into consideration. It was a twice-fought battle, and a positive majority of the Council had decided in favour of discussing the Bill in committee until the President exercised the privilege, which he rarely used, of voting—so making the numbers equal; and the result was, that his (Mr. Macnamara's) motion was lost. Dr. Watson then gave notice of motion, that the matter should be discussed in Council, and, after some discussion, the motion was agreed to; but they were now asked to fight the battle over again. If that were not a waste of the time of the Council, and a waste of money, he did not know what was. He believed that Dr. Lyons would bear him out that, in another place, such conduct would not be tolerated; that, the House having expressed an opinion on the question, it could not be re-introduced and discussed. If the matter were to be introduced and discussed from time to time, of course the time of the Council would be largely occupied, and the members would be detained much longer than they desired. He was most anxious that the Council should come to a determination upon the question that day, and he hoped that Dr. Pitman would see his way to withdrawing his amendment, so that there might not be another long debate upon that which had already been decided.

Mr. SIMON said he did not think there was any inconsistency, as Mr. Macnamara supposed, between the previous vote of the Council and the amendment by Dr. Pitman. The two were entirely consistent. He hoped the Council would not pass a vote on any of the questions now brought before it. The vote, if passed, would be without significance; but he quite assented to the desire of particular members to express their views on the subject. Dr. Haldane had expressed his view on the question of the apportionment of members of the Scotch Board. Of course, he knew that there was another side to the question. Perhaps those who took the other side would be content to hold their peace; for it must be obvious that, if Dr Haldane were answered, and the question were discussed at length the whole sitting of the Council would be consumed. Dr. Haldane had expressed, with characteristic ability and great temperance, his view of the question, and he (Mr. Simon) was glad to have heard it but it did not follow that the Council should come to a vote upon it He hoped they would not, and that Dr. Pitman's amendment would be carried—that the Council would feel satisfied with having heard Dr. Haldane's exposition of one side of the case. That one side would, no doubt, be fully reported; but what useful influence could be exercised by the Council, if there were anything short of an unani

mous vote of the members on any of the points brought before them? If any gross mistake were being made in the Bill, in relation to the collective interests of the public or of the profession, and if an unanimous vote of the Council could be obtained on the subject, well and good. The only unanimous vote, he thought, that the Council could pass would be to wish well to the Bill, in a broad sense, and to express their cordial gladness that the Government had heartily taken up the solution of a great difficulty, that had perplexed so many Governments, in order to terminate what had been a professional scandal for at least twenty years. They ought not to express their own individual opinions, but rather their unanimous hope that the Government might succeed in solving existing difficulties, in a way which would be advantageous to the general public, and at the same time satisfy, in all legitimate ways, the interests of the largest number of the bodies concerned.

Dr. A. SMITH said that Dr. Haldane had suggested what appeared to be a very conjectural explanation of the reason why such a preponderance should be given to the representatives of the universities. That suggestion received some confirmation from the remarkable fact, that in the first Bill there were only four university members against seven members of the corporations. The very important change that had been made, he thought, quite brought the question within the province of the Council for consideration. He was glad that the discussion had been raised, because the opinions expressed would go before the profession and the public; and even if they should be disregarded by the Council, they might have their influence hereafter elsewhere as effectually as if the Council had voted. He observed that the number of candidates examined by the College of Physicians and the College of Surgeons in London was 790, while the number examined by the four universities was only 262. In Dublin, also, the number of candidates examined by the Colleges of Physicians and Surgeons exceeded the number examined by the universities. Those were strong facts in support of Dr. Haldane's motion. The case with regard to Ireland was one of great hardship. The College of Physicians were at first to have three representatives on the board, and he observed that a proposal had been introduced to reinsert that number in the Bill.

Dr. SCOTT ORR said that the Faculty of Physicians and Surgeons of Glasgow approved of the main principle of the Bill, and he agreed with Mr. Simon in wishing that all the members of the Council were of the same opinion. Dr. Haldane had objected, on behalf of two Edinburgh corporations, to the large preponderance of university representatives. In the Medical Council as now constituted, the representation of the universities of Scotland had been exceedingly small—certainly, much too small; and it was difficult to see why the proportion should have been continued so long. It seemed also equally difficult to understand why the university representation should be quadrupled, and why Scotland should be so exceptionally treated. The only reason that occurred to him was that which had been so well suggested by Dr. Haldane, that the prospect of a large representation was held out to the universities in order that they might use their political influence in support of the Bill. The result of such a representation would be simply to extinguish the power and influence of the corporations in everything connected with medical education and examination. Dr. Haldane had shown the enormous proportion of candidates examined by the united corporations of Scotland. It would be seen from the returns before the Council that the proportion was something like seven to four. The corporations had all along been doing much good and conscientious work in the examination and licensing of candidates. The Edinburgh corporations could speak for themselves; but he begged respectfully to refer to the report of the visitors of examinations with reference to the Faculty of Physicians and Surgeons of Glasgow, which was certainly as flattering a report as any that had been given for any of the corporations in the United Kingdom. It appeared to him inconsistent with the liberal spirit of a measure which recognised the claims of the general medical profession to share in its regulation that three-fourths of the medical board for one division of the kingdom should be nominated by bodies so numerically small as the Senates of the universities, the majority of the members of which were not members of the medical profession at all, and even the medical members were not the representatives in any way of the general body of the profession. In comparison with those bodies, the Fellows who constituted the constituencies of the corporations were numerically a large body, composed entirely of medical practitioners and well acquainted with the wants of the profession. With regard to the Extramural Schools, the proposition to constitute the Medical Board of Scotland with so large a preponderance of university nominees would necessarily have a discouraging and probably disastrous effect. The renown that Scotland long enjoyed in reference to medical teaching was in a large measure due to those schools. There were in Glasgow three distinct Extramural Schools, each with a complete staff of teachers, numbering in all about forty. He thought that the Medical Board of Scotland should be constituted in pretty much the same way as the boards for England and Ireland; at all events he would suggest that the proportion might be six members for the universities and five for the corporations.

Dr. MATTHEWS DUNCAN said he intended to support Dr. Pitman's amendment, but he doubted whether he should have done so if Dr. Haldane and Dr. Scott Orr had not had the opportunity of making their speeches, which he considered of the greatest importance and value, and he had no doubt that they would be put on record. He felt, however, that the view stated by Dr. Pitman with regard to the business and the time of the Council was a correct one, and he should therefore support the amendment. He desired to express his cordial assent to the main points in Dr. Haldane's speech. He had had experience as an examiner at St. Andrew's, Glasgow, Edinburgh, and also at the University of London. He had heard a good deal said and written against the Scotch universities and corporations, but he had never had the slightest reason to blush for them, and he was able from his experience as an examiner in England to endorse Dr. Haldane's opinion. As a friend of the universities of Scotland, he regarded the preponderance given to those on the Scotch Medical Board as an injury which they would never cease to feel, and which the history of medicine in Scotland in every chapter of it proved; and many of the most important authorities in the universities were of the same opinion. If any injury were done to the corporations, the bodies that would suffer most would be the universities themselves.

Dr. STORRAR said he had voted in favour of the discussion of the Bill, simply because he saw that there was a considerable section of the Council that desired discussion; and he thought it would be unjust to deprive them of the opportunity of expressing their opinions upon any important principle submitted; but, although he had voted on that side of the question, he had no hesitation in declaring his intention of voting for Dr. Pitman's motion. He did so with the most perfect respect for Dr. Haldane, and for all that he had uttered on that occasion. He was not ignorant of the state of the medical schools in Scotland, and he frankly owned that, when he saw the great preponderance given in the Bill to the representation of the Scotch universities, he was surprised. Dr. Haldane had stated one side of the question as to the injustice of such a preponderance, but they had not heard the other side of the question. He took it for granted that there were certain views before the Government which justified the course that had been taken; but even supposing that the Government were wrong in what they had done, and that they had acted hastily, he did not think that the matter could be put right by any vote of the Medical Council. If there were a division and a slight preponderance in favour of the views expressed by Dr. Haldane, the matter would be represented to Lord Carlingford, who would see that so many representatives were on one side of the question, and so many on the other; and he would, no doubt, come to his own conclusion; and a similar result would take place if the balance of opinion were the other way. The position taken by Dr. Haldane on behalf of the Scotch corporations was not a singular one. A certain amount of dissatisfaction had been felt in Ireland, but the Irish authorities had not brought the matter for discussion before the Council; they had stated the ground of their dissatisfaction to the Government, and he believed that some remedy had been proposed. With regard to England, in the discussion which took place in the Committee of the House of Lords, a few days ago, there were some indications of the universities of England being likely to suffer by the change in the balance of representatives. What did the English universities do? They did not bring their grievance before the Medical Council for discussion, but they took their own course. He did not know what course had been adopted by the University of Oxford, but he knew, in a general way, what had been done at Cambridge. Speaking on behalf of the University of London, he had not come to the Council to ventilate the grievances of that University, but he had gone to the Senate of that body, and asked it to make a very decided representation to the Government; he had also, as Chairman of Convocation, taken steps to have the matter brought before that body when it met on May 8th, long before there was any chance of the Bill passing through the House of Commons. His own impression was, that so strong had been the representation made by the University of London, that the ground of their dissatisfaction was likely to be removed, and that such arrangements would be come to as would be satisfactory to

the universities of England, and not unsatisfactory to the Colleges of Physicians and Surgeons. The University of London could not suppose for a moment that the Medical Council was the proper arbiter of its claims against any other bodies; and he thought the same line of argument might be applied to Scotland. The corporations were important bodies; there were Scotch peers in the House of Lords, and a large number of energetic and intelligent Scotch members in the House of Commons, who could represent the views of those corporations. He thought, therefore, that they would be prejudicing their own case by seeking a decision of the Medical Council. They would be stronger by using the machinery they had in their own power in Scotland, than they could be by any voting which might narrowly divide the Council. For these reasons, he was in favour of the amendment, which declared that it was not expedient to express an opinion upon the question.

Mr. TURNER said he should support Dr. Pitman's amendment. The question was one which had reference to Scotland only, and he did not think that any vote of the Council would solve the matter one way or the other. If there were to be any change in the constitution of the Board, it should be effected by other agencies than those which the Council could bring to bear.

Dr. HERON WATSON said that, after the remarks of the other members of the Council who had spoken, he should confine what he had to say to a few points, in which he should endeavour, if possible, to accentuate Dr. Haldane's observations, and to impress, not merely on the Council, but on the large body of the medical profession which the echoes of that room would no doubt reach, a matter which he deemed of very vital importance to the profession in Scotland. With regard to the point of order taken by Dr. Pitman, and the alleged waste of time and money involved in bringing the matter before the Council, he would remind them not merely of the technical grounds admirably brought forward by Mr. Macnamara, but of the fact that they were a council of medical registration and medical education. He maintained that matters connected with the constitution of the boards which were to regulate the admission, and to supervise the whole course of education and examination, were of vital importance to the Council, and that they were justified in taking them up in connection with any Bill that might be brought before them. For those reasons, he was certainly not disposed to accede to the amendment of Dr. Pitman. He desired to make a few remarks upon some points in connection with the question which Dr. Haldane touched upon. The university element was certainly to preponderate upon the board, and it was to preponderate in different proportions. What was it that rendered it reasonable that Edinburgh should have three representatives, Glasgow two, Aberdeen two, and St. Andrew's one? Was there anything in the constitution of the University of Edinburgh that differed so much from the constitution of the Universities of Aberdeen and Glasgow as to give Edinburgh a preponderance of one? If the universities were always anxious to subordinate the corporate colleges in every attempt that they might make, they were not in the least degree unlikely to desire that, among themselves, one body should not have an undue representation accorded to it as compared with the others. They might probably, therefore, leave the universities in that respect to fight out their own battle on another platform than that of the Medical Council. But while he could conceive of no distinction between the Universities of Edinburgh, Glasgow, and Aberdeen, that should require a separate representation, according to the numbers he had stated, there was, he thought, in connection with the University of St. Andrew's something that did require special consideration—the fact that that university received a representation of only one. It might be said that St. Andrew's graduated ten men in each year, and that those ten men were already upon the *Register*, and that, as the University was not a medical teaching body, it could really hardly have any claim for representation. But how came it that St. Andrew's was in that condition—that she had been reduced to that impoverished state? When they considered that the London University was not a teaching body, but was permitted to open its gates to all comers who satisfied certain requirements, how came it that St. Andrew's occupied its present position? It had held the right to grant degrees, like the Universities of Bologna and Paris, from the year 1411 down to 1858—a right which by Royal Charter was still further confirmed. Under the Act of Union, also, it continued to possess those rights. When the University Bill and the Medical Bill of 1858 were passed, a change was made in the constitution of the University of St. Andrew's. How did that change come about? In 1860, the late Sir Robert Christison informed him that there was nothing which would afford him greater satisfaction than being able to extinguish the right of the University of St. Andrew's to grant degrees. He did not tell him the reason, but he could quite conceive what it was. St. Andrew's was a thorn in the side of the Universities of Edinburgh, Glasgow, and Aberdeen, and she was, therefore, treated as a poor little sister, to be put out of the way. He thought, therefore, that there would be good reason that matters should be reversed with regard to the number of representatives of the universities of Scotland; and if three members were to be given to St. Andrew's, he conceived there would be good ground for the change. He was at a loss to understand what there was in connection with the Universities of Edinburgh, Glasgow, and Aberdeen, which entitled them to be represented by seven members. If members alone were concerned, a single representative of each would be sufficient to secure a proper attention to the interests of those institutions. Why, again, were the corporate colleges to be reduced to a comparatively small number of representatives? Those colleges in the past had done their best to do their duty. He was aware that attacks had been made upon them, but there was nothing in the report of the Royal Commissioners showing any ground for disqualifying the three Scotch corporations from maintaining the position they had hitherto occupied in so dignified a manner. They had been dragged into public notice, but they had abstained from giving any reply to the attacks made upon them. The first occasion on which they were led to make some slight response to those unworthy attacks was when Sir Trevor Lawrence, in the House of Commons, asked Mr. Mundella certain questions in connection with the fellowship of the colleges. The answer was then clearly given that, whatever might be right in England or in Ireland in connection with the appointment of men to fellowships in the Colleges of Surgeons and Physicians, the object which it was desired to attain by opening up fellowships to general practitioners was, that they should feel that they had an interest in one of the bodies of the profession, and an interest in maintaining a high standard of medical education throughout the country. It had been asserted that there was a want of due vigilance on the part of those bodies in admitting men to their examinations. The figures that had been quoted with regard to rejections would testify that they had exercised a reasonable discretion in that matter. On that subject, it would be borne in mind that Mr. Turner had stated, in a subjoined memorandum to the report, "I take exception to the reference to the one-sided expression of opinion as to the character of the examinations of the College of Physicians and the Glasgow Faculty of Physicians and Surgeons. It would only have been fair to those bodies to have also stated that other witnesses had expressed themselves very decidedly that their examinations are satisfactory, and of a thoroughly practical character." It would, however, be unnecessarily taking up the time of the Council to enter into the further details in connection with that matter. He maintained that there had been no improper conduct on the part of the corporate colleges in Scotland which should lead to their degradation. From the remarks that had been made by the Royal Commissioners on the influence of the Scotch universities, their intentions might be very easily gathered; and, as the present Government Bill was the outcome of the report, they could well understand what was reserved for the collegiate bodies in reference to the arrangements for the final examination. The medical board would have to appoint examiners and to determine the nature of the examinations, and they were to have the preliminary examinations in their hands. They had also to determine the schools where the medical students should conduct their medical studies, and who were the authorities that should conduct the preliminary examination. They had power to inspect schools, to visit all examinations previous to the final, and to have it in their power to deprive those bodies of the privileges they enjoyed. They could easily understand what direction the action of the board was likely to take by the proportion of representatives given to the university. The corporate bodies and schools might appeal to the Medical Council; but they could only appear before it as a deputation, hat in hand, humbly asking for a decision and he had no doubt that the Council would, as it had done before, carefully listen to any representations that might be made. The minority of the board, however, would not send up any one to represent them. He might be permitted to read one or two extracts from a letter which he had written on the subject:—"In the old *régime*, the three medical corporations in Scotland returned three members to the General Council, while the universities returned only two; Edinburgh and Aberdeen, Glasgow and St. Andrew's, being linked for this purpose. Now the universities, by this Bill, return to the Scotch Board eight members (Edinburgh three, Glasgow two, Aberdeen two, St. Andrew's one); and the co

porations return only one representative each. Thus, upon the board in Scotland, which will regulate all the examinations, all the examiners, and the course of study, we shall have the universities in the proportion of 8 to 3 to the corporations. The influence of the corporations will thus be entirely subverted; and no one unless actually an university professor, or some one who is, to put it mildly, not opposed to university interests, will be permitted to act under the authority of a board so constituted. In this way, the school of medicine and surgery external to the university, though at present available as affording qualifying courses of lectures and instruction for university education, will come to be extinguished, as the appointment of none but university professors, or those who do not directly oppose them, to act as examiners for the final examination, or as inspectors of examination previous to the final, will determine the students in taking their courses of lectures from those only who will be their examiners, and who, rightly or wrongly, they believe, will take a more benevolent view of their appearance if they had known them as students who have paid fees into their pockets. It will also admit of these same professors in the University so conducting their examinations as to compel students to take out their courses more frequently than is required by the curriculum, so as to secure the greatest certainty of success when they come before them as examiners. No doubt it may be argued that as any scheme for examination formed by the board, must be approved by the Medical Council and by the Privy Council, it is impossible that any such outrage could be committed, but when one sees that the representation on the Scotch Board of the universities is 8 to 3, and that all the representatives to the General Council will thus inevitably be university men, what chance can the corporations have against such odds, especially as it must involve all the expense and trouble of vexatious journeys by deputations to London to wait on the Medical Council and on the Privy Council to contest any point in which the minority protest against the acts of the majority, and when the minority would appear only as suppliants, while the majority would (as represented on the Council) appear both to plead and afterwards to adjudicate. Then before the Privy Council, when the consideration of any statement is not in public court, but in private by any two of the Lords or others comprising Her Majesty's Privy Council, the very fact that the members of the Scotch Board had been made by Act of Parliament so very disproportionate would in itself constitute a strong *primâ facie* ground for accepting the conclusion of the university majority. It must further be remembered that while the universities are represented in the House of Commons, and are connected by many ties with members of the House of Lords, and can recognise the generous benevolence of other influential persons by their honorary degrees, the medical corporations have no representatives in the House of Commons specially elected to consider their interests, have no connecting link with the House of Peers, and have no honorary distinction with which to interest influential persons, or acknowledge their disinterested services. The method by which I should be inclined to meet this difficulty would be to place upon the board for Scotland three members for each of the Scotch Colleges (corporations). That is to say, three for the Royal College of Physicians of Edinburgh, three for the Royal College of Surgeons, and three for the Glasgow Faculty of Physicians and Surgeons. As in fact the three Scotch corporations return nearly twice the number of licentiates that the universities in Scotland do, so a majority of one on the board in favour of the corporation is, I believe, a very reasonable demand." He desired also to read a few extracts from the petition of the Royal College of Surgeons, Edinburgh. "That your petitioners apprehend that the inevitable result of such undue representation of the universities of Scotland upon the board proposed by the Bill to be established, is calculated to bring about, sooner or later, the extinction of the Scotch corporations. That the freedom of Scotch medical teaching and education outside the Scotch universities, qualifying hitherto not only for your petitioners' diploma, but for that of all medical authorities, university and corporate, throughout the United Kingdom, may, by the extinction of the legitimate influence of your petitioners, put an end to the free trade in medical teaching, which at present is a distinctive feature of medical education in Edinburgh, and risk its becoming a monopoly in the hands of the universities, which, even as at present constituted, can, on the plea of a higher standard of education, exercise an influence far from wholesome, in compelling the student of medicine who proposes to graduate, to take his classes from the limited teaching staff provided within their walls. That the provisions in the Bill for the conduct of the examinations in science and medicine antecedent to the final examination to be conducted by the board, are of so vague and general a kind, as to admit of the practical exclusion of your petitioners from a just share in such duty, and the development of such a preponderating university influence in the conducting of all the examinations—preliminary and antecedent to the final—as would virtually make the universities paramount, and bring about the exclusion of the corporations as such, from all proportionate share in such duty." The only other extract he would read was from the petition of the lecturers in the Extramural School of Medicine of Edinburgh. "That the Medical Board for Scotland shall consist of eleven members, of whom eight are to be elected by universities and three by corporations. Practically, therefore, the board represents the universities, and a possible result of the powers vested in it is the entire abolition of corporation representatives in the not distant future. Its functions, at all events, will be exercised in the interest of the universities. That these functions chiefly are—1, the recognition and supervision of schools at which the student may be educated; 2, the recognition and supervision of previous examinations; and 3, the appointment of examiners to conduct the final examination, the nature and extent of which is determined by the board. That the first and second of these functions will give to the university authorities the power of totally suppressing competition in teaching—a power greatly to be deprecated in the interests of the profession and the public, and even of the universities themselves. It is not indeed probable that a high-handed exercise of this power would be at once, and to its full extent, put in operation; but it is easy to see that a time may come, when the opinion adverse to competition which now exists may pervade all the university authorities, and when refusals to recognise new lecturers, and the denial of recognition to previous examinations, in whole or in part, may from time to time be used to diminish the importance, and ultimately to destroy the Extramural School."

Dr. HUMPHRY said that whatever benefit was likely to result to the Colleges of Physicians and Surgeons of Edinburgh, by the consideration of the question in the Medical Council, would already have been gained by the very lucid and careful speeches made by the representatives of those bodies. They were perhaps more fitted for the public ear than for the Council; but the question was, whether the Council ought to express its opinion. He could not think that the Colleges would be likely to be benefited by such an expression of opinion. In the first place, it would be regarded as an assumption on the part of the Council of a duty which did not belong to it. The Council had not to consider the conflicting interests of the several bodies, and, so far as he was aware, it had never done so; it had never ventured to interpose between body and body in any of the departments in the kingdom. The duty of the Council was, and had been, to see that each of the several bodies, in its own capacity and sphere, did its duty with a view of ensuring a proper amount of education to its students; but to consider the merits or interests or position of one body in comparison with another was not the duty of the Council. If, therefore, the Council expressed an opinion, and even a favourable one, to the corporations in question, it would have no weight, and it might even injure their cause. But if the opinion were adverse or nearly balanced, the evil would be still greater. Even if it were their duty to enter into the question, could they, as individuals, give a conscientious vote upon it? Had they the requisite knowledge? One important question which had been brought before them, both by Dr. Haldane and by Dr. Watson, was, the relation of the Extramural School of Edinburgh to the University of Edinburgh. He confessed that on that point he did not think the members of the Council would be able to form an opinion or to give a vote, and their action in the matter might do an injustice to those bodies. But the great reason why the Council ought not to express an opinion was, that it had not been asked to consider the question. On former occasions, the Council had taken up the question of medical politics with some doubt, because it had been referred to them by the Lord President. They had no such duty under the Medical Act; but the questions being referred to them by so high an authority, they were taken into consideration by the Council. The present question lay further outside the Council than the ordinary questions of medical politics, such as those relating to education and examination. The questions at present raised concerned the representation of particular bodies upon the board, and he did not think that they were fit subjects for the consideration of the Council. He should vote for Dr. Pitman's amendment, not because he desired to vote against the bodies in question, but because he wished to be held neutral.

Dr. PETTIGREW said that no doubt injury had been done to St. Andrew's in the past, and it continued even to the present day. He

had recently heard that there was to be an amendment in the House of Lords with a view of excluding St. Andrew's altogether from the Medical Board. He did not see upon what principles of justice that exclusion could be effected. St. Andrew's, at one period, gave degrees to all comers, and there was no reason why it should be deprived of that privilege. So far as he understood it, there was nothing that could be said for the University of London that might not be said with equal force for the University of St. Andrew's; and it was now a question whether the time had not arrived when that University should be reinstated in its former privileges. The examinations were in many respects all that could be desired. It had been rather the custom to decry them, but he (Dr. Pettigrew) failed to see in what respect the University did not examine its students properly.

Dr. HALDANE asked the permission of the Council to withdraw the motion that he had proposed. He had no wish that the Council should express an opinion between the corporations and the universities of Scotland, but he thought that the corporations had been badly used by the Bill as proposed, and the matter was one of such importance that it was right to bring it before the Council.

The PRESIDENT said the object sought would, no doubt, be gained by the discussion that had taken place. He thought, however, it was greatly to be regretted that, at the end of so many days, they should be occupying the time of the Council in discussing a Bill which in a very few hours, or even minutes, would probably have passed the House of Lords. After the statement of the Chairman of the Business Committee, it would be for the Council seriously to consider what course should be pursued with regard to the long list of amendments on the Bill of which notice had been given.

Mr. SIMON suggested that Dr. Haldane should accept Dr. Pitman's amendment, instead of withdrawing his motion. That would serve as a precedent on which to act in regard to the other amendments that had been proposed.

Dr. PITMAN said he had been careful not to make any reference whatever to the opinion which he might entertain upon the constitution of the Scottish Board, because it was no part of his business to make any reference to that question. The point he had taken was that it was a matter with which the Council had no concern, and he was also jealous for the time of the Council. They had then arrived at the eighth day, and had been expending two hours upon a discussion which they were now asked to wipe out altogether from their memories. He thought, with Mr. Simon, that it would facilitate their proceedings if his amendment were adopted by the Council.

Dr. LYONS said that, with all respect to the Chairman of the Business Committee, he thought that a very useful purpose had been served by the discussion which had taken place, and especially by the statements of Dr. Haldane and Dr. Watson. He protested against the idea of the time of the Council having been wasted.

Dr. PITMAN said he had not stated that the time of the Council had been wasted, only that it had not been usefully or properly employed.

Dr. Haldane's motion was then withdrawn, by leave of the Council. Dr. A. Smith and Dr. Pettigrew also withdrew notices of motion, in which other amendments had been proposed.

Dr. PYLE, in withdrawing a motion of which he had given notice, said that he had recently returned from the Riviera, where there was an increasing tendency not to allow British medical men to practise without taking degrees in medicine in the University of Paris. Englishmen were, in consequence, obliged to call in French medical men, many of whom could not speak English, and the results were sometimes extremely serious.

Mr. MACNAMARA withdrew a number of notices of amendment which he had given, but said there was one which he desired to submit to the Council, viz.: "Clause 3, p. 1, line 19. After "mentioned," insert "and has been affiliated to, and obtained a medical diploma from, any medical authority under this Act." It had been held, he said, that the *Register*, as it would be constructed, would indirectly secure affiliation; but if that were admitted to be a desirable thing, he did not see why affiliation should not be made a *sine quâ non*. The Council had been engaged for some days in adjudicating upon cases of professional immorality; and it would have had many more such cases to deal with had it not been for the moral influence exercised by the medical authorities over their alumni. It was of the greatest importance to point out to the Government the great importance, in a social point of view, of affiliation. The bodies, too, required the revenue to enable them to discharge their important public duties. He should look upon it as a national calamity if anything occurred that would at all cripple so magnificent an institution as the College of Surgeons of England, with its splendid Hunterian Museum. Mr. Marshall had told him in conversation that he thought that a student would not like to see the column left blank, and that he would therefore seek affiliation with some college. From his (Mr. Macnamara's) experience in Ireland, he was afraid that when students once acquired the breadwinning qualification, they would not trouble themselves with anything further. Such a result would be a serious loss to the revenue of the authorities, and a still greater loss to the reputation of the profession. It had been stated that, unless students became affiliated, they would not receive hospital appointments; but there was no guarantee that Guy's Hospital, for example, might not declare to-morrow that it would be far better to have a man who was not affiliated. Not many years ago, there was a regulation that no one should hold any infirmary appointment in Ireland who was not a licentiate of the Royal College of Surgeons of Ireland; but that monopoly had been taken away; and if the present Bill passed, all licentiates under it would be able to hold appointments in the county hospitals. There was another amendment which he also desired to bring before the Council, as to the desirability of registering degrees in Arts given by an university. But he would not press it, as he had been informed by a distinguished peer that that would be provided for independently of the Council; and if it were not done in the House of Lords, he had no doubt that an amendment would be proposed to that effect in the House of Commons.

Dr. PYLE seconded the motion, but, without further discussion, it was negatived by a large majority, only two hands being held up in its favour.

The Council then proceeded to the following notice of motion, which had been given by Dr. Quain:

"That in Clause 4 of the Medical Act Amendment Bill (as amended in Committee), the words 'subject to any local law' be struck out, seeing that if colonial practitioners are admitted to practise in this country on simple registration, which is provided for (Clause 21), it seems scarcely fair to impose local laws on registered British practitioners."

Dr. QUAIN said that he now understood that the subject referred to would be abundantly provided for.

The clause of the Bill was as follows:

"On and after the appointed day, a registered medical practitioner may, save as hereinafter mentioned, practise the callings of medicine, surgery, and midwifery, or any of the said callings, in the United Kingdom, and (subject to any local law) in any other part of Her Majesty's dominions, and may recover in due course of law in respect of such practice, any expenses, charges in respect of medicaments or other appliances, or any fees to which he may be entitled, unless he is a member of a college of physicians the members of which are prohibited by by-law from recovering at law their expenses, charges, or fees, in which case such prohibitory by-law, so long as it is in force, may be pleaded in bar of any legal proceeding instituted by such member for the recovery of expenses, charges, or fees."

Dr. QUAIN said that local laws might be of a very objectionable kind. At one time there was a local law in Canada, that there should be a fee of one hundred guineas for registration. He should be very glad if it was made clear that the colonial legislature would not impose restrictions upon a British practitioner, which colonial practitioners were not subject to in this country.

The matter affected the interests of the profession at large, and was not restricted to the interests of the Council. He was sure that it would be the wish of the Council that perfect reciprocity should be established.

The following motion stood upon the agenda in the name of Dr. Quain.

"That, in Clause 70 of the Bill, it would be most objectionable to repeal the portion of Section 4 of the Dentists' Act which prohibits prosecution by private persons, seeing that there is no reason why a distinction should be made between dentists and registered medical practitioners as regards prosecution (see Section 27, Clause 5, of the Bill); and that, if prosecution were instituted by private individuals against the persons on the *Dentists' Register* who have been objected to, the Council would be bound to maintain the accuracy of the *Register*, and would be engaged in litigation all over the country."

Dr. QUAIN said that no one could object to that; but he felt that prosecution should not be directed against registered persons without the consent of the Council.

The motion was not proceeded with.

Dr. AQUILLA SMITH moved:

"That the provision in the Medical Act Amendment Bill (as amended in Committee), for the constitution of the Medical Board

for Ireland (Clause 9, Section 5), in which only two members are to be chosen by the King and Queen's College of Physicians in Ireland, be amended by re-inserting the word "three," instead of "two," as it stood in the original Bill."

The motion was seconded by Dr. HALDANE and immediately withdrawn.

Transference from Old to New Council.—Mr. TURNER, in the absence of Dr. Pitman, Chairman of the Business Committee, said that it was very important that they should come to some understanding as to whether, if the Medical Bill became an Act, there would have to be any meeting of the Council in order to transfer the property and other matters connected with the Council from the old body to the new one. The fifty-second Clause of the Bill provided that the first Council under the Act should come into office on March 31st, 1884. He did not know what the legal technicalities of the matter might be. An expression of opinion from the President might guide the members of the Council.

The PRESIDENT said that the Council had undertaken certain duties, and probably all the members of the Council held the opinion that, as long as they existed as a Council, they should endeavour to perform what they had undertaken. When the Council ceased to exist, the mode of its dissolution would declare itself. He saw no more reason at the present time for changing the course of procedure than he did five years ago. Unless the Council gave him special instructions, he should be guided by circumstances in the matter of summoning them. The Bill would probably become an Act this session, but still the probability was one of remote uncertainty. The pressure of work before the Government was so great, that no plain-speaking statesman could say what Bill was likely to pass. But the Government were earnestly desirous to bring to an end the uncertainties and perplexities of medical education in Great Britain and Ireland; and if they could pass the Bill they would do so. The duties of the present Council under the Act of 1858 would remain the same until the day that the new Council came into office. As to the question whether a meeting of this Council would be necessary in order to transfer, the President said that he could hardly answer it. He should, perhaps, have the opinion of one of the law-officers of the Government on that subject.

Dr. LYONS, said that the transfer of the temporalities of the Irish Church to the Church Commissioners afforded a precedent as to the way in which one body might take over the functions of another.

It was then resolved, on the motion of Dr. AQUILLA SMITH, that the duties of the General Medical Council be delegated to the Executive Committee until the next meeting of the Council.

Vote of Thanks.—Dr. A. SMITH moved:

"That the thanks of the Council are hereby cordially tendered to Dr. Acland, the President, for his efficient services during the present session of the Medical Council."

Mr. SIMON seconded the motion. He said that he could not express how much indebted he felt the Council to be to Dr. Acland for the singular zeal and ability with which he had devoted himself to the service of the Council and the interests of the public. It was now twenty-five years since Dr. Acland began to give his valuable assistance to that branch of the public service. Before he undertook the office of President, it was impossible for anyone to overlook the disinterestedness and public spirit which he brought to the Council table. In these last years, in which he had presided at their deliberations, Dr. Acland had devoted himself to the business of the Council as if it had been the dearest private interest of his life.

The motion was carried by acclamation.

The PRESIDENT said that he could only thank them for their confidence and kindness. He wished that the admirable words of Mr. Simon had been given to a worthier cause.

Votes of thanks were then given to Dr. Pitman, Chairman of the Business Committee; Dr. Quain and Dr. Pitman, Treasurers; and Mr. Millar, Registrar of the Council.

The proceedings then terminated.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT a meeting of the College on April 26th, a communication from the Grocers' Company was read, announcing the foundation of three scholarships, each of £250 a year, and a Discovery Prize of £1,000, to be given every four years, for the encouragement of original research in sanitary science. The following were elected Fellows: James Sawyer, M.D.Lond., Birmingham; George Frederick Elliott, M.D.Durh., Hull; Robert Mundy Gover, M.D.St. And., Home Office, S.W.; Julius Dreschfeld, M.D.Würzburg, Manchester; Francis Warner, M.D.Lond., 24, Harley Street, W.; Herbert Watney, M.D.Cantab., 1, Wilton Crescent, S.W.; William Murrell, M.D.Brux., 38, Weymouth Street, W.; Henry Cook, M.D.St. And., Shaldon, Teignmouth; Thomas Clifford Allbutt, M.D.Cantab., Leeds. The Council report on special examinations was read, and the following resolution was adopted: "That, in accordance with the recommendation of the Council, an examination be instituted in Hygiene and State Medicine." An annual grant of three guineas was made to the schools at Burwash. The President was empowered to nominate one or more Fellows who propose to attend the International Congress on Colonial Medicine at Amsterdam to represent the College.

COLLECTIVE INVESTIGATION OF DISEASE.

DIPHTHERIA.

THE following additional replies have been received from medical officers of health promising their assistance in this investigation. Practitioners in these districts having cases of diphtheria under their care, are particularly requested to communicate with the medical officer of health.

Medical Officer of Health.	District.
F. Barrow, Esq. ...	... Rothbury (rural), Northumberland.
J. Brown, Esq. ...	... Bacup (urban) Lancashire.
E. Casey, M.D. ...	... New Windsor (urban).
E. F. Fussell, M.B.	... Brighton, East Sussex.
Augustus Morcom, Esq.	... Dunstable (urban) and Luton (rural).
J. N. Vinen, M.D. ...	... St. Olave's, S.E.
A. Walker, M.D. ...	... Putney and Roehampton.

ERRATUM.—In list of medical officers of health in Journal of March 31st, page 636, *for* J. Hardwicke, Esq., Rotherham, *read* J. Hardwicke, M.D. Rotherham (urban).

ASSOCIATION INTELLIGENCE.

COUNCIL, 1882-83.

NOTICE OF SPECIAL MEETING.

A SPECIAL meeting of the Council will be held at the Queen's Hotel, Birmingham, on Thursday, the 17th instant, at three o'clock in the afternoon, to consider the following business.

1. Report of the Committee of Council on the Representation of the Branches in the Committee of Council.
2. A resolution in favour of the Medical Acts Amendment Bill.

FRANCIS FOWKE, *General Secretary.*

London, May 3rd, 1883.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These

are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—A meeting will be held at Spalding, on Thursday, May 17th. Gentlemen intending to read papers, or to show specimens or cases, are requested to communicate with the District Honorary Secretary, W. A. CARLINE, M.D., Lincoln.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M., on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.—A joint meeting will be held in Worcester, on Tuesday, May 29th. Members having any paper to read or cases to bring forward, are requested to report the titles of such paper or cases to the Honorary Secretary, not later than Thursday, May 17th, after which date a second circular will be issued, giving full particulars of the meeting.—GEORGE W. CROWE, M.D., Honorary Secretary, Shaw Street, Worcester, April 13th, 1883.

EAST ANGLIAN BRANCH.—The spring meeting will be held at Lynn, on Thursday, May 24th, under the presidency of John Lowe, Esq., M.D. Notices of papers and cases to be sent to the Secretaries before May 12th.—W. A. ELLISTON, Ipswich, MICHAEL BEVERLEY, Norwich, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at the Sussex Hotel, Tunbridge Wells, on Thursday, May 17th, at 3.15 P.M. Dinner at 5.30 P.M.; charge, 6s., exclusive of wine. Dr. Ranking will take the chair. Mr. Abbott will read a paper on Collective Investigation and Note-taking. Members desirous of making any communication to the meeting should send immediate notice to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.—April 25th, 1883.

EAST ANGLIAN, CAMBRIDGE AND HUNTINGDON BRANCHES.—President: W. M. Crowfoot, M.B. President-elect, John Lowe, M.D. A combined meeting of the above Branches will be held at the Town Hall, King's Lynn, on Thursday, May 24th, 1883. The following papers have been promised: Dr. Paget, Cambridge: A Case of Coincidence of Diphtheria and Typhoid Fever. Dr. Eade, Norwich: A Case of Asthma treated by Galvanism. Dr. Latham, Cambridge: Megrim, its Pathology and Treatment. W. Cadge, Norwich: Paracentesis Thoracis, with Remarks. Dr. Dale, Lynn: Pulmonary Consumption and Infection. Dr. Elliston, Ipswich: Lithotomy by Aston Key's Method. S. H. Lindemann, Lynn: Dislocation of Head of Radius in Children. A. C. Mayo, Yarmouth: Pregnancy Complicated with Carcinoma of Os Uteri. H. C. Allinson, Lynn: A Case of Imperforate Hymen, with Retained Menses. A. R. Manby, Rudham: Ten Cases of Puerperal Eclampsia, with special reference to Treatment. R. B. Marriott, Swaffham: Two Cases of Typhoid Fever, and their Sequelæ. S. H. Burton, Norwich: A Case of Scarlet Fever, followed by Pyæmia. At 10.30 A.M. Meeting of the Council. At 11 A.M. The general meeting will commence with an Address by the President, Dr. Crowfoot. The Report of the Council will be received, and New Members elected. A Discussion on the Medical Acts Amendment Bill will be invited. Papers will be read by S. H. Burton, W. A. Elliston, and S. H. Lindeman. At 1 P.M. The President-elect, Dr. Lowe, invites the members to a luncheon at the Town Hall. At 2 P.M. The afternoon sitting will commence with an Address by the President-elect, Dr. Lowe. At 6 P.M. Public dinner (under the presidency of Dr. Lowe), at the Globe Hotel. W. A. ELLISTON, M.D., Ipswich; MICHAEL BEVERLEY, M.D., Norwich; BUSHELL ANNINGSON, M.D., Cambridge, Secretaries. N.B.—The Collective Investigation Committee will present a Report (cards and explanatory memoranda relating to Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, and Syphilis, can be had on application to the Honorary Secretaries, W. A. ELLISTON, Ipswich, for Suffolk; S. H. BURTON, Norwich, for Norfolk).

SOUTHERN BRANCH: SOUTHAMPTON DISTRICT.—The next meeting of the District will be held at Dr. Maclean's, 28, Carlton Crescent, Southampton, on Monday, May 7th, at 7.45 P.M.: to examine accounts; to elect officers of the district, members of Branch Council, representatives to Council of Association. After the election, a united meeting with the Southampton Medical Society will take place, at which Dr. Maclean, C.B., will read a paper on A Case of Poliomyelitis Acuta, with remarks. Members are reminded that the following diseases—acute pneumonia, chorea, acute rheumatism, diphtheria, acquired and congenital syphilis—are being investigated by the Committee, and that cards and explanatory memoranda can be had by application to the Honorary Secretary.—THEOPH. W. TREND, M.D., honorary secretary.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st, at 3 P.M. At this meeting, in addition to the ordinary business, a debate will take place upon Acute Pneumonia and its Treatment. Dr. Arlidge (Chairman of the Local Investigation of Diseases Committee) will commence the discussion.—VINCENT JACKSON, General Secretary.—Wolverhampton, April 29th, 1883.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—A meeting will be held at the Royal Hospital School, Greenwich, on Friday, May 11th, at 8 P.M. *Papers:* Dr. Alexander Forsyth: Experiences in the Coroner's Court. Dr. Robert E. Carrington: Medical Cases. The election of an Honorary Secretary, in lieu of Mr. H. Nelson Hardy, will take place.—W. JOHNSON SMITH, Acting Honorary Secretary.—April 28th, 1883.

EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Canterbury on May 24th, Mr. Bower in the chair. *Collective Investigation Committee:* A discussion on Card No. 5, Acute Rheumatism, will be opened by Dr. Gogarty. All extant cards of the above Committee can be had on application to T. WHITEHEAD REID, Honorary Secretary, 34, St. George's Place, Canterbury.—May 2nd, 1883.

METROPOLITAN COUNTIES BRANCH: SPECIAL GENERAL MEETING.

A SPECIAL general meeting of this Branch was held at the rooms of the Medical Society of London, 11, Chandos Street, on Tuesday, April 17th, at 8 P.M., to consider the organisation of the Collective Investigation Committee appointed at a meeting of the Branch held on January 17th; and to consider the Bill for the Notification of Infectious Diseases, now before Parliament. The chair was taken by THOMAS BRIDGWATER, M.B., President of the Branch.

COLLECTIVE INVESTIGATION COMMITTEE.

The PRESIDENT stated that it had been found that the Collectiv Investigation Committee had been formed rather hastily, without proper provision being made for its management, and that the names of several officers of the Branch, who should be members of it, had been omitted. The Council had very carefully considered the subject, and had drawn up a series of recommendations which would be submitted to the meeting. He would first ask that the resolution of the meeting of January 17th, appointing the Committee, should be rescinded.

This was agreed to.

Dr. HENRY moved, Dr. WALTER DICKSON seconded, and it was resolved unanimously,

"That a Committee of the Branch be formed for the purpose of aiding in the work of Collective Investigation."

Dr. MAHOMED moved, and Dr. E. H. VINEN seconded, the adoption of the following regulations, in accordance with the recommendation of the Council of the Branch.

1. The President, President-elect, Treasurer, and Branch and District Honorary Secretaries, shall be, *ex officio*, members of the Collective Investigation Committee of the Metropolitan Counties Branch. 2. The election of members of the Metropolitan Counties Branch to form the Collective Investigation Committee of the Branch, shall be made at the first meeting of the Council of the Branch after the annual meeting. 3. The power of addition to or removal from the Collective Investigation Committee of the Branch shall rest with the Council of the Branch. 4. An honorary secretary to the Collective Investigation Committee of the Branch shall be appointed by the Council; the same to be a member of Council during his tenure of office, in accordance with By-law 4. 5. The Collective Investigation Committee of the Branch shall be subdivided, as far as may be practicable, into district committees corresponding with the districts of the Branch. 6. Each District Secretary shall be, *ex officio*, Secretary to his District Committee, but with power to delegate his duties to a member of his District Committee, subject to the approval of the Council of the Branch. 7. The Branch and District Secretaries shall send to the Council, before the day of election of the Committee, lists of members of the Metropolitan Counties Branch willing to serve during the ensuing year in their respective districts. 8. All subjects emanating from the Collective Investigation Committee of the Association shall be the primary objects of investigation; and no other subject shall be investigated without the sanction of the Council of the Branch. 9. All meetings of the Collective Investigation Committee of the Branch shall be convened by the Honorary Secretary of the Committee and the Honorary Secretaries of the Branch, and those of the District Committees by the District Honorary Secretaries. 10. All reports, applications, etc., shall be made to the Council through the Honorary Secretary of the Collective Investigation Committee of the Branch.

The motion was carried.

NOTIFICATION OF INFECTIOUS DISEASES.

The PRESIDENT said that the subject which the meeting now ha to consider was a very grave and serious one. While the importance of notification, and the tendency of Mr. Hastings's Bill t restrain the spread of disease, were recognised, there was yet this measure something closely affecting the practice of medic

men. He could not look with sufficient gravity on the tendency of such legislation; and he believed that, if the honest opinion of general practitioners were taken, the enforcement of compulsory notification on them would be about the worst thing that could be done. When he entered on practice thirty years ago, he used to feel pleasure in the reflection that the general practitioner was something more than the ordinary curer of disease; that he was in other ways of essential good to the family, so that an intimate relationship existed between them. His time was often spent more in advising and consulting as to the individual interests and pursuits of members of a family, than in strictly medical duties. But, if the Bill now under notice passed, this intimate relationship would die away. Even now, it was less strong than formerly; partly, indeed, in consequence of the greater facility of communication with others than the medical man. He had observed that, in the discussion on the subject at Worcester, the opposition to the Bill was partly founded on the plea of interference with the monetary profits of the practitioner; but he did not think that this was the chief objection. He would ask Dr. W. Carter, who had most carefully studied the subject, and had that day come from Liverpool to attend the meeting, to address the members.

Dr. W. Carter said that he had given a great deal of attention to the subject under discussion. It had been strongly taken up in Liverpool, and attempts to impose compulsory notification of disease on medical men had been as yet successfully resisted. He would begin by referring to the history of legislation on the subject. In 1872, the kingdom was mapped out into districts under medical officers of health. The Act undoubtedly did much good; for while, in the decennial periods 1841-50, 1851-60, and 1861-70, the death-rates were respectively 22.4, 22.2, and 22.5 per 1,000, the death-rate in the period 1871-80 had dropped to 21.5; and more than three-fourths of the reduction came under the head of zymotic diseases. But indirect results also were soon observed. The medical officers of health showed that they had aims and interests and duties rather different from those of the general practitioners; and hence they soon dissociated themselves from the general body of practitioners, and associated themselves with the Social Science Association and formed themselves into distinct societies in various parts of the country. Dr. Carter referred also to the composition of the Joint Committee on State Medicine of the British Medical and Social Science Associations, which, he said, was mainly formed of medical officers of health or of persons interested in sanitary science. There were about 1,500 or 2,000 medical officers of health in the three divisions of the United Kingdom. The Joint Committee contained sixteen medical men, of whom thirteen were either medical officers of health or persons connected with the Local Government Board; and there were about ten other members. At any rate, there was a great preponderance of a body which seemed to be somewhat in antagonism to the general body of practitioners. It had been represented in memorials to the Local Government Board, that there was an indifference to the spread of disease on the part of the general practitioners; and the authorities in a country district had endeavoured to obtain legislation on the ground of this alleged neglect. Such representations had a powerful influence in modifying the course of legislation; and the reception of memorials of the kind mentioned had encouraged boldness, which had culminated in the Bill now under consideration. In certain towns, Acts had been obtained embodying the principle of compulsory notification by medical men. Often there was nothing in the title of the Bill to indicate this object; thus, at Nottingham, the Act was to enable the mayor and town authorities to construct gas-works, make roads, "and for other purposes"—nothing being said about a proposal deeply affecting the feelings of medical men. Other Bills of the kind had been introduced and were passed, and at last a Police and Sanitary Committee was appointed by the House of Commons to regulate private legislation. This committee had examined witnesses; but it had decided from *ex parte* evidence. Several medical officers of health, and persons favourable to compulsory notification, had been examined; but several practitioners who had applied to be allowed and give evidence had been told that they had no *locus standi*. The Committee had decided in favour of the imposition on the medical man of the duty of notification of infectious disease. On the other hand, a Royal Commission, which had examined not only experts, but general practitioners and others, was much more moderate; stating in its recommendations that "if it be expedient to impose the obligation on the medical attendant," etc.—a very marked difference. The theoretical opinions held by a few, as to the probable results of the enforcement of notification on the medical man, had been verified by the actual results in towns where inquiries had been made. The Public Health Act was accepted as good, because it took into consideration the general interests, including professional relationships; but the present Bill unduly curtailed these interests, and would defeat its own objects. It would promote concealment of disease; and this had actually occurred in several towns where Acts for compulsory notification were in force. Inquiries had been sent from Liverpool to the medical officers of health in towns where such Acts were in operation. In a reply, it was stated that a child suffering from infectious disease had been sent into the country in order that it might not be sent to the hospital; in another case, a child had been kept at home from the same motive; and another gentleman had told him (Dr. Carter) that parents often evaded sending for medical aid in cases of scarlet fever. In fact, in a number of cases, the evidence showed that, if the medical man were called in, it was only as a last resource. The object of the Public Health Act was to bring cases of infectious disease under the care of medical men who knew how to isolate them; but this object would be defeated by the present Bill. Another ill effect anticipated was, that the two branches of the medical profession would be brought into antagonism, and that there would be vexation, annoyance, and distrust; and this anticipation had been verified. For many years, the medical officer of health must be the rival of the general practitioner, and this would be very injurious. Those who hoped to see the medical officer of health rendered independent of local control, and restrained from general practice, must be very sanguine; the tendency of legislation was in the opposite direction. As an example of undue interference, Dr. Carter referred to a case in which, a death having been certified by the medical attendant to have been due to typhoid fever, the medical officer of health examined the body, and wrote to the papers that the medical man had been mistaken. In another case, a medical man who had, from caution in diagnosis, certified that a man had died of "infectious disease," was prosecuted for not certifying that the death had been caused by fever; the medical officer of health stating that he could at once make the diagnosis. A deputation had gone from Liverpool to various towns, and had found that there was a general antagonism between the medical practitioners and the sanitary authorities; that officious interference was resented, and that serious harm was done. There was no proof of the benefit said to have arisen from the Acts in operation. Mr. Hastings, in the discussion at Worcester, had referred to Bolton as proof of the beneficial working of the Act in force there. But, on comparing the statistics of Liverpool with those of Bolton, it was found that, in Liverpool, where no such Act was in force, more rapid progress had been made, under the operation of ordinary sanitary agencies, than in Bolton; and the same result came out when the comparison was made with the country generally. There was much greater progress without special legislation than there was in Bolton. In Leicester, the medical officer of health had issued a report, which had been severely criticised by a member of the Health Committee, who had stated that the mortality had increased instead of diminishing, and that there had been a high death-rate from scarlet fever and measles. The speaker thought that any one who considered the evidence adduced would consider that no real good had been done by the special legislation. Edinburgh had been held up as a model for imitation; but the working of the Act there was very delusive. During the operation of the Act there, measles had broken out, and the number of cases had increased from 440 in February to 1,100 in March, and even beyond that. In the two years succeeding the passing of the Act there had been an increase of mortality in Edinburgh, as compared with the four preceding years. The system pursued in Edinburgh was a delusion. When the medical practitioner there certified "no immediate attention required," nobody interfered; and consequently, the reporting of 5,705 cases of infectious disease led to sanitary precautions being taken in only 641. However injurious and stringent the Acts to which Dr. Carter referred might be, future legislation would become still more stringent; for the Acts would never attain their object; they fought against powers over which there was no control. Dundee had a stringent General Police Act, which did not succeed, and greater stringency was asked for: it was proposed that the medical officer of health should have an absolute right to enter houses, and to remove persons suffering from infectious diseases to hospital or quarantine. Such was the direction in which legislation of the kind under consideration tended.

Dr. Cleveland asked in what way the Bill would affect private practice. What, for instance, could a medical officer of health do in the case of scarlet fever?

Dr. R. H. Lloyd suggested that, in place of opposing the Bill, it

would be better for medical practitioners to try to get a substantial fee for making the reports.

Dr. CARTER said that the only ground for refusing interference on the part of the medical officer of health, was the observation of what took place in towns where Acts for compulsory notification were in operation. The amount of interference must depend on the discretion exercised by the medical officers of health. Sometimes there might be much interference; on the other hand, if the health-officer were discreet, there might not be much friction—but much good would not be produced. He did not think that the proposed fee of half-a-crown would be increased; indeed, the town-clerk of one place had suggested that it should be reduced to a shilling.

Mr. SIBLEY said that few remarks were necessary after the statements of the President and Dr. Carter. But he would expect that the members of the medical profession were generally in favour of notification of disease, if carried out with proper care, and without interfering with general medical practice. The principle of Mr. Hastings's Bill was dual registration; it was not only made incumbent on the parent or guardian to notify a case of disease, but the medical attendant was also made responsible. This would at once lead to conflict and collision, and would tend to destroy the confidence existing between the medical man and the patient. As far as he could see, if anything like such compulsory notification as that proposed were adopted, there would be a perpetual difficulty in carrying out the Act, although the medical profession recognised it as a duty to aid all endeavours to prevent the spread of disease. One great difficulty would arise from cases in which diagnosis was doubtful, as sometimes occurred with scarlatina. The principle adopted by the British Medical Association had been, that the patient's friends should give the information. It had been suggested that the medical man should be content to give a certificate to the family; but even this might give rise to trouble. Medical men recognised it as a professional duty to inform the family when a case of infectious disease occurred in it. He moved:

"That this meeting, while highly approving the principle of notification of infectious diseases, is strongly opposed to such duty being imposed upon the medical attendant, and authorises the President to append his name to the petition against Mr. Hastings's Bill, drawn up by the Parliamentary Bills Committee."

Dr. MAHOMED seconded the motion. He said that Dr. Carter had hit the right nail on the head when he referred to the risk of antagonism between the medical officers of health and the general practitioners; but he thought he had attached rather too much importance to this, for the medical officers of health were but a small part of the profession. The Bill could not become law in the face of all the opposition to it, especially as the Government was not inclined to support it. He would suggest that a conference of medical officers of health with the Branch or its Council should take place, for the purpose of considering the best means of preventing the spread of infectious disease in the metropolis. He believed that thus any necessity for a compulsory Act for any part of London might be avoided. What was required was, to educate the profession and the public as to their duties in regard to sanitary medicine. No doubt practitioners failed to do all that might be done in cases of infectious disease; many were much too lax; none were too strict. An association of medical men to promote sanitary care would be of immense advantage. A compulsory law was odious; he objected to be compelled under a penalty to do his acknowledged duty. If there must be compulsion, it should fall on the person having legal charge of the patient. It might be of advantage that a barrister should be compelled to reveal the secrets of his clients; but then accused persons would not employ barristers; and, if the present Bill became law, patients would not employ doctors.

Mr. NELSON HARDY said that it must not be forgotten that the Branch was part of the Association, which had instructed the Parliamentary Bills Committee to oppose the imposition of compulsory notification on medical men. He called attention to the Scotch Police Bill, which provided that the medical man *may* report cases of infectious disease. The same principle of option was to be found in the Irish Public Health Bill of last year.

Dr. HARE said that all would object to the Bill in its present form; but it was necessary to be careful not to appear to oppose all forms of notification of disease. The medical profession should do all that it could to diminish disease and prevent its spread. He thought that a small modification of the Bill was required; namely, the removal of the portion which compelled the medical practitioner to report cases of infectious disease to the medica officer of health. The medical man would have done his duty if he gave a certificate that the case was one of infectious disease; but the duty of reporting the case to the sanitary authority should rest with the householder.

Mr. ERNEST HART, Dr. NORMAN KERR, and Dr. CARTER, also made some remarks.

The PRESIDENT said he was sure that the members present felt much indebted to Dr. Carter for the manner in which he had placed the subject before the meeting. As a rule, London was free from such measures as that under consideration; it was in provincial towns that their action was chiefly felt. The chief objection to the Bill was the interference with medical practitioners which it proposed. He thought that the Bill would have been framed in a very different manner if the general practitioners had been consulted. Reference had been made to neglect of sanitary duties on the part of medical men; but it must be remembered that they were often prevented from doing all that they would, by the antagonism of the patient and his friends.

The motion was carried.

Dr. MAHOMED proposed, Dr. GILBART SMITH seconded, and it was resolved:

"That the Council of the Branch be requested to consider what measures can be taken by the Branch for the prevention of infectious disease in the Metropolis."

Dr. HARE proposed, and Dr. VINEN seconded, a cordial vote of thanks to Dr. W. Carter for the trouble which he had taken in coming from Liverpool to address the meeting, and for the lucid explanation of the subject which he had given. This was carried unanimously; and the meeting adjourned.

CORRESPONDENCE.

PROPOSED MEDICAL BENEFIT SOCIETY: FURTHER PROCEEDINGS.

SIR,—The graceful recognition by the Committee of Council of the above scheme, and their offer to afford all interested therein a place for discussion at the approaching annual meeting, impel me to propose that some decided step should now be taken. I therefore venture to suggest that you should now convene a meeting at which all members of the profession interested might attend, where, after a provisional committee had been formed, the working of the scheme might be discussed, and a programme drawn out of resolutions, etc., to be laid before the meeting at Liverpool.

It might be as well to have a table of the payments required, drawn out by an actuary, to lay before the Committee; and, to meet this and other primary expenses, I would suggest that all those who have sent in their names as adherents, be asked to send you a small donation of, say, 10s. 6d.—I am, sir, yours, etc.,

WILLIAM CLIBBORN, B.A., M.D.

Birmingham, April 29th, 1883.

*** If the proposition be approved, we shall be willing to act upon it.

ELEVENTH LIST.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. William Cox, Winchcombe, Gloucester; Mr. T. C. Beatty Leaham Harbour, Durham; Mr. F. H. Davies, Hanwell; Dr. Alfred H. Carter, Birmingham; Mr. John W. Davies, Ebbw Vale, Monmouth; Mr. Chas. Penruddocke, Winchcombe; Mr. S. G. Sloman jun., Farnham, Surrey; Mr. George Woodward, Upper Tooting; Mr. F. C. Palmer, Brigg, Sunderland; Dr. P. T. S. Colmer, Yeovil; and Mr. William Pearson, Glasgow.

FOREIGN DEGREES AND THE NEW MEDICAL BILL.

SIR,—I crave your indulgence once more for this letter, and trust this will be the last time I shall have occasion to trouble you on the subject.

Finding, on reading all the reports at my command of the proceedings in Committee, that no reference had been made to the subject, either by Lord Carlingford or any other member of the House, I immediately wrote again to his lordship, calling his attention to the fact; and I have this morning received the enclos

reply, which I shall be glad if you will kindly publish in your next issue.—I am, sir, yours faithfully,

F. ERNEST POCOCK, M.D., Honorary Secretary, Brussels Medical Graduates' Association.

The Limes, St. Mark's Road, North Kensington, W.,
April 24th, 1883.

"Council Office, April 23rd, 1883.

"SIR,—I am directed by the Lord President of the Council to acknowledge the receipt of your letter of the 21st instant, and to inform you that, in his lordship's opinion, the Medical Act Amendment Bill now before Parliament enables any person who is legally using any title at the present moment to continue to use the same, and that the Bill does not affect any existing right.—I am, sir, your obedient servant, (Signed) CH. PEEL.—F. Ernest Pocock, Esq., M.D., The Limes, St. Mark's Road, North Kensington, W."

April 25th. P.S.—I have this morning heard from a medical friend, who had written to Lord Cranbrook on the subject, that, at the suggestion of the latter, the following has been inserted in the Bill. Clause 69. "This Act shall not make illegal the uses by any person, after the passing thereof, of any medical title which he was actually using, and was entitled to use, at the date of the passing of this Act."

WELSH MORALITY.

SIR,—On page 702 of your JOURNAL for the 14th instant, Dr. Matthews Duncan states thus: "Unfortunately, however, among large classes, chiefly, I am told, in Wales and some parts of Scotland, custom permits, and local morals do not interdict, a practice which produces many illustrations of this mutual incompatibility. The practice is called bundling, or keeping company, and consists in parents permitting daughters to cohabit with an eligible man on the understanding that if pregnancy ensues, the legal marriage is made. A woman proving sterile may be deserted by her follower, and gets another with whom the result is different."

I know the habits of the Welsh well, and, though they are far from what could be wished, there is no such practice as Dr. Duncan alludes to. To make such a statement and allow it to be printed is a gross moral blunder. I would suggest to Dr. Duncan to examine more closely into the morals of his own country. Let him examine and compare the statistics of illegitimacy there and here. I should be glad to see them printed—Yours obediently,

Morristown, April 17th, 1883. E. RICE MORGAN.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, April 27th.

Medical Act Amendment Bill.—The Bill was read a third time. On the order that the Bill do pass, the Marquis of SALISBURY moved that the number of members of the Medical Board be reduced from seventeen to sixteen, by removing the Society of Apothecaries from the board.—The Earl of CAMPERDOWN hoped that the Lord President would assent to the amendment. The Society of Apothecaries would, of course, lose their power of granting licences to medical candidates, and it was, therefore, to be expected that their degree and diploma would not be sought after with so much avidity in the future.—Lord CARLINGFORD did not see any representative of the Apothecaries' Company in the House, and he himself did not feel in a position to present their case to the House. On the information he had obtained, he thought the claims of that body to representation on the board were of the slightest; and he was, therefore, prepared to accept the amendment of the noble marquis.—The amendment was agreed to, and the Bill passed.

HOUSE OF COMMONS, Friday, April 27th.

The Army Medical, etc., Services.—Lord E. CECIL asked the Secretary of State for War when the report of the Committee on the Army Medical and Transport Services would be laid upon the table of the House.—The Marquis of HARTINGTON hoped to have the report in his hands in a day or two, and could assure the noble lord that there would be no unnecessary delay in laying it upon the table of the House.

Vaccination in India.—Mr. P. TAYLOR asked the Under Secretary of State for India whether it was a fact that the High Court of Madras had lately decided a case on appeal, to the effect that compulsory vaccination was illegal, the judges declaring that it was quite optional to a parent whether his children should be vaccinated, and that it was not unlawful to dissuade others from suffering their children to undergo the operation.—Mr. J. K. CROSS: My hon. friend has furnished me with a copy of the *Western Star of Cochin*, from which I gather that the facts are correctly stated in his question. Vaccination is not compulsory in the Madras Presidency.

Tuesday, May 1st.

The Vaccination Act.—Mr. GLADSTONE moved, "That the order for resuming the adjourned debate on the Parliamentary Oaths Act (1866) Amendment Bill have precedence this day of the notices of motion and the other orders of the day."—Mr. HOPWOOD, who had on the paper a notice of motion in favour of abolishing the compulsory clauses of the Vaccination Act, expressed his regret that the Prime Minister should have felt himself obliged to propose this motion, as he was thereby deprived of an opportunity of bringing before the House a question which excited the deepest interest amongst large classes of the people; and he hoped an early opportunity would be given.

The Medical Acts Amendment Bill.—The Earl of KIMBERLEY presented a petition from the Apothecaries' Company in Ireland, praying that they may be reinstated in the Medical Acts Amendment Bill.

Wednesday, May 2nd.

Medical Acts Amendment Bill.—This Bill was read the first time, and was ordered to be read a second time on Thursday, May 10th, and to be printed.

HOSPITAL AND DISPENSARY MANAGEMENT.

PAYMENT AT HOSPITALS.

A VERY important meeting of the medical men of the neighbourhood of Greenwich, and others, was held at the Lecture Hall, Greenwich, on the 17th inst., to confer with the honorary medical officers of the Royal Kent Dispensary, in order to obtain, if possible, an alteration of the rules of that institution, so as to do away with the distribution of free letters to all applicants of the artisan and labouring classes.

Mr. CABLE, in introducing the chairman, Dr. Alfred Carpenter, said that every one knew what a deep interest he took in the organisation of dispensaries, and he was very much obliged to him for coming down that evening.

Dr. ALFRED CARPENTER then took the chair, and called on the honorary secretary to read the notice convening the meeting, which having been done, the chairman said that it was quite time that the distribution of free letters to all applicants of the labouring and artisan classes was done away with, as it had a most pernicious effect in encouraging improvidence, and in its tendency to pauperise, and he should be glad to hear the opinion of those present. The resolutions, he thought, might be taken as read, as each person present held a printed copy.

The following are the resolutions agreed to.

1. That it is desirable, on account of the large number of the artisan class and others now using the letters of the Royal Kent Dispensary, who are well able to contribute something towards defraying the cost of medical attendance on themselves, wives and families, that a paying branch should be added to this institution.
2. That patients shall be admitted to the benefits of this charity only on the production of a letter of recommendation from a governor; but in all cases if the head of a family is in work (except in the case of widows, whose means are very limited) the sum of one shilling per week shall be paid in advance, which shall entitle the patient to medical attendance at the dispensary. In the case of more than one member of a family requiring medical attendance at the same time, the charge shall be one shilling per week for the first patient and sixpence per week for each subsequent patient.
3. Should any case require attendance at the patient's home, the charge shall be one shilling and sixpence per week in advance, and if more than one member of a family should require attendance at the same time, the charge shall be one shilling and sixpence per week for the first patient, and sixpence per week in advance for each subsequent patient. In every instance when such attendance is required, application must be made at the dispensary, at the appointed hour, by some person competent to give particulars relative to the patient's illness, or they cannot be attended to on the same day.
4. That there shall be no limit placed on the length of attendance upon any patient under the new rules other than that now in force under the free system.
5. That every patient shall, before admission, make a declaration as to the amount of his or her earnings and also state the number of his or her family.
6. That no married person shall be admitted to the benefits of this charity (except under special circumstances) if the united earnings of the family exceed forty shillings per week, and that no single person shall be admitted whose earnings (except under special circumstances) exceed twenty-five shillings per week.
7. That if any person shall be found to have made a false declaration as to the amount of the united earnings of the family or the number thereof, he or she shall be excluded from the benefits of this charity.
8. That a visiting committee, which shall be composed of one honorary medical

officer, and two members of the monthly committee of the dispensary, shall be appointed monthly by the monthly committee.

9. That the duties of the visiting committee shall be to visit the dispensary as occasion may require, or as often as they may think fit, either together or separately, for the purpose of investigating all matters connected with the institution, and the honorary medical officer of such visiting committee shall countersign all orders for drugs and surgical appliances.
10. That it shall be the duty of the resident medical officer to enter into a book to be provided for the purpose, all matters of irregularity and dispute, and at once bring the same before the notice of the visiting committee.
11. That no honorary medical officer shall be required to attend any case of abortion or premature labour unless it shall be considered as an ordinary confinement and paid for at the usual rate of one guinea.
12. That a redistribution of the various districts shall be undertaken as soon as possible.
13. That the present *Pharmacopœia* be revised.
14. That all fees received from the pay patients by the institution, shall be apportioned yearly by the monthly committee to each honorary medical officer, according to the extent of his duties.
15. That the governors to whom it may not be convenient to distribute their letters, be solicited to give the resident medical officer power to do so for them, so that, should there happen to be any urgent application at the dispensary for a letter, one might be supplied without delay.

Dr. RALPH GOODING opened the discussion, and said that some years ago he was an honorary medical officer of the dispensary, but had given it up on account of the great number of persons he was obliged to attend free, who were well able to procure medical aid through clubs, etc. He thought that the resolutions which had been submitted would meet the case; and he hoped that the honorary medical staff would put on a bold front and insist upon their adoption. He quite agreed with Dr. Carpenter, that the present mode of distribution of free letters tended to pauperise the people and encourage improvidence.

Mr. LLOYD JONES said that he quite agreed that some change was necessary, but advocated allowing eligible persons to be admitted without letters of recommendation, on the payment of the prescribed fees.

Mr. BURDETT said he had given the subject his careful attention, and he entirely agreed with the resolutions as far as they went, but he should like, if possible, a more provident scheme to be adopted. He had looked into the question of the conversion of the dispensary into a provident one, and he could see no reason why it should not be done, as it was not established under an Act of Parliament. There could be no objection to making it a provident dispensary with a free department, which should only be eligible for those who earned very low wages, then the trust money could be well applied towards defraying the cost of such letters. He considered with the other speakers that the present system tended to pauperise and encourage improvidence, whereas under the provident system a feeling of independence would be encouraged.

Dr. MOON said he had formerly been honorary medical officer of the dispensary, but had left it for the same reason Dr. Gooding had. He did not consider that the conditions which existed and called for the establishment of this institution a century ago existed at all at the present day, and that, therefore, there was now no need whatever for a free dispensary, for now the Poor-Law Board took care of all necessitous cases, whereas a century ago the Poor-Law Administration was very weak. He hoped, with the other speakers, that the most provident principle possible would be adopted.

Mr. J. P. PURVIS agreed with the other speakers, and hoped that the most efficient measure possible would be adopted to encourage providence, and thus stamp out the improvidence which was continually met with.

Dr. CARPENTER said he should like to say a few words on the points raised in discussion. He quite agreed with what Mr. Burdett had said respecting the conversion of the dispensary into a provident one, which might be easily done in the way suggested, or by an application to the Charity Commissioners, as had been done in the case of one or two other institutions. Dr. Carpenter said that it had been proved that a great number of those who obtained free letters were well able to pay the small fees required under the provident system, and therefore they ought not to have free letters. The great advantage of the provident system was that it created a feeling of independence, as people could call in their medical attendant without going about begging for letters from subscribers, whereby often very valuable time was lost.

Mr. CABLE said, that being the promoter of the scheme, it would be perhaps right for him to say a few words on the question. He had for years past tried to get the governors to adopt some provident scheme, but could never make any impression: so he thought the best way would be to get the honorary staff together, and see what remedy could be devised, which he did, and the result was the drawing up of the resolutions, and now this general professional meeting; and he was very much obliged to those gentlemen who had come to consider the question, which, he thought, was one of the first importance. He quite agreed with what had been said respecting the improvidence of the classes who obtained free letters, he could assure the meeting that the greater part of those who obtained free letters for their families, spent as much as from 10s. to 15s. per week in drink; and the consequence was that their homes were made miserable, and these miserable homes were very deceiving to the distributors of letters, for they generally took that as a sign of poverty; but there could be no greater mistake made than this, for his experience showed him that these people generally had the most money to deal with, but spent it in drink. He was very pleased to hear that a more provident scheme was thought possible, and he should be most happy to support it. Mr. Cable said that they were about to celebrate the centenary of the dispensary, and he thought that the governors could not celebrate it in a better way than by reforming its rules so as to meet the times. Mr. Cable then read several letters he had received on the subject. Dr. Fairlie Clarke, Mr. T. Holmes, Dr. Clapton, and Dr. Goodhart, all wrote, expressing their sympathy with the movement, and wishing it success.

Several other gentlemen also spoke in favour of the movement.

Mr. J. P. PURVIS proposed the following resolution:

"That whilst generally approving of the resolutions agreed to by the honorary medical officers for the reorganisation of the Royal Kent Dispensary, that this meeting would prefer that an effort should be made to establish a better provident system than is there suggested."

This was seconded by Mr. HARTT, and carried unanimously.

Mr. LLOYD JONES then proposed that, should the more provident scheme not succeed, the second resolution be altered so as to admit all eligible persons on payment of the prescribed fees, without letters of recommendation.

This was seconded by Mr. KELSEY, but on being put to the meeting was lost, only four voting in favour.

It was then agreed that a deputation should be formed to wait upon the monthly committee, to urge the change desired.

A hearty vote of thanks was then passed to the chairman for his kindness in presiding that evening, and the meeting adjourned.

NEW HOSPITAL FOR NORTH LONDON.

AT a meeting for the establishment of the proposed new hospital for north-western London, held last Saturday, considerable opposition was made, on the ground that the Great Northern Hospital is on the eve of extending its operations, and has already raised £4,000 for the purpose; and that the existing hospital accommodation properly handled, and existing institutions duly developed, would meet the requirements of the district. An amendment to that effect was, however, moved and lost.—Professor LEONE LEVI, in proposing a resolution "recognising the advantage of combining the free with the graduated pay system, and of representative administration; and pledging the meeting to establish a hospital on these principles to be called the Central Hospital for North London," stated that there were always present in the northern district of London 100,000 sick persons requiring medical relief.—Mr. H. C. BURDETT seconded the resolution. He estimated that the cost of the proposed new hospital inclusive of the site, would be £40,000.—The resolution was adopted.—On the motion of Dr. G. POTTER, seconded by Mr. W. HEATHFIELD, it was decided to open forthwith a building fund for the reception of subscriptions, the payment of which might be made by instalments extending over five years.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF LONDON.

EXAMINERS.—The following have been elected Examiners for the ensuing year. Chemistry: Professor Dewar, M.A., F.R.S., and Professor T. E. Thorpe, Ph.D., F.R.S. Botany and Vegetable Physiology: Professor Bayley Balfour, M.B., C.M., D.Sc., and Mr. Sydney H. Vines, D.Sc., M.A. Comparative Anatomy and Zoology: Professor Alexander Macalister, M.D., M.A., F.R.S., and Professor A. Milnes Marshall, M.D., D.Sc., M.A. Practice of Medicine: C. Hilton Fagge, M.D., and W. Miller Ord, M.D. Surgery: Sir William Mac Cormac, M.Ch., M.A., and Professor John Wood, F.R.S. Anatomy: Professor D. J. Cunningham, M.D., C.M., F.R.S.E., and H. Greenway Howse, M.S., M.B. Physiology: Professor Arthur Gamgee, M.D., F.R.S., and Professor Gerald F. Yeo, M.D. Obstetric Medicine: J. M. Duncan, M.D., LL.D., F.R.S.E., and Henry Gervis, M.D. Materia Medica and

Pharmaceutical Chemistry: T. Lauder Brunton, M.D., C.M., D.Sc., F.R.S., and Professor F. T. Roberts, M.D., B.Sc. Forensic Medicine: Augustus J. Pepper, M.S., M.B., and Professor George Vivian Poore, M.D., B.S.

MILITARY AND NAVAL MEDICAL SERVICES.

MILITIA SURGEONS.

THE Chairman of the Parliamentary Bills Committee has received information from Sir Eardley Wilmot, Bart., that on the basis of the statements laid before him in pursuance of the resolution of the last meeting of the Parliamentary Bills Committee, he proposes, at as early a date as he can obtain, to bring the subject of the grievances of the medical officers of this service under the notice of the House of Commons.

SIR,—Will you kindly give me your opinion on the following point? A field-officer of volunteers meets with a serious accident on parade; is at once attended by the surgeon of the regiment, who at once sets a fracture and reduces a dislocation. The surgeon continues his attendance for six weeks subsequently. Is the surgeon justified in making any charge (and if so, what), seeing the accident happened while on duty, either for services rendered at the time, or for subsequent attendance?—Yours truly,

VOLUNTEER SURGEON.

*** We are not aware of any rule having been laid down on the question mooted by "Volunteer Surgeon." A surgeon of a volunteer regiment, while acting on duty with his regiment, is, however, in the same position as an army surgeon with a regiment of regular troops; and, in the case of an accident occurring to an officer while on a regimental parade, would hardly be justified in making a charge for the attendance he may give to the injured officer, any more than the army surgeon would be under corresponding circumstances. On the other hand, if this accident should lead to prolonged attendance afterwards, as in the present instance, we should regard it as a breach of good tasts, as well as of right couduct, if the patient allowed the volunteer surgeon to devote to him time and skill belonging to the surgeon's civil practice without suitable remuneration. A complete code of medical regulations seems to be as necessary for the volunteer medical service as for the regular army medical service; not merely for the purpose of instructing volunteer surgeons in their military duties, but also for the guidance of volunteer troops of all ranks in respect to their relations to the volunteer medical department and service.

SPECIAL ATTENDANCES OF ARMY SURGEONS ON OFFICERS.

SIR,—I take the liberty of asking your advice as to what am I to do under the following circumstances. A captain in the —— received a severe injury to his foot when not on duty. I was sent for, being the civil medical officer in charge of troops here. He asked me to attend him specially. I visited him twice a day, applying a number of leeches myself, and supplying all the necessary medicine. But, about ten days after, he fell down stairs, injuring himself more severely. I was attending him nearly two months, paying him fifty-five visits. He has since died; and his father, who is a general, refuses to pay me any fair remuneration; making the remark that, during his thirty years in the army, he never knew of such a demand.

Now, the fact is, I am only allowed three shillings a day to attend the troops, supplying all the medicines required. This is low enough, yet it is not permanent, being only when troops are stationed here. I am informed that, as the officer asked me to attend him specially, I should be paid a fair moderate sum, say from £15 to £20; that no gentleman would refuse doing so, as even military doctors get feed when attending specially. I would take it as a very great favour if you would drop me a line. What am I to do? Will it injure me by applying to the Secretary of State if not successful in getting any remuneration?—I am, sir, yours truly, S. E. O.

*** All military officers, by the rules of the service, have a right to medical attendance, medicines, and all that is necessary in respect to medical and surgical treatment, free of personal cost; provided that, in each case, the officer claiming attendance is on full pay, or holding a staff appointment at the station, and resides within a radius of one mile from the army dispensary. When a civilian medical practitioner enters into a contract with the Government for undertaking medical charge of a detachment of troops, he places himself for the time of his charge in the same position as an army medical practitioner. An army surgeon would not only not make a charge for attendance on a sick officer who is on the strength of a station or garrison under any circumstances, but would decline to take a fee if offered one, as he is aware that the sick officer is entitled to attendance at the public expense. The ordinary contract of the civilian practitioner is at the rate of £10 yearly for every twenty-five officers and men at a station, whether they are sick or well, so there is always a certain amount of chance as to remuneration in the bargain. Should any extraordinary circumstances occur, so that the civilian medical practitioner in charge thinks himself entitled to special remuneration, the regulations require that the case referred to must be submitted by the military officer who engaged the services of the private medical practitioner to the Secretary of State for War, with full explanation of the circumstances which it is thought make a departure from the contract rates deserving of consideration. It would not conduce to a settlement of the claim in the instance described in the accompanying note if the writer were himself to communicate with the Secretary at War direct; he must forward his claim and statement through the military officer above mentioned.

DEATH IN THE ARMY MEDICAL SERVICE.

SURGEON-GENERAL CHARLES MANNERS SMITH, F.R.C.S., late of the Bengal Army, died on the 22nd April, aged 61. He entered the Bengal Medical Department in 1845, served as assistant-surgeon of the 6th Light Cavalry, and went through the Punjaub Campaign of 1848-49, including the siege operations against Mooltan, action of Soorjkhoud, and battle of Goojerat (medal and two clasps). He was afterwards for many years on civil duty in Lahore, where he was professor of medicine at the Military College. He became deputy-surgeon-general in 1872, was then in charge of the Meerut district, and retired on pension in 1877.

WE understand that the statement which appears in a service paper to the effect that, in the report of Lord Morley's Committee on the Army Medical Department, which is now awaiting publication, the sense of a large majority of the members is expressed in favour of the reappointment of one medical officer of standing to each regiment, is without foundation, and contrary to the fact. Only a very small minority of the members were in favour of any such change, and no recommendation to that effect will be found in the report.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

POOR-LAW GUARDIANS AND THEIR OFFICERS.

LAST Friday, Sir C. Dilke, with whom was Mr. Hibbert, received a deputation from the Poor-law guardians of Birmingham, who asked to have the power of dismissing their officers without any restrictions whatever, giving them reasonable notice. Sir Charles Dilke replied that the matter had been before the Board for many years, and that a consolidated order would contain all the powers that they sought for, and this order would be issued before the end of the year. The consolidated order would apply not only to Birmingham guardians, but to the guardians throughout the country. The Chairman of the Parliamentary Bills Committee has communicated with the President of the Local Government Board on this subject, in order to ascertain whether the position of present or future medical officers of these boards will be in any way affected by the proposed order. We shall publish the result of these communications.

WORKHOUSE-MANAGEMENT.

MR. HEDLEY, Inspector of the Local Government Board, and Mr. Taylor, Barrister, have recently concluded an inquiry into the conduct of Mr. Bliss, Master of the Westminster Union Workhouse. The facts elicited in the course of the inquiry disclose a state of things which deserves notice. Mr. Bliss was appointed master of the workhouse (which, compared with other metropolitan workhouses, is a small one, as it contains only 500 or 600 inmates) four years ago. At first, things went smoothly; and, if the inmates had any reason to complain of their treatment, the guardians and the public were unaware of it, for no complaints seem to have been made. In the autumn of 1882, the attention of Mr. Fraser, one of the guardians, was drawn to complaints against the master, of the habitual use of bad language, and of cruelty and abuse of his position. Mr. Fraser, considering that there was some ground for these complaints, and that the person against whom they were made was unfit for the office of master, proposed, at a meeting of the guardians on December 8th, that Mr. Bliss should resign. The motion, however, only found two supporters, and consequently fell through. After Mr. Fraser had definitely moved against the master in this way, complaints were sent to him by persons who had not complained before; and, on January 9th, 1883, Mr. Fraser and his two colleagues sent a letter to the Local Government Board, containing several definite charges against the master, and asking for a formal inquiry to be held, as they were satisfied that in no other way could the charges be properly investigated. This letter was communicated to the guardians, who thereupon passed a vote of censure on Mr. Fraser and his colleagues for daring to complain to the Local Government Board, and determined to hold an inquiry themselves into the complaints against the master. This private inquiry, in which Mr. Fraser and his two colleagues declined to

take a part, lasted three or four days, and the statements of several witnesses were taken, but not on oath, as the guardians were not empowered by law to examine witnesses on oath; and, in the result, the guardians came to the conclusion that the charges against the master were unfounded, and passed a resolution entirely clearing him from them. Mr. Fraser and his supporters, however, were not satisfied; and, after a good deal of correspondence, the Local Government Board inquiry was at length commenced on March 13th, and continued up till April 9th.

The charges which were investigated were numerous, but the principal ones may be grouped under the following three heads; 1. That the master was addicted to the use of bad language; 2. That he was often guilty of cruelty to the inmates, both by using personal violence to them, and by giving them excessvie and improper punishments; and, 3. That he connived at or caused improper entries to be made in the books. As to the truth or falsehood of these charges, we say nothing now; the report of the gentlemen who held the inquiry may be expected shortly, and it will show whether they consider the charges against the master to have been proved or not. But some facts which were elicited in the course of the inquiry are important in their bearing on the system of workhouse management, quite irrespectively of the guilt or innocence of Mr. Bliss. It was proved that paupers had, for comparatively venial offences, been ordered to pick oakum, and had been put on a diet of bread and water. A regulation of the Local Government Board very properly requires that all punishments should be entered in a book, and, in some of these cases, no entry had been made. Mr. Bliss, in explanation, said that he did not consider thatputting a woman to pick oakum, on a diet of bread and water, was putting her under punishment.

Another part of the complaint was, that the master had, in many instances, refused to give inmates stimulants ordered by the medical officer, and had, in some cases, removed them from the infirmary, and put them to work when the medical officer, who of course ought to be the person responsible in cases of illness, considered them unfit for work. Mr. Bliss explained these cases by saying that he had not knowingly disregarded any directions of the medical officer, but did not deny the fact that they had been treated in the way charged.

There were also serious charges brought forward with reference to the keeping of the books, and especially as to the consumption of wines and spirits. These are issued only under the medical officer's orders, which ought to be entered in a book at the time. It was proved that Bailey, a pauper, assisted in keeping both the master's and the surgeon's books, and that he and Ellicot, the clerk of the workhouse, had been in the habit of making entries in the surgeon's book of wines and spirits as ordered for different inmates, when in fact they had been neither ordered nor supplied. These entries were made, as Bailey swore, after the medical officer had checked his book, in order to balance the amount of wines and spirits which were drawn out of store, and which were consumed by someone; by whom was not explained. The entries, as discovered by Dr. Rogers, and proved by Bailey, and as ultimately confessed in part, seem to have been made most recklessly; spirits were entered as supplied to inmates who at the time were dead; a child of three years of age was credited with half a pint of brandy a day, and another, of two years, with a quarter of a pint. Two or three inmates were also called as witnesses, who swore that they had never been ordered, and had never had, the wines or spirits set down against their names.

The evidence adduced shows only too clearly that, whoever may be technically to blame, the supervision exercised at the Westminster Workhouse was very inefficient. These false entries in the books had gone on for a long time systematically without being discovered, or apparently even suspected. Mr. Fraser, who was one of the visiting guardians, proved that he had had the greatest difficulties thrown in his way when he wanted to investigate complaints, and that the master had positively refused to allow him to see an inmate who had complained of ill-treatment, except while he himself was by.

The charges under investigation included charges of cruelty and abuse of his authority by the master; and one of the witnesses said he had not complained because, if he had, "he might have been oakumed and gruelled, and put in the strong room." It is manifest that, if independent investigation be prevented, abuses may easily grow up in workhouses and other large institutions. It is not desirable, of course, to encourage their inmates to complain; but, where they have just ground of complaint, they ought to have the opportunity of being heard by those whose duty it is to look after the establishment.

Guardians, we fear, are too often inclined to leave everything to the permanent officials; and Mr. Fraser deserves the recognition of his services which was given by the inspector of the Local Government Board at the close of the inquiry. It shows the necessity for independent investigation, and that the Government system of audit and supervision is insufficient, unless the guardians will look after their duties themselves, and support those who wish to sift abuses, instead of thwarting them, as they seem to have done in this case.

RESIGNATION OF MR. NETTEN RADCLIFFE.

THE resignation by Mr. J. Netten Radcliffe of his post as Assistant Medical Officer of the Local Government Board, though only now officially announced, has for some time been known by his friends to be inevitable. Mr. Radcliffe's health has for a considerable period been regarded with anxiety, and he has latterly been completely incapacitated for the transaction of any business whatever. We learn with considerable regret that but slender hopes are entertained of his ever being able to resume the position, which he has now for a considerable period held of one of our leading sanitary workers and thinkers. Mr. Radcliffe began his career as a surgeon in the Ottoman medical staff during the Crimean war. Even then his mind was specially directed to sanitary subjects; for, on the conclusion of hostilities, he published a work on the *Hygiene of the Turkish Army*, as well as on the *Murrain at Sinope*. As honorary secretary of the Epidemiological Society, Mr. Radcliffe necessarily had much to do with the questions of foreign epidemics that from time to time roused public attention in this country; and when Mr. Simon began, in 1865, to feel the necessity, for the protection of England, of ascertaining the actual facts as to the diffusion of cholera in Europe, it was to Mr. Radcliffe that he confided the preparation of a special report on the subject. In 1865, and still more in 1866, Mr. Radcliffe was abundantly occupied in investigations concerning cholera developments, his reports on the Theydon Bois and East London epidemics being familiar to most of our readers. In 1869, when the enlargement of the permanent staff of the Medical Department of the Privy Council had become essential, Mr. Radcliffe (the late Dr. Anstie having declined the office) was appointed as the second of the two medical inspectors then appointed, Dr. Buchanan being the first. Since then, Mr. Radcliffe has been largely engaged in inquiries into the sanitary condition of particular districts, though latterly his staff-duties have kept him pretty constantly employed at the head office of the Local Government Board. In 1869, he made an exhaustive inquiry, in conjunction with Dr. Buchanan, into the systems in use in various northern towns for dealing with excrement; and again, in 1874, a still more elaborate investigation into the same subject. More recently, he has prepared a variety of laborious and painstaking memoranda as to the recent history and development of cholera, plague, and other Asiatic epidemics, as well as a critical exposition of the much vexed question of quarantine in the Red Sea. Mr. Radcliffe's sympathies, however, were by no means confined to his own department. He has had a considerable share, first as Honorary Secretary, then as Vice-President, and subsequently as President, in guiding the counsels of the Epidemiological Society; and his contributions to periodical and other literature have been numerous and varied. We should be glad to learn that, under the exceptional and distressing circumstances of his resignation, the Government saw fit to make some addition to the comparative pittance to which he will be entitled as pension.

NOTIFICATION OF INFECTIOUS DISEASES.

A NUMEROUSLY attended meeting of the medical profession of Nottingham was held at the Dispensary on Wednesday, April 18th, to consider the subject of "the Notification of Infectious Diseases." After a long debate, the following resolution was put to the meeting: "That the Town Council be requested to suspend the clauses relating to the compulsory notification of infectious diseases until the subject has been settled in Parliament. Nineteen votes were recorded for, and eighteen against this resolution; some gentlemen remaining neutral.

OBITUARY.

JAMES L. HOLLOWAY, C.B.

SURGEON-GENERAL HOLLOWAY, Surgeon-General Army Medical Department, who died while acting as principal medical officer at Netley on the 19th ultimo, was the son of the late Benjamin Holloway, Esq., D.L. and J.P. The deceased officer entered the Army Medical Department as an Assistant-Surgeon in the year 1848, and his dates of promotion to the successive higher grades of his service are shown by the Army List to have been as follows:—Surgeon, October 2nd, 1857; Surgeon-Major, March 17th, 1868; Deputy Surgeon-General, April 28th, 1876; and Surgeon-General, March 12th, 1882. He served both as Assistant-Surgeon and Surgeon in the 24th Regiment of Infantry. On becoming Deputy Surgeon-General in 1876 he was posted as principal medical officer of the Dublin division of the army in Ireland, and from there, in 1879, he was transferred to South Africa for duty. He received the appointment of principal medical officer of the force which was sent out to that country after the disaster of Isandhula, and served in that capacity during the Zulu war and the Sekukuni. For his services during this period he was gazetted to a Companionship of the Bath. He returned to England towards the close of the year 1881, and in the spring of the year 1882 was appointed principal medical officer at Netley. Surgeon-General Holloway was fifty-seven years old at the time of his death. His funeral took place at the military cemetery, Netley, on April 23rd, and was attended by the whole of the military and medical officers and men doing duty at that station. The name of his successor at Netley has not yet transpired.

The following station order has been published by Sir C. Pearson, K.C.M.G., C.B., Governor and Commandant of the Royal Victoria Hospital, Netley:—"The Commandant is grieved to announce the death of Surgeon-General J. L. Holloway, C.B., principal medical officer of this establishment, which took place at 4 A.M. this morn

ing (April 19th), after a very short but painful illness. In Dr. Holloway Netley Hospital has lost a most capable administrator, and his department a true friend, who most jealously guarded its honours, its privileges, and its rights. To the medical officers of the army, and of this hospital in particular, Sir Charles Pearson desires to express his sincere regret at the loss their profession has so unexpectedly incurred, and, in the name of all under his command, he begs to offer his heartfelt sympathy with Mrs. Holloway in the affliction which has overtaken her with such awful suddenness."

THOMAS HICKES, M.R.C.S., J.P., WESTON-SUPER-MARE.

WE regret to record the death, at the ripe age of seventy-seven years, of Mr. Thomas Hickes. Educated at Guy's Hospital, he took the diploma of L.S.A. in 1827, and became a Member of the Royal College of Surgeons in the following year. He practised for many years in Gloucester, where he earned the respect of all who knew him. The poor of the city will long hold his name in grateful remembrance. Mr. Hickes was for some years a member of the corporation of Gloucester, and he was also a magistrate for the city. He was formerly one of the Surgeons of the Gloucester Lying-in Institution, and medical officer to the county prison.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 26th, 1883.

Bird, Henry, Brampton, Huntingdon.
Edwards, Charles Augustus, Bourne House, Wiveliscombe.
Hamilton, Francis Dancy, Lower Sydenham.
Mitchell, Henry, 22, Eastbourne Terrace, W.
Stevens, Henry George Lewis, Bury St. Edmund's.

The following gentlemen also on the same day passed their Primary Professional Examination.

Bowling, George Augustus Lovelace, London Hospital.
Lewis, James King, Charing Cross Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—Dispenser. Salary £75 per annum. Applications to the Hon. Secretary, by May 7th.

CITY OF LIVERPOOL.—Assistant Medical Officer. Salary, £200 per annum. Applications by May 5th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by May 14th.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by May 16th.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Secretary by May 26th.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary £100 per Annum. Applications, etc., post paid, and marked Eastern Dispensary, to the Hon. Sec., Rev. Conway Joyce, M.A., 6, Richmond Hill, Bath, by May 7th.

HENLEY UNION.—Medical Officer. Salary, £100 per annum. Applications by May 7th.

HOSPITAL FOR CONSUMPTION, Brompton.—Assistant Resident Medical Officer. Salary £50 per annum. Applications by May 10th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by May 5th.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary £50 per annum. Applications to the Chairman of the Committee by May 21st.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Applications by May 8th.

SALOP INFIRMARY, Shrewsbury.—Resident House-Surgeon. Salary, £100 per annum. Applications to the "Board of Directors" by May 19th.

ST. MARY'S HOSPITAL, W.—Ophthalmic Surgeon. Applications by May 19th.

THE ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton.—House-Surgeon. Salary, £80 per annum. Applications by May 16th.

WESTERN GENERAL DISPENSARY, Marylebone Road.—House-Surgeon. Salary, £120 per annum. Applications by May 7th.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS AND EPILEPSY, 73, Welbeck Street, W. Two Honorary Physicians. Applications to the Secretary.

WEST KENT SANITARY COMBINED DISTRICT.—Medical Officer of Health. Salary, £300 per annum. Applications by May 19th.

WEXFORD UNION, Bridgetown Dispensary.—Medical Officer. Salary, £100 per annum, and £15 as Medical Officer of Health. Election on May 7th.

MEDICAL APPOINTMENTS.

BEATLEY, Wm. Crump, M.B.Durham, M.R.C.S.Eng., L.S.A., late Resident Medical officer to Charing Cross Hospital, appointed Assistant Medical Officer to the Somerset and Bath Lunatic Asylum.

BUSH, E., L.R.C.P., appointed District Medical Officer to the Thame Union, *vice* T. W. Lee, M.R.C.S., resigned.

BUTLER-SMYTHE, A. C., F.R.C.S., appointed Assistant Surgeon to the St. John's Hospital for Skin Diseases, *vice* T. Robinson, M.D., promoted.

COLLINS, M., M.D., appointed Resident Surgeon to the Nottingham Dispensary *vice* J. M. Tweed, L.R.C.P., resigned.

DOW, H. B., M.D., appointed Assistant Physician to the St. John's Hospital for Skin Diseases, *vice* J. Hill, M.D. resigned.

FITZGERALD, W. A., M.D., appointed Ophthalmic Surgeon to Dr. Steevens's Hospital, Dublin.

KEAY, John, M.B., C.M., appointed Junior Assistant Physician to the Crichton Royal Institution, Dumfries.

MAPEI, Luigo Vincenzo, L.R.C.P.Ed., M.R.C.S.Eng., appointed Medical Officer to the Golborne District of the Leigh Union, Lancashire.

MARTIN, R. J., F.R.C.S.Ed., appointed Medical Officer to the Atherton district of the Leigh Union.

PAULLEY, L., L.R.C.P.E., appointed Medical Officer and Public Vaccinator for the Fourth District of the Depwade Union.

POLLARD, Frederick, M.D.Lond., appointed Physician to the Liverpool Infirmary for Children, *vice* G. B. Oxley, M.D., now Consulting Physician.

ROW, Frederick E., M.R.C.S.E., L.R.C.P.Ed., appointed Surgeon to the Devonport Workhouse, *vice* P. F. Delarue, M.R.C.S.E., deceased.

SPENCE, W., M.B., appointed Resident Physician to the Royal Edinburgh Hospital for Sick Children, *vice* H. M. Dunlop, M.B., resigned.

STONE, F. W. S., M.R.C.S., appointed Resident Clinical Assistant to the East London Hospital for Children, Shadwell.

VINCENT, Osman, F.R.C.S.Ed., appointed Consulting Surgeon to the City of London and East London Dispensary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

SMITH.—At 3, London Street, Calcutta, on April 5th, the wife of Dr. David B. Smith, Deputy Surgeon General (retired), Indian Medical Service, of a daughter.

MARRIAGE.

SMITH—MACLEAN.—At the parish church of St. John, Hampstead, on the 2nd instant, by the Revd. S. B. Burnaby, Edward Kaye Smith, Esq., of 38, Eversfield Place, St. Leonards-on-Sea, to Emily Janet, widow of Alexander Maclean, Esq., and youngest daughter of the late Robert De la Condamine, Esq., Edinburgh.

HEALTH OF FOREIGN CITIES.—It appears, from statistics published in the Registrar-General's last weekly return, that the death-rate was recently equal to 30.8 in Bombay, and 32.5 in Madras. Small-pox caused 89 deaths in Bombay and 26 in Madras; fever fatality was also excessive in both these cities. According to the most recent weekly returns, the average annual death-rate per 1000 persons estimated to be living in twenty-three of the largest European cities was 31.4, and was no less than 8.7 above the mean rate during last week in the twenty-eight great English towns. The death-rate in St. Petersburg was 39.4, and showed a slight decline from the higher rates in previous weeks; the 702 deaths included 25 from scarlet fever, and 15 from small-pox. In three other northern cities — Copenhagen, Stockholm, and Christiania—the mean death-rate did not exceed 22.0, and ranged from 16.2 in Christiania to 27.5 in Stockholm; 4 fatal cases of whooping-cough occurred in Copenhagen, and 3 of scarlet fever in Stockholm. In Paris the death-rate was equal to 30.9, and the deaths included 40 from measles, 37 from typhoid fever, and 12 from small-pox. The rate in Brussels was 28.9, and 4 deaths from measles and 3 from small-pox were recorded. The death-rate in Geneva was exceptionally high, and equal to 34.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.6, the rate ranging from 23.6 in the Hague to 33.3 in Rotterdam; 24 fatal cases of small-pox were reported in Rotterdam and 5 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 30.8; the rates in these cities averaged from 23.5 and 26.4 in Berlin and Hamburg, to 38.1 and 39.0 in Vienna and Prague. Small-pox caused 6 deaths in Prague, and diphtheria was more or less fatally prevalent in most of these German cities. The death-rate averaged 34.9 in three of the largest Italian cities, being equal to 39.6 in Rome, where the 231 deaths included 9 from measles, and 4 from typhoid fever; diphtheria caused 6 deaths in Turin. The 127 deaths in Lisbon were equal to a rate of 32.4. In four of the largest American cities, the mean death-rate was equal to 21.2, the rate ranging from 24.2 in Brooklyn to 29.3 in New York. Small-pox caused 11 deaths in Baltimore and typhoid fever 15 in Philadelphia; scarlet fever showed fatal prevalence to a varying extent in each of these four American cities.

MR. OSBORNE MORGAN intends to publish his speech on the Contagious Diseases Acts.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. The Annual Oration and *Conversazione*, which, in the ordinary course, should take place next Monday, is postponed for a few weeks, to allow of the completion of the Society's new meeting-room and other premises for the occasion. The date will be announced as early as possible.—Odontological Society of Great Britain, 8 P.M. Ordinary meeting. Casual communications by Messrs. Ackery, Canton, and Dewes. Dr. Dyce Duckworth: On the Characters of the Teeth in Persons of the Arthritic Diathesis.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Angel Money: Gliomatous Enlargement of the Pons Varolii in Children. Dr. Seymour Sharkey: Case of Asymmetry of the Brain, presenting peculiarities which bear upon the question of the connection between the optic nerves and certain definite areæ of the cerebral cortex. Dr. Barlow will show a case of Arrested Development of both Clavicles.

WEDNESDAY.—Royal Microscopical Society, 8 P.M. Dr. P. M. Braidwood: Observations on Three Human Contagia.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Drs. Edmunds and Lawford: On the Immediate Causation of Optic Neuritis, with Cases. Mr. W. Jennings Milles: Cases of Recovery from Mild Sympathetic Ophthalmitis. Mr. Snell: Case of Recovery from Sympathetic Ophthalmitis. Mr. J. E. Adams: Peculiar Changes at the Yellow Spot. Mr. Priestley Smith; A New Self-registering Perimeter. Mr. Couper: A New Refraction Ophthalmoscope. Mr. J. E. Adams: An Ophthalmoscope for Artists. Dr. Brailey: 1. Case of Pseudo-glioma; 2. A Second Case of Asthenopia treated by a Vertical Prism; 3. Case of Muscular Asthenopia in a Child. Living specimens at eight o'clock.

FRIDAY.—Clinical Society of London. Mr. Dalby: Examples of the Two Classes of Cases in which Cerebral Abscess, Meningitis, or Pyæmia originate in Disease of the Ear. Mr. Nettleship and Mr. Higgens: On a Case of Morphœa in the Region of the Fifth Nerve, with Paralysis of the Intra-ocular Branches of the Third. Dr. R. Lee: On a Case of Nystagmus Infantilis. Mr. A. E. Barker: 1. On a Case of Goitre producing great Difficulty of Breathing on Exertion: Excision: Recovery, and complete Relief; 2. On a Case of Sebaceous or Dermoid Cyst of the Tongue: Removal by Submental Incision: Cure. Mr. J. H. Morgan will exhibit a case of Congenital Deficiency of the Femur; Dr. Stephen Mackenzie: A Case of Myxœdema in a Male; Mr. Bernard Roth: A Case of Lateral Curvature of Spine now under Treatment.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

FUND FOR DR. BROWN.

MR. FREDERICK WALLACE has received the following subscriptions towards the above, which he has forwarded to the Rev. E. E. Crake, Clifton House, Eastbourne, Honorary Secretary of the Fund.

	£	s.	d.
Dr. Clapton	3	3	0
Dr. Daly	1	1	0
Dr. Charlwood Turner	1	1	0

SIR,—I have this day received the enclosed, and hand it to you for publication, in the hope that many more outlying friends may be induced to subscribe to the fund.—Faithfully yours, HENRY HABGOOD.

Stafford House, Upperton Road, Eastbourne.

"Dear Habgood,—I herewith remit you £3 3s. to be placed to the fund on behalf of my much respected late pupil, Dr. Charles Browne, whose sad illness I am sorry to find gives little hope of his being again able to resume his professional duties. I also have pleasure in sending you one guinea from Dr. MacMillan of Hull, who, considering it a deserving case, asked me to give it on his behalf while visiting Eastbourne.—Hessle, East Yorkshire, April 21st, 1883."

PRACTICE IN AUSTRALIA.

SIR,—One of your correspondents, "Delta," asks for information on this subject. Although the question is frequently answered, perhaps a letter I received from Sydney last week may be of interest. My friend has good qualifications, is well up in his profession, and a likely one to succeed. He says: "I have found out that eight years in England entirely spoils a man for Colonial life, and when you tell me that you have an idea of coming out, I am bound to give you some advice on the subject, and that is—don't. If you think of coming for a trip only, by all means do so, for I think you will find it most enjoyable, but don't come out to settle. The climate is too hot, and the people are very different to English people, and although you may be able to make more money than you can in England, the expenses of living are very much greater. L., who came out by the same boat, is disgusted with the country and returns to England next week."—Yours faithfully, M.R.C.S.

Chertsey, April 17th, 1883.

DEGREES AND LICENCES.

SIR,—Before commencing general practice, I had some experience as a grinder. I invariably found that pupils expecting rejection at the London and Irish colleges, solaced themselves with the reflection that the double qualification of Edinburgh was afterwards almost a certainty. This generally proved true; why, I shall not venture to say, especially as one examination appeared almost as difficult as the other.

What seems to be the real hardship at present, is the apparent equality of all degrees and licences. University graduates who are compelled to undergo a four years' training in classics, mathematics, mental and moral philosophy, natural and experimental science, have no means of letting the public know that their qualifications are superior to those of their professional brethren, who are unable to produce similar proofs of mental training and general education. I do not mean to imply that an university medical degree from Cambridge, London, or Dublin is superior to those of other colleges and licensing bodies, but that a practitioner possessing a licence from London, Edinburgh, or Dublin, should first obtain a B.A. degree, if he desire to hold high a position as a graduate of these universities. Will the higher title the Medical Acts Amendment Bill settle this question satisfactorily?—Yours faithfully, CATHOLIC.

THE MEDICINE LAY.

SOME months ago, we (*Globe*) published a warning of the revival of the beggin impostor's trick known as the "bottle of medicine lay." A healthy vagra bandages his arm carefully, carries a bottle of water under his coat, collie with a charitable-looking gentleman, drops the bottle with a crash, a attracts a crowd by bemoaning his broken-armed, medicine-less, miseral condition. In spite of our warning, several of these enterprising perso have been carrying on a profitable business and littering the streets wi broken glass for some time, until one of them recently rashly lost his medici twice in the presence of the same gentleman, whose charitable aspect so belied him that, on the second occasion, he called in the police.

Royal College of Surgeons of England.

AT the primary examination in Anatomy and Physiology, held this week, the following questions in Anatomy and Physiology were presented to the candidates, who were requested to answer four, and not more, of the questions in each subject. A. *Anatomy:* 1. Describe the structures displayed upon removing the dura mater from the middle fossa of the base of the skull. 2. Describe the posterior surface of the sternum, and mention the various structures in immediate relation with it. 3. Give the dissection required to expose the parts concerned in femoral hernia. 4. Enumerate in their relative positions the structures displayed upon removal of the sterno-mastoid muscle. 5. Describe the structure and relations of the vesiculæ seminales. 6. Give the dissection required to expose the extensor carpi radialis brevior muscle.—B. *Physiology:* 1. Give an account of the coagulation of the blood. 2. Describe the process of secretion as it occurs in the submaxillary gland. 3. Describe the structure and functions of the grey matter of the spinal cord. 4. Give an account of the structure, development, and uses of adipose tissue. 5. Describe the structure of the valves of the heart, and the manner in which they act. 6. Describe the structure of the mucous membrane of the uterus, and the changes which occur in it during menstruation.

PRIZES OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—No award of the triennial prize of the Royal College of Surgeons having been made this year, the subject has, of course, been withdrawn, and the following substituted for the next, to be awarded in 1886, viz., "The Nature of Inhibitory Action in the Animal Body, to be elucidated by Original Research." This prize consists of the John Hunter Medal, executed in gold, to the value of fifty guineas; or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of £50. The subject for the Jacksonian Prize for 1884 is, "The Surgical Treatment of Uterine Tumours, both Innocent and Malignant." For the present year, it is, "The Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its Various Forms in the Abdominal Cavity. The value of the Jacksonian Prize is the amount of the dividend, between £12 and £13.

Permanganate of Potash *versus* Carbolic Acid.

SIR,—I can readily endorse "H. M. D.'s" opinion (British Medical Journal, April 21st, p. 799) as to the superiority of permanganate of potash as an antiseptic over carbolic acid. I would even go farther than he, and say that, in the treatment of wounds, it might in many cases supersede carbolic, being much less irritant.

But I wish specially to point out one particular, when it might, with great advantage, I believe, be substituted for carbolic. This is in the washing of sponges for operation purposes, especially those performed with antiseptic precautions. A solution of the permanganate forms the most delicate test of their asepticity possible, as it leaves a brown mark on any collection of organic matter. I have had the opportunity of thus testing some of the sponges used during operation at one of the large London hospitals. I found those sponges which had been carefully prepared for the operation, as a rule, come out with. out stain; but those which, having been once used, were comparatively hurriedly rinsed out in carbolic lotion, and supposed to be ready for use again, on being tested were found, after a minute or two of interval, to have on them patches of a dark brown colour, showing the presence of organic matter. We can easily imagine how these patches may be the nidus of septic germs; and herein may lie the explanation of the failure of some operations, which the operators believe they have performed with "full antiseptic precautions." But let the sponges be finally washed in a solution of the permanganate, and any doubt as to their septic or aseptic condition is at once settled.—Yours faithfully,

E. D. K.

SIR,—If your correspondent "H. M. D." will turn back to the first volume of this Journal for 1871, he will see that I had then arrived at the opinion which he has arrived at now as to the worthlessness, dangerousness, and nastiness of carbolic acid when used as a disinfectant. I then advocated the use of heat and sulphurous acid as more trustworthy, and these agents have since been accepted by health-officers as the most generally useful. The merits and demerits of carbolic acid have been so frequently discussed since then, that I should not have troubled you with this letter if I had not read in the excellent little work on *Indian Snake Poison* just published by Dr. Wall, an account of some experiments which fully bear out my own and "H. M. D's" views on the subject. Dr. Wall mixed one centigramme of dried cobra poison dissolved in a cubic centimètre of water, with five centigrammes of various reported antiseptics and disinfectants dissolved in a cubic centimètre of water, with the following results.

One centigramme of cobra poison alone killed fowls in 20 minutes, with sodium hyposulphite in 24 minutes, with carbolic acid in 36 minutes, with ferrous sulphate in 46 minutes, with one cubic centimètre of the officinal solution of chlorine in 53 minutes, with one cubic centimètre of the officinal solution of sulphurous acid in 65 minutes, with zinc chloride in 90 minutes, with permanganate of potash caused no poisonous symptoms.

"Carbolic acid," he observes, "causes very slight delay, and its use was attended with its own special toxic symptoms .... By only one re-agent, namely, potassium permanganate, was the poison completely destroyed." In other experiments he shows that cobra poison retains its poisonous properties after having been subjected to a temperature of 107 C. (224.6° Fahr.).—Yours, etc.,

C. Roberts.

Bolton Row, Mayfair, April 21st, 1883.

REV. M. H. C. S.—It is against our rule to recommend particular practitioners. We believe Mr. Startin, junior, has succeeded his father.

Balneology.

SIR,—Can any of your readers oblige me with the name and publishers of any recent and reliable work on Balneology? I believe there is one in a handy form, but have no easy means of getting to know about it.—Yours, etc.,

Disinganno.

*** There is no very recent English work on general balneology. The only late ones are: *Baths and Wells of Europe*, by J. Macpherson, M.D., crown 8vo (Messrs. Macmillan and Co.); Braun's *Balneology*, edited by Dr. Hermann Weber, 8vo (Smith, Elder, and Co.); *Health-Resorts of Europe and Africa*, by Dr. T. M. Madden (Messrs. Churchill and Co.). Dr. Madden's work is scarcely a book on general balneology. The latest of these works is of the year 1875. Judged by size, Dr. Macpherson's work is probably the handiest.

An Intolerable Nuisance.

SIR,—It is bad enough to be overwhelmed with circulars, often addressed by young ladies, sealed carefully, addressed with well known names and others. It is annoying to have beggars of all kinds ringing the visitors' bell, and taking up the servants' and other inmates' time. But a still greater nuisance, which is increasing in frequency, is the announcement of a gentleman, who has previously sent in his card, whose object is to tout for his firm of wine-merchants or chemists. I have become sufficiently hard-hearted to make short work of such visits; but, sympathising as I do with my younger friends who have not yet started themselves, as painful experience will start them, I venture to appeal through your columns, to young and old practitioners, to do their utmost by word and deed to discountenance these intolerable interruptions to more serious occupation.—I am, sir, your obedient servant,

May 1, 1883. An Old Physician.

Treatment of Croup.

SIR,—What is the best general treatment for croup? What monograms on that subject would you recommend for practice? I very seldom find remedies, etc., from the text-books to do much good. I have myself tried a whole pharmacopœia of drugs, but to no purpose; I have generally to resort to tracheotomy, which at that stage of the malady (when one can persuade the parents to consent) proves fatal.—Yours, etc.,

Anxiety.

W. Beevor, M.B.—Bristowe's *Practice of Medicine* contains excellent chapters on the subject.

Vaccination and Vaccination Inspectors.

SIR,—In my last letter I gave you the trouble to insert, on December 23rd, 1882, on this subject, from a sense of duty, although with great reluctance, I made some remarks as to the inert character, etc., of the lymph that I had received from the National Vaccine Establishment. I have great pleasure, however, now (having just finished my half-yearly vaccination) to report most favourably of the lymph, having received two tubes from the National Vaccine Establishment to set going two distant stations. I adopted precisely the same mode of operating as I have always used; and, as three healthy children were brought at first, I divided the lymph from one tube, and scarified all three children with three marks each; and these, when presented for examination on the eighth day, had each of them (in the eyes of an enthusiastic doctor) "beautiful" and perfect areolæ of cow-pox, that would, if united, exceed on each an inch square surface, and in not one single case from this source of lymph did I fail to produce as good results on every child vaccinated from it. I feel fully borne out, therefore, in my former remarks as to the inertness of the lymph, etc., not producing deep faveation, etc., for which the inspectors blamed myself, and cut me off from receiving the extra grant of the Local Government Board. I hope, however, when the inspector next visits my district, that he will do me the favour and justice of taking the trouble to visit and inspect at least the majority of these recently vaccinated cases; and I am willing to take my status by an unbiassed opinion of them as to the work of

A Public Vaccinator of Over Thirty Years' Standing.

Mutual Influence of Mind and Body.

SIR.—Mr. R. Hughes's postscript to his letter, asking for an article on the effect of colour in the treatment of the insane, was not answered in the Journal of April 14th. Tonga, an Italian alienist, first suggested this mode of influencing mental disease. To the best of my belief, reviews of his theory were published at the time in the *London Medical Record*, and also in the *Journal of Mental Science*. Dr. Blandford's index to this periodical would inform him.

The summary of the theory may be included in the remarks that red, being an exciting colour, is appropriate in melancholia, but not in mania; and that violet, being a depressing colour, is indicated (as a wall-paper) in mania, but not in melancholia.

Dr. Claye Shaw subsequently suggested that pathetic music might soothe in mania, and that exciting airs might stir up the melancholiac.

In my own experience, the efficacy of such therapeutic agents has been found to depend upon the previous education of the patient, and the various crises of his disorder; a change to a more cheerful room, associated with pleasant reminiscences, often exercising a marked influence for the better on the course of the mental disorder.—I am, your obedient servant,

Richmond Terrace, Whitehall, April 14th, 1883. H. Sutherland.

DR. C. T. G.—There are two medical benevolent societies: the British Medical Benevolent Fund (honorary secretary, Mr. Malcolm Morris, 63, Montague Square), and the Society for the Relief of Widows and Orphans of Medical Men (secretary, Mr. J. B. Blackett, 28, Green Street, Grosvenor Square). The provision to which our correspondent refers is made by every ordinary insurance society.

Backward Boys.

SIR,—In answer to the question by "X. Y. Z.," in yours of the 7th inst., I beg to say if the person will apply to Mr. W. Shaw Hayler, the Grammar School, Walsingham, Norfolk, he will find a very suitable school, and all he requires. I have great pleasure in making him, through you, aware of this, and trust he will treat with this gentleman, and find what I can honestly testify to.—Yours truly,

Thos. G. Wadlow, Medical Assistant.

Hope Cottage, West Horton.

A Warning.

SIR,—This afternoon a man called at my house and asked my page if I were at home. He said I was not, whereupon he asked to be allowed to write a message; a slate and pencil were offered him, but he said he wished to write it on paper; consequently he was asked into my consulting room for the purpose (the page waiting in the hall). The message he wrote was in French, asking me to call at a certain house in Harley Street to see him professionally. Shortly after he left, I returned home, and was informed of the case. Upon going into my consulting room, I found that a laryngoscope and an ophthalmoscope had disappeared and could not be found. If you will kindly insert this, it may be a warning to my professional brethren.—I am, sir, yours faithfully,

Edward J. Nix, M.D.

143, Great Portland Street, W., April 18th, 1883.

Invalid's Home.

SIR,—If "A. A. B." will send me his address, I will forward him a prospectus of the Bolingbroke Hospital—the very place for which he is inquiring.—Faithfully yours,
H. R. MOSSE, Resident Medical Officer.
Bolingbroke House Pay Hospital, Wandsworth Common, S.W.

Management of the Perinæum.

SIR,—In a letter which appears with much authority in the JOURNAL on the management of the perinæum, the author appears to consider only mechanical causes for its natural dilatation, as well as in the artificial mode which he adopts. My observation leads me to infer that in cases of rigidity, both of the internal and external parts, a natural dilatation of the parts often takes place, with so much rapidity and so little apparent cause, that it can only be accounted for by supposing, what would appear highly probable, that is, a reflex or sympathetic nervous influence. Perhaps the truth is to be found, in this as in most medical matters, in the experience of each individual and each case. I would remark that the external parts are often extremely sensitive, much more so than the os uteri; and I am afraid that many patients will complain loudly of the proceeding which Dr. A. Duke recommends, whilst the love of others will wax cold. If medical gentlemen find that such considerations as I suggest seem to them true of their patients and cases, reflection may deter very young accoucheurs, not perhaps possessing Dr. A. Duke's skill, from persevering too much in a plan not recommended in the text-books.—I am, sir, your obedient servant,
CHARLES YOUNG.
Chilton Polden, March 13th, 1883.

Non-Intoxicating Beverages.

SIR,—After years of abuse for my "teetotal bigotry and fanaticism," it is positively refreshing to be now called to account in your correspondence column for an approval of popular non-intoxicating beverages, even though these contain some alcohol, and for the moderation of my advocacy of temperance. The exercise of a little thought and knowledge would have shown your correspondents that I could not have commended a drink containing 5 per cent. of alcohol. This was a printer's error; it should have been 0.5 (*i.e.* ½) per cent. I have no desire to see the Government standard of non-intoxicability in beverages altered; but when an attempt was made from a non-scientific temperance quarter to induce you and the British Medical Association to bring pressure to bear on the Government to impose a spirit duty on non-intoxicating drinks, it did seem to be the duty of some known upholder of total abstinence to repudiate and give the *coup de grace* to the proposal, which I have some reason to believe that I have done.

Neither can I agree that "the use of the so-called temperance beverages marks a middle ground between the non-abstainers and the abstainer of some standing." My abstaining friends are mostly veterans of from forty to fifty years' practice of teetotalism, and they nearly all enjoy such drinks.

Probably my experience in the treatment of dipsomania in America and here is as great as that of your correspondents, and I have no hesitation in restating my opinion that good non-intoxicating drinks, whether they contain alcohol or carbonic acid, are, in moderation, safe for reformed inebriates.

If anyone choose to abstain from ginger beer because it may contain a non-intoxicating proportion of alcohol, well and good. That is his affair. But what the reformed inebriate has to avoid is all intoxicating drinks; and the total abstinence movement is a movement to inculcate total abstinence—from what? Why, from intoxicating liquor.—Your obedient servant,
March 26th, 1883. NORMAN KERR, M.D.

Localised Diaphoresis.

SIR,—I shall be exceedingly obliged if you, or any of your correspondents, will kindly suggest some means of inducing diaphoresis of one arm without affecting the whole body. I have tried vapour-baths, both Turkish and Russian, also alkaline baths with kneading, and now intend trying pilocarpine as a lotion applied on lint, and covered with oiled silk. I enclose my card, and remain, yours faithfuily,
PUZZLED.

MR. FOSTER is thanked for his kind expressions, which are much valued.

Meddlesome Midwifery.

SIR,—In the progress that science is now making, with all her engines at high pressure, it may occasionally be useful to pause, and examine the machinery a little, by way of caution, and so perchance prevent some young, ardent, and inexperienced minds from getting into confusion, and probably disaster. Of late, I have observed in your JOURNAL a little of this confusion in the recommendations made for assisting women in labour, and I have been forcibly reminded of one of the favourite maxims of that cautious and practical, though somewhat eccentric teacher, the late James Blundell, who was continually dinning into the ears of those who had the privilege of listening to his lectures, this important truth, "meddlesome midwifery is bad." A German teacher, quoted in your last number, seems to be of the same opinion. One might readily imagine the horror that would have been depicted on the countenances of these old-fashioned teachers, had they been told that, in the present year of grace, it was seriously recommended to "tug with hooked fingers" at the perinæum, between the pains, in order to keep up "continuous extension."

It would almost appear that the great fact that a labour, for the most part, is a natural process, and not a disease, is ignored by the fast practitioners of the present busy and impulsive age, and that plain common sense is not unfrequently pushed on one side to make room for an exhibition of uncommon nonsense; when failure takes place in these experimental, not to say empirical proceedings, it may not untruly be said that the unobtrusive and beneficial operations of the "*vis medicatrix naturæ*," are frustrated or delayed by "oppositions of science, falsely so called." What is said of midwifery, when meddlesome, is equally applicable to medicine and surgery.—I am, sir, yours faithfully,
HENRY MEYMOTT.
Ludlow, April 24th, 1883.

Celluloid Catheters.

SIR,—In answer to your correspondent, "H. J. L. B.," I would state that a patient of mine, who has drawn his own urine off three or four times daily for the last two years, broke a celluloid catheter about one inch above the eye (the fracture was clean and vitreous), after using it only a few times. I consider these catheters safe only in the hands of a skilled person.—Yours truly,
T. WHITEHEAD REID.
Canterbury, April 24th, 1883.

An Appeal.

SIR,—I venture to appeal on behalf of the widow and three children of Benjamin T. Moore, M.D., who died at Kineton on April 20th, leaving his family in the most abject and utter destitution. They are totally unprovided for in any way, and are literally penniless. Any subscriptions, however trifling, to tide Mrs. Moore over the present, until some steps can be taken on her behalf, will be thankfully received by the Rev. F. Miller, M.A., Kineton, Warwick—I am, yours faithfully,
KENNETH W. MILLICAN, M.R.C.S.
April 21st, 1883.

Self-Accusation.

A BUSY doctor sent in a certificate of death, and accidentally signed his name in the space for "cause of death."—*Phila. Med. Times.*

COMMUNICATIONS, LETTERS, etc., have been received from:

The Secretary of the Birmingham and Midland Counties Branch; Dr. Pollard, Liverpool; The Honorary Secretaries of the National Veterinary Association; Dr. Whittle, Liverpool; Mr. A. Teevan, London; The Secretary of the Crystal Palace Company; Our Aberdeen Correspondent; Dr. Willoughby, London; Our Rome Correspondent; The Secretary of the Harveian Society; Mr. H. Grey Edwards, Bangor; Professor McKendrick, Glasgow; Dr. William Easby, Wandsworth Common; Dr. E. Pollock, Glasgow; Dr. Fox, Stockton-on-Tees; Dr. A. Emrys Jones, Manchester; Mr. James Oliver, London; Mr. John H. Gornall, Warrington; Dr. John Woodman, Exeter; Dr. William Carpenter, London; Mr. Vincent Jackson, Wolverhampton; Messrs. J. H. Chambers and Co., St. Louis; Dr. Duffey, Dublin; Dr. J. Rogers, London; Mr. A. H. Twining, Salcombe; Mr. Simeon Snell, Sheffield; Mr. J. Blake, Dublin; Dr. Havard, Shaw; Mr. L Humphry, Cambridge; Mr. M. Duggan, Castle Eden; Mr. Leicester Holme, New York; Mr. C. Lennox Peel, London; Mr. Frederick Page, Newcastle-on-Tyne; Dr. W. R. Huggard, London; Mr. R. Eardley Wilmot, Petworth; Mr. W. W. Reeves, London; Mr. James T. Laffan, London; Mr. C. F. Wardley, Buxton; Dr. W. A. Fitzgerald, Dublin; Dr W. Alexander, Liverpool; Dr. Arthur H. Benson, Dublin; Dr. Charles Renner, London; Mr. E. T. Burton, Birmingham; The Secretary of the University of Edinburgh; Dr. Idelson, Berne; Mr. J. F. Owen, Liverpool; Dr. Sawyer, Birmingham; Messrs. Waukenphast and Co., London; Mr. M. Monckton, Maidstone; Secretary of the Midland Medical Society, Birmingham; Mr. W. Hickman, London; Mr. G. A. Gaskoin, London; Dr. A. B. Garrod, London; Dr. T. W. Trend, Southampton; Mr. W. N. Hobart, Londonderry; Mr. J. Gillingham, Chard; Mr. Warrington Haward, London; Mr. Arthur Jackson, Harrogate; Dr. C. Concannon, Hadfield, near Manchester; Mr. Arthur Cooper, London; Dr. Myrtle, Harrogate; Mrs. L. A. Duke, Bray, co. Dublin; Mr. S. S. D. Wells, Plymouth; Mr. W. S. Granger, Wareham; Mr. Walsham, London; Mr. R W. Thomas, Keynsham; Mr. J. Horatio Baldwin; Mr. George Eastes, London; Dr. Thomas Sanctuary, Salisbury; The Lady Superintendent of Nurses' Infirmary, Chichester; The Honorary Secretary of the Odontological Society; Mr. T. W. Price, Birmingham; Dr. T. A. O. Partridge, Dibrugarh, Assam; Dr. A. Dempsey, Belfast; Dr. James Neal, Sandown; Mr. F. H. V. Grosholz, Aberdeen; Our Dublin Correspondent; Mr. H. Nelson Hardy, London; Mr. G. R. Turner, London; Mr. F. J. Buckell, London; Mr. Nettleship, London; Dr. T. C. Gilmore, Londonderry; Mr. W. T. Bottomley, Shipley; Mr. A. C. Bridges, Birmingham; Mr. W. Roger Williams, London; Mr. J. H. Whitham, Haworth; Dr. J. M. Rhodes, Didsbury; Mr. D. S. Park, Houghton-le-Spring; Dr. W. W. Hardwicke, Rotherham; Mr. S. Burrows, Witheridge; Mr. John Brown, Bacup; Our Glasgow Correspondent; Mr. G. H. J. Dinsmore, London; Mr. T. Whitehead Reid, Canterbury; Dr. J. Arlidge, Stoke-upon-Trent; Mr. R. Barrington Cooke, Scarborough; Messrs. Merryweather and Sons, London; Hon. A. H. Mundella, London; The Secretary of the Dental Hospital, London; Mr. E. M. Owens, Leamington; Rev. M. H. C. Shelton, Portland; Mr. G. A. Farrer, Brighouse; Mr. S. G. Stoman, jun., Farnham; Messrs. Loefiund and Co., London; Dr. Fairlie Clarke, Southborough; Dr. J. Francis Sutherland, Glasgow; Mr. E. Prideaux, Wellington; Mr. John Glover, Dorrington, Shrewsbury, etc.

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CLINICAL LECTURE
ON
EXCISION OF AN OSSEOUS WEDGE AT THE TRANSVERSE TARSAL JOINT FOR THE RELIEF OF INTRACTABLE CLUB-FOOT.

By RICHARD DAVY, M.B., F.R.C.S.,
Surgeon to the Westminster Hospital.

ENTLEMEN,—It is now ten years ago since I first advocated in his theatre the propriety of attacking the tarsal arch by osseous xcision for the relief of intractable club-foot; I will state now, for our guidance and for the thought of other professional men, in as oncise a manner as the cases permit, what my own experience has een, and the conclusions based upon repeated observations. The peration has been, until lately, known as "resection of the tarsal ch;" but this name is now giving place to the more expressive rm, excision of an osseous wedge at the transverse tarsal joint; nd I prefer this latter description for the following reasons. By ie more precise method of removing mechanical wedges from the rsus, portions of the component bones of the transverse tarsal int are invariably included, viz., os calcis, astragalus, scaphoid and boid; and this is true, not only in cases of talipes varus, but in quinus also.

The title excision of an osseous wedge at the transverse tarsal int, directs the surgeon's attention to the prime point on which any of these intractable deformities hinge, and includes the par- al ablation of bones anterior to the transverse tarsal joint; whereas ie term excision of the transverse tarsal joint is only strictly ap- icable to those cases where portions of the os calcis, astragalus, caphoid and cuboid bones are alone removed. Permit me to divide, ien, the consideration of excision of an osseous wedge at the trans- rse tarsal joint into these headings:

1. List of cases operated on by myself.
2. Cases suitable for this operation.
3. The details of the operation.
4. Its results.

First, this table concentrates my experience; and the club-foot atients have all been inmates of this hospital.

These 21 cases represent 23 distinct operations (two of them having oth tarsi operated on at one sitting; 18 are boys, 3 girls; 10 cases of lipes equino-varus, 9 cases of varus, 2 cases of equinus. My oldest se is twenty, the youngest one year and four months. This infant as operated upon at the express desire of her mother, who was un- ble to give the time necessary for out-patient treatment. It was a vere case of congenital talipes varus, and had been an out-patient at an orthopædic establishment since birth. Twenty out of the 21 recovered; and my single death from septicæmia (Case 10) I am disposed to attribute to the prolonged and difficult dissections practised for removing a dorsal wedge of the tarsus through one opening only on the outer side by means of the chisel. And, in passing, let me state that, much as I value the use of the chisel in many operations on bone, yet I have almost entirely discarded its use on the tarsus since the introduction of the saw and director. Try for yourselves on the dead body, and you will soon find out which instrument grants you the greatest precision, and the tissues most immunity from harm; the chisel becomes but an accessory, and not the principal instrumental agent.

Secondly. *Cases suitable for an excision of an osseous wedge.* Let me give an outline of no imaginary sketch. A poor boy is born into the world club-footed; his infant struggles are more than usually miserable, due to the direction of the surgeon and the mis-direction of the nurse. When springtide comes, to this cripple is denied the activity of childhood; his apology for sport is but tame acting, he hobbles on, an eyesore to the proud, an object of pity to his neighbours, a distress to his parents, and a nuisance to himself. As time rolls on, the would-be merciful yet hamper him with useless but costly fetters; our victim is confined by splints, or propped up on crutches, still doomed to lasting deformity, until this helpless child, unfit for work, unfit for play, by the stern exhaustion of per-sistent failure, is banished from home, and relegated to the blank future of workhouse adoption.

It is in such prolonged and persistently rebellious cases of club-foot, that this method of procedure is called for; where expense, loss of time, and certain relapse are considerations. Moreover, in every case, where osseous growth has followed up closely the per-petuation of deformity, nothing short of bone removal will effect a speedy and satisfactory restoration to natural contour and utility. In my own fancy, I have pictured the man, lame from his mother's womb, and who sat for alms at the Beautiful Gate of the Temple, as a case of congenital double club-foot; on Peter's miraculous order, his feet and ankle-bones received strength. In the present day, there exist but few inveterate cases that are not amenable to cure by an excision of an osseous wedge.

In London, however, the exhibition-ground of a most varied out-of-doors pathological series, respect must be given to the vested interests of club-foot proprietors, who are supported by the pedes-trians in the *rôle* of crossing-sweepers, etc., and who find that their receipts are seriously affected by surgical art. Many of us remem-ber a monocular sexagenarian, at the angle of Harley and Queen Anne Streets, who carried a huge box on his head, a broom in his hand, and a species of black leathern bandbox on one foot. This unique triumph of sartorial exaggeration had long aroused my curi-osity, and my desire to excise the tarsal arch encased within it. By bribery, I got him inside my house, and insisted on his re-vealing to my naked eye his naked foot. Under protestation, he did so. "Monstrum horrendum, informe, ingens, cui lumen ademptum!"

Excision of Cuboid Bone, mostly.

o.	Sex.	Age.	Admission.	Operation Day.	Nature of Deformity.	Operation.	Discharged.	Result.
	Boy	15	Jan. 25, 1874	Jan. 27, 1874	Talipes varus cong., left	Excision of left cuboid	May 27, 1874	Recovery
	,,	15	,, ,,	March 17, 1874	Talipes varus, right	Excision of right cuboid	,, ,,	,,
	,,	14	Jan. 12, 1875	Jan. 18, 1875	Equino-varus, right	Excision of right cuboid	April 1, 1875	,,
	,,	10	Jan. 14, 1875	Jan. 26, 1875	,, ,,	,, ,,	May 26, 1875	,,
	,,	10	,, ,,	,, ,,	Equino-varus, left	Excision of left cuboid	,, ,,	,,

Excision of Osseous Wedge at the Transverse Tarsal Joint.

Boy	6	March 17, 1876	March 28, 1876	Equino-varus, left	Excision of osseous wedge at transverse tarsal joint	May 22, 1876	Recovery
,,	12	Nov. 7, 1876	Nov. 14, 1876	Equino-varus, right	,, ,, ,,	May 21, 1877	,,
,,	12	,, ,,	Jan. 16, 1877	Equino-varus, left	,, ,, ,,	,, ,,	,,
Girl	1½	Feb. 22, 1878	March 5, 1878	Talipes varus, right	,, ,, ,,	April 12, 1878	,,
Man	20	Nov. 6, 1877	Nov. 20, 1877	Talipes equinus, left	Dorsal wedge excised	Dec. 5, 1877	Death in 14 days
Boy	16	May 20, 1878	May 31, 1878	Equino-varus cong., right	Excise of wedge at transverse tarsal joint	Aug. 29, 1878	Recovery
,,	14	May 8, 1878	May 25, 1878	Equino-varus, left	,, ,, ,,	July 31, 1878	,,
,,	10	July 6, 1879	July 8, 1879	Talipes varus, right	,, ,, ,,	Sept. 9, 1878	,,
,,	4	June 6, 1881	June 7, 1881	Talipes varus, left	,, ,, ,,	July 22, 1881	,,
,,	10	June 10, 1881	June 14, 1881	Paralytic equino-varus, right	,, ,, ,,	July 9, 1881	,,
,,	10	June 22, 1881	June 25, 1881	Talipes equinus, left	,, ,, ,,	Aug. 11, 1881	,,
,,	11	July 28, 1881	Aug. 4, 1881	Equino-varus, right	,, ,, ,,	Oct. 21, 1881	,,
,,	5	Nov. 25, 1881	Nov. 29, 1881	Talipes varus, right	,, ,, ,,	Feb. 13, 1881	,,
Girl	4	March 27, 1882	March 31, 1882	Cong. varus, r.; mal. developed, l. foot	,, ,, ,,	June 1, 1882	,,
,,	13	June 1, 1882	June 6, 1882	Equino-varus, left	,, ,, ,,	Sept. 9, 1882	,,
Boy	3½	June 17, 1882	June 20, 1882	Double congenital talipes varus	Both transverse tarsal joints excised	Aug. 21, 1882	,,

Mark you, I apply the first four Virgilian epithets to the black leathern bandbox only. A puny case of talipes varus was eased out of this prodigious socket; and the owner of both positively declined to suffer any personal improvement, lest his bread should be taken from him.

Thirdly. *The details of the Operation.* There is scarcely any operation that requires more forethought and mechanical insight than this removal of an osseous wedge at the transverse tarsal joint. You must avail yourselves of an aniline sketch on the skin of the patient's foot, and map out the precise mechanical form of your wedge prior to commencing. In some cases of equino-varus, I have operated first on the plaster-of-Paris cast, and so accurately shaped one's course on the living bone. For these wedges have to be double (so to speak), with two bases and two apices; and I would apply the general law of excisions to this excision, that it is better of the two to remove a slice too much bone than a slice too little; if it be possible, remove only what is necessary.

The method of operating has been already described in the BRITISH MEDICAL JOURNAL (October 29th, 1881, p. 698); and I have but little to add to that procedure. The instruments required are a scalpel, dissecting-forceps, bone-forceps, periosteum blunt-curved knife, saw, and retractors. These instruments have been manufactured by Messrs. Wright and Co., 108, New Bond Street, W.; and I subjoin diagrams of those which are new in design.*

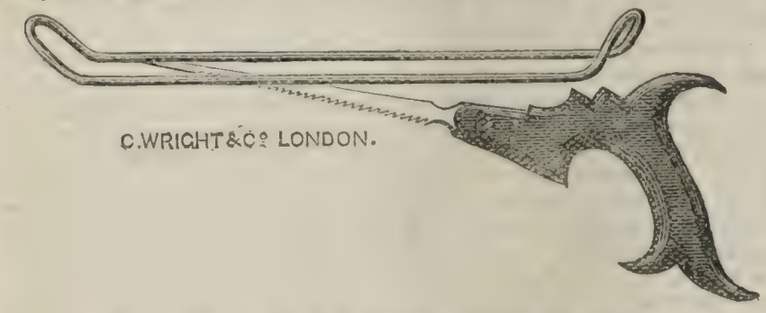


Fig. 1. Saw and Parallel-grooved Director (for Equinus).

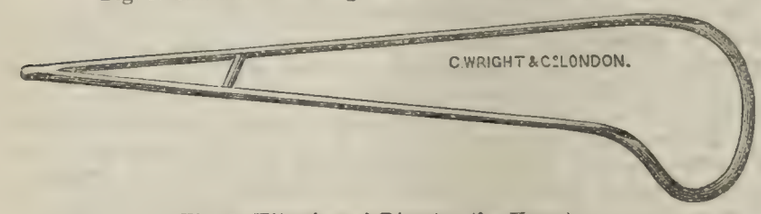


Fig. 2. Kite-shaped Director (for Varus).

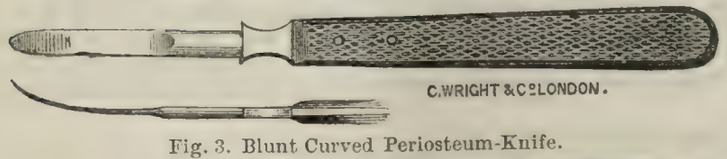


Fig. 3. Blunt Curved Periosteum-Knife.



Fig. 4. Strong Bone-Forceps.

The foot and leg are placed in a splint which permits rotation of the foot outward, and a gum-and-chalk bandage is applied over all. Here let me give you a hint with reference to putting up club-feet in plaster-of-Paris bandages. Do not squeeze the foot in your bandage, as if you were tying up a bundle of toes, but first lay a smooth flat piece of steel on the sole of the foot, and bandage this to the foot; the end of the plate allows the surgeon to manipulate the foot into its required position, and, on withdrawing it (after the bandages are set), a flat broad surface is left for the sole of the foot to expand on, and adds materially towards the cure.

Again, if you are dealing with a young infant, whose spasmodic kicks enable it to wriggle out of your bandage, put your moist bandage on next to the child's skin, without any intervening padding whatever. I have repeatedly found this to answer, and no sore to be produced. Remove your bandages either with the circular saw (driven by a foot-lathe), or by means of this very efficient forceps.

Fourthly. *The Results of this Operation.*—The efficacy of this method of operating is, in my opinion, proven by our clinical test: for twenty patients have been restored to plantar progression, after unsuccessful treatment elsewhere. The letters that I have received from the boys' parents prove that, from a non-professional point of view, the value of the treatment has been appreciated. Let me read you an extract (Case 15). "April 9th, 1883. The boy is able to walk much better than he ever could before you operated on him and his foot remains in the same position as when he returned from London"—(July 9th, 1881).

Many of the boys I have frequently met in the London streets earning their own living, and walking unaided. I have not yet met with a relapse; but I think that a relapse must imply unwarrantable carelessness on the part of a patient's friends, who permit any faulty tendency to be overlooked. And I caution the relatives always on strictly watching for any deviation from acquired symmetry; inculcating on them the law of the perpetuation of distortion, viz., given any deviation of the normal plane of a joint, the exercise of that joint tends to aggravate the deviation. We may recall examples of relapsed genu-valgum, excision, ankyloses of the knee-joint, club-foot, etc. "*Principiis obsta*" is a grand motto in orthopædic practice. Case No. 20 I often see, walking with his schoolfellows, in my own country village in the north of Devon. I trust that, in proposing such a severe treatment for rebellious club-foot, you all will recognise the great importance of treating the deformity in its early and plastic stage, and so prevent recourse to any cutting operation; but that you also will not hesitate to recommend excision of an osseous wedge in cases where bone-growth treading on the heels of and backing up distortion perpetuates it; for, with due reverence, I may quote the words of Solomon, equally applicable to orthopædic surgery as to general culture: "Train up a child in the way he should go, and when he is old, he will not depart from it."

* Within the last few months, these instruments have been used by Mr. Wm. Rose of King's College Hospital on two occasions, and by Mr. Walsham, of St. Bartholomew's Hospital.

ABSTRACTS OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

BY JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

LECTURE VI.—THE FORMATION OF THE BLOOD.

THE blood receives from time to time new supplies of material from the alimentary canal, either by direct absorption or by indirect lacteal absorption. It also receives the lymph, and along with probably, the cellular structures formed in the blood-glands, while it obtains oxygen by the respiratory process. It was the object this lecture to show how physiologists have arrived at their present knowledge of these operations. Beginning with those happening in the alimentary canal, the lecturer first alluded to the older theories regarding the constitution of food. The oldest notion, traced to Hippocrates, and running through many centuries, was that all food contained the same nutritive principle: a theory to be expected so long as it was sufficient to account for various physiological phenomena by the action of special principles. Even Haller (1708-1777), although he gives much interesting information regarding the different kinds of foods used either by nations or individuals, can only say that all nutritious matters are of the nature of a jelly. His contemporary William Cullen (1712-1790) considered nutritious matters to be either "oily, saccharine, or what seems to be a combination of the two." There was no sound knowledge on this subject until Sir Humphry Davy (1778-1829), in his lectures on Agricultural Chemistry, classified the proximate principles of vegetables used in diet as gluten, farina, mucilage, oil, and sugar. Somewhat later, Magendie (1783-1855) made a much more elaborate classification into farinaceous, mucilaginous, sweet, acidulous, fatty, caseous,

gelatinous, albuminous, and fibrinous. He also showed that animal life could not be sustained on one of these; and he pointed out the physiological distinction between nitrogenous and non-nitrogenous foods. About the same time, Prout (1786-1850) simplified Magendie's classification, and divided the proximate constituents into saccharine, fatty, and albuminous. He arrived at this simple classification by considering the constitution of milk. Although Prout's classification is insufficient as not noticing saline constituents, it has been generally accepted, and forms the basis of all subsequent systems of dietetics.

The lecturer then passed on to the subject of digestion. The oldest authors regarded digestion as a concoction, by which they meant such changes as occur in substances when they are exposed to heat in closed vessels. Then came the notion that digestion was a kind of putrefaction. This may be traced back to Celsus. A modification of this theory was advanced by Van Helmont (1577-1644), namely, that digestion was equivalent to fermentation. According to this author, six fermentations occurred in the alimentary canal. Others supposed that the digestive process was largely owing to the mechanical breaking down of the food. Probably this notion arose by the observation of fowls with strong gizzards. The first accurate observations on the digestive process were published in 1752 by Réaumur (1683-1757). He experimented on birds and mammals, and devised the methods afterwards worked out with much greater elaboration by Spallanzani. Although a mathematician, Réaumur was the intellectual forerunner of the Italian physiologist. He made many interesting observations upon the reproduction of lost limbs by crustaceans, upon the movements of star-fishes and zoophytes, upon the electrical action of the torpedo, upon the phosphorescence of marine animals, and upon the life-history of insects. In 1780, Spallanzani published his researches on digestion.

The lecturer here eulogised the methods and style of Spallanzani. His observations were natural, and at the same time comprehensive. He repeated and extended the observations of Réaumur, who was the first to cause animals to swallow tubes, open at the ends, containing nutritive matters. Spallanzani performed similar experiments on amphibians, reptiles, birds, mammals, and finally on himself. His method was to introduce tubes or perforated spheres containing nutritive matter; to withdraw these after a certain time, or to allow them to pass through the alimentary canal. He repeated the experiments of Redi, and of the Florentine academicians, as to the powerful action of the gizzards of certain birds. His observations also led him to investigate digestion in ruminants. The conclusion arrived at was that digestion could not be explained by triturating action, however powerful, and that it was due to the chemical influence of the fluid secreted by the mucous lining of the digestive cavities. This fluid he obtained in sufficient quantity for purposes of experiment, by causing animals to swallow bits of sponge; and he was the first to show that such fluids had digestive properties.

About the same period, Stevens had the opportunity of observing digestion in a soldier who had the power of vomiting at will. This research gave information regarding the alteration the food undergoes in the stomach, the degree of digestibility of different kinds of food, and the length of time required for solution. Stevens's thesis for M.D. at the University of Edinburgh was presented in 1777. Although Spallanzani experimented upon himself with great courage —swallowing tubes, perforated balls, and sponges—and obtained valuable results, this research of Stevens must be regarded as the first of importance relating to man. More elaborate information was obtained by personal experiments made by Gosse, a gentleman who also could vomit at pleasure, and who communicated his observations to Senabier, the friend and biographer of Spallanzani. The experience of this man was registered long before the well known observations of Dr. Beaumont on St. Martin, mentioned in almost every text-book.

The next great step in working out the function of digestion was made by Tiedemann and Gmelin in 1825. The special feature of their work is the careful collection of the digestive fluids, and their chemical analysis. Much more elaborate than the work of Spallanzani, it has not perhaps attracted so much attention; but it is certainly the beginning of quantitative knowledge of digestive processes.

The lecturer then shortly described the well known case of Alexis St. Martin, which began in 1822, and was carefully observed by Beaumont. He pointed out that it was the beginning of the method of making artificial fistulæ, by which it was possible to collect digestive fluids. This method, afterwards followed by Bassow (1842), Blondlot (1843), Bidder and Schmidt (1852), Claude Bernard, and many others in recent times, has been fruitful of important results to physiology and to therapeutics.

The lecturer then proceeded to show how physiological investigation had led to knowledge of the action of the various digestive fluids. As regards the saliva, Leuwenhoek (1632-1723), first observed in it minute corpuscles; Hapel de la Chenaie (1780), first obtained pure parotid saliva from Steno's duct; Tiedemann and Gmelin (1825), first carefully analysed it, and mentioned, amongst organic substances, salivary matter. This was termed by Berzelius, in 1833, ptyalin, but was really impure and not real ptyalin, first isolated by Mialhe in 1845. The latter was also the first to show that saliva changed starch into glucose, an action he attributed to ptyalin, thus establishing a remarkable analogy between the chemical processes in animal and vegetable life, as, in 1833, Payen and Persoz showed the action of diastase.

The gastric glands were unknown to Haller, and were not demonstrated till 1836 (Sprott Boyd). Still, the older observers knew that a fluid could be squeezed out of the mucous membrane of the stomach. It was not until so recently as 1852, that the acidity of this juice was clearly shown by Schmidt to be due to free hydrochloric acid. Previously to this time, much controversy took place as to the real nature of the acid. In 1834, Eberle found that infusions of the mucous membrane of the stomach with a little acid had digestive properties. In 1836, Schwann suggested the name pepsine for the digestive principle, and, in 1839, Wassman succeeded in isolating it. The lecturer then referred to the experiments of Mialhe, Lehmann, Corvisart (1854), and Messner (1859), as showing the action of gastric juice on albuminous matters.

Next, as to the pancreatic fluid; so long ago as 1659, De la Boe first observed this fluid. His pupil, De Graaf, obtained it from a living animal by a tube inserted into the pancreatic duct. Some of the early observers made the mistake of describing it as being acid; and it was not until 1825, that Tiedemann and Gmelin conclusively showed that it was alkaline. Eberle, in 1834, first discovered that aqueous infusion of pancreas of the ox emulsionised fats; and, fifteen years afterwards (1849), Claude Bernard confirmed the opinion of Eberle; and showed, further, that it had the property of splitting up fats into glycerine and fatty acids. About the same time, Eberle noticed the action of pancreatic infusion on chyme—namely, that it cleared up the fluid if it contained albuminous matters in suspension; and later, in 1836, Purkinje and Pappenheim showed that it had a digestive action on such matters. Finally, in 1844, Valentin showed that an aqueous infusion of pancreas changed starch into glucose.

The intestinal juice was first collected by Haller. He opened the bowel, cleared out the contents, and stimulated the mucous surface with acetic acid. Little, however, was known about it till 1846, when Frerichs showed that it changed starch into glucose, and emulsionised fatty matters. The notion that it also has an action on albuminous substances is referable to Bidder and Schmidt, who published their researches in 1852.

The lecturer then referred to the experiments of Brodie (1823), Mayo (1826), Tiedemann and Gmelin (1825), Magendie (1836), and Schwann (1844), as showing that, when the bile was prevented from passing into the bowel by ligature of the bile-duct, the absorption of nutritious matters, especially fatty matters, was affected. He specially alluded to the establishment of biliary fistulæ by Schwann, as being a new method in physiological research, which had been very fruitful of results.

The last part of the lecture referred to the process of absorption. Aselli discovered the lacteals in 1622. In 1651, Pecquet found that these ended in the receptaculum chyli, and that the chyle passed thence into the subclavian vein by the thoracic duct. The valves in the lacteal were discovered by Ruysch (1638-1731). According to Glisson, Jolyffe, about 1652, discovered the lymphatics, but the discovery is usually attributed to Olaus Rudbeck (1629-1702), of Upsala, and to Thomas Bartholin (1616-1680) of Copenhagen. The lecturer then alluded to the controversy that arose regarding the relative absorptive powers of the veins and lymphatics, showing how William Hunter (1718-1785), John Hunter (1728-1794), and the second Munro (1733-1817), contended that the lymphatics alone could absorb. This view held its ground for a good many years, when it was upset by the well known experiments of Magendie (1783-1855), first announced about 1809. He proved that, after all structures had been divided except artery and vein, poisonous absorption might still occur.

The lecturer concluded with a short description of the grounds on which physiologists hold that lymphatic absorption from the tissues occurs. The true origin of our knowledge of the function of

the blood-glands was traced to William Hewson (1739-1774), who was the first to show that the so-called blood-glands were concerned in one function, namely, in the elaboration, or, as he called it, the "secretion" of blood. For many years Hewson's work had no attention paid to it, but its excellence was brought to light in consequence chiefly of the discovery, by Virchow and Hughes Bennett, of leucocythæmia, in 1845.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE IV.—DEVELOPMENT OF THE LAMPREY. (*Continued.*)

ON the ventral aspect of the head, immediately in front of the mouth, is the olfactory pit. It is from its beginning unpaired, and in the larva just hatched forms a shallow groove of thickened epiblast at the base of the fore-brain. Its ventral part is gradually prolonged into a pit, which extends backwards beneath the brain, nearly up to the infundibulum.

On the side of the head, nearly on a level with the front side of the notochord, is the eye. It consists of a very shallow optic cup with a thick outer or retinal layer, and a thin inner or choroid layer. In contact with the retinal layer is placed the lens, which is formed by an invagination of the skin, to which it is still attached at the time when the larva is hatched. The eye only differs at this stage from that of other vertebrates in its extraordinary small size, and the rudimentary character of its constituent parts. The auditory sac is a large vessel placed at the side of the brain, opposite the first persistent branchial pouch. The brain is formed of the usual vertebrate parts, but it is characterised by the very slight cranial flexure. The fore-brain consists of a thalamencephalon and an undivided cerebral rudiment. To the roof of the thalamencephalon is attached a flattened sac, which is probably the pineal gland. The floor is prolonged into an infundibulum, which contains a prolongation of the third ventricle. The lateral walls of the cerebral rudiment are much thickened. Behind the thalamencephalon follows the mid-brain, the sides of which form the optic lobes, and behind this again is the hind brain. The notochord is continued forward in the head to the hinder border of the infundibulum, and is slightly flexed anteriorly.

From the hinder border of the auditory region to the end of the branchial region the mesoblast is dorsally divided into myotomes, which nearly correspond in number to the branchial pouches. The head of the larva differs strikingly in general appearance from that of other vertebrates. This is due to the want of a pronounced cranial flexion in the former, a want probably caused by the small development of the fore-brain. The stomodœum of Petromyzon is very large. In the region of the trunk there is an uninterrupted dorsal fin, continuous with a ventral fin round the end of the tail. There is a well-defined body-cavity which is especially dilated in front, in the part which afterwards becomes the pericardium. In this region is placed the nearly straight heart, divided into an auricle and ventricle, the latter continued forward into a bulbus arteriosus. The myotomes are very numerous, are separated by septa, and have a wavy outline. The notochord is provided with a distinct sheath, and below it is a subnotochordal rod. The alimentary canal consists of a narrow anterior section free from yolk, and a posterior region, the walls of which are largely swollen with yolk. The anterior section corresponds to the region of the œsophagus and stomach, but exhibits no distinct parts. Behind this, the alimentary canal dilates considerably, and on the ventral side is placed the opening of a single large sac, which forms the commencement of the liver. The posterior part of the tract constitutes a kind of yolk-sac, the vertical walls being thick, and formed of several layers of yolk-cells. The excretory system consists of two segmental ducts, each connected in front with a well-developed pronephros, and with about five ciliated funnels opening into the pericardial region of the body-cavity. The mouth undergoes considerable change during the course of development. The upper lip becomes much more prominent, forming, of itself, the anterior end of the body. The opening of the nasal pit is, in this way, relatively thrown back, and is at the same time caused to assume a dorsal position. On the inner side of the oral cavity a ring of papillæ is formed. Dorsally, these papillæ are continued forward as a linear streak on the under side of the upper lip.

The gill-pouches become gradually enlarged, but it is some time before their small external openings are established. Their walls, which are entirely lined by hypoblast, become raised in folds forming the branchial lamellæ. The walls of the head-cavity between them become resolved into contractors and dilators of the branchial sacs. The extrabranchial basketwork becomes established very early. On the dorsal walls of the branchial region, a ciliated ridge is formed. The primitive hepatic diverticulum grows rapidly outwards, and forms a tubular gland. The opening of the duodenum changes from a ventral to a lateral or even dorsal position. The ducts lead into a gall-bladder imbedded in the substance of the liver. Ventrally the liver is united with the abdominal wall, but laterally passages are left by which the pericardial and body-cavities continue to communicate. The yolk-cells doubtless supply nourishment for the growth of the embryo; and although in the anterior part of the intestine they become, to some extent, enclosed in the alimentary tract and break up, yet, in the posterior part, they become wholly transformed into the regular epithelium of the intestine, a condition which does not obtain in other vertebrates. The opening of the olfactory sac becomes narrowed and ciliated; it is carried on to the dorsal surface of the head. The lumen of the sac is well developed. No maxillary arch proper is developed. The larval stage of the lamprey seems to correspond to the adult stage of the development of the hag-fish; while, as will afterwards be seen, the adult lamprey reaches only to the state of development in which we find the larval frog.

THE CAUSE OF THE WAVY OR INTERRUPTED BREATH-SOUND OF INCIPIENT PHTHISIS.*

By D. C. McVAIL, M.D.,
Lecturer on Medicine in the Western Medical School, Glasgow.

BRIEFLY stated, my view of the causation of the wavy or interrupted breath-sound of incipient phthisis is, that it is due, not to any inequality of the breath-sound itself, but to the breath-sound having here and there superadded to it less or more of the cardiac sound which, by the partial pulmonary consolidation, is conducted with abnormal force.

When the pulmonary tissue is quite normal, and when the heart is beating with usual force, the cardiac sounds are not heard at all over the apices of the lung during inspiration. When there is considerable pulmonary consolidation, or when the heart is beating very forcibly, or when there is simultaneously pulmonary consolidation and cardiac overaction, then the heart-sounds may be quite distinctly heard through the inspiratory breath-murmur. But intermediate between these two conditions is a third, in which occurs the so-called wavy or interrupted breath-sound. Here the consolidation of the lung-tissue is but very slight; and, while conducting the cardiac sounds with more than usual ease, so that in the inspiratory pause they are quite distinctly heard at the apex of the lung, still the inspiratory sound is in loudness so much more distinct to the ear, that it masks the cardiac sounds; so that during the continuance of the inspiratory sound, they are not distinctly heard *as such*, but to the ear it only appears as if the inspiratory sound were at these points of time abnormally loud; it

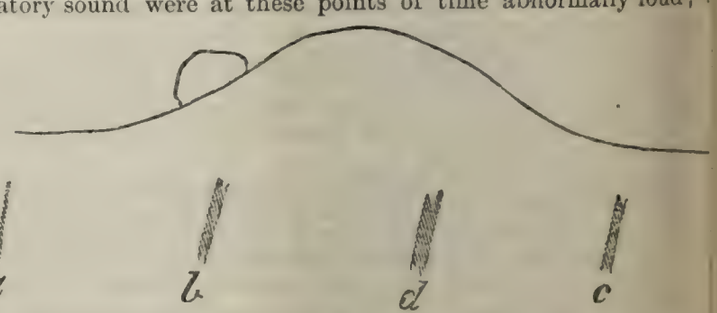


Fig. 1.

thus seems wavy or jerky. If, for example, under such circumstances of slight increased conductivity of the lungs, a cardiac systole occurred in the middle of each inspiration, then the inspiratory murmur would be augmented in the manner shown in Fig. 1.

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Worcester, August 1882.

Let *a b d c* be four heart-beats occurring during a complete respiration, consisting of inspiration, expiration, and pause. Then, on listening over the pulmonary apex, where slight consolidation is present, at beats *a d* and *c*, the heart-sounds will be heard distinctly as such, but at *b*, which is in the centre of the inspiratory-murmur, the cardiac-sound will be so masked by the breath-sound, that it will not be distinctly heard as such, but the breath-sound will, at that instant appear only as if it itself were abnormally loud; it will seem wavy or jerky.

If now, in the course of weeks or months, the consolidation becomes considerably greater, the pulmonary conductivity will, in proportion, become greater, and the heart-sound may be so well conveyed, that it will speak out quite distinctly through even the harshest inspiratory-sound, and so the breath-sound will no longer be described as being wavy, but it would be entered in a clinical record that the heart-sounds were abnormally well conducted.

If, during an inspiration, there were two cardiac contractions, then the breath-sounds would mean two augmentations (Fig. 2) at *b* and *c*; and thus the inspiratory sound, instead of appearing to be divided into three parts, as in Fig. 1, would appear as broken up into five parts (1, 2, 3, 4, 5 in Fig. 2), and this could not be better described than by the term cog-wheel respiration.

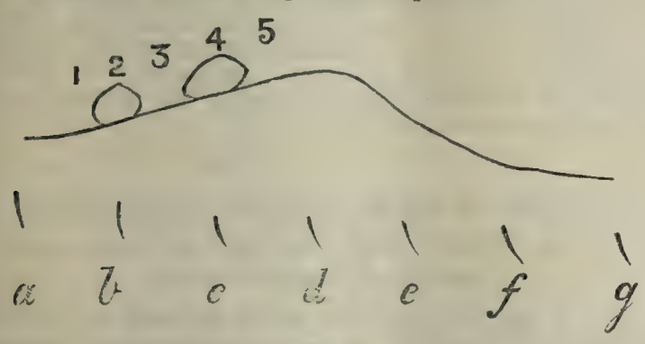


Fig. 2.

Thus the wavy inspiratory sound, due to the breath-sound being supplemented by the cardiac sounds, may be of a very varying character. As one effect of partial consolidation of the pulmonary tissue is to augment greatly the expiratory sound, we have it also, in like manner, liable to become wavy.

Whether or not wavy respiration is ever due to other causes than that I have advocated, I do not at present give a positive opinion; but certainly, in the great majority of cases, the mode of its production is that which I have just explained.

Dr. THEODORE WILLIAMS (London) said he quite agreed with what Dr. McVail had said; but if Dr. McVail would refer to a work on consumption by his (Dr. Williams's) father and himself, now out of print, in which almost exactly the same view was advanced, and he might have mentioned that the original idea of it was suggested by Dr. Theophilus Thompson.

ON THE USE OF ANÆSTHETICS DURING LABOUR.*

By THOMAS D. SAVILL, M.D.Lond.

IN opening this discussion, I will ask your kind attention to three questions:—

1. What are the advantages and disadvantages of the use of anæsthetics during normal labour?

2. What are their advantages and disadvantages during abnormal labour?

3. What is the best kind of anæsthetic to use, and the best mode of administration?

1. In normal labour. Many years ago this subject had a moral aspect, and I am told that the question still exists in the minds of the laity, but we need scarcely stop to discuss it now. The pains of even healthy labour are in some cases very severe, producing at times what almost amounts to delirium. Are we not then justified in giving some form of anodyne, just as we would for a neuralgia? Provided we avoid certain risks, why should we not assuage the pain in the one as well as in the other? In these days of scientific medicine, when we are so far in possession of the knowledge of the conditions and sources of danger, we can with greater boldness employ agents for the relief of suffering which, in darker times, we rightly hesitated to use even for the necessary treatment of disease. Moreover, pain is a depressing agent in itself, and lowers the vitality of the sufferer; and we ought, on this account, to relieve it where possible. Of course, it behoves us first to become acquainted with the risks we run, and to see that they are reduced to a minimum. But the relief of pain is not the only advantage which anæsthetics have in normal labour, for they also obviate a tendency to certain complications. Rigidity of the cervix, and other irregular uterine contractions, depending on functional causes, are less likely to occur when chloroform has been given, even to a slight extent; and the indirect good thus done is equivalent to all the advantages of a speedy over a tardy labour. Again, in some women there is an inherent predisposition to puerperal convulsions, so justly dreaded by the obstetrician; and this tendency anæsthetics will counteract by quieting the nervous system, and abolishing the pain which acts as an exciting cause.

It is right, however, that we should bear in mind the objections that there are. The first, and indeed the only formidable one, is the tendency to produce *post partum* hæmorrhage. It is now well established that both ether and chloroform, when given to the full extent, produce great relaxation of the muscular tissues throughout the body—voluntary and involuntary. About the voluntary, anyone can assure himself; and that the organic muscles also share in the general relaxation, is evidenced by the diminished vermicular movements of the intestines of an animal after death; by the dilatation of the pupil which occurs after the initial stage of administration; and by the diminution, and sometimes abolition, of the uterine contractions, which occur when the full effect of either of these drugs is induced. It is in this way that they hinder nature's method of closing the uterine sinuses after the separation of the placenta, and then flooding occurs. How to obviate this untoward result should be one of our chief aims, when an anæsthetic has been used.

By interfering with the uterine contractions* before expulsion of the fœtus, labour becomes somewhat prolonged. And, further, all anæsthetics (but especially ether) are apt to be attended with troublesome vomiting, and followed by headache and depression.

You will notice that all these evils arise from complete anæsthesia. Partial anæsthesia is not attended by them, if other conditions be favourable; and I believe it is this fact which will explain the discrepancy between some of the statements as to the effect of anæsthetics on the uterine contractions.

2. Let us turn now to the case of abnormal labour. By that, I mean labour that is complicated in some way, or necessitating some form of operative interference.

Here, besides relieving pain, an anæsthetic greatly facilitates manipulations of all sorts. That very relaxation which is otherwise an evil is here of great use; especially is it so in the operation of turning. Of all operations, perhaps, it is more advantageous in cases of version than in any other; but at all times, whether for craniotomy, cephalotripsy, high forceps operation, or the introduction of the hand into the uterus, fully induced anæsthesia gives great assistance to the operator, and much ease to the patient, enabling her to undergo the operation without movement or shock. Again, besides obviating a tendency to the two complications—spasm of the cervix and puerperal convulsions—chloroform constitutes the best and speediest mode of treatment for both of these conditions when they arise; the first by relaxing tissue, and the second by abolishing the reflex excitability of the nervous system.

The disadvantages are—1st. The great tendency to the production of *post partum* hæmorrhage as already mentioned; and 2ndly. A fresh one—in the way it muffles and obscures the pains, so that we cannot tell the precise moment to aid nature with our efforts. This applies mainly to the group of forceps operations.

3. We now come to the question: What is the best anæsthetic to use and the method of its administration? The division of cases into normal and abnormal has a practical application; for in normal cases it is given solely with the object of relieving pain, and it is quite unnecessary to push the anæsthetic to loss of consciousness; but in abnormal cases, besides relieving pain, it is given as part of the treatment, and complete anæsthesia must be induced.

The best kind of anæsthetic to use has hitherto been pretty well agreed upon; for, although many drugs have been suggested, chloroform has justly carried off the palm. Of the two commoner anæsthetics, chloroform and ether, we know that, whereas chloroform tends to produce death suddenly by cardiac paralysis or syncope, ether, in most cases, tends to death by choking

* Read before the East Surrey District of the South-Eastern Branch.

* Churchill (*Theory and Practice of Mid.*, fifth edition, p. 236), and Leishman (*System of Midwifery*, second edition, p. 822) deny this; others agree in the above statement. I offer an explanation for the discrepancy in the next paragraph.

up the lungs or larynx. In the fatal syncope of chloroform, all is over in a moment; artificial respiration or anything else is of little or no avail. But, in the asphyxia of ether, by pulling the patient's tongue forward, rolling him over on his side, and, lastly, by artificial respiration, we can almost always restore him. And this constitutes the only, though great, advantage of ether over chloroform in ordinary cases. But these arguments do not hold in labour, for it is now well known that chloroform has but little tendency to the production of fatal syncope in pregnant women; a fact which may be accounted for, partly by the cardiac hypertrophy that always accompanies pregnancy, and partly by the absence of anything like terror in the excitement of the moment. On the other hand, the disagreeable irritation of the lungs which ether produces, and the struggling and length of time it takes to produce anæsthesia (especially in unaccustomed hands) constitute very great objections to its use in parturition. Some, however, still prefer it, and no doubt it is of much value when for some reason chloroform cannot be given. Methylene dichloride has been tried, and found wanting; and you will find the merits of nitrous oxide expounded by Dr. Macan in the JOURNAL for February 2nd of this year. Chloral is useful during the first stage—at which time chloroform is not advisable—and is warmly supported by Dr. Playfair.* Its action is the same as chloroform, and it is safer, but it is also much less speedy and efficacious.

The method of administration of chloroform must differ according to the purpose we have in view. If the relief of pain be our only object, its partial administration may be effected either by giving the crude drug in small quantities, or by diluting it to the appropriate strength with alcohol.† This latter method has the advantges of being safer and more exact. The alcohol, also, in some degree, counteracts the depressing influence of the chloroform. I believe the most convenient proportions to be equal parts by measure of chloroform and rectified spirit; and there are two small practical points worth note: (1) the addition of some aromatic serves to make the mixture more agreeable, perhaps to prevent sickness, and to avoid confusion with pure chloroform; (2) add the chloroform to the spirit, so as not to get a precipitate.

Concerning the inhaler, the simplest is the best. A perforated box with a pad of lint inside, or handkerchief folded will do, or Skinner's inhaler and drop-bottle are convenient. There is no need for a special administrator in these cases; the patient can give it to herself. Direct her to take half a dozen deep inhalations, and then, as she becomes drowsy, the inhaler drops off, and the administration ceases. An useful test of the effect produced is her power of conversation.

In normal cases, chloroform should not be given in the first stage, when it materially interferes with the mechanical dilatation of the os. In the second stage, it may be given at any time, and becomes especially necessary towards the end, as the head passes the vulva. Much of the success, or the reverse, depends on the precise moment at which the administration is stopped. If too early, the patient is unrelieved during the most painful period of the whole labour; if continued too long, you run the risk of hæmorrhage. In the third stage, it is not called for at all, except, perhaps, in some cases of retained placenta from hour-glass contraction.

In abnormal cases, where it is desirable to produce complete anæsthesia, the crude drug must be administered; and it is of the utmost importance for one person to devote his attention entirely to the anæsthetic. The mode of administration differs in no way from ordinary cases, except, perhaps, for the length of time it may be given.

In conclusion, allow me to indicate, by way of summary, what I believe to be the main precautions, whose observance would render the use of chloroform perfectly justifiable.

1. There are certain women who have a tendency to flood at every confinement, and others in whom there seems an already too great relaxation of fibre—weak anæmic females in their eighth or tenth confinement; and to these it would be unadvisable to give chloroform, except for necessity. Happily, it is not these women who suffer the most pain, but rather those strong healthy primiparæ whose pelves and general build approximate to the masculine type.

2. We should not give it when labour is complicated with severe vomiting, or with acute disease of the heart or lung, unless there be imperative call for it.

3. It should not be given to the full extent, except for operation, convulsions, or spasm of the cervix; and then it is most necessary that one person should devote his entire attention to it.

4. The inhalation should be stopped directly we find the pulse becoming very weak, or the respiration irregular.

5. Anything which makes us suspect a fatty or enfeebled cardiac wall should make us cautious in the use of chloroform. Here, as in cases other than those of labour, it is not the most extensive valvular disease (so long as it be attended by compensating hypertrophy), but the atrophied or degenerate wall that constitutes the source of danger. Unfortunately, the signs of these conditions are subtle and uncertain; but a fatty heart may be suspected by an exceedingly feeble cardiac impulse, combined with an almost inaudible first sound; or attacks of dyspnœa, vertigo, and syncope, in the absence of anæmia, or valvular lesion; or the copious deposit of fat in other parts of the body, and the occurrence of dropsy without adequate cause. A dilated heart may be suspected by increased area of præcordial dulness, combined with epigastric and venous pulsation, and a want of correspondence between the violence of the cardiac impulse and the strength of the pulse. Pericardial adhesions also form a great source of danger. They may be suspected when the heart's apex is fixed above its normal position, and does not shift with respiration: or when there is depression instead of protrusion of intercostal spaces over the position of the apex, giving a wavy character to the cardiac impulse.

6. The sixth and last precaution I would mention is this. In all cases we should take extra care to prevent the occurrence of hæmorrhage after birth; by giving a full dose of ergot in a little warm water when the head reaches the perinæum; by ceasing the chloroform immediately it is born; and by rousing the patient from her lethargy as soon as possible.

* *Prin. and Prac. of Med.* Second Edition, vol. i, page 343.

† I believe originally suggested by Sansom (*Chloroform*: 1866.)

A CASE OF GANGRENOUS VARICELLA.

BY WARRINGTON HAWARD, F.R.C.S.
Surgeon to St. George's Hospital.

A. W., aged 1 year, was admitted under my care at St. George's Hospital on March 14th, 1883, on account of a number of gangrenous patches upon the skin.

The child was miserably ill-nourished, very dirty, and very ill; it weighed only six pounds and a half. On the left side of the scalp was a large scab, which, on being removed, discovered a deep ulcer, evidently formed by the confluence of several circular sores. On other parts of the scalp, and also on the face, were numerous circular scabs varying in diameter from a quarter to half an inch, covering similar ulcers. On the chest, abdomen, and back, were a number of black gangrenous patches of circular outline, of from half an inch to an inch in diameter, which in some parts were just becoming confluent. The skin around these patches of gangrene was of a dusky red colour. The larger of the gangrenous spots were all upon the skin of the abdomen. Beside these patches, there were scattered over the trunk and limbs numerous small scabs like the ordinary varicella spots in the drying stage, and also a few small vesicles and papules. The child was frequently sick; the pulse rapid and feeble; temperature 104°; and there was dulness to percussion over the base of the left lung.

The history was as follows. The parents were healthy. I saw the mother, who looked in good health. She had had six children, of whom three were dead from infantile diseases. The two other children were said to be healthy. This child had been puny and sickly from birth, and had never thriven. It was vaccinated in January, and the vaccination-spots had, according to the mother's description, run a perfectly natural course, and healed well. A week before its admission to the hospital, a crop of small red spots, of the size of a pin's head, came out on the child's face, chest, and abdomen. These afterwards became small blisters, resembling, the mother said, "vaccination-spots at the end of a week from vaccination." The mother did not know of any other children in the house or among her friends having chicken-pox. The spots became black, and began to increase in size, about the fourth day of the eruption.

When I saw the child, I was at once struck by the resemblance of the eruption to that represented in the picture accompanying Mr. Hutchinson's paper on Gangrenous Eruptions in connection with Chicken-pox and Vaccination, in the *Medico-Chirurgical Transactions* (vol. lxv, p. 12); and this, with the history of the case, led to the diagnosis of gangrenous varicella.

The child died on the fourth day from admission, and at the *post mortem* examination I discovered that the child had been seen as an out-patient on the third day of the eruption by the house-physician, who had recognised the case as one of ordinary varicella.

The examination (made by Mr. Ross, curator) showed that the gangrenous patches upon the abdomen had penetrated the entire thickness of the skin, exposing the muscles beneath; in other parts, the ulceration was of less depth. In each lung there were several small recent secondary abscesses, surrounded by a zone of hyperæmic tissue; on the left side there was also recent lymph on the surface of the pleura, and two ounces of purulent fluid in its cavity. A careful inspection of the brain, the other viscera, and the joints, revealed nothing unnatural.

In this case the diagnosis was made certain by the child having been seen by a competent observer, with the ordinary eruption of varicella before gangrene had commenced.

But to any one acquainted with Mr. Hutchinson's paper, the history and aspect of the eruption made the nature of the case sufficiently apparent. The gangrene in this instance set in suddenly and progressed with great rapidity; and a point of interest is the early occurrence of pyæmia, which was no doubt the immediate cause of death.

I am afraid the case does not throw any light upon the cause of this serious complication of what is usually a trifling disease. This child was very ill-nourished (probably from wrong feeding) and feeble, but other recorded instances of the disease have occurred in healthy children.

PEPTONES IN URINE.

By CHARLES HENRY RALFE, M.D., F.R.C.P.,
Assistant-Physician to the London Hospital.

Since my communication to the Journal, April 7th, in which I alluded to the detection of peptones in urine, I have had three cases under observation at the London Hospital, in which the urine gave the reaction characteristic of these bodies with Fehling's solution. As the subject has again been brought forward in the interesting communication of Dr. Oliver (April 21st), and by Dr. George Johnson in last week's Journal, I venture to think that brief notes of the cases may not prove uninstructive at the present time.

Case I.—A lad aged 18, who had received, some days previously, a severe blow over the left flank, and for which he had been treated at the time in the receiving room of the hospital, applied with a letter at the out-patient department on April 9th. He stated that, since the accident, he had been feeling ill and weak, and that he still suffered much from pain in the left iliac region, passing down the groin into the thigh and hip; his bowels were much confined. The urine was examined for blood and albumen, and a small quantity of the latter was found. On testing the urine with Fehling's solution, a decided rosy red coloration was developed just above the junction of the two fluids. He was ordered to take an alkaline mixture, to which a few drops of tincture of opium were added, and a draught of sulphate of magnesia every other morning. On April 16th, he reported himself as much better, the urine was free from albumen, and no coloration was developed with Fehling's solution.

Case II.—A woman, aged 54, was admitted as an out-patient April 16th, with dyspeptic symptoms, apparently due to gastro-duodenal catarrh. As she stated she was frequently disturbed in the night time to pass urine, and suffered from weakness and debility, the urine was examined for albumen; none, however, was found, but the red coloration with Fehling's solution was well marked. She was ordered a mixture of bismuth and nux vomica three times daily, and a compound rhubarb pill, with belladonna, twice a week at bedtime. April 30th. The dyspepsia was much relieved; there was still a coloration with Fehling's solution, but fainter.

Case III.—A woman, aged 55, but looking very much older, was first seen April 23rd, complaining of rheumatism, dyspepsia, and shortness of breath, with a frequent desire to pass urine; she was very weak and debilitated. The urine was examined for albumen, but none was found; an exceedingly distinct, rosy red coloration, however, was developed with Fehling. In this instance, the urine gave a precipitate with picric acid, which redissolved on the application of heat. This patient was ordered quinine. On April 30th, I saw her again; she felt a little stronger, but the coloration with Fehling's solution was still distinct.

In order to ensure the development of the characteristic reaction, the following mode of procedure must be adopted. A drachm of Fehling's solution is to be introduced into a test-tube, and then a drachm of urine is to be floated carefully on the surface. Where the urine comes into contact with the alkaline copper solution, a thick zone of phosphates will form, above which, if peptones be present, a red halo will appear, not violet, as stated by Dr. George Johnson, but a decided claret, or ruby red. Indeed, as a matter of fact, it is laid down in works on physiological chemistry, that the violet tint is characteristic of albumins, while the red coloration distinguishes the peptones from these. Great care must be taken not to mix the urine with the Fehling's solution, otherwise the deposit of phosphates will be diffused, and the red coloration obscured. It is probable, owing to want of attention to these details, that Dr. George Johnson has failed hitherto to meet with a specimen of urine showing the reaction.

The urine, too, should be recently passed. In Case 3, the reaction was very distinct in the sample of urine passed by the patient in the out-patient room, and a few hours later it was well marked when I showed it to a friend; but by the next morning the urine lost the power of developing the coloration with Fehling's solution, yielding instead only a muddy cloud. The urine had evidently undergone putrefactive changes, for it smelt abominably. I have since thought the peptones in this case might have been derived from pancreatic digestion; the result of which, as is well known, if prolonged, is to lead to putrefactive changes in proteid substances.

In my first communication I stated my belief that the peptones found in the urine would probably consist of the "mixed" peptones, and not merely of "true" peptones. I find, on reference to Dr. Michael Foster's *Text-Book of Physiology*, that the proteid body observed by Dr. Bence Jones in a case of osteomalacia, closely resembles the A peptone of Meissner, or if the nomenclature of Kühne be adopted, hemi-albumose. This body, as I need hardly observe, is one of the initial products of both peptic and tryptic digestion.

In conclusion, I venture to think that a consideration of the conditions under which peptones appear in the urine is likely to furnish us with important information, not only as regards the physiology of these bodies, but with respect to many obscure derangements of digestion. The test is so easy of application, and the reaction so plainly marked, while the number of instances in which it is found to occur are far from being rare and exceptional, that we ought soon to be able to collect a sufficiency of facts from which some useful deductions may be drawn.

ON THE ACTION OF CANNABIS INDICA.

By JAMES OLIVER, M.B.,
House-Physician to the Hospital for Women, London.

Indian hemp for some time back has been vaunted as a medicine of some therapeutic value in cases of dysmenorrhœa; to me, however, its action seems so variable, and the preparation itself so unreliable, as to be hardly worthy of a place on our list of remedial agents at all.

Two preparations of this drug have been recommended for use, viz., the tincture and the extract; it should matter little which is used, the tincture being simply a spirituous solution of the extract. Much, however, as far as results obtained go, seems to depend upon its place of cultivation. Many of those persons who experienced unpleasant effects from one-grain doses had previously taken the same dose (different sample, however,) with almost no result at all.

It is usually said that cannabis Indica produces pleasurable symptoms; such, I regret to say, has not been my experience; in fact, the result has frequently been alarming to the friends of the patient, but more frequently still, from the comparative inertness of the drug, no result is obtained at all, even although three and four grains have been given as a dose. When unpleasant symptoms have been produced by the use of this drug, they do not readily pass off, but will often persist for a day or two, and the too early use of morphia will not uncommonly aggravate the condition.

The physiological effects of the drug usually manifest themselves about two hours after administration; this, however, varies, being hastened or retarded according to the condition of the stomach as regards food at the time of ingestion.

Cerebral symptoms are the first to develop, the patient experiencing peculiar indescribable sensations in the head, by no means pleasant in character; and although quite rational, knowing all that is going on, some have an irresistible desire to be always on the move. In some cases earlier, in others later on, the patient loses control over the muscles, being unable to move them at will; in one case, the muscles of the larynx were so affected, and the patient when interrogated was for the time being unable to respond.

Muscular anæsthesia is often produced by the use of Indian hemp,

and this is, as a rule, so complete that the whole body feels unsupported, as if floating in air. Pain, even at this stage, frequently persists, showing how little influence this drug evidently has on the sensory nerves. In some cases, spasmodic contractions of the voluntary muscles result, and this is more especially to be noted in the muscles of the jaw. Dimness of vision in many cases quickly follows, the pupils in some remaining unaltered, in others being apparently contracted. The pupil responds to light, but accommodation is interfered with, objects at a distance being very indistinct. The pulse is invariably rapid, but quite regular. Sensibility to touch is unaltered. Numbness and tingling have been constant symptoms in all the cases.

OCCIPITO-POSTERIOR PRESENTATIONS.

By A. D. LEITH NAPIER, M D., Dunbar, N.B.

Apropos of recent memoranda relating to occipito-posterior presentations, three cases have recently fallen to my lot within one week.

Case I.—A secundipara, aged 34, had been delivered, by forceps, two and a half years before, and then sustained perineal laceration, which was sutured and healed. On March 26th, 1883, I was sent for about 11.30 P.M. On examination, found the membranes ruptured, the os well dilated, the anterior lip swollen, posterior freely movable. The head was lying in the third position (right oblique, occiput posterior), and fixed in the middle third of the pelvis; transverse diameter was somewhat contracted. The anterior lip was supported, and slipped over the head; there was no natural attempt at rotation. Manual efforts to bring the occiput forwards failed. Equal parts of ether and chloroform having been given, the straight forceps was applied about 1.50 A.M. Rotation was attempted cautiously, but as more force seemed necessary than was thought justifiable, it was not continued. It was impossible to raise the head, as mentioned by Smellie and others. Traction being directed backwards, as the head neared the outlet, the forceps, pressing on the cicatrised part of the perinæum (the cicatrix being easily distinguished by its hardness and non-elasticity), caused a right lateral laceration of about an inch; the tear was foreseen and calculated on. The head came without further rupture, and a large female child was born about 2.10 A.M. On the removal of the placenta, a violent gush of blood occurred, and the uterus did not contract. More ergotine was injected, and with extra-uterine and intra-uterine manipulation, the uterus contracted. A silver suture was inserted for the perineal rent, and the patient washed with carbolised water. No single unfavourable symptom during the puerperium.

Case II.—A secundipara, aged 26, had been delivered two years ago instrumentally, and sustained considerable perineal laceration, for which she consulted me several months later. Labour came on on March 30th, 1883. On visiting about 4 P.M., I found the membranes had been ruptured for some hours; the os was almost of the size of a crown; the head on the upper third and in the fourth position, left oblique occiput-posterior. The patient was highly nervous, and the pains most feeble and unsatisfactory. I revisited about 5 P.M., and found very little alteration, except that the parts were hot and tense, and the anterior lip swollen; the caput succedaneum was prominently felt on the right parietal bone. Dr. Steele's modification, and, afterwards, one of Barnes's largest sized bags was introduced within the uterus anteriorly; the former became displaced; and, partly owing to accidental tension from the connecting syringe, the larger bag also was dislodged; it was reintroduced, but not, as formerly, wholly within the os, and fully distended. Pressure on the bag, and digital posterior expansion during the pains, shortly relaxed the os; the bag was withdrawn, and the os slipped over the head. The pains increased in severity; the head advanced, and, aided by digital manipulations, the occiput rotated forwards as it neared the pelvic floor, and, before seven o'clock, a large male child was born with the occiput anterior, the face turned to the right thigh of the mother. The umbilical cord entangled the shoulder. Recovery excellent.

Case III.—This was a quartipara, aged 29; youngest child eighteen months old; her deliveries had been usually easy. The patient was taken ill on the afternoon of April 1st, 1883. I was summoned on April 2nd about 4 A.M. On examination, the os was found easily dilatable, the membranes unruptured; the head occupied the right oblique position, the occiput posterior. After waiting nearly an hour, and finding no alteration, and noting the inefficiency of the pains, I supported the anterior lip, which slipped over the forehead, ruptured the membranes, and shortly after the pains increased. Upward pressure was maintained on the head anteriorly, and the natural rotation aided during the pains. As the head reached the pelvic floor, the perineal and vaginal tension was relaxed by stretching the posterior vaginal wall by the fingers; the occiput moved to the front, and, about 6.30 or so, a fine male child was delivered: the face rotated downwards to the left thigh. Recovery was excellent.

The occurrence of these consecutive occipito-posterior presentations is uncommon. Two clear examples of third presentations, within so short a time, is a proof of the assertion advanced by modern writers, that these are less unusual than was credited by byegone authorities.

The character of the labour was alike in all three, inasmuch as the pains were feeble, and of brief duration; artificial aid was given in all. The anterior lip was pressed upwards, as it delayed delivery, and far more effectual support to the anterior portion of this can be made digitally.

In Case I, the narrowed transverse diameter and the unyielding perinæum probably explained the non-possibility of forward occipital rotation. Despite assertions to the contrary, I venture to think some perineal laceration in instrumental occipito-posterior deliveries is almost inevitable, unless either the fœtal head is smaller, or the maternal parts more roomy than the average. I also think that more scientific and accurate instrumentation can be carried out in these cases by means of straight forceps, unless the head is at the brim, when curved instruments are preferable. To reverse curved forceps, for rotation purposes, would generally be more risky than the circumstances warranted. I esteem artificial rotation, by curved instruments, attempted in the cavity, far more hazardous than the chance of moderate perineal laceration, which is rendered probable by effecting delivery with the occiput backwards.

In Case II, pressure on the anterior part of the head was continuously maintained by the India-rubber bag; certainly this manœuvre was serviceable, and merits further trial. Had it not been for its adoption, I am convinced the case would have required forceps.

Case III illustrates the value of precise diagnosis, and how, by means of safe and ready aid, nature may be assisted.

ON THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.

By W. J. WALSHAM, F.R.C.S.

In the British Medical Journal of April 21st, Mr. James Black, referring to an article of mine on the above subject in the Journal of April 7th, suggests, as a possible objection to the method therein advocated, that, in the case of an artery such as the femoral, the branches of which are apt to arise abnormally, a large branch might occur between the two ligatures, and, not being discovered until the moment of dividing the vessel, would cause at least some embarrassment. The presence of a large branch either close above the upper ligature or below the lower would, no doubt, tend to endanger the success of the operation, as it would were it to occur near a ligature applied in the usual way. Given, however, an abnormal branch at the situation where the artery is usually tied, should it happen to arise between the two ligatures, it would, I take it, be a fortunate occurrence for the patient, as a ligature could then be applied to it also before dividing the vessel, and all chances of secondary hæmorrhage from this source be prevented. As to the discovery of such an abnormal branch, Mr. Black says that, when an artery is neatly tied, such a very small opening is made in its sheath, that it would be quite impossible to tell whether a branch is given off from the posterior aspect of the trunk. This, of course, holds good in applying a ligature in the usual way, but not in the method advocated by me. In my cases, the sheath having been freely opened, the ligatures were applied a little less than half an inch apart (*not* a little less than an inch)—*i.e.*, as close together as possible, consistent with the division of the vessel and the prevention of the slipping of the ligatures. The small portion of the artery, therefore, between the two ligatures, was fully exposed, and a director passed under it before the division was made. Any branch, consequently, arising from its posterior or other aspect, would have been readily discovered.

OBSTETRIC MEMORANDA.

A CASE OF CYSTOCELE COMPLICATING LABOUR.

On January 10th, a patient of mine, who was pregnant, complained to me that she had had "bearing-down pains" in the lower part of her body, and that she thought something had given way. I made a digital examination, and found a tumour protruding through the vulva. I could pass my finger behind it, and could recognise the os uteri high up and looking backwards; but anteriorly the tumour was attached. I concluded that it was a case of cystocele, and ordered my patient to preserve the recumbent posture, making frequent use of the catheter myself, to prevent accumulation and decomposition of urine. The case went on without any inflammatory symptoms until labour set in on the 29th ultimo. Early in the labour, the bladder and rectum were emptied. As the patient had a very roomy pelvis, I found that at first I could replace the tumour, and hold it up above the pubes by means of two fingers; but, as the pains became more intense, I was obliged to withdraw my fingers, and, in doing so, the bladder followed them. I then consulted with Dr. Dobie, of Keighley, and the result was that I gave the patient a full dose of ergot, placed her in the knee-elbow position, replaced the tumour and held it in position until the next pain brought down the head well into the pelvis. After this, there was no further trouble; the case was quickly and easily terminated without further complication.

I have reported this case, not because any extraordinary treatment was adopted, but because I had to deal with a complication which is apparently rare, since I have fruitlessly consulted on this point several well known midwifery books.

John H. Whitham, L.R.C.P.Ed., etc., Haworth.

IMPERFORATE HYMEN PERSISTENT IN LABOUR.

At 11 P.M., April 25th, 1883, I was called to see S.O., primipara, aged 32, said to have been in labour since Monday morning, the 23rd ultimo. I found the patient suffering from severe "pains." On digital examination, I was somewhat surprised to find that the orifice of the vagina was completely closed by a tough membrane. Anteriorly, it was comparatively thin, and attached to the edge of the vaginal orifice, whence it sloped gradually backwards until, at the posterior wall, it was attached an inch and a half from the orifice. Here it was very thick, and gave the same sensation to the finger as the walls of the vagina itself. The fœtal head could be easily felt through the tissue, which was perfectly lax, resisting all efforts at rupture with my finger.

Having decided to give the uterus time to do its best, I left, calling again at 4 A.M.; but, though the pains had been strong and frequent, things were much in the same condition. By sawing with my nail at the thinnest part, I eventually got the end of my finger in, and tore the hymen by drawing the finger backwards, until about halfway across, but I could not manage it further. I then waited an hour, in the hope that the remaining half would not be sufficient obstruction to delivery; but, "pains" becoming short and slight, I put on a forceps, and delivered without difficulty. The patient is going on satisfactorily.

I have reported this case under the belief that such a tough condition of hymen is most unusual.

It is medico-legally interesting, that one single act of copulation, in spite of the seeming difficulties of the case, sufficed for impregnation.

H. Grey Edwards, B.A., M.B., B.Ch.,
Bangor, North Wales.

A SPINA BIFIDA PRESENTATION.

On April 15th, 1883, I was called by the midwife to attend Mrs. B., who was in labour with her fourth child. Labour commenced at 2 P.M. on the previous day, the pains had been very severe until 10 P.M., but after that time became few and far between, and of very little force. When I saw Mrs. B., the pains appeared to be moderately strong but of short duration. There had been nothing abnormal in her previous confinements. On making an examination it was with great difficulty that I could reach the os, which I found nearly fully dilated; its margins were rather flaccid, and during a "pain" the presenting portion of the child exerted no pressure on them whatever.

From what I could feel of the presentation, I at first thought I had a face to deal with, there being something which very closely resembled the well defined margins of the orbits, beyond this I thought I felt the nose, and still, a little further on, my fingers slipped into what I at once took to be mouth, only it was somewhat jagged inside as though it were lined with fully developed teeth; I then came across a hand. I passed my hand into the vagina to make a more thorough examination, satisfied myself it was not the face, and at the same time could feel the unmistakable smooth outline of a child's hip, but owing to the above irregularities I was unable to tell clearly what the arrangement of parts could be, and decided to call in my friend and colleague, Mr. William Cox. We came to the conclusion that it was no face, but the lumbar region that presented, and therefore decided to turn. This was accomplished in the usual way, and the feet brought down, only slight difficulty being experienced until the head was being delivered, but with my left forefinger in the child's mouth and my right hand on its occiput, this was soon overcome. The placenta soon followed, and the mother made a good and rapid recovery. The child, a female, appeared to have been dead about twelve hours, was fully developed. The head was somewhat hydrocephalic. On further examining the body we found the cause of our not being able to clearly diagnose the presentation to be a large spina bifida situated in the middle of the lumbar region, and very much resembling to the touch the part for which I had at first mistaken it. This case struck me as being very interesting in showing how a diseased condition of a fœtus may confound the diagnosis of the accoucheur.

Charles Penruddock, M.R.C.S.Eng., L.R.C.P.Ed.,
Winchcombe.

THERAPEUTIC MEMORANDA.

APOMORPHIA, A SAFE, CERTAIN, AND QUICK EMETIC.

It has occurred to me, in several cases, to have patients who have been obnoxious to ordinary emetics. The emetic has caused nausea and depression, but no emesis. A few weeks ago, two cases of this kind occurred in my practice. One was a man who had been drinking and eating indigestible food. Domestic emetics had been given, which had produced nausea and ineffectual attempts at vomiting. It occurred to me that apomorphia, used hypodermically, might succeed. I prepared a solution containing a grain of chloride of apomorphia, twenty minims of rectified spirit, and water to two drachms, of which I administered ten minims hypodermically, which equals one-twelfth of a grain. In seven minutes, it produced free and copious vomiting. There was no nausea, nor depression, nor intolerance of food. The other case was a man who was a total abstainer. Patient had loaded his stomach with a mass of indigestible food, which had caused acute pain in his stomach. He had tried domestic remedies without success. Pain was so severe, that I was called up at night. The other case having been so successful, I at once administered ten minims of the solution. In two minutes, without any previous nausea or warning, the contents of the stomach were violently ejected on the floor, the patient not having time to get a vessel to vomit into. This was repeated two or three times at short intervals, and the patient had speedy relief. In this case, there was no nausea or bad after-effect.

From inquiries which I have made, I am convinced that the value of apomorphia as a safe, certain, and quick emetic, is not appreciated, because not known. In cases of alcoholic and narcotic poisoning, it is a most valuable remedy, and, judging from my experience in one case, the emesis is delayed a few minutes only. In cases of acute gastralgia, and convulsions in children due to overloaded stomach, apomorphia will prove a speedy cure. I have given one-sixth of a grain of the drug to children by the mouth without producing any effect whatever.

John Brown, L.R.C.P.Lond., etc., Bacup.

Housing the Poor.—Surgeon-Major Evatt has suggested the application of the customs of the Army to the question of the housing of the poor. Why should not, he asks, power be given to the Postmaster-General to expend a portion of his annual surplus in erecting buildings in which to house the persons employed? For the accommodation provided, a deduction would be made from their salaries; and thus a just interest on the funds expended would be obtained. The same plan could, he thinks, be adopted in the housing of the police, and might also be employed by large companies and firms employing many hands, for the benefit of the latter. If, he says, once the persons employed were collected together in model dwellings, reading-rooms, club-rooms, perhaps even a cottage-hospital, would develop themselves, and a strong *esprit de corps* might be created.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GENERAL HOSPITAL, BIRMINGHAM.

DIABETES TERMINATING BY COMA.

(Reported by J. W. BOND, M.D., Resident Medical Officer; and B. C. A. WINDLE, B.A., M.B., Pathologist.)

M. F., WAS aged 17 when she died; she was a stout, healthy girl, until midsummer, 1881, when her menses ceased. About this time she was frightened at being left in a house at night in charge of children, and soon noticed that she was becoming thinner and unusually hungry and thirsty, and that she passed a very large amount of urine. After food, she had a sensation "as if something was snatching it from her stomach." In October, 1881, the thirst, hunger and polyuria increased, and severe headache came on, with frequent attacks of gnawing pain in the epigastrium. On one occasion she was described as having suffered from violent pains in the abdomen, with itching all over the body. This lasted for a few hours. In February, 1882, she was greatly emaciated, weighing 5 stone 4 lbs 12 ozs., and was passing 280 ozs. of urine a day, with a spec. grav. of 1035. After this, she was able to work, but suffered from langour, and from perpetual thirst, and craving for food. She was very susceptible to cold, was short of breath, and had night-sweats. Towards the end of November she had a syncopal attack, and on December 11th slight hæmoptysis. On December 18th she had a second syncopal attack, and was admitted into the hospital under Dr. Russell.

On admission she was found to be suffering from advanced diabetes. She complained of craving for food, and thirst, that she had to pass urine frequently, day and night, and that she always felt tired. She was greatly emaciated, weighing but 5 stone 2 lbs.; her height was 4 ft. 9½ins.; her tongue and fauces were red and dry; her bowels were not confined. The expression of her face was one of intense weariness. On the first four days after admission, when on ordinary diet, she passed about 174 ounces of urine daily; it had a sp. gr. of 1045, and contained sugar, but no albumen. After this she was put for six days on a modified diet, consisting of mutton broth, eggs, milk, and toast, and passed, on an average, 117 ounces of urine a day, with a sp. gr. of 1036°, containing sugar, but no albumen. Mutton was then added to her diet, and during the next week, December 27th to January 3rd, inclusive, she passed on an average 158 ounces of urine daily, with a sp. gr. varying from 1032° to 1035°. During these thirteen days her bowels were stated to be acting regularly. On January 4th the amount of urine fell to 120 ounces. The bowels acted once. She complained of slight headache.

January 5th.—After having slept on her bed in the middle of the morning, she woke up with a headache, and with pain in the right axilla. The bowels were said to be regular. At a later period she was unable to eat her dinner. Some urine passed at 2 P.M., gave a deep Burgundy-red colour with ferric chloride, which disappeared on boiling. At 4 P.M. she was shivering, and besides the pain in the right side, which was of a stabbing character, and worse on deep breathing, she had sharp epigastric pain. She complained also of frontal headache, and that she could not see well. At 5.30 P.M. her temperature, which had been normal in the morning, was 104.5° Fahr. At 7.30 P.M. the patient had an expression of pain and seemed drowsy, her cheeks were flushed, her lips were of a good red colour, the pupils were dilated, the skin was dry. The respirations were 30 in the minute, loud and deep. Harsh breathing was heard over a small patch just below the right scapula. She had now for the first time a slight cough. The pain in the right side and epigastrium remained unaltered. The pulse was 126, and regular. She said that her bowels had been very regular for the last few days. She was ordered at once a large enema containing 2 ounces of castor-oil. By 9 P.M. the enema had brought away an enormous amount of pale-coloured fæces, the first part hard and lumpy, the latter soft, and with this numerous fragments of tapeworm. The pain had been greatly relieved, and the patient said that she felt much better. The temperature was 102° Fahr.

January 6th.—The temperature in the morning was just over 95° Fahr. She had slept well, and had scarcely any pain. Her breath smelt like sour beer. The nurse stated that yesterday it did not. During the day the patient dozed. At 8.30 P.M. the pain had returned in the right axilla and epigastrium, and she also complained of frontal headache, shortness of breath, and thirst. Her face was flushed, expression heavy, lips red, tongue red and glazed, and her skin dry. The bowels had not acted. The temperature was 100.6°, and the pulse 120, and the respirations, 24. No abnormal breath-sounds were heard. She was ordered to have an enema containing 3 ounces of castor-oil at once; and by the mouth, half an ounce of castor-oil.

January 7th.—The bowels were very freely open after the enema. The pain was soon relieved, and she slept well. The breath had lost the peculiar odour, and there was no pain in the back or belly. There was a small patch of herpes on the upper lip. Vision was good, and the temperature normal.

January 8th, 5 A.M.—The patient was in great pain. She was drowsy, but could easily be roused, and then complained of shivering up her back, and of pain in the right side, which was worse on deep inspiration. Her face was a little flushed, but not cyanotic; the pupils were dilated, and reacted sluggishly to light; the skin was dry; the patient was very thirsty. She was vomiting watery fluid. The respirations were deep and noisy, twenty-eight in the minute; all the extraordinary muscles were working. The pulse was 132 and feeble; the temperature was 100° Fahr. The blood was examined, and was found to contain an excessive number of leucocytes. Two teaspoonfuls of brandy were ordered every hour, and pilocarpine, one-third of a grain, was given hypodermically without apparent effect. One ounce of castor-oil was given by the mouth, and a large enema as before. This brought away large quantities of fæces.

At 10 A.M. the patient was very drowsy. Her temperature had fallen to 97.6° Fahr. She could easily be roused, but answered questions in a slow dreamy manner. Her respirations were heavy and deep, and the breath had an odour resembling sour beer. An examination of the blood was made, with the following results. The red corpuscles did not run into rouleaux; many granular masses, and small granules resembling free nuclei were seen; no fat was seen on testing with osmic acid; no signs of bacteria were found on staining with gentian violet and methylene blue. The proportion of white corpuscles was 11.7 per cent.

At 12.30 P.M. her face was slightly dusky, but the lips and nails were of a good red colour. She was very drowsy, breathing very deeply, and the alæ nasi were working. The pulse was 132; the respirations 30.

At 2 P.M. she had a fit of struggling, during which the limbs were rigid and the teeth clenched. At one time she sat up, and suddenly bent forward until her head nearly touched her toes. She was very thirsty.

At 4.15 P.M. she lay on her back with her eyes almost closed. The cheeks, lips, and skin were generally dusky, dry, and cold. She did not speak or cry out. She could easily be roused, and then said that she had no pain. Breathing was sighing in character. The pulse was 126, the temperature 96.6°, and the respiration 26. At 6, 7, and 8 P.M. she had convulsions, similar to those described above, and was greatly exhausted after each fit. At 10.30 P.M. she was very restless, lying with eyes partly closed; the pupils were dilated; the skin dusky. She was muttering about her thirst. No definite resemblance to the odour of acetone could be detected in the breath. On this day, albumen was for the first time detected in the urine, which had been frequently tested for it since her admission. Microscopic examination gave the following results: 1, numerous medium-sized granular casts; 2, casts resembling fatty casts; 3, hyaline cylinders of a delicate greenish yellow tint, staining deeply with magenta; these did not appear to be ordinary hyaline casts; 4, a large number of cells of vesical and vaginal epithelium. The latter was detached in large flakes, masses containing upwards of forty cells being visible. All these presented a cloudy and swollen appearance.

January 9th.—Throughout the night the patient had been quiet, and had no convulsions. She did not speak except when roused by her friends, and then only in the early part of the night, when she complained of thirst. As late as 7 A.M. she recognised her sister. After this she became more and more cyanotic and comatose, and at 11.25 A.M. died.

Necropsy, twenty-three hours after death.—The body was moderately well-nourished. The abdomen was distended, and faintly green; there was desquamation over the lower part and over the outer surfaces of the arms and thighs. Slight labial herpes remained. The diaphragmatic convexity was at the upper margin of the fourth rib. The intestines were much distended; in the pelvis were a few drachms of clear reddish fluid. The heart weighed five and a half

ounces, and appeared normal; there was a long narrow white clot in the aorta. The blood did not present any abnormal naked eye appearance, and on being allowed to stand underwent no extraordinary change. The right lung weighed ten ounces; it presented a large number of subpleural hæmorrhages; on section across the upper part of the lower lobe, a greyish circumscribed nodule was seen, about half as large again as a walnut, and somewhat wedge-shaped; it did not reach the surface. This nodule sank in water. The lower lobe was slightly congested. The left lung weighed seven and a half ounces, and showed a few subpleural hæmorrhages. The upper part of the right side of the diaphragm was congested, and showed distended veins and many hæmorrhages. The liver weighed fifty-two and a half ounces; the gall-bladder was almost empty. The pancreas weighed one and three-quarter ounces; it was apparently normal, save for its size, which was rather under the average. The stomach exhibited a few hæmorrhages at the posterior part of the pyloric end. In the upper half of the duodenum were a very large number of hæmorrhages. From this point they became fewer, and finally ceased about four feet from the stomach; in the lower part was a large mass of tænia medio-canellata, with a small amount of coloured fæces. The weight of each kidney was nearly six ounces; the capsule stripped off easily, leaving a smooth pale surface. The cortex was pale, and the Malpighian bodies were very prominent. The other organs, including the brain, spinal cord, cervical and sympathetic, and solar plexus were apparently normal.

Microscopic examination of the organs gave the following results. The white patch in the right lung proved to be a small nodule of grey hepatisation. The remaining portions of the lungs were healthy. No fat emboli were to be found in them; and it may here be mentioned that several organs were examined for them with negative results. The epithelium of the pancreas was granular and swollen. The epithelium lining the renal tubes was extremely granular and swollen, especially in the convoluted tubes. In some tubes were masses of broken down epithelium, in others granular *débris;* others, again, contained blood-corpuscles, and in a very few there were bodies somewhat resembling hyaline casts; but, though possessing their solid appearance, they lacked their translucency, and were more granular. The spleen was normal; the small arteries were examined, but were not found to present any change. The blood-vessels of the medulla were very much dilated, and lay in open spaces. We do not attach any importance to either of these appearances. The other organs presented no points of interest.

REMARKS BY DR. BOND AND MR. WINDLE.—It is somewhat surprising that, in the published cases of diabetic coma, little is said as to the diet. In this, as in two other cases of which we have exact information, diabetic coma has supervened on the adoption of a diet rich in albumen and poor in starch. We think it noteworthy that the addition of extra mutton to a generous albuminous diet, in the case just described, was accompanied by an increased daily passage of over forty ounces of urine. On the first day after this increase of diet, the amount of urine rose from ninety-six to one hundred and sixty-eight ounces.

As a point affecting treatment, we may note that though the girl constantly stated that her bowels were regularly opened, enormous amounts of fæces were passed after the various enemata which were administered on the supervention of grave symptoms. The marked relief afforded by this treatment was very noticeable. Attention may here also be drawn to the fact that in the last two cases of diabetic coma, which have come under our notice, the patients have been the hosts of large masses of tænia medio-canellata. The appearance of the ferric chloride reaction, in the urine of diabetics, does not appear to us worthy of being considered a foreshadower of diabetic coma. It is true that in this case it was first present on the morning of the attack, but on the other hand, we have recently made some observations which show that it is frequently found in the urine of diabetics, without the supervention of coma. In connection with the morbid anatomy of this case, we wish to draw attention to the condition of the pancreas. We have recently had the opportunity of examining this organ in four cases of this disease with the following results. In two cases, both of which terminated by coma, the epithelium was cloudy, swollen and granular, in one case more especially so. In the third, we did not see the organ in a fresh state, but it is described as having been "small and hard." Microscopic examination showed the presence of a quantity of fibrous tissue surrounding masses of shrunken, and in some parts fatty, epithelium. In the fourth case, that of a male adult, the organ weighed less than one ounce, and presented to the naked eye the appearance of a fibrous band about as thick as the little finger. On microscopic examination, the entire organ was found to consist of fibrous tissue, nor were we able to discover any trace of any of its normal constituents. The epigastric pain seems to be accounted for by the congestion about the diaphragm, and by the hæmorrhages there and in other parts of the abdomen. Finally, we desire to express our gratitude to Dr. Russell for having kindly placed this case at our disposal.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 8TH, 1883.

JOHN MARSHALL, F.R.S., President, in the Chair.

Congenital Absence of both Clavicles and Malformation of Cranium.—A living child, aged 2, was shown by Dr. BARLOW, in which there was congenital absence of both clavicles, and malformation of the cranium. When an infant, she had well marked signs of inherited syphilis, but there was no reason to suppose that that was concerned in causing the malformations. There was complete absence of both clavicles; the manubrium sterni was obvious, and the sternal attachment of the sterno-mastoid muscles; but where the clavicles ought to be felt, the finger came down upon the first rib. The acromion process was very prominent on both sides, and so was the spine of the scapula, which seemed, in fact, to form the summit of the shoulder. That part of the scapula which formed the supraspinous fossa, instead of sloping obliquely, so that its posterior surface looked upwards and backwards, was bent almost into a horizontal plane, nearly at right angles to the body of the scapula. The trapezius and deltoid were well developed. The movements about the shoulder were very good, and, in addition, the child's humeri could be brought across the chest in a manner quite impossible in normal development; but it was striking how little obvious deformity the malformation produced. There was also some arrest of development of the margins of the frontal and parietal bones, so that there was not only a large anterior fontanelle, but also a median gap, which would hold the breadth of the forefinger, extending from a point an inch and a half above the root of the nose to the highest point of the occiput. There was also between the posterior and anterior fontanelles what might be called an interparietal fontanelle, made up of two corresponding little bags, which were in the positions normally occupied by the parietal foramina. There was no reason to suspect hydrocephalus. The ears were well formed, the arch of the palate good, and there was no heart-disease. This form of defective ossification of cranial bones was not considered very uncommon, but the arrested development of the clavicles was very rare. Förster, in his book on *Malformations*, mentioned the fact that rare cases of defect or arrest in development of one or both clavicles occurred, and somewhat more frequently defect of the radius. In the Pathological Society's *Transactions* for 1875, there was a case reported by Dr. Dowse, which was formerly under the care of Mr. Marshall, in which the condition of the shoulder-girdle, so far as absence of the clavicle was concerned, was identical.

Gliomatous Enlargement of the Pons Varolii. By ANGEL MONEY, M.D.—The object of the paper was to draw attention to the existence of a remarkable enlargement of the pons Varolii, of undoubtedly unfrequent occurrence. The disease was remarkable from the enormous increase in size of almost every part of the pons and neighbouring parts of the brain; the tendency to implication of one-half of the pons as much as the other was a noteworthy feature. The cases recorded were entitled to further consideration from the light they throw on a condition which, in this country, had been ill-understood. Cases of so-called gelatiniform enlargement of the pons Varolii, published in the *St. Bartholomew's Hospital Reports*, by Dr. Gee and Dr. Percy Kidd, were unquestionably of the nature of gliomata; and it would seem, therefore, advisable that the descriptive provisional nomenclature should be abandoned. Virchow, in 1863 (*Die Krankhaften Geschwülste*), described the various kinds of gliomata (including the infiltrating forms which give rise to diffuse enlargement) as occurring in any part of the brain; and there seemed to be no good reason for the employment of a special name for the disease, when it happened to occur in the pons. The first instance here recorded was worthy of remark from the fact that, although the disease involved both halves of the pons, the symptoms were decidedly unilateral. This kind of thing had been mentioned in other recorded cases. In the second case, hæmorrhages into the retina and intestinal mucous membranes were discovered. Though this association might be one of mere coincidence or unreal relationship, yet, looking

to the known occurrence f hæmorrhages in various parts of the body, almost undoubtedly as the result of lesions, more especially of the base of the brain, it seemed not unlikely that here also one had to do with a causal connection. The absence of such hard-featured symptoms as hyperpyrexia and glycosuria was worthy of mention; and a partial explanation might possibly be forthcoming in the notion that, for the production of such symptoms, lesions of sudden onset were required.—The PRESIDENT remarked that these cases required careful attention, for they gave rise to the question as to whether these gliomata of nervous tissues were of the same nature as the gliomata of other tissues, *e.g.*, of the eyeball; for the latter were decidedly malignant, and extended even after removal of the eye, whilst in the nervous tissues they seemed benignant. The relation of gliomata to sarcomata also deserved consideration; did their differences arise from the tissues in which they had origin?—Dr. GEE observed that the symptoms Dr. Money had described would certainly point to disease of the pons; he believed Dr. Money to be probably correct in his nomenclature, since he referred it to a known catenary of diseases, and did not put it down as a new disease as Dr. Kidd had done.—Dr. SOUTHEY inquired if these gliomatous infiltrations were found to have any constant association with syphilis, as Virchow used to teach, or were considered cancerous.—The PRESIDENT said he had been surprised to hear that in these cases the nerve-fibres were completely absent, and yet the functions of the pons continued active.—Dr. FERRIER admitted the wide destruction of nerve-fibre, but considered that it could not possibly be complete, for, if it had been, both motion and sensation must have been abolished. In a somewhat similar case which he had examined, he had found great difficulty in detecting normal nervous fibres, but after careful search they had been found, and he expected that the same would prove the case in Dr. Money's specimens. He agreed that the symptoms during life would have been enough to show disease of the pons.—Dr. KIDD acknowledged that, when he wrote the description of his cases, he did not know Virchow's description of infiltrating gliomata, and had pictured gliomata as limited tumours, such as the President had described. Gliomatous infiltration he considered a much better term for such states than glioma.—Dr. HALE WHITE suggested that the most essential difference between gliomata and sarcomata was the development of gliomata from highly differentiated connective tissue, and that this was probably the reason why gliomata were innocent.—Dr. MONEY, in reply, said he had found no history of sarcomata in the family of either of his cases. The gliomata in modern classification were also certainly considered to be unconnected with syphilis. Glioma, in Virchow's nomenclature, was a generic term including many things, and practically equivalent to any sarcomatous tumour of the brain, not due to mere hypertrophy of the neuroglia, but to perverted change.

A Case of Asymmetry of the Brain presenting Peculiarities bearing upon the Question of the Connection between the Optic Nerves and Certain Definite Areæ of the Cerebral Cortex.—By SEYMOUR J. SHARKEY, M.B. The patient, whose age was 25, died in St. Thomas's Hospital, owing to injuries received from the fall of a house. Her right arm and leg were somewhat smaller than their fellows, and the former was rigid. After her death, this condition was ascertained to have been congenital, but no observations were made during life, either with regard to this malformation, or with reference to the condition of her special senses, etc. The subject of the communication was primarily the anatomical peculiarities of the brain, and secondarily the physiological conclusions which they suggested. The most striking characteristics of the specimen were: 1. the general slight arrest of development of the left hemisphere; 2. the small size of the corresponding crus cerebri and anterior pyramid; 3. the absence of the angular gyrus and superior temporo-sphenoidal convolution, together with the fusion of some of the other convolutions of the left temporo-sphenoidal lobe; 4. the extreme atrophy of the optic tract, optic thalamus, and corpora geniculata on the same side. It was argued that the knowledge possessed at present of the connection between the central convolutions of the brain and the motor strands justified us in referring the small and somewhat rigid limbs on the right side, together with the atrophy of the left-anterior pyramid and crus cerebri, to the condition of the two ascending central convolutions, and their expansions near the great longitudinal fissure. The atrophy of the left optic tract, optic thalamus, and corpora geniculata, must be looked at in connection with the absence of the angular convolution, and with the malformation of the left temporo-sphenoidal lobe. Although, from a consideration of this single anatomical specimen, any more precise assertion was scarcely warranted; still, it was hardly possible to avoid looking upon it as confirmative of the physiological experiments of Ferrier, which pointed in the same direction, and which seemed to indicate that the angular gyrus was in some way bound up with the function of vision. The specimen likewise supported the views that the optic thalamus had some direct connection with sight, and that there was semi-decussation and not total decussation of the optic nerves in the chiasma. For the right optic nerve bore a far larger proportion to the left, than the left optic tract did to the right. And finally, the absence of any inequality between the corpora quadrigemina of the two sides, supported the theory that these bodies were not in the direct line of fire, so to say, between the retina and the cerebral cortex; though they might be in some way related to the co-ordination of the ocular muscles, which were necessary for normal vision. The brain, in excellent preservation, was shown, and also drawings by Mr. Charles Stewart, and photographs by Mr. Charles West, some of which were ingeniously arranged on a glass background, so that, when held up to the light, the two unsymmetrical halves of the brain could be seen one above the other in identical positions.—Dr. FERRIER considered the paper a valuable contribution to our knowledge of the brain, and congratulated Dr. Sharkey on his lucid and accurate treatment of a difficult piece of anatomy. He could not help deeply regretting that the clinical history was so incomplete, that they had no good evidence as to the senses of sight and hearing. He considered the pathological condition as undoubtedly one of descending degeneration, and remarked that it was important to notice such a condition dependent on an atrophy and not on a lesion, for some people held that such descending degenerations were dependent only on inflammation. In 1880, at the meeting of the British Medical Association at Cambridge, he had, in conjunction with Professor Yeo, pointed out that the angular gyrus and occipital lobes were conjoint centres of vision; that is to say, after removal of the occipital lobes, vision would be lost for a time, but recovered, and the same after removal of the angular gyrus; but, of the two, the angular gyrus was more essential. When an eye or limb was absent, and the lesion was traced backwards to the brain, it was nearly always found that the corpora quadrigemina were affected; in Dr. Sharkey's case, they were not affected, and that he attributed to the cortical and not peripheral origin of the atrophy. There was loss of the superior temporo-sphenoidal convolution, and nevertheless no atrophy of the auditory nerve, which he was accustomed to trace back to this part of the cortex; but this, he considered, might be due to the fact that the auditory nerve went first to a nucleus in the floor of the fourth ventricle, and was nourished from that. He did not feel inclined to abandon his impression that the superior temporo-sphenoidal convolution was one of the centres of hearing—an impression strongly supported by one of the specimens for which he had been prosecuted, viz., a completely deaf monkey, in which *post mortem* examination had shown no injury beyond that of the temporo-sphenoidal convolution.—Dr. MONEY asked if there was any change of colour in the atrophied portion, as he had himself observed in cerebral atrophy a slight pigmentation, due, he believed, to blood-pigment.—The PRESIDENT suggested several questions of interest arising out of this case. Was there any difference in the two sides of the cranium? Was there any abnormality in prominence or expression of the right eye? Had the spinal cord below the pyramids been examined? Had any note been made of the thickness of the grey cortex of the deranged convolutions? Were the corpora geniculata concerned with vision or with nutrition of the optical apparatus? As to the centres apportioned to various actions, he thought it probable they merged into one another, and overlapped considerably, so that, in the case of a narrowly localised injury, the function of the injured part could be taken up by several other parts as substitutes.—Dr. SHARKEY said, in answer, that he had looked for differences between the two sides of the cranium, but had not been able to find any, and that the expression of the eyes had never been noticed as abnormal. He had made a complete examination of the spinal cord, and had found distinct descending sclerosis in the posterior part of the lateral column; but none in the small portion of the anterior column, which generally did not decussate; this non-decussating strand, however, had been found to be variable in many cases, and he imagined that it was probably absent in his case. The thickness of the cortical matter he had not as yet examined, wishing to keep the specimen intact at present, but he hoped to do so soon. The colour he had not found abnormal; but he was hardly able to form a good opinion, as he had removed the brain along with its membranes, and put it in spirit to keep it coherent. The limitations of the cortical centres, he thought, were fairly definite, at least, in motor cases. He had collected five cases where there had been limited motor paralysis, with limited injury o

the corresponding motor cortical centre; in such cases, he had found the paralysis was complete for a short time only, and that confirmed the hypothesis that one part's functions could be taken up, to a certain extent, by other parts when it was damaged. The corpora geniculata he regarded as probably nutritive in function, but admitted that the materials for any certain opinion were still incomplete. The absence of further clinical record in his case he greatly regretted. The patient had been injured in the back by the fall of a house, and had come under the surgeon's care with incontinence of the sphincters and paralysis of the right leg. The atrophy of the right leg had naturally been noticed; but there had been no symptoms to call attention to the upper limbs or head.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, APRIL 4TH.

E. MALINS, M.D., President, in the Chair.

Atrophied Ovaries.—Dr. MALINS showed, with microscopical sections, two atrophied ovaries removed from a patient aged 40. There had been a cessation of the menses for six years, and the patient was quite disabled by the constant pain. Convalescence had been quite satisfactory.

Hysterical Paraplegia.—Dr. SUCKLING showed a case of paraplegia in a woman aged 25, which he considered to be hysterical. During an attack of subacute rheumatism, a sudden rise of temperature occurred, attended with complete spastic paraplegia; but in twenty-four hours the rigidity passed off, and the patient was able to move about. There was ankle-clonus, and an increase of patellar reflexes on both sides; also analgesia. Electrical sensibility had been found to vary considerably, the responses being normal.

Hypertrophy of Toe-Nails.—Mr. HUGH THOMAS exhibited two very long nails, removed from the great toes of a woman aged 65. They had been allowed to remain uncut for eleven years. The right one measured five inches and a quarter, and passed under the four other toes; the left was three inches and three-quarters in length, and lay over the other toes of the foot. The patient was unable to walk. After removal, the matrix on both sides was found to be healthy.

Double Placenta.—Mr. THOMAS also showed a placenta from a case of single birth, having a separate cotyledon imbedded in its membranes. Attached to it was a rudimentary cord inserted into the maternal end of the umbilical cord, suggesting the former existence of another fœtus. During the whole period of pregnancy, there was persistent vomiting. No *post partum* hæmorrhage took place.

Empyema: Paracentesis.—Mr. CHAVASSE showed a child seven years of age, upon whom he had performed paracentesis thoracis for empyema, by means of a double opening in the left eighth intercostal space. The child was lost sight of, but returned in four months with the drainage-tube *in situ* and the lung collapsed. In a fortnight after removal of the tube, the wounds were closed, and the normal physical signs fully re-established.

Phosphatic Calculus from a Child.—Dr. EDGAR UNDERHILL (Tipton) exhibited eight small phosphatic calculi removed from a boy eight years old. The bladder had been examined for stone several times, but nothing could be detected with the sound. As circumcision did not altogether relieve the symptoms, Dr. Underhill made an exploratory incision into the bladder, and the stones were then readily detected by the finger, and removed.

The Administration of Parochial Medical Relief.—Dr. HICKINBOTHAM read a paper, which commenced by asserting that sickness was a most potent factor in producing and maintaining pauperism, and thus causing heavy rates; therefore it was manifest that it would be an economical policy to use such means as would tend to prevent illness or shorten its duration. It was argued that, to do this, the best men, the best medicines, and the best appliances should be available in the Poor-law medical service. Three reasons were given which deterred first-class practitioners from accepting parish appointments: 1, bad pay; 2, social disability; 3, harassing supervision. Dr. Hickinbotham considered that payment should be equal to that received by one of equal education and ability in the legal or other professions; that all medicines and appliances should be supplied at the cost of the parish; and that, in large centres, the appointments should be sufficiently valuable to demand the whole of the officer's time, as in the case of medical officers of health. Dr. Hickinbotham was not in favour of the permanent tenure of office, but thought that reasonable notice on either side should determine the appointment. It was thought that consultations should be held in obscure or difficult cases, at the cost of the guardians. Referring to the management of workhouse infirmaries, an opinion was expressed that they would be best worked upon the hospital plan, with a senior and responsible non-resident, and a junior resident staff of house-physicians and surgeons. Dr. Hickinbotham regretted the antagonism which often existed between boards of guardians and their medical officers; as also the attitude of the central authority—the Local Government Board—which, he said, was never marked by confidence or cordiality towards the medical profession.

WEDNESDAY, APRIL 18TH.

E. MALINS, M.D., President, in the Chair.

Hypertrophic Polypus of the Cervix.—The PRESIDENT showed a specimen of this condition, with microscopic sections.

Ovarian Cyst.—The PRESIDENT also showed an ovarian cyst showing the formation of daughter-cysts. The tumour altogether weighed twenty-eight pounds.

Necrosis of Patella.—Mr. JORDAN LLOYD exhibited a specimen showing the result of using a peg-leg in a case where the os calcis was diseased.

Ovariotomy-Trocar.—Dr. EDGAR UNDERHILL (Tipton) exhibited a simple form of this instrument, which consisted of a plain tube tapering to a point, sufficiently sharp to puncture any cyst, but not sharp enough to injure any internal organ. The openings were at the sides, and there were no clips of any kind. He had demonstrated its utility in a case at the Guest Hospital, Dudley, where a multilocular ovarian cyst was removed weighing seventy-two pounds. The usual clips he had found troublesome, often tearing the cyst-wall, and allowing the escape of fluid into the peritoneal cavity.

Amputation of Tongue by Scissors.—Mr. CHAVASSE showed a tongue removed by scissors for epithelioma. The hæmorrhage during the operation was so profuse, that it was found necessary to open the trachea and suck the blood out of the patient's windpipe.

Hydatids of Uterus.—Mr. HUGH THOMAS read the notes of a case of uterine hydatids accompanied by icterus. The patient was an anæmic woman, aged 26. The weight of the mass removed was three pounds and three-quarters. No *post partum* hæmorrhage took place. With regard to the jaundice, the author thought it probable that a direct connection existed between the two conditions, caused by some undue pressure of the morbid mass upon the biliary apparatus, as, when the uterus had been emptied, a rapid convalescence took place.

Neurectomy for Facial Neuralgia.—Mr. CHAVASSE, in a paper upon neurectomy as a method of treating facial neuralgia, discussed the plans of performing the various operations that had been devised. Many instances were quoted, occurring in his own practice and those of other surgeons, in which the operation had resulted in long periods of relief; and, again, cases in which the painful manifestations were only subdued for a short time. The weight of the evidence showed that, in certain instances, neurectomy held out hopes of long or permanent relief from suffering when other means had proved ineffectual.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL SECTION.

FURNEAUX JORDAN, F.R.C.S., in the Chair.

Election of Office-Bearers.—The following were unanimously elected office-bearers for the ensuing year; *Chairman:* D. C. Lloyd Owen, F.R.C.S.I.; *Secretaries:* R. Saundby, M.D., and Bennett May, M.B.

Acute Necrosis of Clavicle.—Mr. HASLAM showed a girl from whom the entire shaft of the left clavicle had been removed for acute necrosis. She had previously lost the terminal phalanx of the left thumb from probably the same cause. There was no evidence of syphilis, and the etiology of the case was obscure.

The Classification of Papillomata.—Dr. SAUNDBY read a note in reference to Mr. Lloyd Owen's specimen of papilloma of the iris. Objection had been taken by some speakers at the last meeting, that papillomata were growths of epithelial origin, and could not grow from a mesoblastic tissue like the iris. The writer showed that Billroth stood alone among modern authorities in classifying papillomata as epithelial growths, while even he admitted the existence of fibromatous and sarcomatous papillomata. All other authorities regarded the term as referring simply to the external form of the tumour, a circumstance depending upon the position of the growth on a free

surface; and papillomata had been described growing from the meninges of the brain, the interior of joints, the inner surface of cysts—notably of ovarian cysts—and other mesoblastic situations.

Tuberculosis of Male Genito-Urinary Organs.—Dr. WINDLE showed the kidneys, ureters, bladder, and testes, affected with tuberculosis, from a case of pulmonary phthisis.

Aortic Aneurysm.—Dr. WINDLE showed the small sac of an aneurysm of the arch of the aorta, which had ruptured into the pericardium.

Cystic Degeneration of the Kidneys.—Dr. WINDLE also showed two enlarged kidneys, the substance of which was converted into innumerable cysts with thin walls, and containing thin clear fluid. No microscopical examination had yet been made. The clinical history was one of repeated hæmorrhages from various surfaces, but there was no special indication of renal disease.

Syphilitic Testis.—Dr. BARLING showed a testis which had been removed by amputation for chronic suppuration with sinuses. There was no fungous protrusion. The history of syphilis was doubtful, and no microscopical examination had yet been made.

Chondroma of Palm.—Mr. JORDAN LLOYD showed a lobulated tumour of eighteen months' growth, removed from the palm of the hand, where it lay superficial, but adherent to and apparently growing from, the palmar fascia. He regarded it as a chondroma which had undergone myxomatous transformation, although the section under the microscope showed no chondromatous elements. He regarded the tumour as likely to recur.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

APRIL 12TH, 1883.

B. WALKER, M.R.C.S., President, in the Chair.

Fractured Patella.—Dr. PORTER showed three cases of fractured patella, to illustrate the good results that could be obtained from very simple treatment. One case had stood the test of fifteen months, and a second of nine months, and in both union appeared to be either osseous or very firm fibrous. One patient was following his occupation as a groom, and riding constantly, while the other had been working as a file-cutter without the help of a stick, or assistance of any kind, three months after the accident. The third case had only been under care about five months, and the patient was not yet able to resume work; but, as far as it was possible to judge of the result, his leg promised to be as useful to him as in the other cases shown. The same treatment had been adopted in each case—a back-splint and footpiece reaching well up the thigh for three months, followed by a gum and chalk knee-cap for two months longer. Dr. Porter dwelt particularly on the importance of firm compression at the very commencement, with a view to reduce the swelling and ensure early apposition of the fragments. He alluded to the fact that he had seen the first case in which wiring the fragments together had been tried, but he did not believe a better result had been obtained than in the cases he had shown.

Cases of Fever.—Dr. DYSON related four cases. Two of them were sisters, aged respectively 18 and 16; both father and mother had strong neurotic proclivities, the one being very hysterical, and the other suffering from epileptiform attacks. The younger sister began to be ill three days after the elder; the onset of the pyrexia was somewhat sudden, and accompanied by a prolonged rigor. This was succeeded by high temperature (in both over 104° Fahr.), quick pulse, flushed face, furred tongue, wild delirium, and sore-throat. The throat was somewhat congested, and on the pharynx were small separate vesicles, like herpes. The treatment consisted of salines with aconite. The physical signs in the throat were out of all proportion to the amount of soreness and pyrexia; but the throat trouble was the only expression of disease found. There was no bronchitis, pneumonia, or pleurisy. The pyrexia subsided in about forty-eight hours, and was succeeded by profound prostration, the patient being unable to stand or walk. The other two cases were those of a mother and her son, both very nervous and irritable. In these the onset was not so sudden, but the throat signs and symptoms were the same, and the high fever with delirium, followed by great prostration, was identical. All the cases occurred about the middle of January, when there were many other cases of a similar character prevalent. The urine examined in three of the cases presented the usual characters of febrile urine. The exact nature of these cases was not clear; they seemed most nearly allied to herpes of the pharynx, but the vesicles were few in number, and not confluent, as frequently occurred in membranous sore-throat. Dr. Dyson met with a great amount of acute illness of an unusual character in the first few weeks of the year, and this might possibly be due to the rain of the previous three months.

Strangulated Umbilical Hernia.—Dr. T. H. MORTON gave particulars of this case, successfully operated upon by him. The patient, a woman, was aged 64, and reducible hernia, of the size of a large orange, had existed many years. On March 7th, it could not be returned by taxis, and on March 12th, symptoms of strangulation appeared. Next day the operation was performed by dividing the upper edge of the ventral opening. Recovery was rapid.

Hydrocele, Injected by Ergot.—Dr. T. H. MORTON also related this case. The patient, a strong man, aged 29, had first noticed a swelling eight years ago, probably induced by the saddle when riding. He had been tapped three times, and an injection used once. On February 24th, 1883, sixteen ounces of fluid were withdrawn, and iodine was injected. The patient came under notice again on March 25th with the fluid again collected. Eight ounces were taken away, and the treatment suggested by Mr. Walker (BRITISH MEDICAL JOURNAL, March 17th, 1883) was tried, namely, injecting two drachms of the spirit extract of ergot (*P.B.*). Very little pain, and but slight inflammatory action followed. There was no accumulation of fluid when the man was seen on April 3rd.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, MARCH 16TH, 1883.

WILLIAM MOORE, M.D., President of the Section, in the Chair.

Living Specimens.—Dr. MCDONNELL exhibited a case of hammer-cramp; and Dr. STORY a case of hæmatrophia facialis.

Specimens Exhibited by Card.—The following were shown: Dr. C. J. NIXON: Intussusception of the Death-struggle; Dr. J. W. MOORE: Disease of the Aortic Valves, with Compensatory Mitral Regurgitation; Dr. HAWTREY BENSON: Abscess in Wall of Bladder, which pointed externally.

"Bleeders" and Sudden Death from Cerebral Hæmorrhage.—Dr. FRASER read a paper, mentioning some instances of serious bleeding following trifling injuries, and then described two cases of sudden death from sanguineous apoplexy, occurring in individuals who had previously suffered from bleedings of the nose, lungs, etc.—Dr. HENRY KENNEDY related a fatal case of purpura, in which the *post mortem* examination revealed an extensive effusion of blood over the surface of the brain; and he referred to Latour's observations on hæmorrhage.—Dr. COX referred to a gentleman the subject of hæmorrhagic diathesis, in whom a chill appeared to be invariably the exciting cause of the hæmorrhage. In this case, there was a well marked family history of the diathesis.—The PRESIDENT mentioned a case of an old lady who suffered from severe epistaxis, and shortly afterwards became completely demented.—Dr. FRASER, in reply, said he introduced the first two cases merely to show that he was not overlooking the subject of hæmorrhagic diathesis. In such cases, the blood was almost water; but, in the case of the gentleman pointedly alluded to, he never saw better clotting blood. The hæmorrhage in his case was not produced by chill, but he appeared to form more blood than was required, and this was eliminated by the nose, lungs, or kidneys.

Hammer-cramp.—Dr. R. MCDONNELL showed a young man aged 22, whose right arm was subject to muscular spasms. He was a nailer, and had been, since he was eleven years old, more or less hard at work at this occupation. The spasmodic jerkings of the muscles, which interfered with his occupation, began about seventeen months ago, and, after the first three months, became so violent that he had to give up work altogether. The case was one of functional spasm unaccompanied by pain. This was an affection very similar to writer's or scrivener's cramp, although all the muscles supplied by the brachial plexus seemed to be affected, and those around the shoulder-joint, especially the great pectoral, seemed to be most so. The treatment consisted in regular, orderly, rhythmical movements of the limb, as was successful in a very similar case reported by Dr. G. V. Poore in the *Practitioner*, September 1872.—Dr. FOOT said that this man had been under his care for a considerable period during which time there was a marked improvement in his symptoms. He thought it was analogous to cases occurring in telegraphists, milkers, violin and pianoforte-players. He was not aware that it differed from several cases recorded by the late Dr. Frank Smith of Sheffield. He never thought there was any approach to chorea, as when in bed the muscles were perfectly quiet.—Dr. HENRY KENNEDY remarked that Dr. John Harley had succeeded in curing similar cases by large doses of succus conii, two ounces at a

single dose.—The PRESIDENT and Dr. C. F. MOORE having also taken part in the discussion, Dr. MCDONNELL replied. He said that there were two points raised by Dr. Foot in reference to the case. First, there was no difference of opinion as to the nature of the case, which belonged to the category of scrivener's palsy, but differed from the tremor in piano-players, etc. His case also differed from those of Dr. Frank-Smith in not having general paralysis. Dr. Frank-Smith's cases bore no relation whatever to scrivener's cramp, or hammer-cramp. The second point was, that Dr. Foot did not seem to think that the case belonged to chorea; because the patient was quiet at night; but so far as his (Dr. McDonnell's) experience went, in any except the most exaggerated case of chorea, the movements were entirely stopped during sleep.

SUBSECTION OF STATE MEDICINE.

FRIDAY, APRIL 12TH.

C. A. CAMERON, M.D., President of the Subsection, in the Chair.

A New Test for Organisms in Water.—Dr. POLLOCK read a communication from Dr. R. Angus Smith of Manchester, disclosing his newly discovered test of the presence of organisms in water. It consisted of rendering the water thick by dissolving gelatine in it. If pure, the gelatine cylinder remained long unaltered, but if the water were impure from the presence of organisms the gelatine round the organisms became liquefied and globular, the organisms remaining solid at the bottom of the spheres.—The PRESIDENT exhibited photographs of test-tubes of water which had been thickened by a solution of the purest fish-gelatine, and then exposed to the action of light. When the water was pure, it remained translucent, but when bad, bubbles were rapidly formed, and the bacteria which appeared to be in the water began to act on the gelatine, breaking it up and rendering it soluble. A rapid movement of gas was observable, the bubbles or balls appeared to be spherical; they were aggregations of bacteria. This change took place quickly, almost in twenty-four hours. But a peculiarity of the test was this, that it was only applicable where infusorial animals were present. For instance, peaty water in which there were no animalcules or bacteria would stand without breaking up the gelatine.

Consanguineous Marriages.—The PRESIDENT read a paper on consanguineous marriages in relation to deaf-mutism. He described the practices and prejudices in respect of consanguineous marriages amongst ancient and modern nations, civilised, barbarous and savage. He next reviewed and criticised the memoirs on the subject of the effects produced by the marriage of cousins. On the whole, the evidence seemed to show that the effects were somewhat injurious. The statistics in reference to mutes published in the Irish Census Reports for 1881, and the previous decennial reports, were closely examined by the author. It appears that in Ireland, in 1881, there were 5,136 mutes, of whom 135 were the children of first cousins. The author endeavoured to ascertain the proportion of the population who were children of first cousins. He ascertained that amongst nearly 8,000 persons, the proportion was only 0.57 per cent., or less than one-fourth of the rate amongst deaf-mutes. As the statistics were in great part collected amongst Protestants, the author believed that there was not in all Ireland one person in two hundred the offspring of first cousins, as marriage between such persons was very rare amongst Catholics, who formed three-fourths of the population of Ireland. The general conclusion arrived at was, that consanguineous marriages were a cause of deaf-mutism.—The CHAIRMAN (Dr. Fitzpatrick) observed that in his own experience he found almost every case of deaf-mutism to be the result of the intermarriage of near relatives. To take an example, he found not only was one child a deaf-mute and another insane, but that the whole family partook of degeneration of the nervous power. They entered early into marriage, and never prospered in society. Scrofula, deaf-mutism, insanity, and other characteristics exhibiting weakness of brain and muscular power, resulted from those marriages.—Dr. EUSTACE thought it was well known to all persons who tried to breed first-class animals, that close in-and-in breeding resulted in very great deterioration of the species, and also that animals when left to themselves did not select their nearest relatives for sexual intercourse. Even that much maligned animal the female dog would invariably select not a dog of her own peculiar breed, but one of a different race altogether, both with regard to size and colour.—Dr. WRIGHT concurred as to the damage ensuing from the marriage of near relatives, and referred to Darwin's experiment on pigeons, and to the difficulty of keeping a pure breed of poultry, as illustrated by the fate of the bantams brought from the Palace of Pekin, and by the destruction of another favourite breed of fowls, the white-crested Polish. He did not believe that female animals selected the male; the converse, he thought, was the rule.—Dr. CAMERON replied, pointing out that his statistics were necessarily incomplete and restricted. It would be indispensable to ascertain how many of the whole population were the children of first cousins, before drawing a definite conclusion.

Disposal of Sewage in Villages.—Dr. W. M. A. WRIGHT (Dalkey) read a paper containing suggestions for the better disposal of sewage in Irish country villages. It must be admitted. he contended, that, in the better class of Irish villages, where each cottage was provided with a privy and ashpit, a serious nuisance was frequently caused by their faulty construction, and the filthy manner in which they were kept, the receptacle of the privy being generally too large, some too deep below the level of the ground, and communicating with the ashpit, which was also too large, deeply sunk, and uncovered by a roof. Both privy and ashpit being undrained, their contents mixed, and formed a fœtid semi-fluid mass of liquid excreta, vegetable refuse, and fine ashes, which was frequently augmented by the surface-drainage from the neighbouring pigstye. Such a state of things as this was dangerous to health, both directly from its gaseous emanations, and also indirectly through the soakage into the neighbouring soil; and it was for such cases that the improvement was suggested. The poorer class of Irish village, which consisted for the most part of irregular detached mud cabins, being quite destitute of any kind of privy or ashpit accommodation, would not be considered, as in their case the nuisance just described did not exist. It must be remembered that any proposed scheme, to be practical, must be cheap both in construction and in working, and simple, as both the rural boards of guardians, who were the sanitary authorities, and the owners of the cottages, would be certain to reject any costly plan. The expense of construction would prevent the adoption of either the water-carriage, the dry earth, the simple pneumatic or Liernur's system; and the trouble and expense of the necessary scavenging put the pail systems (both the Gomm and Rochdale) out of the question. In fact, the method most likely to be successful in practice was one to improve away the more dangerous properties of the privy and ashpit. The best way to effect this was, first, to roof over the ashpit, and have no communication between it and the rafters of the privy; next, to construct the privy with a small receptacle, the flow of which should be carefully cemented, and sloped towards the back wall, where an open grating was fixed to permit the escape of the urine, and leave the fæces dry. The urine should then pass into a sewer-pipe, which was common to as many cottages as possible, probably to all on one side of the street, and which also received the house-slops and the liquid manure from the pigstye and stables, but no rain-water, and emptied into a cemented and well ventilated cesspool situated in a grass field, as far as practicable from the village. When the cesspool became full, it could be readily emptied by means of a pump with a long hose-pipe attached to its nozzle, and its contents distributed by irrigation over the field in which it was sunk. As it was full of a highly concentrated liquid manure, which formed a most valuable application as a fertilising agent, the results to the pasture would be most beneficial, while, owing to the well known properties of growing vegetation, the sewage would become rapidly deodorised, and rendered innocuous. The solid excreta which remained in the privy could, when the ashpit was being cleaned, be mixed with the dry ashes, and so removed without causing any nuisance dangerous to health.—Dr. POLLOCK said Dr. Wright had, no doubt, brought forward a practical paper, but his sanitary measures were in great part retrogade, especially in suggesting the re-introduction of the old cesspool. Earth was a great deodoriser, but of course its effect was limited to deodorising a certain quantity of matter. As an illustration, he knew of a cesspool at the end of a long garden which had so saturated the clay, that a spadeful could not be turned up without producing the most abominable stench. A patient of his had nearly lost her life from the same cause.—Dr. R. MONTGOMERY, the Rev. H. SEDDELL, and Dr. H. V. DILLON made remarks.—Dr. COX did not see any reason except dietary why human excrement should be more deleterious than that of other animals, which, when exposed to the atmosphere for a time, became deodorised and practically inoffensive. Hence it was that, having regard to the habits of the peasantry, who went some distance from their dwellings, the excrement was not productive of the danger that might be supposed; but, from exposure, it became reconverted into its mother earth. Indeed, he could conceive that to be less harmful than where the excrement was conveyed in sewers and discharged into the tide, and then washed back. At the same time, he did not want to defend the habits of the peasantry. He suggested the innocuous disposal of excrement by incineration —The PRESIDENT would have the whole material collected in one

receptacle, like an ordinary liquid manure-tank, which was provided in every well regulated farmyard in Scotland and England, and also in parts of Ireland. He believed the burying of excrement would be the course adopted in future, as was done in Glasgow, Manchester, Bolton, and other towns at present. When incinerated, it was reduced to an ash, which was used as a building material. The excrement was collected in pails from the house, the man throwing a pinch of carbolic acid into each pail, and thus preventing any noxious odour. Every town required some system that its local condition rendered more desirable than another. In Dublin, he was doing all he could to induce the people to give up filthy privies. There were 2,000 water-closets substituted for privies, while there were 16,500 water-closets, against 11,000 privies; and he hoped there would be no privies worth speaking of in the course of five or six years.—Dr. WRIGHT replied.

ULSTER MEDICAL SOCIETY.

APRIL 3RD, 1883.

Scleroderma.—Dr. WADSWORTH showed a patient aged 40, suffering from this disease. He was of temperate habits, and a carter of flour. In this employment, he was frequently subject to chills and wettings. He had a good family history, and never had syphilis. About two months ago, he felt his skin hard and tight on his face and chest. This had increased to such an extent, that he was now unable to take a deep breath. Latterly, there had been some improvement in this respect; but it had been remarked, since he came under observation, that the disease was subject to slight exacerbations and remissions. The skin of the body was entirely, that of the limbs only partially, affected; it was of a dull yellow colour, some patches being darker than others. Sensation, by the ordinary rough methods of testing, did not appear to be much if at all impaired. The skin was most dense over the nape of the neck; but on the chest, abdomen, and back, it was also very thick and tense, and could scarcely be pinched up between the fingers, and it, as it were, firmly embraced the trunk, so that freedom of movement was limited. The face, and arms as far as the elbows, and the thighs were affected, but not so markedly as the trunk. The man had at first some albumen in the urine; but that had disappeared. There were no cardiac murmurs, and the heart and other viscera appeared healthy. There was a slight moisture on the skin, which gave to it a slippery feel. While he was in a hot bath, the condition of the skin was improved, and he felt easier; but immediately afterwards it returned to its usual state. Various medicines had been given, but, with the exception of chloral, none of them appeared to have the slightest effect. A dose of chloral was administered every night, which produced sleep, and in the morning he felt his skin more supple and relaxed. If the chloral were omitted at night, he felt in the morning scarcely able to breathe. Dr. Wadsworth promised to again report the progress of the case.

Purpura.—Dr. LINDSAY read notes of a case of purpura, with comments on the disease. The patient, a girl aged 14, was admitted into the Belfast Royal Hospital on March 14th. She was a worker in a ware-room. The eruption appeared two weeks before admission. There was no dietetic cause for the disease; she always used a fair quantity of vegetables and two pounds of meat weekly. Spots first appeared on the legs, then on the arms and body. They were more numerous on the extensor surface of the limbs, and varied in size from a threepenny-piece to a speck. There were no bleedings. The heart was irregular, and the urine slightly albuminous. She had never menstruated, but pains similar to the approach or onset of the catamenia existed immediately before the appearance of the eruption. Dr. Lindsay stated that several cases of purpura had come under his notice in women who were suffering from suppression of menstruation. He was not prepared to say that these cases were examples of vicarious menstruation; but in the absence of any well-established pathology of purpura, he thought he was warranted in concluding that the disease had its immediately exciting cause in altered innervation consequent upon the non-performance of the menstrual function. In the case under discussion, the administration of iron produced melæna, and had to be discontinued. The mineral acids were then given, and in two weeks the eruption had disappeared; and with the exception of slight langour and fatigue, the patient was again in her usual health.

THE Princess Christian has been awarded a certificate in nursing after attending a course of lectures at the Kensington (Major Gildea's) centre of the St. John Ambulance Association.

REVIEWS AND NOTICES.

DELLA PARALISI REGRESSIVA (On Regressive Paralysis). By WILLIAM BARLOW, M.D. (Manchester.) Translated from the English (1878) into Italian by V. BOMPIANA, M.D. Pp. 116. Milan: 1882.

WE congratulate Dr. BARLOW upon the well deserved recognition which the merits of his work on Regressive Paralysis have just received, in the shape of a translation into Italian; especially when we take into consideration the numerous productions on the same subject by the French and German schools of neurology. We are glad to have this opportunity of recalling to the attention of our readers the labours of the author in a field of inquiry of equal theoretical interest and practical importance.

By the name of Regressive Paralysis, Dr. Barlow designates what in former days was called spinal paralysis of the adult, and essential or infantile paralysis, both of which are now included under the technical term of "acute poliomyelitis." We do not feel quite sure, however, that the character of regressiveness is of a sufficiently essential nature to deserve its being used as a specific distinction in the nomenclature; though there is, no doubt, a justification for this use in the fact that other spinal disturbances (muscular atrophy, locomotor ataxy) are emphatically progressive diseases. Granting the acute inflammatory nature of the poliomyelitic process, its regression is common to it, and to most inflammations which, after subsidence, allow the functions of the organs attacked to return to a more or less complete degree. Logically, also, the term regressive paralysis ought to include many peripheral paralyses, such as that of the facial nerve, from cold or other such causes. From a practical point of view, however, regressiveness is an important feature of acute poliomyelitis, and lends support to the view that progressive muscular atrophy is not a true myelitic, but rather a degenerative disease of the anterior horns of the spinal cord.

With reference to the actual starting point of the inflammatory process, Schulze has lately supported the view that it was not to be found in the cells themselves, but in the vessels supplying the anterior portion of the cord, and that it spreads thence to the columns as well as to the grey matter. There is still much to be cleared up in the inflammatory, sclerotic, and degenerative processes, which are at the root of the great clinical types of spinal disease.

Dr. Barlow draws attention to the fact, already noticed by Sinkler that the majority of cases of infantile poliomyelitis occur during the months of July and August; he thinks that there is a connection between the occurrence of this disease and that of other morbid states rife during the hot weather, when children are peculiarly subject to reflex troubles. In fact, according to him, "this paralysis is of a reflex nature." The actual onslaught of the disease is often very sudden, and may be unaccompanied with any noticeable symptoms beyond the paralysis, or it may be ushered in with convulsions and fever. Convulsions are not common, however; and, where they occur, they naturally make one suspicious of a cerebral lesion. If the brain be primarily involved, one may expect the convulsions to become a more prominent feature in the case, and especially not to be limited to the preparalytic stage, as seems to be the case in true infantile paralysis. The fever has not been yet fully described its fleeting character, and the fact that its true nature can be recognised only when paralysis has made its appearance, may account for the paucity of materials at hand. The only thermometric measurements are, we believe, those of Ehrenhaus, who found the temperature 39.2° Cent. (102.5 Fahr.) on the first day (afternoon); 39° Cent. (102.2 Fahr.) in the morning, and 39°5 Cent. (103 Fahr.) in the evening, on the second day. On the third day (morning), the temperature was normal, and the paralysis established.

Dr. Barlow gives a short history of sixty-three cases, some of which, with our present knowledge of the subject, would no longer be considered to belong to the poliomyelitic group. He gives a careful summary of the leading diagnostic characters of "regressive paralysis," to which we might add three points of some importance—the absence of tendon-reflexes, the presence of the reaction of degeneration, and the localisation of the paralysis (in many cases at least) upon single muscles, or groups of muscles; the last point having this peculiarity, that the picking out of the muscles does not occur according to their nerve-supply, but to their cord-supply. The researches of Remak, Ferrier, and others, have thrown much light upon the problem involved in the localisation of poliomyelitis; the explanation being mainly this, that the ganglionic cells in the anterior cornua are arranged in groups concerned in the innerva

ion of muscles having a physiological, not an anatomical community.

The electrical phenomena of degenerating muscles have been fully worked out by Erb, and are just beginning to be recognised in this country as a most important factor in our diagnosis and prognosis of atrophic paralysis; and in the recent volume on nervous diseases, published by Dr. Buzzard, the question of tendon-reflexes has received an exhaustive treatment from the clinical point of view.

In a future edition, Dr. Barlow will no doubt have the opportunities of bringing up his conscientious monograph to the rapidly rising level of recent neurological science.

In the meanwhile, we have to thank him for the share he has taken in the advancement of our knowledge concerning a subject so important and interesting as "regressive paralysis."

CLINICAL LECTURES ON THE DISEASES OF OLD AGE. By J. M. CHARCOT, M.D. Translated by LEIGH H. HUNT, B.Sc., M.D., with additional Lectures by ALFRED L. LOOMIS, M.D. London: 1882.

THIS volume is one of the series of works now publishing by Messrs. Sampson, Low, and Co., under the title of "Standard Medical Authors." The use of the term "standard" in connection with these volumes is not that which, in former days at least, was assigned to it. It is not used to signify medical works which have acquired to themselves a settled position of the highest authority, accepted on all hands for a series of years, but simply treatises of reputed authors adjudged by the publishers and their editors to be of high value, and which they probably hope will, in due course, be regarded as of standard authority on the matters of which they treat.

By this criticism on the title given by the publishers to a series of volumes intended to form a "Library of Medicine," we do not wish to detract from the value of the several works that have appeared, or that may hereafter appear, each of which must stand upon its own merits, and either attain, in the estimate of the profession, a "standard" position, or else, if happily escaping speedy oblivion, fall into the category of ordinary literary productions, whose existence is comparatively fugitive, and after a brief period, known only to the anxious student and the plodding librarian.

The work before us is of composite production. It contains twenty-one lectures by Professor CHARCOT, delivered at the Salpêtrière, and translated by Dr. Leigh H. Hunt, Laboratory Instructor in Pathology in the University of the City of New York. Following these are ten lectures by Dr. A. L. Loomis, Professor of Pathology and Practical Medicine in the same university. Of the translation we may at once say that it is fairly good, yet not satisfactory to the English scholar, as it contains many clumsy phrases, and not a few which have not cast off their original French clothing.

Professor Charcot's reputation as a pathologist will secure to any of his productions the attention and the interest of all students of medicine. The lectures now placed before us exhibit the same close and accurate clinical observation with which readers of his works are familiar. The information is valuable and minute on the matters upon which he has lectured; but most of these matters, in fact, have only an indirect bearing upon the diseases of old age, and we feel sure that many purchasers of this volume will be greatly disappointed when they examine its contents; that is, presuming that they have acquired it for the purpose of learning the result of Charcot's immense experience at the Salpêtrière in respect to those diseases. For, in the lectures published, Charcot has attempted no systematic description of the diseases peculiar to age, no finished sketch of the special features of any one of them, except gout, rheumatic gout, and acute and chronic rheumatism.

Excluding the preliminary disquisition on ancient and modern medicine, which has assuredly nothing to do with senile diseases, there are only four lectures of the twenty-one which are not occupied with gout and rheumatism, and their cognate conditions; and those four lectures themselves, although detailing many valuable observations upon the general pathological peculiarities of advanced life, including important notes upon senile pneumonia, are chiefly occupied with inquiries and discussions, physiological and others, upon thermometry. Consequently, so far as Dr. Charcot's portion of the treatise is concerned, the reader, who opens it to learn that distinguished physician's teachings on the diseases of age, finds himself practically confronted by a most elaborate and learned essay upon gout and rheumatism, and their congeners, studied from all points of view, and with reference to all periods of life.

In putting forth these lectures by Professor Charcot, as a treatise "on the diseases of old age," the editor or translator, it must be admitted, is certainly only following the lead of the lecturer himself. For the latter opens his first lecture by saying: "The course which we to-day inaugurate is purposed to acquaint you with the general characteristics that distinguish the pathology of old age from that of adults, and to fix your attention on some of those diseases which are more especially met with in asylums reserved for the aged." (Page 1.) The inference from this is, that the French Professor started with the project of dealing generally with the pathology of age, and that the lectures collected in this volume represent the first instalment of a complete and systematic account of the diseases of old people; of which, possibly, we may look for further portions to be published hereafter. If this be so, and Professor Charcot devote to the other senile diseases an amount of attention proportionate to that given to gout and rheumatism, he will produce a more comprehensive and elaborate work than has ever yet been written upon the subject in question.

Further, an explanation for Dr. Charcot's extended investigation of gout and rheumatism is to be found in the fact, as stated by himself, that these diseases, particularly in their chronic form, are most common in asylums for the aged, and that no better field for their complete study, than the Salpêtrière, could be anywhere found. It behoves us, moreover, in fairness to add that, though Professor Charcot has so limited his survey of senile maladies, the complementary course of lectures by Dr. Loomis goes far to fill up the hiatus. The Charity Hospital, the Belle Vue Hospital of New York, and other like institutions, with which this well-known American physician is connected, have afforded him ample opportunities for observation of the diseases upon which he lectured; and we find the substance of his lectures very much to the point, and very clearly expressed. As a matter of course, in writing about diseases of a particular period of life, it is inevitable to avoid going over the ground covered by the descriptions of those same maladies, set forth in general works of medicine, as affecting people of all ages. However, after allowing for much inevitable repetition of well-known facts in the descriptions, we are still of opinion that Dr. Loomis might have done more in the way of differentiating morbid changes and symptoms, as seen among the aged, from those of earlier adult life.

Lastly, we may observe that, even by the addition of Dr. Loomis's lectures, the category of senile diseases is not fully represented in this treatise. Some of those omitted may be quoted from the imperfect enumeration given by Charcot: *e.g.*, senile marasmus, senile osteomalakia, and senile asystolism. To these might be added certain affections of the liver and of the skin, even should those of the throat and special senses be held to be wisely excluded, as considered subjects for special treatises.

This criticism of the work before us has been mainly occupied in noting deficiencies. It would not be just to part from the volume without assuring our readers, that a vast amount of scientific pathology is to be found in its pages. Charcot's Lectures on Gout and Rheumatism were deserving of translation, quite irrespectively of their position in a course devoted nominally to diseases of old age. Indeed, they present the most complete examination of their subjects, as well from the stand-point of physiology as from that of pathology and of therapeutics. The same value appertains to the lecture on the general pathology of old age and to the discourses on temperature in disease. The vast opportunities afforded the lecturer, in the great asylum for the aged of the Salpêtrière, has enabled him to lay down with precision various general laws belonging to senility, and especially with regard to thermometry, acquaintance with which is of importance to every medical practitioner.

REPORT OF THE COMMITTEE OF MANAGEMENT OF THE HOMERTON HOSPITALS FOR THE YEAR 1881.

THE point of greatest interest presented in this report, is the demonstration it affords of the utter inadequacy of the accommodation provided in these hospitals for cases of infectious disease arising in the large area they are intended to serve. At the beginning of the year, each hospital was fully occupied with its proper class of patients. From May to July, the whole accommodation of both hospitals was utilised for small-pox, the fever cases being received by the Stockwell Hospital. In October, the large increase in the number of admissions for fever rendered it "necessary to utilise the small-pox hospital for fever patients;" but, at the same time, forty beds were set apart in the fever hospital for the accommodation of

such cases of small-pox as were too severe to be removed to the *Atlas*. These various changes in the use of the hospitals, justified only by extreme necessity, seem to us fully to warrant the opinion expressed by the Committee, "that another infectious hospital in the eastern portion of the metropolis is much needed."

During the year, 2,304 cases of small-pox were under treatment; 365 died, and 1,919 were discharged, leaving 20 still under treatment at the end of the year. The usual tables are furnished, showing the proportion of cases and deaths at the different ages and among the different classes—vaccinated, doubtfully vaccinated, and unvaccinated. They tell the oft told tale of the extreme value of vaccination. Into the fever wards there were admitted 979 cases, of which, however, 157 were diseases other than the three fevers usually treated in these hospitals. The admissions of these three fevers were: scarlatina 456, enteric 226, and typhus 140; the deaths were 59, 48, and 17; the discharges 421, 166, and 95; and the mortalities per cent. 12.6, 21.8, and 13.4 respectively. The mortality over all cases was 14 per cent.

In the report of the fever hospital, Dr. Collie describes an interesting experiment carried out by him with a view to put to the test the opinion that enteric fever is directly contagious. "The four wards at the east end of the fever hospital had their water-closets closed, and their connection with the main drainage cut off at the point where the main ward drain joins the hospital drain. In a word, all communication between the wards and drainage was abolished. In one of the airing courts a large pit was dug, and into this the stools of the patients (who were, as far as possible, all in bed, the convalescents being transferred to the small-pox hospital) were thrown as soon as they were passed, and at once covered with dry earth. In each ward there was a charge nurse and two assistant nurses by day, and a charge nurse and assistant nurse by night, all the assistant nurses being young. It seemed to me, therefore," continues Dr. Collie, "that if any of these contracted the fever, the source of infection would be proved to be, not the drains, because they were cut off, but the emanations from the patients' bodies or the fresh stools."

Dr. Collie is able to report the occurrence of three cases of the disease apparently contracted by direct contagion. None of these cases, however, is in itself conclusive, although together it is urged they afford considerable *primâ facie* evidence. "One fact is indisputable," says Dr. Collie, "and that is, that three persons fell sick of enteric fever within a fortnight of their exposure to enteric patients in rooms cut off completely from drains—in rooms in which there were no decomposing stools—and that these three persons were not exposed to any other known source of infection." If this were clearly proved to be the case, the occurrence of these three cases would form very strong evidence in support of the reasonable theory supported by Dr. Collie. It does not appear, however, that the ward drains which, we presume had been previously used for enteric stools, were thoroughly examined before they were cut off; and it might be urged as a possible objection that the soil under the wards may have contained decomposing enteric matter which had oozed out from the drains when they were in use. It seems to us that the omission of any statement as to this renders a link missing in the chain of evidence.

AUSCULTATION AND PERCUSSION: TOGETHER WITH THE OTHER METHODS OF PHYSICAL EXAMINATION OF THE CHEST. By SAMUEL GEE, M.D., F.R.C.P. Third Edition. London: Smith, Elder, and Co. 1883.

THE first edition of this work was an accurate and valuable production, very full of help for the student; the third edition is distinctly an improvement. The book is devoted to an exposition of the methods and results of physical examination of the organs contained in the thorax; as expressed by the motto which Dr. GEE has quoted from Dr. Robert Bridges's elegiac poem on St. Bartholomew's Hospital;

> "Teque auscultantem, palpantem et percutientem
> Pectora, sic morbi ducere signa vident."

The volume has been slightly increased in size, but the increase of matter is greater than might be judged from this, owing to the care which has been expended on increased condensation, and on the pruning away of every exuberance of epithet or description. Yet the book is not dull; indeed, too much praise can hardly be given to its literary style; though the author has had to deal with a dry subject, and a mass of discordant details, he has contrived to say what he had to say in crisp epigrammatic English, which is really a model in its way, and makes one regret that some other writers on medicine have, in their aspirations after a polyglot erudition, too often contrived to forget how to write their own language. It is surprising, however, that a writer of such evident taste and nice discrimination should have permitted himself to adopt such "a cacophonous combination of incongruous sounds," as "anakatadicrotic jugular pulsation!" We can imagine that a student, who on first taking up the book, encountered such a phrase or term as this, should incontinently lay it down again in despair.

The part of the book which deals with the physical signs of pulmonary disease has been much improved. The chapter on Pulmonary Collapse, which was before somewhat too short, has been considerably expanded, and now deals fully with an important subject. The same remark applies, also, to the chapter on Pleurisy with Effusion, where the discussion of the differential diagnosis, formerly dismissed in a few lines, has been expanded to occupy nearly three pages; new and valuable matter has been added under the heads of empyema and of traumatic rupture of the diaphragm, and there are additional chapters on Destructive Pneumonia, on Pyæmic Infarctus, and on plugging of the trachea or bronchus by foreign bodies. We are not quite so sure that the alterations in the chapters which deal with cardiac diseases are improvements; but the book, as a whole, is most admirable; it is calculated to be in the future, as it has been in the past, a trustworthy guide to the student, who may obtain from its pages just the knowledge which will be of use at the bedside—"Ausculta, et compone meis sermonibus ora;" yet it is only the advanced student who can appreciate all its excellencies.

NOTES ON BOOKS.

The Transactions of the Medico-Chirurgical Society of Edinburgh.—The Medico-Chirurgical Society of Edinburgh has this year commenced the publication of an annual volume of *Transactions*, and we have before us the first of the series. It contains the records of the papers read and specimens exhibited at the annual meeting. Among the most valuable papers are those of Drs. Gibson and Balfour on Heart-Disease; of Professor Fraser on Diabetic Coma; and the surgical papers of Dr. Donkin, Professor Chiene, and Mr. Joseph Bell. The whole volume is an excellent record of sound work, and there is no doubt that the Society has done wisely in commencing the issue of its *Transactions* in the form of an annual volume. This will, in itself, encourage henceforth the presentation of papers of actual value.

How to Help in Cases of Distress. By C. S. LOCH, Secretary to the Council of the Charity Organisation Society (Longmans and Co.).—This is a book which a large number of medical men will find profoundly interesting and instructive, both in their capacity as medical practitioners and as citizens. It contains full particulars of charities for relief in affliction, in sickness, and in permanent or temporary distress, and also of those designed for reformatory purposes. It gives a vast deal of information of a careful, accurate, and thoughtful kind as to existing organisations, and the means at disposal in reference to the applications of sanitary law; prevention of baby-farming; public baths; artisans' dwellings; boarding-out; Habitual Drunkards Act; charge of imbeciles; maintenance of, and provision for, cases of infection; special wards for infectious cases in workhouses; the duties of inspectors of nuisances; invalid kitchens in relation to hospitals; the cleansing of sewers; Poor-law provision for cases of sickness, etc. The medical practitioner, in dealing with the sickness and distress with which he is constantly brought in contact, often needs, and does not always possess, precisely the kind of information given in this very handy guide. It is very fortunate that a man of the rare devotion to the sick poor, the remarkable comprehensiveness of knowledge, and equity of judgment, combined in Mr. Loch in a rare and high degree, has undertaken so useful a task as that successfully fulfilled in this excellent handbook, which adds one more to the many services rendered by the Charity Organisation Society.

Papers relating to the Administration of the Dentists' Act (reprinted from the *Journal of the British Dental Association.*)—This document includes an admirable address of Mr. John Tomes, F.R.S., the retiring President of the British Dental Association, delivered at Liverpool in August 1882, which traced the history of the administration of the Dentists' Act, and the discussion of its merits and its defects. In this luminous statement of Mr. Tomes, and in the accompanying notes, will be found what he describes as the history of the consecutive proceedings in respect to the Act, and an interpretation of these proceedings, not conceived in a technical

pirit, but aiming at a description of the position as it stands with view to the real and continued progress of the organisation of the ental profession, towards which Mr. Tomes has so largely contributed. His work has been much, and, as we think, often unwisely, iticised. We entertain no doubt of the great value of the results hieved; and, although the machinery is far from being as simple it might have been, and ought to have been, still, on the whole, works well; and, as with most machines of the sort, more depends on the intelligence, the public spirit, and good will of those who e entrusted with the administration, than to the actual perfection the machinery itself. On the whole, the dental profession and ie public have great reason to be satisfied and grateful for the exllent work which has been done on their behalf in the construcon and administration of the Dental Acts.

Dangers au Point de Vue Sanitaire des Maisons Malconstruites. ar le Dr. T. PRIDGIN TEALE.—This is a translation into French, nder the auspices of the Mayor of Havre, of Mr. T. Pridgin Teale's lmirable and graphic illustrations of home dangers, of bad plumbg, and bad sanitary construction. Such a book is likely to be at ast as useful in France as it has been in England; and the best ish that can be offered in respect to this book is, that it will find tithe of the readers it deserves, and whom it is calculated to inruct.

DR. MICHAEL FOSTER'S *Text-book of Physiology* appears, in fourth edition, carefully revised and re-edited, and with a eat deal of what was before put into small print incorporated in e body of the text, with the result of making the book more gible and more readable, and therefore, probably, even a greater vourite than it has hitherto justly been with students. It would superfluous to say anything beyond what we have already said former occasions in favour of this most satisfactory and trustorthy manual.

REPORTS AND ANALYSES
AND
ESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DR. JUNKER'S APPARATUS FOR INHALATION OF ANÆSTHETIC VAPOURS.

SIR,—Mr. Ernest Clarke, in the number of the BRITISH MEDIAL JOURNAL for May 5th, raises an objection to the anæsthetic pparatus which I devised many years ago for the administration methylene, and which has been since extensively used, both for ethylene and chloroform: that it is impossible to feel the pulse ithout aid of a third hand. Mr. Clarke appears to be the first who as met with this supposed drawback. On the contrary, I, and many ho use the apparatus, succeed in managing it, even with only one and. It requires very little practice to hold the mask, and, by essing the balloon against it, to squeeze it with four fingers with-t hurting the patient's face, whilst the little finger is placed on ie facial artery, being thus easily enabled to count the pulse and timate the rhythm.

As regards Mr. Mills's modification, I beg to state that Professor ose, then at Zürich, at present at Bethania Hospital at Berlin, mens in a pamphlet on operations on the face and oral cavity with eclined head (to prevent the inspiration of blood), published in 1878, at it was only owing to this apparatus, that he was able to perform ie operations under continued deep narcosis by chloroform. After ndering the patient insensible in the usual manner, he removes ie mask, and introduces the elastic tube which connects the mask ith the bottle holding the anæsthetic fluid, deeply into the nostril without the use of an elastic catheter or flexible leaden tube).

Professor Rose brought the subject before the Annual Surgical ongress, held at Berlin, two or three years ago. Since then, this ethod has been generally adopted on the Continent in similar perations.—I am, etc.,

F. JUNKER, M.D.

London, May 7th, 1883.

A SIMPLE AND PORTABLE STETHOSCOPE.

HOUGH many, if not all, medical men not living in large towns are bsolved from the duty of wearing a tall and cylindrical hat, they ave another incubus in the shape of a stethoscope, for which the bove hat is a convenient place. That the usual stem and disc instrument is not easy to carry, is shown by the modifications it has undergone within the last few years. The binaural, with metal mounts and a small chest-piece, is more portable than most stethoscopes; but some men do not like it, or its cost.

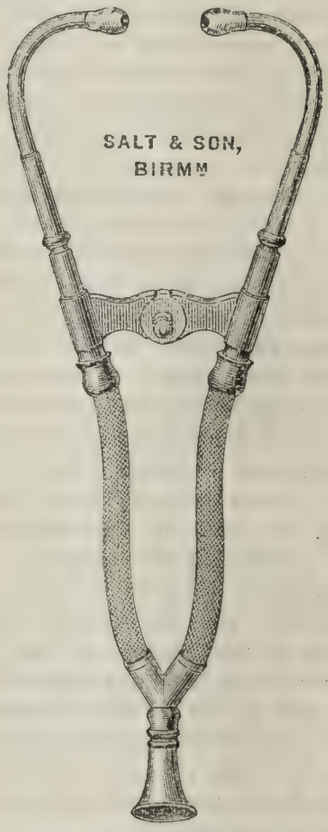
I have made a very good instrument of the following parts: a pear-shaped ivory ear-piece, in which an inch of metal tube is firmly fitted; a foot of quarter-inch black rubber tube; and a metal Toynbee ear-speculum. This latter makes a capital chest-piece, and does not creak under the fingers when held against the patient; it can be detached in a moment, if required for examining ears.

The ear-piece should be of the proper size to remain in the ear without holding. In using this stethoscope, I think I have found that, when the tube is not kept nearly straight, the chest-sounds are not so well heard.

CAREY COOMBS, M.D.Lond.

NEW PORTABLE BINAURAL STESHOSCOPE.

THE annexed engraving represents a new form of binaural stethoscope contrived by Messrs. Salt and Son of Birmingham, the improvement in which consists in this usually awkward instrument being, for the first time, rendered really portable and handy. This is effected without loss of acoustic perfection, by dividing the metal tubes into three pieces, which slide within each other tightly, yet smoothly, and without noise, like a telescope. The flexible tubes are connected by bayonet-locks, which prevent them from falling out in use; and the entire instrument, when closed and



folded, is only five inches and a half long. Mounted with coralline tips and hearing-piece, and with the metal parts gilded, this is a strong, thoroughly portable, efficient, and elegant binaural stethoscope. No one who has once learnt to use a binaural stethoscope, and has ascertained for himself the invaluable information which it conveys as to the source and direction of delicate head-sounds, will ever be justified in dispensing with its use in clinical examinations; for it gives information which the single-tube stethoscope is quite incompetent to furnish. It is an important object, therefore, to provide these quite indispensable instruments of daily medical practice in as conveniently portable a form as possible. This has, in the present instance, been well accomplished.

THE OPEN SPACES OF LONDON.—While the Metropolitan Board of Works are laying out the Hackney Downs as a recreation ground for the people, the Hackney District Board of Works have acquired West Hackney churchyard and the disused churchyard in Well Street as open spaces for the people; and the lord of the manor of Hackney has offered to hand over to the Board several smaller spaces in their area for a like purpose.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 12th, 1883.

THE INDIAN MEDICAL SERVICE.

WE are concerned to say that, by every mail, letters pour in upon us from Indian medical officers who have lately joined, and who bitterly complain of the present state and future prospects of the once famous service into which they have, as they think, entered unadvisedly. The discontented state of the service has also attracted the notice of the Indian lay press, and is from time to time made the subject of articles expressing alarm lest the depressed state into which the service has fallen should act as a deterrent to high-class young medical men entering a service which at one time had many attractions. This fear is well grounded. As we have more than once said, unwillingness to injure the Indian medical service, which up to a recent time was indisputably the best in the world, made us reluctant to give publicity to the bitter complaints that reached us, in the hope that they arose from causes in their nature temporary, and therefore likely soon to pass away. Lord Hartington, it will be remembered, at first received the representations of the Indian medical officers who waited on him with courtesy, and promised to give careful consideration to their grievances. Little or nothing came of his lordship's "consideration;" and at last, acting, no doubt, on the counsel of his military advisers, Lord Hartington declined to receive any more communications from the Committee of the Association of Indian Medical Officers, most of them retired, who were advocating the cause of the service to which they once belonged, as being "neither to the advantage of the public nor conducive to the interests of discipline." And so this discontented body of officers are left to "stew in their own juice." How far this is likely to "conduce to the interests of the public service," will probably soon be seen; for it is simply impossible that the present condition of things can go on without becoming known in the schools of medicine in all parts of the kingdom, the result of which must inevitably be, in a few years, to leave the competition for appointments entirely to the natives of India and the Indo-Britons, who will then flock into it unopposed.

Now, what are the grievances of which the medical officers complain? They are briefly as follows. One is the number of young surgeons now on the "unemployed list." This means that surgeons are kept for an unreasonably long time on what is called, most absurdly, as we have more than once pointed out, "unemployed pay." The authorities in India say that this has been brought about by the block in promotion, caused by the disbanding of many regiments, and the necessity for retrenchment. Admitting this, the medical officers who have recently joined the service have some right to say, "We have been deceived. No notice was given to us when we competed for and gained commissions in the medical service of the Government of India, that we were to be considered in effect, although not in name, supernumerary to the strength required for the service of the State, and treated accordingly." To this there is really no answer. They further say, looking back to the places they took at the London and Netley examinations, "we could, one and all of us, have entered the medical department of the British Army under conditions secured to us by a Royal Warrant, the promises in which are now fulfilled in letter and in spirit." An article on this subject in the pages of an Indian contemporary points out that young medical officers should blame their own defective reading of the prospectus handed them at Netley (the writer should have said the India Office, as no prospectus of the kind is given to surgeons on probation at Netley). This document provides that surgeons, "however employed, will be restricted to the lower rate of pay till they have passed the lower standard examination" in native languages. This they take to mean, our contemporary goes on to say, "that immediately they have passed the examination, their pay is to rise from 286 rupees to 450 rupees a month, not observing that, in paragraph 14, 286 rupees is fixed as the surgeon's pay up to five years' service. It is a pity this is not made more clear, as the hopeful and eager student is often assailed with disgust and discontent on discovering his mistake." From the evidence before us, it is clear that intending candidates for Indian appointments either deceive themselves, or are deceived on this important point; and this is the reason why we give prominence to it for the information of intending candidates for Indian appointments. At the same time, we feel ourselves warranted in suggesting to the authorities of the India Office the obvious propriety of suspending admissions to the service until those who are, as we have said, supernumerary to the required strength, are absorbed.

Another cause of discontent also dwelt on, not only in the communications addressed to ourselves, but also by the lay press in India, is the practice, which has hardened into a rule, of employing junior medical officers who have passed the required examinations in the vernacular in officiating appointments, giving them only half the pay of the permanent holder, this addition to their allowances being more than swallowed up by travelling expenses and frequent change of station. Add to the above the fact that there are now only ten administrative appointments in the Bengal Service; and here it is where we think the promises and prospects held out to intending candidates are delusive; for a moment's consideration will satisfy one who sits down to calculate his chances of promotion—which young men, before entering, never do, not having the data for such calculations—will see that his prospects of attaining to administrative rank in the medical service of India are yearly becoming "small by degrees, and beautifully less."

This JOURNAL has never been made the channel of artificial grievances. In one of the letters now before us, from a gentleman who we believe, has since left the service of the Government of India in disgust, we have a "grievance" of this kind put prominently forward. This gentleman puts, in the forefront of his advice to intending candidates, a statement in the following words. "He," the candidate, "will learn nothing at Netley!" We can very well understand that a man, capable of asking us to print such a statement without a word of explanation, is just such a person as would learn nothing at Netley, or anywhere else. We are tempted to ask Where did this gentleman acquire such a knowledge of the injuries of battle-fields, that he has nothing to learn from the lessons of a teacher, who, by the consent of his profession at home and abroad is the highest living authority on military surgery? Where, we should like to know, was he taught, before he went to Netley, the medical and surgical arrangements now required in modern wars? Was he so perfect in his knowledge of military hygiene, that the late Dr. Parkes, or his successor, Professor De Chaumont, could teach him nothing in this now indispensable branch of his profession as a military surgeon? Did he go to Netley so well instructed in empirical diseases and their sequels, that he required no teaching on the treatment of such affections, and no careful study of the condition of the invalids from India in the wards of Netley Hospital, presenting to men, whose whole lives have been given to the study of tropical disease, material for the most careful study and reflection? I

men go to Netley, so perfect in the use of the microscope, and the work of the hygienic laboratory, that they have nothing to learn? This certainly was not the account of the requirements, placed before the Council of Medical Education, of candidates for the public services. Neither, notwithstanding the great improvement in the professional education of the men who now present themselves for appointments, could the London Examiners for Netley present them with certificates of such competence and perfection, as is implied by our correspondent's opinion of his own qualifications.

THE CHEMICAL PATHOLOGY OF DIABETES.

THE Pathological Society of London, having devoted two evenings to the discussion of the Pathology of Diabetes, is about to follow the lead of the Legislature when it finds itself in a difficulty, and will appoint a special committee to further investigate the matter, and report. The discussion has, no doubt, been useful, if only in forcibly drawing the attention of the Society to the fact that morbid anatomy is not the whole of pathology. Every and any deviation from the natural condition of the body, whether as regards structure, nutrition, or function, constitutes disease; yet there was found a speaker to maintain that, since the observed morbid anatomy varied greatly in different cases of diabetes, therefore no such disease as diabetes existed; that it was to be regarded merely as an aberration of function. But surely aberration of function is disease. This view of pathology, however, is too narrow and short-sighted to deserve discussion. The interest of the debate was undoubtedly greater on the second night than on the first. This was due "in great measure" to Dr. Dickinson's spirited reply to the criticisms which several speakers had made on his observations and theories, but especially to the long and important speech of Dr. Pavy, who detailed the results of some of his recent researches. It is interesting to note that, as Dr. Douglas Powell, who closed the discussion, remarked, the observations and experiments of these two distinguished physicians and pathologists do, to a great extent, dovetail. Basing their knowledge on clinical observation—for the clinical physician never doubts that diabetes must be studied as a special disease—the one observer has turned to morbid anatomy, the other to experimental physiology, to afford some explanation of the phenomena of the disease; for "physiology and pathology," to quote the words of the late Dr. Parkes, "are in fact one; normal and abnormal life, regular and irregular growth and decay, must be studied together."

Every part of the body contains carbo-hydrates, chiefly in the form of starch. To import the word glycogen into the discussion appears merely to add an element of confusion; for glycogen, according to Dr. Pavy, is chemically identical with the starch found in vegetables. Further, it would appear that, in every part of the body, the formation of starch from maltose, or dextrin, is constantly going on. The liver possesses this power to a pre-eminent degree. Glucose, cane-sugar, and starch are, in health, all converted by the ferments of the alimentary cantal into maltose; this is the process of digestion of the carbo-hydrates. This maltose is absorbed, and the portal blood can be shown to contain a large quantity of it; the blood, however, which leaves the liver contains no maltose, and, indeed, comparatively little more than a trace of carbo-hydrates; the relative proportion in one of Dr. Pavy's experiments which he communicated to the Society, was 5.11 in the portal blood, and .80 in the venous blood of the right side of the heart.

The chief carbo-hydrate which the portal blood contains is maltose, and this is converted, in the liver, into the colloidal body glycogen, that is, into starch. The liver, in health, contains no maltose; it contains starch and a trace of glucose. We give the results of one of Dr. Pavy's most recent experiments: a healthy rabbit was pithed, the abdomen immediately opened, and the liver excised and plunged into a freezing mixture; the amount of carbo-hydrates it contained was 11.063 in a thousand parts, and of this 10.133 was starch. Certain points in these researches of Dr. Pavy will, no doubt, excite a good deal of criticism; *à priori*, it would seem improbable that the same ferment should, under the same conditions, convert both glucose and starch into maltose, since the chemical change, in the two cases, is in an opposite direction; but we will not delay to discuss this point, because a still more surprising statement remains for consideration. We will quote Dr. Pavy's own words from the communication made to the Royal Society on April 5th: "Evidence," he says, "has likewise been supplied that, by an action of the same nature as that which moves the carbo-hydrates from one to the other in the carbo-hydrate group, they are, under certain conditions, carried into a body out of the group, and thence not susceptible of being brought into glucose by the converting action of sulphuric acid; and, on the other hand, under other conditions, a substance is brought into the carbo-hydrate group, and its nature made recognisable by the converting action of sulphuric acid and its cupric oxide reducing power."

This view is, we believe, opposed to all that is at present known with regard to the behaviour of the carbo-hydrates. The chemical structure of the carbo-hydrates is simple and peculiar; and, though they have relations with the alcohol group, and through them with the fatty acids, nothing definite is known with regard to any transformation within the animal economy in that direction; still more widely do the carbo-hydrates differ in their chemical constitution from the albuminoids. The carbo-hydrates, moreover, are unstable bodies, easily destroyed by oxidation within the economy. It has always been taught that they tend to be resolved into simpler bodies, and are easily burnt up into carbonic acid and water. Dr. Pavy therefore, will have to bring forward very strong evidence in favour of the view that the carbo-hydrates enter by combination into the constitution of more complex bodies.

Holding these views with regard to the assimilation of the carbo-hydrates, Dr. Pavy believes that, in diabetes, the action of the liver on them is reversed, and that starch is converted into glucose; and that, further, glucose is probably produced from bodies not belonging to the group of carbo-hydrates, by a reversal of the action above referred to. It can be shown experimentally that the liver, when supplied with blood which contains an excess of oxygen, that is to say, with blood which is not thoroughly venous, can convert starch into sugar. If the liver contain a considerable excess of sugar, so also must the blood leaving it; and, when the blood contains sugar, it is always excreted by the kidneys in proportional amount. Glycosuria being assumed to be due to abnormal fermentation of the carbo-hydrates of the liver, and this abnormal fermentation being attributed to an excess of oxygen in the portal blood, Dr. Pavy propounds a theory which, by accounting for this excess, will account for diabetes. If in any area the vaso-motor system be paralysed, the circulation through that area becomes so quick, that the blood, when it reaches the veins, still has the characters of arterial blood. In diabetes, Dr. Pavy supposes that there happens a palsy of the blood-vessels of certain areas of the organs which make the chyle, and that thus the portal blood, owing to the hurried circulation which takes place in certain parts, comes to contain too much oxygen. Diabetes is a progressive disease; it may be held in check, it may seem for a time to be cured, but it always comes back, and, sooner or later, its victims, by slow or rapid stages, succumb; this we are told to account for, by supposing that larger and larger areas are, step by step, involved in the palsy.

However far this theory, which is not entirely novel, may stand the test of future observations and discussion, it is at least interesting to note, that the two speakers, who by prolonged study and laborious research were best able to express well founded convictions, looked to a dilated condition of the blood-vessels in the organs as an important factor in the production of diabetes.

On the etiology of the disease little or no light was thrown. If

glycosuria should be shown to be produced by vaso-motor palsy, still we should know nothing of the cause of this palsy; conceivably it might be due to central lesion, or to a peripheral lesion of the nervous structures, or it might be due to disease of the muscular apparatus of the vessels.

Dr. Pavy's communication will attract much attention among chemists, and his views will probably be severely criticised; but of this there can be no doubt, that he has made a valuable contribution to the study of what we are tempted to call pathological chemistry, a study which appears to have few attractions for the pathologists of our day and country; but one which, nevertheless, [illegible] capable, we firmly believe, of yielding important results in almost every department of medicine.

WEATHER FORECASTS.

It is generally admitted in this country that it is impossible to predict, with anything like accuracy, the changes which are likely to occur in the weather for more than two days in advance; because the position which this island occupies as regards the sea, and the neighbouring continent of Europe, induces such rapid atmospheric vicissitudes as to forbid any longer successful forecasts. The present system of forecasting here depends, to a great extent, on the rapidity with which the earliest sign of a change in the weather is telegraphed from the western stations to the central office in London. In America or the continent of Europe, where the telegraph-wires stretch over a very large tract of country, notice of changes in the weather can be forwarded immediately they are noticed to a very great distance; but in London, owing to the want of stations in the west, *i.e.*, the Atlantic, as a rule, only a few hours' notice of an alteration in that quarter can be obtained. As a pamphlet has been published by Mr. Dewar,* which gives forecasts for the whole year, we propose to discuss his prognostics somewhat fully, to ascertain if he has made any advance in the principles and practice of forecasting atmospheric changes.

The principles on which the forecasts are based have been omitted in this edition, because "they remain the same as previously published; and, it is, therefore, hardly necessary to repeat them." As we have not a copy of the edition for previous years containing this exposition, we cannot tell upon what data the forecasts are founded; but it is evident, from the text, that the calculations are based, to a great extent, upon the position of the moon, and on the resultant tides, as well as, to a lesser extent, on the force exerted by the sun. It is clear, therefore, that Mr. Dewar's studies are based on astro-meteorology, which is now attracting much more attention than has been bestowed upon it for many years. He gives the time at which the moon "souths" each day; the general direction of the wind, or the quarter from which the general movement of the air takes place; as well as the force of the primary and secondary tendencies. The force of the latter is said often to overcome the former, in which case the actual wind-currents may be almost opposite to that mentioned in the column of primary tendency. Numerous examples of this kind are shown in his tables; but the data on which he predicted the primary wind-direction are not stated in the pamphlet, and we are unable to do more than compare the forecasts with the actual weather, which we can do, because he says that "most of the disturbances marked with a single or double star are likely to occur in the vicinity of the meridian of Greenwich." We will, therefore, compare the weather at Greenwich with that predicted.

In the month of January, the direction of the wind corresponded fairly well with that foretold on twelve occasions; but it blew from a different quarter on as many as nineteen days. Now, considering that Mr. Dewar predicted them as likely to be southerly or north-east, and as these are the prevailing winds for this month (Bloxam, on "Winds," *Proceedings of the Meteorological Society*, 1866), this was no great success. As regards the force of the wind, he was more frequently wrong, as the words "stormy" and "strong wind" were marked against fourteen days, whilst the wind was below the average on twelve out of these fourteen days, and the weather was stormy only on two days. It is true, he says, that "stormy winds" include heavy rain, snow, thunderstorms, or dense fogs; but even this definition does not help him much, as the words "fresh gales" were added. For instance, on the 20th and 21st of January, there was fog on one day, and, instead of a fresh gale, there was almost a calm on the other. In the same month, there were two days marked with a double star, to show "important disturbances," and there were three others marked with a single star, to show decided, but less marked, disturbances. On the days thus marked, the weather was fine on one, with a slight excess of wind, and changeable, with a moderate excess, on the others; in fact, ordinary weather for the time of year. In February, there were three days marked with a double star; on one of them, there was no disturbance, the wind being less than usual, but with some rain; on another, it was squally; and, on the third, very fine, and almost a calm. The same may be said of three days marked with double stars in March; so that in these, the most crucial of his predictions, he has almost utterly failed. Mr. Dewar has been almost equally unfortunate as regards his fine days; for instance, between March 1st and 10th, he predicted as many as seven fine days, whilst it was snowy on some of these days, and fine on a day which was expected to be stormy. On the 24th, 25th, and 26th of March, which were fine for the time of year, the weather was predicted to be "very stormy, with south-east and north-west gales." The unusual cold of March was not referred to; but he rarely gives the probable temperature, although the words "very fine, mild," occur on several occasions in the forecasts for January and February.

The influence of the moon on temperature has been examined by Mr. Park Harrison, and the results published in the *Proceedings of the Meteorological Society;* and he has shown that certain small increments of temperature correspond with certain phases of the moon, yet they are too small to require any marked attention. As regards rainfall, Mr. Glaisher, Mr. Dines, and Mr. Bloxam have carefully examined the relations between the different days of lunation and the amount of rain (*Proceedings of the Meteorological Society*), and found that, to a small extent, there is a relation between the two, as the largest rainfall occurred on the ninth and tenth days (Bloxam and Dines), ninth and twelfth (Glaisher), and the next largest on the seventeenth, eighteenth, and nineteenth days. These differences are far too small for any forecasts to be founded on them; but they are sufficiently large to keep in memory, as being those on which there is likely to be somewhat more rain than on the earlier or later days of lunation.

It is alleged by many meteorologists that there is a connection between the size and number of sun-spots and the occurrence of cyclones, as well as varying amounts of rainfall, wind, barometric pressure, and temperature; whilst others deny that there is any relation between them. Mr. Scott, in his recent excellent book on meteorology (*Elementary Meteorology*, p. 392), says that the connection is not sufficiently understood to justify prediction, as one class holds "that sun-spot frequency accompanies a high, whilst the other asserts that it is associated with a low temperature; so that it can scarcely be said that the close relation between solar and terrestrial phenomena is capable of accurate demonstration." It is also said that years in which the relative values of the sun-spots have been large, have also been good harvest and vintage years. This is true to a certain extent; but, on the other hand, years in which there have been only a small number of sun-spots have been good vintage years. It is evident, therefore, that the different phases of the moon and the varying size and number of sun-spots cannot at present be used to forecast the general or special kind of

* *Weather Forecasts, Air and Tidal Currents, and Dates of Storms.* By D. Dewar. Blackwood, London.

weather which is likely to occur on any given date, or even at any particular period of the year.

DR. E. SYMES THOMPSON is now giving a series of lectures at the Gresham College, Basinghall Street, on the subject of "Nursing."

AT the Stamford Petty Sessions, an auctioneer named Reedman has been summoned for disobeying an order to have his child vaccinated, and fined the heavy penalty of 6d. and costs.

THE Medical Act Amendment Bill was set down *pro formâ* for second reading in the House of Commons on Thursday, the 10th instant. In consequence, however, of the pressure of public business, the reading of the Bill was necessarily deferred until after the Whitsuntide vacation. Mr. Biggar has given notice of his intention to oppose the Bill.

THE Council of the Metropolitan Counties Branch have decided on issuing a circular to members of the British Medical Association, and of the profession generally in London and the suburbs, asking them to sign a petition in favour of the Bill. A form of petition is enclosed with the circular letter. It is highly desirable that, in addition to signing the petition, each member should use his influence with any member of Parliament with whom he may be acquainted, and urge him to support the second reading of the Bill.

WHILST approving in general of the Bill, and desirous that it should become law, the above-named Council has appointed a special committee to examine its details, with the view of pointing out any amendments, which it may be desirable to introduce during the progress of the Bill through Committee in the House of Commons.

THE vacancy in the ranks of the Medical Department of the Local Government Board caused by the appointment of Dr. Thorne Thorne as Assistant Medical Officer has not yet been filled up. Certain officers of health have, however, been recently employed by the Board to overtake the arrears of work in the Medical department, and it is thought probable that the election of the new Inspector will be made from among these.

AT the next meeting of the East London and South Essex District of the Metropolitan Counties Branch, to be held at the New Town Hall, Hackney, on Thursday next, at 8.30 P.M., Mr. Watson Cheyne will read a paper on Tubercle-Bacilli in relation to Tubercular Disease, and will give microscopical demonstrations. All members of the Branch are entitled to attend the district meetings; and it is hoped that many will avail themselves of this privilege.

WE understand that Dr. Graily Hewitt's book on "The Diseases of Women" is in course of publication in Italian; it is published at Naples in the form of monthly fasciculi, of which three have already appeared. The same work has also just been issued by Messrs. Birmingham of New York in a cheap form, under the editorship of Dr. Harry Marion Sims, the son of Dr. Marion Sims.

A MEMORIAL tablet is to be placed on the house in Reiter Street (now Skoda Street), Vienna, formerly inhabited by the celebrated physician Dr. Skoda. The ceremony will take place on June 13th, the day of his death. The inscription—rendered into English—is: 'Dwelling-house of Professor Joseph Skoda; born in the year 1805, died in the year 1881."

ON Wednesday last, at University College Hospital, Mr. Christopher Heath made use of Junker's anæsthetic apparatus in a case of excision of the jaw. Some little difficulty in getting the patient under the influence of the anæsthetic was met with, but anæsthesia was subsequently easily maintained throughout the operation; the narcotised air was delivered at the back of the pharynx through an ordinary gum-elastic catheter bent to the required form. About two and a half drachms of chloroform were used in twenty-five minutes. The convenience of the apparatus to the operator was manifest.

A CHEMIST named Armand, residing at Vassy, in the department of Haute Marne, has been condemned to pay a fine of 10,000 francs, and 2,000 francs damages, to a M. Junot, under somewhat singular circumstances. Mdme. Junot, the wife of the prosecutor, was, it seems, in the habit of making frequent purchases of morphia from the defendant for her own use, with the result that, not long since, her mind became so seriously affected that it was found necessary to confine her in a lunatic asylum. On this ground, M. Junot brought an action against the chemist, with the result above mentioned.

THE CATAPULT NUISANCE.

To the risks of the road, especially in the neighbourhood of large towns, on Sundays, we must add the dangers which arise from the perpetrators of the catapult nuisance. From the operations of lads who amuse themselves by loitering about suburban roads, and shooting stones from their formidable catapults, we have lately heard of several cases of injury to pedestrians. The offenders usually escape punishment, because no one takes the trouble to capture and prosecute them. The nuisance may seem a small thing to those who have not experienced it, but it is really time to put it down, for many persons have been injured by stones propelled with almost the force of a bullet.

LECTURES ON BOTANY AT CHELSEA GARDEN.

A COURSE of botanical lectures and demonstrations was commenced on Saturday afternoon last at the garden of the Apothecaries' Society at Chelsea, and was numerously attended, the lecture-room being completely filled. The lecturer was Mr. J. G. Baker, F.R.S., F.L.S., of the Kew Gardens, who gave, as an introduction to the subject, a general view of the organs composing a perfect plant—as the root, the stem, the leaves, the flowers, and the fruit. After the lecture, the audience were conducted through the garden, where the living specimens were explained and described in connection with the discourse previously given. The lectures will be delivered on successive Saturdays during the summer months, and the admission is free.

CONTAGIOUS DISEASES ACTS.

THE only official notice received by the police who have been employed in carrying out the Contagious Diseases Acts, that those Acts have been suspended, is contained in a telegram from the Commissioners of Police, directing that no further proceedings are to be taken under the Acts, and stating that the police engaged in the work will be otherwise disposed of in a few days. These officers number twelve inspectors, and about fifty sergeants and constables. The inspectors are stationed as follows: six in the Woolwich dockyard district, including Greenwich, Dover, Deal, Shorncliffe, Folkestone, Hythe, Colchester, Aldershot camp, and Windsor; three in the Chatham Dockyard district, for Chatham, Gravesend, and Canterbury; two at Portsmouth Dockyard for Portsmouth, Winchester, and Southampton; and one at Devonport Dockyard.

THE LIVERPOOL SCHOOL OF MEDICINE.

A SIGNIFICANT understanding seems at length to have been arrived at between the authorities of the Liverpool School of Medicine and those of the Victoria University at Manchester. On April 28th, there was held a meeting of the governors of University College,

Liverpool (of which institution the local flourishing medical school is the medical faculty), when it was unanimously agreed that the college should be affiliated to Victoria University. Before the institution can claim admission, however, to the university, it will be necessary to create two further professorial chairs (of Latin and history), for the endowment of which a sum of £20,000 is needed, and also to appoint some additional lecturers and demonstrators. Towards these new requirements, considerable contributions have been promised.

THE RECENT SMALL-POX EPIDEMIC.

SPEAKING of the subsidence of the recent epidemic of small-pox in his last annual summary, the Registrar-General observes that the deaths from this cause had been no less than 2,367 in 1881, but fell to 431 in 1882. The rate was 0.11 per 1,000 living, and was lower than that of any of the previous six years. Out of the 431 persons who died, 108 were certified to have been vaccinated, and 184 were certified to have been unvaccinated, while no trustworthy information was given as to the remaining 139. Of the deaths concerning which the necessary information was forthcoming, 37.0 per cent. were of vaccinated, and 63.0 per cent. of unvaccinated persons. Of the vaccinated, 23 per cent. were under twenty years of age, and 77 were above that period of life; while among the unvaccinated, the proportions were nearly inverted, 67.4 per cent. having been under twenty, and 32.6 above that age. The Registrar-General regards as the probable explanation of this inversion that the protective efficacy of vaccination in the individual becomes weakened with lapse of time, and in a much greater degree than does the protection afforded by an attack of small-pox itself.

SMALL-POX AND VACCINATION.

IN his account of the prevalence of small-pox in Gateshead during the past year, Dr. Green gives some especially noteworthy instances of the efficiency of vaccination. In one family a vaccinated child took the disease, was removed, and recovered after a few days' illness. With the exception of a baby, which, unfortunately, was overlooked, all the members of the family were re-vaccinated, and all escaped, but the baby contracted small-pox and died. From another household four children were admitted into the hospital; one was vaccinated, and had a few spots, while the remaining three, who were unprotected, suffered from confluent small-pox, and only one recovered. Five cases from a family were admitted for treatment, one a vaccinated child with a few spots; four vaccinated, three of them with confluent, and one with semi-confluent small-pox; of the unvaccinated, one died, and another lost her sight. In another family there were six children, five being unprotected; one of these contracted the disorder and was removed; another of the unvaccinated children was sent to a neighbour's immediately the first became ill. This child, the vaccinated child, and the father and mother, who were both vaccinated, escaped; the other four had very severe attacks of the disease, in a confluent form, and two died.

THE NEW ASSISTANT MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.

AS was generally anticipated, the post of Assistant Medical Officer of the Local Government Board, left vacant by the resignation of Mr. Netten Radcliffe, has been filled by the appointment of Dr. Thorne Thorne, who is one of the senior officers of the Medical Department, and whose name is very well known in all ranks of the profession. Dr. Thorne first became connected with the Medical Department of the Privy Council in 1869, when he made a special inquiry into the effects produced on the human subject by the consumption of milk from cows having foot-and-mouth disease. Since then, he has been largely engaged in the current sanitary and vaccination business of his department; but, if we except his Caterham typhoid fever inquiry and a few others of passing interest, he has had but little opportunity of evincing his skill as an etiologist. It is, however, as an administrator that Dr. Thorne's strength has chiefly lain. If a particularly thorny question had to be settled, or an unusually awkward local authority had to be managed, Dr. Thorne was assigned for the task; and his success in this branch of duty has been remarkable. The report which he not long ago prepared for the Local Government Board, on the use and influence of hospitals for infectious diseases, was a most painstaking and meritorious piece of work, greatly needed, and likely to be of incalculable advantage to local authorities. Dr. Thorne, in addition to his official honours, is Lecturer on Public Health at St. Bartholomew's Hospital, one of the Committee of the London Fever Hospital, and Treasurer of the Epidemiological Society.

CHARGE AGAINST A MIDWIFE.

AN inquest was held by Dr. Diplock at the Black Bull, Silchester Road, on April 28th, on the body of Elizabeth Harmer, aged 26, who had died on April 24th in St. Mary's Hospital. The case excited much interest in the neighbourhood, several fatal cases having occurred in the practice of the same midwife. It appeared that the patient was delivered by Mrs. Goss, the midwife, on January 26th. She was ill three weeks after, when Dr. Roberts saw her, and said she had puerperal fever. She was taken into St. Mary's Hospital on March 24th, and died there on April 24th. From the evidence, it appeared that four women attended within a few weeks by Mrs. Goss had all had puerperal fever. The coroner, in summing up, said the main point was whether Mrs. Goss had been duly cautioned, when attending one of the cases of puerperal fever, of the danger of continuing to attend midwifery cases. Was the danger explained to her by the doctors? They declared that they had advised her to discontinue practice. The question in the present case was, Did Mrs. Goss know of her own experience, or was she told of the danger she might do by carrying on her practice? The doctors said they told Mrs Goss the nature of the disease; and, if then Mrs. Goss continued, for the sake of money, to carry on her business, and conveyed to Mrs. Harmer the disease of which she died, it was a sign of culpable recklessness amounting to manslaughter. The jury were unanimously of opinion that Mrs. Goss, in spite of her having been cautioned, nevertheless, for the sake of money, continued at her business. The coroner said, "That is manslaughter." Mrs. Goss was then remanded on bail. This is the same midwife to whom we referred last week.

THE ANNUAL CONVERSAZIONE OF THE METROPOLITAN COUNTIES BRANCH.

THE Council of the Metropolitan Counties Branch has lately had under consideration the advisability of continuing the receptions which have for some years been given by the Presidents at the South Kensington Museum. The cost of each reception, amounting to a sum varying from £150 to nearly £200, and of necessity gradually increasing with the increase of members, has been borne solely by the President for the year; and there has been for some time a growing feeling that the Presidents ought not to be so heavily taxed, and that the system hitherto followed was likely to be detrimental to the Branch, by deterring members whom it might be thought desirable to elect to the highest office from accepting the offer made to them. In November last, the Council appointed a subcommittee to investigate the subject; and, at a meeting of Council held last month, it was determined, on the recommendation of the subcommittee, that the present system of holding an annual gathering at the South Kensington Museum at the expense of the President should be discontinued; and that, in order that a beginning in this direction might be made, the present President (Dr. Bridgwater) and the President-elect (Dr. Hare) be requested

not to give such entertainments at their own charge during their respective terms of office. At the same time, the subcommittee was requested to consider whether an annual *conversazione* might not in future be held at the expense of the members generally; and, if so, what would be the best means of raising the necessary funds; and to report thereon to the Council. It is but right to say, that both the President and the President-elect declared their readiness to follow the custom of their predecessors, if the Council should think it advisable for them to do so; but it was felt that, as a beginning must be made at some time, no opportunity was likely to be better than the present.

THE PARKES MUSEUM.

THE preparations for the re-opening of this museum, on the 26th instant, are in a forward state; the walls are to be covered by exhibits of the various materials used for internal decoration—such as tiles, parquetry, flaxen materials, washing papers, and paints free from deleterious ingredients. The Council are ready to receive proposals from manufacturers or amateurs who may desire to present sanitary apparatus of any kind to the museum. At the last meeting of the Council (on May 9th), the Vice-Chairman read the following letter, which he had received from General Sir H. F. Ponsonby, K.C.B.: "I have laid before the Queen the documents enclosed by you, and I am commanded by Her Majesty to asssure you that it has given the Queen much pleasure to learn the satisfactory progress of the Parkes Museum." Among those who will attend the re-opening ceremony will probably be Earl Granville; the President of the Local Government Board (Sir Charles Dilke); Earl Fortescue; Lord John Manners; Sir T. Spencer Wells, Bart.; Sir Henry Thompson; Sir Algernon Borthwick; Sir Joseph Fayrer; Colonel Frank Bolton; Professor Humphry of Cambridge; and Mr. Edwin Chadwick, C.B.

PRESCRIBING DRUGGISTS.

ANOTHER death from chloral once more exhibits the fatal ease with which the public, in spite of a Sale of Poisons Act, can procure dangerous drugs from prescribing chemists. Last week a young man, twenty-two years of age, the subject of melancholia with suicidal tendency, applied to one of the leading pharmacists of Birmingham, complaining of pains in his head and sleeplessness, and asking for some chloral to make him sleep. The druggist explained at the inquest that he "advised deceased to try and do without narcotics," but he did not advise him, as he ought to have done, to consult a medical practitioner, and he at once supplied to him, as he ought not to have done, a very dangerous quantity of a solution of hydrate of chloral. The druggist very improperly prescribed for, and supplied to the intending suicide, a mixture containing 120 grains of chloral hydrate, with directions that the twelfth of the whole was to be taken for a dose. The young man took the mixture home, wrote a farewell to his friends, swallowed the whole of the poison, and was found next morning dead in his bed. Neither the coroner nor his jury appear to have made any comment upon the conduct of the druggist; no one was blamed, and the stereotyped verdict of suicide whilst in a state of temporary insanity was returned. The death of this young man was clearly preventible. The deceased was suffering from a form of unsoundness of mind, which was possibly curable, and which rendered it necessary that he should be efficiently prevented from injuring himself. The death of this suicide might have been prevented if a dispensing druggist had refrained from prescribing for serious illness, and from supplying to the deceased, without any authorisation, a poisonous quantity of a dangerous drug.

THE SMOKE NUISANCE.

THE Smoke Nuisance Acts require that convictions for the first offence shall be accompanied by a fine of not more than £5, nor less than 40s.; a second conviction for the like offence entails a fine of £10, and for each subsequent conviction the sum of double the amount of the penalty imposed for the previous conviction. The analysis which has been made by Mr. Ernest Hart, the Chairman of Committee of Council of the Smoke Abatement Institution, from returns forwarded to the Duke of Westminster, President of the society, by the Home Secretary, shows that, out of a total of 1,036 convictions for improper construction and negligent use of furnaces, 193 only carried fines above the minimum of 40s. fixed by the Act for first offences, and 167 are at that minimum rate, while 676 convictions carried fines below the legal minimum, the average amount of such fines being actually 7s. 11d. only. Without being invidious in directing attention to particular courts in which the administration is most defective, it should be noticed that, out of a total 66 second and subsequent convictions for furnaces "Not properly constructed," 36 carried fines below the legal minimum; and in 62 similar convictions for "Negligent use of furnaces," 47 carried fines below the legal minimum; while the amount of the fine imposed in some courts for improper construction and negligent use of furnaces in second and subsequent convictions was £3 5s. 2d., in other courts it was only 6s. 9d. The returns show the most extreme variation in the treatment of cases in the different courts; while some courts inflict penalties of £10 for second and third, and £20 for fourth convictions; others fine only 1s. for second and third convictions, and the fines range at almost all rates between these extremes. A further anomaly is shown by some courts fining 40s. for seventh, and 10s. for sixth convictions. In the main, the returns show the treatment of the cases to be purely arbitrary, and that the administration does not comply with the letter—far less the spirit—of the legislation.

THE UTILISATION OF LONDON SEWAGE.

AT a cost of several millions of pounds, a system of drainage for the metropolis has been so carried out, that the Thames immediately below Barking has been converted into a great open sewer. We learn, from a contemporary, that, with a view to remedying the intolerable nuisance which has been created by the pollution of the river, Sir Joseph Bazalgette has suggested that works should be undertaken for emptying the sewage of London into the German Ocean, at a cost of six millions sterling. Mr. Rose Innes, in calling attention to this subject at the meeting of the City Commissioners of Sewers, very properly remarked that the adoption of such a suggestion would involve a wanton waste of public money. For a much less sum than this, it would surely be possible to devise a scheme for converting the sewage into valuable manure. That town-refuse has fertilising properties is admitted by everybody who is entitled to speak with authority upon the question of its utilisation; and as there are thousands of acres of unproductive land on the Kent and Essex coasts which might be converted into sewage-farms, there appears to be no good reason why the experiment of making it productive by irrigating it with the London sewage should not be tried. It is estimated that the present annual output at the Barking outfall works would yield six hundred and fifty thousand tons of excellent manure; and, if this estimate is to be relied upon, it is not unreasonable to assume that the price which the manure would realise would greatly diminish the cost of carrying out the utilisation scheme. It must not be forgotten, however, that the utilising experiment has not been a brilliant success in those English towns where it has been tried, though, we believe, in France, it has been adopted with the most satisfactory results by more than one municipality. In this country, the adoption of the scheme has been confined to one or two inland towns; and, if it has not realised the expectation of the promoters there, it is worth while trying whether the experiment would not be more successful if applied to the large tracts of unproductive land on either side of the mouth of the Thames. Something must be done to prevent the

continuous pollution of the river in the neighbourhood of the outfall works, and the sewage-farm scheme is possibly preferable to that for carrying the sewage to the German Ocean, as the latter would involve an expenditure which the ratepayers would never tolerate. The Commissioners of Sewage are so far favourable to the utilisation proposal as to think it worth while referring the consideration of it to the Port Sanitary Committee, Mr. Rose Innes's resolution to this effect having been unanimously adopted.

LAUNDRIES AND INFECTIOUS DISEASES.

THE danger of sending infected linen to the common laundry without previous disinfection, must be obvious to any thoughtful person; but, like many other obvious things, this danger needs to be impressed again and again upon the attention of careless householders. A laundress may, unwittingly or otherwise, be both the recipient and the retailer of infectious particles; and to her powers of mischief in both capacities, the following examples eloquently testify. Dr. Cameron, of Hendon, writes that laundries are a constant and prolific source for the introduction of small-pox, scarlet fever, and other diseases. Indeed, all the cases of scarlet fever and small-pox that occurred at Hendon during the past year were either introduced by persons coming into the district with the disease upon them, or through the medium of infected clothing being sent to be washed without previous disinfection. In September, scarlet fever was introduced through this medium, and thirteen children were attacked. Another outbreak in December seemed to emanate from one of the laundries, but, the children being at once isolated, the disease did not spread. Dr, Bruce Low, of Helmsley, in Yorkshire, has a remarkable experience to record. A young girl was hired to go to a house where there were two convalescents from scarlet fever, of which cases she was aware when engaged. A week after she went to her situation, she contracted the disease, and was sent home as soon as the rash was discovered. No medical advice was sought, to avoid what her mother called "bother." This woman took in washing, and, as soon as the daughter was able to go about, she was sent out with the clean linen to the various houses. At one house at least, the coppers received from the girl in change from the washing-bill were accompanied by large flakes of skin, which had peeled off the girl's hands. At the house where the scales were received with the coppers and the linen, there were subsequently several cases of severe scarlatinal sore-throat. These facts were only traced some few weeks afterwards; too late, of course, to prevent the mischief.

THE HYGIENE OF WATER-COURSES IN RELATION TO FISH.

DURING the International Fishery Exhibition at Berlin in 1880, a prize was offered by His Majesty the King of Saxony for the best treatise on "The Pollution of Water-Courses and the Prevention of it, with a special view to the Life and Health of Fishes." But no competitor has been able to gain this prize. In consequence, and in compliance with a request of the German Fishery Association, His Majesty has graciously consented to assign the said prize to the committee of the German Sanitary Exhibition, and at the same time to empower the committee to bestow it on the best execution of the above-mentioned task, which is accordingly again proposed in a somewhat enlarged form. The prize will be awarded to the best essay on the sanitary, industrial, agricultural, and other interests—including those of fishery—endangered and injured by the pollution of water-courses, as effected partly by the utilisation of them for various purposes, partly by the influx of refuse and sewer-waters; also a precise statement of chemical materials, machines, architectural constructions considered to be the most effectual means against such detriments, and demonstration of technical and economical practicability of propositions relative hereto. The addition of drawings, models, and preparations, will in certain cases be indispensable. Monographs on single divisions of the question will not be excluded from competition. Inventions of an elder date will likewise be admitted, provided they are treated from a new point of view. In case of special experiments being required for a proper estimation of a proceeding, the jury may adjourn the verdict for a time, not exceeding a twelvemonth. Persons of all countries may compete. The manuscripts must be either in German, French, or English. Competitors may send their essays anonymously; such essays must bear a motto, and must be accompanied by a sealed envelope having the same motto and containing the name of the competitor. The jury is authorised to open the envelope if communication with the competitor should become desirable. Manuscripts are to be sent post free to Dr. P. Boerner, 8, Burggrafen Strasse, Berlin, before December 31st, 1884. The prize furnished by His Majesty the King of Saxony consists of a silver "jardinière." There will be also an award of 600 marks, granted by the German Fishery Association, besides two prizes of 300 marks each, offered by the Committee of the German Sanitary Exhibition.

THE PREVENTION OF PHTHISIS.

THE phrase chronic pulmonary phthisis is now, in a certain sense, a generic term, for it includes the distinct, if rarely dissociated, varieties of consumption of the lungs known as the fibroid, pneumonic, and tubercular forms of phthisis. But, however its intimate morbid anatomy may vary in particular instances, pulmonary consumption is still a well recognised and terrible entity, of marked hereditary transmission, and attended by increasing cough, progressive signs of lung-destruction, and gradual wasting of the body. Using the term phthisis or consumption in this latter and well understood, though scientifically inexact, sense, our present knowledge of the morbid processes which constitute consumption, incomplete as it is, justifies us in asserting unequivocally that it is highly probable that our adult mortality from phthisis might be considerably reduced, if members of phthisical families, and persons of phthisical habit and tendency, could be induced to pursue a course of life intelligently designed to prevent in them the incidence of consumption. In wisely chosen food, in suitable exercise, in well adapted clothing, and in the respiration of pure air, a person of consumptive inclination may find four distinct and potent details of everyday life which are usually well within his control, about which there can be little doubt or controversy, and which may be turned to efficient account in the prevention of phthisis. Precautions, if they are to be effectual, must not, as is now too often the case, be put off until signs of pulmonary mischief become manifest. Then the evil can only be mitigated, not avoided. If phthisis be apprehended, the daily diet should be rich both in nitrogenous flesh-forming and in fatty constituents. The especial nutritive value of milk in such a case is universally recognised. Next to well arranged daily food, exercise in the open air is of the greatest importance in the prophylaxis of phthisis. On this point, the late Dr. Parkes was emphatic. He laid down the rule that "the best climates for phthisis are perhaps not necessarily the equable ones, but those which permit the greatest number of hours to be passed out of the house." By well adapted clothing, many of the chills, catarrh and pulmonary congestions which often lead up to consumption might be prevented. The rules in this respect are well established. The feet should always be dry and warm; the covered parts of the body, excepting the head, should be clothed in suitable woollen fabrics; the underclothing should be kept of the same thickness all the year round, and variations of apparel to suit the changes of season being made only in the outer garments; and no constrictions or compressions should be allowed to hamper the respiratory play of the thoracic and abdominal parietes, or to impede the circulation of blood through the lungs and heart. With regard to the respiration of pure air, it may be said generally that it is within doors that the breathing of vitiated air is most likely to become

langerous, and is such a powerful excitant of phthisis. All apartnents in which persons live should be thoroughly ventilated, by ight as well as by day, so as to secure a constant movement of ure air in imperceptible currents.

KEFIR, A NEW MILK-FERMENT.

WHILST, during the last few years koumiss has been introduced nto Western Europe, and even into America, a new drink prepared rom cow's milk by a process of fermentation imperfectly understood, s coming into use in Russia. This drink is Kefir, and it has for ong formed the chief article of diet among the mountaineers in the eighbourhood of Mount Elbruz and Kasbek, in the Caucasus. It orms a thick white fluid, with a faintly acid flavour, said to resemble ertain light wines. The mountaineers themselves call it "Ghippo." he inhabitants of the plains near the Caucasus, and the Russian ettlers, who term it Kefir, Kifir, or Khiafar, make use of it, not or the table, but as a popular remedy for anæmia, struma, gastric atarrh, and chronic bronchitis. According to the Moscow *Medical Gazette*, where a contribution on the subject has recently appeared, Dr. Kern being the author, the preparation of Kefir is very simple. he mountaineers make it by filling a bag made of goat-skin with ilk, then a tenacious mass, of the size of a walnut, of a material hich they term "Kefir-seed," and the precise origin of which is nknown, is added to the milk. In a few hours the process of fermentation sets in actively. When prepared in wooden or glass essels, the kefir tastes better. After a lapse of twenty-four hours weak kefir is produced; when the process is allowed to continue for hree days, the kefir becomes very strong. The source of the ferment is scrupulously concealed by the Caucasian mountaineers, who, ith the humour of the English cook who once sold a secret for aking "fundied cheese," the "secret" being that, the cheese must e fundied after toasting and before the addition of pepper, cannot e persuaded to enlighten strangers to any greater extent than in supplying a small sample of the ferment, in the form of dry dark-brown rth-like masses, but steadfastly refusing to say whence they are btained. One of these fragments dropped into milk begins rapidly effervesce, turns milk-white, and assumes the form of a mulberry, then fermentation proceeds at once. If a piece, thus transrmed, be dropped into another bowl of milk, it rapidly increases size, and also causes fermentation. Dr. Kern has carefully xamined specimens of this "kefir-seed," which consists chiefly masses of zoogloea, holding together collections of a bacterium hich he calls *Dispora Caucasica*. The yeast-fungus, *Saccharomyces erevisiæ*, is always found associated with this new germ. "Kefir-eed" retains its vitality after remaining for months in its dry conition. Dr. Kern has a great belief in the future of kefir, which as all the virtues of koumiss, and possesses one great advantage ver the latter fluid, in that it is just as good when prepared from ow's as from mare's milk.

SCOTLAND.

GLASGOW DISTRICT BOARD OF LUNACY.

HE Glasgow District Board of Lunacy has resolved to empower a mmittee to purchase a site for a new asylum, which may be ther at Hartwood or Brountod.

THE DUMFRIES INFIRMARY AND FEVER PATIENTS.

NOTHER effort has been made to alter the decision arrived at by e managers of the above hospital in reference to the reception of ver patients, on the ground that the arrangements made were not tisfactory to the local authority. At the annual meeting of the bscribers, the matter was fully discussed, and eventually it was ry properly decided to uphold the decision of the managers, whereby sixteen beds are set aside for fever patients; and the local authority by whom they are sent in are to be charged two guineas per week per patient. A graceful compliment was paid to Professor M'Lagan of Edinburgh, by electing him a life governor of the Infirmary in consideration of his generous conduct in declining to accept any fee for his valuable report on the adaptability of the Infirmary for the reception of infectious cases.

UNIVERSITY OF ABERDEEN.

THE various medical classes met for the summer session on Monday, May 7th; all the classes were well attended. In addition to the ordinary classes, new classes for practical pathology and operative surgery have been instituted. The other special means of instruction in diseases of the eye, teeth, ear and larynx, and the practical instruction in public health and insanity were alluded to by Dr Struthers in his introductory remarks in opening his class.

ABERDEEN ROYAL INFIRMARY.

As already stated in this JOURNAL this institution, like others of a similar nature, has got into difficulties, and with characteristic energy the managers have resolved to liquidate the debt of over £3,300. At a largely attended meeting held last week it was resolved to appoint a special committee to co-operate with the finance committee in organising a house-to-house collection, to clear off the existing debt and to increase the permanent annual income.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

AT the recent examinations for the double qualification of the Royal Colleges of Physicians and Surgeons, Edinburgh, forty-four candidates passed the first professional examination, and fifty-two candidates passed the second professional examination, and received the L.R.C.P. & S.E. diploma. For the single qualification, L.R.C.S.E., six candidates were successful; while for the qualification in dental surgery, three candidates passed the first professional examination, and two candidates passed the second professional examination, and received the L.D.S. diploma.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending April 28th, show that the death-rate in the eight principal towns was 27.6 per thousand of estimated population. This rate is 3.5 above that for the corresponding week of last year, and 0.1 above that for the previous week of the present year. The lowest mortality was recorded in Aberdeen, viz., 19.5 per thousand; and the highest in Glasgow, viz., 34.6 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 4.4 per thousand, or 0·4 below the rate for the previous week. Whooping-cough and measles were the most fatal miasmatic diseases. There were 119 deaths registered from acute diseases of the chest, being 14 less than in the previous week. The mean temperature was 43.0°, which was 2.1° below that of the week immediately preceding, and 1.9° below that of the corresponding week of last year.

LECTURESHIP ON DISEASES OF THE EYE.

ON Monday, an important addition to the teaching facilities in Edinburgh University was inaugurated by the commencement of a course of lectures on diseases of the eye, by the recently appointed lecturer, Dr. Argyll Robertson. Several of the professors in the Faculty of Medicine were present, thus testifying their appreciation of this addition; and the lecturer was introduced by the senior professor present, Dr. Douglas Maclagan. The lecturer directed attention to the fact that in only one university in the United Kingdom, namely, that of Dublin, was ophthalmology constituted a special subject of examination. He spoke of the immense value of a knowledge of

diseases of the eye in medicine, and regretted that the knowledge of the subject in the profession was still so limited, although, of late years, considerable improvement had taken place. The course of lectures will be given in the surgery class-room in future.

THE GLASGOW ROYAL INFIRMARY.

IT will be remembered that, as formerly noted in the JOURNAL, it was decided to submit to the consideration of a special committee those matters connected with the administration of this institution, which had led to some difference of opinion between the managers and the medical staff of the hospital. This committee has now issued its report, which was brought before a meeting of the managers on the 7th instant, and was unanimously adopted. A perusal of it shows that they have gone very fully into the matters remitted to them, and have put themselves in communication with a large number of the principal hospitals in Great Britain as well as with a deputation representing the views of the medical staff of the Glasgow Royal Infirmary. The question of the administration of anæsthetics by the resident medical staff is one which occupies much space in the report, and the suggestions of the committee on this head are embodied in a few regulations which, they think, ought to be enacted. They advise that, when a surgeon receives a new assistant, he should instruct him practically in the administration of anæsthetics, and point out the dangers to be looked for, and as soon as the surgeon is satisfied with the assistant's knowledge on these points, he shall grant him a certificate to that effect, and unless possessed of this certificate or otherwise legally qualified, he shall not be entitled to perform any operation under an anæsthetic in the surgeon's absence. All cases where anæsthetics are administered must be entered n the operation-book if in the surgeon's absence, and should death occur while the patient is under an anæsthetic, whether in the absence or presence of the surgeon, particular note of the case must be made in the ward journal. Other matters are touched upon in the administration of the hospital, but the anæsthetic question is the one round which the chief interest has centred both in the eyes of the profession and the outside public. We do not propose at present to remark at any length on the report, to which we may again direct attention, but it may be said generally, that while the suggestions made by the committee should tend to allay any uneasiness on the part of the public as to any want of care in the administration of anæsthetics in the institution, they in reality in no way differ from the rules formerly in vogue in the hospital, and of the safety of which the medical staff had all along satisfied themselves.

IRELAND.

BELFAST WORKHOUSE.

MR. HAMILTON, Local Government Board Inspector, in his half-yearly report, states that an addition has been made to the probationary accommodation since his last report, and that two new bath-rooms have been added. During the last winter, Belfast was tolerably free from any epidemic disease, and there has not been any unusual pressure on the union hospital. The workhouse is at present quite adequate to the wants of the union, but the inspector thinks that the accommodation would not be sufficient to meet any unusual pressure for relief. The only part of the institution which he found to be crowded was the ward in the infirmary occupied by small children.

HEALTH OF DUBLIN.

AT the last meeting of the Executive Committee of the Dublin Sanitary Association, attention was directed to the Registrar-General's weekly returns, and to the high mortality at present prevalent in Dublin. During the last eight weeks the average death-rate was 36.2 per 1,000, as compared with 32 in the corresponding weeks in 1882, and 32.2 in 1881. For the first quarter of the present year, the death-rate was 35.1 per 1,000, as against 22.1 in London, and 31.6 in Glasgow. The admissions of typhus cases into hospital numbered for the quarter referred to 351, being an increase of 106 over the admissions during the previous quarter.

DUBLIN UNIVERSITY BIOLOGICAL SOCIETY.

DR. FINNY, King's Professor of Practice of Medicine, will deliver an address explanatory of the objects of the Collective Investigation Committee, at an open meeting of the above society, on Thursday next. Several leading members of the profession have promised to attend, and will speak to resolutions in favour of the objects of the committee. We congratulate the students of Dublin—the future practitioners of the kingdom—in taking the initiative in so laudable and important an undertaking, and anticipate a most successful meeting.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

MR. WILLIAM STOKER was elected a member of the Council of the College at a special meeting of it held on Saturday last. The results of the examinations held last month have now been published. For the "first half," 119 students were examined and 51 were stopped. Fifty-six candidates for the final examination for the licence of the College presented themselves, and of these twelve were rejected. Among the successful candidates we observe the name of a baronet, Sir Charles Coote. Sixty-six students were examined in general education, of whom 14 were rejected.

DEATH OF DR. STEELE.

WE regret to announce the death, on the 6th instant, in his sixty sixth year, of Dr. Steele, the Registrar of the Branch Medical Council for Ireland. Although a Doctor of Medicine of the University o Dublin, and a Fellow of the King and Queen's College of Physician in Ireland, Dr. Steele did not practise his profession. He was fo many years officially connected with the Royal Dublin Society; and upon the museums and library of that body being formed into Science and Art Museum under the Civil Service, Dr. Steele was appointed as its Director. He was an admirable official, and a well informed and courteous gentleman.

BOARDS OF GUARDIANS AND THEIR MEDICAL OFFICERS.

ON receiving a deputation of the Poor-law guardians of Birmingham, Sir Charles Dilke is reported to have stated "that a consolidated order would contain all the powers that they sought for, and this order would be issued before the end of the year, and be applicable throughout the country."

The Chairman of the Parliamentary Bills Committee of the British Medical Association has communicated with the Local Government Board on the subject of this statement, which has gone the round of the press, and to which we recently referred. He has received the following communication in reply:

Local Government Board, Whitehall, S.W., May 7th, 1883.

SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 1st instant, and to inform you that the statement in the London press to which you refer is incorrect. It is not the intention of the Board to confer on boards of guardians uncontrollable powers of dismissal of officers. Any change which may be made by the proposed consolidated order will respect to tenure of office, will only apply to officers appointed after the date when the order comes into operation.—I am, sir, your obedient servant, S. B. PROVIS, Assistant Secretary.—To Ernest Hart, Esq., British Medical Association, 161A, Strand, W.C.

THE MEDICAL ACT AMENDMENT BILL.

The subjoined statement is founded on a careful collation of the Medical Bill as published in the BRITISH MEDICAL JOURNAL of March 24th, with the Bill as passed by the House of Lords and sent down to the House of Commons. It shows the exact nature of the alterations which have been made. The references to the lines of the clauses are applicable to the clauses as printed in the JOURNAL. In the portions of the Bill to which there is no reference, no change has been made.

The following clauses of the original Bill are unaltered (the figures in parentheses denote the numbers of the clauses in the amended Bill): 1 to 8 inclusive; 12 (11), 13 (12), 17 (16), 18 (17), 19 (18), 20 (19), 22 (21), 23 (22), 24 (23), 30 (29), 31 (30), 32 (31), 34 (32), 35 (33), 36 (34), 37 (35), 39 (37), 41 (39), 42 (40), 44 (42), 45 (43), 46 (44), 48 (45), 49 (46), 50 (47), 51 (48), 52 (49), 53 (50), 57 (54), 59 (56), 60 (57), 61 (58), 62 (59), 63 (60), 64 (61), 65 (62), 66 (63), 67 (64), 68 (65), 69 (66), 70 (67), 71 (68), 72 (70), 74 (72); also the second and third schedules.

Alterations have been made in the following clauses.

CLAUSE 9. *Establishment of Medical Boards.*—The number of members of the Medical Board for England is to be *sixteen*; the Colleges of Physicians of London and of Surgeons of England are each to return *four* members; and the Apothecaries' Society of London is omitted. The members of the Medical Board for Ireland are to be *three* each for the University of Dublin, the Royal University of Ireland, and the Royal College of Surgeons in Ireland, and *two* for the King and Queen's College of Physicians; the Apothecaries' Hall in Ireland being omitted. In paragraph 6, the words giving a medical board "power to acquire and hold lands for the purpose of its constitution without any licence in mortmain" are withdrawn. Paragraphs 13, 14, and 15 (JOURNAL, March 24th, page 379, col. i) are altered as follows.

13. The Privy Council, on the suggestion of the Medical Council hereinafter mentioned, or of their own motion, may at any time, as respects any medical board, report to Her Majesty that an increase ought to be made in the number of authorities entitled to return a member or members to such board, also in the number of the members of such board, by conferring on any medical authority established in the part of the United Kingdom to which such board belongs, and not being one of the constituent authorities for the time being of such board, and being in the opinion of the Medical Council and Privy Council of sufficient importance to be worthy of such a privilege, the power of returning a member or members to such medical board. 14. The Privy Council, on the suggestion of the Medical Council, or of their own motion, may also from time to time report to Her Majesty that any constituent authority ought to be deprived of the privilege of returning a member or members to a medical board if the Medical Council and Privy Council or the Privy Council are or is of opinion that such authority has so diminished in importance as not to be entitled to such privilege. 15. The Privy Council shall also, at the expiration of every ten years, take into consideration the number of members returned to a medical board by the constituent authorities returning members to such board, and may, where any such authority in their opinion deserves such a privilege, report to Her Majesty that an addition ought to be made to the number of members returned thereby, or, in case a constituent authority returns more than one member, that a reduction ought to be made in the number of members returned by such authority.

The following paragraphs have been added to this clause.

17. Any report of the Privy Council purporting to be made in pursuance of this section shall be laid as soon as practicable before both Houses of Parliament, if Parliament be in session at the time of the making thereof, or if not, then as soon as practicable after the beginning of the then next session of Parliament. 18. If either House of Parliament present an address to Her Majesty within forty days next after any such report has been laid before such House that such report, or any part thereof, ought not to be carried into effect, no further proceedings shall be taken in respect of the report with regard to which such address has been presented; but if no such address is presented by either House of Parliament within such forty days, as aforesaid, it shall be lawful for Her Majesty, by Order in Council, to give effect to any such report, and any Order in Council so made shall be of the same validity as if it had been enacted in this Act.

CLAUSE 10. *Medical Board to Regulate Examinations*, etc. (p. 379, col. 1).—In line 6, after the word "examination," the words "in medicine, surgery, and midwifery" are inserted. For "so far as practicable" (line 17) to "United Kingdom" (line 19), the following is substituted

The rules with respect to final examinations shall be framed in such manner as to secure, so far as is practicable, in each part of the United Kingdom, an equality of standard in each final examination and an equal capacity for testing proficiency, also care shall be taken that the same comparative value shall be assigned to the importance of different branches of knowledge in the final examination held in each part of the United Kingdom, and that for that purpose the same maximum number of marks shall be assigned to the same branch of knowledge in such examination.

CLAUSE 11 (*Committee of Medical Board*) is withdrawn.

In CLAUSE 14 (13 of amended Bill) (*Establishment of Medical Council*), a casual vacancy among the members elected by the registered practitioners is not to be filled up if it occur in the *fifth* year in place of *fourth* or *fifth* year).

CLAUSE 15 (14 of amended Bill). *Duties of Medical Council.*—Lines 1 to 4 of this clause from "the Medical Council" to "sufficiency thereof," are altered as follows.

The Medical Council shall have power from time to time, by visitation or otherwise, to inquire into the sufficiency of any examinations conducted or recognised for the purposes of this Act. The Medical Council may also make inquiries of and call for any information from any of the medical boards constituted by this Act, also from any medical authority or medical school, or other medical body taking any part in any medical examination or medical education in pursuance of this Act.

CLAUSE 16 (15 of amended Bill) *Committee of Medical Council.*—The Council may delegate to such committee any of their powers except that of *approving schemes* or making orders regulating a medical board. The words in italics have been inserted.

CLAUSE 21 (20 of amended Bill) *Medical Board to Visit Schools and Examinations.*—The words "in that part of the United Kingdom to which it belongs," are inserted after "medical board" in line 2 of the clause (JOURNAL, p. 579, col. 2), and the following words are added at the end of the clause: "The order of the board on this behalf being subject to appeal on the part of such examining body or medical school to the Medical Council,"

CLAUSE 25 (24 of amended Bill). *Privileges of Colonial Practitioners.*—The following words are inserted in line 2, after "British possession" (JOURNAL, p. 580, col. i.): "to which this Act applies shall, if he is qualified to hold such appointment by the law of such British possession," be entitled, etc.

The following Clauses are inserted.

25. *Power of Her Majesty in Council to define Colonies and Foreign Countries to which part of the Act applies.*—Her Majesty may from time to time by order in Council declare that this part of this Act shall be deemed on and after a day to be named in such order to apply to any British possession or foreign country which in the opinion of Her Majesty affords to the registered medical practitioners of the United Kingdom such privileges of practising in such possession or foreign country as to Her Majesty may seem just; and from and after the date of such order in Council such British possession or foreign country shall be deemed to be a British possession or foreign country to which this Act applies within the meaning of this part thereof; but until such order in Council has been made in respect of any British possession or foreign country, this part of this Act shall not be deemed to apply to any such possession or country; and "the prescribed day" as used in this part of this Act means, as respects any British possession or foreign country, the day on and after which this part of this Act is declared by order in Council to apply to such British possession or foreign country. Her Majesty may from time to time revoke and renew any order made in pursuance of this section; and on the revocation of such order as respects any British possession or foreign country, such possession or foreign country shall cease to be a possession or country to which this part of this Act applies, without prejudice nevertheless to the right of any persons whose names have been already been entered on the *Register*.

26. *Medical Titles.*—On and after the said appointed day it shall be lawful for any registered medical practitioner who is on that day in possession of or may thereafter obtain any diploma granted by any authority for the time being authorised to return a member or members to any medical board, or who being on the *Register* of colonial or foreign practitioners is on such day in possession of or may thereafter obtain any recognised colonial or foreign diploma granted in a British possession or in a foreign country to which this Act applies, to cause a description of such diploma to be added to his name in a column of the *Medical Register*, and to take or use any medical title which such diploma authorises him to take or use.

CLAUSE 26 of original Bill (*Statutory Title of Registered Medical Practitioner*) (JOURNAL, p. 580, col. i.), and CLAUSE 27 (*Medical Titles and Medical Higher Titles*) are omitted.

CLAUSE 28 (27 of amended Bill). *Penalty on Misuse of Medical Titles.*—The words "in either of the following cases" (line 9 of clause in JOURNAL, p. 590, vol. ii) to "or severally" (line 12) are withdrawn; as are also the words defining "an existing diploma" (lines 16 and 17).

CLAUSE 29 (28 of amended Bill). *Contents and Form of Medical Register.*—The sentences at lines 16—19 of the clause (JOURNAL, p. 580, col. ii), "each list" . . . "such titles," providing that there shall be two columns, one for qualifying titles, and the other for "higher medical" titles, are omitted.

CLAUSE 33 (*Penalty on Wilful Falsification of Register*) is withdrawn.

CLAUSE 38 (36 of amended Bill). *Expenses of Act and Fund to meet such Expenses.*—The following words are inserted at line 15 of the clause (JOURNAL, p. 581, col. ii), after "duties under this Act"—"and subject to the payment of the foregoing expenses, in this Act described as the administrative expenses of each board." Paragraph 4 (lines 30 to 36): "The expenses of maintaining" to "funds of the Medical Council" is inserted as No. 4 of the regulations regarding the medical board funds (p. 15); the final word "Council" being omitted, and replaced by "Board." At line 57 of the clause, the following words are added to the sentence authorising fees to be charged for examinations.

In estimating the amount of the fees to be charged by each medical board for its final examination, a distinction shall be made between so much of the fee as is leviable for the purpose of supplying funds for defraying the administrative

expenses of the board and so much as is leviable for the purpose of defraying the expenses of the maintenance of museums and libraries; and the fees to be paid by university graduates or undergraduates holding university certificates of having passed the examinations at their university, qualifying for admission to the final examination of the board, shall not exceed the portion of the fee leviable as aforesaid for the purpose of supplying funds for the administrative expenses of the board.

The words at lines 61—63, and line 65 to end of clause, respecting the payment of an annual registration fee, are withdrawn.

CLAUSE 40 (38 of amended Bill). *Appointment of Officers by Medical Boards.*—The words at the end of the clause "but the same person may fill the offices of secretary and treasurer" (JOURNAL, p. 581, col. ii) are omitted in the amended Bill.

CLAUSE 43 (41 of amended Bill). *Approval and Confirmation of Schemes.*—The following words are added at the end: "Any revocation, or alteration of, or addition to a scheme, is included under the words 'scheme' in this section."

CLAUSE 47 (*Powers of Colonial Legislature*) is withdrawn.

CLAUSE 54 (51 of amended Bill). *Time of Election of Medical Board.*—For the words at lines 13 and 16 of the clause "Each of the medical authorities" . . "representing its body" (JOURNAL, p. 583, col. i), the following is substituted.

Each of the medical authorities in each part required to return a member or members to a medical board shall return such member or members in manner following, that is to say, if it be an authority which before the passing of this Act returned a member to the General Medical Council, then in manner in which such authority was accustomed to return a member to such Council, but if it be not such an authority as lastly hereinbefore mentioned, it shall return a member or members to a medical board in manner directed by the Privy Council.

CLAUSE 55 (52 of amended Bill). *Time of Nomination and Election of Medical Council.*—At lines 44 and 46, the words "thirtieth day of April" are substituted for "thirty-first day of March;" and at lines 48 and 50, the word "May" is substituted for "April."

CLAUSE 56 (53 of amended Bill). *Rules for Final Examination.*—At line 2, the word "August" is substituted for "May;" at line 12, the words "January 1885" are substituted for "September 1884;" in lines 14 and 15, the words "March 1885" are substituted for "November 1884;" and in the last line of the clause, "September" is substituted for "March."

CLAUSE 58 (55 of amended Bill)—*Transfer of Funds of Branch Councils*—is altered as follows.

On and after the day on which the medical board of any part of the United Kingdom comes into office, the branch council in that part of the United Kingdom shall cease to exist; and all funds and property belonging to such branch council shall, subject to all liabilities affecting the same, be transferred to and vest in the Medical Council. Provided that the Medical Council shall, out of such funds, advance to each medical board such moneys as shall be required to defray the expenses necessarily incurred before a medical fund can be formed. Provided also that the Medical Council shall, when making such advances, be satisfied as to the terms and other conditions of repayment by the several medical boards.

The following new clause is added to the saving clauses.

69. *Saving as to Existing Titles.*—This Act shall not make illegal the use by any person after the passing thereof of any medical title which he was actually using, and was entitled to use, at the date of the passing of this Act.

CLAUSE 73 (71 of amended Bill). *Definitions.*—After "unincorporate" in line 2 of the clause, the following words are inserted. "'British possession' means any part of Her Majesty's dominions exclusive of the United Kingdom, but inclusive of the Isle of Man and the Channel Islands." At lines 7 and 8, the word "June" is substituted for "January."

CLAUSE 75 (*Application of Act to United Kingdom, Channel Islands, etc.*) is withdrawn.

In the first schedule, the words in paragraph 3, "A committee of a medical board" (line 1) to "casting vote" (line 5), and "or committee" (line 5), are omitted in the amended Bill.

STUDENTS AND THE MEDICAL BILL.

ON Saturday last, in the room of the Society of Arts, the members of the Medical Union Society held a discussion on the Medical Bill, presided over by Mr. Henry Power, F.R.C.S.Eng.

Dr. GLOVER, in opening the debate, said his wish was to hear what students had to say on a matter deeply affecting them. He would contract his observations so as only to start the discussion. He began with the question: Is there any case for legislation? which he answered by saying that three Governments had thought so, including both parties; the profession thought so. No fewer than twenty Bills had been brought into Parliament, besides three Government ones, between 1870 and 1881. The Medical Council itself thought so, with various degrees of conviction at different times. Lastly, the Royal Commission thought so. With such a consensus in favour of change, the present arrangements were discredited and could not be perpetuated. The existing organisation of the profession might be described as a Medical Council in which nineteen bodies were represented, most of them individually; nineteen examining bodies, many granting more than one qualification; numerous medical schools. The Act of 1858 gave to the diplomas of all medical authorities, in whatever division of the kingdom, equal legal value as qualifications. Why alter the present arrangements? The very foundation of them was an honourable equality in the different but corresponding examinations. According to the report of the Commissioners, there was great inequality. Then the diplomas were imperfect documents, only half diplomas. The students were harassed by multiplied corporations and examinations. The whole system was antiquated and unsatisfactory. The next question was, what changes were desirable; first, a new Medical Council, less representative of interests, with the power of enforcing its regulations; secondly, a single licensing authority in each division of the kingdom, with security for equal examinations, equal cost, and equal curricula; thirdly, more complete protection of medical titles against fraudulent or false use. Dr. Glover then described the changes actually proposed in the Bill, including a differently constituted Medical Council, with direct representatives of the profession, and the representation no longer of individual bodies, but of divisional boards. Fourthly, the Bill defined the future title to registration; a person must prove competency in medicine, surgery, and midwifery, by passing, "with credit," a final examination such as provided in the Act. Finally, the Bill provided stringently against the false use of titles. The Bill was creditable to the Government, and deserved the support of the profession. He hoped the students would earnestly consider the subject, and see their way to support the Bill. He regretted two things, the abandonment of the clauses in reference to higher titles, and the fact that under the Bill the new licentiate would have no title. This ought to be remedied.

The PRESIDENT endorsed the statements of Dr. Glover, that there was an immense difference at present in the standard of different bodies, and he was of opinion that this Bill should become law. On one occasion, in company with a fellow visitor (the day being August 12th), on arriving at the examination room he found the examiners were out shooting, and messages had to be sent here and there to find some one to come and examine the students awaiting their ordeal. At another time, at the anatomical portion of the examination, an old dry limb, all plastered over with wax and paint, was presented to test the knowledge of the students. The veins were coloured blue; the arteries were filled with red pigment; the lymphatics were painted yellow. He had, of course, to report inefficiency. Again, he had found that on certain occasions questions were given haphazard at the moment of arrival. Replies were required in half an hour to the questions jotted down in that cursory manner, and then the examiner, during the *viva voce* examination, glanced over the written papers and passed the candidates. This necessitated his unfavourable report. In other instances the sifting was superb in comparison with the above; the examination was systematic, thorough, orderly, and careful. In particular, he could speak of the Queen's University of Ireland. Never had he seen more satisfactory work done, especially in anatomy. Hence it was very unfair that candidates receiving diplomas from such a board should be pitted against men who had done nothing, or had passed a mere sham ordeal. He was sure the meeting would accord to Dr. Glover their heartiest thanks for his admirable and thoughtful address.

Mr. WADE considered this was a special occasion, since it had brought before them a measure in which they were especially interested. He would ask his fellow members to listen to his statement, and would ask their endorsement of his proposition. He then read a resolution that had been drawn up in accordance with the views of many members of that society. He approved of Dr. Glover's views that the two great features for the future were: (1) equality of examination, and (2) an improved governing body. It was most unfortunate that the profession should have governing them a body of such elastic tendency as the one in Oxford Street. The Council never showed force of character, and one was required. He approved of the concentration of representatives. Nineteen of the twenty-four representatives at present were members of corporations, and only five were Crown members and independent. But there was one weakness in the chairman's remarks, viz., that the new examinations would improve the social position of the profession. At their last meeting it was moved: "That this society agrees, individually and collectively, that they must look for elevation of the profession in the future, not to the elevation of standard of examination, but to a higher standard of preliminary education." At the present time, there were eighty-four different preliminary examinations accepted; and he believed that two only were to be removed in the new list, leaving eighty-two. These embraced boards existing in Scotland, Ireland, Ceylon, and India. With such a large number of boards, hailing from such remote quarters of the globe, it is impossible for uniformity of standard to exist. Until they could alter this and ensure a good general education prior to entering the medical profession, the latter could not command the desired position or status. It would be a great boon to have one examination requisite, and one only, as this Bill would provide. But the omission of the clause empowering successful candidates to register the title "Licentiate in Medicine, Surgery, and Midwifery," was very disappointing, whereby no title was to be given. The following were the terms of the petition in favour of the new Medical Bill which he proposed should be sent to the Commons, embodying certain resolutions as representing the feelings of this Society.

"To the Honourable the Commons of the United Kingdom in Parliament assembled.

"This petition of the Medical Union Society of London humbly showeth that your petitioners are engaged in the study of medicine in the metropolis. Your petitioners beg to complain of great inconvenience and injustice in the present division of the authorities for licensing to practise the different parts of medicine. They complain that the diplomas now given are costly, that they are only half diplomas, and that those given in different divisions of the kingdom are of very unequal value. Your petitioners would, therefore, pray your Honourable House to pass the Bill for amending the Medical Acts now before you, with or without modification. Your petitioners pray you to enact that, when a student should have passed 'with credit' the new examination to be established by the Divisional Board, under the double sanction of the Medical Council and the Privy Council, he shall be entitled to be registered as a licentiate of the Medical Council in Medicine, Surgery, and Midwifery; or that, in lieu of right to register such title, he be exempted from the final examination of the corporations for their lowest diploma. And your petitioners will ever pray."

Mr. SLATER, of Guy's, seconded the adoption of the petition. He said the services of the corporations in the past was not good reason for compelling men to go to them in all future time. He thought it absurd that there should be no titular recognition of the new licence.

Mr. RICHMOND would have preferred provision for examination in Anatomy and Physiology, as well as in Clinical subjects. He also insisted on the importance of high preliminary examinations. He was also anxious to know what was likely to be done in regard to unqualified assistants.

Dr. DANFORD THOMAS, Coroner, spoke very strongly in support of the B

d of the importance of the preliminary examinations being duly controlled the Council. He expressed deep dissatisfaction with the present compli- ted and piecemeal system of examining bodies, while it had a bad effect on idents to require them to choose between nineteen examinations of all degrees stringency in all divisions of the kingdom.
The discussion was continued by Messrs. Blakiston, Richards, Blakeman, and iers; and, in the end, the petition was unanimously and heartily adopted.

UNIVERSITY OF LONDON.

IE annual meeting of Convocation took place on Tuesday last; Dr. orrar, the chairman, presided. Mr. H. E. Allen, LL.B., having en duly nominated Clerk of Convocation, was unanimously re- ected to the office. The report of the annual committee was pre- nted to the meeting by Messrs. J. W. Bone, B.A., and Henry orris, M.B., who moved its reception, which was agreed to. The st paragraph of the report referred to the heavy loss the University id sustained in the death of the late Vice-Chancellor, Sir George ssel; and gave a sketch of his University career. The annual mmittee had recommended that a resolution, expressive of the elings of the House at the bereavement which had befallen the niversity, should be submitted to Convocation; this resolution was oposed by the Solicitor-General, Sir Farrer Herschell, M.P., in an oquent speech, and was seconded by Mr. F. Stock, D.Lit. Mr. T. Osler, Mr. F. Tomkins, and Dr. Quain also spoke in support of the solution, which was passed unanimously, amid the silence of the ouse.

It was moved by Mr. P. Christie, seconded by Mr. P. Magnus, and solved: "That graduates in music be admitted to Convocation, ion such terms as are prescribed with regard to graduates in ience."

It was moved by Dr. M. Baines, seconded by Mr. H. Morris, and solved: "That in the constitution of any medical board for Eng- nd, under the Medical Bill now before Parliament, no arrangement ll be considered by Convocation which does not provide for the pointment on it by this University of at least two representative embers."

Mr. H. M. BOMPAS presented the report of the special committee local examinations proposed to be held by the University, and oved that it be received by Convocation and submitted to the nate. The suggested scheme had been drawn up by the special mmittee of six graduates appointed by Convocation last January consider the subject, and the main points of it, as mentioned by Mr. mpas, were as follows: That only one examination of less difficulty an that of the matriculation examination should be established; at it should be held simultaneously in London and certain pro- ncial centres; that its object should be, generally, to take a place long public examinations analogous to that held by the junior al examinations of the Universities of Oxford and Cambridge; d that it should apply to girls equally with boys. That candidates ould be required to show a competent knowledge in each of the eat subjects of which the examination shall primarily consist, ilst some subjects will be voluntary. That candidates must under sixteen years of age; and must show competent know- lge in English, one of the following languages (Latin, Greek, ench, or German), mathematics, and any one of the fol- ving sciences (Chemistry, Mechanics and Hydrostatics, Heat, ght, and Electricity, Physiography and Human Physiology, or ology, or Botany). That candidates may also be examined in one two of the three following voluntary subjects: Drawing, the eory of Music, and Scripture History.

Mr. W. HINTON seconded the proposition, to which an amendment s proposed by Sir JULIAN GOLDSMID, and seconded by Mr. H. A. SBITT.

After much debate, it was resolved to refer the scheme to the an- al committee for consideration, and report to the House, with an truction to that committee to invite the attendance of the six ntlemen forming the late special committee when considering the ject.

The following graduates of the Faculties of Medicine and Science re elected members of the annual committee, viz.: M. Baines, D., A. W. Bennett, B.Sc., W. C. Coupland, M.A., B.Sc., J. Curnow, D., G. Eastes, M.B., C. H. Fagge, M.D., W. H. Holman, M.B., H. Howse, M.S., M.B., B. Kisch, M.A., B.Sc., A. McDowall, B.Sc., Magnus, B.A., B.Sc., H. Morris, M.A., M.B., R. Neale, M.D., W. J. atling, B.Sc., F. Taylor, M.D., and W. C. Unwin, B.Sc.

On Wednesday Earl GRANVILLE, the Chancellor, presided at the nual distribution of diplomas, prizes, and certificates to the suc- sful competitors in the examinations of the past year. Several ies were among the gainers of these coveted distinctions, and were loudly applauded as they presented themselves for the honours gained. After the distribution of prizes, the Chancellor, Sir JOHN LUBBOCK, and Sir JAMES PAGET, severally addressed the assembly, which then dispersed.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Honorary Secretary, Mr. T. H. Bartleet, has forwarded to all Fellows of the College of Surgeons a circular letter, together with a list of the Fellows, about two hundred in number, who have already joined this Association. The circular contains a copy of resolutions passed at a meeting of the Committee of the Association held in London, April 10th, 1883, which were the following: "1. That this Committee recommends the members of this Association not to vote for any candidate for the Council of the Royal College of Surgeons, who will not support a movement for securing such alterations in the Charter of the College, as will enable the Fellows to vote for the election of members of the Council by proxy, and as will secure to the Fellows and Members the right of meeting as occasion requires, and under suitable regulations within the walls of their College. 2. That the President and Honorary Secretary be requested to inquire of each candidate for a seat upon the Council at the election in July next, his views upon these two points, and to communicate the results of these inquiries to the Fellows generally, in such a manner as may seem best. 3. That this Committee recommends that this Association should support at least two candidates at the next election of members of Council, who will carry out the views expressed in the above resolutions. 4. That the Honorary Secretary be requested to call a meeting of this Committee as soon as the nominations for the next election of members of Council of the College are closed. 5. That the Honorory Secretary be requested to circulate among the Fellows of the College copies of the above resolutions, and a list of the members of the Association." We have always entertained the opinion that the present mode of conducting the election into the Council of the College is in the highest degree unsatisfactory, entailing (as it does) the personal attendance at the College of all Fellows who may desire to record their votes; and the time during which the poll is open being indefinite, and dependent, to some extent, upon the caprice of the chairman, voting by proxy should be allowed, and the time occupied by the election should be definite, and not permitted to depend upon such fortuitous circumstances as those that now regulate it. And, if the Fellows make their desires upon these two points thoroughly known to the Council, as by a numerously signed petition, it may be hoped that the Council will endeavour to secure the alterations in the Charter which the change would render necessary; for the election, as now regulated, is conducted in accordance with the Charter, and that latter would have to be altered in order to permit the proposed changes to take place. So little deference, however, has been paid to the wishes of what we believe to be the majority of the Fellows on this subject, that the Council of the College has only itself to thank if they should now be enforced by an organised agitation, and become a test question to candidates for election.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN extraordinary meeting of the Council was held at the College on Thursday last, May 10th. The minutes of the quarterly Council held on the 12th ultimo were read and confirmed. The signatures to the by-laws of members elected to the Fellowship were received. Professor Huxley, who was elected a Fellow at last Council, was presented and admitted. The Jacksonian Prize was presented to Mr. Anthony Bowlby, Curator of the Museum of St. Bartholomew's Hospital. Arrangements were made for the election of members of Council in July. Dr. Robert Barnes of Harley Street, a Member of the College of over twenty years' standing, was elected a Fellow.

The President reported on the progress of the Medical Acts Amendment Bill (1883), and the following resolution was passed: "That the Bill, as modified and introduced into the House of Commons, meets with the general approval of this Council."

A letter was read from Mr. Marshall, reporting the proceedings of the General Medical Council at its last meeting. It was ordered to be entered on the minutes, and a vote of thanks was given to Mr. Marshall for his services to the College at the Medical Council.

Notice of motion was given by Mr. Cadge, who will move at the next meeting of Council that it is expedient that the Fellows of the College be allowed to vote at the annual election of members of Council either in person or by proxy.

THE SCOTTISH MEDICAL CORPORATIONS AND THE MEDICAL ACTS AMENDMENT BILL.

On Tuesday afternoon a deputation from the Scottish Medical Corporations had an interview at the Privy Council Office with the Right Hon. A. J. Mundella, and strongly urged that an increased representation under the Medical Acts Amendment Bill should be given to these bodies upon the Scottish Medical Board. The gentlemen in attendance were:—from the Royal College of Physicians, Edinburgh, Dr. Balfour, President; Dr. Haldane, Vice-President; and Dr. Wyllie, Secretary; from the Royal College of Surgeons, Edinburgh, Dr. Heron Watson, Dr. John Smith, and Dr. John Duncan; from the Faculty of Physicians and Surgeons, Glasgow, Dr. Scott-Orr, President; Dr. Eben. Watson, and Dr. D. C. McVail. In the course of the interview it was argued that the Medical Corporations were entitled to six representatives on the Medical Board, whereas the Bill only proposed to give them three, against eight from the Universities. This claim was based upon the ancient foundation and useful character of these institutions. It was contended that their independence and largely representative character was of advantage to the profession, and that the high character of their examinations, especially the final, had done much, not only to originate medical education in Scotland, but also to raise and maintain its high standard of efficiency. The universities, it was stated, had always shown a selfish and jealous disposition towards the College, and might still more prejudicially exercise this spirit in the future if allowed the undue preponderance now proposed by the Bill to be given to them upon the Medical Board.

Mr. Mundella, without expressing any opinion of his own, said he would represent the views of the deputation to the Lord President when they came to consider any necessary modifications in the details of the Bill. The measure would probably not get into Committee of the House of Commons for several weeks, and it was desirable to make as few changes in it as possible, so as not to delay or imperil the passing of a measure which was so excellent. The deputation then withdrew.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED DURING THE MONTH OF APRIL, 1883.

Acute Pneumonia. (56.)

J. Aikman, M.D., Guernsey (1); J. E. Allen, Esq., Todmorden (1); R. Atkinson, Esq., Ripponden, near Halifax (1); A. H. Bampton, M.D., Plymouth (1); W. R. Bates, Esq., Addingham, Leeds (1); R. L. Batterbury, M.D., Berkhampstead (3); M. G. Biggs, Esq., Wandsworth Common (1); G. Black, M.B., Keswick (2); J. Mackenzie Booth, M.B., Aberdeen (4); J. E. Clendinnen, Esq., Cosely, Staffordshire (3); Algernon A. Cohen, M.B., Burwash (1); D. W. Craig, Esq., Bingley (1); E. Crossman, Esq., Hambrook, Bristol (1); A. Davidson, Esq., Thornhill, N.B. (1); D. Goyder, M.D., Bradford (1); W. E. Green, Esq., Sandown (4); C. Harrison, M.D., Lincoln (2); H. W. Hubbard, Esq., Kensington Park (2); C. J. B. Johnson, Esq., Wetherby, Yorks (1); F. J. Joynes, Esq., Dursley (1); W. J. Le Grand, Esq., Dublin (1); T. McClure, M.D., Worle, Somerset (1); J. Neal, M.D., Sandown (1); W. J. Pilcher, Esq., Boston (1); A. Ransome, M.D., Bowden (1); C. Mason Scott, Esq., Rockingham, county Dublin (1); C. E. Shelley, M.B., Hertford (6); E. Skinner, Esq., Sheffield (2); W. D. Sheppard, Esq., Merthyr Tydvil (2); V. G. Webb, Esq., Coleshill (2); T. J. Webster, Esq., Merthyr Tydvil (1); W. White, M.D., Hadfield, Manchester (1); W. Whitworth, Esq., St. Agnes, Cornwall (1); E. T. Wilson, M.B., Cheltenham (2).

Chorea (11).

A. H. Bampton, M.D., Plymouth (1); H. M. Barker, M.B., Sandown (1); T. A. Buck, M.B., Ryde (1); W. A. Carline, M.D., Lincoln (1); E. Crossman, Esq., Hambrook, near Bristol (1); R. H. Lloyd, M.D., Lambeth Infirmary (1); K. N. MacDonald, M.D., Cupar, N.B. (1); J. W. Martin, M.D., Sheffield (1); T. C. Railton, M.D., Old Trafford (1); E. B. Reckitt, Esq., Boston (1); C. E. Shelly, M.B., Hertford (1).

Acute Rheumatism (34).

J. Aikman, M.D., Guernsey (1); J. E. Allen, Esq., Todmorden (1); A. H. Bampton, M.D., Plymouth (1); R. L. Batterbury, M.D., Berkhampstead (1); M. G. Biggs, Esq., Wandsworth Common (1); J. Mackenzie Booth, M.B., Aberdeen (1); W. F. Brook, Esq., Fareham (1); W. A. Carline, M.D., Lincoln (1); D'Arcy B. Carter, Esq., Wakefield (4); W. M. Clarke, Esq., Clifton, Bristol (1); Algernon A. Cohen, M.B., Burwash (1); J. T. Collier, M.D., Lincoln (1); E. Crossman, Esq., Hambrook, near Bristol (1); W. E. Green, Esq., Sandown (3); A. Kebble, Esq., Flaxton (1); S. Lockie, M.D., Carlisle (1); J. W. Martin, M.D., Sheffield (2); C. Meeres, M.D., Sandown (1); T. Morton, M.D., Kilburn (1); W. J. Pilcher, Esq., Boston, Lincolnshire (1); W. F. Phillips, Esq., Andover (1); A. Rabagliati, M.D., Bradford (1); H. Rainbird, Esq., Saxilby (1); C. H. Robinson, Esq., Dublin (1); W. D. Sheppard, Esq., Merthyr Tydfil (1); T. Sympson, Esq., Lincoln (1); W. White, M.D., Manchester (1); W. Whitworth, Esq., St. Agnes, Cornwall (1).

Diphtheria (40).

F. Barrow, Esq., Rothbury, Northumberland (1 sanitary, 1 case); A. Campbell, Esq., Navenby, Grantham (1 case); G. H. Davis, Esq., Mortimer, Berks (2 cases); W. H. Folker, Esq., Hanley (1 case); H. Mallins, M.B., Watton, Norfolk (1 sanitary, 1 case); C. Meeres, M.D., Sandown (1 sanitary, 1 case); C. P. Moreton, Esq., Sandown (1 case); A. E. Pownall, Esq., Chorlton-cum-Hardy, Lancashire (1 case); T. C. Railton, M.D., Old Trafford (2 sanitary); H. S. Renshawe, M.D., Sale, Manchester (1 sanitary, 1 case); C. E. Saunders, M.D., Portman Square, W. (1 sanitary, 1 case); Rev. H. E. Tweed, Coleby Vicarage, Lincoln (1 sanitary); A. T. Wilkinson, M.D., Manchester (1 case). Details of 20 cases from G. Turner, Esq., Medical Officer of Health for Bishop Stortford and combined districts. Reports of 9 epidemics of diphtheria occurring in East Sussex District during the last ten years, from E. F. Fussell, M.D., Medical Officer of Health. Report of an epidemic occurring at Magdalen, Norfolk, from W. L. King, Esq.

Syphilis (3).

T. F. Pearse, M.D., Liphook, Hants (1 acquired, 1 inherited); G. H. Dabbs, M.D., Shanklin (1 acquired).

Total returns for month of April 144

The following Additional Replies have been received to the Phthisis Inquiry.

J. Arnold, Esq., Trinidad; J. Patterson Cassells, M.D., Glasgow; W. Dickson, M.D., Upper Norwood, S.E.; J. Hinds, M.B., Halstead; Surgeon-Major R. Jackson, Pachmarki, India; R. S. Peart, M.D., North Shields; Surgeon-Major A. K. Prescott, Mutbra, N.W.P., East Indies; R. J. Pye Smith, Esq., Sheffield; R. Wood, M.D., Bromsgrove, Worcestershire; Surgeon-Major J. Jameson, M.D., Bangalore, Madras; J. J. Stack, Esq., Hoxton, N.; A. W. F. Streer, Esq., Bombay; E. H. Vinen, M.D., Bayswater; Surgeon-Major Hodden, M.B., Belgaum, Bombay; Cárlos Gómez, M.D., Trinidad.

Total already acknowledged 1,050
Total of list..... 15

Total replies received..... 1,065

ASSOCIATION INTELLIGENCE.

COUNCIL, 1882-83.

NOTICE OF SPECIAL MEETING.

A special meeting of the Council will be held at the Queen's Hotel, Birmingham, on Thursday, the 17th instant, at three o'clock in the afternoon, to consider the following business.

1. Report of the Committee of Council on the Representation of the Branches in the Committee of Council.
2. A motion in favour of the Medical Acts Amendment Bill.

Francis Fowke, *General Secretary.*

London, May 3rd, 1883.

COMMITTEE OF COUNCIL.

NOTICE OF SPECIAL MEETING.

A special meeting of the Committee of Council will be held at the Freemason's Tavern, Great Queen Street, on Tuesday, the 22nd instant, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

161A, Strand, London, May 9th, 1883.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

Meetings of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th 1881.

Francis Fowke, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. The

are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

F. A. MAHOMED, Secretary to the Committee.

12, St. Thomas's Street, S.E.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—A meeting will be held at the Johnson Hospital, Spald ing, an Thursday, May 17th, at 3.30 P.M., when a discussion on Diphtheria will be invited. The following papers will also be read and discussed:—1. "A Case of Hypertrophy and Prolapsus of the Tongue," by Edwin Morris, M.D. 2. "On the Mechanical Treatment of Uterine Displacements," by G. Elder, M.B. 3. "A Case of Caries of the Os Calcis: Excision: Recovery," by T. Sympson, F.R.C.S. 4. Dr. Carline will exhibit a new optical instrument for detecting errors of accommodation and refraction. 5. "A Few Words on Intermittent Fever," by W. Newman, M.D. Dinner at the Red Lion at half-past five.—W. A. CARLINE, M.D., Honorary Secretary, Lincolnshire.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M., on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.—A joint meeting will be held in Worcester, on Tuesday, May 29th. Members having any paper to read or cases to bring forward, are requested to report the titles of such paper or cases to the Honorary Secretary, not later than Thursday, May 17th, after which date a second circular will be issued, giving full particulars of the meeting.—GEORGE W. CROWE, M.D., Honorary Secretary, Shaw Street, Worcester, April 13th, 1883.

EAST ANGLIAN BRANCH.—The spring meeting will be held at Lynn, on Thursday, May 24th, under the presidency of John Lowe, Esq., M.D. Notices of papers and cases to be sent to the Secretaries before May 12th.—W. A. ELLISTON, Ipswich, MICHAEL BEVERLEY, Norwich, Honorary Secretaries.

EAST ANGLIAN, CAMBRIDGE AND HUNTINGDON BRANCHES.—President: W. M. Crowfoot, M.B. President-elect, John Lowe, M.D. A combined meeting of the above Branches will be held at the Town Hall, King's Lynn, on Thursday, May 24th, 1883. The following papers have been promised: Dr. Lowe, Lynn: Two Cases of Perforation of Stomach. Dr. Paget, Cambridge: A Case of Coincidence of Diphtheria and Typhoid Fever. Dr. Eade, Norwich: A Case of Asthma treated by Galvanism. Dr. Latham, Cambridge: Megrim, its Pathology and Treatment. W. Cadge, Norwich: Paracentesis Thoracis, with Remarks. Dr. Dale, Lynn: Pulmonary Consumption and Infection. Dr. Elliston, Ipswich: Lithotomy by Aston Key's Method. S. H. Lindeman, Lynn: Dislocation of Head of Radius in Children. A. C. Mayo, Yarmouth: Pregnancy Complicated with Carcinoma of Os Uteri. H. C. Allinson, Lynn: A Case of Imperforate Hymen, with Retained Menses. A. R. Manby, Rudham: Ten Cases of Puerperal Eclampsia, with special reference to Treatment. R. B. Marriott: Swaffham: Two Cases of Typhoid Fever, and their Sequelæ. S. H. Burton, Norwich: A Case of Scarlet Fever, followed by Pyæmia. L. Humphry, Cambridge: A Case of Morbus Cæruleus with Cerebral Complications. At 10.30 A.M. Meeting of the Council. At 11 A.M. The general meeting will commence with an Address by the President, Dr. Crowfoot. The Report of the Council will be received, and New Members elected. A Discussion on the Medical Acts Amendment Bill will be invited. Papers will be read by S.H. Burton, W. A. Elliston, S. H. Lindeman, and Dr. Dale. At 1.30 P.M. The President-elect, Dr. Lowe, invites the members to a luncheon at the Town Hall. At 2 P.M. The afternoon sitting will commence with an Address by the President-elect, Dr. Lowe. At 6 P.M. Public dinner (under the presidency of Dr. Lowe), at the Globe Hotel. Tickets five shillings, exclusive of wine. W. A. ELLISTON, M.D., Ipswich; MICHAEL BEVERLEY, M.D., Norwich; BUSHELL ANNINGSON, M.D., Cambridge, Secretaries. N.B.—The Collective Investigation Committee will present a Report (cards and explanatory memoranda relating to Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, and Syphilis, can be had on application to the Honorary Secretaries, W. A. ELLISTON, Ipswich, for Suffolk; S. H. BURTON, Norwich, for Norfolk).

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st, at 3 P.M. At this meeting, in addition to the ordinary business, a debate will take place upon Acute Pneumonia and its Treatment. Mr. Arlidge (Chairman of the Local Investigation of Diseases Committee) will commence the discussion, and the following gentlemen have promised, if possible, to take part in the debate, viz.: Dr. McAldowie, Dr. G. H. Lowe, Dr. Galet, Dr. Monckton, Dr. Reid, Dr. Totherick, and Dr. J. H. Tylecote.—VINCENT JACKSON, General Secretary.—Wolverhampton, April 29th, 1883.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at the Sussex Hotel, Tunbridge Wells, on Thursday, May 17th, at 3.15 P.M. Dinner at 5.30 P.M.; charge, 6s., exclusive of wine. Dr. Dunking will take the chair. Mr. Abbott will read a paper on Collective Investigation and Note-taking. Members desirous of making any communication to the meeting should send immediate notice to the Honorary Secretary, T. TURNER VERRALL, 95, Western Road, Brighton.—April 25th, 1883.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Canterbury on May 24th, Mr. Bower in the chair. *Collective Investigation Committee:* A discussion on Card No. 2, Acute Rheumatism, will be opened by Dr. Gogarty. All extant cards of the above Committee can be had on application to T. WHITEHEAD REID, Honorary Secretary, 34, St. George's Place, Canterbury.—May 2nd, 1883.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held on Wednesday, May 30th, 1883. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than the 19th instant.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace.—May 7th, 1883.

SOUTH WALES AND MONMOUTH BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT BRANCH.—The next meeting of the above District will be held on Thursday evening, the 17th instant, at half-past 8 o'clock, at the New Town Hall, Hackney, when Mr. Watson Cheyne will read a paper "On Tubercle-Bacilli in Relation to Tubercular Diseases," with microscopical demonstrations.—FREDERICK WALLACE, Honorary Secretary, 96, Cazenove Road, E.—May 10th, 1883.

YORKSHIRE BRANCH: SPRING MEETING.

THE spring meeting was held in the Queen Hotel, Harrogate, on April 25th; the President (Mr. JESSOP) in the chair. Over forty members were present.

Registration of Midwives.—The following resolution was proposed from the Chair, and carried *nem. con.:* "That this meeting is of opinion that the Bill for the Registration of Midwives in England and Wales is one worthy of the support of the Yorkshire Branch."

Collective Investigation.—The SECRETARY reported that the Collective Investigation Committee appointed by the Council was at work, and would meet in Leeds soon.

Communications.—The following communications were read:

1. Dr Churton read a paper on Bleeding for Nephritis.—A discussion ensued, in which the President, Dr. Myrtle, and Dr. Little took part.
2. Mr. Knaggs: A Mode of Treating a Tense Abdominal Cyst.
3. The President: Gangrene of the Foot determined by the Spontaneous Cure of a small Popliteal Aneurysm.
4. Dr. Myrtle: On some Common Affections of the Anus, often neglected by medical men and patients.
5. Mr. J. A. Myrtle: A case of Erratic Gout.
6. Dr. Oliver: Demonstration of Albumen Tests.

Dinner.—After the meeting, the members dined together.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

A MEETING of the above district was held at the Bush Hotel, Farnham, on Thursday, March 29th; S. G. SLOMAN, Esq., in the chair. Nine members and one visitor were present.

Collective Investigation Committee.—Dr. T. F. Pearse of Haslemere was elected Secretary of the Collective Investigation Committee, in the place of Mr. A. A. Napper, resigned.

Notification of Infectious Diseases.—The following resolution was signed by the members present, to be sent to the Parliamentary Bills Committee: "That this meeting earnestly desires compulsory notification of infectious diseases; but it wishes to express its opinion that the compulsion to notify should be placed upon the householder, as his duty as a citizen, and not upon the doctor."

Papers, etc.—The following were read.

Dr. T. F. Pearse: Medical Ethics and Fees.

Dr. R. Boxall: Antiseptics in General Practice.

Mr. S. G. Sloman: A case of Intra-uterine Amputation.

Next Meeting.—It was decided that the next meeting be held at Reigate in October, in conjunction with the East Surrey District.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at Bridgend, on April 18th; EVAN JONES, Esq., President, in the chair.

Invitation to the Association for 1885.—A letter was read from Dr. Edwards, of Cardiff, apologising for his absence, and stating that he would accept the office of President-elect, should the annual meeting of the Association be held at Cardiff in 1885. It was resolved:

"That, in the opinion of this meeting, the Association should be invited to hold its annual meeting in 1885 in Cardiff, Dr. Edwards

consenting to be President-elect; and that the secretaries take steps to ascertain the expenses, etc., that would be connected therewith."

The British Medical Benevolent Fund.—Dr SHEEN stated that the result of the movement started by this Branch in aid of the Medical Benevolent Fund last year was upwards of £30, and that this sum would be increased this year.

Collective Investigation.—The question of Collective Investigation was mentioned, and members were urged to give it their individual attention.

Compulsory Notification of Infectious Diseases.—A petition against Mr. Hastings's Bill for the compulsory notification of infectious diseases by medical men was laid on the table for signature.

Medical Act Amendment Bill.—Some of the features of this Bill were briefly discussed. Communications were read from the Secretary of the Reading Branch, drawing attention to certain needed amendments. It was resolved: "That we object to a direct annual tax for registration being made retrospective." It was suggested that, if a compulsory annual providence fee could be introduced into the Bill, in place of the compulsory annual registration fee, it would be universally welcomed; and a scheme could subsequently be drawn up for the administration of the fund.

New Members.—The following were elected: F. J. Davies, Esq., Abercam; Stuart Jenkins, Esq., Gower Road; James Jardine, M.B., Merthyr; V. D. Jones, Esq., Llanboidy; and (Branch only): F. Shapley, Esq., Bridgend Asylum; A. D. Davidson, M.D., Swansea.

Medical Provident Society.—Mr. GEORGE A. BROWN (Tredegar) made some remarks on the great desirability and usefulness of such a society, and laid the following paper on the table for signature: "We, the undersigned, members of the South Wales and Monmouth Branch of the British Medical Association, are willing to join the Medical Provident Society when it is formed, and provided the rules are such as we can approve of."

Papers.—The following were read:

1. Dr. Griffiths (Swansea) read notes of a paper on Purpura Hæmorrhagica.

2. Mr. J. Farrant Fry (Swansea) read a paper on Cock's Operation in cases of Impassable Urethral Stricture, giving cases, and reviewing other lines of treatment.

3. Dr. Sheen read (for Mr. G. O. Willis, late of Monmouth) notes of a case of Amputation of the Forearm for Epithelioma of the Hand, in a woman aged 86, two years ago. The patient is still living and well.

4. Dr. Sheen also showed (for Mr. Willis) a specimen of a Stone removed by Lithotomy from a child with a rickety pelvis.

5. Dr. Sheen (Cardiff) read notes on Nitrite of Amyl and Nitro-glycerine in Uræmic Asthma.

Visit to County Asylum.—Through the courtesy of Dr. Pringle, the Superintendent, the members were enabled to pay a visit to the County Asylum, which was much appreciated. The cleanliness of the wards, the good bodily health of the patients, and the comforts of their surroundings, were points frequently remarked upon.

Dinner.—Upwards of twenty members and friends subsequently partook of an excellent dinner at the Wyndham Arms Hotel.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

A MEETING of this district was held at the Pier Hotel, Sandown April 28th; present: ALEXANDER G. DAVEY, M.D., President, in the chair, and several others.

The SECRETARY read the balance sheet of the district, which was duly signed.

Election of Officers.—It was proposed by Dr. J. NEAL, seconded by Mr. GREEN, and carried unanimously, that Dr. Joseph Groves be the President-elect. Mr. GREEN proposed, Dr. ROBERTSON seconded, and it was carried, that Dr. Pletts be the Vice-President-elect. It was proposed by Dr. PLETTS, seconded by Dr. NEAL, and carried, that Mr. Green be re-elected Honorary Secretary and Treasurer. Dr. Coghill and Mr. Green were re-elected as representatives to the General Medical Council. Dr. Coghill was also re-elected as member of the Branch Council.

Next Place of Meeting.—Mr. GREEN proposed, and Dr. J. NEAL seconded, that Freshwater, or, failing to obtain sufficient numbers, Cowes, be the next place of meeting.

The President.—Dr. DAVEY thanked the members for their support during the past year of office, referring to those members who had resigned, died, or left the neighbourhood. He named those gentlemen who had read papers during the year, and thanked them individually. Dr. Davey then vacated the chair, after a short address, which was received with applause, and Dr. Neal took the chair as President of the year.

Dr. BUCK proposed a vote of thanks to Dr. Davey for the able manner in which he had discharged the duties of president during the past year. This was seconded by Mr. GREEN, who also thanked the chairman for his uniform kindness and assistance in his duties as secretary. Carried with acclamation.

Dr. J. NEAL, on taking the chair, thanked the members present, and gave an address on recent researches in science, and a retrospect of changes in thought and treatment.

Dr. DAVEY proposed a vote of thanks to Dr. Neal for his excellent address. This was seconded by Dr. ROBERTSON, and carried.

The Medical Act Amendment Bill.—A petition in favour of the Medical Act Amendment Bill was placed on the table for signature, and a discussion on the Bill took place.

Communications.—The following communications were made:

1. The adjourned discussion on Mr. Robertson's paper on Pulse-tracings took place, in which the Chairman, Dr. Davey, and Mr. Green, took part.

2. Mr. Green detailed Notes of a Case of Rheumatic Fever, followed by Aortic Incompetence, showing the compensation of the heart as represented by the sphygmograph. The tracings were exhibited.

3. Mr. Green related a Case of Removal of Pipe-stem from a Tongue, showing the stem, and Dr. Pletts related the subsequent history and treatment.

Dinner.—The business of the meeting being concluded, the members adjourned to an excellent dinner, and an enjoyable evening was passed.

CORRESPONDENCE.

LITERARY AND LEGAL RESEARCHES BY THE MEDICAL COUNCIL.

SIR,—In an unpretending paper appended to the report of one of its committees, and published in the twentieth volume of their minutes the Medical Council has lately given to the world the results o some inquiries into matters of interest to many besides the members of our profession, results which if they stand the test of criticism, will certainly be heard of in literary and legal circles. Th paper to which allusion is made, has been prepared by the representative of Oxford University (Dr. King Chambers), and i modestly entitled "Statements founded on Documentary Evidenc laid before the Committee on the Employment of Unqualified As sistants," but it contains much original work, as your readers will se when we quote a few passages.

On the very first page is a sentence which throws an entirel new light on a passage in the prologue to the famous Canterbur Tales, and which might fairly claim for its author the right to place among the commentators of that well-studied poem. Chauce has described among the pilgrims who met at the Tabard Inn, o their way to the shrine of St. Thomas-à-Beckett, a certain doctor physic who was a very perfect practitioner, and adds that—

> "Full redy hadde he his apotecaries,
> To send him drugges, and his letuaries,
> For eche of hem made other for to wynne;
> Here friendschipe nas not newe to begynne."

The meaning of this passage which has hitherto been accepted l commentators, is that which seems to lie on the surface—that t doctor recommended the apothecaries, and the apothecaries recor mended the doctor—a practice, says one editor, now expressly fo bidden to members of the London College of Physicians. T need for reconsidering this interpretation will appear by comparin it with the following, which comes to us, as we have said, with the authority of the General Medical Council, and as the particul discovery of the representative of Oxford University.

"In England, five hundred years ago, it was considered a matt of course that a 'doctore of physike,' whom Chaucer describes as 'verey perfite practisour,' should have 'full ready' at hand *dispe ing assistants*" (the italics are ours), "to send out his electuari and *when their master rode forth on his holiday trip*, to keep patients together to the mutual advantage of both parties. 'F eche of hem made other for to wynne.' They acted as what now called a stop-gap. These assistants were legally grocers." T we confess, is all new to us, and we doubt not, it will be to many our readers, even those who are most familiar with the father of Engl poetry, but if it were not true, it could not, of course, have a pl in a statement founded on documentary evidence—indeed, it wo

e hard to say what it had in that case to do with the subject of unualified assistants. As to the trifling difference between their master" riding forth for his holiday trip, and on going on pilgrimge, or as to how the dispensing assistants obtained a legal status s grocers without being independent tradesmen, these are probably natters for further inquiry. So also must be the apparent inconistency between Chaucer's statement that this very perfect practiioner having himself made his diagnosis of the malady and its ause, ordered for the sick man the appropriate remedy which his pothecaries thereupon supplied, and the supposition that his "asistants" acted "as a stop-gap," and kept his patients together in his bsence. If the learned leisure of Oxford has brought to light any acts favourable to the new interpretation of this passage, it may urely be expected to produce them in the spirit of its representaive in Chaucer's time, who "gladly wolde he lerne, and gladly eche."

Among the legal researches, one in particular seems destined, if dopted in our courts of justice, to displace some of the most ordiary maxims of criminal jurisprudence. It has hitherto been suposed that, if a person is employed by another, and authorised to eceive moneys on his employer's account, the retention of such oneys, or any part thereof, by the *employé*, and its appropriation o his own use, amounts to embezzlement, and renders the guilty erson liable to severe punishment. It seems, however, that the Iedical Council hold that an unqualified assistant is justified in reaining the whole or any part of moneys paid to him for his emloyer, provided these are paid for services rendered by him as such ssistant. "The money gained by the unqualified assistant for his ervices evidently does not of right belong to the principals, yet hey are credibly reported to receive it, and are described as going ound to outlying dispensaries and branches in London to collect hat they consider as *their* profits. So strongly are they impressed ith a sense of proprietary right, that they look upon the retention y the unqualified assistants of these moneys as an *embezzlement*." his, adds the exponent of the opinion of the Medical Council, shows strange blunting of honourable feeling, which is in every sense infamous conduct!"

We think it right to warn any unqualified assistant, into whose ands these pages may fall, that the Council's opinions are not yet ccepted as conclusive in ordinary criminal cases, and that it would e unsafe to rely upon them as a defence in a trial at the Old ailey.

Perhaps the most interesting passage in the entire paper is that which, by a combination of literary and legal research, it is shown at the proper place to look for a definition of the legal expression, infamous conduct in a professional respect," is in the prose-poetry f Macaulay's *Essays*. To no one outside the Medical Council could ich a brilliant idea have occurred, and few could hope to work it ut more successfully. "No legal technical meaning," we are told, is in England attached to the word 'infamous'. It is to be taken i its current ethical sense, in which an essential feature is, that the eed is done, or the conduct pursued, for the sake of gain. 'If we nderstand the meaning of words, it is infamous to commit a wicked ction *for hire*.' The sentence is Macaulay's, and is intended to haracterise a strictly legal but cruel act—the hiring out of British oops to a native prince for the ravaging of Rohilkund. A few ages further on, the writer uses the word again, in speaking of Sir lijah Impey's acceptance of the Chief Justiceship of Bengal, on the ondition of holding his tongue. He is described as sitting on the ench 'rich, quiet, and *infamous*'." Thus, the conduct which, in the pinion of the Medical Council, ought, in the case of medical men, be punished by removal from the *Register*, is such as would, in the gal profession, lead a man to the acceptance of a chief-justiceship. ad the author of this paper pushed his researches a little further, e would have found that, in the opinion of the same essayist, it is teemed infamous to violate vulgar fidelity to party; that a peerage ay be—nay, has been—the baptism of infamy; that the path to ower and glory has been thrown open to the manifold infamies of urchill; and that the first Duke of Marlborough had done his best make infamy exquisite. *(Essay on Hallam's Constitutional istory.)*

It would be ludicrous, if it were not so painful, to see the memrs of a semi-judicial body like the Medical Council, trifling thus ith a matter of grave importance. It is all the more inexcusable, cause, at the very sitting of their body at which this report was ceived, they decided a case which was undoubtedly one of "inmous conduct in a professional respect"—one in which a medical an, taking advantage of his position as such, alienated a wife from r husband, and destroyed the peace of a home. It would be an insult to the intelligence of your readers to ask them, if such conduct is at all comparable to that of every one who makes money by keeping unqualified assistants, or even to that of Sir Elijah Impey?

—I am, sir, yours truly, A GENERAL PRACTITIONER.

A MEDICAL PROVIDENT SOCIETY.

SIR,—There have been several letters in the BRITISH MEDICAL JOURNAL respecting the formation of a provident sick society for members of the profession; and I see that the difficulty they have met with is to fix upon an annual payment to secure, as I understand the matter, £2 2s., or any given sum, per week in sickness.

My object in writing is to inform our brethren that I have been insured in the Wesleyan and General Assurance Society, 9, Moor Street, Birmingham, several years, and do not think that they can be assured on better terms than this society offers. It is, first, a sick club, and allows the sick members the weekly allowance (whatever sum it may be) for a year, and one-half the allowance for life, if they continue sick. As to the payments to this society, these may be made fortnightly, monthly, quarterly, half-yearly, or yearly, at the convenience or option of the insurer; and I believe it has one or more agents in every town of any size in England. It is, secondly, an insurance society, like any other ordinary insurance society in the kingdom. The payments vary, of course, with the age of the assurer, and he can insure for sickness alone, for a death-payment alone, or for both combined, as I do. I insured at the age of thirty-four, thus: £2 2s. in sickness, and £200 at death, for which I pay annually £11 5s. or 6s. I have once received about thirty guineas for some months' sickness, and my £200, by bonuses, has increased to £261.

I would advise those gentlemen who are engaged in seeking to establish an independent society for sickness, etc., to obtain the prospectus of the above-mentioned society, and I judge it will be found the very thing they want; at all events, it may afford them useful information on the subject of insurance, sick-clubs, etc.—I am, sir, yours, etc., CAUTION.

SIR,—With regard to the Medical Provident Society, I think the following points should be well considered.

1. Forbidding charges should be avoided, as precluding subscribers.

2. Guarantee should be given that the relief, when required, shall not be grudged or stinted.

3. Imposition, when detected, should be visited with condign punishment.

4. The *locum tenens* should be of any religion the *medicus* may require.

5. For effecting insurance, if desired, some arrangement should be made with the General Post Office, or else the Royal Exchange Insurance Company.

6. Some arrangements should be made, for those who wish it, with the society, for granting pensions to medical men and their widows, also orphans (see *Medical Directory*, page 1,395).

7. Security should be given against any bankruptcy or chancery suits. We know to what liquidation is tantamount.—I remain, sir, yours truly, SAMUEL W. SMITH.

Pershore, April 16th, 1883.

SIR,—The general idea of a medical provident society is so excellent, and its usefulness so eminently practical, that I presume few members of our profession would hesitate to join, provided it was once well and truly established; but who is to take in hand the organisation and general management of such a very considerable concern as a provident society for the profession, scattered throughout the United Kingdom? I fear that the organisation and carrying on of such a society without regularly paid officials, offices, etc., would not be practical, and this would necessarily be very expensive, and swallow up a large number of premiums.

As a suggestion, I would say that, if every member of our Association would at once undertake to join, and pay annually a sufficient premium (and it need not be large), why should not our head-office create a new branch in its duties, and undertake the management, and at a minimum of cost to the Society? This would greatly simplify matters; and members ill, and wishing to declare on the funds, would only have to obtain, say, a weekly certificate from another member of the Society, and forward it to the head-office in London, in the same way as many of the ordinary clubs carry on their work.

Members declaring on should be obliged to employ a *locum tenens* while receiving sick-pay.

In the meanwhile, please add my name to your list.—I am, sir, your obedient servant, W. ARNOLD THOMSON, F.R.C.S.I.

Ampthill, April 25th, 1883.

SIR,—No doubt one of the greatest sources of anxiety to the busy practitioner is, when illness overtakes him, how he is to provide his patients with an efficient substitute. The fear that his income will suffer loss is altogether secondary to this. I speak from personal knowledge, as I have several times been able, during my military service, to stop such a gap for friends in civil life, who dreaded trusting to such casual help as is obtainable through advertisements or agents. As I write, I know of a gentleman who is seriously ill, in a neighbourhood where injury has accrued to more than one practice through the introduction of unreliable men.

Now I would ask, could not a provident society be organised amongst us, which could provide permanent employment for a certain number of high-class men, to be utilised in the practices of the members as necessity should arise? If it were obligatory on each member employing a substitute to report confidentially to the secretary of the Society, at the termination of his illness, whether he was in all respects satisfied with his *locum tenens* or otherwise, in a short time, all doubtful characters would be eliminated. The really good *locum tenens* would be benefited by this arrangement, by having permanent and remunerative employment, instead of being, as he now is, frequently unemployed for long periods.

I do not offer this suggestion to supersede the scheme which is now being considered, and which I beg to support, but as an alternative, should the other be found impracticable. In these days of evolution, larger possibilities may grow out of so humble a commencement.—I am, yours faithfully,

ROBERT BATHO, M.D.Br., M.R.C.P.Lond.,
Brigade-Surgeon (retired).

Castletown, Isle of Man, April 25th, 1883.

SIR,—Before the meeting at Liverpool, it would be well to obtain the opinion of some expert in life-assurance and benefit societies as to the possibility of our supporting a benefit society of our own. I would therefore suggest that a series of questions be drawn up, and submitted to an experienced actuary, as Mr. Cornelius Walford. The questions might take a problematical form, as follows:—1st. Is it possible, with 3,000 subscribers, to form a benefit society which shall be financially sound? 2nd. What should be the rate of premiums to secure different sums, say 10s., 15s., £1 1s., or £2 per week in case of illness? 3rd. What is the lowest number necessary to form a safe benefit society? What the premiums for different sums? These are examples of the class of questions which should be satisfactorily answered before there is any discussion on the subject.

Reading the lamentable appeals which have lately appeared in the JOURNAL, we must all sympathise with any efforts to prevent a repetition of them. With so many existing sound insurance offices, and with such facilities for insuring for small sums, from £50 to £100, there ought not to be any excuse for a man who leaves his widow and children in an absolute state of impecuniosity.—I remain, yours faithfully, TH. M. DOLAN.

Horton House, Halifax, May 4th, 1883.

DONATIONS TO PRELIMINARY EXPENSE FUND.

Sir,—I quite agree with Dr. Clibborn's letter in your last issue, respecting the proposed "Medical Benefit Society." Now that so much has been written on the subject, immediate action is what we require, and to bring about this—money. Unless some sterling "go" is put into the matter, it must of necessity end in smoke. I enclose my half-guinea, and trust those gentlemen who have already promised their adhesion to the scheme will do likewise,—Remaining, sir, faithfully yours, JAMES DENHAM BRADBURN, F.R.C.S.Edin.

Kettering, May 8th, 1883.

Sir,—I enclose 10s. 6d. for preliminary expenses, etc., in connection with the above. I trust that Dr. Clibborn's appeal in last week's JOURNAL will be promptly responded to. It appears to me to be of great importance that the preliminary meetings should be held with the least possible delay, so that an actuary's opinion may be obtained, and the outline of a scheme drawn up, to be submitted to the annual meeting of the Association in August next, where its practicability, and the advisability or otherwise of adopting it may be decided on.—Faithfully yours, T. H. RAVENHILL.

Bordesley, Birmingham, May 7th, 1883.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. A. H. Twining, Salcombe, South Devon; Mr. Josiah Williams, Sheffield; Mr. Thomas Drapes, Enniscorthy, County Wexford.

A list of donations to the "preliminary expense fund," suggested by Dr. Clibborn, will be published in our next week's issue.

Steps are being taken to obtain a preliminary report, drawn up by an eminent statistical authority.

THE CONTAGIOUS DISEASES ACTS.

SIR,—As it may be presumed that the Government will carry out the vote of the House of Commons, accepting Mr. Stansfeld's resolutions, the Contagious Diseases Acts are virtually dead; no possible reaction can galvanise them into life again. This inevitable result is largely due to the cynicism of the report of the Select Committee, which rashly challenged the religious opinion of the country. This cynical report has killed the Acts; now that they are dead, let the medical profession turn their attention to the wisest means that can be devised for obviating the evils which you seem to anticipate as the logical outcome of the repeal of the Contagious Diseases Acts, to wit, increased disease in the army, and an increase of juvenile profligacy.

The mere fact of the Acts being repealed and the special police withdrawn, will remove that perpetual incitement to prostitution among soldiers, namely, that they were not allowed to associate with respectable women (a thing very deeply resented by many soldiers), that the society of women of abandoned life was good enough for them. As to special means, we should recommend:

1. That greater facilities ought to be given for soldiers marrying.
2. That the leading of any young person of either sex under sixteen years of age into immorality should be made a misdemeanour.
3. That adequate powers be conferred on local police to enable them to maintain order in the streets, prevent solicitation by either men or women, and to suppress houses notoriously of evil fame.
4. That the law of affiliation be so altered that, as formerly, a child may be affiliated before its birth, and without the mother being obliged to enter the workhouse.
5. That, in cases of infanticide, the father of the murdered child if known, shall be prosecuted as an accessory, unless he can show that he had made proper provision for the accouchement of the mother and the care of the child.

These ideas suggest themselves to my mind as very reliable means for obviating all the evils which you fear so much, and which, I am convinced, will lessen very much both disease and juvenile profligacy, and contribute largely to the decency and order of our streets. The profession and our medical journals will have more weight with the public, if they take up the question in this spirit than if they confine themselves to weeping over retrogressive legislation, the weakness of party government, and the natural respect that our representatives entertain for the safety of their seats in the House of Commons.—Yours, etc.,

EWING WHITTLE, M.D., M.R.I.A.

Parliament Terrace, Liverpool, April 30th, 1883.

SOUTH AUSTRALIA FOR PHTHISIS.

SIR,—In the face of the following facts, I should be much obliged if some of your readers, who have experience, would tell me (through the JOURNAL or otherwise) whether I should be wise to recommend a patient (a young professional man), with commencing phthisis, to live in South Australia; holding out to him reasonable hope that his complaint may be arrested and his life prolonged. Extracts from the *Victorian Year-Book* for 1881-2, published by Government authority, show that, "by far the most fatal complaint under the head of constitutional diseases is phthisis, which, in 1881, caused 1,1[illegible] deaths—a larger number than had ever been previously set down to it in one year." "Except during the prevalence of epidemics phthisis is the occasion of more deaths than any other disease."

"The increase of phthisis among the male population is striking, as shown by these figures. The number at the phthisical ages was smaller in 1871 than in 1861 by 4,619, and yet the deaths from phthisis at those ages increased by 47. The number was smaller in 1881 than in 1871 by 19,786, and yet the deaths from phthisis increased by 32."

"At from 25 to 30, nearly 1 in 3 of the whole population of that age died from this disease; at from 35 to 45, about 1 in 5 died."

Are the above figures to be explained only by the fact, that

easing numbers go out to South Australia, at an advanced stage of e disease, in the vain hope of finding relief? Or, can it be that e *Bacillus tuberculosus* is rapidly becoming acclimatised, like the bbits, and thistles, and other pests, which have been introduced om the old country to the serious detriment of the colonists?—
am, sir, yours faithfully, WILLIAM A. S. ROYDS.
Reading, April 17th, 1883.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE PAYING SYSTEM IN GENERAL HOSPITALS.

SIR,—In the JOURNAL of April 21st, you dealt with the pressing ancial crisis through which the metropolitan hospitals are passg. On Monday a meeting in aid of St. George's Hospital was ld at Grosvenor House, with the view of raising £30,000. If this m be secured, there will still be an annual deficiency of some ,000 a year to be found. As shown last week, the remedy for is state of affairs at St. George's, and elsewhere, will be found in e introduction of the paying system into the existing general spitals. Will you allow me to further proceed to consider what organisation will be necessary to successfully effect this desirable sult? The paying system, if wrongly applied, will prevent the aritable public from subscribing liberally to the hospitals, and will ll down upon the honorary medical staff of the hospitals, the hosility and suspicion of the general body of the profession. There ll be another doubt in those cases where the private friends of the norary medical staff are admitted to private wards in general spitals for operations on payment of substantial fees, because, oner or later, after taking the fee, the enterprising surgeon who luntarily incurs this additional responsibility, will bring upon mself the wrath of some family, a member of which has been so mitted, and has died of pyæmia, or from the result of hospitalism. ow are these evils to be avoided? Simply by coming to the desion that, in adopting the pay system, the hospital committees d medical staffs will not alter their present mode of procedure, t that they will minister to the requirements of the sick poor identically the same manner as they are doing at present. This what the special hospitals have done, and that is why the pay stem in their hands has proved such a success in the metropolis. l that the hospital committees have to do is to pass a resolution at, for the future, the hospital shall contain pay and free beds; at, in order to carry this out, a visiting committee shall be estaished, consisting of three members appointed out of the committes of management, each member of which shall serve upon the siting committee in rotation for at least two months out of the elve. Upon the principal medical officer will devolve the duty of mitting all the in-patients, and he must decide, in the first inance, whether the patient shall be relegated to a pay or a free d, his decision being, in each instance, subject to the revision of e visiting committee. In the out-patient department, a special icer must be appointed to see each applicant who applies for lief, and to issue the prescription-papers and cards, stating ereon in each case whether the patient consents to pay anything, whether he is admitted free. How are the committees and ecial officers to ascertain whether a patient can pay, and, if so, at he can pay, per week? Simply by throwing the burden of oof upon the patient.

At each hospital where it has been decided to give the new system trial, every patient will be informed that he now has the privilege, in the case of cottage hospitals, of paying something, however all, towards the cost of his maintenance during his treatment at e hospital, providing he is willing to do so. Each patient will be ked, "What are you able to pay per week, and how much shall I ter on the card?" If a patient says, "I cannot afford to pay ything," then he will be at once admitted to relief, but will be d that he must, at a subsequent visit, produce evidence, in the ape of a letter or certificate, or other information proving his ability to contribute. The committees will have to fix a minimum d maximum scale of payment for in- and out-patients. I would ggest a minimum of 5s. and a maximum of £1 per week for an intient, and a minimum of 2d. and a maximum of 1s. per week for out-patient. In theory it appears difficult to work such a system this with success, but in practice it is found to work with ease, ing to the desire of the majority of patients to pay a little when y can afford it, and to increase, rather than to diminish, the pularity of the hospitals that have adopted it. How is it that s new departure in hospital administration has tended to increase the popularity of the hospitals which have introduced it? Simply because the receipt of even a small payment from the patients necessitates thoughtful and adequate provision for their proper treatment at the hospitals, and experience proves that the working classes hold it to be more economical to pay a small sum per week to a hospital where they have the privilege of attending after working hours as out-patients, or where they are sure they will not be obliged to remain for more than, say, a couple of hours at the outside, than to go to one of the large general hospitals and to pay nothing, with the certain loss of five, six, or perhaps seven hours of their time, to say nothing of the risk to health which such prolonged waiting, and consequent dissatisfaction, almost certainly produces. The adoption of this modified variety of the pay-hospital system by the metropolitan general hospitals will, we believe, not only relieve them from their present financial difficulties, but increase their popularity, because it will necessitate a re-arrangement, and an adequate provision for the thorough discharge of all the work which they undertake in future. At any rate, something has now to be done, and the success of the pay-hospital system and its many advantages justifies the hospital managers in giving it a fair trial. The public and the profession will watch the results accomplished by this new departure in hospital management with no little interest.—I am, sir, yours faithfully, A HOSPITAL MANAGER.

"PITY FOR THE VETERANS."

SIR,—I was in Venice when I read the article which appeared in your issue of April 7th under the above head, or the following would have reached you earlier. The remarks seemed to have been evoked by my report; and, though probably quite unintentional on the part of the writer, yet the impression conveyed to the casual reader is, that I am devoid of humanitarian principles, that I rather grudge existence to all over seventy years of age, that I would exclude all cases of senile insanity from county lunatic asylums, and that unphilanthropic opinions generally are frequently expressed in asylum reports. I certainly, however, hold that bedsores, ordinary paralysis, and even a fractured thigh, should all be capable of proper treatment in a workhouse infirmary.

In justice to my report, kindly publish the offending paragraph. It occurs in an analysis of ten years' statistics, and is suggested by the marked increase during the last ten years in the admission of senile cases.

	Ten Years ending 1872.		Ten Years ending 1882.	
	No. of Cases.	Percentage.	No. of Cases.	Percentage.
Senile Insanity above 70 years of age	... 25	... 2.7	... 50	... 4.2

The admission of patients above 70 years of age is numerically exactly double what it was in the previous ten years; and the percentage on the admissions is increased by more than a third.

I have from time to time, in my reports, called attention to the increasing tendency that exists of sending in aged patients on account of simple failing of mental power and inability to maintain themselves, and to take care of and keep their persons in proper order, more than on account of any active mental unsoundness which necessitates asylum treatment. Most county asylums contain a large residuum of this class, but under the existing provisions of the Lunacy Law, it appears uncertain how far parochial authorities can be called upon to provide for or take charge of anyone, discharged as unrecovered, even although the necessity for special asylum treatment is not present, although ordinary attention, nursing, and suitable diet, is all that is required. It certainly seems to me that, if there were an inducement, instead of there being the opposite, for the retention of this class of case in the workhouse infirmaries, the legitimate work of an asylum—the cure of the recoverable insane, and the safe keeping of the insane who, for their own sakes as well as for the public safety, have to be isolated—could be more thoroughly carried out, the evils resulting from overcrowding avoided, and the expense of hurried enlargements to county asylums diminished.—I am, your obedient servant, J. A. CAMPBELL, M.D.

Garlands, Carlisle, April 21st, 1883.

PRIVATE DISPENSARIES.

SIR,—Having read attentively the letter of your correspondent "P.D." on the above subject, I feel myself constrained, in the interests of the public, even more than of the profession, to endorse the able remarks you have made in comment on the same. As you very correctly point out, he has quite avoided the real question at issue; and I may further venture to suggest that "P.D." is evidently uninformed on the very point he has taken up. "P.D." seems never to have heard of the clubs and assurance associations from which the London working classes derive such extensive benefit, for a far more modest outlay than they ever could from these private dispensaries you so justly condemn as mere speculations, which most undoubtedly they are. In corroboration of what I advance, and for the enlightenment of poor "P.D.," whose ignorance of what he writes about is truly pitiable, may I be permitted to refer to some facts I quoted in an article I wrote on the subject, and which appeared (under the heading Dispensaries *v.* Clubs) in the *Students' Journal and Hospital Gazette* of July 15th of last year. I then pointed out the wide gulf separating the sham dispensary from the benefit club, the utility of which our hard-working population, at the East End especially, so justly appreciate and avail themselves of. An author not being debarred from quoting his own writings, I beg "P.D.'s" kind attention to the following extract from the same.

"No person is allowed to join such a club without previously passing the inspection of a duly registered medical man, who has to give a certificate showing that the applicant is in good health, and able to work. Now, say that our club comprises 500 members, each of whom pays towards medical attendance one shilling per quarter; say that, in the course of a year, an average of fifty members need such attendance; we have, therefore, 450 sound members likewise going on paying one shilling per quarter, whose contribu

tions, vastly exceeding those of the sick members, must, *à fortiori*, allow the medical attendant far ampler means to provide medicaments suitable to the requirements of the individual case, and at the same time enabling this practitioner to provide the services of a trustworthy and efficient person to assist him in his duties: we do not say a fully qualified man, but one whose professional studies and aptitudes render him capable to attend to any average case of emergency. I feel confident that the above details speak sufficiently for themselves to be patent to all, and to need no recapitulation on my part. I feel no less confident that I have succeeded in demonstrating that club practice most certainly deserves a more universal extension; moreover, that there ought to be more clubs for women and children on the basis of the London and Manchester Industrial Institution, a society which provides for the expensive requirements of medical attendance, sickness, and death-benefits even, by modest subscriptions of a few pence per week—a splendid result from insignificant means."

I do not conclude the quotation, as I feel I have already trespassed too far on your valuable columns, but may mention at the same time that, while the medical officers of these clubs and societies do a vast amount of good to their poorer fellow-men and their families, in no instance do they ever act in a manner derogatory to their profession.

Hoping that, by calling attention to these facts, I may have been fortunate enough to contribute to "P.D.'s" enlightenment and edification, I beg to remain, sir, yours faithfully, J. BRINDLEY JAMES, M.R.C.S.Eng.,
Medical Officer London Friendly Institution, etc.

MILITARY AND NAVAL MEDICAL SERVICES.

A VOLUNTEER HOSPITAL CORPS.

AT Charing Cross Hospital, on April 27th, Surgeon-General Hunter, A.M.D., presided over a meeting of the Provisional Committee formed to further the organisation of a Volunteer Hospital Corps. In addition to a large number of medical officers of metropolitan Volunteer corps, there were present Colonel the Hon. Paul Methuen, C.B.; Mr. Furley, of the St. John's Ambulance Association; Lieutenant Maclure, honorary secretary of the Volunteer Ambulance Department; and Surgeon-Major Cross, A.M.D. Surgeon-Major Evatt, M.D., A.M.D., explained the objects of the promoters, which are chiefly to form a Volunteer Medical Department and Volunteer Hospital Corps, similar to the same organisations in the Army, pointing out that at present the Volunteer medical organisation was simply regimental, and that there was no provision for complete treatment of the sick and wounded generally, beyond first assistance on the field. It was proposed that students in the medical schools should be invited to join bearer companies and learn all the duties of orderlies, so that, when passed into full practice, they should be eligible to take up the duties for which the Army Medical Staff at present were alone competent. Colonel Methuen drew attention to the probability of an early report from the Committee now sitting at the War Office to inquire into Army medical arrangements, and suggested that the promoters should take no final steps until the report was issued. Resolutions were passed, that the Deans of medical schools throughout the country should be asked to assist the movement in their own establishments; and that the Secretary for War should be applied to to give permission for Volunteer medical officers to undergo a short special training in their duties at Aldershot. The Provisional Committee were asked to remain permanent for three months; and a vote of thanks to the chairman closed the meeting.

SIR THOMAS GALBRAITH LOGAN, K.C.B.

IT is officially announced that the reward for distinguished and meritorious service, which became vacant recently through the death of Surgeon J. Wyer, has been conferred on Sir Thomas Galbraith Logan, K.C.B., honorary physician to the Queen, and formerly director of the army medical department. This reward is one of the fourteen good service pensions allotted to the army medical department, to be conferred on meritorious officers, subject to the approval and recommendation of the director-general for the time being. In the present instance Director-General Dr. Crawford has performed a graceful act in thus publicly recognising the services of his former chief, under whom he officially served for several years. Sir Galbraith Logan must be the oldest, or nearly the oldest, existing member of the army medical department. His first commission as hospital assistant was on May 8th, 1828. He was gazetted assistant-surgeon in July, 1830; surgeon in August, 1842; surgeon-major in November, 1852; deputy inspector-general in December, 1855; and inspector-general in April, 1859. In March, 1867, Dr. Logan was appointed director-general of the medical department of the army, and he finally retired from active employment in April, 1874. It was during his direction of the department that what is now commonly spoken of as the "unification system" of administration was introduced. Great opposition was manifested for a long time against it, both in military and medical circles, and Sir Galbraith Logan became the subject of much personal obloquy and repeated attacks in a certain portion of the press. He has lived to see the system thoroughly established, as well as to witness a general change of opinion in favour of the consolidation of the department, and the now acknowledged greater power of usefulness which the change in the administration of its functions has produced. Sir Galbraith's active military services were of an important character. They commenced with the Sutlej campaign of 1845-46 during which he took part in the actions of Buddiwal, Aliwal, and Sobraon. During the year 1855 he served in the Crimea, and was present at the taking of the Quarries, on June 7th, and the assault of Sebastopol on the 18th of the same month. At the time of the final assault of the place, on September 8th, Dr. Logan was principal medical officer of the Highland Division. For these services he received, in addition to the medal and clasp for the Sutlej campaign, the Crimean medal and clasp, the 5th clasp of the Medjidié, and the Turkish medals. In July, 1865, Dr. Logan was made a Companion of the Bath, and in June, 1869, was advanced to be a knight commander in the order. Sir Galbraith Logan has always been very popular among his brother officers, from his courteous manners and genial disposition, and still takes an active interest in all that concerns the professional reputation and welfare of his department. The deceased medical officer Surgeon John Wyer, to whose good service pension Sir G. Logan has succeeded, was no less than seventy-two years in the ranks of the department, on full and retired pay together, his first appointment as assistant-surgeon having dated as far back as February 5th, 1811. He was engaged in continued active service in the field during the latter period of the Peninsular campaigns.

IRISH STUDENTS AT THE ARMY MEDICAL EXAMINATIONS.

SIR,—There are a few remarks which I, as an unsuccessful competitor at the recent examination, would like to offer in answer to Surgeon-Major Hamilton's letter, which appeared in your issue of April 14th. It is hardly possible for Dr. Hamilton, after attending only one examination, to draw the conclusion he does, viz., that the examination is perfectly fair; especially as it happens to be the very examination in which a large proportion of Irishmen were successful; and it is, to say the least of it, a curious coincidence, that it happens to be the one which followed on Mr. Gibson's question in the House. Now I do not intend to give an opinion one way or the other as to whether favouritism is shown to any special nationality; but I do hold that the examination is not a fair competitive one, for the reasons which I will state.

With regard to the written part of the examination, no one can find fault as few men will be prejudiced enough to suppose that nationality, or letters of introduction to the various examiners, would influence such men. It is to the *viva voce* part that objection is taken. Now, strictly speaking, no competitive examination is fair unless each competitor is placed on the same footing. This is not the case in the army medical examination. In the first place, the cases presented for diagnosis vary widely, and he must be a very astute and clever examiner who can make allowance for the stupidity of a patient, not to speak of the grades of difficulty in making a diagnosis in the various cases. Twenty minutes is only allowed to examine your case, take notes, and test the urine; so that, in some instances, when you go to write it out fully, you find you have very little data to write from. In the next place, men are only human, and their tempers are as subject to variation as the weather. We know that, after examining for five or six hours, they are apt to, and do, get irritable; consequently, the candidate suffers. Again, residents in London, and especially those who attend University College Hospital, have a great advantage over non-residents, since they can go round the hospital, and know the exact cases there. As for the diagnosis of a surgical case, some of the ordinary instruments for helping to make it are denied to you.

Dr. Hamilton seems to think that Mr. Gibson had better not have opened the question in Parliament. I cannot agree with him. Since his (Mr. Gibson's) question in the house, a great many have noticed the large proportion of Irishmen who have been successful; and with reference to that portion of it as to whether Ireland was represented by the examiners, it would have been more straightforward to have answered that she was only to the extent of 100 or 200 marks (I am not sure which) out of a total of 3,200.

There is just one point I would like to notice in conclusion, and it is this. It is very generally supposed that the Director-General selects the most suitable men from those who qualify; and it seems to me that some of the questions asked at the physical examination have no meaning unless this were the case. I just mention one of them. "Have you ever held the post of house-surgeon or resident in a hospital?" Now, what would be the use of asking this question, unless the fact of having held a post of the kind told in your favour. The conclusion would seem to be, that the examination was competitive to a certain extent, but only so far as the candidate is suitable. If the examination was conducted purely on paper, and the candidates known only by numbers there could be no ground for complaint.

As I intend competing again, naturally I do not give my name, but may sign myself A NON-SUCCESSFUL COMPETITOR.

THE ARMY MEDICAL SERVICE.

SIR,—The pamphlet on the present and future prospects of the Army Medical Department, lately noticed in your columns, is one that deserves the careful attention of all who are concerned in seeing this department contented and efficient.

I would beg of you to allow me to thank its author for the trouble he has taken to set forth, and for the very clear way he has done so, the disheartening position in which the surgeon-majors of the department at present are

ith regard to their promotion to the next rank, viz., that of brigade-surgeon. f I confine myself just now to this one point, it is not that the pamphlet loes not raise others of importance, but because this seems to me to take the rst place.

The author shows that the position of the senior surgeon-majors is, under xisting conditions, a very hopeless one. The War Office Committee of 1878, n whose recommendations the latest warrant affecting the department was ased, imagined that surgeon-majors would attain the rank of brigade-surgeon n about twenty-two years and a half of service, and made this cheerful as- umption the corner-stone of their scheme. But what do we see instead? 'his—that the last surgeon-major who was promoted had twenty-five and a alf years' service; and that, at the present rate, promotion to this rank will ecome slower and slower, until, in a few years, men will have served for wenty-eight years, and will still be surgeon-majors.

At present of senior surgeon-majors ranking with lieutenant-colonel, there re 137, and in two years there will be 200 of these officers, not only senior, ut senile (!) or, as a letter in your issue of the 14th instant, expresses it, grey-haired and soured officers, going about performing executive duties of routine nature," to the detriment of their self respect, and the discredit of heir department. Some of these will of course, and in course of time, become rigade-surgeons, but only to be shelved in a year or two at the age of fifty- ve, when executive officers must retire.

What a poor incentive this, to that professional zeal so desirable to see in- ised into the department, and without which, in these days, its proper status s a scientific body cannot be maintained.

It is surprising that the general feeling of the department, which naturally altogether with the views expressed in the pamphlet on this head, has not een more outspoken in favour of it. But the fact is, the junior men are well ff as to pay, and their promotion after twelve years is assured, and this, they ink, is far enough for them to look ahead. The evil of which their seniors mplain is not within measurable distance of themselves, and so the matter pses. To them sufficient for the day is the good thereof! But to *les autres* ie seniors the case is reversed, and the shoe pinches badly.

The writer of the pamphlet has no difficulty in finding out the cause of the agnation in promotion, or its remedy. Both are obvious. The first is, the ng time administrative officers can hold their appointments. They need ot vacate them till they are sixty years of age, and, in consequence, not a w hold them for thirteen, fourteen, or sixteen years. Here is the block lainly. And the remedy? Equally plain. Make all these appointments of efinite tenure, *i.e.*, for five or even seven years (as the pamphlet recom- ends), but then to be vacated; that is to say, adopt the principle now ap- lied to the command of regiments, and all staff appointments.

The pamphlet puts it thus: "Why should a deputy surgeon-general serve r ten or fifteen years in the rank, while a lieutenant-colonel commanding regiment has to vacate his appointment at the end of four years' actual mmand? Surely, the principle that demands new blood every four or five ars in a regiment, is equally applicable to a department like the medical, hen the duties everywhere are so much alike," etc. (page 7).

The BRITISH MEDICAL JOURNAL, and the great body it represents, have ven the Army Medical Department many a "lift" in the past, but the pre- nt case shows that the department must, like the daughters of the horse- ech, continue to cry, "Give, give!" It is hoped that this matter may be ken up by the Association. The more it is considered, the more it is evi- nt that, for the well-being and efficiency of the Army Medical Department, change in the direction indicated should be made, *i.e.*, that the tenure of s administrative appointments should not exceed from five to seven years.—

ours obediently,

A SURGEON-MAJOR.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

E Vice-Chancellor has issued a notice, informing the members of Senate, that the professorship of anatomy has become vacant by resignation of Professor Humphry. The Vice-Chancellor has eived the following letter from Professor Humphry.

"Anatomical Museum, Cambridge, May 4, 1883.

DEAR MR. VICE-CHANCELLOR,—You were quite right in your tement in the Arts Schools the other day, that I intended to re- the professorship of anatomy in any case; and I think it best lo so at once, in order that there may be a sufficient period for election of my successor during the present term. I therefore tender to you my resignation of the chair of anatomy, which I e held by the favour of the University since 1866. Early in 7, I was asked to assist my predecessor in his lectures. I have rdingly taught anatomy in the University for six and thirty rs; and I have much pleasure in bearing testimony to the un- ying courtesy, good feeling, and gentlemanly bearing of the lents during the whole of that time. My chief reason for re- ing is that the increased and increasing number of students, ed to a due prosecution of the study of the science, now require whole time and attention of the professor; and the income uing to my successor, under the new statutes, will enable him exclusively to devote himself to the duties of the professorship. remain, dear Mr. Vice-Chancellor, yours very truly,

"G. M. HUMPHRY.

P.S.—I shall be happy to continue to superintend the depart- t till my successor has been appointed."

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

BOARDS OF GUARDIANS AND MEDICAL OFFICERS' FEES.

SIR,—I am medical officer to the Frettenham District of the St. Faith's Union, Norfolk. In January 1882, I amputated a finger of a boy for injury, acting on an overseer's order. The fee was refused, on the ground that the father could afford to pay, which he cannot, and I was told to get the money from the overseer himself. After some correspondence with the Local Government Board, I was informed that "they saw no reason to interfere with the decision of the board of guardians."

On September 20th, I attended a woman in her confinement on an overseer's order; and on October 28th I attended another. The fees in both are refused, although I have since attended members of both families: one with an overseer's order, and the other with an order from the relieving officer. If they cannot pay for an ordinary slight illness, how can they pay for an attendance during a confinement?

Can you advise me what to do? Of course, the gross injustice is evident; but can I legally claim and obtain the money; as, if I can, I fully intend doing so? By inserting this in your next issue, you will, I am sure, oblige not only one but many another "parish doctor."—Yours, etc.,

Coltishall, Norfolk, May 3rd, 1883. HUGH TAYLOR.

*** There can be no doubt that, if our correspondent had sued the board of guardians for the fee he was entitled to about six months ago in the County Court, he would, on exhibiting the order of the overseer, or putting the latter person in the witness-box, have recovered a fee, but it is now too late. The Local Government Board never sees any reason for interfering with the decision of a board of guardians on any question affecting the interests of a medical officer, whether the latter be in the right or not. As regards the fees for the two cases of midwifery attended on the overseer's order, we advise that a summons be at once taken out against the board of guardians; care, however, being taken, on going into court, to produce the orders, or, better still, by subpœnaing the overseer who gave the same. At the same time, we would advise our correspondent to call as a witness on a subpœna either Dr. Rogers, the Chairman of Council of the Poor-law Medical Officers' Association, or Mr. John Wickham Barnes, the honorary secretary. Either of these gentlemen would, if put in the witness-box, be able to show, not only what is customary, but what is the law on the subject. The case decided in the Cambridge County Court last autumn—to wit, Grubb *v.* the Chesterton Board of Guardians—is one that may be referred to. It was quoted at length in our issue of October 28th, 1882.

CERTIFYING PAUPER LUNATICS.

SIR,—In the event of a parish medical officer certifying for the removal to an asylum of a pauper lunatic, and afterwards the magistrate not giving an order, can the medical officer claim any fee for examining or certifying?—Yours, etc. A UNION SURGEON.

Norfolk, March 24th.

*** We would advise our correspondent to apply for a fee, but we much question whether he will get it. The text of a pauper lunacy certificate runs thus: "Having called to my assistance a surgeon, etc., and being satisfied that A or B is a person of unsound mind, I direct his, or her, removal to — Asylum." Where a magistrate or the justices do not make the order, there is grave doubt as to the legality of any payment. Some boards of guardians sanction the payment of a fee, whether the order be made or not, but we believe payment may be objected to, if the auditor's attention be called thereto.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

SIR,—The profession, and all who are interested in sanitary work, are deeply indebted to you for the admirably exhaustive and luminous report which you have presented to the Parliamentary Bills Committee on the subject of private bill legislation, and especially in regard to the anomalous and conflicting relations of the enactments in force in various places for the repression of infectious disease. As one who has for some years, on every opportunity, strongly deprecated the cry that has been fostered for compulsory notification, as immature and unwise, unless dealt with as only part of a much larger question, I am pleased to read the strong expression of your own opinion that "a general inquiry into the operation of the existing health acts, with special reference to the numerous additional provisions, extensively various, and arbitrarily included in the local acts of a great number of towns and districts, appears to be urgently called for." You have yourself sufficiently animadverted on the unsatisfactory nature of the results of the deliberations of the Parliamentary Select Committee of last session, and I will only point out one matter to which you do not refer in your report, as indicating the need for reviewing the decisions of the committee, and that is, that they have authorised the grant to local authorities of powers which may be worked so as to bear very hard on householders in some cases, without taking any course to ensure that these authorities have made those provisions which the law authorises them to make for the purpose of assisting householders to meet the difficulties which the incursions of infectious disease brings with them.

I do hope that the deputation from the Parliamentary Bills Committee, when they may wait upon Sir Charles Dilke, will not make the mistake of founding their opposition to Mr. Hastings' Bill upon any question of the possible conflict of interests amongst members of the medical profession to which it may lead, or even on the mere fact that the profession have expressed a strong objection to the duty of notification being compulsorily imposed upon the medical attendant, important as this fact may be as a basis

for their own action in this matter, but that they will confine themselves to making a strong, unanimous, and authoritative protest against any further legislation in regard to the repression of infectious disease, until such an inquiry as you suggest has been made. I venture to think that if a select committee were appointed for the purpose, and the area from which evidence is taken made sufficiently wide, the conclusions to which it would lead would be so clear and irresistible, that no great difficulty would be found in recasting by its light the whole section of the Public Health Act, so as to give a consistent and intelligible skeleton of legislation which might be clothed into further enactments through the agency of the Local Government Board, whenever occasion might arise.—I am, yours truly,

Gloucester. FRANCIS T. BOND, M.D.

THE RESULT OF COMPULSORY NOTIFICATION AT NOTTINGHAM.

SIR,—I must apologise for asking a little of your space to reply to Dr. Seaton's letter in the JOURNAL of April 7th. It is necessary to do so in order to draw the attention of your readers back to the important subject under discussion, and away from the irrelevant matters which form the principal parts of Dr. Seaton's letter. The subject is what has been the result of compulsory notification at Nottingham; and the report of the Medical Officer of Nottingham in reference thereto. This is sufficiently important in itself for discussion, without introducing the progress of infectious diseases of Sheffield, or elsewhere; and the prophecies as to Sheffield indulged in by Dr. Seaton, however interesting in themselves, are not so important as the *facts* relating to Nottingham. I shall, therefore, decline to wander away from Nottingham.

I am not at all troubled, as incorrectly stated by Dr. Seaton, because he has only one year's experience of notification to report upon. But I regard it as a grave matter that his official report thereon should be so misleading. It contains no fact in which an independent reader can found a judgment as to efficacy of notification, but instead, it gives the opinion of the medical officer, which when tested by the figures of the Registrar-General, are found not to be verified. Dr. Seaton says that figures are "beside the mark." Undoubtedly if they contradict a preconceived theory, they are best left out of sight, as Dr. Seaton has done. Otherwise they form awkward standards by which to test the accuracy of published statements when the statement differs from them.

In reply to the question, whether from a public point of view the measure (Compulsory Notification at Nottingham) in its limited application has been beneficial in its operation or not, Dr. Seaton says in his report, "I can only answer in the most emphatic manner that its results have proved beyond a doubt to be of great benefit to the public." He gives no facts to prove this general statement of his opinion.

I test it by reference to the death-rate from all causes, from seven zymotic diseases, and from the two diseases scheduled for compulsory notification, and the result in no case supports the official statement.

The following table gives for Nottingham the death-rate from all causes and from zymotics from the Registrar-General's reports, and the death-rates from scarlet fever and small-pox calculated by myself from the deaths reported by the Registrar-General. Your readers can judge for themselves from these figures.

Annual death-rate from all causes, scarlet fever, small-pox, and seven zymotic diseases in Nottingham during twelve years 1871–82.

Year.	DEATH-RATE.			
	All Causes.	Scarlet Fever.	Small-pox.	7 Zymotics.
1871	26.0	0.32	1.65	2.1
1872	25.3	0.05	2.32	2.0
1873	23.2	0.12	0.0	1.3
1874	24.8	0.53	0.0	1.3
1875	27.7	1.72	0.0	5.1
1876	23.5	0.79	0.0	3.6
1877	22.9	0.19	0.0	1.9
1878	21.0	0.54	0.0	2.8
1879	22.6	1.06	0.0	2.7
1880	25.1	0.77	0.0	4.8
1881	22.4	1.87	0.02	4.0
1882	23.5	1.44	0.26	4.4

It appears from these figures that there was an increase in the death-rate from all causes, from small-pox, and from the seven zymotic diseases in the year in which compulsory notification was in force as compared with the preceding year, and a diminution of 0.43 per 1,000 in the death-rate from scarlet fever.

The death-rate from *all causes* was not so high in any of the past six years as it was in the year when "the great benefit" was derived from compulsory notification, except once—viz., in 1880—when it was 25.1; next year, without notification, it dropped to 22 4.

The death-rate from *scarlet fever* has, during the past twelve years, only twice exceeded the rate during years of compulsory notification—viz., 1875 and 1881, when it was respectively 1.72 and 1.87 per 1,000. In 1876, without notification, the death-rate fell to 0.79, and in 1877 to 0.19 per 1,000; while, with all the machinery of notification, the death-rate in 1882 is only reduced 0.43 per 1,000 below the rate for 1881. The rate for the year of compulsory notification is not only relatively but absolutely a year of severe epidemic from scarlet fever in Nottingham. Notwithstanding this, the official report states that "the notification of scarlet fever has been attended with the most excellent results."

Again, with regard to the efficacy of compulsory notification in diminishing the deaths from the *seven principal zymotic diseases*.

The death-rates as published by the Registrar-General show that the year of compulsory notification in Nottingham was one in which these diseases were very fatal—viz., at the rate of 4.4 per 1,000; whereas in the previous year the rate was only 4.0 per 1,000. Only twice during the last twelve years has the death-rate from these diseases been anything like what it was during the year of compulsory notification—viz., in 1875, after which it rapidly fell, and in 1880—but the rate of decline in 1881 was doubled by the rate of increase in 1882, when compulsory notification had been one year in force. Facts are troublesome things; and these facts are such as are not reconcileable with the opinion in the official report, which states that, by a variety of direct and indirect means, compulsory notification has been very beneficial in Nottingham.

The death-rate from *small-pox*, too, largely increased in 1882, as compared with 1881. This being so, how can the official opinion be correct that "the results are such as to furnish satisfactory proof of the value of notification to all who are open to conviction?" (This remarkable opinion refers specially to the notification of small-pox.)

I know of no other method of testing the fatal prevalence of scarlet fever and small-pox at Nottingham except by the death-rates; and, like all other persons, except the medical officer of health, I regard them as essential to test it.

It would have been of great interest and importance if facts had been given to enable one to judge as to the effect of compulsory notification on the prevalence of these diseases in a non-fatal form; but the official report is silent on this point.

The peculiarity of vision which compelled the writer of the official report to publish the remarkable laudatory opinion as to the results of notification in Nottingham is perhaps to be accounted for by reference to a sentence in the interesting autobiographical passage in his letter in the JOURNAL of March 31st. In this letter, after explaining that he would not apologise for certain very offensive observations relating to a medical man of position and repute in Nottingham, he goes on to refer to the standpoint from which he is "bound to view compulsory notification. Why or how he is "bound" is only known to himself. He certainly is not "bound" by the facts of the case to draw the conclusions he has published, nor is he justified.

I do not attempt more than a statement of facts; your readers may draw their own conclusions. I am not "bound" in any way on the subject, and will at once follow the conclusion which fact may suggest, but not the opinion of any one when I find them contrary to the facts. I will not enter into any dialectical arguments on this subject, nor allow myself to be drawn into discussion of any extraneous matter. The results of the first year's operation of compulsory notification at Nottingham is the only point I have referred to; and any facts bearing on this will be welcome, I am sure, to other readers than myself.—Your obedient servant,

THOMAS WHITESIDE HIME, B.A., M.B.

P.S.—In my previous letter, the death-rate for 1878 in Nottingham was erroneously given as 24.2. I had not seen the proof of my letter, and had no opportunity of correcting the error.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BETHNAL GREEN.—During 1881-2 there was a large increase in the mortality from zymotic disorders in Bethnal Green, the death-rate from the seven principal diseases being 662 against 553 in the previous year, and representing a rate of 21.6 per cent., while that for the whole of London was only 17.2. Dr. Bate regards two causes as responsible in a great measure for this increase, (1) the tardy information which he receives of the outbreak of infectious disease, frequently not until the case appears in the Registrar's weekly return as a death, and (2) the difficulty of isolation and the absence of a disinfecting apparatus. Two years ago the importance of this provision was pointed out by Dr. Bate, and it is to be regretted that the vestries have not yet provided their important and populous district with adequate means of ready and effectual disinfection. Of 737 cases of small-pox reported during the year, 57 died at their own homes, and 680 were removed to hospital, where 61 succumbed to the disease. Measles was extremely fatal, destroying no fewer than 185 lives, chiefly being those of young children. Scarlatina accounted for 82 deaths, whooping-cough for 102, and diarrhœa for 107. Fever was fatal in 59 cases, 37 being attributed to enteric fever, five to simple fever, and four to typhus. There were nine deaths from diphtheria, but Dr. Bate believes that several were cases of scarlet fever without rash, other members of the family were suffering, or subsequently suffered from this disorder. In every instance, however, the sanitary arrangements in which the sufferers resided were defective. From constitutional diseases there were 618 deaths registered, including 441 from cancer, 441 from tubercular diseases, and 378 from diseases of the nervous system, no fewer than 160 being caused by convulsions. Eleven deaths were returned as unregistered, ten being newly-born infants. The death-rate from all causes was 24.0 per 1,000 of the population. During the year, Dr. Bate directed special attention to the bakehouses in his district, and he reports that he found them in a worse condition than on the occasion of his last visit in 1878. The Act transferring the duty of inspecting these places to the factory inspectors does not seem to work satisfactorily, and Dr. Bate deplores this retrograde piece of legislation. The cow-sheds were subjected to careful inspection, and were found fairly satisfactory, but comment is made as to the somewhat lax enforcement of the regulations of the Metropolitan Board of Works. The mortuary continues to be a great boon to the district, and has provided a temporary resting-place for 28 bodies. Dr. Bate concludes his report with an interesting and exhaustive account of the system of sewer ventilation carried out in Bethnal Green, and offers some practical suggestions for its improvement.

BIRKENHEAD.—Mr. Vacher sends, as usual, an elaborate and interesting report on this extensive urban district. He discusses

ne length, the prevalence of zymotic disorders, and refers specially the fatality from typhus. During 1881, there were twenty-four ıths ascribed to fever, twelve of which were distinguished as ›hus, eleven as typhoid, and one as remittent. The history of the :t outbreak of typhus points conclusively to the immense value of :ly notification. The initial case was not reported until death had :en place, nor was the patient isolated, and by these means the ;ease was communicated to thirty-seven persons, four of whom :d. The second outbreak seems to have been due to an error of ıgnosis, a death from typhus having been certified as from pneu›nia. Nine cases came to notice, four terminating fatally. Mr. ıcher states that his authority met with considerable difficulty in noving infectious patients to hospital without the consent of their ends. What is wanted is power to remove without consent, on a stice's order, whenever a patient cannot be properly isolated so as prevent the spread of the disorder, or properly treated. If the ›rds "or lodged in a room occupied by more than one family" uld be struck out of the 124th clause of the Public Health Act, it ›uld be materially strengthened; as, when a general description, ch as "without proper lodging," is followed by a specific descrip›n of certain improper lodging, the specific description is apt to be nstrued by justices as interpreting the general description. The sence of a system requiring the notification of infectious disease ›o occasioned considerable difficulty to the authority; but this has w been obviated through the operation of the Birkenhead Im›vement Act, which came into force in January 1882. The prin›al zymotics account for 180 deaths; measles being responsible : 49, scarlatina for 20, whooping-cough for 45, diarrhœa 24, dipheria 5, and "fevers" 24. The death-rate from these causes in 1881 ıs 2.1 per 1,000, being far below the local mean in previous years. .e gross mortality was also considerably below the average; the ath-rate from all causes being 17.32 per 1,000, against 19.70 in 80, and 20.27 in 1879. During the year, 27 deaths were returned uncertified; and, although the proportion of these deaths is adually diminishing year by year, it is unfortunate that nearly ree-fourths of the number are infants. Much good work of an unetending nature was performed during the year. House-to-house spections of the cottage property were regularly made, the drains d gulleys periodically cleansed, and refuse removal systematicy dealt with. Mr. Vacher refers to the utility of the fever hos:al, and speaks in high terms of the value of the disinfecting appatus, which, however, is not so extensively used as it might be.

BRADFORD (YORKSHIRE).—Mr. Butterfield sends, as usual, an exllent report on the health of this borough for 1881. The death-rate gistered during the year was 19.6 per 1,000, being 4.4 below e average of the previous ten years. This great falling off was incipally owing to the comparative absence of diarrhœa during e third quarter of the year, and to the mildness of the fourth arter. There was also a diminution of the principal zymotic disses and of infant mortality, which Mr. Butterfield holds to be due improved sanitary conditions, and increased vigilance in the con›l of epidemic outbreaks. The deaths from zymotics were 363, ainst 753 in 1880, and 471 in the previous year. Scarlet fever, ıich may be considered endemic in the borough, caused 118 deaths, d the outbreak of this disease which commenced at the end of ıgust was contemporaneous with outbreaks in many of the neighuring towns and places at a distance, such as Hull, between which d Bradford there is much communication. During December, the tbreak gradually abated, and, in the last week of the year, only cases were reported. Whooping-cough was, as usual, very fatal the borough, and caused 107 deaths, while 13 are attributed to easles, and 26 to "fever." Of these latter, 19 were described as ›m enteric fever, but Mr. Butterfield thinks that they might well ve been otherwise classified. The health-officer reports that, al›st invariably where cases of true enteric fever were reported, ing to some defect, generally an imperfectly trapped waste-pipe, ver-air found access to the dwelling. In two cases where the nitary conditions of the houses were perfect, there was a history exposure to sewer-air elsewhere. Mr. Butterfield gives an inte.ting account of the small-pox cases which came under his notice ring the year, and he states that, had it not been for the early imation he received of these cases, and the great facilities for lation which the borough possesses, there can be no doubt that ere would have been a disastrous epidemic. As it was, but two ›ths were registered from the disease. There was a marked ninution in the deaths from diarrhœa. Instead of 212 deaths which urred in July, August, and September, 1880, only 43 occurred in same months of last year. Since the provisions of the compulry notification of infectious diseases, contained in the Bradford Improvement Act, came into force, 423 cases of scarlet fever have been reported, 215 sent to the Fever Hospital, and seven to the infectious wards at the workhouse; thus, 52.5 per cent. were isolated in buildings specially constructed for the purpose. Disinfection was also actively pursued, much good work being accomplished with the aid of Ransome's apparatus.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS, Friday, May 4th.

Typhus Fever in Dublin.—Mr. CORBET asked the Chief Secretary to the Lord-Lieutenant of Ireland whether the investigation relative to the outbreak of typhus fever in Jones's Court, Dublin, had terminated, and with what result.—Mr. TREVELYAN: This matter has been inquired into as fully as possible by the medical inspector of the Local Government Board, and copies of his reports have been furnished by the Government to the Corporation of Dublin. They go to show that, while it is to be regretted that the dispensary doctor (who was a newly appointed officer, and not familiar with all the provisions of the Public Health Act) did not promptly report the nature of Roe's illness to the officer of the Corporation, who might have taken steps to prevent the holding of a wake, yet there is no reason to think that he was guilty of any wilful neglect of duty; and, as has already been stated, the weight of evidence goes to show that the fever was not spread by the wake, but by concealment on the part of those families in which the disease first appeared. There does not appear to be any manner in which the Government can further interfere usefully in the matter.

The Contagious Diseases Acts.—Lord R. CHURCHILL asked the Secretary of State for War whether it was the intention of Her Majesty's Goverement, without delay, to introduce a Bill to give effect to the resolution arrived at on Friday, April 20th, relative to the Contagious Diseases Acts; and whether it was the intention of Her Majesty's Government, pending further legislation, to continue to enforce the law; or whether they would consider themselves entitled to exercise a dispensing power, and to issue instructions to the authorities to undertake no further prosecutions under the Act.—The Marquis of HARTINGTON: In consequence of the resolution passed by the House of Commons on April 20th, in reference to the Contagious Diseases Acts, we propose as soon as possible to introduce a short Bill, providing for the following main points—viz.: (1.) To repeal all sections of the Acts of 1866 and 1869 which direct periodical or compulsory examination of women (including all police action.) (2.) That any woman voluntarily presenting herself at a certified hospital may, at her own request, be examined; and, if it be deemed necessary by the surgeon, may be admitted into such hospital, and detained there in accordance with the provisions of the present Acts. (3.) That, in places under the Act where no certified hospitals exist, any woman may, at her own request, be examined by a duly appointed surgeon, and, if it be deemed necessary by the surgeon, may be admitted into a certified hospital, and detained there in accordance with the provisions of the present Acts. (4.) That anything in the present Acts not inconsistent with the above should be retained. This is all the legislation which appears to be absolutely requisite in the present session. It will not, however, exclude a consideration by the Government of the whole question, with a view either to legislation next session on the lines of the recommendations of the Royal Commission of 1871, or of the Bill of 1872, or possibly to the introduction of some further provisions into a Bill which is about to be presented to the House of Lords, for the amendment of the law relating to the protection of young girls. As, however, it is uncertain when the Bill the provisions of which I have indicated can be passed, it was necessary to consider what action should be taken at once. It appears that the powers conferred on the Admiralty and the Secretary of State for War are, in the main, permissive and not obligatory. The operation of the Acts hinges on the appointment of visiting surgeons at the places subjected to the Acts, and on the employment of the metropolitan police. All the expenses of the administration of the Acts are to be defrayed by the Admiralty and the War Office from money to be voted by Parliament. After the vote of April 20th, there exists no reasonable probability that the House of Commons will vote the fund necessary for the administration of the compulsory examination sections of the Acts. Instructions have, therefore, been given for the withdrawal of the metropolitan police. The visiting surgeons will be for the present retained for the purpose of providing a legal means of admitting

women who desire to enter a certified hospital, who are to be subject to detention under the 17th section of the Act of 1866, which authorises a woman voluntarily to subject herself to examination. Amended estimates providing for the expenses of the administration of the Acts will be substituted for those now contained in the Navy and Army Estimates, and the discussion of these estimates on the introduction of the Bill will probably give the most convenient opportunity for entering into any further details on the subject.—Lord R. CHURCHILL asked whether the noble Marquis adhered to the opinion expressed by him in the recent debate, that the present Acts were absolutely necessary for the efficiency of the Army and Navy. Did the War Office and the Admiralty still maintain that view of the question?—The Marquis of HARTINGTON believed that he had not been accurately reported. All he said was, that the Acts had tended to the efficiency of the Army.—Sir H. WOLFF asked when the Bill for the better protection of young persons would be brought in. The removal of the police charged with the execution of the Acts would render the need for the Bill all the more urgent.—Sir W. HARCOURT said that the Bill would be introduced immediately after Whitsuntide.—Mr. WARTON asked the Secretary of State for War whether lately at Cairo in one battalion, about 650 strong, 75 men were laid up at one time in consequence of venereal disease.—The Marquis of HARTINGTON: The returns of sick at Cairo are not given by battalions; but, on April 13th, the soldiers of the force at Cairo under treatment for venereal disease amounted to 2.65 of the strength, which would only give an average of about 17 to a battalion of 650 men. By a later return, received yesterday, it appears that, of the whole force in Egypt, those in hospital for venereal disease were about 3½ per cent. of the force.—Mr. WARTON asked whether it was true that the military authorities in Ireland lately made a strong application to the Government, to the effect that the Contagious Diseases Acts should be extended to Dublin, on the ground that a large proportion of its garrison was rendered inefficient by venereal disease.—The Marquis of HARTINGTON: In December last, the military authorities in Ireland represented strongly the great prevalence of venereal disease among the garrison of Dublin, and urged that the provisions of the Contagious Diseases Acts should be extended to that city. It was not considered expedient to propose legislation for such an extension; but I have arranged with the governors of the Westmoreland Lock Hospital to offer additional accommodation to diseased women; and I hope that this measure may have some result in improving the health of the garrison.

Dundrum Lunatic Asylum.—Mr. W. CORBET asked the Chief Secretary to the Lord-Lieutenant for Ireland whether he had noticed the following passage in the last Parliamentary Report on Irish Lunatic Asylums: "Central Asylum, Dundrum.—We give as usual the report of the resident physician and governor. As requested by the inspectors, the Government assented to a Commission of Inquiry being held into the general local management of the institution, and the official relationship existing between some of the officers associating with them, for the purpose of a more efficient and exhaustive scrutiny, by two experienced gentlemen from other departments. Not only the immediate investigations, but the drawing up of the reports thereon, extended over a considerable period, so numerous and varied were the points gone into;" whether that statement referred to certain grave charges against the resident medical superintendent; whether it was true that his report of his own management of the institution was always inserted in the annual report to Parliament: whether a similar practice existed in regard to the other public asylums; and whether, in view of the allegations made, he would cause all the correspondence on the subject of the inquiry, together with the official reports of the Commissioners, to be printed in the forthcoming report to Parliament.—Mr. TREVELYAN: The statement quoted refers to a departmental inquiry held by order of the Government into a number of matters connected with the administration of the asylum. Among other matters inquired into, there were charges and counter-charges between the resident physician and the late visiting physician—much more, however, on the part of the former than the latter. It is the case that the resident physician's report is inserted in the inspector's annual report presented to Parliament. This is not done in the case of the district asylums. The reports of departmental committees of inquiry, such as that referred to in this question, are always regarded as confidential, and I cannot undertake to lay the report or the correspondence relating to it on the table of the House.

Monday, May 7th.

The Contagious Diseases Acts.—Mr. PULESTON asked the Secretary of State for War whether he was prepared to adopt some scheme now to mitigate the evils likely to arise from the present action of the Government in annulling the provisions of the Contagious Diseases Acts.—The Marquis of HARTINGTON: The action which I stated the other day the Government proposed to take is with the view, not of annulling the provisions of the Contagious Diseases Acts, but of retaining as much of those provisions as we can reasonably expect to receive the support of the House in retaining. The Lock Hospital will remain, and the power of detention of women who are found to be diseased will also remain in force. We are considering whether it will be possible to adopt any of the recommendations of the Royal Commission of 1871, which, in their opinion might be applied, not only in these districts, but more generally with a prospect of improving the health of the troops and of the population generally.—In answer to Sir R. CROSS, Sir W. HARCOURT said that he had no control over local bodies of police. Over the Metropolitan Police, however, the Executive had authority, and the principle upon which the Executive had acted was that after the recent decision arrived at by the House they were bound to discontinue enforcing so much of the executive portion of the Acts as was in their discretion to enforce or not to enforce.—Sir R. CROSS wished to know whether the authorities over the local police had the power to exclude from the duties of that police the execution of the Acts in question.—Sir W. HARCOURT said that he preferred not to express any opinion about the rights of the local authorities. Sir W. HARCOURT said that the local authorities were not under the same pressure from the House of Commons as the Executive Government was. The House of Commons had control over the estimates from which the payment of the Metropolitan police must come, and consequently the House could exert great pressure upon the Executive. The payment of the local police did not depend upon the estimates, and thus the House could not exert the same pressure in the case of that body.—Lord R. CHURCHILL observed that local justices of the peace might, on the information of a superintendent of police, order compulsory examination in a given locality. He asked whether the Government had the power to interfere with the discretion of the justices of the peace.—Sir W. HARCOURT replied that he had no power by circular or otherwise to interfere. If he were to give instructions to the local police they would not be bound to respect them. In local boroughs the autonomy with respect to the local police was absolute.—Mr. GORST asked whether the House was to understand that no vote would be proposed in the estimates with a view to the carrying out of the Acts.—The Marquis of HARTINGTON said that it was the intention of the Government to substitute revised estimates for the administration of the Acts, as he had already stated. When the votes were moved there would be a convenient opportunity for discussing the matter.—Mr. PULESTON obtained leave, under the conditions of the Standing Orders, to move the adjournment of the House, in order to call attention to it as a matter of urgent public importance. He protested strongly against the withdrawal of the Metropolitan Police engaged in the administration of the Acts. Public opinion in the towns affected was strongly in favour of the Acts.—Lord HARTINGTON maintained that the Acts were only permissive and not obligatory on the Government, and after the carrying of Mr. Stansfeld's resolution, which was a plain warning that the House would not provide the money required, the Government had no other course open to it. But all the voluntary parts of the Acts and the indirect benefits which they obtained would remain.—Mr. E. CLARKE insisted that it was the duty of the Government to carry the Acts out until they were repealed, and that the division on Mr. Stansfeld's motion did not represent the opinion of the House.—Sir S. NORTHCOTE thought the Government had been too precipitate in virtually repealing, in obedience to an abstract resolution, Acts of Parliament which had been seventeen or eighteen years in existence, and had been repeatedly examined by commissions and committees.—Mr. GLADSTONE denied that the vote had been snatched. The views of the Government were well known, for in 1872 they had brought in a Bill embodying the abolition of compulsory examination. The Acts, by requiring that the expense of them should be defrayed out of annual estimates, had deliberately assumed that their operations should depend on the will and judgment of the House of Commons. After the passing of Mr. Stansfeld's resolution it was impossible for the Government, many members of which had supported it, to submit an estimate, or to spend money on the Acts without an estimate.—Sir W. BARTTELOT asserted that the House had been taken by surprise, and Colonel MAKINS, Mr. T. BRIGHT, Mr. WARTON, and Mr. C. BENTINCK spoke; and Mr. W. H. SMITH expressed the opinion that the action of the Government would be mischievous, and generally condemned by all who understood the subject.

EDICO-LEGAL NOTES AND QUERIES.

COUNTRY CORONERS.

—The following memoranda illustrate the partiality of country coroners wards their own medical friends, to the detriment of other medical men who ve not been so fortunate as to secure their smiles by the means of the offer a good dinner, etc., whilst the last two cases illustrate the facilities afforded ose who may wish to get rid of their children in a summary manner; and together the exhibition of such partisanship is in very bad taste, and calcu- ted to sow discord amongst neighbouring practitioners who should be the st of friends, and always ready to lend one another a helping hand.

About twelve months or more ago, a child, three or four months old, was und dead in bed by its mother. The child was an illegitimate one. I tended the woman in her confinement in the workhouse; seven or eight ys before the child was found dead, I vaccinated it (I may mention that I a parish medical officer for the workhouse, and seven parishes around, cluding the one in which the woman lived); and, on the morning it was und, I was summoned, and went to see the dead child. I found it quite rm; it had only been dead a few hours, very dark round the mouth, and ident signs of pressure on the face. I heard no more about the case, after forming the police, until I was surprised to learn that an inquest had been ld, and a neighbouring practitioner, Dr. M., a friend of mine, had made a *st mortem* examination. He had never seen or heard of the child until he ceived the order to make the *post mortem* examination. I wrote to the roner, and received a reply that he had not been told by his officer that I d seen the child, and that he had appointed Dr. M., a gentleman in whom had confidence, to give evidence in cases occurring in this district. The *st mortem* examination, it appears to me, from the condition of the child ien I saw it, was wholly unnecessary.

A few months later, an old man was found dead in an outhouse; he was ry old, over seventy, I think. He had been in my surgery as a pauper a few ys before, as the relieving officer wished him to apply for relief. I gnosed a fatty condition of heart and organs, and was not surprised to hear his sudden death. Again I was ignored. Dr. M. was required to make a *st mortem* examination, and give evidence, when I was quite ready, from my owledge of the man, to have given a certificate of the cause of death. Again emonstrated with the coroner, and received much the same reply as before, cept that he stated that he could appoint whom he pleased to make the *st mortem* examination, etc., and quite omitted to answer my question as to ether or not it was customary to request the parish medical officer to act the case of paupers. A few weeks after, a child was found dead by me ly in the morning. Its parents had about the worst character in Welling- n. The mother had primary syphilis in all its filthiest forms a few weeks ore the child was born, and its father was a navvy and notorious drunkard. I ended the child for hereditary syphilis for a few weeks, but it had had no dical attendance for some weeks before it was found dead. The coroner ote to his officer, and said he thought an inquest quite unnecessary, there ng no suspicious circumstances. The registrar refused to register it for ne time, as he thought it the most suspicious death he had ever been asked register. And now, sir, contrast this with the following case, which urred a week or so before the previous one. A child was found dead in like the last case; its parents were most respectable, the father the village cksmith, both being very decent people. My friend and the coroner's nd, Dr. M., was sent for to see the child; an inquest was held, and no me attached to the parents. Finally, a case has occurred quite recently in ich the coroner's remarkable conduct has surprised many beside myself. as called up at about 3 (?) in the morning, to see a child seven years of age. und her just dying, her face black, her eyeballs starting from her head, her appearance was as though she had been choked or suffocated. I could nothing in the mouth, and the child died in a few minutes. The child quite well the previous day, out all day skipping and playing at a rela- 's house. She had a supper of salt pork, and went to bed. She was vio- tly sick during the night, and had a violent fit of coughing, and died. The ther told the coroner's officer that the child was a delicate one, and had dical attendance two months previously. I have known and attended the ily as club patients for several years; there was nothing to cause the d's death that I could find out, and the "treatment" consisted of a warm der and a small bottle of medicine. The coroner's reply to his officer, four s after the death, was on a post-card, and stated that no inquest would be unless he, the officer, thought there were any suspicious circumstances. he officer said that was for the coroner to decide, I believe the registrar has rted or is about to report the case to the Registrar-General. No comment is ired; but I should like to know if there is any remedy for such a state of gs as exists here. I am sorry to say the coroner is a medical man.—I etc.,

ENGLEDUE PRIDEAUX, L.R.C.P.Lond., M.R.C.S.Eng., etc.,
Medical Officer and Public Vaccinator to the Wellington Workhouse, and No. 1 and No. 2 Districts of the Union.
ellington, Somerset.

* 1. By the Act of Parliament 6 and 7 Will. IV., Sec. 1, it is enacted: at whenever it shall appear that the deceased person was attended at his h, or during his last illness, by any legally qualified medical practitioner, coroner may issue his order for the attendance of such practitioner as a ness; and if it shall appear that the deceased was not attended at or before death by any legally qualified practitioner, the coroner may issue his order the attendance of any legally qualified medical practitioner in actual prac- in or near the place where the death has happened." If the coroner act irected by the above section of the Act, there can be little doubt as to who ie proper medical witness at an inquest.

From the example given, it appears that the information supplied to the ner by his constable must be of a very imperfect character, otherwise it fficult to account for the decision of the coroner in the cases mentioned. uld a coroner show partiality or favour to anyone in the holding of uests, such conduct may be reported, upon affidavit, to the Lord Chancellor, will investigate the same.

CORONERS' INQUESTS.

SIR,—Will you kindly answer the following questions? 1. A medical man gives the coroner notice of a sudden death, which he cannot certify; the coroner holds an inquest, calls all the witnesses except the medical man, and the jury return a verdict. Is it legal for the coroner to do this? and, if so, who is to pay the medical man for the trouble of inquiring into the case, and reporting it to the coroner, supposing the family of deceased to be too poor to pay?

2. And if the coroner may legally do without the evidence of the medical man, is he not bound, at least by courtesy, to give the medical man notice of the fact, instead of leaving him in doubt till he sees the inquest reported in the newspapers? Thanking you by anticipation for your reply, I am, yours, etc.,

May 1st, 1883. T. W. P.

*** 1. It is quite legal for the coroner to act as you describe. There is no legal obligation on the part of a medical man to report cases to the coroner, and he is only entitled to fees when called upon to give evidence.

2. The coroner is not required by law to summon a medical man to give evidence at an inquest; but, as a rule, the last medical man who attended the deceased, or the one who was called immediately after death, is summoned to give evidence. We regret to say that some coroners and their juries frequently fail to appreciate the importance of the evidence of a medical witness in assisting them to arrive at the true cause of death.

OBITUARY.

WILLIAM SAMUEL TUKE, M.R.C.S.

WILLIAM SAMUEL TUKE, who passed away at Bournemouth on April 20th, at the age of twenty-six, was the eldest son of Dr. D. Hack Tuke of London. He was a student of University College, where he obtained the gold medal in Physiology, and the Filliter Exhibition in Pathology. He also obtained the gold medal in Physiology at the Intermediate M.B. examination at the London University. After holding the appointment of house-physician under Dr. Wilson Fox, he took the M.R.C.S. diploma in 1878. Afterwards, he was for some time in Egypt and the South of France, seeking in those more genial climes to arrest the pulmonary mischief which had declared itself, and to which he eventually succumbed. In 1881, the New Sydenham Society published an excellent translation by him of Charcot's *Lectures on Senile Diseases.*

William Tuke was unquestionably a man of rare powers, and his early removal is a keen disappointment to all who had the privilege of his acquaintance. It had been the hope of his friends to see him pursuing the specialty with which his father's name is so honourably associated, and he had already contributed several papers on psychological subjects to the *Journal of Mental Science.*

His mental breadth and lucidity, which were known and recognised by not a few of our leading men, gained for him a very high place in the esteem of his teachers and fellow-students. But it was in the sweetness and strength of his personal character that the charm of the man lay. Keen as was his scientific interest in his hospital patients as "cases," he won their confidence and affection in an exceptional degree, by the simple power of true sympathy. His loss has left a sorrowful blank in the hearts of his many friends.

BENJAMIN WILLS RICHARDSON, F.R.C.S.I., Dublin.

WE regret to announce the death, on Sunday, April 29th, in the 64th year of his age, of the above well-known Dublin surgeon. The immediate cause of his death was, we believe, cardiac asthma; but his friends and acquaintances had noticed that for some time past he had been looking far from well, although he recently performed his arduous duties as chairman of the Court of Examiners at the Royal College of Surgeons without making any complaint as to his health. Mr. Richardson filled this post for a great number of years, and kept the minutes of the various examinations in a manner which it will be difficult for his successor to emulate. He was for twenty-five years one of the honorary secretaries of the late Surgical Society of Ireland, and on his resignation of that office in 1881 was presented with a service of plate by the members, in recognition of his long and valuable services to the Society.

Mr. Richardson was also one of the surgeons of the Adelaide Hospital since the year 1858. But although an able and remarkably well-informed surgeon, he did not succeed in obtaining that large share of private practice to which his ability fairly entitled him. His mind seemed to tend more to criticism, to minuteness and neatness in his work, and to almost painful accuracy in observation, than to take that broad and comprehensive view of nature and of disease, which goes far in securing a foremost position. Until lately Mr. Richardson was, we believe, the writer of many of the long

critical and analytical reviews of surgical works which appeared in the *Dublin Journal of Medical Science*, and which exhibited his intimate acquaintance with French and English surgical literature. He contributed several original articles to the same journal, as well as to its contemporaries, and also introduced several instruments for the treatment of stricture of the urethra—a subject in which he took much interest—as well as a tubular *presse artère*, and an ether inhaler. He was one of the first Dublin professional men to use the microscope scientifically; and he possessed considerable manipulative skill in its use and in mounting preparations. Mr. Richardson filled all the positions he occupied with tact, ability, and efficiency. His loss will be much felt in his college and in his hospital, and by all those who were brought into contact with him and knew his worth.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Members, April 26th, 1883:

Fraser, Donald Manson, M.D.Aberdeen, Haverstock Hill, N.W.
Gibbons, Robert Alexander, M.D.Edinburgh, 32, Cadogan Place, S.W.
Granville, Joseph Mortimer, M.D.St. Andrews, 16, Welbeck Street, W.
Maguire, Robert, M.D.London, Manchester
Parker, George Williams, 39, St. Mary's Road, S.E.
Sinha, Narendra Prasanna, L.M.Calcutta, 37, Gloucester Crescent, N.W.
Steavenson, William Edward, M.B.Cambridge, 15, Henrietta Street, W.

Admitted Licentiates:

Bloxam, George Edward, Wimbledon Hill
Bown, Arthur Thomas, West Combe, Evercreech, Bath
Braine, George Marcus Panton, 7, Crossfield Road, N.W.
Cave, Edward John, Melbury Osmond, Dorchester
Christian, John Barrow, Ashwell Station
Crago, William Henry, Middlesex Hospital, W.
Cresswell, Francis, Winchmore Hill, W.
Gale, Arthur Knight, Fulham Hospital, Seagrave Road, S.W.
Glover, John Philip, 2, Osborne Terrace, S.W.
Goddard, Charles Ernest, 14, Cambridge Gardens, N.W.
Haynes, Walter Frederic, 53, Devonshire Street, N.
Hind, Alfred Ernest, 37, Guildford Street, W.C.
Howse, Percy William McDowall, 74, Victoria Dock Road, E.
Jones, John Edward Evans, Head Master's House, Maitland Park, N.
Lessey, Sandford Scobell, 4, Park Gardens, Ealing, W.
Lewers, Arthur Hamilton Nicholas, 88, Gower Street, W.C.
Masters, Edgar Ernest, 84, Railton Road, S.E.
Mickle, Herbert, 3, Lansdowne Place, W.C.
Robson, William Waller Constable, 25, Brompton Square, S.W.
Rowell, Herbert Ellis, College Park, S.E.
Saneyoshi, Yasuzumi, 65, Lambeth Palace Road, S.E.
Stone, Frederick William Stanley, Hospital for Children, Shadwell, E.
Style, Mark, St. Mary's Hospital, W.
Thornton, Henry John, Middlesex Hospital, W.
Trinder, Alfred Probus, St. Bartholomew's Hospital, E.C.
Unicume, Thomas, Ramsgate
Vogan, James Norman, 45, Eastlake Road, S.E.
Welch, George, St. Bartholomew's Hospital, Rochester
Whitworth, William, 43, Frederick Street, W.C.
Wholey, Thomas, 2, North Side, Victoria Park Square, E.
Williams, John Henry Hywell, Haverfordwest

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 19th instant, viz.:

Messrs. L. McEwan Anderson, New Cross, Benjamin P. Bartlett, L.S.A., Hastings, J. David Malcolm, M.B.Edin., Edinburgh, William Watson, L.S.A., Rochester, J. H. Hawkins Manley, M.A.Cantab., West Bromwich, R. Hodgson Wright, Forest Hill, Reginald J. Ryle, St. John's Wood, James Merces, Calcutta, W. W. Constable Robson, L.R.C.P.Lond. Brompton Square, J. Rundle Cater, Westbourne Square, W. Frederick Webster, Kilburn, J. William Blompied, L.S.A., Jersey, D. John Slater, L.S.A., Putney, C. John Dabbs, Newport, Isle of Wight, Thomas Wilson, L.S.A., Hollingbourne, Kent, H. Eustace Cree, L.S.A., St. John's Park, N., Samuel Rabbeth, L.S.A., Putney, E. Herbert Squire, L.S.A., Wivenhoe, Essex, and A. Ernest Hind, L.R.C.P.Lond., Stockton-on-Tees.

Four candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College; and two were rejected.

At the recent pass examinations for the diploma of membership of the Royal College of Surgeons, which was brought to a close on the 19th instant, 96 candidates presented themselves, as compared with 70 at the corresponding period last year. Of this number, 4 were referred to their professional studies for three months, 20 for six months, three for nine months, and one for twelve months; making a total of 28 out of the 96 examined. At the primary examinations in Anatomy and Physiology, there were 195 candidates, against 220 last year.

The following gentlemen passed their primary examinations on the 23rd instant:

Messrs. C. William Lockyer, and W. Theophilus Ord, students of the Bristo School; C. Everard Oldacres, J. O. Wakelin Barratt, and L. Albert Taylor of the Birmingham School; A. Hepworth Robinson, W. Croft Helme, and R. Stephen Hubbersty, of the Edinburgh School; G. Henry Oliver, and J. Threapland Henderson, of the Leeds School; L. C. Talbot Dobson, and P. John Rendall, of St. Bartholomew's Hospital; W. E. Gillson Jackson of the Westminster Hospital; William Barrett, of the Manchester School P. Allen Lloyd, of St. Mary's Hospital; Frederick Beard, of Guy's Hos pital; G. Howard Monks, of Harvard; H. Wilberforce Aikins, of Ontario E. Lucien de Chazal, of University College; and H. Morton Burke. o St. Thomas's Hospital.

Six candidates were referred for three months, and one for six months.

The following gentlemen passed on the 24th instant:

Messrs. F. Sidney Hawkins, and C. Edward Dew, students of the Bristo School; A. Edward Morison, Thomas A. Brown, and W. John Munro, the Edinburgh School; Joshua Holt, Henry Thirkill, and O. Milner Booth of the Leeds School; Samuel Hughes, and Francis Tyndall, of the Liver pool School; Alfred Berrill, of the Birmingham School; C. Lachlan Fraser of the Glasgow School; Frank Wyatt-Smith, of the University of Cam bridge; Alfred E. Roberts, of the University of Aberdeen; A. Alexande Brockat, of St. Thomas's Hospital.

Eight candidates were referred for three months, and one for six months.

The following passed on the 25th instant:

Messrs. R. William Walsh, H. Murray Ramsay, R. Hugh Chapman, J. Thomas Jones, John Oliver, L. George Guthrie, B.A.Oxon., and A. Brougham Warde, of St. Bartholomew's Hospital; R. H. Anglin Whit lock, H. F. Dale Stephens, Murray Mac Laren, and T. Jackson Thyne, the University of Edinburgh; C. John Ireland, and Alfred Brown, of t Leeds School; J. Ernest Trask, and C. J. Stokes Shaw, of the Brist School; W. Thelwall Thomas, and Duncan Marquis, of the Glasg School; F. Gault Finley, of McGill College, Montreal; W. H. Wils Elliot, of Guy's Hospital; C. Gerald Southern, of St. Thomas's Hospita C. James Thompson, of the London Hospital.

Three candidates were referred for three months.

The following gentlemen passed their primary examinations Anatomy and Physiology at a meeting of the Board of Examine on the 26th ultimo, and, when eligible, will be admitted to the pa examination, viz.:

Messrs. William Taylor, Herbert Hirst, and R. Horace Lucy, students of Edinburgh University; R. William Hazell, S. Edward Barrett, and Geo Wordsworth, of the London Hospital; F. H. Frederick Clarkson, Lawrence Walsh, and E. Moresby Hassard, of St. Bartholomew's H pital; P. Percy Manning, and H. G. Hawkins Monk, of King's Colle G. W. Augustus Lynch, of St. Thomas's Hospital; E. Kendrick Macartn of University College; Edward Deane, of Guy's Hospital; A. Willi Robinson, of St. George's Hospital; and William Stafford, of the Glas School.

Eight candidates were referred to their anatomical and physiological studies for three months.

The following gentlemen passed on the 27th ultimo, viz.:

Messrs. H. Patrick Cholmeley, A. W. Thorburn Steer, E. Gaved Stocker, E. Dalton Agnew, of St. Bartholomew's Hospital; D. Matthews Bro F. Antill Pockley, J. William Wyncoll, J. Frederick Farrar, and Lawr G. Mallam, of the Edinburgh School; C. Edward Adamson, and F. V Burton, of University College; T. Arthur Collinson, and Charles Nas King's College; A. Tronson Ozzard, of the London Hospital; R. H Parry, of the Glasgow School; W. H. Charles Staveley, of St. Thor Hospital; and A. Thorley Wood, of St. George's Hospital.

Seven candidates were referred.

The following gentlemen passed on the 30th ultimo, viz.:

Messrs. Henry W. Gardner, H. William Brighouse, R. Ashton Bostock, Harold A. W. Batten, of St. Bartholomew's Hospital; Reginald Bow J. Cleasby Taylor, and W. H. George Stephen, of the Edinburgh Sc F. Edward Nichol, and George Hope, of St. Thomas's Hospital; E. Bar Osmund, and Edgar Nicholson, of the Middlesex Hospital; John of Guy's Hospital; H. E. Hill Smith, of King's College; and J. E. S Barnett, of the Charing Cross Hospital.

Eight candidates were referred for three months, and two for six months.

The following gentlemen passed on the 1st instant, viz.:

Messrs. D. Stockton Whiteley, P. B. Travers Stubbs, R. Davids Barb Mayston Bond, A. Charles Dove, P. C. Hutchinson Strickland, a Mason Snow, of St. Bartholomew's Hospital; H. Alexes Thomson, Hamilton Symonds, John MacGrigor, C. James Lewis, and Edward W of the Edinburgh School; A. Izod Richards, S. Unwin Duer, and So Peake, of the Middlesex Hospital; S. Squire Sprigge, and R. W Wright, of St George's Hospital; H. Hanlock Ellis, and H. Ca Kidd, of St. Thomas's Hospital; Rolf Creasy, of Guy's Hospital; Lindon, of King's College; and George Niven, of the Cambridge Sc

Three candidates were referred for three months.

The following gentlemen passed on the 2nd instant, viz.:

Messrs. J. Hubert Griffin, J. William Stephens, and G. Frederick Ald St. Bartholomew's Hospital; G. Hancock Gutch, Robert Nairn, Timbrell Bulstrode, of St. Thomas's Hospital; Percy Edwards, David M W. Joseph Winckler, and G. Arthur Pratt, of University College Alphonse Mariette, and A. Wandesforde Comber, of King's College; Allen, and Charles Ewart, of St. George's Hospital; Hastings Gilf Charles Metzgar, of Guy's Hospital; Samuel S. Larcombe, of Charit Hospital; Leslie Powne, of the Middlesex Hospital; Bernard Mcl of the Westminster Hospital.

Five candidates were referred for three months.

The following gentlemen passed on the 7th instant:

Messrs. Langford Symes, A. Hancock Middleton, and G. Rix Cox, students of the Dublin School; William Nattress, and W. Hecfor MacDonald, of the Trinity School of Medicine, Toronto; W. Glover Moore, and Charles Barlow, of the Liverpool School of Medicine; E. John Sidebotham, and Russell Coombe, B.A.Cantab., of the Cambridge School; W. J. Roalfe-Cox, of St. Thomas's Hospital; J. Courtley Holderness, of the Glasgow School; H. B. Blodwell Greene, of the Belfast School; W. Blake Nisbet, of the Edinburgh School; Alfred Moxon, of the Birmingham School; Arthur S. Kendall, of the New York School; and W. James Hill, of the Bristol School.

Twelve candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following passed on the 8th instant:

Messrs. Charles Pollard, F. Robbinson Bolton, Lawrence Bidwell, and L. Sobey Grose, of Guy's Hospital; L. Owen Lindridge, J. Williamson Pugh, and S. Rupert Hodge, of the London Hospital; R. George Cross, R. James Reece, and A. Locke Cox, of St. Bartholomew's Hospital; W. M. Abbot Anderson, and E. Alfred Barton, of University College; E. Atherden Thompson, and S. C. Gundry Fox, of the Westminster Hospital; J. Trail Harries, of King's College; H. John Gould, of the Middlesex Hospital; F. C. Wright Hounsell, of St. Thomas's Hospital; Alexander Whyte, of St. George's Hospital; E. George Wallis, W. Mortimer Sheen, and D. Lovett Hubbard, of Guy's Hospital; H. Laird Pearson, and William Matthews, of the Liverpool School; F. Gower Gardner, and G. Capel Hall, of the Birmingham School; O. Henry Reddall, and A. Maurice Joly, of University College; G. Trevor Collingwood, and J. Francis Taylor, of the London Hospital; F. C. Geneste Butler, and H. J. Manning Watts, of St. Bartholomew's Hospital; Caleb Schnehage, of the Leeds School; T. Curtis Leman, of the Bristol School; T. Edward Honey, of St. Mary's Hospital; W. Frederick Dewsnap, of St. George's Hospital; and E. Lloyd Williams, of the Middlesex Hospital.

Ten candidates were referred for three months.

At a meeting of the Council of the Royal College of Surgeons, on hursday, the 10th instant, the following members of the College ere admitted Fellows, under Section 5 of the Charter relating to embers of the College of twenty years' standing, viz.: Messrs. John omes, F.R.S., of Cavendish Square, diploma of membership dated arch 21st, 1859, and Thomas Henry Huxley, F.R.S., Marlborough ace, St. John's Wood, May 8th, 1862. At the same meeting of the ouncil, Dr. Robert Barnes, of Harley Street, was elected a Fellow, s diploma of membership bearing date May 8th, 1862.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received rtificates to practise, on Thursday, May 3rd, 1883.

Coyle, Edward, 56, Bain Street, Glasgow.
Huzzey, Reginald Lee, 136, Spa Road, S.E.
Roberts, Edward, North Parade, Aberystwyth
Roosmale-Cocq, Frederick Owen Young, 46, Parkhurst Road, Tufnell Park.
Shorthouse, William Stanley Neville, Croydon.
Taylor, Alfred Everley, Claughton, Scarborough.
Tibbles, John Thomas, Melton Mowbray.

The following gentlemen also on the same day passed their Primary Professional Examination.

Waters, Avery Clough, London Hospital.
Willan, Leonard James, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

CKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80 per annum. Applications to Mr. George Fell, Solicitor, Aylesbury, by May 21st.

HELTENHAM GENERAL HOSPITAL.—House-Surgeon. £100 per annum. Applications by June 15th.

TY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by May 14th.

OVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by May 16th.

ALRYMPLE HOME FOR INEBRIATES.—Married Medical Superintendent. Salary £160 per annum. Applications to Dr. Norman Kerr, 42, Grove Road, Regent's Park, N.W.

ENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Secretary by May 26th.

INMOW RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £50 per annum. Applications addressed "Medical Officer of Health" by May 21st.

SHERTON HOUSE ASYLUM.—Assistant Medical Officer. Applications to Dr. Finch, Fisherton House Asylum, Salisbury.

LASGOW ROYAL INFIRMARY.—Extra Dispensary Physician. Applications by June 1st.

LASGOW ROYAL INFIRMARY.—Teacher of Chemistry. Applications by June 15th.

LASGOW ROYAL INFIRMARY.—Teacher of Physiology. Applications by June 15th.

OSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary £50 per annum. Applications to the Chairman of the Committee by May 21st.

ANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Salary, £250 per annum. Applications by the 24th instant.

NORTH WEST LONDON HOSPITAL, Kentish Town Road.—Physician and Surgeon. Applications by the 15th instant.

PARISH OF ABERLOUR.—Medical Officer of Parochial Board. Applications to Mr. M'Gowan, Union Bank, Aberlour, by May 14th.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—House-Surgeon. Salary, £100 per annum. Applications by the 22nd instant.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—Assistant House Surgeon. Applications by the 22nd instant.

READING AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications to Samuel Griffin, Secretary, 82, Southampton Street, Reading, by the 14th instant.

SALOP INFIRMARY, Shrewsbury.—Resident House-Surgeon. Salary, £100 per annum. Applications to the "Board of Directors" by May 19th.

ST. MARY'S HOSPITAL, W.—Ophthalmic Surgeon. Applications by May 19th.

THE ODDFELLOWS' AND MECHANICS' CLUBS OF STAVELEY, Westmorland.—Resident Medical Officer. Clubs' fees yield £65 and upwards annually. Applications, addressed to Messrs. George Lucas and George Lishman, Secretaries, by the 19th instant.

THE ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton.—House-Surgeon. Salary, £80 per annum. Applications by May 16th.

UNIVERSITY OF CAMBRIDGE.—Professor of Anatomy. Applications to the Vice-Chancellor.

WEST KENT SANITARY COMBINED DISTRICT.—Medical Officer of Health. Salary, £300 per annum. Applications by May 19th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Physician (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Assistant Physician for Diseases of Women (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Two Surgeons (must be Fellows or Members of the Royal College of Surgeons.) Applications by May 28th.

MEDICAL APPOINTMENTS.

COCKRAN, Christopher H. G., L.R.C.P.E., appointed Surgeon to the Reading Dispensary.

DONKIN, H. B., M.B., appointed Physician to the Westminster Hospital, *vice* G. P. Fincham, M.D., resigned.

FINCHAM, G. P., M.D., appointed Consulting Physician to the Westminster Hospital.

GLASSINGTON, Charles W., M.R.C.S., appointed House-Surgeon to the National Dental Hospital, Great Portland Street, *vice* F. Bate, L.D.S., resigned.

GRAHAM, C. R., M.R.C.S.Eng., etc., appointed Honorary Surgeon to the Royal Albert Edward Infirmary, Wigan.

GRANT, W. F., M.B., appointed Junior House-Surgeon to the Darlington Hospital, *vice* J. H. Rodgers, L.R.C.S., resigned.

GREVES, E. H., M.B., appointed Assistant Medical Officer to the Liverpool Infirmary for Children.

HARTRIDGE, Gustavus, F.R.C.S., etc., appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

HUET, Frank A., L.D.S., appointed Honorary Dental Surgeon to the Northern Counties Hospital for Incurables, Mauldeth, Manchester.

LEGGE, Richard John, M.D., L.R.C.S.Ed., L.A.H.Dublin, appointed Assistant Medical Officer to the Derby County Asylum.

ROOCROFT, W. Mitchell, M.R.C.S.E., L.R.C.P.Ed., appointed an Honorary Medical Officer to the Royal Albert Edward Infirmary, Wigan.

SINCLAIR, J., L.R.C.P.Lond., M.R.C.S., L.S.A., appointed House-Physician to the London Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

COOKE.—On April 29th, at 59, Warrior Square, St. Leonards-on-Sea, the wife of John Cooke, M.B.Lond., of a daughter.

MARRIAGES.

ROBERTS—RICHARD.—On May 2nd, at Engedi Chapel, Festiniog, by the Rev. Dr. Edwards, Bala, assisted by the Rev. H. Williams, Griffith John Roberts, F.R.C.S.E., L.R.C.P.E., youngest son of the late John Roberts, Surgeon, Festiniog, to Elizabeth Catherine, eldest daughter of Mr. Richard, Glasfryn, Festiniog.

HALL—BLOXHAM.—On Saturday, May 5th, at the parish church of Halesowen, Worcestershire, by the Rev. H. Armstrong Hall, Vicar of Trinity Church, Bristol, and brother of the bridegroom, assisted by the Hon. and Rev. F. G. Pelham, Rector of the parish, Hammond Frederick Oswald, third son of the late George Hall, Governor of Parkhurst Prison, Isle of Wight, and formerly of the 52nd regiment, to Edith, third daughter of the late C. W. M. Bloxham, M.R.C.S., of Whitehall, Halesowen.

THE annual dinner of the officers of the Army Medical Department will take place on Friday, May 25th, at the Inns of Court Hotel, Lincoln's Inn. The chair will be taken by the Director-General. Officers intending to dine are requested to send their names to Surgeon-Major W. G. Don, 6, Whitehall Yard, S.W., from whom dinner tickets can be obtained.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY. .....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Pathological Society, 8.30 P.M. Mr. John Morgan: Multiple Growths in the Bladder. Dr. Curnow: 1. Hydatid Cyst in Lung; 2. Ulcerated Intestines. Dr. Percy Kidd: Disseminated Growths in Liver. Dr. Norman Moore: 1. Larynx from a Case of Scarlatina; 2. Larynx from a Case of Measles. Dr. Cavafy: Acute Atrophy of Liver. Drs. Savage and Hale White: Specimen of Vacuolation of Brain. Mr. Swinford Edwards: 1. Parts after Cystotomy; 2. Comminuted Fracture of Tibia. Dr. Abercrombie: Bones from a Case of late Rickets. Mr. Horsley (for Mr. Heath): Hypertrophy of Neck and Condyle of Jaw. Dr. Thin (for Dr. Hills of Demerara): Bacilli of Leprosy. Mr. Eve: Hernia of Intestine through Posterior (?) Layer of Peritoneum (recent). Mr. Sutton: Remarkable Case of Parasites (card). Mr. Churchill: Multiple Exostoses (living).

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. Cripps Lawrence: A Case of Bronchopneumonia occurring in a Child. Dr. Buzzard: The After-History in some Cases of Syphilitic Disease of the Nervous System.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE CONTAGIOUS DISEASES ACTS.

SIR,—The writer of the leading article on the Contagious Diseases Acts is evidently blind to the real state of public opinion on this question. The vote on Mr. Stansfeld's motion proves conclusively that M.P.'s will not be led by the dicta of the medical profession. There are medical men whose idea of moral ethics is—that it is wrong "to do evil that good may come." The Nonconformist ministers have almost unanimously condemned the Acts as immoral. They can surely judge of the Contagious Diseases Acts in their social and moral aspect, as well as, and perhaps better than medical men. I am not prepared to deny that the Acts may have prevented venereal diseases in our Army and Navy, and have also been the means of reclaiming juvenile prostitutes. My opinion of the Acts is based, not on "sentimental philanthropy" and "free trade in disease," but on sound moral philosophy. Sin and suffering have ever been joined together; these Acts seek to dissever that union. This law is universal. There may be occasional exceptions. In sanitary, social, and physical law this rule obtains, and rightly so. If "municipal authorities" are so much in favour of the Contagious Diseases Acts, as the writer states, they had better seek to get local Acts and pay a borough rate called the Contagious Diseases Acts Rate. This would be just, as it regard the cost of working the Acts; the town benefited would pay for it; but we should hear nothing of these Acts if this course were adopted. If the Parliamentary Committee intend to make one supreme effort to save the Acts, by appealing to the members of the Association to sign a petition in favour, I hope they will give equal opportunity to those petitions for their repeal. Dr. Whittle and his party may belong to the majority; if so, they can look well after themselves. I wrote to M.P.'s, proving that the moral and social aspect had higher claims than the medical aspect. The result has been most satisfactory. In this way we shall soon sweep these Acts off the statute book. The outlook, I know, is most doleful in the writer's opinion, but we shall trust to the Police Acts to keep the streets from evils prognosticated, and to Christian men and women to reclaim the erring ones.—Yours, etc.,

Bacup, May 1st, 1883. JOHN BROWN, L.R.C.P.Lond., etc.

WELLS.—Burt and Co., coach-builders, Swinton Street, Gray's Inn Road, London, W.C.

THE MEDICAL SERVICE OF CYPRUS.

SIR,—Dr. Barry states that at several out stations, "Levantines" have replaced English medical officers. Can Dr. Barry inform us if these gentlemen are "qualified medical advisers," and of their nationality?—I am, etc.,

M. B. M. A.

A FELLOW (Birmingham).—Due notice of the election will be sent to you. Of the retiring members of the Council, it is stated that neither Messrs. Birkett or Hewett will seek re-election; and as no doubt Mr. Cooper Forster, the Vice-President, will be re-elected, there will be two vacancies, one of which, it is generally expected, will be filled by your distinguished townsman.

THE TREATMENT OF CROUP.

SIR,—In reply to "Anxiety's" letter in your JOURNAL of the 5th instant, I would strongly recommend the following general treatment, provided he has the case in its early stage, viz., a hot bath, a hot poultice of burnt salt to the throat externally, a mustard emetic, and a dose (to be regulated according to the age of the child) of the following mixture every two hours. Tartar emetic, liquor ammoniæ acetatis, and mistura citratis potassæ, to six ounces. The citrate of potash mixture can be made by saturating bicarbonate of potash with citric acid. I have not lost a single case of croup out of ten so treated. I am, etc., CHARLES J. FAHIE, Medical Officer, Lusk Dispensary District.

Rush, May 7th, 1883.

SIR,—On Thursday morning, May 3rd, at 7 A.M., I was sent for to see A. B., a little boy of weak intellect, aged 9, who had been absent from home since 5 P.M. on Monday. He had presumably been locked up in St. Luke's Church for the period of over sixty hours, during which time it is impossible that he could have obtained food or drink. He is now rapidly recovering from the prolonged starvation.—I am, etc., G. E. CORRIE JACKSON, M.R.C.S.

17, Poland Street.

TITLES UNDER THE NEW ACT.

SIR,—What titles will the new licentiates of the Medical Council be allowed to use? Will they style themselves "surgeons," or "physicians," or "doctors"? I have suggested that all registered persons should style themselves "doctors" on their name plates, adding after their names the letters of their qualifications. This is a question worth considering, as at present the law is against any one using the title unless he is an M.D. of a home university.—I am, sir, yours,

SURGEON.

THE BACILLUS OF WHOOPING-COUGH.

SIR,—In answer to your correspondent, I would refer him to the BRITISH MEDICAL JOURNAL of January 27th, 1883, p. 168, wherein he will find some particulars relating to the bacillus of pertussis. I am now engaged in endeavouring to verify Dr. Burger's results, which, I hope, before the end of the year to complete and lay before the profession.—Yours faithfully,

TH. M. DOLL.

Halifax, May 5th, 1883.

A Case for General Sympathy.

Dr. Henry C. Burdett, 39, Gloucester Road, Regent's Park, N.W., desires us to acknowledge the receipt of the following subscriptions towards the "Henford Fund," in reference to his letter which appeared in the British Medical Journal of April 21st. Amount already acknowledged, £342 14s. 6d.; Dr. Travers, £1 1s.; J. E. Meredith, Esq., £2 2s.; C. Crawford, Esq., £1 1s.; C. Elliott, Esq., £2; E. H. Addenbrooke, Esq., £1 1s.; George Kell, Esq., £2; Dr. Bull, £1 1s.; Joseph Williams, Esq., 10s. 6d.; "B," £1 1s.; Dr. Bisset Hawkins, £1; C. M. Elliott, Esq., £5 5s.; Dr. Philpots, £2; R. B. Holland, Esq., £2 2s.; N. Davies-Colley, Esq., £1 1s.; Miss E. Parrott, £1 16s.; Surgeon-Major N. V. Churchill, £1; Thomas Smith, Esq., £3 3s.; Dr. W. W. Stanithorpe, 15s. 6d.; T. F. Fernandez, £1.

The Moore Fund.

The Rev. F. R. Miller begs to acknowledge, with thanks, on behalf of Mrs. Moore, in addition to subscriptions already acknowledged: Anonymous, Sunderland, 10s.; Mr. C. Young, Bridgewater, 10s.

Medical Etiquette.

The subjoined correspondence has been forwarded to us for publication and comment—

(*Copy.*) "Shaw, March 30th, 1883.

"W. A. Patchett, Esq.

Dear Sir,—Yesterday morning I was asked by an old patient of mine to see her daughter, who, she thought, was dangerously ill. On arrival at the house, I was informed that you were in attendance but could not be found. I, seeing the girl so ill, said, 'Oh, it will be all right, I will see her, and prescribe for her, for Dr. Patchett.' They replied that they wished me to continue in attendance, as they were not satisfied with Dr. Patchett's treatment. I told them they of course could please themselves about that, but until they had given notice to Dr. Patchett, I could not undertake the case on my own behalf, and that they must consider my visit and medicine for Dr. Patchett. I did not again see the patient until they assured me they had gone and given you to understand that they wished you to discontinue your services. I have not charged the first visit and medicine in my book against them. On my arrival there this morning, I received a message from you, saying I was no gentleman, etc. Now, sir, if you had anything insulting to communicate to me, you might have had the courtesy not to use the medium of a third party to transmit your ideas. And you also passed some slighting remarks about my qualifications and practice. I may assure you that, at all events, I do not consider myself inferior to you either in my qualifications in medicine and surgery, or in the qualification of a 'gentleman.' I shall retain a copy of this, and if you still feel aggrieved, I shall put it to the test of further opinion through the medical press.—I remain, yours truly, Andrew Spearing."

(*Reply—Copy.*)

Dear Sir,—In reference to your note, I beg to say that your version is very different from that given by Mr. McL. to me on Thursday night. 1. You were not specially sent for, but called in because you happened to be in the neighbourhood when I could not be found. 2. Mr. McL. told me you were the first to suggest that Mrs. McL. should send across to tell me that you were in attendance. 3. You prescribed right off, and sent the messenger to Mr. Platt's for medicine, when the patient had suitable medicine of my own prescribing. If the people were frightened, you must have known that the case was merely one of hysteria, and therefore not so very urgent. 4. As to the people being dissatisfied with my treatment, that is the very reverse of what Mr. McL. told me; but, however, that is of no importance. I have no wish to feel aggrieved at all, and do not wish to quarrel with you about the people, for the game is not worth the candle. All I can say is, if I had been called in to see a patient of yours, under the same circumstances, I should certainly not have remained in attendance, whether they had requested me or no; and in my opinion you acted unprofessionally. What you call the insulting message has been misconstrued, as I will explain if I see you. I sent no insulting message. The message I sent you was that, 'I was surprised at your keeping in attendance, which was unprofessional and ungentlemanly.' . . . . Excuse this note being written by two people, but I am in great haste.—Yours truly, W. A. Patchett, Shaw, March 31st, 1883."

(*Copy.*) "Shaw, March 31st, 1883.

Dear Sir,—I, at all events, thought you would have expressed regret for the (I repeat) insulting message you sent me through Mr. McL. Instead of doing this, after my explanation to you, you actually acknowledge, and don't retract, that you said I was acting unprofessionally and ungentlemanly. . . . For the past fifteen years I have been engaged in practice, and latterly been a partner in one of the largest practices in the North of England, and I have never yet been found guilty of a breach in the observance of medical etiquette. I can quite understand Mr. McL. not wishing to hurt your feelings by telling you he was dissatisfied with your treatment, but I must repeat that my explanation in my letter to you was in every respect perfectly true. With reference to the medicine you say they had, I understood at the time that Miss McL. was suffering from different symptoms than when you saw her; and I said that, not knowing what the medicine was, I thought it better to get fresh, and as I did not expect to reach home before two o'clock, I wrote them a prescription to be made at the chemist's; but, as I said before, neither that nor my visit did I charge for, and I had not time to advise you of this before receiving your message. In your letter you say you do not wish to quarrel with me, but it cannot be otherwise when you accuse me of being unprofessional and ungentlemanly; for this I expect an apology; which if not forthcoming, I regret to have to inform you the correspondence between us will be made public.—Yours truly, Andrew Spearing."

(*Copy.*) "Shaw, April 2nd, 1883.

Dear Sir,—I regard your last note as an impertinent one. I decline to apologise to you. Unless Mr. McL., whom I sent for specially and told that I wished him to tell me the exact truth about the matter, told me deliberate lies, I hold that it is you who ought to apologise. My action in the matter rests entirely upon what Mr. McL. assured me were the true facts—and the message I sent to you was, I considered, under the circumstances, quite justifiable. If Mr. McL. distorted my message I am not responsible for that; I hold that a patient is certainly entitled to determine his or her medical attendant, but what I complain of is, that it was unprofessional to remain in attendance upon a case under my care, and to which you had only been accidentally called in my absence, as Mr. McL. assured me in the most positive manner that he was well satisfied with my treatment of his daughter, both on this and on a previous occasion of her illness, and that it was at your instigation that he came to tell me that you had taken charge of the case—you boast of your long experience in practice (which is, however, less than mine) but I regret that it has not made you better acquainted with the way such matters should be arranged amongst medical men.—Yours truly, W. A. Patchett.

"P.S.—I will save you the trouble of copying this correspondence. I have already had it copied, and am sending it to the editor of the *Lancet*, for his opinion upon the matter."

(*Copy.*)

"Oldham Road, Shaw, April 3rd, 1883.

"Dear Sir,—I have this day read a copy of your letter to Dr. Patchett, dated March 30th, 1883, and beg to state that the statements therein contained are in every respect perfectly true; I feel sorry that there should be any difference between Dr. Patchett and yourself on the subject.—I remain, yours respectfully, George McLaren.—To Dr. Spearing, Shaw."

*** An eminent authority, to whom we have referred this correspondence, comments on it as follows.

In the introduction to the *Code of Medical Ethics*, to which we have oft had occasion to allude, and, in cases of doubt and difficulty, invariably refer, it is well remarked that, "professional differences not infrequently arise from want of candour—or errors of statement—on the part of the patients, their relatives or attendant friends, and probably constitute the most fruitful source of the unhappy heartburnings and jealousies which so frequently disgrace an otherwise noble profession. A medical man cannot, therefore, be too cautious how he receives and acts upon invidious statements, said to have been made in reference to a case by a professional brother, or other person; for such reputed remarks are so often misunderstood, misrepresented, or wilfully perverted, as to give rise to serious disputes and lasting estrangements, which a personal interview, or a mutually courteous note of inquiry and explanation would have prevented or removed; it should be, therefore, a special obligation on the faculty to be ever careful and wary in respect to statements which involve disparagement to a brother-practitioner." The above correspondence affords but too truly an apt and regrettable illustration of the necessity for such caution—in reference to which we venture to affirm, after a careful consideration of the alleged facts, that, if the lesson inculcated in the preceding cited extract had been acted upon, the misunderstanding between Mr. Spearing and Mr. Patchett would have been avoided, and wisely so, for such unhappy dissensions (too often engendered by our one great besetting sin, jealousy) reflect most injuriously upon the profession at large, and more or less incite the public to withhold from us that degree of respect to which an opposite line of conduct would justly entitle us.

As regards the points more especially involved in the dispute, there can, we think, be no question that if Mr. Spearing had resolutely adhered to his original expressed attention "to see Miss —, and prescribe for her for Dr. P.," all would have been ethically right, and socially well.

He should, moreover, however strong the inducement may have been to resume professional attendance upon a former patient, have at once frankly recognised and acted upon the fact that, for a time at least, he had been superseded by another practitioner (a somewhat bitter-pill, no doubt to swallow—to use a homely phrase—but wholesome withal, and one that each of us has more or less frequently to digest as best we can); and, therefore, having provided for the emergency, he should, either in person or by note, and with as little delay as may be, have communicated the circumstances to the attendant practitioner (Mr. Patchett), and at the same time, courteously, but firmly, declined the request of the family to assume further direction of the case, except in consultation with the then medical adviser.

We are further of opinion that, if his letter of March 30th had been couched in more conciliatory language, the pre-existing feeling of amity would have been maintained. It is also, we think, to be regretted that Mr. Spearing did not avail himself of the opening afforded by Mr. Patchett's reply-note, and wait for the proffered personal explanation, which, with a little mutual tact and self-control, could scarcely have failed to end in a retractation of hastily spoken words, and, as a natural sequence, have resulted in a much to be desired reconciliation.

At the same time that (as the professional Mentor appealed to by Mr. Spearing) we have felt it a duty, in the true interest of himself and of the faculty, to frankly express our views on the line of action he has taken in his unfortunate dispute with Mr. Patchett, we regard it alike incumbent upon us to disapprove of the conduct of the latter, for he ought not to have forgotten that, both being on the official *Register* as possessors of medical and surgical diplomas, they were, in the eye of the law, equally qualified; neither was he, in our opinion, justified in taking exception to Mr. Spearing having "prescribed right off, and sent the messenger to Mr. Platt's for medicine, when the patient had suitable medicine of my (Mr. P.'s) prescribing." For such complaint there was no just cause, inasmuch as, Mr. Spearing being necessarily ignorant of the nature of Mr. Patchett's medicine, it would be his duty to prescribe such remedies as he deemed best adapted for the emergency.

Sick Room Cookery.

Querist.—The following works contain chapters on the subject of sick room cookery:—*Lectures on Medical Nursing*, by Dr. J. Wallace Anderson, Glasgow, Maclehose; *Convalescent Cookery*, by Catherine Ryan, Chatto and Windus; Cullingworth's *Manual of Nursing*, J. and A. Churchill; *Food and its Preparations*, by Mrs. W. T. Greenup, Bemrose and Sons.

A Word on the side of the Shoemaker.

SIR,—The article in your issue of April 21st on "The Choice of Boots and Shoes" has come under our notice. The great aim of all such articles seems to us to be to try to prove that shoemakers want educating, and showing how to make shoes. According to you, we shoemakers violate one of the very fundamental principles of making, by not allowing sufficiently for the necessary expansion of the foot in walking. You seem to ignore the fact that we always take an outline of the foot standing on the ground, with the whole weight of the body resting upon it. This, of course, expands the foot considerably, both in length and breadth. On the other hand, it must be borne in mind that, were boots to be made of the width of the foot, when the weight of the body is upon it, they would simply be unwearable, for the very reason that they could be kicked off the foot at will, by being much too large.

The principles you advocate and the faults you find have been known to shoemakers for generations. The public have much to answer for, in the misshapen boots and shoes that are often seen. As you know, people will have what they want, and not what the tradesman wishes them to have; and if they cannot get the article they require, they will go elsewhere for it. As, therefore, we have to get our living, we must supply the article that is required, whatever our opinion may be of it, or go to the wall.—We remain, sir, yours truly,

WAUKENPHAST AND CO.

London, April 28th, 1883.

*** The object of our annotation was certainly not to "prove that shoemakers want educating, and showing how to make shoes." The general public, rather than shoemakers, are probably in most instances to blame for yielding to the pernicious demands of fashion in the choice of boots and shoes. It is only by diffusing, and repeatedly insisting upon, the true physiological principles which ought to be recognised in the selection of coverings for the feet, that the public taste can be reformed, and the evils to which we have drawn attention be remedied. We appreciate the improvements which shoemakers have made, and are still effecting, in the directions we have indicated.

C. S. T. is referred to the answers which have appeared on this question more than once in the numbers of the BRITISH MEDICAL JOURNAL for the current year.

Morning Cup of Tea.

SIR,—Will some of your readers give their opinion as to whether the above is injurious, either to nervous, digestive, or urinary systems; or in any other way harmful? and, if so, why? The custom prevails very generally, especially with, yours truly,

MEMB. BRIT. MED. ASSOCIATION.

ERRATA.—In Dr. M. Pallen's article, "On some Points in the Reparative Surgery of the Genital Tracts," published in the JOURNAL, May 5th, at page 853, column i, line 25 from bottom, *for* "congulation" *read* "coangulation;" and on page 854, column i, line 25, *for* "B, Fig. 3" *read* "B, Fig. 2."—In a letter on "An Intolerable Nuisance," at page 897, line 10 from top, *for* "started" *read* "steeled," and *for* "start" *read* "steel."

Sea-sickness.

SIR,—Will any of your readers oblige me by stating what is the best means for the prevention and cure of sea-sickness.—I am, sir, yours truly,

A MEMBER.

M.B., C.M.—*A Digest of the Law relating to Public Health and Local Government*, by Mr. G. F. Chambers, F.R.A.S., 8th edition (Stevens and Son).

The Cold Weather of March.

THE Swiss meteorological reports attribute the quite exceptional cold of the month of March, 1883, to the enormous snowfall. The quantity and extent of the snow appear to have been abnormal for the time of the year. The depth and range of the snow-masses hindered the operation of the sun's rays upon the soil, and the wind streaming across snowy mountains and plains from north, east, and north-east, operated as a positive cooler. Hence the sun exercised less heating power, and the wind exercised more cooling power, throughout the whole month than is the rule for March. Notably, white bodies are those which are least fitted to convey the sun's beams, as they reject or reflect a portion of the light and heat-force. When the white body is ice or snow thousands of miles in extent, traversed also by continual wind, the exceptional coldness of the ground and the atmosphere is easily to be understood. During the whole month of March, the northern hemisphere was not merely covered unintermittently with snow, but new snowfalls were constantly reported. The same report is given of the mountain districts of South Russia, Turkey, Hungary, Italy, and Spain. The sun's rays had no chance of coming into actual contact with the surface of the soil over a very large part of Europe, which in itself was something abnormal for the first month of spring. At the same time, the ice-cooled wind, sweeping over enormous ranges of snow, was positively cooling the entire area of Europe.

A. H.—Apply to the Secretary of the College for the last Calendar, which will give you the desired information.

The Bread-Pill Cure of Hysteria.

MM. LANDOUZY and Ballet, in the *Revue Mensuelle de Médecine*, give the history of an hysterical patient to which it is well to give an extended publicity, not because it presents any novel feature but as a proof of the scientific errors of those ill-trained minds which attribute the cure of hysteria to supernatural influences. An hysterical patient, twenty-six years of age, who had previously suffered from chorea, was received in the wards of the Charité. There was very marked contraction of the lower limbs, and the patient was unable to execute the slightest movement, not being even able to raise herself in bed. After one or two hypodermic injections of morphia, given at her express desire, she was told that she should have a more energetic remedy, and must use it cautiously. On October 7th, bread-pills were prescribed, and the next morning she related that wishing to poison herself, she had swallowed the pills; at once the effect was terrible, but soon after she was able to walk a little, and eagerly asked to have another pill; this was accorded, and resulted in her completely recovery. Two days later on she helped to clean the wards. In a month's time she left the hospital.

Balneology.

SIR,—Will you allow me to direct the attention of "Disinganno" to Section 228, where he will find a vast fund of information relating to balneology; also to Sections 617 to 622, where "Anxiety" may refresh his memory with all the varied treatments of croup adopted during the last forty years; while "Puzzled" may, in Section 28:1, learn that belladonna and atropine, locally and constitutionally, succeed in curing localised sweatings, besides seeing at a glance under what circumstances these conditions occur, and what other remedies have been used.—Yours,

MEDICAL DIGEST.

MR. T. P. TAYLOR, House-Surgeon, Essex and Colchester Hospital, asks: "Is it not very unusual to have a case of aneurysm in a young person aged 20, and with only a history of six months' illness?"

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Brailey, London; Dr. H. Stolterfoth, Chester; Miss F. Lankester, London; Dr. D. Drummond, Newcastle-on-Tyne; Mr. A. Garvey Kelly, Navan; Dr. D'Arcy Adams, London; Mr. Edward East, London; Dr. Philipson, Newcastle-upon-Tyne; Dr. A. Emrys-Jones, Manchester; Dr. A. Creswell Rich, Liverpool; Mr. J. Fenn Clark, Leamington; Dr. J. A. Mackenzie, Farnworth, Bolton; Mr. E. Noble Smith, London; Dr. John Cooke, St. Leonard's-on-Sea; Royal College of Surgeons, Edinburgh; The Secretary of the Local Government Board; Dr. Manson Fraser, London; Mr. F. C. Richardson, London; Mr. Hugh Taylor, Coltishall, Norfolk; Mr. E. Nock, London; Mr. S. W. North, York; Dr. J. W. Martin, Sheffield; Mr. Shirley F. Murphy, London; Dr. McKendrick, Glasgow; Mr. W. Eassie, London; Mr. W. Walker, Redcar; Dr. Norman Kerr, London; Mr. D. C. Black, Glasgow; Dr. T. M. Dolan, Halifax; Mr. J. Brindley James, London; Mr. A. C. McEwen, Chester; Mr. R. B. Sellers, Rochdale; Mr. F. Nash, Todmorden; Dr. Murray Lindsay, Derby; *Medical Digest*; Dr. Ralfe, London; Leamington Medical Book Club; An Old Physician; Dr. Sawyer, Birmingham; Our Aberdeen Correspondent; The Secretary of the Chelsea Hospital for Women; Dr. Montrose A. Pallen, London; Mr. P. H. Emerson, Cambridge; Mr. E. J. Adkins, Hastings; The Honorary Secretary of the Harveian Society; Dr. Ravenhill, Birmingham; Mr. Edward Bellis, London; Meteorological Society; Dr. Robertson, Buxton; Mr. J. R. Upton, London; Dr. Danford Thomas, London; Mr. F. P. Taylor, Colchester; Messrs. Ingram and Royle; Mr. David Hadden, Weston, Wexford; Mr. J. Prince Stallard, Worcester; Er. W. Bain, Manchester; Dr. Saundby, Birmingham; Mr. H. Nelson Hardy, Dulwich; Dr. A. H. Bampton, Plymouth; Mr. James Arthur, Wingate; Mr. Vincent Jackson, Wolverhampton; Mr. J. A. Erskine Stuart, Healey; Mr. G. J. Roberts, Festiniog; Dr. W. Clibborn, Birmingham; Mr. John Brown, Bacup; F. Z. S.; Mr. C. H. Glassington, London; Mr. Josiah Williams, Sheffield; Mr. Dolan, Halifax; Mr. G. C. Jackson, London; Mr. H. Lionel Smith, Uttoxeter; Dr. A. Sheen, Cardiff; Mr. W. E. C. Nourse Exeter; Mr. Kenneth Millican, Kineton; Dr. W. Kebbell, Hove; Mr. Percy R. Wylde, Bath; Mr. Charles S. Ticehurst, Petersfield, Hants; Mr. G. A Thompson, Ampthill; University of Dublin; Mr. Hadley, London; Mr. W Edwin Williams, Abertillery, near Newport; Dr. Rawlings, Swansea; Pharmaceutical Society; Mr. Thomas Collier, Ripon; Dr. Glover, London; Dr W. Newman, Stamford; Mr. O. Meredith Jones, London, etc.

BOOKS, ETC., RECEIVED.

A Text-Book of Physiology. By M. Foster, M.A., M.D., F.R.S. With Illustrations. Fourth Edition Revised. London: Macmillan and Co. 1883.

Transfusion; Its History, Indications, and Modes of Application. By Charles Jennings, L.R.C.P., Lond. With Engravings, Illustrating the Author's Syphon for Intraneous Injection and Immediate Transfusion, and a Bibliographical Index. London: Balliere, Tindall, and Cox. 1883.

Practical Lessons in Elementary Physiology and Physiological Anatomy for School and Science Classes. By D. M'Alpine, F.C.S. Twelve Plates with Practical Directions and Explanatory Text. London: Balliére, Tindall and Cox. 1883.

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AN ADDRESS
ON
TYPHOID FEVER IN PARIS DURING THE YEARS 1875-1882.*

By Prosper de Pietra Santa, M.D., Paris.

OUR eminent President, Dr. William Strange, having very kindly ıvited me to take part in the proceedings of this splendid assembly, hich will form an epoch in the history of the British Medical ssociation, I have thought that it would be suitable to direct your tention to-day to one of the questions which, thanks to the researches physicians and sanitarians in Great Britain, has received the eatest and most successful amount of study.

If I do not absolutely agree with the ideas and doctrines of the nglish school respecting the etiology of typhoid fever, I have too uch confidence in the liberality of your sentiments and the impar- ılity of your opinions to refrain from submitting both my doubts ıd my reservations to your impartial consideration.

It is especially with regard to the complex problems of public giene, that the necessity appears of promoting the progress of ıowledge, not only by the discovery of positive but also by the tablishment of carefully observed negative facts, so as to restrain e excessive tendency to generalisation which may attend an ac- pted doctrine.

The scientific history of typhoid fever does not extend further ck than forty years; but, among the eminent authors who have ilt it up, you must be, with good right, proud to reckon the names William Budd, Murchison, Corfield, Carpenter, and Strange.

Before entering on the immediate subject of this paper—namely, phoid fever in Paris during the period 1875-1882—allow me to e a general outline of the subject in three preliminary chapters; :.:

I. The present state of the question;
II. The conditions of this morbid entity in the French army;
III. Its general manifestation in Europe during, for example, the ar 1876.

These preliminary considerations will, I hope, facilitate the expo- ion of the new facts; and, if they do not entirely justify the con- ısions to which careful statistical researches have led me, they ll, no doubt, inspire some of you with the thought of verifying d controlling, in the case of London or some other great centre population, the results which I believe have obtained in the case Paris. Let us not forget, moreover, that similar researches tered into the programme traced out by Dr. Strange at the meet- g last year in the Isle of Wight.

I. No one in the present day could doubt the existence, in the eat centres of population, of a fever which, notwithstanding the rious denominations which it receives in different countries of the rld, possesses a special and characteristic physiognomy, consti- ting synthetically the typhic or typhoid condition.

In England, as you know quite well, three theories have been posed, to explain the assemblage of phenomena which constitute e disease.

According to Drs. Budd and Corfield, typhoid fever is an exan- ematic pyrexia, which is propagated by specific germs from the estines of diseased persons, and enters the system by the air, ter, and food. Drs. Murchison and Carpenter, partisans of the ytogenic theory, maintain that the transmission of the disease is ected by microzymes, by fungi (microgerms of vegetable nature), by chemical matters. An intermediate theory admits, for the duction of virulence in these germs, a force capable of trans- ming them and increasing their activity and power.

Dr. Strange regards as an established fact in science the fæcal gin of typhoid fever (which on the Continent is called the nglish theory"), whether there be direct contagion by the patient's estines, or whether the morbific material be elaborated in sewers, in latrines, in privies, in water and soil impregnated with fæces, and also in localities where the air is damp and vitiated.

The popular publications of the National Health Society recognise a constant association between the poison or morbific principle (almost exclusively contained in the alvine evacuations of the patient), and the defective state of the drainage of houses.

In Germany, the conception of the etiology of typhoid fever has been generally dominated by the ideas, more ingenious than true, of Pettenkofer, respecting the oscillations of the layer of subsoil water. None of us would deny the incontestable evidence of low and moist localities in the production of typhoid fever; but at the same time none of us could admit without verification Pettenkofer's theory regarding refractory soils, as soon as we recognised the persistence of the disease in countries of different geological formations, the frequent change of locality of epidemics of the disease through all parts of the French territory, and the accidental and transitory character of the disease in a great number of localities.

In France, eminent hygienic physicians have adopted without dispute the ideas of Murchison and Strange; and one of them, Professor Brouardel, in an official report on the sanitation of Paris, has cited facts which seem to demonstrate the decided influence, on the development of typhoid fever, of exhalations from sewers, of ordure accumulated in dry soil-pipes, of miasms emanating from latrines and cesspits. However, the great majority of French physicians —taking into consideration the numerous and remarkable works of our military medical men; the splendid clinical, necroscopic, and statistical researches of Louis and his pupils; the recent micrographic studies made at the observatory of Montsouris; and the annual reports transmitted to the Academy of Medicine in Paris by the medical inspectors of epidemics—do not hesitate to recognise the following facts.

1. The etiology of typhoid fever is sufficiently vast to supply precise facts in support of all the doctrines.
2. Most diverse causes are capable, in their turn, of giving rise to an epidemic of typhoid fever.
3. The disease is developed spontaneously by infection, or specifically by contagion.
4. The forced attempts at reduction to a single cause, made by certain authors, would vanish before the clinical study of facts, and before the figures of medical statistics.
5. We cannot accept the doctrine of the unicity of the typhogenic poison (proceeding only from the intestinal secretions); for, even if this source be certain, it is not less true that the part taken by latrines and sewers has been singularly exaggerated.
6. In these circumstances, the general opinion of French statisticians may be formulated in these terms. "Living in the midst of excreta, in an animalised and stinking atmosphere, especially in a confined space, more or less closed, such as a house, when putrid materials accumulate, is a wonderfully efficient preparation for the reception of typhoid fever." (Dr. Arnould.) "The propagation of typhoid fever by the air is certainly possible; but it is necessary to greatly restrict the doctrine which would represent this source of propagation as constant, or as acting in a simple and regular manner."

II. In studying the conditions of this morbid entity in the French army, we will more accurately define the limits of the action of the principal agents or factors. The research which has been bestowed on the causes of typhoid fever in the army, shows that it has produced a lively impression on the military profession.

In the interior of France, typhoid fever invariably constitutes each year the principal cause of deaths from acute diseases. The mortality in the army from typhoid fever oscillates (in average years) between two and three per thousand among the soldiers actually on service.

This receptivity cannot be attributed uniformly to the military condition and to the life of the soldier, or to the fatigues of training; for the disease is rare during campaigns and in time of war; we must, then, admit the interval of special predisposing causes. These are:

1. The age of the soldier (twenty-one to twenty-three), which is the age most liable to typhoid fever;
2. The want of acclimatisation in large towns of individuals, of whom the great majority have lived in country districts;
3. Agglomeration in similar groups, of which each member is exposed in the same way;
4. The previous health of the soldier, who is thus more or less affected by the conditions of his new existence.

Our mode of recruiting, too, well realises these conditions of agglo-

* Read in the Section of Public Medicine at the Annual Meeting of the British Medical Association in Worcester, August 1882.

meration of individuals, and of extreme liability to the disease on the part of the subjects themselves.* "It hence results that typhoid fever becomes, as it were, a forced result of the composition of the army; remains permanent in the form of sporadic cases; and reappears in an epidemic form when a sufficient time has elapsed for the immunity resulting from the previous epidemic to disappear, and for the liability to disease on the part of the military class to have gained a certain intensity." (Dr. Lubanski.)

The history of epidemics in the French army formally contradicts the doctrine of simplicity and unicity in the etiology of typhoid fever; it demonstrates, in a peremptory manner, that the causes, far from being universal, appear, on the contrary, as a collection of influences most diverse in character ("comme un faisceau des influences les plus diverses").

The fatiguing duty of the soldier, the emanations from the *fosses d'aisance*, from drains, or from freshly stirred earth, the soiling of the floors or the walls of the dwellings, in a word, every circumstance which checks the action of the elementary laws of health, and which may reach a certain degree of filth or of infection, is in its turn the cause of this or that epidemic of typhoid fever.

"In fact, all these causes are factors of an epidemic when it finds an evil so favourable for its development as subjects first specially predisposed by age, and then collected together in such a way as to fall almost always under the stroke of fatigue." (Lubanski.)

This is the right time to consider the great share which belongs to self-infection in the genesis of typhoid fever.

"Although very numerous," writes M. Léon Colin, the eminent professor at Val de Grâce, "the typhogenic influences possess the common character of being almost constantly capable of being referred to the action of man on man; whether by self-infection, as in cases of transference of a pre-existing disease, as by infection from without, as in the case of external miasmatic influences. It is almost within the power of man to create epidemics of typhoid fever, by submitting to known conditions individuals liable to the affection (especially by agglomeration in unsuitable places, in the centre of large towns, of young individuals of rural origin), and by realising these conditions at certain periods of the year, especially the autumn."

To sum up: the multiplicity of the typhogenic influences, their accumulation in epidemics characterised by rapid evolution and considerable mortality, and, finally, their dissociation and attenuation in French regiments withdrawn from the morbific medium, show clearly that the cause of typhoid fever is without consistence, and capable of being decomposed into several; and that, in the generality of cases, it does not take the form of a single agent presenting the attributes of exclusive or specific causes.

III. In 1876, thanks to the kind co-operation of the eminent medical men who are the directors of the bureaux of hygiene or of medical statistics in the principal towns or capital cities, I was able to draw up a map of the typhoid fever during that period.† In the map of Europe which I have the honour to place before you, the sanitary conditions of each town in respect of the special question which occupies our attention, is indicated by the signs +, −, and =.

The sign = has necessarily relation to the average mortality from typhoid fever, as derived from observations made in recent years. The sign + indicates a greater or less epidemic prevalence of typhoid fever. The sign − shews a more favourable condition; that is to say, the prevalence of typhoid fever was below the average.

The following facts, for 1876, in regard to each town, are also indicated on the map: (1) the number of the population; (2) the general mortality from all causes; (3) the proportion of general deaths to the total population; (4) the number of deaths from typhoid fever; (5) the proportion which deaths from this cause (typhoid fever) bear to the general mortality.

The first fact which comes out in this inquiry is the existence, in all the great centres of population, of a fever which, notwithstanding the various denominations which it receives in different countries, possesses the special and characteristic physiognomy which we call the "typhic or typhoid state." The second fact is the recrudescence, at variable epochs, of the disease which exists everywhere in endemic conditions; a recrudescence sometimes of sufficient importance to assume the appearance of a true epidemic. A third fact is the coincidence of the greatest number of cases of the disease and of deaths with the period of the year comprised between the months of July and November. A fourth fact, one of very great importance, is the constant and progressive diminution of the endemic prevalence of typhoid fever, both in the number of cases and in their severity, in proportion as works of sanitation and of general hygiene have been extensively and intelligently carried out. In support of this statement, I will cite London, Brussels, Munich, and Zurich, where the percentage of deaths among persons attacked by typhoid fever has fallen from 22 and 20 to 7 and 5. The relative proportion of deaths from typhoid fever to deaths from all causes, taking the average of several years, oscillates between 1.4 to 1.7 and 3.8 to 4 per cent. In London, it is 1.4; in Paris, 2; in Lisbon, 1.65; in Buda-Pesth, 2.5; in Berlin, 2.6; in Zurich, 2.7; in Munich, 3.2; in Brussels, 2.9. In Italy, the proportion is generally higher; in Turin 4.2; in Geneva, 3.6; in Milan, 2.9; in Bologna, 3.3; in Florence, 1.7

We now come to the summer and autumn period of 1876. In the majority of cases, the mortality from typhoid fever was lower than the average for the corresponding period of preceding years in London, Madrid, Zurich, Munich, Brussels, Milan, Venice, Bologna Florence, and Naples. The amount of reduction was 30 per cent. in London, according to the calculation of Dr. William Farr, and 5 per cent. in Brussels, according to Dr. Janssens.

The towns in which the mortality from typhoid fever was in the same proportion as the normal average were Buda-Pesth, Vienna Geneva, Rome, Naples, and Lisbon.

The towns where the disease was most fatal in the epidemic stat were Berlin, Rotterdam, Stockholm, St. Petersburg, Turin, and Paris but it was especially in Stockholm and St. Petersburg that the epi demic was most fatal. In Paris, the percentage rose to 4.08.

It is not my intention to draw immediate conclusions from thi inquiry. These are the elements (but they are precise elements which I bring forward towards the ultimate solution of this grav question of public health.

Let us proceed, on the present occasion, to study the epidemic i Paris in 1876.

In order to have a starting point for comparison, I have combine the official bulletins of the municipal statistics during the first thre years of their publication (1865-66-67). At this epoch, the popul tion of Paris was 1,696,141. The average annual number of deatl during this period was 47,474; and the average of deaths fro typhoid fever was 940. This gives a proportion of deaths fro typhoid fever to deaths from all causes amounting to 1.9 per cent.

In 1875, the population of Paris was 1,851,792 (according to tl census of 1872). The general mortality had risen to 45,556, ar that from typhoid fever to 1,048, or a percentage of 2.3 of the deatl from all causes.

These two proportional numbers, 1.9 and 2.3, approach each oth very closely, and may be considered as representing the norm average annual mortality from typhoid fever.

In Paris, in 1876, the total number of deaths from all causes w 49,721; from typhoid fever, 1,973, giving a percentage of 4.08—th is to say, not less than double the normal average.

Such is the truth in all its simplicity.

I have represented these results in tables, indicating for ea arrondissement the relation of the mortality of typhoid fever to th from pulmonary phthisis and to the deaths from all causes. T most superficial examination of the tables calls forth a feeling deep sorrow, showing as it does the frightful tribute which is i posed on our life in Paris by that murderous and terrible scourg pulmonary phthisis. For it, no period is fixed, no social position privileged, no quarters of the city are free.

This very important table (Table I.) which I place before y shows for each arrondisement of Paris:—(1) the population accordi to the census of 1876; (2) the superficial area in hectares*; (3) t number of inhabitants to each hectare; (4) the number of deat from all causes in 1877; (5) the death-rate per 1,000 inhabitant (6) the deaths from pulmonary phthisis; (7) the deaths fr typhoid fever; (8) the proportion of deaths from typhoid fever 1,000 inhabitants.

These various data form the basis of a final table, which, by t eloquence of its figures, gives a complete summary of the id which I have had the honour to lay before you. In four spec columns are arranged the arrondissements of Paris, presenting the same time—(1) the place which each arrondissement occup

* In consequence of the law of 1872, the number of young soldiers present at the same time under the colours has undergone a considerable increase, whence there is a relative augmentation of those who are specially disposed by their age and circumstances to take typhoid fever. (L. Colin.)

† The two questions proposed to my respective correspondents were the following: 1. Has the prevalence of typhoid fever (enteric fever) been the same as, or less, or greater than, what it has been at the same periods in previous years? 2. In what proportions have the modifications been observed, which have marked the progress of the disease?

* A hectare is 2.47 English acres.

TABLE I.—*Statistical Table of the Mortality in each of the Arrondissements of Paris in* 1877.

Arrondissement.	Population (Census of 1876).	Superficial Area in Hectares.	Inhabitants per Hectare.	Deaths from all Causes (1877).	Death-rate one in	Deaths from Phthisis (1877).	Deaths from Typhoid Fever (1877).	Deaths from Typhoid Fever per 1000.	Degree in Scale of Population.	Degree in Superficial Area.	Degree in Scale of General Mortality.	Degree in Scale of Mortality from Typhoid Fever.
I	71,898	190	378	1,019	51.3	140	31	0.43	19	17	17	7
II	77,768	975	797	965	57.5	166	18	0.23	16	20	18	15
III	90,797	156	575	1,405	49.8	222	17	0.18	12	19	16	17
IV	98,293	156.5	630	2,975	45	340	37	0.37	9	18	10	9
V	104,373	249	419	3,095	37	409	54	0.51	6	14	7	5
VI	97,631	211	462	2,237	45.4	300	37	0.138	10	16	12	8
VII	83,672	403	207	2,434	40.5	332	42	0.50	14	10	13	6
VIII	83,993	381	220	1,972	63	282	61	0.73	13	11	19	1
IX	115,689	213	543	1,578	56	194	20	0.17	5	15	15	19
X	142,964	285	501	4,519	42.6	467	88	0.61	3	13	3	3
XI	182,287	361	504	3,527	35	443	34	0.18	1	12	1	18
XII	93,537	568	164	4,086	37.3	363	59	0.63	11	4	8	2
XIII	72,203	625	115	2,197	36.5	170	16	0.22	18	3	14	16
XIV	75,427	464	162	2,964	31.4	209	25	0.33	17	8	9	10
XV	78,579	720	109	3,321	36.4	356	42	0.53	15	1	11	4
XVI	51,299	709	72.3	918	43.5	99	14	0.25	20	2	20	14
XVII	116,682	445	262	2,325	38.8	250	31	0.26	4	9	5	12
XVIII	153,264	519	295	3,173	37.2	344	40	0.26	2	7	2	13
XIX	98,367	566	173	2,353	35.3	241	29	0.29	8	5	6	11
XX	100,083	521	192	2,563	32	362	16	0.16	7	6	4	20
TOTALS	1,988,806			49,626	——	5,689	711	——				

TABLE II.—*Showing the Mortality from Typhoid Fever during each Month in Paris in* 1875-76 *and* 1877 to 1881.

Years.	January.	Fbry.	Mrch.	April.	May.	June.	July.	August.	Septr.	Oct.	November.	December.	Total.
1875	55	66	62	79	68	89	77	54	89	174	89	144	1,046
1876	94	54	68	72	45	53	84	306	265	188	488	256.	1,973
Average	74.5	60	65	75.5	56.5	71	80.5	180	172	181	288.5	200	1,509,5
1877 to 1881	581	571	496	338	381	238	339	483	419	450	360	361	5,017
Annual Average	116	115	99	67	76	57	64	96	84	90	72	72	1,008
Minima	(1878) 38	30	33	33	26	(1877) 46	(1879) 51	62	54	(1877) 40	(1877) 45	(1877) 491	
Maxima	(1881) 344	274	186	130	189	97	124	217	136	174	142	117	(1881) 2,130

in the general population; (2) its place in the scale of space occupied, so as to indicate the density of the population; (3) its place in the scale of general mortality; (4) its place in the scale of mortality from typhoid fever.

What are the lessons which we may reasonably draw from these data of medical statistics, having always in view the special subject which engages us at present, the etiology of typhoid fever?

1. In the endemic condition (Table II), typhoid fever remained, during the months of February, March, April, and May, below the number 100, and oscillated between 45 and 72. In July, there was a marked increase; the number (84) approached that for January (94). In August and November, the highest numbers were reached—306 and 488. The months of September, October, and December give lower figures—viz., 265, 188, and 256. The disease followed a nearly similar course in 1875; but the deaths from typhoid fever were less irregularly distributed through the first six months of the year.

2. The deaths from typhoid fever were unequally distributed over the twenty arrondissements of Paris. From the indications furnished by the statistical tables (and as if to show the absurdity of *à priori* ideas, and of all considerations which do not embrace the facts as a whole, and do not take into account the complexity of the causes which produce them) we meet with unforeseen results. There is no direct and constant relation between the number of the population and that of deaths from all causes on the one hand, and of deaths from typhoid fever on the other. There is no direct and constant relation between the figures representing the deaths and those which represent the superficial area of each arrondissement. Finally, there is no direct and constant relation between the general mortality and that from typhoid fever, and the density of the population.

Not wishing to abuse your kind attention, I will take the arrondissements of Paris which in 1875 showed the highest and the lowest mortality.

The eleventh arrondissement (Popincourt) occupies the first place as regards population, the first in general mortality, the twelfth in superficial area. It has, however, only the third place in regard of density of population (1 death in 35 inhabitants; 464 inhabitants per hectare).

The tenth arrondissement (St. Laurent) occupies the third place in population and mortality, and stands thirteenth as regards superficial area (473 inhabitants to the hectare: 1 death in 42 inhabitants). It occupies the twelfth place as regards density of population.

The third arrondissement (Temple) is eleventh in population, sixteenth in mortality, nineteenth in superficial area; it has 575 inhabitants to each hectare. Its death-rate is one in 49 inhabitants; that is to say, it occupies the sixteenth place.

Finally, the eighth arrondissement (Elysée) is fourteenth in order of population, nineteenth in general mortality, eleventh in superficial area; it has only 199 inhabitants to the hectare, and stands in the lowest (twentieth) rank as regards mortality—one death in 63 inhabitants.

All these figures are borrowed from the official documents of the Prefecture of the Seine, and from the statistical tables of the *Annuaire du Bureau des Longitudes.*

With regard to the epidemic of typhoid fever in 1876, the information which the Prefect of Police, president of the "Conseil d'Hygiène et de Salubrité du Departement de la Seine," has been good enough to communicate to me, shows that the deaths reported (exclusive of those in military and civil hospitals) were: Popincourt, 128; St. Laurent, 86; Temple, 51; Elysée, 18.

In order to gain a better view of the special physiognomy of the epidemic, and to establish more logically the necessity of studying the local circumstances and the topographical conditions of the various arrondissements of Paris, I have arranged a special map showing the following data. The twenty arrondissements are grouped in four categories.

1. Those with one death in 25 to 37 inhabitants (11th, 5th, 19th, 20th, 15th, and 14th).

2. Those with one death in 37 to 40 inhabitants (18th, 17th, 12th, and 13th).

3. Those with one death in 40 to 45 inhabitants (10th, 4th, 6th, 7th, and 16th).

4. Those with one death in 45 to 63 inhabitants (9th, 8th, 1st, 2nd, and 3rd).

I have also indicated, by means of circles of different colours, the arrondissements in which the mortality from typhoid fever was respectively from 1 to 25, from 25 to 50, and above 50.

What is the result of this comparison? It shows that the greatest number of deaths from typhoid fever occurred in an arrondissement (11th) of the first group (in which the general death-rate was highest), in an arrondissement of the second group (12th), in one of the third group (10th), and in one belonging to the 4th group (3rd). These results need no comments; they fully justify the reservations which I have made, and call for new studies, undertaken without partisanship and without previous anticipation.

As a contribution to these new researches, I place before you the results obtained for the period from 1877 to the first half of 1882. The census of the population in 1876, gave for Paris 1,988,806 inhabitants; that in 1881, 2,239,925. For greater exactitude, we will take the average as 2,114,357 inhabitants. Subjoined are the official statistics of the general mortality from all causes, of the deaths from pulmonary phthisis, and of the deaths from typhoid fever.

TABLE III.—*Comparative Mortality in Paris in each Year.*

Years.	Population Census of 1876.	Population Census of 1881.	Population Average.	Deaths from all Causes.	Deaths from Phthisis.	Deaths from Typhoid Fever.
1877	1,988,806	—	2,114,367	49,625	5,689	711
1878	1,988,806	—	2,114,367	49,501	5,688	515
1879	1,988,806	—	2,114,367	55,168	5,708	605
1880	1,988,806	—	2,114,367	59,458	5,641	1,056
1881	—	2,239,928	2,114,367	59,065	9,549	2,130
		Total.....		272,817	32,275	5,017

The mortality from typhoid fever in the twenty arrondissements of Paris was thus distributed during the period from July 1876 to the end of December 1881.

TABLE IV.—*Showing the Mortality from Typhoid Fever in Paris in each Arrondissement, in each Year.*

Arrondissements.	1876.	1877.	1878.	1879.	1880.	1881.	Total.
I	48	31	22	17	31	68	217
II	46	18	9	22	27	61	183
III	51	17	12	14	54	65	213
IV	58	37	24	28	61	76	284
V	28	54	29	32	52	88	283
VI	26	37	20	20	48	72	223
VII	34	42	21	31	61	115	304
VIII	18	61	23	22	29	76	229
IX	42	20	31	25	48	87	253
X	86	88	27	35	58	156	450
XI	128	34	34	46	114	178	534
XII	98	59	21	44	62	136	420
XIII	21	16	25	29	46	60	197
XIV	19	25	25	21	52	53	195
XV	25	42	22	21	38	93	241
XVI	21	14	17	20	38	66	176
XVII	48	31	43	53	69	123	367
XVIII	42	40	57	44	63	175	421
XIX	31	29	31	48	62	143	344
XX	20	16	22	33	43	74	208
Total.....	890	711	515	605	1,056	1,965	5,742

To sum up: these detailed conclusions support the considerations which I have laid before you; they impress on us the necessity of new researches, before assigning to typhoid fever a simple, regular, and constant etiology. In the mean time, we must not lose sight of the fact that typhoid fever is an essentially human disease, in the sense that it derives from the internal and external conditions of man the principal elements of its existence.

THE ROYAL SOCIETY.—The following is the list of fifteen candidates recommended for election by the Council of the Royal Society: Surgeon-Major James Edward Tierney Aitchison, M.D.; James Crichton Browne, M.D., LL.D.; Surgeon-Major George Edward Dobson, M.B.; James Matthews Duncan, M.D.; Professor George Francis Fitzgerald, M.A.; Walter Flight, D.Sc.; Rev. Percival Frost, M.A.; David Gill, LL.D.; Charles Edward Groves, F.C.S.; Howard Grubb, F.R.A.S.; John Newport Langley, M.A.; Arnold William Reinold, M.A.; Roland Trimen, F.L.S., F.Z.S.; John Venn, M.A.; John James Walker, M.A.

HYDATIDS IN DOGS.—Dr. Davies Thomas, who is pursuing the study of the development of hydatids in the south-eastern district of South Australia, has, according to the *Australian Medical Journal*, found 40 per cent. of dogs swarming with them.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

BY JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

LECTURE VII.—THE MECHANISM OF SECRETION.

THE old anatomists were familiar with the appearance and position of most of the glands of the body; but, from mistaken notions as to the circulation of the blood, they regarded them as vascular organs, diverticula, or reservoirs, into which the blood might flow, and thus prevent congestions in the event of an accidental obstruction to the flow of blood. Vesalius (1514-1564) first observed that all glands had not simply mechanical functions, and that they separated from the blood special fluids. They also drew a distinction between ordinary glands and those having no ducts, such as the thyroid and the spleen. Another old notion was that all the tissues between vessels and skin were grouped under a general name, *parenchyma*—a word expressing the idea that the blood ebbed and flowed into this spongy-like indefinite structure. Eustachius, a contemporary of Vesalius, Columbus, and Fallopius, first said that all kinds of parenchyma were not alike, and he thereby foreshadowed the notion of differences of intimate structure, not familiar to anatomists until many years after the death of Eustachius in 1574. He paid special attention to the structure of the kidneys, showing that these organs consisted of two substances, the one fleshy, dense in structure, and of a glandular nature, and the other of a tubular character. He also observed pathological changes in the kidney, such as variations in volume, consistence, and colour, and the effects of calculi. He studied also these organs in living animals. For many years, the advanced opinions of Eustachius do not appear to have made any headway, and it was not until the discovery of the circulation of the blood that the crude notion of a parenchyma was abandoned, and it was seen that tissues and organs had a complex and varying structure. Then came Malpighi, who, after observations on the structure of plants, was led to investigate that of glands. In 1665, he described glandular structure as constructed on the plan of follicles or cavities clustered round the ends of ducts or tubes. About this time, the art of injection of blood-vessels was originated, and this led Ruysch, Professor of Anatomy at Amsterdam, the chief originator of the method, to declare that injections into the blood vessels of glands found their way into the ducts. He therefore assumed that the arteries ended in the ducts, or in the pouches of Malpighi, and he held that secretion occurred in the artery itself.

As regards the speculative opinion on secretion, the oldest notion was that of Van Helmont (1577-1644). Secretion, said he and his followers, is a fermentation; and there is a special ferment in each gland, which attracts from the blood the materials of the secretion. The theoretical conception of the fermentation process in these old times was not very different from what it is now. They knew nothing of specific ferments; they guessed their existence, and supposed that the essential feature of fermentation was a change, or series of changes, occurring without any visible external agency.

A mechanical theory of secretion was first advanced by Descartes (1596-1650). He compared it to filtration, and assumed that the particles of the secretion had a definite form, corresponding to minute apertures or pores in the different glands, each gland accordingly "allowing those particles to pass through it, which possessed the same figures as its own pores." Leibnitz (1646-1716), supported also a filtration theory, but he supposed that the pores of the filter were filled with a special substance, "so as to admit of this substance alone passing through them." It is striking to observe how similar this view is to modern explanations of some of the phenomena of diffusion. The notion of secretion involving chemical operations is attributed by Haller to Keill (1673-1719); but the mechanical theory for many years held its ground.

The lecturer then alluded to various stages of discovery regarding the structure of the kidneys. In 1665, Malpighi described the structures in the cortical portion which bear his name. These he considered to be of the nature of glands, clustered round the ends of the tubes, somewhat in the manner of a bunch of grapes. About

the same period, Bellini described the medullary portion; and in 1749, Ferrein discovered the convoluted tubes of the cortical substance, with which neither Malpighi nor Ruysch seem to have been acquainted. No important observations as to the structure of the kidneys (with the exception of those of Schumlansky in 1788, in which he indicated the opinion that there was an anatomical relation between the Malpighian bodies and the uriniferous tubes), were made until 1842, when William Bowman showed that each Malpighian body consisted of a glomerulus of minute vessels, invested by a cyst or capsule, which was really the end, or the beginning, of the uriniferous tube. In this paper, he stated also that the tubes "consist of an external tunic of transparent homogeneous tissue (which I have termed the basement-membrane), lined by epithelium." This is the first use of a term now well known. Johannes Müller (1801-1858), was one of the first (1830) to investigate thoroughly the minute structure of glands, and to refer it to a common type.

Then came an important epoch in the history of opinion regarding secretion, when it was recognised that the cellular elements of the gland were concerned in the process. In 1838, Purkinje announced that the nucleated epithelium of the ducts of glands took part in secretion; and, in the same year, Schwann suggested a similar function for the epithelium of the mucous membranes. The importance of epithelium was also indicated by Henle and Wasmann in 1839, the latter especially describing the epithelium of the gastric glands. Secretion was now known to occur in the ultimate follicles of a gland; and the next step was to ascertain which of the structures of the gland was specially concerned in the function. This was accomplished by John Goodsir in 1842, when he showed that coloured secretions could be detected in the cells of the ink-bag of *Loligo*, in the hepatic cells of many molluscs and crustaceans, and in the colour-producing cells of *Aphysia* and *Ianthina*. He arrived at the important conclusions, that "the ultimate secreting structure is the primitive cell, endowed with a peculiar organic agency, according to the secretion it is destined to produce." He also made the important generalisation, that "growth and secretion are identical—the same vital process under different circumstances."

A short time previous to the appearance of Professor Goodsir's paper, Mr. Bowman had shown that the fat in the fatty liver is contained in the secreting cells; and, in his paper on the Kidney, he urges the view "that secretion is a function very nearly allied to ordinary growth and nutrition." The lecturer pointed out the great influence on physiological opinion of Mr. Bowman's article "On Mucous Membrane," in Todd's *Cyclopædia of Anatomy and Physiology*. There he reduces the structure of any mucous tissue essentially to two elements—namely, the basement-membrane and the epithelium; and he indicates how secretion may take place by changes in the epithelial cells.

Thus physiologists were familiar with the notion of secretion being either a kind of filtration or depending on the action of cells. From an early period, however, another factor was recognised as entering into the problem—namely, the influence of the nervous system. The older physiologists were quite aware of nervous states affecting secretion; but they had no explanation to give, except the vague one of sympathetic relation. Everard Home stimulated the nerves of the glands electrically, but arrived at no important conclusion. In 1809, Sir Humphry Davy, from the analogy that the electric current decomposed various substances, suggested that the nervous energy so susceptible to galvanic stimulation might possibly have a similar effect, and thus produce the elements of secretion. Wollaston also theorised on the subject. In 1811, Benjamin Brodie found that, after destruction of central nervous organs, secretion to some extent might go on. Wilson Philip, in 1822, made an important investigation on the action of the vagi on the stomach. This research, which attracted much attention in its day, showed that nervous influence was essential to secretion; but Philip supported the erroneous view that nervous energy was identical with galvanism.

For many years, no progress was made in this department of physiology, and knowledge as to the influence of the nervous system on secretion was summed up by Alison, *facile princeps* in his day as a philosophical critic, by the statement "that the nerves exercise over secretion not an uniform and essential, but occasional and controlling influence."

The lecturer then alluded to the discoveries of Claude Bernard as to the vaso-motor system (1858), and especially to his researches on the innervation of the submaxillary gland of the dog, the results of which may be found in every physiological text-book. These researches show so clearly the influence on secretion of the blood-circulation through the gland, as to lead one almost to suppose that secretion depended almost entirely on blood-supply. Ludwig, however, showed that secretion under nervous influence might occur in glands separated from the body, and in which there was no circulation. Further, he demonstrated that secretion might go on although the pressure in the interior of the gland was greater than that in the arteries. Thus it appeared that nerve-fibres might directly influence the development and growth of secreting epithelial cells. A morphological basis for this view was announced by Pflüger in 1866, when he described the termination of nerves as passing into direct connection with the protoplasm of the salivary cells, and even with their nuclei.

The lecturer then gave a short description of the new method of directly studying the changes in secreting cells in the living animal, first devised by Heidenhain in 1868, and since fruitful of results in the hands of Kühne, Lea, Langley, and others. The result of these observations is to give, not merely a remarkable corroboration of the views of Goodsir and Bowman as to secretion being essentially a phenomenon of cell-life, but also to afford a glimpse of some of the molecular changes occurring in nutrition. The cell lives, as it were, on matters supplied to it by the blood; it has special peculiarities of molecular structure; it selects matters from the blood; and these matters probably become, for a time, part of the protoplasm. The protoplasm is thus built up or renovated, but it soon undergoes disintegration, and at least a portion of the cell-substance passes into the fluid condition, and thus forms a part of the secretion.

But whilst this explanation accounts for the secretion of many glands, can it be supposed that no process of filtration of water occurs? This, the lecturer considered, is still a somewhat doubtful question. In the salivary glands, secretion can be arrested by atropine, whilst the blood-supply is not diminished; but, on the other hand, the hydraulic arrangements of the Malpighian glomeruli of the kidney indicate separation of fluid independent of cell-secretion. Even supposing, however, that the separation of water by the special structural arrangements in the kidneys is essentially a physical process, depending on variation of blood-pressure, and on the quality of the blood, this does not interfere with the acceptance of the modern theory of secretion, namely, that the primary factor is the activity of the secreting cell. This theory also supports the view that the functional life of every organ depends on the activities, physical or vital, of its constitutional parts, and it further shows that some of our distinctions are arbitrary, and that there is a continuity of structure amongst nerve-endings, walls of capillaries, basement-membranes, and epithelial cells.

ABSTRACT OF LECTURES

ON THE

METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

BY W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE V.—METAMORPHOSIS OF THE LAMPREY.

THE larva of the lamprey, described in the last lecture, does not grow directly into the adult, but first becomes a larval form called Ammocœtes, supposed formerly to have been a distinct species, till its true nature was found out by Augustus Müller. In this form, its histological elements become more differentiated, and a few organs reach a fuller development. The branchial skeleton becomes more developed. The capsules for the auditory and olfactory sacs are more fully formed. The olfactory sac is almost divided into two by a ventral septum. The eye is more developed, but is still placed at a considerable depth below the surface. The optic cup forms a deep pit, in the mouth of which is situated the lens. The natural layers are well developed, and the outer layer of the optic cup, or layer of retinal pigment, contains numerous pigment-granules, especially on the dorsal side. At the edge of the cup, the two layers meet, and blend into one another. They constitute the commencement of the pigment-layer of the iris, but, at this stage, are not pigmented, and the mesoblast of the iris is not perceptibly differentiated. The lens has the normal structure of the vertebrate lens, the inner wall being thick and doubly convex; while the outer wall, which ultimately

forms the outer epithelium, is very thin. There is a large space between the lens and the retina, containing the vitreous humour. The aqueous humour is not present, and the tissues in front of the lens have little resemblance to those of vertebrates. The cornea is represented by epidermis and subdermal connective tissue, which latter passes, without any sharp line of demarcation, into the dermis, and by a thick membrane continuous with the choroid, which represents the membrane of Descemet. The subdermal connective tissue is continued as an investment round the whole eye. There is no specially differentiated sclerotic, and a choroid is only superficially indicated. The peculiar features of the eye of this larval stage are probably due to degeneration.

In the brain, the two hemispheres lie one on each side of the thalamencephalon. There are well defined olfactory lobes and two distinct olfactory nerves present. The postnasal canal is partially developed, but is closed; but the development begun seems to be soon arrested. The excretory organs undergo considerable changes. A long series of segmental tubes, which first appear in a larva of about nine millimètres, becomes established behind the pronephros; and, in the Ammocœtes of sixty-five millimètres, the pronephros has begun to atrophy. The generative organs are found in a larva of about thirty-five millimètres. Shortly before the metamorphosis, the portion of the cloaca into which the segmental tubes open becomes separated off as a distinct urogenital sinus, the walls of which become perforated by the two abdominal pores. The Ammocœtes lives in the mud of streams. It grows larger without undergoing any marked alteration in structure, and, after three or four years, undergoes a further metamorphosis, and becomes developed into an adult lamprey, which dies shortly after producing its generative products. The changes which take place during this final metamorphosis are very marked. The dome-shaped mouth of the larva is replaced by a more definitely suctorial mouth, surrounded with horny cuticular teeth. The eyes appear on the surface, and the dorsal fin becomes more prominent, and is divided into two parts. Besides these changes, great modifications take place in all the organs. In the skeleton, an elaborate system of cartilages is developed in connection with the mouth. The cranium itself undergoes important modifications, and neural arches are formed. The branchial sac becomes detached posteriorly from the œsophagus; this latter then sends forward a prolongation above the branchial sac, which is at first solid. This prolongation forms the anterior part of the œsophagus of the adult, and joins the formative oral cavity at the velum. The so-called bronchus of the adult is thus the whole branchial region of the previous larval stage of the creature, and the anterior part of the œsophagus of the adult is an entirely new formation. The posterior part of the alimentary tract of the larva undergoes partial atrophy. The gall-bladder of the liver is absorbed, and the liver itself ceases to communicate with the intestine. The eye undergoes important changes in its passage to the surface, and acquires all the characters of the normal vertebrate eye. The brain becomes larger and more compact, and the optic lobes become more distinct. The pericardial cavity becomes completely separated from the body-cavity, and a distinct pericardium is found. The mesonephros of the larva disappears, and a fresh posterior part is formed.

SHORT SIGHT AMONGST THE BOYS OF GREENWICH HOSPITAL SCHOOL.

By Fleet-Surgeon HENRY HADLOW, R.N.

(Communicated by the Director-General of the Medical Department of the Navy.)

In April 1881, a committee was appointed by the Lords Commissioners of the Admiralty to hold an inquiry upon certain points connected with Greenwich Hospital School; amongst others, upon the physical development of the boys under the system of industrial training that was then being carried out, and with especial reference to the very large proportion of boys—roughly, about 70 per cent.—who were found to be physically disqualified for the naval service. To assist in this inquiry, a return was prepared, showing the causes of unfitness for which each boy was rejected for the navy between April 1st, 1876, and March 31st, 1881, and the particular trade or industrial occupation at which the boy was employed, and the results were afterwards arranged by me in the tabular form that accompanies these remarks. It is open to the objection that a particular boy may not have been at any one trade during the whole period of his school-life; that he may, for example, have been engaged in the washhouse for a time before going to the tailor's shop, or otherwise; but this will not affect the group of results to which I would call attention here.

On glancing over the table, the first thing that immediately arrests attention is the very large number of boys who are found unfit for the navy on account of defective vision, nearly all of them from simple myopia; which is the more remarkable from the fact, that the sight of every boy is tested either at his entry into the school or subsequently. All the boys who entered the school prior to the reorganisation in November 1878 were subject to a special physical examination at the age of thirteen years; and, if they were then found to show any defects that might subsequently render them unacceptable for the navy, they were discharged from the school. This examination included the special test for eyesight by Snellen's types, which they were required to read at the full distance; and consequently every boy in the school above the age of thirteen years must have had perfect vision at this period. Since the reorganisation, the same tests and the same perfection of eyesight have been required on the entry of the boy into the school. On pursuing the subject further, it was found that, out of 1,074 of these boys, no fewer than 60 were rejected for the Royal Navy at fifteen and a half years of age, on account of defective sight, the cause in almost every case being simple myopia (Report of the Committee on Greenwich Hospital School, Minutes of Evidence, Question 566 *et seq.*); or, in other words, it was found that in the short space of two and a half years, between the ages of thirteen and fifteen and a half, five and a half per cent. of the boys who had perfect vision when tested at thirteen had developed a degree of myopia, that rendered them unfit for admission into the service for which they had undergone a long and expensive training. If our investigations had ceased at this point, it would not have been an unreasonable proposition to suggest that myopia was a disease of youth likely to make its appearance during that particular period of life, and that it must be regarded as inevitable in a certain proportion of cases; but an examination of the causes of disqualification for which boys were rejected shows us, further, that the cases of myopia were not distributed equally throughout the school, but existed in a number out of all proportion to the rest in what is termed the select school and special class; and that, although this comprised only about one hundred boys, there were seventeen rejections between April 1st, 1876, and March 31st, 1881—a number which stands out with startling distinctness on the table attached to these remarks; and also that the myopia exhibited by these boys was of a higher grade than that found in the rest of the school.

We have thus established, beyond any possibility of doubt, two facts with regard to the origin and causation of short sight; firstly that it is developed during the school life of the boys; and, secondly that it is found most frequently, and of the highest grades, amongst the lads of the more advanced classes, and who spend most of their time in study and reading. There is nothing new in these results they only confirm, in a very emphatic manner, the observations of Dr. Cohn of Breslau, who was the first to undertake an independent examination as to the prevalence and causation of short sight amongst the scholars of the local schools. In the course of his inquiries, he examined the eyes of 10,060 children, and of these he found no fewer than 1,004 myopic. His researches went on to prove that this defect of vision originated during school-life; that it showed a progressive rate of increase as the children advanced from the lower and more elementary to the higher classes, where the eyes were kept more continuously employed; and, further, that it existed in the largest proportion in those schools in which the light was deficient, or badly arranged, or where unfavourable optical conditions were found to prevail. The attention of the medical profession having been directed to the question, confirmatory evidence was now forthcoming from Russia, America, Alsace-Lorraine, and in England, where the subject has been treated of by Mr. Liebreich (*School Life in Its Influence on Sight and Figure*), and Mr. Brudenell Carter (*Eyesight, Good and Bad*, by R. B. Carter, F.R.C. 1880).

It is impossible to overrate the importance of these considerations to all those who are interested in the education or bringing-up of the young. Not only is asthenopia or myopia a most serious disqualification for many conditions of life, but we have every reason to believe that the predisposition to become short-sighted is hereditary, and that the children of short-sighted parents have a much greater tendency to develop the same defect, if placed under unfavourable conditions, than others. To the principals of all schools having for their object the training of boys for a naval or maritime life, the subject is one of vital importance. At sea, perfect vision is an absolute necessity; the safety of a ship may, and often do

Analysis of the Return of Greenwich Boys rejected for the Royal Navy from April 1st, 1876, to March 31st, 1881; showing the Trades at which they were engaged, and the Causes of their Rejection. Where more than one disability that would cause rejection is shown by the same boy, he is entered in each column.

Disabilities causing Rejection.	Trades.																				
	Bakers.	Band.	Barbers.	Blacksmiths.	Bricklayers.	Carpenters.	Engine-room.	Hair-pickers.	Kitchen and scullery boys.	Knitters.	Mat-makers.	Painters.	Pupil teachers and writers.	Sail-makers.	Select school and special class.	Shirt-makers.	Shoemakers.	Store boys.	Tailors.	Washers, ironers, laundry repairs, etc.	Weavers.	White frock makers.
Number generally employed	24	90	2	12	8	36	—	8	24	20	18	12	20	24	100	20	40	—	170	218	18	—
Under standards	7	3	—	2	3	3	—	1	9	4	11	2	2	16	27	—	12	1	30	37	4	1
Phymosis and varicocele	—	2	—	—	1	—	1	1	3	2	2	1	2	2	10	1	3	—	6	5	1	—
Defective sight	1	—	1	1	2	—	—	—	2	—	1	1	3	2	17	1	1	1	2	7	1	—
Defective hearing	3	1	—	1	—	—	—	—	2	1	—	1	—	4	4	—	1	—	2	5	—	—
Defective teeth	—	—	—	—	2	—	—	1	1	1	—	1	—	3	1	—	—	—	1	4	1	—
Glandular swellings...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	1	—	3	1	—	—
Deformities	3	1	—	1	—	1	—	—	2	2	—	—	—	2	4	—	1	1	—	3	—	—
Scrofula and phthisis	—	1	—	—	—	—	—	—	—	—	—	—	—	1	3	—	—	—	4	3	1	—
Debility and want of development	—	1	—	—	—	—	—	—	—	1	—	—	1	1	4	—	—	—	5	3	1	—
Diseases of heart	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—
Diseases of lungs	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Diseases of skin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Incontinence of urine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—
Stammering	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	1	—	1	—	—

depend on the quick recognition of a signal light; the issue of an engagement may turn on the promptness with which a few distant signals can be made out, and their message correctly interpreted, and the long range guns of the present day would be useless in the hands of men with a restricted range of sight, and to these, more than to others, it is imperative that the conditions under which myopia is induced should be sought out and rectified. Dr. Cohn had very little hesitation in attributing the defective vision which he found so prevalent, to the imperfect lighting of the schoolrooms, and to the bad construction of the desks and forms at which the children worked and sat, causing them to bend over their task, to bring the eyes unduly close to the book, and thus keep up a strong consequent effort of the ocular muscles. Mr. Liebreich says that asthenopia, amblyopia, and short sight "all arise from the same circumstances—viz., insufficient or ill-arranged light, or from a wrong position during work. Insufficient or ill-arranged light obliges us to lessen the distance between the eye and the book while reading or writing. We must do the same if the desks or seats are not in the right position, or of the right size and shape. When the eye looks at a very near object, the accommodating apparatus and the muscles which turn the eye so that the axes converge towards the same object are brought into a condition of greater tension, and this is to be considered as the principal cause of short-sightedness and its increase" (*School Life in Its Influence on Sight and Figure*, page 8).

At Greenwich, as at other schools constructed before these views were understood, or it was suspected that the condition of the schoolroom was so closely connected with defective vision, we find all the defects to which Mr. Liebreich refers. The desks and stools were of the usual old fashioned construction, of the same height for boys of all sizes and ages, with no backs, narrow seats placed much too far from the edge of the desk, and want of proportion between the height of the two. Notwithstanding the very praiseworthy efforts of the teachers, it was easy to see that the habit of stooping over the book and sitting in a constrained awkward position was inevitable. Again, some of the rooms were so dark in corners, and "very large corners" too, that it would be impossible on a winter's day for the boys to see to do their work properly without gas. The Rev. J. G. Daugar, whose evidence we are here quoting, goes on to say—"It was almost too dark in one or two cases at five o'clock yesterday afternoon (June 23rd). I commented upon the matter on the spot where some of the boys were working. The result of that is that you find figures badly made, and indifferent writing, and it cannot be helped; you cannot scold a boy for it, because he gives the answer at once, 'I cannot see to do it better.' But there is another point in connection with the lighting, in almost every case I believe in every case—the desks are placed so that the boys must sit with their backs to the light. This is a most absurd arrangement, because the boys sit in their own light for everything they do" (Report of Committee. Minutes of evidence. Question 1,375.)

Here then we have in an extreme degree all the conditions that are considered to favour the development of short sight; and these conditions were not peculiar to Greenwich Hospital School, but were unfortunately only too common in establishments of a similar nature. In a very large and richly endowed school, visited during the course of the inquiries, the lighting of great part of the class-rooms was so deplorably bad that it is a matter of wonder how the boys could perform their tasks at all on a dull day. There were no statistics as to the prevalence of short sight in the school, but it is a curious coincidence that the only person I have met with in later years who was educated there, is myopic in an extreme degree. Desks and forms of improved shape and better construction have been devised to meet these evils, and are now in pretty general use; they are of graduated sizes, to suit boys of different ages; there is a board behind to support the loins just above the hips; the edge of the desk is perpendicularly above the front of the seat, and the inclination of the desk can be altered from 20° for writing, to 40° for reading, whilst a foot-board is attached, on which the feet rest naturally and easily. A suitable desk having been thus obtained, it remains to place it in such a position as to secure for it not only a sufficiency of light, but that the light shall fall in a right direction, from the side and above, preferably from the left, as the shadow of the hand will not then be projected on the paper in writing. It is greatly to be regretted that this important consideration should be so much neglected in schools. The ill effects of having the windows at the back of the children have been already referred to, but the still more objectionable practice of placing the desks facing the light is only too common; the books from which the scholars are working will then be completely in shadow, whilst the glare of light in front will compel the children to assume any position that will shade the eyes, and their sunk heads and contracted brows will at once strike anyone who visits such a school on a day of any moderate brightness.

The wise and beneficent liberality of their lordships has enabled the evils formerly existing at Greenwich to be corrected in a most complete manner. Obstructive partitions have been removed, windows have been inserted, a complete system of new desks of the most approved make has been supplied, and they have been rearranged throughout, with the object of placing them in the right position with regard to the windows, and securing not only abundance of light in every part of the room in which the scholars sit, but its correct incidence. Cubic space is abundant; ventilation and warming arrangements have been revised upon the most approved principles; and the class-rooms, in all sanitary particulars, may be regarded as models that might well be copied by any educational establishment of the highest class; indeed, I think there are very few that would not suffer by any comparison.

By well considered measures of sanitation, such as this; by properly constructed desks to take the strain off the ocular muscles; by abundantly lighted class-rooms; and by watchful care on the part of the teachers to prevent that bad habit of drooping their heads over their work and stooping into which children will commonly fall if not corrected; there is no doubt that the evils to sight

of long hours in school may be minimised; but the importance of fresh air, exercise, and out-of-door occupations and relaxations must not be overlooked, not only from their influence in maintaining the general health and tone of the system, but from the condition of rest given to the ocular muscles by looking at out-of-door and moderately distant objects.

In a report on the education of the young in Alsace-Lorraine, extracts from which have been published in some of the medical journals (*Lancet*, October 7th, 1882), it is stated that boys of thirteen years of age have, on an average, about eight hours' study a day. It would be too much to suppose that any mechanical arrangements of desks or windows could neutralise the effect upon eyesight, as well as upon the general health, of such an amount of close application at the very time of life when growth ought to be most active, and the physical development most carefully fostered; and it causes little surprise when we read, further, that amongst the young men who have of late years passed the educational standard that qualifies them for voluntary military service, no fewer than 80 per cent. were physically unsuited for the army, whilst the extreme prevalence of myopia has long been well known. Higher culture is too dearly purchased at such a price as this, and there does not appear to be at present any fear that our youth will be subject to such a discipline, the tendency is rather the other way; but since it can be clearly demonstrated that, even under our own mild educational system, myopia does arise during school-life, and under conditions that are well known and apparently removable, it becomes a matter of special interest to all those engaged in educating or training boys for the navy or mercantile marine to make themselves acquainted with the circumstances under which short sight may be induced, and how it may be best prevented.

ON SOME RECENT METHODS OF TREATING GRANULAR LIDS.

By W. A. BRAILEY, M.D.,

Ophthalmic Surgeon to the Evelina Hospital; Assistant-Ophthalmic Surgeon to Guy's Hospital.

THE difficulties attending the effectual treatment of granular conjunctivitis (trachoma) have been demonstrated by long experience. They are found almost equally formidable, whether the disease be recent or of long standing, acute or less severe; and thus we naturally turn with avidity towards any new remedy that may be recommended.

I venture to lay before the members of the Association a summary of my recent experiences of the treatment—first introduced into Europe, from the natives of Brazil, by De Wecker of Paris (*Annales d'Oculistique*, pages 86 and 211)—inoculation by jequirity (the *Abrus precatorius* of the natural order Leguminosæ).

The seeds, which are extremely hard and tough, are first broken and freed from their shell. They are infused for two hours in cold water, in the proportion of 1 to 50; by this time they are so softened as to be easily pounded up, after which they are soaked in the same water for twenty-two hours more. The solution now requires only careful filtration to be ready for use. It is applied to the everted lids, or, when this is impossible, between the lids, thrice daily, till a severe conjunctivitis, of a purulent or diphtheritic type, is produced. I append a brief summary of certain cases, which may indicate, to some extent, the relative value of this and other methods of treatment.

CASE I.—A. B., aged 10, was admitted into Guy's Hospital on account of sago-like granulations on the conjunctiva of both lids of each eye. There was considerable pain and photophobia. The corneæ were clear. The disease was of ten months' standing only. Following a recent suggestion of Galezowski, the left eye was treated by excision of the much diseased oculo-palpebral fold; but, for the right, the mitigated nitrate of silver stick was used freely. On the fourth day, both were treated with the stick, and this was continued for two months. At the end of this time, the improvement was greatest in the unoperated eye. But, as the sago-like granulations were still there, together with some pain and photophobia, it was decided to treat with jequirity. After the ninth application, there was chemosis, with some increase of pain. The inner surface of the lid was lined by a thin lympho-purulent layer, which could be readily detached without causing bleeding. At no time was there a free purulent discharge from between the lids. On ceasing the inoculation, the inflammation gradually subsided, till, one month later, the pain and photophobia were gone. Sago-like granulations are, however, still present, though in diminished number.

CASE II.—W. B., aged 17, sailor, was admitted into Guy's Hospital o December 6th, 1882. The left eye was normal, but the right wa severely affected with trachoma of both lids, and great corneal vascu larity. For the first two months of his stay in the hospital, he wa treated with bi-weekly applications of mitigated nitrate of silver stic after the performance of syndectomy. The improvement of the lic being but slight, and the cornea still retaining its vascularity, it w decided to use jequirity. After the seventh application, there w severe pain, with abundant transparent, slightly yellowish, scaldin discharge. A thin membranous, or so-called diphtheritic-lookin layer, lined both lids, to within two millimètres of their free edg For the last two nights he had no sleep, on account of the pain an discomfort. The inoculations were now ceased, as the membrane w still becoming thicker, though the conjunctiva was never œdematou On the seventh day, the layer was soft and purulent-looking; a from this time it gradually disappeared. There was, however, nev any great amount of purulent discharge. Henceforward the ey gradually improved till, one week later, he went to a convalesce home. Six weeks later, his eyes and general condition were mu improved. The iris and pupil were now for the first time visil through the cornea. There were, however, still some sago granu tions on the conjunctiva.

CASE III.—C. H., aged 15, a pallid undersized girl, had had t choma of both eyes for nine years. On admission, both corneæ w vascular, and only semi-transparent. The palpebral conjunctiva each eye presented, besides occasional areas of cicatricial tissue, so sago-like granulations. She had pain and photophobia one year a She was treated as an in-patient, for five weeks, by Mr. Bader, w injections of ointment of yellow oxide of mercury beneath the lids, fr which she received benefit. She was re-admitted on October 17 1882, when mitigated nitrate of silver stick was applied every fou day. At the end of two months, she went out somewhat benefit On March 17th, she was re-admitted, as the right eye had somew receded, being now considerably injected. The left eye, on the ot hand, had improved since her discharge. Inoculation with jequi was now tried, but did not take well, producing only slight so-cal diphtheritic infiltration, and afterwards scanty purulent discha She was sent out very considerably improved, notwithstanding th considerable number of vascular granulations still remained.

The result of these and other cases shows that, in jequirity, have a drug of decided value. Though it does not, in ordinary ca immediately destroy all the granulations, it diminishes very consi ably the pain and photophobia, and has a decided influence in cl ing the cornea. Nor does it appear to affect this tissue injurio in which respect we must admit it to be decidedly superior to in lation from cases of ophthalmia neonatorum. At first, I had siderable hesitation about introducing cases of inoculation with je rity into the general eye ward; but I have not found that it makes difference to the progress of other cases, whether operative or Though precautions against contagion have naturally been taken have not succeeded in inoculating into the sound eye the ophtha produced by this agent.

CASES OF PENETRATING GUNSHOT WOUND O THE ABDOMEN.

By ARTHUR H. ROBINSON, M.D.Durh., M.R.C.S.,

Formerly Resident Surgeon, Hull General Infirmary.

THE following examples of the above injury may prove of int when read with Professor George Buchanan's case published in BRITISH MEDICAL JOURNAL of March 31st. They both under my notice in the Hull Infirmary, during the years 187 and I am indebted to my friend Mr. Craven, under whose care were, for permission to record them.

J. T., aged 36, chief engineer on board a steamship, was adm into hospital on September 11th, 1879. Whilst examining a l revolver on board his ship, one of the barrels exploded, and the tents were lodged in his abdomen. He was brought some dis in a cab, and arrived at the hospital half an hour after the occur of the accident. He walked to his ward, and was at once plac bed. On examining the abdomen, a clearly-cut linear wound, slightly inverted edges, was found two inches below the umb and two inches to the left of the middle line. The patient plained of considerable pain all over the abdomen; his skin wa and moist, breathing short, pulse small and very rapid. In or ascertain the precise direction taken by the bullet, a prob cautiously passed into the opening, and it was at once deflec

ıe right in the direction of the umbilicus, but immediately before ·aching that point it was again suddenly deflected in the direction f the abdominal cavity, which it unmistakably entered. The most ıreful examination of the parietes failed to discover the further ɔurse of the bullet, and it was considered to have embedded itself ı the liver. The worst view of the case was taken, and the patient's ·iends were sent for. Thirty minims of tincture of opium were at nce administered with brandy and water, given in small quantity, nd occasionally repeated. Vomiting of a bilious character came n shortly afterwards; and, as the patient suffered severely from the bdominal pain, referred more particularly to the region of the liver, ; was decided to place him thoroughly under the influence of ıorphia, administered hypodermically. This was accordingly done, ommencing with a quarter of a grain, afterwards increased ɔ a third of a grain; and it was repeated, on an average, every five r six hours, or as soon as the patient complained of a return of the ain. There was no external hæmorrhage from the wound, and it ·as dressed with wet lint. The patient recovered from the collapse ɔwards evening, when his pulse was 88, and his temperature 100°. ·eyond small quantities of milk and soda-water, no nourishment ·as attempted to be given, and even that was returned. After a ɔmewhat restless night his temperature next morning was 99°, and ulse 124, weak and threadlike. He complained of pain over the ·egion of the liver, and with this was a slight tinge of jaundice in ıe conjunctivæ, and discoloured urine. The patient constantly ıaintained a sitting posture in bed. During the following three or ɔur days his condition remained much the same, with the exception f his temperature, which fell to 97.4° on one occasion, being on an verage 98°. His pulse, too, reached as high as 136. His stomach ·efused almost entirely to retain the simplest nourishment, and ·casional enemata of brandy and essence of beef were given. These, ɔo, were only partially retained. By September 17th, his condition ·egan to show signs of improvement, and on the 20th his bowels ·cted for the first time. On the 23rd he was able to take fish to his ınner, and on the 29th he sat up out of bed. The wound, which ad required next to no attention, was healed completely. A close ·amination of the parietes, more especially the lumbar region, was ·ain made, but without any positive result. The patient being anxious ɔ return to his home, which was at Gateshead-on-Tyne, he was dis-ıarged on the twenty-third day after the injury, and passed under ıe care of Dr. Frederick Page, of Newcastle. He consulted Dr. age very shortly afterwards, for an attack of vomiting, which was ɔnsidered to be due to peritoneal irritation. This subsided, and in few weeks the man returned to his duties on board ship, and he as pursued them ever since, three and a half years, without the ·ast further intimation of the locality of the bullet. His phy-cal condition is so satisfactory that I believe he has lately ıarried.

In December 1880, another case, in many respects similar to the rst, came under my notice. This patient was a chimney-sweeper, bout twenty-eight years of age, and he also had been wounded in ıe abdomen by the accidental discharge of a revolver, which had een stolen by a friend from a ship's cabin. On this man's admis-ion into hospital, he was suffering severely from collapse, almost ɔ insensibility. He was almost pulseless, constantly expressed a esire to defæcate, and kept his hands tightly grasped over his ab-omen. On examination, an opening was found in identically the ame position as in the former case, that is, two inches below the mbilicus, and two to the left of the mid-line; but its edges were ıore contused and inverted. There was no hæmorrhage externally, nd the wound was treated as in the previous case; indeed, the ame general treatment was followed throughout. The parietes ·ere carefully examined, but the opening was not probed, the ıtense collapse rendering it almost certain that the ball had pene-·ated the abdominal cavity with the worst results. The pain was ·ept under by repeated hypodermic injections of morphia, but vomit-ng, generally bilious in character, remained persistently. This pa-ient's temperature also became subnormal, and his pulse reached 50. There was no action of the bowels, though the desire was lways more or less present. On the seventh day after the injury, he patient's temperature was 96.6°, and shortly after it was taken he lied.

I examined the body some hours afterwards, and, before opening t, I attempted to pass a long probe into the track of the bullet. The vound was completely healed, and, almost immediately after break-ng my way through the cicatrix, I encountered some obstacle, which eventually stopped my search. On opening the body, the ɔbstacle proved to be the small intestine in one clotted mass, the ·oils being firmly held together by thick tough lymph. No trace of the bullet's track could be found in this, and the most careful examination of the entire small and large intestine failed to discover any sign of injury done to those organs in the form of a perforation. Nor was there any trace of extravasation of their contents. The search was continued further, but, beyond what appeared to be a graze on the right side of the body of the first lumbar vertebra, no trace of the bullet could be found in the abdominal organs or the lumbar muscles, though, doubtless, it was embedded somewhere in the latter.

Remarks.—The treatment adopted in these cases was what the late Surgeon-General Otis called the "ostrich-line" of treatment; but the alleviation of suffering by the morphia injection, as evidenced by the first patient's craving for it on the return of pain, must have had some share in effecting the satisfactory termination of that case. The bullet used in both revolvers was very small, hardly larger than a pea, and conical in form. It would be interesting to know whether the evident difference in the direction of the tracks were due to difference in aim, or simply to the proverbial eccentricity of small-arm projectiles, the points of entrance coinciding so exactly. The first case is probably an instance of how these missiles may become encysted; in this case, no doubt, in the liver. The final resting-place of the bullet in the second remains wrapped in obscurity, no aperture of exit existing.

TRANSPOSITION OF VISCERA.

By WM. JULIUS MICKLE, M.D., Bow.

In January, 1882, I made the necropsy of W. P., a sign-writer, who died, at the age of 40, of general paralysis of about three years' duration. On admission, his height was 69 inches, his weight, 144 lbs. During life, the transposition of the areas of percussion-dulness of the liver and spleen had been noticed; and of the necropsy only so much will be here related as refers to the transposition of viscera.

The heart was more erect, and more under cover of the sternum, than usual. Its chambers had, as it were, changed sides; the thicker and stronger ventricle, connected with the aorta, concerned in the systemic circulation, and forming the cardiac apex, being on the right side; while the ventricle operative in the pulmonic circulation, and through the pulmonary artery, was on the left side. The auricle receiving the systemic veins was on the left side, its appendix was directed forward and to the right. A thin septum, situated posteriorly, separated this auricle from the other, except where a patent foramen ovale, one third of an inch in diameter, kept open communication between the two. The ventricle on the left side, with a tricuspid flap well to the left, opened into the pulmonary artery upwards, forwards, and to the right; and, springing from this point, the pulmonary artery curved round to the right under the aortic arch. The auricle receiving the pulmonary veins was to the right and posteriorly; its appendix, directed to the right and somewhat forwards, nestled under the pulmonary artery. The mitral valve had anterior and posterior flaps. At the right ventricular summit, and in front, was the aortic opening. Of the aortic valve, one segment was on each side, and one posteriorly, but not exactly so. Behind the right segment the larger coronary artery made exit; behind the left, the lesser. The aortic arch was directed towards the right, thence it curved down to the vertebral column, on the anterior and right aspect of which it descended through the thorax. Similarly, the gullet coursed down the left anterior aspect of the dorsal column; but, below, it crossed to the right to gain the œsophageal opening in the diaphragm. The lung in the left chest had a very imperfectly divided-off third, or middle, lobe. The lung in the right chest, however, had a small imperfect middle lobe. The spleen was in the right hypochondrium. The position of the liver was reversed, its larger lobe lying in the left hypochondrium and epigastrium, and its smaller lobe extending rightwards to the spleen.

Of the stomach, the cardiac opening and the cardiac end were to the right of the middle line, and the pylorus to the left of the same. The duodenum was also to the left, and the convexity of its horse-shoe curve was directed to the left. The end of the ileum, the cæcum, and the appendix vermiformis, were in the left inguinal region. Thence arose the ascending colon on the left; then came the transverse arch of the colon; the descending colon, on the right side; the sigmoid flexure, in the right iliac fossa; and the rectum, entering the true pelvis slightly to the right side. The kidney of the left side weighed 5 ozs.; of the right, 4½ ozs.

Note.—The local destructive inflammation of the left lung may

have been due, or partly due, to inhalation of particles of food; and its localisation in the left, rather than in the right lung, a result of transposition.

CLINICAL MEMORANDA.

MORBILLIC RASH IN TYPHOID FEVER.

In connection with Dr. Whipham's report of two cases of scarlatinal rash in typhoid fever, I would like to record a case in which the rash exactly resembled that of measles, and indeed the case was at first mistaken for one of measles by all who saw it.

A probationer nurse, who had been in hospital ten days, and was nursing two cases of typhoid fever, suddenly complained of the premonitory symptoms of an acute febrile attack: pain in the back, thirst, headache, etc.; her temperature ranged between 101° and 104°, and continued high throughout the attack. On the third day after she noticed her illness, a rash, exactly resembling that of measles, appeared first on the feet and legs, and afterwards to the chest and upper extremities; yet she had no coryza or conjunctivitis, and no history of morbillic contamination could be elicited. The rash gradually faded, and no desquamation followed. On the fourth day, typhoid stools, brown tongue, and pain in the right iliac region convinced us that the case was one of typhoid fever, exhibiting a peculiar rash. The subsequent history of the case confirms this opinion, although happily not a *post mortem* sequence, as the patient recovered.

I have seen many forms of dermatitis in typhoid fever, which illustrate the maxim that this symptom is often very misleading, and if not understood may lead to disastrous consequences.

WALTER C. BEEVOR, M.B., House-Surgeon, Hospital, Newark-on-Trent.

THE CAUSE OF VERTIGO.

I READ with much pleasure the paper "On Vertigo," etc., by Dr. Woakes in the JOURNAL of April 28th, until I came to the following statement: "Thirdly—and this is the chief contention of my thesis—it is to change in that vessel which is the chief vehicle of blood to the brain—the vertebral artery—that vertigo and the phenomena associated with it are due." "When it is considered how largely the vertebral artery is concerned in the blood-supply of the brain, the wisdom of arranging its distribution so that the earliest departure from the normal condition shall become permanently notified, will become evident. In this way, the organ of equilibration serves a sentinel-like function to warn us of the state of blood-supply of the brain as a whole."

If Dr. Woakes will read *Brain* (July 1882, p. 170), he will find that I have ligatured both vertebral arteries in many epileptics, and in only one of them did the "sentinel-like" function act (Case 3, p. 173), and in that case not by vertigo, but by tinnitus and deafness. It will be seen that in several cases both vertebrals were tied simultaneously, and a cerebral disturbance produced such as rarely occurs in disease. If vertigo have any connection with the vertebral arteries it ought to have been present after the ligature. No mental habetude has followed the ligature in any case such as occurs after the vertebral inefficiency of Dr. Woakes. The vertebral arteries have now emerged from obscurity, and are not so safe vessels for theorising upon as they once were. W. ALEXANDER, Liverpool.

SUCCESSFUL VENESECTION.

THE successful result obtained by depletion, recorded in the JOURNAL, April 28th, by Mr. A. C. Shout, is very similar to a case that came under my observation in 1877, when stationed at Rangoon, British Burmah. I entered the case fully at the time in the regimental case-book, but now only quote from memory.

Sergeant ——, Royal Scots Fusiliers, was admitted to hospital for delirium tremens. I do not now remember his particular symptoms, but, a day or two after his admission, I was sent for at night to see him. When I arrived at the hospital, the senior apothecary, Mr. Devine, a man of great ability and experience, informed me that he thought the case was hopeless, and the end very near. I found the patient comatose, convulsions recurring at about a minute's interval, the eyes fixed, the pupils semi-dilated, breathing slow and laboured, the pulse full and bounding, the face very congested and swollen, and the jugular veins distended. I considered that depletion alone could save him, but, wishing for another opinion, sent for Surgeon-Major Comyn, who was in charge of the hospital. He arrived in a few minutes, and agreed with me that bleeding would, at all events, give him a chance. About twenty ounces of blood were taken from the arm, and the result was almost like the working of a miracle. The convulsions ceased, the complexion became natural, the breathing easy, the swollen veins disappeared, and he passed into a quiet sleep. He awoke next morning perfectly well, and was discharged from hospital two or three days afterwards.

I think that the symptoms of delirium tremens which he showed on admission must have been due to congestion of the brain, and not to true alcoholic poisoning; as, if it were the latter, his recovery could not have been so rapid and complete as it was.

This instance of successful venesection made a great impression on me at the time, as it was the first non-surgical case I had seen, in which I could say, beyond a particle of doubt, "but for the means employed, this man would have died."

W. L. CHESTER, M.B., Surgeon A.M.D.

SURGICAL MEMORANDA.

FOREIGN BODY IN THE URETHRA.

J. B., a carter, aged 42, was admitted into the Alton Cottage Hospital on April 27th. The day before, he had been drinking heavily and in the evening was seized with severe pain in the perineal region, accompanied with some hæmaturia. He was seen by a surgeon, who sent him to the hospital. There was some obscure history of a large shawl-pin having been lost, and it was supposed he had run it into him whilst rolling about on the floor drunk.

On examination, a foreign body could be felt lying along the under side of the penis, from its lower half towards the perinæum; and about the middle of the penis a sharp point was discovered. A small incision was made through the skin over it, and the point of a large black pin was then forced through, seized by a pair of forceps, and drawn out; it was between three and four inches in length. The head of the pin was then found intact in the urethra; the point of the pin was therefore depressed, and the head pushed up through the urethra and drawn out through its orifice. A catheter was passed and left in the bladder for twenty-four hours, and the wound dressed with carbolic oil. Blood was passed in the urine several times afterwards. No urine escaped by the wound, and at the end of the week the man was sent out, cured.

It is evident that the man whilst drunk got out of bed in the absence of his wife, secured the pin, forced the head of it through the orifice of the urethra, and, pushing it down, lost his hold of it. It gradually slipped along the urethra till the head reached the bulbous portion. He had been able to pass urine, but not so freely as usual but blood was always mixed with it. He stoutly denied having the slightest knowledge as to how it was done.

WM. CURTIS, Alton, Hants.

THERAPEUTIC MEMORANDA.

NITRITE OF AMYL IN URÆMIC ASTHMA.

WITH reference to Dr. Sheen's note on this treatment, published in the JOURNAL for April 28th, I may say that, in August last, I attended a patient (for Dr. Adam of Boston) who had been suffering for a long time from gout, chronic Bright's disease, and albuminuria, with occasional attacks of asthma and pulmonary œdema. On one occasion, when suffering from a severe fit of asthma, I made him inhale nitrite of amyl, from which he obtained great relief for several days. A week subsequently to the first administration of the amyl, he was sitting in his room alone, and was suddenly seized with a violent attack of asthma, and, before he could reach the nitrite, he became unconscious, and expired in a few minutes.

I may add that he informed me that nothing had given him so much relief as the nitrite; and possibly, had he been able to reach it in time, during the last attack, his life might have been prolonged. THOMAS SANCTUARY, Crane Lodge, Salisbury.

NOTES ON PARALDEHYDE.

As I have prescribed this new drug on several occasions, it may be of interest to give my experience. The dose as a hypnotic is from thirty to fifty minims. It produces sleep in most cases in a few minutes after taking it, the effect lasting from three to seven hours. Larger doses, no doubt, would produce longer narcosis. It produces no headache, no constipation, nor stomach derangement, cor

trary to the report given of it. In one case, it caused a slightly depressant effect on the heart. In a patient who had been accustomed to take chloral, it was stated that the sleep was refreshing, but, if disturbed during the sleep, the tendency to sleep left, which was not the case with chloral.

Paraldehyde in some cases causes a peculiar burning taste in the mouth the following morning. The breath smells of the drugs for several hours after waking. It is probable that nearly all the drug is got rid of by the lungs in the same state as it is taken. Paraldehyde is not much, if anything, superior to chloral. It costs five shillings per ounce; chloral, sixpence per ounce; besides which, it requires a larger quantity of the former, so that it is about sixteen times as dear as chloral. Therefore it is not likely to come into general use. Being so insoluble in water, it makes rather a large draught, which is objectionable.

JOHN BROWN, L.R.C.P.Lond., etc., Bacup.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

UMOUR IN THE RIGHT LOBE OF THE CEREBELLUM: NECROPSY.

(Under the care of Dr. RAMSKILL.)

[Reported, with Remarks, by C. F. COXWELL, M.B.Cantab., late Resident Medical Officer and Registrar.]

. S., a hammerman, aged 25, was admitted on August 18th, 1882. is illness began five weeks before this date with double vision hen looking in front of him, followed in a few days by vertical eadache, which was worse at night, and which changed later to ontal headache. He had vomited his food after his meals frequently since the commencement of his illness, and had retched a ood deal before vomiting. Three weeks ago, the left eyelid dropped, nd a squint appeared, but he could not describe it accurately. He ad had about a dozen fits during the month previous to admission. e said that he had had some weakness of the right hand and arm, nd that there had been stiffness at the back of the neck.

His condition when admitted was as follows. He was a poorly ourished man; he did not answer questions readily, appearing dull nd a trifle drowsy; his memory was somewhat impaired, and conersation was carried on by him with a visible effort; he complained generally diffused headache. He could walk alone, but did so oking on the ground, in an unsteady manner, and with his feet, at ast one foot, transversely separated. On standing with his eyes ut and his heels together, he fell to the right or left, or backards. His condition with regard to the cranial nerves was as follws. First: he recognised peppermint and assafœtida when held each nostril. Second: he could tell the number of fingers held before him, but could not read the largest print; there was inense double optic neuritis. Third: the pupils were 4½ mm., equal, nd reacted sluggishly to light and accommodation. There was ight nystagmus when looking to the right. There was a slight oop of each eyelid. The fourth and fifth nerves were in no way ffected. Sixth: there was nearly complete paralysis of each exrnal rectus. The seventh, eighth, and ninth were unaffected. The ght arm was unsteady when held in front of him, so that he could ot feed himself with it. His grasp, as tested by the dynamometer, as represented on the right side by 25 lbs., on the left by 35 lbs., hich, considering that he was right-handed, supported his statement that he was weaker on the right than on the left side. Both gs were pretty strong; he could kick them about in bed, and hold ch leg extended off the bed; there was no difference in power beeen the two legs. There was no rigidity of either arm or leg in e intervals between the fits. Sensibility was unimpaired. The ndition of the reflexes was as follows. The plantar was slight, nd the right was greater than the left. There was no ankle-clonus. he knee-jerk was about normal, and equal on the two sides (the nee-jerk was never obtained except on this one occasion). The emasteric abdominal, and epigastric reflexes were all much in excess, and equal on the two sides. The reflex of the wrist was not obtained on either side. The heart and lungs were normal. The pulse was 90, and strong. The urine was of specific gravity 1020, acid, and contained no albumen nor sugar.

Whilst Mr. Coxwell was at his bedside, the patient had an epileptiform convulsion. Suddenly, all four limbs became semirigid and semiflexed, and subject to slow clonic spasms of very small extent; the head was turned upwards and to the right, and the eyes in the same direction; the pupils became more dilated than they had been previously; he was quite conscious, and able to answer questions. The fit lasted between one and two minutes. Towards its termination, the knee-jerk was in excess, and there was ankle-clonus on each side, which had disappeared when it was next looked for in two minutes' time.

The mental condition did not change much, but he became rather drowsier and more lethargic. He lay in bed generally on his right side, and had frequent fits, which consisted generally in incomplete loss of consciousness, small tremors of the right arm, and involuntary passage of urine.

September 6th. Sight had become worse; there was marked double internal strabismus; the tongue was pointed distinctly to the right side; there was tenderness over the skull in the occipital region, but nowhere else; he fell backwards and to the right when supported in the standing position. Even after repeated trials, made very carefully, the patient sitting on a high stool with his legs dangling down, no knee-jerk could be obtained; the limbs were in no way rigid. He was emaciating rapidly.

September 9th. The knee-jerk continued to be absent. He was having frequent fits, which were characterised by a partial loss of consciousness and small clonic spasms of the right arm in an extended position. Each fit lasted about half a minute.

September 14th. He had had three severe fits which affected the right arm and leg, the head being turned towards the right.

On the morning of September 19th, although drowsy, he was able to speak quite sensibly. At first sight there was no very evident change in his condition, but, on investigating the state of his ocular muscles, it was found that the eyeballs were more prominent than they had previously been, and that the double internal strabismus no longer existed. But there was complete ophthalmoplegia externa on both sides. Of this there could be no doubt; for, although the man was quite blind, he made repeated efforts in answer to requests to turn his eyes in various directions, and would not believe that he was not succeeding in doing so. He died suddenly some hours later. During his illness his temperature varied but little from normal.

Necropsy.—A soft vascular growth, about an inch and a half in diameter, was found in the posterior region of the right lobe of the cerebellum, the whole bulk of which was about twice that of the left lobe. The upper cervical region of the spinal cord showed as the result of compression distortion towards the left. The right occipital lobe of the cerebrum was flattened on its inferior surface, and the corpora quadrigemina were flattened and displaced perceptibly towards the left; there was an excess of fluid in the ventricles.

REMARKS BY MR. COXWELL.—It is worthy of notice that, while at first the epileptiform convulsions were general, they afterwards affected invariably the same side, namely, the right. Taken into consideration with the fact that, while at first, when standing unsupported, he fell to the right, to the left, or backwards, but that later on he always fell to the right, this may possibly indicate that the tumour commenced its growth on the inner side of the right lobe, and that the direction of its increase was from within, outwards. The impairment of power over the right arm is easily explained by pressure on the right side of the cervical region of the spinal cord. The external recti were early affected, and in an increasing degree as time went on, probably owing to pressure on the trunks of the sixth nerves, the anatomical position of which renders them specially exposed to the influence of increase in the contents of the cranium. The ophthalmoplegia externa which preceded his death was perhaps due to pressure on the corpora quadrigemina. Lastly, the knee-jerk, or "patellar reflex," was never obtained except on one occasion early in his illness. With this may be coupled the total absence of rigidity in the limbs. These two latter symptoms are not common in cases of cerebellar tumour; but in another probably similar case, of much longer duration, the deep reflexes having been absent, and the limbs flaccid for many months, finally ankle-clonus, much increased knee-jerks, and intense rigidity have made their appearance. The other symptoms frequent in cerebellar disease, namely, retraction of the head, nystagmus, optic neuritis, etc., call for no remark.

QUEEN'S HOSPITAL, BIRMINGHAM.

EXOPHTHALMIC GOÎTRE: TREATED WITH DUBOISINIA.

(Under the care of Mr. HUNT.)

[Reported by LESLIE PHILLIPS, M.D.Brux., House-Physician.]

M. Y., aged 39, a married woman, came to the hospital on August 8th, 1882. She had a large goître, exophthalmos, much palpitation, a systolic *bruit* in the pulmonary area, and œdema of the legs. The nervous emotional state in which she was, was painful to herself and others. The urine contained no albumen. She was ordered to take $\frac{1}{120}$ of a grain of duboisinia sulphate, in an ounce of water, three times a day.

August 15th. The palpitation was better; she stated that she vomited occasionally (whether after the medicine was doubtful).

On August 22nd, she was told to take the medicine twice a day.

September 5th. She was better; she was less nervous; there was no œdema; the bowels were relaxed in the mornings.

October 3rd. She said she was "very much better"; the bowels were still relaxed in the morning, and she sweated much at night.

October 17th. She was much better; the eyes did not project so much.

October 31st. She complained of sweating after meals and palpitation on excitement, but was much better; the thyroid gland was, if anything, larger; the basic *bruit* was still present. She was ordered to take the medicine three times a day.

On December 12th and 26th, she reported herself very much better. There was still some palpitation; the eyes were very little prominent; the bowels were freely open; the medicine, she said, seemed to make her "tipsy and sleepy." The disappearance of her nervous excitability was most manifest.

LIVERPOOL ROYAL INFIRMARY.

SOME RECENT CASES OF DISEASES OF WOMEN.

(Under the care of Dr. WALLACE.)

[Reported by HENRY BRIGGS, M.B., Resident Medical Officer.]

1. *Rupture of Perinæum and Lower Part of Recto-vaginal Septum.*—E. J., aged 32, was admitted on September 5th, 1882. Her labours had been easy and not instrumental. The injury occurred on August 1st, during a very speedy labour. The tear extended deeply into the recto-vaginal septum, and there was entire loss of control over the action of the bowels. Operation was postponed until October 21st, when Dr. Wallace performed the operation in a manner which he had found most reliable, especially in cases of deep laceration.

The operation was conducted as follows. The anterior vaginal mucous membrane was separated from the posterior rectal mucous membrane, by carefully dissecting through the intervening cellular tissue of the torn recto-vaginal septum; the reflection of the mucous membrane of the vaginal canal was continued forwards on each side, thus laying bare the perineal cellular tissue at the same time; the lateral reflections of the vaginal mucous membrane were brought together with catgut-sutures, thus completing the vaginal canal anteriorly; the rectal mucous membrane was dragged down, and stitched to the pared anal verge; the pyramidal space intervening between the two canals was then closed by approximating the symmetrical, labial, triangular surfaces by means of deep sutures of stout wire passed as deeply as, but without enclosing, the vaginal mucous membrane; the most posterior of these deep sutures was so placed as to draw downwards and backwards the septum in front of the rectum; this served to relieve the finer superficial sutures from tension in holding downwards the lower end of the gut. A large rubber drainage-tube was tied into the rectum, and the bowels were kept loose by small doses of castor-oil administered night and morning.

REMARKS.—Dr. Wallace pointed out that the great advantage in this operation was the non-removal of mucous membrane, a most important consideration for child-bearing women. The perinæum completely healed by first intention; carbolic and iodoform dressings were used locally.

2. *Multilocular Ovarian Cyst.*—S. C., aged 51, a thin married woman, with anxious facial expression, and œdematous extremities, came to the hospital on September 29th, 1882, two years after she first noticed the abdominal enlargement. The menses had ceased seven years previously.

On October 6th, Dr. Wallace operated under the carbolic spray. Extensive parietal adhesions were found, and the aggregation of small cysts necessitated a large abdominal incision. The large cyst contained 240 ounces of fluid. The pedicle, unusually wide, was ligatured with silk, and a thermo-cautery applied to its stump, and also to the peritoneal surface of the abdomen, in two parallel lines, to check bleeding. A rubber tube was introduced; but, as there had been very little sero-sanguineous discharge through it, on the evening of the operation it was withdrawn. The entire absence of sickness, and the slight abdominal pain, together with a temperature ranging from 100.6° to 98°, and a pulse of 108 to 96, marked the progress of the first three days. Fifteen days after operation, the dressings were finally removed.

3. *Excision of the Uterus and a Large Fibroid Tumour.*—H. M., aged 50, was admitted with a large fibroid of the uterus, whith had rapidly increased in size for the past three years. The uterus was removed just above the cervix, and its stump clamped in Kœberlé's *serre-nœud*. Hæmorrhage was effectually controlled. Full antiseptic precautions were carried out. The patient progressed favourably towards recovery. On the eighth day after the operation, the temperature was 99°, and the pulse 114. The abdomen was perfectly flat. On the thirteenth day, the patient's progress having been uninterrupted, the abdominal sutures were removed. The abdomen was flat. The dry aseptic slough on the clamped uterine cervix was not giving rise to any local or constitutional disturbance.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 15TH, 1883.

THOMAS BUZZARD, M.D., Vice-President, in the Chair.

Reports of Morbid Growth Committee.—The report of the Committee on Mr. Lawson's case of recurrent enchondroma of the lower jaw stated that, in the opinion of the Committee, the later growths were sarcomata, and consisted chiefly of spindle-cells. The same Committee also reported on Mr. Roger Williams's case of growth in a diverticulum from the bladder; the Committee agreed with the author that the tumour was a sarcoma, which had become inflamed.

Multiple Growths in the Bladder.—Mr. MORGAN said that the patient was a man who had suffered for many years from hæmaturia and symptoms of irritation of the bladder. Mr. Morgan had explored the bladder through a median perineal incision, and ascertained that a tumour was present, and that the mucous membrane about the trigone was velvety. The tumour was removed by the écraseur, and the patient was very much relieved for about six or seven weeks, but, after this period, the symptoms recurred, and he gradually sank and died. The bladder was shown by *post mortem* examination to present numerous villous growths indiscriminately scattered over the mucous membrane. The growths were about the size of almonds, and were soft to the touch. The prostate was somewhat enlarged. The growth had the naked-eye appearances of a papilloma, and this view was confirmed by microscopical examination, which, however, could not be very completely made, owing to the damage which the specimen had suffered in transit.

Bacilli of Leprosy.—Dr. THIN, for Dr. HILLIS of Demerara, showed specimens and a drawing of the bacilli of leprosy. Dr. Hillis had sent from Demerara tubercles excised from patients suffering from tubercular leprosy; and sections had been prepared and stained, at Dr. Hillis's request, specially for the Pathological Society. The drawing shown had been made from the preparations in accordance with Dr. Hillis's wishes, and gave an accurate representation of the bacilli.

Hydatid Cyst in Lung.—A specimen was shown by Dr. CURNOW, which he had obtained from the body of a seaman aged 30, who died in the Dreadnought Hospital under his care. He had suffered from a cough for four months, and had had frequent attacks of hæmoptysis. On admission, there was some impairment of movement and resonance, and marked deficiency of breath-sounds and of vocal fremitus and resonance, over the upper part of the left side of the chest. The sputa were copious, frothy, and mixed with bright blood. There was no fever nor local distress. About three months after admission, he suddenly expectorated about two ounces of colourless opalescent fluid, and this was followed by profuse hæmoptysis. Two weeks later, he spat up a large piece of hydatid membrane. Examination showed a superresonant percussion-note under the left clavicle, with whispering pectoriloquy; lower down, the breath- and voice-sounds were absent; the chest, on the left side behind, was dull from base to apex. A few days later, he expectorated another

large piece of membrane, and again had profuse hæmoptysis; two days later, he died of exhaustion. The necropsy showed that the upper part of the left pleural sac was obliterated by dense thick adhesions, while the lower part contained between three and four pints of pus. In the upper lobe of the left lung was a large rounded cavity, which contained a loose hydatid cyst as large as a Tangerine orange, and about five ounces of blood-stained fluid; no communication could be traced between this cavity and the empyema. The lung was compressed and airless. No other hydatid cyst was found in the body. Dr. Curnow referred to the rarity of this disease in England, and added that the patient had spent a short time in Australia, where the disease was prevalent.—The CHAIRMAN observed that the cyst was probably too small to have been tapped, but Dr. CURNOW thought that the operation ought to have been performed.

Ulceration of Large Intestines.—Dr. CURNOW also showed a specimen of a somewhat unusual form of ulceration. The case was one of typhoid fever, followed by a relapse and thrombosis of the external iliac and femoral veins. The chief point of interest about the specimen was, that the large intestine was covered with small rounded ulcers, in many of which a small central opening, showing a cheesy interior, could be seen; whilst others were deeply excavated, with sloughy pigmented bases. These ulcers were remarkably numerous and close, and extended from the ileo-cæcal valve to the very lowest piece of the rectum. Many of the ulcers in the small intestine presented a central caseous mass. The patient was employed on board a troop-ship, and other cases of typhoid fever occurred on the same boat.

A Case of Disseminated Cancer.—Dr. PERCY KIDD exhibited the organs from a case of cancer widely disseminated throughout the body, and also microscopical specimens from the same case. The new growths had been found in nearly all the abdominal organs, in the bronchial and mediastinal glands, in the lung, cerebellum, and the subcutaneous tissue of different parts of the body. In the left frontal lobe of the brain there was an old hæmorrhagic cyst. The left arytenoid cartilage was necrosed, but the larynx was not otherwise diseased. The disease probably originated in the abdominal glands, the growths in the liver being multiple and evidently secondary. The root of the right lung was infiltrated by a very hard growth extending from the mediastinum. Microscopical examination showed that the growth was carcinomatous. Sections of the right lung showed that the carcinomatous infiltration followed the lines of the blood-vessels and bronchi, with comparatively slight implication of the lung-tissue itself. In a few sections from the head of the pancreas, which was involved in the disease, a curious concentric structure was observed. It consisted of series of regularly disposed fibrous rings, in which were numerous thin spindle-celled nuclei. At the centre of this structure was a minute opening, with walls which seemed to be lined by an epithelioid membrane; these appearances were thought to suggest a vascular origin. The patient was a man who had died in the Brompton Hospital after having been for several months previously in a dull, heavy mental condition, which deepened some days before death into coma.

Two Cases of Gastric Ulcer associated with General Degeneration of Arteries.—Two specimens of gastric ulcer were shown by Dr. NORMAN MOORE. 1. An ulcer of an oval form, about one inch in diameter, situated on the lesser curvature, two inches from the pylorus, from a man aged 56. All the arteries of the body were highly atheromatous. The posterior third of the left cerebral hemisphere was softened, and the cerebral arteries were largely calcified. The gastric artery was almost completely calcified. In the base of the ulcer was a small adherent clot, leading into a branch of the pancreatico-duodenal artery; a copious hæmorrhage from this had been the cause of death. 2. A commencing ulcer in the middle of the greater curve of the stomach. The patient was a woman aged 34, who died in St. Bartholomew's Hospital of interstitial nephritis associated with atheromatous arteries, and abundant gouty deposits in joints and other parts. The middle part of the ulcer was covered by epithelium, and consisted partly of blood, and partly of necrosed mucous membrane. The ulcer was bounded by a distinct edge. Dr. Moore observed that ulcer of the stomach in patients with healthy arteries had been attributed to embolus. It seemed probable from these cases that, in persons with degenerated arteries, gastric ulcer might be due to thrombus forming in a calcified vessel.

Polypus of the Stomach.—Dr. NORMAN MOORE also exhibited a soft spherical growth from the mucous membrane of the stomach, projecting at the end of the first third of the great curve. The polypus, which was obtained from the body of a man aged 68, who died of bronchitis, had given rise to no symptoms during life. Some specimens of polypi of the small intestine had been shown to the Society during this session, but polypi of the stomach were less frequent. There were three specimens of the kind in the Museum of St. Bartholomew's Hospital; but the unfrequency of the growth was shown by the fact, that the present specimen was only the second which had been observed out of the last three thousand *post mortem* examinations.

Inflammation and Ulceration of the Larynx, from a case of Measles and from a case of Scarlet Fever.—These specimens were shown by Dr. NORMAN MOORE. In the case of measles, the child was a boy aged five years, who died of abscess of the brain, following necrosis of the temporal bone, six weeks after he was first taken ill. The larynx showed ulceration of the cords and of the base of the epiglottis. There was no false membrane. In the case of scarlet fever, the ulceration was somewhat more extensive; a considerable tract of epithelium was destroyed, but, when fresh, no false membrane could be detected. There was a deep ulceration of the fauces without false membrane. The patient, a boy aged five years, was the third case of well-marked scarlet fever occurring in a house in the course of three months. Dr. Moore thought that these cases were of interest in relation to the remark of Barthez and Rilliet, that laryngitis was more frequent in measles than in scarlet fever. It was certainly rare to find ulceration of the larynx in necropsies of either the one or the other in London, and the symptoms of laryngitis frequently observed in measles were rarely severe enough to suggest ulceration.

Acute Atrophy of the Liver.—Specimens from a case of acute atrophy of the liver, which was to some extent unusual, were brought to the notice of the Society by Dr. CAVAFY. The patient, who was a young man, aged 28, was taken suddenly ill the day before he was admitted into St. George's Hospital; he complained of feeling ill, began to vomit, became jaundiced, and in five or six hours unconscious, and so remained until his death, at 4 A.M. on the third day. When admitted he was deeply jaundiced and unconscious, with fixed dilated pupils; the liver-dulness appeared to be diminished, but the abdomen was much distended; the urine contained leucin, tyrosine, and bile-pigment. At the necropsy, numerous small hæmorrhages into the peritoneum, pleura, and endocardium, were found, as well as hæmorrhages, into the substance of the lung. The liver, especially the right lobe, was small, and weighed only thirty-six ounces; it was not markedly soft, but rather tougher than natural, barely retaining the impress of the finger; as seen through the capsule, there was no lobular marking, and the colour was a dull brownish red. The cut surface had the same colour, with here and there a little brown yellow material; the lobules were not distinguishable. The kidneys and heart were in an early stage of fatty degeneration. A careful search for micro-organisms had been made by Mr. Lingard, under the direction of Dr. Klein. None were found in any of the organs, except in the hæmorrhagic patches in the lungs, where a pneumonic process was beginning; in the alveoli were numerous micro-organisms, namely, bacilli of two kinds, large and small, and micrococci; in one place the bacilli were seen in the walls of the blood-vessels; the necropsy, however, was made thirty-four hours after death, and Dr. Cavafy, therefore, did not attach any importance to these organisms, which were probably due to early putrefactive changes. The investigation of this case, therefore, had failed to confirm the statements of Waldeyer, and others, with regard to a specific micro-organism in this disease.

Cerebral Vacuolation.—Dr. HALE WHITE read a paper, written conjointly by Dr. SAVAGE and himself, on vacuolation of the cerebral substance. It was shown that there were nine causes for holes in the brain—1. Small processes of sclerosed meninges, in cases of general paralysis, dipped into and excavated minute portions of cerebral tissue. 2. In the same disease the sclerosed neuroglia, by its contraction, might give rise to small cavities. 3. There might be multiple hydatids in the brain. These three conditions were very rare, the authors having no knowledge of the second, whilst the third was almost confined to animals suffering from staggers. Several references to continental authors were given, whilst the relation of the muslin appearance to the second of the above was pointed out. 4. The fourth cause was the dilatation of cerebral vessels giving rise to the "*état criblé*." It was particularly emphasised that this was, in the majority of cases, of no pathological significance. 5. Shrinking of the cerebral convolutions in some cases gave rise to holes in the subjacent cerebral substance; a very good example of this condition was exhibited. 6. Miliary aneurysms, as Charcot had pointed out, might give rise to holes in the brain-substance; some very marked specimens showing this were exhibited. 7. In the condition known in Germany as *die Porencephalie*,

a large gap existed in the brain-substance; this might communicate either with the exterior or the interior of the brain, or both. 8. The Gruyére cheese condition. This, it was pointed out, was quite different from the *état criblé*, for it was due to a dilatation of the perivascular lymphatic space of his. Of the causes of this dilatation nothing was known; probably they were local, so the dilatation was saccular. The authors showed an example of this condition in which the whole of the brain, except the lower part of the medulla, was riddled with cavities exactly like those found in cheese, and microscopic specimens exhibited showed that these holes were produced by this perivascular dilation. The shape and direction of the cavities also corresponded with that of the vessels. Very few examples of this condition had been carefully described; in England only one, by Lockhart Clarke, who referred it to the same cause. 9. The authors showed specimens from two remarkable cases in which the kidneys, lungs, liver, heart, and brain all contained holes; in the kidney, these cysts were due to the dilatation of either the tubules or Malpighian capsules; in the liver they were due to the vacuolation of the hepatic cells; in the lungs and brain it was impossible to come to any definite conclusion as to their origin, but in both these viscera the cavities contained a peculiar material, staining deeply with logwood; both the subjects were lunatics. Cases in which there were only a few holes, such as patches of softening hæmorrhage, were not considered to come within the scope of the paper.—Dr. SAVAGE said that, in the cases of the two lunatics last referred to, the changes were certainly not due to changes produced by preservative fluids after death, as the vacuolation was noticed at the necropsy. Both the patients were general paralytics, but in one the disease was chronic (three or four years), in the other acute (three or four months). He was convinced that the vacuolation occurred under various conditions. This question of multiple cystic disease deserved consideration and discussion, and he regretted not to see more members interested in the care of the insane present.—Dr. BUZZARD remarked that Lockhart Clarke's patient was also a general paralytic; in the cavities, that observer had found *débris* and blood-vessels.—Dr. MAHOMED thought the condition must be rare, and Dr. HADDEN said that he had recently met with one case.

Comminuted Fracture of Tibia.—Mr. SWINFORD EDWARDS showed a specimen of fracture of the tibia, where the anterior tibial vessels and nerves were compressed between the two fragments. Gangrene of the limb occurred, necessitating amputation, and the patient, who was a woman, aged 61, the subject of fatty degeneration of the heart and extensive atheroma, died a month later.

Hypertrophy of Neck and Condyle of Lower Jaw.—Mr. HORSLEY said that the patient from whom this specimen was obtained had been shown to the Society by Mr. Christopher Heath on March 6th (see BRITISH MEDICAL JOURNAL, March 10th, 1883, p. 458). Mr. Heath had removed the hypertrophied portion of the jaw, and the deformity had been quite cured. The enlargement was partly due to a fibro-cartilaginous material.—Dr. GOODHART exhibited for Mr. EVE a similar specimen, which had been recently presented to the Museum of the Royal College of Surgeons by Mr. J. McCarthy.

Multiple Exostoses.—Mr. FREDERICK CHURCHILL showed a living specimen of multiple exostoses very symmetrically arranged. The patient was a girl, aged 15. The growths had been first noticed at about seven years of age. All the metacarpal bones except the first had small pyramidal hard growths springing from them, and similar growths existed upon the first and second phalanges of the fingers, and upon the proximal phalanx of the thumb. The clavicles presented growths in front at the junction of the outer and middle thirds, and behind at a point just internal to the acromio-clavicular articulation. Growths occurred on the limbs in the following situations: from the lower epiphyses of the radius and ulnar, at the upper and inner part of the shaft of the humerus, from the femur, just above both the internal and external condyle, from the anterior and posterior surface of the inner tuberosity of the tibia, from the upper fibular epiphyses, and from the internal and external malleoli. The phalanges of the feet, with the exception of the terminal, were the seat of numerous growths. The margin of the iliac crest was irregular at its central portion on each side.

Card Specimens.—Mr. SUTTON: (1) Encephalocele; (2) Uterine Disease in Animals; (3) Remarkable Case of Parasites.—Mr. ROGER WILLIAMS: (1) Sarcoma of Bones of Leg; (2) Miliary Cystic Degeneration of Mucous Membrane of Bladder; (3) Sarcoma of Choroid.—Dr. SAMUEL WEST: (1) Obliteration of One Coronary Artery; (2) Aneurysm of the Heart.—Mr. ROECKEL: Necrosed Bone from External Auditory Meatus.—Mr. BRUCE CLARKE: Hernia Cerebri.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 11TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., F.R.S., President, in the Chair.

Test for Sugar in Urine.—Dr. G. OLIVER, of Harrogate, read a paper, and demonstrated the detection of sugar in urine by means of test-papers, stained in indigo-carmine and carbonate of soda.

Examples of Two Classes of Cases in which Cerebral Abscess, Meningitis, or Pyæmia, originate in Disease of the Ear.—Mr. DALBY read notes of eight cases in which suppuration within the tympanum had ended fatally. They were selected to show how, by the consideration of a large number of cases, they might be divided into two very distinct classes. In the first class were those in which a person, apparently in good health, with both tympanic membranes entire, was attacked by acute inflammation of the tympanic cavity, ending in rupture of the membrane and a discharge from the ear. Within a period to be counted by days, he or she had rigors, and in due course the usual symptoms and endings of meningitis, cerebral abscess, or pyæmia. In the second class, before any serious complications arose, perforations had existed for many years, attended either continuously or at different times by a purulent discharge; and these might again be subdivided into those in which the bone forming the tympanic cavity was diseased, and those in which it was not. The questions which were discussed in this paper were as follows. (1) Can it be predicted of any case in an early stage of its history that the probabilities are in favour of a fatal termination? (2) What are the local conditions of the ear, or the symptoms which would point to such a conclusion? (3) Should any especial precautions be taken? (4) Is there any treatment of a local kind that should be employed as a protecting influence? (5) Is there any treatment which is often employed in perforations that should be especially avoided? From a consideration of these cases, as well as of many others which had come under the notice of the writer, he maintained that certain conclusions might fairly be drawn from them; at any rate that, although the subject of any perforation of the membrane was in some degree of peril, that those in which the bone was diseased were in greater danger than those in which it was not. It was not difficult to determine whether the bone was affected; a careful examination with the probe under reflected light, exuberant granulations, and bony fœtor would decide the question. At the same time, it should be remembered that a considerable area of diseased bone in the tympanic cavity was quite compatible with long life, and this was especially the case if the patient had learned to manage the ear by scrupulous cleanliness, and by some sort of protective pad which would keep the external air from the lining membrane of the tympanum. Influences which might lead to a fatal ending were the entrance of sea-water into the ear, and the use of strong mineral astringents. Thus, in estimating the probabilities of a long life for persons with perforations, their habitual discretion formed a distinct element as to their chances, and this might well be kept in view by insurance companies. Other points for consideration were the urgent necessity of removing a polypus if it prevented the egress of discharge from the tympanum; the important bearing of head-pains, whether occurring either at the commencement of the inflammation of the middle ear, or at a later period; the importance, in recent cases, of great profusion of discharge, attended with feelings of giddiness.—Mr. HAWARD said that it was agreed that any one with a discharge from the ear was in much more danger to his life than any one who had no such discharge; and that one with such a discharge might at any time pass into a condition of much danger. All surgeons saw such cases, especially amongst children. The question, therefore, arose whether anything could be done to avert such danger; because, when symptoms of feverishness, great pain in the ear, etc., indicating progress of the disease towards the brain, arose, it was often then too late to do any good by treatment. If there were free suppuration, could one do anything to stop the discharge or aid its escape? Yes; if the bone or anything else in the external auditory meatus stopped the escape, it should be removed. And as some astringents seemed to set up serious inflammation, the only thing to be done was to see that the pus could escape freely. The tympanum might contain a large amount of foul discharge. In a case of pent-up matter occurring at any other part of the body, one would try to make a counter-opening to permit its escape; similarly, should not one make an opening into the mastoid cells, in order to syringe out the ear? This operation had been sometimes done too late, when the head was already affected. Might it not be done more often, in order to facilitate the discharge, and wash out the cavity?—Mr. JESSETT inquired if Mr. Dalby had made a *post mortem* ex-

amination in his fatal cases. Only in one case did the paper speak of pus in the pleura; whilst it mentioned abscess in the brain in others. Recently he had seen a child with discharge from the ear, whose temperature was 108.0° Fahr.; it died shortly of pyæmia, when the bone surrounding the ear was found to be much diseased, and had a pin-hole opening into the cavernous sinus, which was probably the cause of the acute pyæmia.—Dr. HALL inquired if it would not be better for insurance companies rather to refuse to take these cases with discharge from the ear, than to accept them with increased premium.—Dr. R. J. LEE inquired what insurance medical officers were to do. He had seen a child treated for typhoid fever, in whom he found tenderness over the mastoid region. He had had discharge from the ear long before. The mastoid cells of that side had then been opened, and pus let out, but death ensued in twenty-four hours. In another case, a boy had had perforation of both tympanic membranes for some months, and the discharge had quite ceased for a few days. The boy was rolling about with a temperature of 102° and 103° Fahr. The mastoid cells were then opened, and pus began to flow thence two days after the operation. From that time the patient had rapidly improved. What was one to do in such cases? Should one operate early? Under what conditions did abscess of the mastoid cells form? Could any harm come from opening them? He thought not.—Dr. MAHOMED said that of course it must be the experience of aural surgeons, that they had a large number of cases of discharge from the ears in which the person had gone on well through a long life. Some of the complicated cases came to be treated in hospital, and they were very striking. It was said that these cases were usually seen too late for treatment to be of service. He did not think so. He had seen a patient in Guy's Hospital, who had been comatose all one night, directly after entry to the hospital, apparently from meningitis. He had a swelling behind one mastoid process, which was trephined. Healthy bone at first came away; then the trephine was used again, and fœtid gas and discharge escaped directly the mastoid cells were opened. When he recovered from the chloroform, he had no sign of cerebral trouble, and no other convulsive fit, although convulsions had been constant before the operation. But his temperature kept up; he had pyæmia, and died with abscess of the lung. Pus was found below the dura mater, and he had plugging of the lateral sinus. He remembered two cases at the Fever Hospital, in which the mastoid cells were trephined, and the patients had recovered. Another patient had aural vertigo, and was treated with hydrobromic acid. A week afterwards he was desperately ill, had suppurating meningitis, and died; and, at the *post mortem* examination, there was found no sign whatever of disease of the ear or of the bones forming it.—Dr. W. R. ROGERS inquired if the treatment, formerly much employed, of leeching and blistering over the mastoid process with strong iodine, was not of service. He had treated cases of aural discharge with hygienic measures, counter-irritants, and local washes, and his cases of death had been very rare. Men with discharge from the ear had not been admitted to the Navy by first-rate physicians, and yet such patients were living twenty and more years afterwards. A lady he knew had had such discharge for more than thirty years, and was still very well.—The PRESIDENT said that all such cases were not fatal. How many were fatal? What was roughly the percentage of them that did well? What was the treatment to be adopted to avoid the peril to which they were liable? These seemed to be the chief points that the discussion had produced.—Mr. DALBY, in reply, said he certainly did not mean to insinuate that many cases of discharge from the ear were fatal. Thousands such lived to be sixty, seventy, and even eighty years old, and then died of other trouble. The fatal cases were rare. He could not tell the proportion of fatal cases. He had seen these eight fatal cases in his private practice, from 1874 to 1883; and he had seen four other cases, which, however, were not typical, so that he had excluded them from his paper. He thought perhaps one case in one thousand, or even one in two thousand or three thousand, might be about the percentage of fatal cases. As to the life-assurance question, it would be ridiculous to reject cases for aural discharge alone; but where there was diseased bone, he advised rejection. If the cavity of the tympanum were treated with care, cases with discharge might be insured; but, if the patient were careless and would not take proper care of the ear, his premium should be increased. A *post mortem* examination had been made in every case mentioned in his paper, except one; in that case, there were religious scruples on the part of the friends of the deceased; but a physician and himself were both quite sure beforehand, from the symptoms, that the patient was dying of cerebral abscess. As to opening the mastoid process, if there were pain upon pressure over the mastoid cells, it would probably be beneficial; the operation was likely to produce much benefit, as was detailed in a paper which he had published in the Royal Medical and Chirurgical Society's *Transactions*. As to leeching, he thought that, when these cerebral symptoms had come on, the time for leeching had gone by, and it was not then likely to be of much use.

A Case of Morphœa in the Region of the Fifth Nerve, with Paralysis of the Intra-ocular Branches of the Third.—Mr. NETTLESHIP read for himself and Mr. C. HIGGENS the notes of this case. The subject was a married woman, aged 35, who applied to Mr. Nettleship in November 1880 with mydriasis and partial cycloplegia of the left eye, with evidence of some dilatation of the retinal vessels and thickening of the coats of the retinal veins, and dilatation both of those vessels and the arteries. She also had single patches of ivory-white morphœa on the corresponding temple, side of the nose, and upper lip, and a similar but less characteristic change in the skin of the forehead and front of the scalp on the same side, with thinning of the hair. The eye-symptoms were of three months' duration; she had not discovered the skin-changes. She was out of health from recent parturition and old uterine troubles. There was no proof of syphilis. She used eserine, and took various drugs, including iodide of potassium and arsenic, for a year; and then went to Guy's Hospital, where, under Mr. Higgens's care, she continued the same local treatment, and took iodide of potassium and mercury. The symptoms in the left eye were unaltered, except temporarily, by the eserine drops; the healthy skin affected by the morphœa had become partially atrophic, and the hair on the affected area had nearly all fallen. Latterly there had been threatenings of an onset of the same disease on the right side of the face and in the right eye, but it was not at present declared. During the course of the case, there had been some eczema behind the ear and on the palm on the same side as the morphœa. The authors pointed out that, whilst the morphœa was strictly confined to territories supplied by the first and second divisions of the fifth nerve, the eye-symptoms pointed clearly to affection of the branches of the third to the interior of the eyeball; and they observed that, in this respect, the case might be compared with those cases of herpes of the fifth in which the third or other motor nerves were also affected.—Mr. HIGGENS said there was also a patch of morphœa over the angle of the left scapula; otherwise, the patient was now in the same condition as when Mr. Nettleship had seen and reported upon the patient.—A MEMBER inquired if there was any pronounced loss of sensation in the case. Probably there might be some diffused spinal or cerebral change occurring.—Mr. NETTLESHIP said that the patch over the scapula could not be connected with the same nerves as the patch over the eye; nor did he know of anything to suggest that there was central nervous disease.

Living Specimens.—The following specimens were exhibited. Mr. JOHN H. MORGAN: Congenital Deficiency of the Femur. Dr. S. MACKENZIE: Myxœdema in the Male. Mr. B. ROTH: Lateral Curvature of the Spine. Dr. BARLOW: Sclerema.

HARVEIAN SOCIETY.

APRIL 19TH, 1883.

E. SYMES THOMPSON, M.D., President, in the Chair.

Cases of Gastro-intestinal Catarrh simulating Typhoid Fever.—Mr. J. H. DREW read a paper on this subject. He related three well marked cases, selected from several others, occurring late last autumn, when they seemed, in his opinion, to have been epidemic. The symptoms commenced with rigors, pains in the head and abdomen, coated tongue, a tendency to sickness and diarrhœa, with a persistent rise of temperature to not higher than 102° Fahr. The evacuations were mucous; no tympanites or gurgling over the cæcum was observed, nor was there any rash or delirium. Towards the end of the second week these symptoms subsided, and convalescence was rapid, with no tendency to relapse. The only treatment adopted was rest, and a milk diet, and, during convalescence, tonics and change of air. It might be suggested that these cases were mild forms of typhoid fever; this, however, Mr. Drew doubted, for the following reasons. 1. The symptoms were developed promptly, not insidiously, the fever and prostration were not so marked as in typhoid; there was no dry brown tongue, no rash, deafness or delirium, and the stools were mucous in character. 2. The duration of the symptoms, and the period of high temperature, were much shorter than in the graver disease, and their subsidence was more sudden, the power of taking solid food being established during the third week, and unattended by any injurious results. Any means

of definitely diagnosing other fever-states from typhoid, during its early stage, would be a great relief for all persons concerned, although it might make no essential difference in the treatment.—Dr. FITZPATRICK regarded these cases as typhoid in character.—Mr. SEDGWICK agreed with Mr. Drew in his view of their nature.—Mr. CRIPPS LAWRENCE, who had attended several cases of the same nature in the autumn of last year, mentioned that an excellent account of gastro-intestinal catarrh was given by Vogel and Niemeyer. A diagnostic point of importance, he considered, was that there was no evening rise of temperature in these cases, as in typhoid fever.—Mr. RAYLEY OWEN spoke of like cases in his own experience.—Mr. LYNCH had found the salicylate of soda very efficacious.—The PRESIDENT observed, in conclusion, that there was an undoubted difficulty in diagnosing cases of this kind from typhoid fever, the boundary line between them not being distinctly marked.

Case of Hectic simulating relapse in Typhoid Fever.—This case was brought forward by the PRESIDENT. The patient, a girl, aged 8, had been ailing for some months, but, though suffering from a troublesome cough, was able to go to school up to November 15th, 1882, shortly after which she first came under the author's observation. She then presented manifest symptoms of typhoid fever, viz., intermittent diarrhœa, rose-coloured spots on the abdomen, and an evening temperature of 104° Fahr. As her sister had a short time previously had typhoid fever, and as the sanitary condition of the house in which she lived was very faulty, this appeared to be a typical case; but, contrary to expectation, there was no remission of the feverish symptoms till about the seventh week of her illness, and then the temperature did not reach the normal point, but varied between 99° and 100°. She then developed symptoms of tuberculosis; irregularity of the bowels, nausea, and vomiting, a fanciful appetite, pleuritic pains on the right side, and constant cough with but little expectoration. The author regarded the illness as tubercular disease of the lungs, supervening upon an attack of typhoid fever, in a patient already predisposed to lung-mischief. But where the one ended and the other began could not be recognised; there never was any clear line of demarcation between the feverishness of the typhoid and that of the tuberculosis.

Brain with a very largely Dilated Ventricular Cavity.—This specimen, contributed by Mr. J. ERNEST LANE, was taken from a subject in the dissecting-room of St. Mary's Hospital School. The quantity of fluid contained in this cavity was estimated at a pint. The corpus callosum and fornix were so flattened and thinned by pressure, as to be hardly recognisable; the foramen of Monro did not exist as a foramen, there being a perfectly free and wide communication between the lateral and the third ventricles; the convolutions were quite distinct, though the sulci between them were very shallow. The specimen was taken from the body of a man, age 69, who had been an inmate of the Leavesden Asylum for twelve years, suffering from dementia, being also very deaf, and dirty in his habits, but with no special symptom of interest during life.

Remarks on the Use of Respirators and Antiseptic Inhalations.—Dr. FREDERICK HICKS showed various forms of respirators, and criticised their respective merits from the point of view of the patients who had to use them, and of the nurses who had charge of them. He explained that there were two principal uses for antiseptic inhalation—viz., the disinfection of the fœtid breath of patients suffering from such conditions as basic cavities, local empyemata with fistulous opening into the bronchi, and, above all, bronchiectasis; secondly, the more important use in the therapeutics of phthisis. Ordinarily, respirators were made in two varieties: 1, to cover the mouth only; and 2, to include the nostrils as well as the mouth. Of the former kind Roberts's respirator, made of nickel-plated metal, as supplied by Maw and Thompson, was by far the most serviceable instrument from every point of view, such as handiness, cleanliness, being less of a muzzle or gag than any other (a point of importance when dyspnœa was a prominent symptom), and also because of its ready removal for expectoration. This last was really a matter of much importance, for, in many patients, especially those suffering from such conditions as were mentioned above, bronchiectasis, etc., the need for expectoration was suddenly provoked, and was with difficulty controlled, so that little time was allowed them to reach the spittoon. Of the ori-nasal respirators, the principal varieties were Cushman's, Mackenzie's, and Blake's. The last, with the air-bag to adapt it to the face, was the best; but they all failed, and the mouth-respirators also, from the fact that no respirator could be kept long in close contact with the face without causing discomfort, if not actual chafing, so that, sooner or later, the patients applied them very loosely, and then the air found an easier way to reach the mouth than by passing through the substance which contained the antiseptic. This difficulty originated the suggestion of using respirators merely as a support or holder for some volatile antiseptic substance in front of the face, so that an atmosphere charged with some antiseptic was maintained in front of the air-passages. Of this variety, the respirator of Dr. Burney Yeo was, perhaps, the simplest; the new form suggested by Cosgrave had the same idea. No doubt this was a very good method of using antiseptic inhalations; but something was still required which should be more comfortable and convenient to the wearer, and, at the same time, be simple and efficient. He thought the muzzle-form should be discarded, and, if none more convenient could be discovered, and the patient could not be placed in an altogether antiseptic atmosphere, then a hand inhaler would be of service. Such an appliance was exhibited. It was constructed entirely of glass; a piece of chemical apparatus, known technically as a "scrubber," was filled with bits of pumice charged with the antiseptic. The glass mouthpiece of a Maw's inhaler was inserted into the upper opening of the apparatus, and the air inhaled entered by the lower opening, passed over the pumice, and became strongly charged with the antiseptic. Such an arrangement was absolutely cleanly, and very simple to use; for, once charged, it did not require to be dismounted for renewal of the antiseptic. To obtain the greatest good from antiseptic inhalations, a patient must devote himself very thoroughly to the treatment. Respirators should be worn almost continuously, or for about ten minutes every hour the inhaler should be used; the sputum, an hour after the inhalation had been suspended, should smell perceptibly of the antiseptic; at the same time, care must be taken to avoid causing dyspepsia; carbolic acid poisoning might also be induced. The author had observed no very marked results from the use of antiseptic inhalations, but all patients testified to their use in allaying cough. This effect might be due to merely a sedative action, but also the more probable explanation was that the antiseptic caused diminution of the irritating qualities of the sputum. If this were so, then antiseptic inhalations were rendering a real service in therapeutics. The following antiseptics were mentioned—phenol, creasote, or the two combined; oil of eucalyptus globulus alone, or in admixture with chloroform, iodine, or essential oil of almonds; thymol in spirituous solution; iodoform; and oleum pini silvestris. Sponge was often used as a carrier of the antiseptic, but it soon became foul, and was much to be condemned. Tow was the only serviceable carrier, and a fresh pledget should be employed every day.—The PRESIDENT confirmed Dr. Hicks's remarks as to the impracticability of continuously wearing a respirator, and mentioned that physicians at Davos had discarded them, and caused their patients to remain for a certain time in an atmosphere rendered antiseptic. Recent observations had taught that it was impossible for air to penetrate as far as the bacilli, which lay in the centre of the tuberculous area.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, MAY 2ND, 1883.

GEORGE BUCHANAN, M.D., F.R.S., President, in the Chair.

The Causes of the Excessive Mortality among the Women and Children of the European Soldiers serving in India.—Dr. JOSEPH EWART, of Brighton, discussed this subject in a paper divided into two sections. The first embraced considerations relating to the high mortality among women; the second, the still greater mortality among children; and, in both cases, the hygienic and sanitary measures required to effect a material reduction of the existing death-rates were indicated. The average death-rate among the women of the European forces in India, during the ten years ending 1880, amounted to 24.527 per 1,000, ranging from 20.83 in 1876 to 36.54 in 1872; in Bengal, from 18.16 in 1877 to 46.12 in 1872; in Madras, from 14.72 in 1872 to 26.95 in 1878; and in Bombay, from 14.6 in 1874 to 33.41 in 1872. By the kind assistance of Surgeon-General Marston, the author had been enabled to give, side by side, the death-rate of the women belonging to the European troops in the United Kingdom and in India during a period of four years. It was:

In 1877, 22.50	in India,	8.59	in United Kingdom.	
„ 1878, 29.20	„	8.65	„	„
„ 1879, 25.00	„	7.75	„	„
„ 1880, 21.05	„	8.37	„	„

More than half of the average mortality of the decennial period, or about 12.667 per 1,000, was caused by a few diseases peculiar to hot climates. Intermittent fever accounted for 0.103 deaths; remittent and continued fever, for 3.038; dysentery, 2.143; diarrhœa, 1.442; cholera, 3.467; splenitis, 0.0017; hepatitis, 1.424; atrophy and

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anæmia, 1.029, per 1,000 of strength. In the year 1880, out of a death-rate of 21.05 per 1,000, 8.70 were accounted for by these eight diseases; while the balance of 12.35 were ascribed to the following maladies or classes of disease: 0.24 to small-pox, 2.66 to phthisis, 0.73 to apoplexy and sunstroke, 1.21 to heart-disease, 0.25 to syncope, 1.45 to chest-diseases, 3.39 to diseases peculiar to women; 0.24 to abscess, and 1.94 were not specified. From the moment the soldier's wife set foot on Indian soil—sometimes before, during the passage out through the Canal, the Red Sea, or Indian Ocean—she was liable to be confronted with influences inimical to the preservation of a high standard of health. As she was now landed at the ports of disembarcation in the winter season, she had not at first to contend against the greatest of all her enemies—malaria. But even at this period she might be exposed to the substantial dangers arising from the direct action of the sun, and have to learn, after painful and bitter experience, that the head must be protected by efficient head-gear and an umbrella covered with cotton cloth. In the closely approaching hot weather, the succeeding rains, and the drying-up season, between the cessation of the monsoon and the commencement of the winter, when most parts of the plains were steeped in malaria, some much more than others—most of all, perhaps, the border-lands of marshes, jheels, and the terai—she was too frequently unmindful of the necessary precautions, and she would be fortunate if she escaped an attack of ague or some other ailment, it might be febricula, or what was termed seasoning fever, dysentery, or diarrhœa, during her first year of residence. During the decennium 1871 to 1880, both years inclusive, the admissions of sick women to hospital exceeded the strength by 1,593 cases; but, as it was not always needful for these women to go on the sick-list for every illness that would be deemed sufficient to disqualify their soldier-husbands for military duty, a certain number of sick women—not definable with precision—might be left in their own quarters without being officially reported, and did not, therefore, find a place in the returns. It appeared, however, that, out of a strength of 58,260 women of the European Army of India, 39,853 had to be treated for illness, of which 38,294 admissions were due to the eight principal diseases previously cited, whilst a considerable proportion of the remainder was the result of the direct or indirect operation of malaria. Unlike the contagious and exanthematous fevers, a prior attack of the various types of malarious fever conferred not only no immunity from subsequent seizures; but there was reason to believe that each paroxysm—especially if the individual were still resident in districts where the cause abounded and was endemic—would seem to render the liability to future ones greater and greater. Whether in its comparatively stormless action, gradually, sometimes imperceptibly, resulting in characteristic deterioration of the general health without ever developing into paroxysms of fever, or in the tempest of ague, or remittent—sometimes moderately severe, at other times so pernicious as, in its subjective phenomena, to be indistinguishable from typhus—this thing or condition which, for want of a better term, was still called malaria, exercised a deleterious effect mainly upon the vaso-motor nervous system. Hence arose the disorders of digestion and assimulation, visceral congestions and enlargements, altered constitution of the blood—anæmia, simple and pernicious, pigmentation of the skin and internal organs, weakening of the circulatory and muscular systems, and many other states of impaired health grouped in the returns under the headings "general debility" or "atrophy and anæmia," and accounting for 13,404 cases during the decennium. To the dangers of a tropical sun, excessive heat and malaria, must be added imperfect house-accommodation; bad water, except in the stations of Calcutta, Madras, and Bombay; vegetable and animal food of inferior quality; difficulty of obtaining adequate open-air exercise, owing to the exhausting heat of the climate, the short cold season being excepted; inability to secure the cooling influence of an evenly worked punkah in the hot weather; liability to chill from the general disuse of light flannel next the skin; and child-bearing, with a host of diseases peculiar to women, causing alone 3.39 per 1,000 of the death-rate. During the ten years ending 1880, the death-rate among the children of the European army of India amounted to 67.864 per 1,000. The excess of mortality due to climatic causes was shown in the following figures. Thus, the death-rate among soldiers' children was

In 1877,	50.33 in India,	24.08 in the United Kingdom.	
„ 1878,	79.73 „	28.41 „	„
„ 1879,	77.06 „	26.86 „	„
„ 1880,	60.43 „	30.28 „	„

Of the decennial average mortality, 29.726 per 1,000 of strength was caused by the eight principal diseases already referred to, leaving a still larger balance of 38.838 from other maladies, of which 24.228 resulted from tubercular disease, heat-apoplexy, meningitis, and hydrocephalus, convulsions, and dentition. According to age, there died per 1,000 of strength

	1877.	1878.	1879.	1880.
Under 6 months	224.65	295.39	319.63	290.73
Between 6 „ and 1 year	158.73	218.75	216.98	210.31
„ 12 „ „ 18 mos.	137.45	210.00	214.16	181.16
„ 18 „ „ 2 yrs.	55.87	141.59	103.26	94.66
„ 2 years „ 3 „	45.63	71.58	118.75	55.72
„ 3 „ „ 4 „	18.34	39.34	36.27	51.45
„ 4 „ „ 5 „	16.72	23.28	40.71	32.47
„ 0 „ „ 5 „	87.49	135.10	138.03	116.68
„ 5 „ „ 10 „	10.06	12.08	16.72	11.37
„ 10 „ „ 15 „	6.41	8.05	9.74	6.29

Most of this vast mortality was ascribed to malaria, heat, unhealthy parents transmitting enfeebled constitutions to their children, insanitary surroundings, errors in natural and artificial feeding, etc. To enable the soldier's wife to realise the importance of pure air, pure water, wholesome food, good cookery, plenty of house-room, free ventilation, daily exercise and bathing, avoiding undue exposure to the sun, efficient clothing, a perfect system of hygiene and conservancy in the preservation of her own health and that of her offspring, she should be provided with a sanitary primer, written in plain language, setting forth, very briefly and concisely, all the simple truths necessary for her to know. Such a work, intelligible to the commonest understanding, if mastered and acted upon, and supplemented wherever and whenever practicable by lectures, would go some way to improving the health and lessening the waste of life among the women and children of the European army of India.—In the discussion which followed, the President, Drs. Chevers, Murray, Scriven, Lawson and Bovill, and Mr. Long took part. Some comments by Dr. De Renzy on the subject were also read.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MAY 10TH, 1883.

WM. BOWMAN, F.R.C.S., F.R.S., President, in the Chair.

THE PRESIDENT said that he wished to remind the members of the Society that the next meeting, on June 7th, would be a special meeting for the discussion of the subject which had been before announced—namely, the Relation of Eye-Disease to Disease of the Spinal Cord. The "memoranda" drawn up by Dr. Gowers, as a guide to members who might wish to make communications, had already appeared in the BRITISH MEDICAL JOURNAL (for March 24th, 1883, p. 591), and a copy of them would be sent to every member in the kingdom before the meeting.

Remarks on the Immediate Causation of Optic Neuritis in Cases of Intracranial Disease.—Dr. WALTER EDMUNDS and Mr. J. B. LAWFORD made a communication which was based on the examination of the optic nerves in eighteen cases—namely, eight of head-injuries, two of tubercular meningitis, two of tumours of the dura mater at the base of the brain, two of cerebellar tumour, and two of cerebral tumour. The cases occurred consecutively at St. Thomas's Hospital. The examination of the optic nerves showed inflammation when they were affected at all, often more intense at the peripheral part and in the meninges of the nerves. The authors inferred from this, that the inflammation was communicated to the nerve from its meninges, down which it extended from the meninges at the base of the brain. This view was further supported by an analysis of the cases. The alternative theory of a descending cerebritis was criticised, and considered to be less well founded. Microscopic sections and drawings were exhibited.—The PRESIDENT observed that the paper contained a careful analysis of a valuable array of facts.—In reply to a question, Dr. EDMUNDS said that there was distinct evidence that the inflammation commenced on the surface of the optic nerve, and extended towards the centre.—Dr. BRAILEY believed that the theory put forward by the writers of the paper was well founded; the only fact that appeared to be inconsistent with it was the extreme œdema of the disc, which occurred with such slight trace of inflammation in the nerve. He considered, however, that this was an inflammatory œdema. In the trunk of the nerve, the pressure of the sheath prevented any marked swelling or œdema; but in the papilla this pressure was vastly diminished.

Cases of Recovery from Mild Sympathetic Ophthalmitis.—Mr. JENNINGS MILLES read notes of five cases, the clinical characters of which were very similar. In each of the cases, there was a wound of the cornea, in conjunction with a wound of the ciliary region, or entanglement of the iris. The attack of sympathetic inflammation

was of a very mild type, consisting of iritis serosa, without any posterior synechiæ. There was very slight ciliary congestion, and no pain. In every case, the sympathising eye made a rapid and uninterrupted recovery. In three cases, the exciting eye was enucleated directly symptoms of sympathetic inflammation began. In one, excision was performed for traumatic cataract following a secondary operation, twelve months after all sympathetic symptoms had disappeared. In one, excision was performed twenty-two days before sympathetic inflammation appeared; this case was also remarkable from the fact, that the exciting cause of the disease was an extraction of cataract, which had been performed fifteen days before the excision. Mr. Milles showed some micro-photographs, illustrating the conditions of irido-cyclitis and neuro-retinitis found in the excised eyes. He stated that he was indebted to Mr. Watson Cheyne for being able to exhibit them. On the question of treatment, the cases were opposed to the dictum of Mauthner, that "one dare not excise in serous iritis;" but they clearly proved that excision did no harm. On the other hand, they did not support the view that excision had any power to modify or arrest the progress of sympathetic ophthalmitis, when once started. Stress was laid on the great importance of the constant use of atropine, and the removal of all sources of irritation, chiefly by the rigid exclusion of light, and by keeping the patient in a dark room, with a bandage over the eyes.—Mr. POWER said that, at St. Bartholomew's Hospital, Chatham, he had seen a large number of cases of wounds of the eye, of every severity, among the workmen at the dockyard. When the wound was very extensive, and the eye so seriously injured that it could hardly again become useful, there could be no question but that immediate excision was the proper treatment. It was in the cases of smaller wounds, of punctured wounds with protrusion of the iris, that any question of treatment arose. He considered that the best practice was to do a large iridectomy with a keratome; by this means the impacted portion of the iris could be, as a rule, thoroughly removed, and there was no fear of subsequent straining of the iris. After this operation, both eyes ought to be bandaged, and the patient kept in a dark room for two or three weeks. In cases where the lens was damaged, there was much further danger; and, if the lens became cataractous, it would probably be necessary to excise the eye.—Mr. COUPER observed that Mr. Milles's cases proved that sympathetic ophthalmitis might sometimes be mild; indeed, in one of the cases, the inflammation was so mild that it was a question whether it should be called sympathetic ophthalmitis at all. But the cases threw no light on the all important point, namely, whether there were any signs which could with certainty show whether any given mild attack would continue mild, or suddenly become severe and destroy the eye.—Mr. ADAMS FROST related the case of a girl aged 10, who had received a punctured wound of the cornea, close to the sclero-corneal junction; the lens was also injured. At the end of seven weeks, the lens was beginning to be absorbed, and the iris was adherent; at the end of eight and a half weeks, she had an attack of sympathetic ophthalmitis, with papillitis; by the twentieth week, vision was quite normal, and the only remains of the sympathetic ophthalmitis was the papillitis. Atropine, which had up to this time been constantly used, was now discontinued; and, ten weeks later, the patient, who had in the interval suffered no pain, came back with the iris everywhere toughly adherent; atropine was now useless. The cases showed the importance of keeping up the effect of atropine for a long time after the apparent subsidence of sympathetic ophthalmitis.—The PRESIDENT said that he fully agreed that the exclusion of light, and the continual use of atropine, so long as it did not cause irritation of the surface, were the important elements in the treatment. He recalled one remarkable case in a child who was brought to him a few days after the onset of sympathetic ophthalmia. The other eye had been rendered useless by the injury, and was immediately excised. The inflamed eye was tense, the iris was adherent and bulging, and there was keratitis punctata; after the excision, the tension immediately became normal; after many weeks of serious iritis, the eye quieted down, but there was complete posterior synechia, with bulging of the iris. The case was so marked that he made a drawing of it. The treatment by atropine and a dark room was persevered in; and when he saw the child at the end of a year after the accident, the eye was absolutely free from disease, and showed no trace of the extensive synechiæ which he had so carefully drawn some months earlier. The case had made a great impression on his mind, and was altogether most encouraging. He quite agreed with Mr. Power that it was desirable to excise the iris early, when it was impacted. An iridectomy embracing the whole of the incarcerated portion of the iris, and considerably beyond, so as to include all that was in relation with the site of the injury, ought to be done. If this could not be completely done, it was proper to detach the incarcerated portion of iris from the remainder, so as to prevent straining and dragging.

A New Registering Perimeter.—Mr. PRIESTLEY SMITH exhibited an improved form of the perimeter described by him a few months ago in the *Ophthalmic Review*. In the original instrument, the sight-object traversed the visual field in concentric circles. This method, though advantageous in certain cases—namely, wherever the limiting line of the field runs in a meridional direction—was not universally applicable. With the instrument as now constructed, the field would be traversed either in meridians or in circles; it was thus more efficient, as well as being simpler in construction. The axis which carried the quadrant had fixed to its posterior extremity a wooden disc or hand-wheel, balanced so that the quadrant would stand in any position without fixing. The chart was placed upon the posterior surface of the hand-wheel, and rotated with it. Behind the chart was a bracket carrying a horizontal fixed scale, the divisions of which correspond with the circles on the chart; and when the instrument was rotated, whatever position the quadrant assumed, the corresponding meridian of the chart stood against this scale. In consequence of this automatic movement of the chart, the readings obtained on the quadrant were very easily pricked off upon it by a steel pencil held in the hand of the operator. The advantages of the arrangement were, that the chart was visible to the operator throughout, and indicated by its own position the exact position of the quadrant. Thus any particular part of the field could be at once brought under examination by bringing that point on the chart round to the scale, and re-examination could be made of any point at any time by placing the original chart in the instrument. The perfected instrument was in the hands of Messrs. Pickard and Curry.

Peculiar Changes at the Yellow Spot.—Mr. J. E. ADAMS showed drawings of a peculiar appearance at the yellow spot. The patient was a woman. The affected area was slightly raised in each eye; the nature of the patch was uncertain, very probably it was a physiological peculiarity.

A New Refraction Ophthalmoscope.—Mr. COUPER exhibited an ophthalmoscope, about a foot long, over an inch broad, and containing 74 lenses, which he found very convenient in estimating refraction. The construction of the instrument, which was very ingenious, cannot conveniently be described without a diagram.

Asthenopia.—Dr. BRAILEY made the following communications. 1. The case of a delicate child aged 7, in whom asthenopic symptoms were immediately and perfectly relieved by the use of a 4° prism, base in, divided between the two eyes. Both internal and external recti were absolutely weak, the latter apparently even more so than the former. There was no hypermetropia. 2. A case in which a prism, placed vertically, relieved symptoms of asthenopia. Correction by sphericals and cylinders gave partial relief, which was rendered complete by the addition of a prism of 3°, placed before the left eye with the apex down. The case was very like one reported to the Society by the author in 1881.

Pseudo-glioma.—Dr. BRAILEY also read notes of a case illustrating the development of the condition known as pseudo-glioma. The disease began with an acute febrile attack, with swelling and redness of the lid, and proptosis and injection of the globe. Afterwards the eye became slightly shrunken; the iris-periphery was retracted; and a whitish reflex was visible from behind the clear lens. Dr. Brailey judged the case to be one of spontaneous suppurative hyalitis.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, APRIL 6TH, 1883.

JAMES HOUGH, F.R.C.S., Vice-President, in the Chair.

The late Dr. Bacon.—The VICE-PRESIDENT proposed, and Dr. LATHAM seconded, a vote of condolence with the family and friends of the late Dr. Bacon. This was carried unanimously.

Treasurer.—Mr. LAURENCE HUMPHRY was elected honorary treasurer and joint secretary.

Case of Chronic Empyema Treated by Drainage.—Dr. W. A. SMITH, of Newport, showed a case of chronic empyema treated by free incision and drainage. The patient, a man aged 52, of good family history, and who had been a soldier in the Crimea, had enjoyed good health, with the exception of having contracted syphilis when a young man, until harvest-time of 1880, when he was attacked with pleurisy of the right side. For a year before coming under observation he was bedridden, and six months after the commencement

of his illness, two fistulæ formed in the sixth and seventh right intercostal spaces, and just outside the vertical nipple line. When first seen he was suffering from hectic, and œdema of both legs, and was greatly emaciated. He was removed to the hospital at Saffron Walden, in September, 1881, and two free incisions were made in the site of the natural openings, and a large quantity of very fœtid pus evacuated. A long drainage-tube was inserted, and the cavity washed out daily with a weak solution of carbolic acid. For nearly twelve months the same treatment was continued, and the patient steadily improved in health. On removing the tube, he was one day unable to replace it, and the wound soon healed. From this closure he had never suffered, and he was now, six months after, able to enjoy life, although he could not do a hard day's work. There was now very considerable collapse of the right wall of the thorax, and depression of the shoulder; the percussion-note in front was fairly good down to the lower border of the fifth rib; there was very fair vesicular breathing, though with prolonged expiration and scattered crepitation. The percussion-note over the right side of the back was much impaired; the respiratory murmur was weak but vesicular. The heart was drawn considerably to the right of the usual position. His present, and on the whole, favourable condition was exceptional, considering his age, the length of time which elapsed before he came under active treatment, and the amount and character of the pus before a free opening was made. That the latter had healed without giving rise to a renewal of his symptoms was probably owing to the exceptionally elastic condition of his chest-wall, allowing it to fall in upon the contracted lung.—Dr. LATHAM, Mr. BALDING, Mr. LUCAS, and Mr. ROPER, entered into a discussion on Dr. Smith's paper.

Paralysis of the Extremities following Sore-Throat.—Dr. INGLE gave particulars of the following case. W. F., aged 54, an artist, of intemperate habits, was very depressed and ill on January 5th, complaining of some stiffness in his back and limbs, with numbness of the left arm and hand; the right arm he could move freely. His throat had been sore for a few days, and he had had irregular chills and feverishness; he had been to business that morning, though when he got up he felt as if his legs did not belong to him. On the 6th, his condition was more serious; the right arm was numb, and there was loss of power in both hands and legs. Sensation was perfect everywhere. The urine was scanty, 1035, no albumen. The pulse was irregular and compressible. There was no loss of power over the rectum or bladder. Shooting pains from the spine into the limbs and trunk were complained of. He was seen in consultation with Dr. Latham the following day, when his symptoms were graver still; his breathing had become short and difficult, owing probably to implication of the intercostal muscles and diaphragm. He was ordered iodide of potassium and bicarbonate of potash. On the 8th, there was complete paralysis of the arms and legs, and partially of the left side of the face. He had painful spasms in the back, and involuntary starting. He retained full power over the rectum and bladder. He remained in much the same condition until the 13th, when he had some return of power in the hand, and was able to draw up the right leg in the bed. He continued to improve, and ultimately recovered completely. From the previous history, it appeared that, about ten days before the paralytic symptoms commenced, the patient received a letter from a brother in the North, on opening which he was very conscious of an unpleasant and peculiar odour, which fact was also observed by his housekeeper. The letter contained the information that three of the writer's children were then ill of diphtheria. In the evening of the same day, Mr. F. had a rigor, felt his throat sore, and was very prostrated, continuing more or less ill to the time when he first came under observation. Dr. Ingle inclined to the view that the paralysis was most likely due to some diphtheritic poison; for about that time an epidemic of sore-throats, principally of a follicular type, was prevalent. He raised the question as to whether it was possible for the diphtheritic poison to be conveyed by means of a letter.—Dr. LATHAM thought the nature of the paralysis in this case admitted of some doubt, whether it were postdiphtheritic, or whether it might have been due to some temporary lesion high up in the spinal cord or medulla. He alluded to the value of nux vomica in the treatment of postdiphtheritic paralysis. —Mr. WHERRY related two cases under his care, where the first symptom was paralysis of the ciliary muscle, not uncommonly the earliest to be affected. He pointed out that there was often no relation between the severity of the throat-affection and the paralytic complication.

Unusual Tumour of the Breast.—Mr. SHEILD showed a specimen of malignant tumour removed from the breast of a girl, aged 14, by Professor Humphry. The history could not be obtained, but it was probably of rapid formation. Under the microscope, it showed the characteristics of spindle-celled sarcoma. Such tumours were very rare at that age, and, from their soft brain-like consistence, might give one the idea of a collection of fluid; rapid recurrence was to be expected. The wound was kept open and made to heal by granulation, in the hope that suppuration might get rid of any sarcomatous cells that might remain about the base of the tumour.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 20TH, 1883.

J. W. TRIPE, M.D., President, in the Chair.

Tenement Dwellings.—Mr. WYNTER BLYTH, Medical Officer of Health for Marylebone, read a paper, in which he stated that the conditions under which the working population of our large cities, and especially London, existed, could scarcely be called natural. The lot of a respectable working man was a hard one. If he had a family, unless his wages exceeded the average, he could scarcely afford to live in two rooms, and must be satisfied with one. He had to work from early until late; his life was cheerless, his amusements few. However hard, however cheerless the life might be of the artisan who was, or would be, accepted in model dwellings, or as the tenant of a properly conducted tenement-house, it was not this class which gave health-officers trouble or anxiety, but a class for which no Artisans' Dwellings Act yet passed, or any Act contemplated, appeared to provide. This class, if their form, their mental state, or their habits were regarded, would be found to be degraded and brutalised. Scientific opinion considered that, in the onward march of the human race, there were some retrogressions. In some rare cases, the backward movement was extreme; as, for example, in certain microcephali, the so-called ape-men, beings of feeble intellect, Simian in their form, in their hairiness, in the constant moisture of their mouths, in their autumnal restlessness, and in their general habits, and between this extreme form of human degradation and civilised man there was every step; so that the wild man of the woods, in all mental characteristics, was born and bred in great cities. The microcephali were shut up in asylums; retrogressive man, with mind enough to pick and steal, but not mind enough to get an honest living, filled the slums and tenements of cities. Cities had not a monopoly of producing these forms. A remarkable instance in the country of a family relapsing into quite a savage mode of life was quoted from the author's personal observation. If this view were correct, there must and would always be produced a number of degraded forms, deficient in intellect, relapses to the wild man, possessing all the love for strong drink, all the moral obliquity, all the cunning, and, in certain cases, all the ferocity of savages. Sanitary regulations would educate such people to be clean and tidy, but only to a certain point. The Legislature had done little for this class, save providing them with prisons, and the prisons were full of them. It was a great mistake to imagine that, by any laws whatever, the whole people could be raised out of the mire, for hereditary predispositions could not be altered. The effect of demolishing rookeries was mostly to shift them from place to place. The high death-rate of the worst tenements, something like forty per cent., was not at all dependent upon their sanitary conditions, but natural to such ill-developed and imperfect forms. After stating the advantages and disadvantages of model dwellings, the author concluded that, at present, it was most important to improve, modify, and alter existing tenement-houses, and to prevent private houses from being converted into tenements unless their owners were willing to properly adapt them. The sanitary authority should have the most ample power to cause the most extensive alterations of any house let out in tenements, such, for example, in any particular case where it seemed desirable of insisting upon an external staircase; to see that, whether by fireproof staircases or otherwise, a tenement-house was in some degree secured against risk to human life from fire, the manner in which recently poor people had been roasted alive in their tenements from absence of these precautions being terrible and disgraceful. Upon a representation to the sanitary authority, by the medical officer of health, that a certain house in a certain street was occupied by the lowest class of lodgers, it should then be the duty of the authority to cause each house to be registered, and to fix the number of people who were to sleep in each room, and also to insist upon a responsible person being in charge of the houses, and, generally, to make regulations in them for scavenging and cleaning more or less frequently, according to the population they had to deal with, and, in short, to draw up a code of rules in the spirit of the model by-laws settled by the Local

Government Board, as applied to houses let in lodgings. The author did not approve of powers of entry being given to any officer at all times, either night or day; but, if there were suspicion of overcrowding or illegal acts, it ought to be possible to get a magistrate's order to enter even at night. The question of the passages being used as night-refuges should be a matter for the police; and they should have power to enter the passages, provided the door were left unlatched, and expel or arrest trespassers.—In the discussion which followed, the President, Dr. Corner, Mr. Lovett, Mr. Bailey, Dr. Edmunds, Dr. Corfield, and Mr. Shirley Murphy, took part.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, APRIL 20TH, 1883.

WILLIAM MOORE, M.D., President, in the Chair.

Specimen.—Dr. M'SWINEY showed a specimen of thoracic aneurysm.

The Therapeutic Value of Nerve-Stretching.—Mr. STOKES read a paper on the therapeutic value of nerve-stretching in tabes dorsalis. He commenced by pointing out that the evidence afforded by the cases of tabes dorsalis treated by nerve-stretching, indicated the fact that relief for some of the most distressing symptoms of that disease might, if the operation be performed sufficiently early, be anticipated. He considered that the absence of a physiological explanation as to how the operation acted was no reason for its rejection, and gave instances of other operative procedure of which the *modus operandi* was as yet unexplained. The particulars of two well marked examples of the disease treated by him—in one of which he stretched the sciatic nerve on one side, and in the other on both sides—were then given. Although the operations were not followed by any signal improvement in motor power, the results in other respects, as regards relief from lightning-pains, vesical irritability, and return of sensibility in certain regions of anæsthesia, were satisfactory and encouraging. The views of various writers on the effects of stretching on the nerves were discussed, and those of Ceccherelli shown to be at variance with the results obtained in the author's cases, and also with the experience of Dr. Brown-Séquard. Mr. Stokes also discussed the importance of estimating accurately the amount of force that should be used, and was of opinion that a very moderate amount was sufficient to obtain the desired therapeutic results. He also stated his belief that many of the recorded failures of the operation were to be attributed to the employment by the surgeon of an undue amount of force. He advocated the use of an electric cord and dynamometer in nerve-stretching, and believed that in the case of the larger nerves a force of about ten pounds would be found sufficient. Although a satisfactory physiological explanation as to how nerve-stretching produced the results observed was still to be obtained, we were not wholly in the dark. He quoted Dr. Brown-Séquard and Dr. Charlton Bastian, to show that after the operation a certain amount of vaso-paralysis was produced, resulting in vascularity and increased temperature of the part, and that the improvement which occasionally followed the operation was probably connected with these phenomena.—The PRESIDENT did not see why nerve-stretching should be passed over merely because the *rationale* of the treatment was not understood. He thought the procedure would apply to nervous functional affections, such as sciatica.—Dr. DUFFEY said there was no doubt the operation gave a certain amount of relief to some of the distressing symptoms of the disease. Ceccherelli, in giving an analysis of one hundred cases of nerve-stretching for various conditions, had described certain pathological changes when the operation had been followed by extravasations or degenerative changes affecting the vessels of the nerves, which, he presumed, tended to diminish the sense of conductivity of the nerve. The amount of traction was so great as to affect the spinal cord directly. Some observers believed in certain changes having taken place in the cord itself. In favour of this view, nerve-stretching on one side of the body might relieve symptoms referable to both sides.—Dr. C. J. NIXON considered that the operation of nerve-stretching in this disease should only be used in desperate cases, after all other means of giving relief had failed. He thought it a very doubtful point what amount of traction could safely be made on the cord.—Dr. FINNY asked what was the right time at which the operation should be performed. He referred to the frontal nerve having been stretched in cases of facial neuralgia.—Dr. H. KENNEDY thought that slightly pinching the nerve, and thus conveying irritation that could not injure its substance, might have a beneficial effect.—Dr. CORLEY considered the operation a most serious one to perform, and one to be approached with the utmost carefulness. In some cases of stretching the sciatic nerve, the cord, answering mechanically to the stretch, would be moved as far as the cervical vertebræ. In the case of sciatica in which he applied it, the nerve was affected with neuritis. The next day severe symptoms arose, indicating that, although the force used was not great, it had effected serious changes in the cord. These symptoms disappeared after forty-eight hours. Two months had now elapsed since the operation, with complete absence of sciatic pain.—Mr. STOKES, in reply, said that in Ceccherelli's cases undue violence must have been used. He could not lay down any rule as to the time at which the operation should be performed, but, probably, the earlier the better.

Thoracic Aneurysm.—Dr. MACSWINEY read the notes of a fatal case of thoracic aneurysm occurring in a sailor, who had worked at his employment up to within one month of his death. The aneurysm was not diagnosed during life, as there were no signs or symptoms present specially characteristic of the disease. The man was supposed to have got cold from exposure during bad weather. He had cough, bronchial *râles*, and pain in the region of the heart. Physical examination threw no light on the nature of the case. The patient expectorated nine or ten ounces of bright red blood, and died in a few hours afterwards. At the necropsy, twenty hours after death, the aneurysm was found to spring from the posterior and outer aspect of the descending portion of the arch of the aorta; it projected into the upper and inner part of the left division of the thorax, a portion extending across the vertebral column, eroding the bodies of the third, fourth, fifth, and the upper part of the sixth dorsal vertebræ, and lying in the upper and inner portion of the right division of the thorax. The third and fourth ribs on the left side had been eroded, and the tumour had passed backwards between them a short distance. The entrance into the aneurysm was circular, and about as large as a sixpence; and, a quarter of an inch below it, a little pouch was formed in the site of the origins of the first pair of intercostal arteries. This was evidently the beginning of a second aneurysm, the aorta being in this position very much diseased. The arch and thoracic portion of the aorta were atheromatous, as were all the valves of the heart in varying degrees. The bronchi and œsophagus did not show any signs of pressure. The thoracic duct could not be found, but large lymphatic vessels connected with glands lying at the sides of the dorsal vertebræ were to be seen. The sac was filled with laminated fibrine, and was covered with a quantity of tough matted tissue. The aneurysm was, therefore, diffused. The recurrent laryngeal nerve was not to be found in the specimen. A few fibrous strings were to be seen at the upper portion of the pericardium, but there were no signs of pericarditis on any other portion of the pericardium. The lower lobe of the left lung at its superior posterior part had become adherent to the aneurysm, which had here burst into it. There was a cavity in the central portion of the external part of the lobe which was covered only by pleura. The costal pleura was thickened on both sides, and, on that portion nearest the tumour, the deposited lymph had undergone fatty degeneration.—The PRESIDENT could not agree that symptoms were quite absent.—Dr. FINNY drew attention to the absence of hypertrophy of the left ventricle, notwithstanding the size of the aneurysm, which confirmed Stokes's observation on this point.—Dr. C. J. NIXON related a similar case of fatal aneurysm, in which the only symptoms present during life were those of severe bronchitis.—Dr. HENRY KENNEDY made some remarks on the case.

IS CRANIOTOMY JUSTIFIABLE?—From an analytical study of the subject, Dr. Montgomery (*Philadelphia Medical Times*, March 10th, 1882) is inclined to answer the above question in the negative. He terminates his studies by stating the following proposition. Craniotomy is unjustifiable, as it considers only the life of the mother, and destroys that of the child, while it is our duty to endeavour to save both. In pelves with a conjugate diameter greater than two and a half inches we have other alternatives equally safe for the mother, which afford the child a chance for life. These alternatives suggest, in the following order, where the conjugate measures 3.25 inches or over, the forceps; 2.75 inches or over, version; 2.375 inches or over, symphyseotomy, followed if necessary by the forceps. In all subsequent pregnancies, and in the first when distortion is discovered sufficiently early, premature labour should be induced. In pelves measuring less than two and a half inches, Cæsarean section affords better results for the mother, and should be done whether the child be living or dead. In a limited number of cases (where the os is dilated) laparo-elytrotomy may be preferred to Cæsarean section. In all cases requiring it, operative interference should be early. The obstetrician should control events, not be controlled by them.

REVIEWS AND NOTICES.

SAINT BARTHOLOMEW'S HOSPITAL REPORTS. Edited by W. S. CHURCH, M.D., and JOHN LANGTON, F.R.C.S., vol. xviii. London: Smith, Elder, and Co.

THE new volume of the *Reports* of the great city hospital and medical school includes twenty-six papers, besides the proceedings of the local students' society, the list of specimens recently added to the museum, and the statistical tables for 1881 issued by the registrars. It is highly satisfactory to note that a very large majority of the papers are written by members of the permanent or temporary staff of St. Bartholomew's Hospital, a proof that the boundless resources of that institution are not neglected by those whose duty it is to develop them.

The first paper, "On Fitful or Recurrent Vomiting," by Dr. Gee, is faulty in its title only. It should have been named "Cases of Fitful or Recurrent Vomiting in Children," for "On" leads the reader to expect some comments on the nine clinical reports which constitute the entire article, and none of the patients were over nine years of age. The cases are of considerable interest, having, of course, been carefully selected by the experienced author of this paper, and in none did any of the organic diseases known to produce vomiting exist. Dr. Legg contributes a "Note on the History of Exophthalmic Goître." This note shows that Stokes has already done justice to the first physician who recognised a disease, of which the symptoms were palpitations, enlarged thyroid gland, and prominence of the eyeballs, namely Dr. Parry of Bath, who attended a case of this kind in 1786. An anonymous writer described a second case in the *Medico-Chirurgical Journal and Review* in 1816. Dr. Legg has succeeded in finding Dr. Graves's earliest published observations on exophthalmic goître. They are to be found in the *London Medical and Surgical Journal*, vol. vii, May 23rd, 1835, Lecture XII. Two rival journals, under the same name, were then in existence, one issued by the original editor, Ryan, and preserved in the libraries of the College of Surgeons of England, and of the Royal Medical and Chirurgical Society. Graves's first notice of the complaint in question is not to be found in this series, but in that which was concurrently published by Renshaw. Von Basedow's first paper appeared in 1840. He laid most stress on the prominence of the eyes, Graves looking on the enlargement of the thyroid as the more important symptom. But Sir Henry Marsh had called attention to the importance of the exophthalmos in the same year that witnessed the publication of Von Basedow's paper. Hence it is to Dublin and not to Germany that the merit of first recognising the existence of exophthalmic goître must be awarded. Mr. Walsham contributes an interesting report on cases of deviation of the nasal septum remedied by forcible straightening, sometimes combined with stellar division of the septal cartilage. Mr. Marsh, in a paper on "Orthopædic Surgery," expresses his preference for the poroplastic felt, and his objections to the plaster-of-Paris jacket. Dr. Ormerod furnishes some valuable statistics of one hundred cases of phthisis in which the larynx was examined; and Mr. W. H. Cripps also contributes a series of tables comprising the details of one hundred cases of imperforate rectum and anus in infants, giving the nature of the deformity, the operation, and the result. Work of this kind is invaluable for reference. Mr. Butlin supplies some interesting details of his work in the department for diseases of the larynx, including a case of removal of a papilloma of the trachea through a tracheotomy incision. Dr. D. A. King records, in an analytical and statistical manner, his experience of the typhoid epidemic of 1881-2. His observations are based on seventy cases that occurred in the hospital.

One of the best of the numerous and interesting analytical papers in this volume is that by Dr. W. E. Steavenson, entitled "Some Notes on Tracheotomy." It includes a remarkable case where a patient concealed the fact that she was in labour, and the only objective symptoms that were observed appeared to justify the operation of tracheotomy. The author of the paper was requested, as house-surgeon, to operate, but the dyspnœa did not appear to be like that which he had relieved by tracheotomy in previous cases, and after waiting a few hours, much to the annoyance of the senior medical officers concerned with the case, the patient was delivered of a male child. Dr. Steavenson's tables are based on six cases of tracheotomy performed at St. Bartholomew's Hospital, and forty-seven at the Hospital for Sick Children, Great Ormond Street; in all this second series the operation was performed for diphtheria or other laryngeal disease. Another series, of which each case is also related in full in the same article, consists of cases admitted into hospital for the removal of the tube, after it had been worn for some time. The full clinical records of these cases are highly interesting. In some instances the risk involved in removal of the tube, temporary or permanent, was very great; in one case death resulted, very suddenly, in spite of every precaution.

Dr. Norman Moore contributes a scholarly article on "The Physicians and Surgeons of St. Bartholomew's Hospital before the Time of Harvey." Want of space prevents us from noticing several highly interesting papers that deserve separate criticism in order that they may receive full justice. We refer to the contributions supplied by Drs. Duckworth, West, and Ormerod, and Messrs. Willett, Baker, and Marsh. Dr. Champneys supplies to the *Reports* a learned essay on scoliotic pelves, it includes a valuable series of measurements and other data useful for further work in this direction. Dr. Vincent Harris's paper on "The Diagnostic Value of Cardiac Murmurs," is exceedingly interesting, and should be read by enthusiastic young clinical clerks ever ready to find out a murmur, and to attach a precise signification to it. The history of auscultation shows that it was not until Dr. Hope and others had demonstrated the true explanation of the causes of the heart-sounds on living animals that Laënnec's discovery became of any practical value. The fact that both mitral and aortic disease may exist without a murmur being audible on auscultation is proved beyond doubt, as well as the more universally recognised truth that loud and harsh murmurs may be heard when there is no organic disease. To Mr. Langton's paper on "Hernia of the Ovary" we have already referred in a recent number of the JOURNAL. Dr. Church and Mr. Langton, the editors of the *St. Bartholomew's Hospital Reports*, may be congratulated on the high value of the eighteenth volume, and we trust that its excellence will be maintained in future issues, especially as regards a liberal supply of papers from the actual staff of the hospital.

A MEDICAL FORMULARY BASED ON THE UNITED STATES AND BRITISH PHARMACOPŒIAS, TOGETHER WITH NUMEROUS FRENCH, GERMAN, AND UNOFFICIAL PREPARATIONS. By LAURENCE JOHNSON, A.M., M.D., Lecturer on Botany, Medical Department of the University of the City of New York, etc. Pp. 402. London: 1882.

So far as concerns medical practitioners of the British islands, their interests and their requirements, we consider the selection of this volume as one of *Low's Library of Standard Medical Authors* an unfortunate one. With Squire's *Companion to the Pharmacopœia* in their hands, exceedingly little is to be found in the treatise before us to recommend it to our readers for purchase. It may contain a memorandum of some American drugs not to be found in the other book referred to; but, even when this is the case, the notice of their reputed virtues is so brief that it is of small value to all those who have no other sources of information about them. The general scheme of the work, it is not unfair to surmise, is borrowed from Squire's *Companion*. If it be so, we must pronounce it an inferior production; not nearly so rich in information, and less complete in many respects.

Rightly viewed, we consider this work should never have been submitted to the profession in this country. It is written for American physicians, and to them will have a value in its notes of foreign formulæ, particularly those of the *British Pharmacopœia*. But even in their case, its publication is not happily timed; for a new *United States Pharmacopœia* has just appeared, the additions, omissions, and alterations in which are so considerable, that they must completely put out of date all previously published commentaries and "companions."

It might be thought that, in the present state of chemical science, something like fixity of nomenclature might be looked for in respect of all the best known metallic salts: for instance, those of iron and mercury; but the changes of name in our *British Pharmacopœias*, within comparatively few years, exhibit a want of accuracy of knowledge of such salts which is truly surprising. And we are not helped, but, on the contrary, rather perplexed when we refer to the book before us, and find yet another nomenclature obtaining in America. For example, our ancient friend, tinctura ferri sesquichloridi, or tinctura ferri perchloridi, appears as tinctura ferri chloridi; corrosive sublimate as hydrargyrum chloridum corrosivum, and calomel as hydrargyrum chloridum mite; and with regard to all the earthy and alkaline salts, they are represented as salts of the metal and not of its oxide; so that, instead of finding carbonate of ammonia, we meet with carbonate of ammonium, bicarbonate of sodium in place of bicarbonate of soda, and so on with the rest of the alkaline salts.

Among vegetable products used medicinally, we notice one indigenous to North America, popularly known by a name confounding it with a potent drug of quite different character. It is the apocynum cannabinum, called Indian hemp, a name familiar to us all as rightly applicable to cannabis Indica. Presumably to avoid confusing the two plants, the authors of the *United States Pharmacopœia* (of 1870) called this plant cannabis Americana. This proceeding may be ingenious and probably useful; but, seeing that the American cannabis is no other than the Indian plant naturalised in America, it cannot be pronounced either as scientific or sensible to replace, by a new specific name, one already generally acquiesced in by botanists and pharmacologists. It will be a happy day for medical men when a communism obtains among them with regard to the drugs they employ, the names they give them, and the medicinal virtues they assign to them.

ESSENTIALS OF VACCINATION: a Compilation of Facts relating to Vaccine Inoculation and its Influence in the Prevention of Small-Pox. By W. A. HARDAWAY, M.D., Professor of Diseases of the Skin of the Missouri Medical College, St. Louis. Chicago: Jansen McClurg and Company. 1882. Pp. 146.

IT is to English minds not a little curious that, with the exception of the preliminary treatises issued in the early days of "cow-poxing," between seventy and eighty years ago, no work on vaccination should have been published in the United States. The explanation is to be found in the almost complete dependence of American medicine upon the works of English writers, not only in vaccination, but throughout the whole of medical practice. Except in so far as the author of this little work gives his own personal experience, or borrows from the writings of his countrymen, on the comparatively new question of animal vaccination, the book is a mere copy of English works on the subject, the late Dr. Seaton's admirable *Handbook of Vaccination* being laid under especial contribution. Dr. HARDAWAY falls into the common error of quoting European opinions, without in the least weighing the merit or importance of the source from which they come. Perhaps this is hardly to be avoided, but it gives a distinctly wrong tone to the book. The volume being what it is, detailed criticism of its pages is hardly called for.

The author endorses the recommendation of Trousseau, that vaccination should be repeated every five years, arguing that, "if this practice be unnecessary, it is, at all events, free from objection." His views upon the degeneration of the prophylactic power of vaccinia are based upon statistics which have been proved to be fallacious, and to that extent they lose their cogency. He is a thorough believer in animal vaccination, and urges with much insistence the importance of proper supervision over the cultivation of bovine virus. To us in England, who are happily ignorant of "commercial" lymph, Dr. Hardaway's remarks on this head may seem unaccountably severe; but there is, unfortunately, no room for doubt that, in America, the cause of vaccination has been gravely compromised by lymph cultivated by unscrupulous speculators for mere greed of gain. Bovine crusts he regards as almost wholly worthless; indeed, any excuse for the use of crusts that might once have existed can now hardly be tenable.

As to the identity of vaccinia and variola, Dr. Hardaway inclines to the view of Seaton, against that of Chauveau and Fleming; but he has no new arguments to advance on the subject. Considering that Dr. Hardaway doubts "if there is a civilised land where less is known of the theory and practice of vaccination than in America," and that "the subject is criminally neglected in its medical schools," he would have done well to write with greater fulness and exactitude as to the appearances of normal and abnormal vaccinia. Looking, moreover, to the author's special position as a dermatologist, an exact description of the skin-complaints sometimes incident to vaccination might well have been looked for. But whilst we cannot place the book on a par with English works on the subject, it is undoubtedly an useful compilation of its kind; and, the state of American knowledge on the subject being as it is, will doubtless serve a very acceptable educational purpose.

LORD MORLEY'S COMMITTEE.—The Earl of Morley's Commitee on the Army Medical and Transport Department, which has been sitting at intervals for the last six months, has concluded its inquiries. The Committee's report has been finally considered, but, being very voluminous, it is not expected to be out of the printer's hands for some time. Several important changes in the administration of the two departments will be advised by the Committee.

NOTES ON BOOKS.

Vaccination: Its Place and Power. By THOMAS M. DOLAN, L.R.C.P.Ed., F.R.C.S.E., L.S.A., Halifax. London: Knight and Co. 1883.—This is another of the treatises on the subject of vaccination which have appeared pretty frequently of late. It apparently consists of a paper read before a conference of Poor-law guardians, with a summary of the views expressed in text-books on the question; Mr. Ernest Hart's *Truth about Vaccination* being largely laid under contribution. We are inclined to think that Mr. Dolan is too apologetic in tone in speaking of the interest of medical men in vaccination; but there is a certain rude justice in his remark, that "it is a fallacy to suppose we have anything to gain by the enforcement of the Vaccination Acts; we should make more by small-pox." The statistical facts he adduces in support of his argument as to the protective effect of vaccination are, as regards foreign countries, too remote now to tell very strongly, and, as regards the United Kingdom, might well have been supplemented by the newer figures of the last epidemic of 1880-1. Mr. Dolan is evidently very much in earnest, and he writes with great sense as to the duties of guardians in the enforcement of vaccination.

A Handbook of General Treatment for Coolies. By CHARLES J. HANCOCK, M.R.C.S., L.R.C.P., L.S.A., etc.—The writer of this little book has been for some years Medical Superintendent of Tea Estates in Assam. We have looked over this work with care, and commend it as an extremely valuable manual for the medical cure of coolies employed not only on the tea estates of Upper Assam, but in all tropical and subtropical regions where the coolies of India are employed in tea, sugar, and coffee industries. The loss of life and the amount of preventable disease among coolies employed in the above industries have been enormous, arising not, we willingly believe, from want of common humanity, but from ignorance on the part of planters. It is with pleasure, therefore, we observe that a considerable part of Mr. Hancock's book is devoted to the hygienic management of estates, and to dietetics; in other words, to the prevention of disease. Anyone who has served with native troops in India will recognise at a glance the importance of what is written on the subject of anæmia and its consequences, œdema, anasarca, general dropsy, as sequels of that scourge of the native races of India; and we commend what Mr. Hancock has written on the prevention and treatment of this fruitful mother of disease, not only to medical men in charge of coolies, but to young and inexperienced medical officers in charge of native regiments. We observe, however, a strange omission. Our author treats of diarrhœa; but there is not, so far as we can see, a word on the subject of dysentery—an omission which should be rectified in a future edition. In the vocabulary at the end, the term dysentery is explained, but not a word on the important subject of treatment. Mr. Hancock gives a number of prescriptions for the administration of medicine, but in the list of drugs at the end the doses are not given; this also should be corrected.

VARIATION IN THE STRENGTH OF ACONITE ROOT.—The *Therapeutic Gazette*, May 1882 *(Detroit Lancet)*, gives the results of an examination of six samples of aconite root, offered for sale by prominent wholesale dealers. All but one of the samples were of the ordinary aconite root, varying only in size, and in alkaloidal content. The sixth, labelled Chinese aconite, belonged to a different species. The tubers were plump and conical (fusiform); some of them with one or more small processes of a similar form, set nearly at a right angle with the axis of the main tuber. They were of pretty uniform size, about 1¼ to 1½ inches long, and ⅛ to $\frac{9}{16}$ inch in diameter. The surface was generally smooth, and the interior generally quite white, of an uniform texture, and a peculiar chalky appearance, abounding in starch. The six samples contained respectively 1.182, 0.599, 0.597, 0.548, 0.531, and 0.356 per cent. of aconitia, while 0.6 may be set down as the minimum figure for a standard drug. The Chinese aconite had but little more than half this strength. With all skill and honesty in manufacturing extracts, tinctures, etc., from drugs varying so widely, it is not strange that the preparations of aconite frequently disappoint the prescriber. Some standard of strength ought to be officially prescribed—even an arbitrary one—to secure anything like uniformity in the therapeutic results expected from such drugs. This is work for scientific pharmacy; it is for the physician to encourage and aid it to the extent of his ability.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DR. JUNKER'S APPARATUS FOR INHALATION OF ANÆSTHETIC VAPOURS.

SIR,—The question of priority in the substitution of a tube for the face-piece in Dr. Junker's apparatus is one of small moment. Since my friend Dr. Ernest Clarke mentions it, in the JOURNAL of May 5th, as my modification of Dr. Junker's apparatus, I may state that I began to use it in March 1878 (see *Lancet*, 1878, vol. 2, p. 839), and was not aware that it had been employed by anyone else before the publication of my paper. I should be glad, however, if you will allow me to say that the use of a gum-elastic catheter or leaden tube has, in many cases, a great advantage over the soft connecting tube belonging to Dr. Junker's apparatus referred to by him in his letter in last week's JOURNAL; and, as I gather from a paragraph in another part of the JOURNAL, that the apparatus is not always employed in operations of the kind referred to, I will, with your permission, add a few details in connection with its employment, which, with a now considerable experience, appear to be worth noting, and which I hope may be of service to others to whom the apparatus is not familiar. In some cases, having got the patient under the influence of chloroform, I have maintained the anæsthesia by introducing the elastic tube, which connects the mask with the bottle holding the anæsthetic fluid, through the nostril to the pharynx; but my reasons for preferring a gum-elastic catheter in these cases are, first, on account of its more easy introduction; second, because, as that part which remains out of the nostril is sometimes subjected during the operation to pressure or bending, it is necessary to employ an instrument which, unlike the connecting tube, cannot easily be rendered impervious. But there are some cases in which the introduction of a tube through either of the nostrils is impossible, as when they are blocked by tumour; and there are other cases, such as cleft palate, in which it is undesirable. If anæsthesia is to be maintained throughout these operations, the vapour must be conducted through the mouth; and though it is quite possible to do so with the connecting tube, it may be far more advantageously done by a gum-elastic catheter or flexible metallic tube; for the connecting tube, being very limp, can only be kept in position by the administrator's hand being placed near the mouth, and even then it is liable to be displaced from the mouth every time the blood is sponged out; whereas the gum-elastic catheter, or the flexible metallic tube, being nine or ten inches long, can he held in place from a distance. This is important, because in these operations the surgeon requires all available space in front of the patient's face. I at first used, in all cases of operation on the mouth, a No. 8 gum-elastic catheter open at both ends, which answers very well when inserted into the nostril, but when used for the mouth, I found that, becoming warm, it would not retain the curve I desired, and this led me to employ a leaden tube. When giving the vapour by the nostril, I use a gum-elastic catheter of the largest size that can be conveniently introduced, and do not pass it beyond the edge of the soft palate. For giving the vapour by the mouth I use what is called a "flexible metallic catheter," No. 12, with both ends cut off, and hold it in the mouth about on a level with the wisdom-teeth.—I am, etc.,

JOSEPH MILLS, Administrator of Anæsthetics to St. Bartholomew's Hospital.

15, Henrietta Street, Cavendish Square, May 14th, 1883.

THREE deaths from chloroform are reported to have occurred in Baltimore since October, 1882.

A FOOD Exhibition has been inaugurated on the Cours de la Reine, near the Palais de l'Industrie. The exhibits consist of every species of alimentary and gastronomic product, and the organisers seem to have made the most of the narrow strip of land under the avenue of trees which has been conceded to them by the town of Paris. During the exhibition, a competition will take place between the cooks of all the restaurants, clubs, hotels, etc., of Paris, each one coming by turn to concoct some toothsome dish, on the merit of which a special jury will decide. A prize will be given to the successful competitor.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 19th, 1883.

THE INCREASING FATALITY OF CANCER.

THE last published report of the registrar-general refers to the increased and steadily increasing death-rate from cancer in England and Wales, but expresses a doubt how far the increase may be apparent only, and due to improved diagnosis, and how far to a real augmentation. Unhappily, the consolatory doubt thus suggested cannot be long entertained by anyone who inquires closely into the question. A strict examination of the facts and figures bearing upon it, must lead to the painful and disquieting conviction that cancerous disease is, year by year, becoming more fatal in this country, and that no theory, of more skilful recognition and precise classification than formerly obtained, will adequately account for its increased prevalence. It is indeed somewhat surprising to find the registrar-general again propounding the view that the increase of cancer may possibly be apparent only, seeing that this explanation was disposed of finally in the report for 1876, by that accomplished vital statistician, Dr. William Farr. "The increase of cancer," he said, "a strange new growth, is much more rapid than increase of population. . . . As the diagnosis of the disease, when affecting the uterus and internal organs, has been facilitated by the speculum and other means, the increase may be partly nominal. Diseases now referred to cancer may have been formerly undistinguished, and referred to other heads. But, after every allowance has been made, it is evident that there is a real increase of deaths by cancer in England." The justice of this observation becomes at once apparent when the returns are looked at. In the year 1847, 4,586 deaths were referred to cancer; in 1879, 14,679 were referred to it. The mortality rose progressively in the five quinquennial periods between 1850 and 1875, from 302 per 1,000,000 living in the first, to 443 per 1,000,000 living in the last. In 1875, the rate was 480 per 1,000,000 living. No one knowing anything of the history of medical practice, will believe that anything like the increase here indicated in the mortality from cancer, which is a disease slow in its progress, invariably fatal in its issue, and marked in a vast majority of cases by symptoms of the most unmistakable description, is to be accounted for by improved methods of investigation, and more accurate nomenclature.

No doubt some cases, which would formerly have been vaguely returned as tumours, are now recognised as cancer in some of its forms; but, on the other hand, probably at least an equal number of cases, which would formerly have been roughly set down to cancer, are now distinguished from it, and ascribed to maladies which have headings of their own; and the facts bearing upon the increase of cancer as a whole, become all the more striking when it is remembered that the mortality from one of its varieties has undergone a marked diminution of recent years. Chimney-sweep's cancer, which was at one time very frequent, is now rarely seen. It has been practically suppressed by Act of Parliament, and affords an instructive illustration of the influence which wisely devised laws may exert in arresting the spread of disease, and even in stamping

it out. But, notwithstanding the suppression of chimney-sweep's cancer, malignant disease still gains ground amongst us.

The fact is, that cancer is growing more common; and that fact should be faced boldly, and should have all possible publicity given to it. To know our danger, is to insure the adoption of such protective measures as are available, and to set ingenuity to work to find ways of escape. To shut our eyes to it is to give it the advantage over us. The alarmist is an objectionable character, but there is a still more pernicious social nuisance, and that is the flattering unctionist, if we may coin from Shakespeare such a name for the being who lubricates everything with the oil of gladness, and polishes each plague-spot on the body-corporate, till it shines so that we cannot distinguish it from healthy tissue. To the flattering unctionist, whatever is is right, progress is universal, and everything *couleur de rose* to souls and eyes that have been properly anointed. Facts that create foreboding may be refined away, statistics that awaken anxiety may be so manipulated as to prove exactly the contrary of their obvious meaning. We have only to stereotype a smile, put our hands in our pockets, and glide into a blissful futurity by the usual route, "straight down the crooked lane and right round the square." And it is the flattering unctionist who, whenever we are startled by the inroads of disease, steps forward to assure us, with bland confidence, that we are sadly deceived, that the increase is apparent and not real, and that there is not the slightest necessity for taking our hands out of our pockets; and in doing this, he works incalculable mischief. The ignorant public are ever but too ready to listen to any flattering tale, and so they are soothed by such assurances, and spared that just appreciation of danger which is the necessary condition of investigation of its source, and protection against it.

With reference to cancer, it seems certain that the public has not yet been awakened to a realisation of the truth that it is spreading, and claiming a greater number of victims each succeeding year. And surely it is desirable that this truth should be brought home to them; for, once they have grasped it, they will not only sanction, but insist on, searching investigations into the nature and origin of the visitation. The sophistries and sentimentalities of antivivisectionists will be brushed aside, in view of the menacing advance of this dread and excruciating disease; and pathologists will be exhorted to pursue their researches untrammelled, and to sacrifice whatever number of animals may be necessary in the scientific pursuit of means by which its attacks may be warded off, or its ravages arrested. Nor would such researches be undertaken by pathologists without good hope of obtaining valuable results. The tendency of medical and surgical discovery of late has been to remove the barriers which were supposed at one time to separate ordinary inflammation from malignant new growth. It is even taught that inflammatory processes pass by insensible gradations into those of malignancy, while it is pointed out that some of the local applications which are beneficial in inflammation have also an unquestionable influence when used in cancer, in repressing cell-growth, and in retarding its development. There can be nothing, therefore, extravagant in anticipating that we may yet light upon some remedy the internal administration of which will cause a malignant ulcer to heal, or a malignant growth to melt away, just as syphilitic formations vanish under mercury and iodide of potassium.

But, besides the advantageous effect which it might have in freeing and promoting research, there are other ways in which the dissemination of the knowledge that cancer is increasing may be of service. When public attention is strongly called to the disease, its ordinary modes of incursion will be more generally understood than they are at present, and means of prevention or timely treatment will be more widely adopted; for even to-day, when the experimental investigation of cancer has yet to be undertaken, and when medicine is powerless but to alleviate its pangs, the surgeon's knife can do much to ward it off, and to extirpate it. Local irritation is one of the factors in the production of cancer, and this has very often its seat in moles and other forms of congenital excess, as well as in innocent new growths that are not congenital, in scars and cicatrices, in syphilitic ulceration, sclerosis, and papilloma—in precancerous structures and conditions, in short, that permit of removal.

"It is the conviction which grows with each year's experience," said Mr. Jonathan Hutchinson, in that able philosophical paper on the Local Origin of Malignant Growths, which he read at the Worcester meeting of the British Medical Association, "that, in the rules of practice which would spring out of the full and hearty adoption of the doctrine of the local origin of cancer, rests our only hope of being able to save those who consult us from the horrors of this dreadful malady. 'Too late! Too late!' is written in legible characters upon three-fourths of cancer cases when they come under the notice of operating surgeons. When the doctrine of the precancerous stage shall be widely adopted, and when surgeons generally shall recognise the propriety—let me say the duty—of operation for purposes of prevention, then, and I believe not till then, shall we witness a considerable reduction in the mortality from cancer."

In speculating as to the meaning of the increase of cancer—and nothing but speculation is yet possible—we are led to consider its causes, which may be summed up as senility of tissue, local irritation, and inheritance; and under each of these perhaps some part of the explanation of the increase of cancer is to be found. Senility, either of the organism as a whole, or of the particular structure affected, may be regarded as a necessary condition of cancer. The young are almost exempt from it. Of the deaths attributed to cancer in 1879, 75 per cent. were of persons above forty-five years of age, and only 25 per cent. of persons under that age. But it is not senility in its extreme degree that is most productive of cancer, but rather senility in its early stages, when organs and tissues that have been actively engaged in function are just passing into a state of comparative or complete disuse, and when the reproductive energies are subsiding. The forces that have been engaged in building up normal organisations are then diverted towards the formation of heterologous structures; and perhaps it might be argued that premature senility is increasing amongst us, and that the wear and tear of modern life produces an enfeeblement which is favourable to cancerous growth.

It is a lamentable truth, as pointed out by Mr. Leonard Courtney in a recent address at Liskeard, that life becomes more and more toilsome to the masses with the advance of civilisation. Mills and machinery, railways and telegraphs, have not really lightened our burdens. They have conduced to the propagation of swarms of human beings, but it cannot be maintained that they have made human existence more tranquil and easy, and less exhausting, than it used to be. The prolongation of life which is alleged to have taken place, may be a prolongation of old age, rather than of the years of strength and vigour; and it may be that we are becoming prematurely old, and are inducing by our modes of life, more frequently than our forefathers did, that state of the living tissues which makes them liable to cancer. The lower animals in a wild state do not suffer from cancer; but when they are brought into domestication, and so have the gift of old age conferred on them by being protected from their natural enemies, they become like men, only in a less degree, subject to this scourge. And some of the habits of civilisation, as well as its general evolutional effects, may contribute to the propagation of cancer. Thus it can scarcely be doubted that the enormous extension of the habit of smoking in the last half century must have multiplied greatly those cases of epithelioma of the lip, which often have their starting point in the irritation caused by a pipe. Then, again, our negligence in dealing effectually with other diseases may also favour its dissemination for if a syphilitic inflammation may become cancerous, it is clear

hat the spread of syphilis has scattered throughout the population innumerable possible seeds of cancerous degeneration. And each ase of cancer, however produced, may, through the transmission of constitutional tendencies to offspring, become the parent of many. Sir James Paget has referred to the case of a person who died of ancer of the stomach, and where two daughters and many of their hildren (to the number of twelve or fourteen in all) also died of ancer in different organs. It is as yet undecided whether cancer is ommunicable in any other way except by hereditary transmission.

CORONERS.

ATTENTION has on several occasions been drawn in our pages to the eforms in the law relating to coroners adopted in Massachusetts, nd subsequently in New York. We now give, almost *in extenso*, Bill at present before the New York State Legislature, and drawn p by the Medico-Legal Society of New York.

1. The county judge shall appoint a medical examiner for each listrict. Such medical examiners shall be able and learned in the cience of medical jurisprudence, who shall have been in the active ractice of their profession for at least five years; such medical xaminers shall be selected and appointed without reference to olitical or partisan considerations, and solely by reason of their itness and professional attainments for the office.

2. The examiners so appointed shall hold their office for the term f seven years, and until their successors shall be appointed and nter upon the duties of their office, but they shall be liable to emoval by the said judge appointing them, or by their successors n office, for cause shown, after service of written charges and oppor- unity for defence. Any vacancy is to be filled up by the said judge.

3. The remuneration in some cases is to be £1,000 a year; in others 1 per view, £4 per view and necropsy; also travelling expenses.

4 and 5. Each medical examiner is to enter into a bond, and take ny oath binding him to the discharge of the duties of his appoint- ient.

6. The medical examiner, who shall be appointed and qualify pur- ant to this Act, shall make all the examinations hereinafter pro- ded, upon view of the body of any person reported or supposed to ave been slain, or suddenly died, or dangerously wounded, or to ave died from criminal violence, or by a casualty, or suddenly when apparent health, or when unattended by a physician, or in any spicious manner.

7. Whenever a medical examiner shall have notice that there has en found, or is lying within his district, the body of a person dead wounded, it shall be his duty to visit and take charge of the dy, carefully examine the same, and diligently inquire into the use and manner of the death or wounding, and make a necropsy if shall appear to be necessary to ascertain the cause of death, or hether a crime has been committed contributing thereto; and if it all appear to the said examiner that there is no reason to suspect at a crime has been committed, which occasioned or contributed death, he shall thereupon make a careful statement in writing in plicate, setting forth every fact and circumstance tending to show e condition of the body, and the cause and manner of death, and e grounds of his conclusion, together with the names and addresses any person or persons by whom such facts and circumstances may known, which statement so made by such examiner, or caused to made by him, shall be subscribed by such examiner, and one, thout delay, shall be delivered to the nearest coroner, and the her to the district attorney of the county, whereupon the examiner all give the requisite certificate of death; in case the person ose body shall have been so examined shall appear to have been stranger or non-resident of the county, he shall give orders for e burial at the public expense. If a necropsy shall be made, it all be made so as to enable a record to be made and preserved, d to show the actual state and condition of all the vital organs, and in full detail, and shall be reduced to writing and signed by the examiner.

8. Notwithstanding such examiner shall be of the opinion that there is no reason to suspect that a crime has been committed, and shall so state, if the district attorney shall be of a contrary opinion, and shall so certify to the coroner to whom such statement shall have been delivered, the said coroner shall thereupon institute an inquest, to be held in accordance with provisions of this Act; in which case the said examiner shall state and certify any necropsy made, as hereinbefore provided.

9. If, upon such examination, the examiner shall be of opinion that death was caused by violence, and a crime was committed, or he shall entertain doubts upon the subject, he shall so report in his statement of his examination to the coroner and the district attorney. On the receipt of such report and statement, the said coroner shall, without delay, institute and prosecute an inquest into the facts and circumstances of such death; and he shall have full power and authority, and it shall be his duty, to issue subpœnas for witnesses, and cause them to be served, and compel their attendance, and to hear such inquest, and to consider the facts and circumstances proved before him; on which inquest the said coroner may, in his discretion, direct the witnesses to be kept separate, so that they cannot converse with each other until they have been examined; and he may also exclude all witnesses from the place of hearing. The district attorney to have power to attend the inquest and examine witnesses, and the coroner to have the powers of a committing magistrate.

10. The coroner, after hearing the testimony, to draw up and sign a report, in which he shall find and certify when, where, and by what means the person deceased came to his death; his name, if known; and all the material circumstances attending his death, etc. This report to be filed, and sent to the district attorney, and also to the clerk of the county.

11 and 12. If the coroner, upon such inquest, shall find that murder, manslaughter, or criminal assault has been committed, he shall bind over witnesses as in a criminal prosecution. Process to issue as in the case of other crimes.

13. The medical examiner may, if he deem it necessary, call a chemist to aid in the examination of the body, or of substances supposed to have caused or contributed to the death; and such chemist shall be compensated on the certificate of the examiner.

14. Witnesses are to be paid as in criminal prosecutions.

15. Persons aware of cases of death or wounding, requiring examination, to give notice to the district medical examiner.

16, 17, 18. Relate to fees and expenses. 19. Provides for a medical examination by a neighbouring medical examiner, in case of default.

20. The existing number of coroners to be reduced. Future coroners to be attorneys or counsellors-at-law, of at least five years' standing.

21. No undertaker to bury the body of a person described under Section 6, without a certificate of death, signed by the medical examiner.

PFLÜGER AND BORN ON THE PREDETERMINATION OF SEX.

PROFESSORS Griesheim and Pflüger have recently published, in the *Archiv für ges. Physiologie*, some remarkable experimental researches on the relation of sex to influences before or after impregnation, in the frog tribe. These researches were commenced, some time since, by Dr. G. Born, who artificially impregnated frog-spawn by applying to it the semen of frogs in full rut, and then brought up the tadpoles, killing them when they had reached the adult condition, and determining their sex. Ninety-five per cent. proved to be females, whilst, in natural conditions, spawn, according to his experience, produces male and female frogs in almost even numbers. Dr. Born

attributes this increase in the proportion of females to the animal diet which he gave his tadpoles, which in the wild condition are vegetarians; and infers that the determination of sex is due to circumstances affecting the ovum after impregnation. Griesheim found the average proportion of the sexes in frogs under a year old to be naturally 36.3 per cent. males, and 63.7 per cent. females. Pflüger made his experiments from a series of adult frogs, all living in the same conditions. In order to test the relation of concentration or deficiency of semen as influencing the sex of future frogs, a number of eggs were mixed with ripe concentrated semen, 492 tadpoles hatched out of the spawn, and of these, 39.4 per cent. proved to be males; when semen concentrated with water was mixed with spawn, out of 209 tadpoles, 27.3 per cent. were males. Lastly, ripe spawn was fertilised with fluid taken from the testes of aged male frogs that had ceased to exercise sexual functions, and in due time perfect tadpoles were hatched, 35.3 per cent. becoming males. The average, on adding the above three groups of artificially begotten frogs, was 37.7 per cent. male, that is, almost precisely the natural proportion, according to Griesheim's experiments. Hence the amount or concentration of semen appears to have no influence on determination of sex.

Not contented with these experiments, Pflüger began again last spring with a new series, taking every possible precaution to prevent the death of the youngest tadpoles. Three hundred and sixty-eight eggs (A) were fertilised with concentrated seminal fluid; 492 (B) with semen diluted with water. In A, the mortality was 1.3 per cent.; in B, 0.4 per cent. Three hundred and sixty-three remaining tadpoles were reared in two special ponds, and fished out two months later. Of A, 166 frogs were living; of series B, 204. Out of the total of 370 frogs, the proportion of sexes was almost balanced; in group A, 48.4 per cent. were males; in group B, 48.5 per cent. were of that sex. "Hence, under all circumstances, the concentration of semen has no influence in determining sex—in frogs."

Pflüger accounts for the very different conclusions following Born's experiments by showing the fallacies caused by the great mortality among the tadpoles which Born fed entirely on meat; out of 8,400 fertilised eggs, only 1,443 lived to adult age, and of these but 72 were males. In natural conditions, Born found that the excess of females over males was not higher than according to Pflüger's experience.

Pflüger has continued his labours by endeavouring to discover if the relative proportion of the sexes, in frogs, be already determined before fertilisation. He reared frogs from Utrecht, Königsberg, Glarus, and Bonn separately, but under the same conditions, and noted the different proportion of sexes in young hatched from the eggs of the Dutch, Prussian, Swiss, and Rhenish frogs; in all cases some of the spawn was fertilised with pure seminal fluid, some with semen diluted with water. The proportion of males in the spawn from Utrecht frogs was 12.2 per cent. when reared from eggs fertilised by pure semen, and 14.1 per cent. when the fluid was diluted, the total average being 13.15 per cent. In the Glarus series, the proportion of males, under the same circumstances, proved to be 22.4 per cent., in the Bonn frogs 35.7 per cent., and in the spawn of Königsberg frogs 48.5 per cent. All these frogs were reared at Bonn. Pflüger, continuing in his extraordinary zeal for the acquirement of precise knowledge, then endeavoured to ascertain the proportion of sexes in frogs actually hatched and reared in their native land, or rather water, proceeding, of necessity, to the above named places, where he found the proportion of males to be, at Utrecht, 13.2 per cent., Königsberg 46.9 per cent., and Bonn (taken from ponds in the neighbourhood) 35.5 per cent. The close correspondence of these returns with the same in the case of the spawn of frogs brought from these places to Bonn is very noteworthy, and tends most strongly to prove that the sex of frogs was determined before the eggs, brought to Bonn, had arrived at that town. Thus differences of climate, of water, of nourishment, and even of method of fertilisation proved to exert little influence on the proportion of sexes. Pflüger next made an estimate of the proportion of sexes in adult frogs reared, under protection from frog-eating animals, in their native waters, and found the proportion of males to be at Utrecht 47.5 per cent., Königsberg 50 per cent, and Bonn 51 per cent. Thus the ratio for old frogs is nearly the same at Bonn and Utrecht, though it is very different in the case of young frogs. A male frog very rarely impregnates more than one female.

Pflüger attempts to explain the significance of these proportions. He had found an irregular hermaphroditism of young frogs which causes the genital gland of young adults to resemble an ovary when it ultimately developes into a testicle. The complete maturation of this hermaphrodite gland takes place in the beginning of the second year, so that in two-year-old Bonn frogs the males muster 49 per cent. The power of development of this irregular hermaphroditism depends upon race, and accounts for the remarkable differences in the proportion of males in different parts of Europe. In Königsberg this power hardly exists, in Bonn it is greater, in Utrecht greater still, and, greatest of all, at Breslau in Silesia where Born carried on his observations. It is evident, Pflüger observes, that, in order to search deeper into distinctions of sex specimens with the least amount of irregular hermaphroditism, as those from Königsberg, should be examined, in order to eliminate sources of fallacy as much as possible. In the course of these experiments, it was found that the seminal fluid remained, within the testes, efficient for fertilisation for about a month after the specific breeding season.

In consequence of the reported increase of mortality from cholera in Bombay, quarantine for various terms is now imposed at Suez upon arrivals from the former port.

The honorary degree of LL.D. of Cambridge is to be conferred on M. Pasteur, Sir John Lubbock, and Professor Roscoe of Owens College, Manchester.

The death-rate at Hove for the first quarter of this year was the satisfactorily low rate of 12.0 per 1,000. This is the lowest rate that has been registered for the district since the winter quarter of 1877, when it was 11.5 per 1,000.

The head-master of a Board-school at Sunderland has been ordered to pay compensation to the amount of £15 to a boy whose fingers he had inflicted permanent injury with a hazel-stick because the lad had been absent a day through illness.

At the usual meeting of the managers of the Metropolitan Asylums Board, on the recommendation of the South-Eastern District Hospital Committee, it was resolved to purchase land adjoining the institution, at an expense of £2,000. It was also decided to purchase certain properties in Homerton for £16,700, and the Cheston estate at Darenth for £13,175.

Her Royal and Imperial Highness the Duchess of Edinburgh, attended by Lady Harriett Grimston and Major Poore, visited the Royal Hospital for Children and Women, Waterloo Bridge Road, S.E., on Tuesday afternoon. The secretary and resident medical officers were in attendance, accompanied by the chaplain and sister-superintendent.

ANIMAL VACCINATION.

In view of the prevalence of foot-and-mouth disease, apprehension has been expressed in some quarters lest the calves used for vac-

tion purposes, at the station in Lamb's Conduit Street, might come infected. We believe that the matter has been brought der the notice of the Privy Council, and that, in consequence, ps have been taken to prevent any such occurrence, while arrange- nts are being made for the immediate isolation of any animal ich may chance to contract the disease.

ANTIDOTES FOR STRYCHNIA.

. McREDDIE (*Proceedings of the N. W. Provinces Branch of the itish Medical Association*, 1883), after injecting strychnine into gs, has tried the effects of antidotes on the animals, using inhala- ns of chloroform, amyl nitrite, atropine, and eserine. He finds it all these remedies are inefficacious, neither preventing the fatal ult, nor arresting the convulsions.

AN ILLEGAL DEATH-CERTIFICATE.

. ARTHUR WALTER BROUGHTON, a surgeon practising at Batley, s recently fined £5 and costs for unlawfully making a false certi- ite of death. The prosecution was instituted at the instance of Medical Alliance Association. It was alleged that the deceased man to whom the certificate related had been attended by a . Alfred Wilson Broughton, a brother of the defendant, who had seen the deceased. Notwithstanding that Mr. Wilson Broughton ore that his brother had seen the deceased on two occasions, the gistrates decided to convict.

THE PUBLIC HEALTH ACT *versus* THE EDUCATION ACT.

NATIONAL schoolmistress was recently proceeded against by Dr. rse of Brierley Hill, for exposing a child while suffering from an ctious disease. It was alleged that the defendant caused the ld to attend an examination, and for this purpose fetched the ld from home before she had recovered from scarlet fever. e case unfortunately fell through, as it was successfully contended t Dr. Pearse was not an aggrieved party. If this be law, how- r, it is not equity, and it is to be hoped that the Educational partment will make some inquiry into the conduct of the tress.

DEATH OF A MEDICAL WATERLOO VETERAN.

E death has just occurred at Newbury, Berkshire, of a venerable dical practitioner, Mr. Richard Rodd Robinson, who had entered n his ninety-first year. Mr. Robinson studied at St. George's spital, and received his diploma seventy-three years ago, having n admitted a Member of the Royal College of Surgeons in the r 1810. He began his professional career as an army surgeon, l was present on duty at the battle of Waterloo. For a long iod he had been in practice at Newbury, where he held for twenty rs the office of surgeon to the Newbury Dispensary; he was also some years a member of the Newbury corporation.

THE PLAGUE IN PERSIA.

E Turkish authorities, having become aware that an epidemic ase had recently appeared in Persia, sent a military and a civil geon to the localities affected, and these gentlemen have sent in ir first report. Neither of them has been able to cross the line ch has been established around the centre of infection; but, on ating a large amount of information received by them, the dis- e appears to be bubonic plague. It has been most prevalent in the sian district of Kïl Djivanero, seventeen hours' march from the kish frontier. The epidemic is extremely destructive—so much hat, it is stated, some villages are entirely depopulated. The rnational Sanitary Board have sent to the spot Dr. Stiépovich, itary Commissioner at Van, with orders to furnish the Board, by gram, with circumstantial details of the actual conditions. A d quarantine is already established on the frontier, and in the passes of Suleymanié, through which general communication between the two countries is carried on.

DR. DRUITT.

WE regret to learn of the death of Dr. Robert Druitt, which took place on Tuesday, May 15th, at his residence in Kensington. Dr. Druitt was well known as the author of the *Surgeon's Vade Mecum*, a work which has enjoyed a high popularity among medical students and practitioners, and has passed through eleven editions. For many years, he took an interest in sanitary matters, and held for some time the office of medical officer of health for a metropolitan district. He was also the author of several contributions to medical periodicals, and of a *Report on Cheap Wine*. Dr. Druitt, who had, we believe, been in failing health for some time, was sixty-eight years of age at the time of his death.

MEDICAL SECRETS AND THE WITNESS-BOX.

THE law of this country, that no medical witness can claim exemption from answering a question because the answer might involve a violation of secrecy, or even implicate the character of the patient, is, perhaps, sufficiently well known. Few medical men, we imagine, assent to the application of this principle; and we are glad to learn, as an augury of better things, that, in the State of New York, it has been decided that "no person duly authorised to practise physic or surgery shall be allowed or compelled to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon."

THE INDEX MEDICUS.

THE publisher of the *Index Medicus* has issued a circular in which he states that, notwithstanding a slight increase in the subscriptions during 1882, the financial result still show a deficiency; so that the future of the *Index* is rendered precarious. On looking through the list, we notice that several public medical institutions, which might be expected to take in a work of such utility for purposes of reference, are conspicuously absent; among them may be mentioned the Royal College of Physicians in London, the College of Physicians and Surgeons of Ireland, the medical schools attached to the large hospitals, etc. Such institutions, as well as persons interested in medical literature, would not, we think, be wasting money in becoming subscribers to the work, which is highly creditable to the energy of our transatlantic brethren.

INSURANCE OF INFANT LIFE.

IN commenting on the high death-rate amongst infants in Glanford Brigg during the past year, Mr. Moxon refers to the more than questionable practice of insuring the lives of children directly they are born. The insurance of the life of the bread-winner of the family is a most desirable and praiseworthy precaution against the loss which his family would sustain if he were removed by death, but it does not seem that, in ordinary circumstances, the lives of the children, or indeed of the wife, need be insured. In Glanford Brigg the practice is extensively carried on, one agent alone having hundreds of insurances in this neighbourhood, the majority of which are on the lives of children. Whilst not charging any individual with an abuse of the system, Mr. Moxon rightly holds it to be an objectionable, and, maybe, a dangerous thing, that a parent should have a money interest in the death of those dependent upon him.

DIPHTHERIA AND INFECTED MILK.

DR. PAINE, in his last report on Cardiff, refers to the diffusion of diphtheria in that town by a contaminated milk-supply. On in

quiring into the causes of a fatal outbreak of diphtheria at a farm-house, Dr. Paine found that milk for town-distribution was obtained from this source; and, believing that the well-water was at fault, he caused it to be examined, and found that it contained an excessive amount of sewage-contamination. The use of the well for drinking purposes was prohibited by the sanitary authority, but it was not forbidden for other general use. Some time afterwards, several deaths from diphtheria happened in the town, and it was ascertained that the milk used by the patients had been obtained from this farm. The tin vessels used for conveying the milk were rinsed night and morning with water obtained from this well. The well was afterwards permanently closed, and no other fatal cases of diphtheria occurred in the town.

NOVEL FUNERAL REFORMS.

IT is proposed, in consequence of the number of deaths which are occasioned by colds caught at funerals, that skull-caps and gum shoes and Scheveningen wind-screens at the grave shall be as regular paraphernalia of funerals as the pall, the "weepers," and the hearse-horse. The suggestion, says the *New York Herald*, is practical and praiseworthy. It is in line with the recently adopted provision of India-rubber suits for baptism by total immersion, and bears testimony that we live in a progressive age. A better system, however, is that established in Utica, in Oneida county. The principal cemetery there is provided with two chapels—one of stone, where funeral services are held in the summer; the other of iron and glass, where they are held all the rest of the year. Into this "conservatory chapel," full of tropical verdure, the funeral train passes through a covered carriage-way, and the services are held in light and warmth, among trailing vines and blooming shrubs. At their conclusion, the corpse is surrendered to keepers, who, after the mourners have departed, remove it to a cold vault to await interment in a grave.

VEGETARIANISM.

MRS. NORMAN KERR lately entertained about 100 *employés* of the Vestry of St. Marylebone at a vegetarian supper at the Walmer Castle Coffee Tavern, Seymour Place, Marylebone Road. There were also present Dr. B. W. Richardson, the Rev. W. Barker (rector of St. Marylebone), and Dr. W. Blyth. The dinner consisted of "hotch-potch" soup, which was much like Scotch broth, a savoury pie, a "sweet," cocoa, and bread, and the cost was calculated at 3d. per head. For the "hotch-potch" soup, the materials were two bunches of turnips, which cost 8d.; one bunch of carrots, 4d.; two bunches of leeks, 6d.; two heads of celery, 5d.; 6 lb. potatoes, 6d.; one pint of green peas, 2d.; parsley, 3d.; and ½ lb. butter, 7d.; making a total cost of 3s. 5d. There were six loaves of brown bread, at 9d. per quartern loaf, costing 4s. 6d. For the savoury pie, the materials were two and a half gallons of haricot beans, at 2d. per quart, 1s. 8d.; 15 lb. flour, at 7d. per quartern, 2s. 6d.; 6 lb. onions, at 1d. per lb., 6d.; and 1½ lb. butter, at 1s. 2d. per lb., 1s. 9d.; costing altogether 6s. 5d. For the "sweet," there were used 17 lb. rice, at 2d. per lb., 2s. 10d.; seven bunches of rhubarb, at 2½d. per lb., 1s. 5½d.; and 10 lb. sugar, at 2½d. per lb., 2s. 1d.; making the cost 6s. 4½d. For drink, there were supplied 100 cups of coffee, at one halfpenny per cup, costing 4s. 2d. The total cost for 100 persons was thus £1 4s. 10½d., or 3d. each person. The object was to show how cheaply a nourishing meal might be provided. Apologies were read from Lords Waldegrave, Claud Hamilton, and Mount-Temple (who stated that Lady Mount-Temple had been a vegetarian for many years), Mr. Ernest Hart, and Sir Patrick Colquhoun (who sympathised warmly with vegetarian diet, and practised it when in his own house).

THE CONTAGIOUS DISEASES ACTS.

AT the last meeting of the Chatham Board of Health, the following resolution was unanimously carried: "This board, having heard with great regret the recent action of the Government in regard to th altered mode of administering the Contagious Diseases Acts, an thereby rendering them practically nugatory, resolve that a deput tion of this board seek an interview with the Home Secretary to l their views before him, and that the member for the borough l requested to arrange such interview, and introduce the deputatio Hopes were expressed that the Government might again be induc to reinstate the police who had been engaged in carrying out t compulsory clauses of the Act. The Portsmouth Town Coun have agreed to petition against the repeal of the Contagious Diseas Acts. During the discussion, the opinions expressed were una mously in favour of the operation of the Acts. One of the membe thought that the Watch Committee ought to appoint an officer carry out the measures while the Government were considering t matter, but it was pointed out that such a course could not adopted. The Sheppy Board of Guardians have also protest against the withdrawal of the Metropolitan Police from Sheern in consequence of the resolution of the House of Commons co demning the Contagious Diseases Act, and have unanimously resolv to memorialise the Prime Minister in favour of the compulso clauses being retained, as they had acted most beneficially in She ness, while not a single complaint had been made against the m ner in which they had been administered.

SYPHILIS IN THE NINTH CENTURY.

BETWEEN the years A.D. 806 and 810, an Emperor of Japan co manded his court physicians, Abemanas and Idzumo Kirosada, collect in one volume all extant records of native medicine and s gery. A manuscript copy of this work, for centuries forgott although the facts of its origin were recorded in Japanese histo was found in 1827 by a priest, in a provincial Buddhist temple. Scheube, of Leipzig, has recently examined this work, and, in n article published in a recent number of Virchow's *Archiv*, has sho its undoubted authenticity and its high value from a purely sc tific point of view. It was written long before Chinese ideas penetrated into Japan and influenced native practitioners. most interesting passages are descriptions of local and gen affections, which clearly prove that syphilis, and several allied orders, were well known to the ancient Japanese. Chancroid phagedenic chancre are clearly described, as well as a "swelling the penis, of the size of a millet-seed," followed by eruptions, fever ness, pains in the bones and head, blindness, swelling of the ticles, and other very familiar symptoms. These were observe continue for many years. The passages of this work, called Daidorui Thiu-ho, which relate to the treatment of these sympt have not yet been translated into English. Herbs alone appea have been used, and without much success; mercurial treatment introduced at a comparatively recent date, from Europe. ancient Japanese surgeons do not appear to have recognised venereal origin of the disease which they describe, although Daidorui distinctly traces all the secondary symptoms to poison from the affected organ."

THE BRITISH MEDICAL BENEVOLENT FUND.

AT a special meeting of the Committee of the British Me Benevolent Fund, held on Tuesday, May 15th, for the purpos electing annuitants, there were no fewer than twelve vacancies. applicants over the age of 60, in needy circumstances, are co ered eligible, and from these a list of the more urgent case drawn up, to the number of thirty-nine, by a special subcomm who, after careful investigation, recommended the following Mr. J. C. S., aged 78; Surrey; suffers from asthma and i tinence of urine. 2. Mr. E. C., aged 62; London; incurably lysed; has a wife and eight children. 3. Mr. A. P. O., age Middlesex; in broken health, no income. 4. E. H., aged 68; wall; formerly an assistant, qualified; can no longer ear

ig. 5. J. G., aged 67; London; incapacitated by deafness. 6. K., aged 75; London; bedridden; has an imbecile child. 7. F., aged 74; Staffordshire; nearly blind, and very infirm- Irs. B., aged 66; Suffolk; quite helpless. 9. Mrs. M., aged 79; rshire; she helped a daughter to keep a school till recently. Mrs. B., aged 78; Gloucestershire; nearly blind, bedridden. 11. L., aged 62; London; losing her sight. 12. Mrs. D., aged 71; p; dependent on son, a clergyman with nine children and £100 ar. All were elected to annuities of £20, and the annuity of H. was raised from £10 to £20. No canvassing has been re- d, and the applicants have been put to no trouble, anxiety, or nse. The annuities will be distributed in monthly instalments r. Jonson, Chairman of the Committee.

NEW OUT-PATIENT DEPARTMENT AT ST. MARY'S HOSPITAL.

new out-patient department at St. Mary's Hospital, Paddington, used for the first time on May 14th. The hospital was formerly ill provided in this respect, but the new building, which is con- d with the main block by a roofed gangway, leaves little to be ed. In the centre of the building is a lofty waiting hall, lined glazed bricks, and capable of seating two hundred persons. are four consulting-rooms, each of which is also provided with ll waiting-room. Opening off each consulting-room, are one or retiring-rooms, fitted with the, so-called, Mackenzie lamps, rovided with dark blinds for laryngoscopical, and ophthalmo- al examination. The building is in two storeys, and is in way well adapted to its purposes. It seems to us to be a r for regret that the lighting of the department is to be d by numerous unventilated gas jets. There are now a large er of good ventilated gas lamps to be obtained, some one of might surely have been adopted. We understand that there roposal on foot to light the new wing of the hospital with the c light; steam engines will, in any case, be in use in the base- of the new block, and might, it is thought, be used for driving namo-electric machines. The experiment would be interest- it we doubt whether the Committee of Management would be wisely in making it; the expense would be great, as double s would have to be laid everywhere, and though the electric is better than the unventilated gas jets ordinarily seen in l wards, we believe that the true solution of the difficulty will nd, as we said above, with reference to the out-patient depart- n properly constructed ventilating gas lamps; in a new building s no reason at all why the adoption of this plan should entail ious increase in the estimates, while at the same time the might be made to contribute very materially to the ventilation wards. The ground-floor of the new block is to be used as an it-ward; above this there will be two other wards; above rds, nurses' dormitories, and in the topmost story of all, will ls for cases which require to be isolated. The basement will ted to the convenience of the students, who will be provided library, dining-room, and smoking-room. The medical school e builder's hands, and will shortly be very greatly improved arged.

CORONERS IN THE UNITED STATES.

ew York Medico-Legal Society has had under its considera- subject of the reorganisation of the office of coroner, and oduction of medical examination by experts, in lieu, gener- an inquest by a jury; and a Committee of the two profes- egal and medical—has recently reported on the subject to w York Medico-Legal Society. The Committee have exa- he proposed changes, and the statute of the State of Massa- already noticed in our columns, and are substantially n the opinion that the principal changes needed are the aboli- he cumbersome, expensive, and comparatively useless coro- y, and the inefficient examination and inquest which gener- ally prevail under the present system; and, in its place, the substitution of an intelligent, thorough, and useful medical examination, in all cases where a person has been killed, or has died suddenly, or been dangerously wounded, or found dead under such circumstances as to require an examination or inquest, the result of which would materially aid the police-officers in the prosecution and conviction of criminals. The Committee thinks that it is of primary importance to secure the appointment of experienced and competent examiners. They have received reliable information that the Massachusetts law has for five years worked acceptably, met with public approbation, and disclosed no defects except of minor importance, and easily remediable; and they recommend the adoption of a similar measure for the State of New York. They advise that the general duties of a medical examiner should be to visit and examine the body of any person reported or supposed to have been killed, or suddenly died, or mortally wounded, or been found dead under circumstances requiring inquisition, and to make a necropsy, if it shall appear to be necessary, to ascertain the cause of death; and if it appear to the examiner that there be no reason to suspect that a crime has been committed, he should be required to make a detailed report, in writing, of his examination and necropsy, if any, and deliver it, without delay, to the nearest coroner, and in duplicate to the district attorney; which report should also contain a statement of the probable cause of death. In case the examiner should be of opinion, from such examination, that a crime has been committed, or he shall entertain doubts upon the subject, he should so report to the coroner and to the district attorney; and, if he should deem it necessary, call in a chemist to aid in the examination of the body, or of substances supposed to have caused or contributed to the death. On receipt of the notice from the medical examiner and report, the coroner is to hold an inquest, subsequent to which the names of persons contributing to the death shall be delivered by the coroner to a magistrate. The experience of the United States is valuable as a guide to British opinion, in view of any changes to be made in the law of this country in regard to coroners' inquests.

THE CONTAGIOUS DISEASES ACTS AT HONG-KONG.

In accordance with their well known principles the opponents of the Contagious Diseases Acts have pressed the abolition of a local series of regulations upon the Colonial Secretary. A very large deputation recently had an interview, at the Colonial Office, Whitehall, with Lord Derby and the Hon. Evelyn Ashley. This deputation urged the abolition of the Hongkong Contagious Diseases Acts ordinance. It was introduced by the Right Hon. J. Stansfeld, M.P.; Sir Wilfrid Lawson, Mr. S. Smith, and Mr. Fry, all members of Parliament, were present. Mr. Stansfeld explained the operation of the system in force at Hong Kong, and endeavoured to show that it was at variance with the wishes and prejudices of the native population; other members of the deputation urged the usual objections against legislation of this kind. Dr. E. Whittle made out that the Acts were, in a sanitary sense, failures. He deserves commendation for having openly admitted that he did not represent the medical profession, for the majority of his profession, he was obliged to allow, did not hold his views. Lord Derby, in reply, observed that the discussion had been extended from the purely local question to the general policy of Contagious Diseases Acts. He reminded the deputation that the feeling of Parliament must be consulted, and, therefore, if the deputation wished to obtain what it desired, it must convert not himself, but Parliament. Though his lordship expressed himself as entirely uncommitted on the subject, he pointed out several difficulties in the way of the opponents of the Acts. "I cannot quite assent to one argument which was used—namely, that these Acts are a protection to immorality. No doubt that is perfectly true as regards the men themselves who are primarily concerned; but, as we all know, disease of this kind is hereditary. It is passed on to innocent children, and therefore it is

not only the guilty who suffer, but many innocent persons suffer also. Then I think also you will have to discuss the question to what extent you are prepared to undertake the duty of putting down immorality by law. The general feeling of the public has been against putting the law very rigidly in force, and, as a matter of fact, it is only put in force when the nuisance goes beyond a certain degree. With regard to the medical evidence, that to my mind is exceedingly important. If you can really prove that these Acts, passed for the one object of doing away with or indefinitely lessening certain evils, have not accomplished that object, you will have made out your case, because it is solely upon that justification that the case in favour of the Acts has rested. However, as a gentleman who spoke on that subject very candidly admitted, the majority of the medical profession did not take the same view that he had taken; and I observe that the majority of the Committee of the House of Commons, which may be presumed to be fairly and impartially selected, did not take that view either. When I find the system prevailing at home, I cannot undertake to sweep it away in the colonies. Colonial legislation will follow that of England. What I have to do is to refer you to the opinion of the House of Commons. With regard to the local part of the question, the facts of the case stand thus. An amended ordinance was lately sent home intending to deal with some of these questions. I thought it better, in view of a probable Parliamentary discussion, to suspend action upon the ordinance, and have sent it back again to Hong Kong for a thorough investigation of the circumstances by the new Governor, and for a report upon it. No doubt by the time that report arrives we shall know what is the view Parliament takes, and until I know that, it is impossible for me to speak more decidedly upon the subject." The deputation then withdrew, after having thanked his lordship for his courteous reception and kind attention.

CLINICAL SOCIETY OF LONDON.

AT the last meeting of this Society, Dr. George Oliver, of Harrogate, gave a demonstration of the method he employs for the detection of sugar in the urine by means of test-papers. The test-papers were charged with the carmine of indigo and carbonate of soda. When one was dropped into an ordinary half-inch test-tube, and as much water poured in as just covered the upper end, and heat applied, a transparent and true blue solution, resembling Fehling's in appearance, was obtained. (A transparent solution could not, at the meeting, be produced from the London water. The characteristic reaction with grape-sugar was, however, unimpaired.) If with the paper one drop of diabetic urine had been added, shortly after the first simmer, a beautiful series of colour-changes appeared: first violet, then purple, then red, and finally straw-colour; while, on the other hand, one drop of non-diabetic urine induced no alteration of colour. The colours returned in the inverse order on shaking the tube, which allowed the air to mingle with the liquid. Reheating restored the colours again. Confirmation of the presence of glucose was obtained by dropping in a mercuric chloride paper, while the solution was still quite hot, after the complete development of the indigo reaction. Then there was produced immediately a blackish green precipitate. No such precipitation occurred when a drop of non-saccharine urine was under examination by the indigo test; then the blue solution was merely turned into a transparent green one. This test, as Dr. Oliver pointed out, discovers (*a*) the normal sugar; (*b*) the varying proportions of sugar which fill in the gap between the normal amount and that which characterises diabetes mellitus, as in liver-derangements and vaso-motor disturbances; (*c*) diabetic proportions. It possesses the following advantages over Fehling's test. 1. It will detect sugar in any proportion in the presence of albumen, peptone, blood, pus, or bile, and as readily as in ordinary diabetic urine. 2. It gives no play of colours with uric acid. 3. It possesses portability, cleanliness, and stability. Moore's, Trommer's, and Bœttger's bismuth tests are all inferior in delicacy. As yet, Dr. Oliver had not discovered anything besides glucose whi brought out the characteristic play of colours. After the reading this paper, the President announced that the Council of the Soci had determined to appoint a committee, consisting of Drs. Marc Southey, Ord, and Mahomed, to inquire into and report upon tests for albumen and sugar which have been brought before notice of the Society during the present year by Drs. Pavy, Johns and Oliver. The President stated that there were several pap yet to be read this session, which could not possibly be all take the one remaining meeting; he, therefore, put it to the assem whether an extra meeting should be held, and, upon its be decided to hold such meeting, fixed it for Friday, June 1st.

SCOTLAND.

DR. J. GREIG SMITH, of Bristol, has resigned his positio examiner in surgery and midwifery at Aberdeen, an office w he has held for two years. Dr. Smith's resignation will necess the election of an examiner in these subjects for the profess examinations to be held in July.

WOODILEE ASYLUM.

IT was decided at a meeting of the Barony Parochial Board o 8th instant to recommend the Asylum Committee to elect Dr. to the vacant office of Superintendent of Woodilee Asylum. Blair has been for some years assistant medical officer at navel, and the experience obtained there, combined with his known ability, mark him out as in every way excellently qu for the post.

THE WEATHER IN SCOTLAND.

IT seems impossible to account for the sudden changes i weather which have marked the present month. The openin were warm and mild, but they were soon followed by a ret keen east wind, and, on the 8th instant, a sharp snowstorm w perienced over nearly all Scotland. In some parts the sno very heavily, and there has been a large mortality among shee lambs, owing to scarcity of pasturage and the severity weather.

VITAL STATISTICS OF ABERDEEN FOR APRIL.

THE returns of the registrars for April show that, during the there were 319 births in Aberdeen—161 males and 158 fema these 277 were legitimate, and 42 illegitimate. The marriag bered 52, and the deaths 175—89 males and 86 females. The ing were the chief causes of death: diarrhœa, 6; cancer, 6; 20; scrofula, 6; cephalitis, 9; paralysis, 8; heart-disea stomach-disease, 6; old age, 12.

POISONING BY NITRIC ACID.

ON Monday, James Gow, a brassfounder, residing in K swallowed by mistake a quantity of aquafortis. He had g cupboard and helped himself, as he thought, to some beer of which it was the corrosive fluid used by him in his t thereupon drank a considerable quantity of water. Dr. I Kirkcaldy was at once called in, and did all that was pos the patient; all, however, proved unavailing, and, after much pain, the man died.

HEALTH OF EDINBURGH.

THE mortality of Edinburgh continues low, the deaths n 69 and the death-rate 16. An equal number of deaths (32) in the old and new towns. Phthisis and other chest-disea no fewer than 23 of the entire mortality. Of 10 deat

zymotic diseases, 5 were from whooping-cough, 4 from measles, and one from scarlet fever. There were 97 intimations of zymotic diseases, of which 61 were of measles, 32 of scarlet fever, 3 of diphtheria, and one of fever.

GLASGOW SOUTHERN HOSPITAL.

THOSE interested in the erection of a hospital to meet the wants of the south side inhabitants of Glasgow have not been idle in the matter, and they have gone the length of inviting plans for the building. These were adjudicated on last month, and the premium awarded to Messrs. Douglas and Sellars, architects, Glasgow. The ground for the hospital has been obtained in a nice open locality near the Queen's Park, and the plan selected provides for a building which is at first to be limited to 120 beds, but is to be capable of extension to 250, should circumstances demand it. We fear the chief difficulty that lies with the promotors of this scheme is, how to obtain the necessary funds for the undertaking.

THE VALUE OF REVACCINATION.

A VERY interesting case is given by Dr. Russell of Glasgow in his last health-report, illustrating very clearly the value of revaccination, even after exposure to the poison of small-pox. As noted in the JOURNAL of April 28th, a case of small-pox was removed to the hospital from one of the houses in the city on April 6th. The other occupants of the house were revaccinated at once, but one of them, a woman, sickened on the 14th, and an abortive eruption of small-pox appeared on the 17th. These facts show that the virus of small-pox had been imbibed, but as it lay twelve days dormant, while the vaccine virus became constitutional on the eighth day, the vaccine had four days start, so to speak, and the woman escaped with what would have been a very severe attack with a few slighted papules.

THE ABUSE OF OUT-DOOR HOSPITAL RELIEF.

At a meeting held recently in Greenock, with the object of taking steps to increase the accommodation in the eye wards of the Greenock Infirmary, a report was read from the oculist, Dr. Cluckie, on the subject. In this report occurs the following passage: "Many of the patients that are treated daily at the Infirmary ought to be ashamed to impoverish a charitable institution by taking advantage of benefits which are only intended for the working classes. As showing you the class of cases that frequently present themselves for treatment, I may state that we have frequently ladies with their servants in attendance getting treatment for themselves or some member of their family." We are glad to see that Dr. Cluckie has thus spoken openly against a state of matters which should at once be attended to, and we hope that the hospital authorities will take steps to put a stop to such an abuse of the charity.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending May 5, it appears that the death-rate in the eight principal towns was 20 per thousand of estimated population. This rate is 1.3 above that for the corresponding week of last year, but 2.6 below that of the previous week of the present year. The lowest mortality was recorded in Perth, viz., 15.3 per thousand; and the highest in Paisley, viz., 35.3 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 3.8 per thousand, 1.6 below the rate for the previous week. Measles was the most fatal miasmatic disease, the mortality therefrom being greatest in Glasgow. From acute diseases of the chest 132 deaths were registered, or 13 more than in the previous week. The mean temperature was 44.5°, being 1.5° above that of the week immediately preceding, but 2.4° below that of the corresponding week of last year.

THE HEALTH OF GLASGOW.

THE medical officer's report for the fortnight ending April 28th, states that there were 679 deaths registered, representing a death-rate of 34 per 1,000 living. The number of deaths from pulmonary diseases was 223, giving a death-rate of 11 per 1,000 living, and constituting 33 per cent. of the total deaths. There were 6 deaths from fever, 4 of which were from enteric, and 2 from typhus. The deaths from infectious diseases of children were 103—viz., 51 from measles, 37 from whooping-cough, and 15 from scarlet-fever. The mortality from measles is rapidly on the increase, and has spread over all parts of the city. The death-rate from measles was 2.6 per 1,000, and from whooping-cough 1.9, so that these two diseases alone accounted for 4.5 of the death-rate. The average age of the fatal cases of measles was 23¼ months, and of whooping-cough 22 months, which explains the fact that 49 per cent. of all the deaths registered were of children below 5 years of age. One case of small-pox was removed from a suburban parish, and another case was registered in the city. This latter occurred in a house from which a case of small-pox had been already removed to the hospital.

GLASGOW ROYAL INFIRMARY.

WITH the publication of the report of the Committee, and with the adoption of the suggestions embodied therein, a short summary of which we gave in last week's number of the JOURNAL, we hoped that the difficulties that have of late arisen in the administration of this hospital were at an end. It is accordingly with some misgiving that we see it officially announced that the gentleman who recently resigned the office of Chairman of the Board of Managers, and to whose ill-advised and unnecessary interference in matters medical all recent troubles are mainly due, has been asked by the Board of Managers to resume office, and has agreed to do so. If this step be necessary for the good of the hospital, and to make it appear to the outside public that all differences in the management of the charity are at an end, we have no doubt that the medical staff will be found ready to acquiesce in the arrangement; but, in doing so, they deserve credit for great forbearance, for, not only personally, but collectively, they have been exposed to a vast amount of misrepresentation and annoyance from a quarter from which it should least have come. We hope that Mr. McEwen will return to office with a higher estimate of the services that the medical staff yearly bestow on the infirmary than he seems hitherto to have possessed; and that, by the use of greater tact and courtesy, he may show himself fitted to fill the post which he has once again been asked to occupy.

HEALTH OF THE PRINCIPAL SCOTTISH TOWNS.

IN the eight principal Scottish towns, during the month of April, the deaths of 2,849 persons were registered; of these, 1,431 were males and 1,418 females. Allowance having been made for proportional increase of population, this number is 162 above the average for the same month during the preceding ten years. The death-rate of each town was, per 1,000 of its inhabitants: in Aberdeen 20, in Edinburgh 22, in Paisley and Perth 23, in Leith 27, in Greenock 28, in Dundee 29, and in Glasgow no less than 34. Of the entire mortality, 1,187, or 41.7 per cent., was of children under five years of age; and the percentages of the individual towns were: Paisley 28, Aberdeen 31, Edinburgh 32, Perth 33, Dundee 36, Greenock 43 Glasgow 47, and Leith no less than 56 per cent. Zymotic diseases caused 17.0 per cent. of the entire mortality; this rate, however, being considerably exceeded in Glasgow and Leith, where whooping-cough and measles prevailed. Whooping-cough, as usual, was most fatal, having caused 180 deaths, or 6.3 per cent. of all the deaths—in Dundee 11.5 and in Leith 11.9 per cent. of all the deaths were ascribed to it. Measles caused 127 deaths—in Glasgow 7.3 and in Leith 7.0 per cent. of the deaths were ascribed to measles. Of 38 deaths due to fever, 8 were registered as typhus, 25 as enteric, and 5

as simple continued fever (whatever that may be). Of the 8 deaths from typhus, 4 were in Glasgow and 2 in Edinburgh. Diarrhœa caused 42 deaths, scarlet fever 38, diphtheria 16, croup 15, metria 1, dysentery and small-pox 1—this solitary case of small-pox occurred in Glasgow. To apoplexy 73 deaths were attributed, to paralysis 77, to cardiac diseases 167, to hydrocephalus 71, and to premature birth debility 80 deaths. Phthisis pulmonalis contributed 347 deaths, equal to 12.2 per cent of the entire mortality; while inflammatory affections of the respiratory organs (other than those already referred to) caused 641 deaths, or 22.5 per cent of the whole. Of 69 deaths due to violent causes, 5 were of suicides. Four females and five males were over 90 years of age, the oldest of whom (a male) was 103 years of age. As to meteorological conditions during April, the mean barometric pressure was greater by 0.111 inch, and its monthly range greater by 0.072 inch. The mean temperature was greater by 0.7°, and its mean daily range greater by 1.2°. The mean humidity was less by 2; the rain depth in inches was less by 0.41 inch; and the wind-pressure less by 0.28 lb. than the average of the same month for the preceding twenty-six years. The highest mean temperature (46.2°) was at Leith; the lowest (44.0°) equally at Perth and Greenock. The greatest rainfall was also at Greenock.

DEATH UNDER CHLOROFORM.

We are sorry to have to put on record another of those fatal cases which from time to time occur during the administration of anæsthetics, and which have given to this subject such importance and interest. The occurrence took place in the Western Infirmary, Glasgow, and the anæsthetic used was chloroform. The patient was an elderly man, who was to undergo the operation of excision of the tongue. The anæsthetic was given, as is usual in the Western Infirmary, by means of a towel, and it had not been very long administered before it was noticed that respiration had ceased, that there was marked lividity of the face, and that the patient presented many of the features of a person in the tonic stage of an epileptiform convulsion. Every effort was made to re-establish breathing, but without success. A *post mortem* examination revealed nothing to account for death, beyond the presence of well marked symptoms of asphyxia. This is the third death that has occurred in the Western Infirmary during the administration of chloroform, and its occurrence just at the present time is a striking comment on the chloroform agitation recently carried on at the Royal Infirmary; for, in this case, the anæsthetic was administered by the surgeon himself, with all the care that extensive knowledge and experience of the subject could give.

IRELAND.

The Medical Board of the Adelaide Hospital, Dublin, will proceed, on Friday, June 8th, to elect a successor to the late Mr. B. Wills Richardson, whose lamented death has caused a vacancy on the surgical staff of the hospital. Applications should be forwarded to the Honorary Secretary of the Medical Board, not later than Friday, June 1st.

HEALTH OF BELFAST.

From the monthly report of Dr. Browne, J.P., medical superintendent officer of health, it appears that, during the four weeks ended April 21st, 83 cases of zymotic disease proved fatal. During the same period, 535 births were recorded, and 497 deaths. There were 86 deaths from phthisis, and 144 from diseases of the respiratory organs, making a total of 230 deaths from lung-affections in the four weeks. The average death-rate from all causes was 30; from zymotic diseases, 5; and from lung-diseases, 14. The deaths from the sequela of scarlatina and whooping-cough were greatly increased by the piercing cold and rapid changes in the atmosphere. The mortality from the other principal zymotic diseases, especially from typhus and enteric fever, were much below the average.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

A quarterly meeting of the committee was held recently in Belfast, presided over by Dr. Drennan. The financial statement of the branch was presented, and Dr. Spedding was deputed to call upon the non-subscribing younger members of the profession, in order to enlist their sympathies on behalf of the Society. Next month being the period at which the funds of the Society are annually distributed, at the general meeting in the Royal College of Surgeons in Dublin, several applications were considered, in order to be transmitted to the parent committee for placing on the roll for grants in sums proportioned to the exigency and urgency of each case. After a careful examination of the claims, a number of widows and orphans of deceased physicians and surgeons were approved of as suitable to obtain assistance.

BELFAST ROYAL HOSPITAL.

The honorary secretary has made an appeal to the charitable on behalf of this institution. He states that, despite all the efforts of the Board, and the liberal response to special appeals made, the hospital is some £1,000 in debt; that it requires nearly £8,000 per annum to conduct it efficiently; that the annual subscriptions have hitherto only amounted to about £1,400; and that the Board are in constant fear of having to close wards that urgently require to be enlarged. A steady income, derived either from annual subscriptions or endowments, is the only mode of conducting this great charity with credit to Belfast. He states that he knows no charity in Belfast that merits more confidence, or has stronger claims upon the public, than the Royal Hospital. It certainly is not creditable to a great town like Belfast, which boasts of its wealth and commercial importance, to leave the only institution which deals with such a mass of human suffering, in a state of chronic impecuniosity.

THE LATE MR. B. WILLS RICHARDSON.

At a meeting of the Medical Board of the Adelaide Hospital, Dublin, held on Friday, the 4th instant, Dr. H. Head, in the chair, the following resolution was unanimously adopted: "That the Medical Board of the Adelaide Hospital desire to record their deep regret at the death of Mr. B. Wills Richardson, who has been a valued member of the staff of this institution since its recognition as a clinical hospital. His strictly punctual and conscientious attention to his duties, his honourable conduct, and his uniform regard for the interests and reputation of his colleagues, caused Mr. Richardson to occupy the highest place in the regard of the members of the medical staff. They ever reposed the most perfect confidence in his honour, and cannot but feel that his death will be an almost irreparable loss to them and to the poor, in the treatment of whom he never spared time nor trouble; and they wish to convey to Mrs. Richardson and his family their sincere sympathies in their bereavement."

Royal College of Surgeons of England.—At the recent primary, or anatomical and physiological examinations for the diploma of membership of the Royal College of Surgeons, which were brought to a close on the 12th instant, there were 169 candidates examined against 167 at the corresponding period last year. Of this number, 53 were referred to their anatomical and physiological studies for three months, and nine for six months, making a total of 62 referred candidates; last year, 58 were referred for three months, and six for six months.

THE MEDICAL ACT AMENDMENT BILL.

THE following letter has been sent by the Secretary of the Perthshire Medical Association to the Right Hon. A. J. Mundella, M.P., and other members of Parliament specially interested.

Almondbank, Perth, May 15th, 1883.

Sir,—I am directed by the Perthshire Medical Association to express to you their general and cordial concurrence with the Government Medical Bill as it has left the House of Lords.

The most important provision specially affecting Scotland is contained in Clause 9, Section 4. With regard to the vexed question of proportional representation there formulated, we would express satisfaction with the principle adopted of giving to the universities a decided majority in the Divisional Board for Scotland. There are very many methods by which this might be effected; but, if the entire number of licensing bodies (seven) is to be maintained, no better solution presents itself to us than that in the Bill.

The higher medical teaching is safe in the hands of the universities, and the interests of the corporations are protected by the right of appeal; while it is also well known that most of our prominent men have connection with both a university and a corporation. With regard to extramural teaching, we believe that, in its best development, it will be furthered by the other provisions in this measure.

There are a few minor amendments which we venture to suggest for your consideration.

1. We believe it would conduce to the more easy working of the Council and Divisional Boards, were retirement by rotation substituted for withdrawal *en masse*, as now proposed.

2. Only registered practitioners should be held qualified to sit on these Boards.

3. A guarantee should be given in the Bill that examinations shall be conducted at the different centres of medical education.

4. Reciprocity of practice should exist between the colonies and this country, and a similar principle should guide the Council in their recognition of foreign diplomas.

5. Any unqualified person *practising for gain* should be made liable to punishment.

6. The fee for reinstatement on the *Register* should not exceed one guinea, and provision should be made for those whose names have been omitted, through simple negligence, being readmitted on the same terms.

7. Men proceeding to a degree, or in possession of such, should not be mulcted of more than £5 5s. for the prescribed final examination by the Board (as recommended by the Royal Commission).

8. A special Committee of the Privy Council should be named for action under this Bill.

9. The General Councils of the several universities should elect their representatives to the Divisional Boards.

In laying these views before you, we beg to explain that we have no direct interest in any of the universities or corporations further than that possessed by all graduates or licentiates; and that in the highest degree it is important that the continued worry and excitement of threatened legislation should be removed by the immediate enactment of such a thoughtful measure as the Medical Act Amendment Bill now under review. We will feel deeply indebted, should you give the preceding statement on the part of the Association your favourable attention. With an apology for the length to which these notes have run, I beg to subcribe myself, your obedient servant, ALEXANDER BAIRD, M.D., Honorary Secretary.

P.S.—One member dissented from the views here expressed with regard to the composition of Divisional Boards.—A. B.

THE SIXTH DECENNIAL REVISION OF THE PHARMACOPŒIA OF THE UNITED STATES, AND THE PHARMACOPŒA GERMANICA, EDITIO ALTERA.

IV.

In the immediately preceding article, the general characters of the Pharmacopœias of Great Britain and of the United States were discussed. In this, the chief features of the *Pharmacopœa Germanica* will be treated in a similar manner. Most of its general characters are capable of comparison with those of the other *Pharmacopœias* have been criticised in previous articles, and the remaining noticeable points will now be briefly reviewed.

The *Pharmacopœa Germanica* of 1882 contains much less new matter than the sixth revision of the *United States Pharmacopœia*. It appears somewhat bald, owing to the total absence of cross references, and to the omission to give any translations, synonyms, or symbolic formulæ in the text; and it fails in the very plain duty of providing lists of the substances added to, or omitted from, the new edition.

The preface gives an account of the means adopted for revising the preceding *Pharmacopœia*. It recounts that the German Federal Council, having determined that the edition of 1872 required revision, caused the Commission, to the composition of which we have already referred in a previous article, to be called together, and instructed it to report as to the manner in which the revision should be carried out. The outcome of this, was that the Chancellor of the German Empire requested each State to charge all persons interested in medicine and pharmacy to give their opinions as to the faults existing in the then *Pharmacopœa*, and how far the materia medica should be increased in the forthcoming one. After the *Pharmacopœia* Commission had reduced to order the various suggestions thus made, it considered that a large number of drugs and preparations unsuitable to modern practice should be removed, and that no new medicaments should be introduced, unless they were of use in every-day life, and were proved, by experience, to be of value. It further appeared that better methods should be given for more accurately estimating the quality of drugs, in order that the inspection of medicines sold in the shops might be more efficiently carried out. The Commission unanimously determined that their ordinances should have a more universal application, and should become part of the public law; and requested those skilled in these matters to make suggestions. Thus a second varied mass of material was brought together, in the collection of which many medical and pharmaceutical societies throughout Germany took part. The Commission then considered it desirable that the chemists and pharmacists of their body should closely and critically examine each subject, and conduct any necessary experiments. When this work was finished, the Commission was again called together, and completed their labours.

As a result of the determination to give better means for determining the purity of drugs, volumetric solutions are, for the first time, introduced. It may be here mentioned that volumetric solutions are also introduced for the first time into the *United States Pharmacopœia* of 1882. The latter solutions are identical with those in the *British Pharmacopœia* of 1867, excepting that, in some cases, there is a trifling difference in strength, due to the adoption of the newer atomic weights. The *Pharmacopœa Germanica* gives formulæ for several volumetric solutions not contained in either of the other pharmacopœias, viz.: Acidum hydrochloricum volumetricum, liquor amyli volumetricus, liquor kalii bromati volumetricus, liquor kalii bromici volumetricus, liquor kalii hydrici volumetricus, liquor kalii permanganici volumetricus, and liquor natrii chlorati volumetricus.

Acidum hydrochloricum volumetricum is used as the volumetric solution of oxalic acid in the *British* and *United States Pharmacopœias*. It has the disadvantage of containing a volatile acid. The oxalic acid solution speedily undergoes slight decomposition, with formation of formic acid, and is of such a strength that it is liable to crystallise out in cold weather. A sulphuric acid solution would be more useful than either. The liquor amyli volumetricus consists of starch boiled with chloride of zinc and water, and then iodide of zinc added. It is similar to, but not identical with, Schultz's solution, which is used in vegetable microscopy for staining the cell-walls in plants. As the *Pharmacopœa Germanica* does not indicate the uses of its official volumetric solutions, it does not appear at first sight of what practical value in pharmacy this solution may be; but on examination of the text, we find that it is used for detecting free chlorine in such substances as hydrochloric acid; or free bromine in solution. The chlorine or bromine, if present, liberates the iodine from the iodide of zinc, and this at once gives a blue colour with the starch in the solution. The chloride of zinc acts as a preservative.

Liquor kalii bromati volumetricus and liquor kalii bromici volumetricus are both quite new to pharmacy. Again, in these cases, it requires a little research to find to what uses these solutions are applied. They, however, are used together for the estimation of liquified carbolic acid. If one gramme of this preparation be diluted up to one litre of water, and this solution added to a definite amount of a mixture of the two volumetric solutions, with the further addition of sulphuric acid, not more than a certain amount of the

dilute liquified carbolic acid should be used to completely decompose that mixture. The nature of the decomposition is that all the bromine is first liberated from the mixture of sulphuric acid, bromide and bromate of potassium, and that this forms a precipitate of tribromophenol with the carbolic acid. The reaction is shown to be complete by the filtered solution giving no blue colour with volumetric solutions of starch, indicating absence of free bromine. Liquor kalii hydrici volumetricus is used simply as our volumetric solution of soda for estimating acids. Liquor kalii permanganici volumetricus is used for estimating ferrous salts. It has the advantage over the volumetric solution of bichromate of potassium of the *British* and *United States Pharmacopœias* in this respect, that it shows the slightest excess of itself by the pink colour of the solution; whereas, in using bichromate, one is compelled to withdraw successive portions, and test them with ferricyanide of potassium in order to ascertain if there is excess of the reagent or not. Liquor natrii chlorati volumetricus is a solution of chloride of sodium used for estimating silver salts, neutral chromate of potassium being used as an indicator of excess of the silver compound.

The remaining solutions, viz., liquor argenti nitrici volumetricus, liquor iodi volumetricus, liquor natrii throsulphurici (hyposulphite of soda) volumetricus, are of the same strength as those of the *British Pharmacopœia*, 1867.

In the estimation of alkalies and acids, solutions of phenolphthalein and tincture of cochineal are used as indicators. In the *British Pharmacopœia*, litmus only is employed; and in the *United States Pharmacopœia*, litmus is mentioned; but, though no other indicator is defined, any other suitable one may be used. In using solutions of phenolphthalein, no colour is observed with free acids, but when there be excess of alkali, a purple red colour is produced. As it is unsuited for estimations of ammonia, and is not available in the presence of carbonic acid, the tincture of cochineal may be used in these cases. The latter is not influenced to the same extent that litmus is by carbonic acid. It is yellowish red in the presence of acids, violet in the presence of alkalies. It is not very sensitive to organic acids.

In the text, chemical reactions are given in the order of their importance, and the ease with which they can be applied. Processes for the manufacture of chemicals are described in a few cases only, where they are absolutely necessary. When solutions are to be made 1—10 or 1—20, one part of the substance and nine or nineteen parts of the solvent are to be taken. The word *aqua* is to be always interpreted as distilled water, even in making decoctions and infusions. Unless special directions be given, dried plants and parts of plants are to be used in making their preparations.

No names of authorities are appended to the Latin names of plants or animals throughout the book. This is a very distinct drawback, and may lead to some confusion, since in some cases the same name is given by different authors to distinct plants. Thus *Cassia acutifolia* is stated by the *Pharmacopœa Germanica* to be the source of Alexandrian senna, but *C. acutifolia*, Nees, corresponds to *C. elongata*, Lemaire, which is given in the *British Pharmacopœia* as the source of Tinnivelly senna, while *C. acutifolia*, Delile, corresponds to *C. lanceolata*, Lamarck, and which is given in the *British Pharmacopœia* as partly the source of Alexandrian senna.

The *Pharmacopœa Germanica* is remarkable in containing drugs which are used in veterinary practice only, and these are not signified by any special mark. It contains a list of medicaments commonly called poisons, which must be kept most carefully, and secluded (*locis seclusis cautissime asservanda*), and another of medicines which must be separated from the rest, and kept with care (*a reliquis separanda et caute servanda*). A table follows, showing between what limits the specific gravities of official liquids may vary in the inspection of drugs in shops; and another table shows to what extent, in round numbers, for practical purposes, chemicals used in medicines are soluble in water, spirit, and ether.

No list of obsolete drugs removed from, or of new drugs added to, the present revision, is given; but, on examination, we find that upwards of 360 substances contained in the edition for 1872 are dismissed, while only 48 new articles have been added. It will be noticed that there is an enormous reduction in the number of preparations; and, among other things, no fewer than 27 waters, 18 plasters, 29 extracts, 25 tinctures, and 21 ointments, have been omitted. With few exceptions, these can be very well spared. On the other hand, only 12 new galenicals have been introduced.

The following is a complete list of the substances omitted from the new edition.

Acetum colchici.
— purum.
— rubi idæi.
Acidum aceticum aromaticum.
— chloro-nitrosum.
— nitricum crudum.
— nitricum dilutum.
— succinicum.
— sulphuricum fumans.
— valerianicum.
Aconitinum.
Ærugo.
Æther petrolei.
Æthelenum chloratum.
Alumina hydrata.
Ammonium carbonicum pyro-oleosum.
Ammonium phosphoricum.
Amylum marantæ.
Aqua amygdalarum amarum diluta.
— aromatica.
— chamomillæ.
— chamomillæ concentrata.
— cinnamomi spirituosa.
— communis.
— fœtida antihysterica.
— kreasoti.
— lauro-cerasi.
— melissæ.
— melissæ concentrata.
— menthæ piperitæ spirituosa.
— opii.
— petroselini.
— phagadænica.
— phagadænica nigra.
— plumbi Goulardi.
— rubi idæi.
— rubi idæi concentrata.
— salviæ.
— salviæ concentrata.
— sambuci.
— sambuci concentrata.
— tiliæ.
— tiliæ concentrata.
— valerianæ.
— vulneraria spirituosa.
Argentum nitricum fusum.
Atropinum.
Aurum foliatum.
Balsamum tolutanum.
Baryum chloratum.
Bismuthum valerianicum.
Cadmium sulphuricum.
Carbo animalis.
Carboneum sulphuratum.
Carica.
Castoreum sibiricum.
Ceratum æruginis.
— cetacei.
— cetacei rubrum.
— myristicæ.
— resinæ pini.
Cetaceum saccharatum.
Charta resinosa.
Chininum.
— tannicum.
— valerianicum.
Chinoidinum.
Cinchoninum.
— sulphuricum.
Coccionella.
Colla piscium.
Conchæ præparatæ.
Coniinum.
Cortex fructûs juglandis.
— mezerei.
Cuprum aceticum.
— aluminatum.
— subaceticum.
Cuprum sulphuricum ammoniatum.
Dextrinum.
Electuarium theriacæ.
Elemi.
Elixir proprietatis Paracelsi.
Emplastrum ad fonticulos.
— adhæsivum anglicum.
— ammoniaci.
— aromaticum.
— belladonnæ.
— conii.
— conii ammoniacatum.
— fœtidum.
Emplastrum fuscum.
— galbani crocatum.
— hyoscyami.
— lithargyri molle.
— meliloti.
— mezerei cantharidatum.
— minii rubrum.
— opiatum.
— oxycroceum.
— picis irritans.
Emulsio amygdalarum composita.
Extractum aloes acido sulphurico correctum.
— aurantii corticis.
— carnis (Liebig).
— centaurei.
— chamomillæ.
— chelidonii.
— chinæ.
— colocynthidis compositum.
— colombo.
— conii.
— dulcamaræ.
— fabæ calabaricæ.
— gratiolæ.
— lactucæ virosæ.
— ligni campechiani.
— liquiritiæ radicis.
— malti.
— malti ferratum.
— mezerei.
— millefolii.
— myrrhæ.
— pulsatillæ.
— rhataniæ.
— senegæ.
— stramonii.
— strychni aquosum.
— valerianæ.
Faba calabarica.
Farina hordei præparata.
Fel tauri depuratum siccum.
Fel tauri inspissatum.
Ferrum chloratum.
— citricum ammoniatum.
— citricum oxidatum.
— iodatum saccharatum.
— oxidatum fuscum.
— phosphoricum.
— pyrophosphoricum cum ammonio citrico.
— sulphuricum oxydatum ammoniatum.
Flores aurantii.
— chamomillæ romanæ.
— malvæ arboreæ.
— millefolii.
— primulæ.
— rhœados.
Folia aurantii.
— laurocerasi.
— rosmarini.
— rutæ.
— sennæ spiritu extracta.
— toxicodendri.
Fructus anisi stellati.
— cannabis.
— ceratoniæ.
— colocynthidis præparati.
— coriandri.
— myrtilli.
— petroselini.
— sabadillæ.
Fumigatio chlori.
Fungus laricis.
Gelatina.
— lichenis islandici saccharata sicca.
Gemma populi.
Herba chelidonii.
— chenopodii ambrosioidis.
— galeopsidis.
— gratiolæ.
— lactucæ.
— linariæ.
— majoranæ.
— millefolii.
— polygalæ.
— pulsatillæ.
— spilanthis.
Hydrargyrum depuratum.
— nitricum oxidulatum.
— sulphuratum nigrum.
— sulphuratum rubrum.
Kalium ferro-cyanatum.
— sulfuratum ad balneum.
Kino.
Lichen islandicus ab amaratie liberatus.
Lignum campechianum.
Linimentum saponato-ammoniatum.
Liquor ammonii carbonici.
— ammonii carbonici pyro-olesi.
— ammonii caustici spirituosus.
— ammonii succinici.
— ferri chlorati.
— hydrargyri nitrici oxydulati.
— natri carbolici.
— natri chlorati.
— seriparus.
— stibii chlorati.
Macis.
Magnesia lactica.
Manganum hyperoxydat.
Manna.
Mastix.
Mel.
Mistura gummosa.
— vulneraria acida.
Morphinum.
— aceticum.
Mucilago cydoniæ.
Natrum pyrophosphoricum.
— pyrophosphoricum ferratum.
— santonicum.
— subsulphurosum.
Oleum animale æthereum.
— aurantii corticis.
— bergamottæ.
— cajeputi rectificatum.
— chamomillæ infusum.
— chamomillæ æthereum.
— juniperi empyreumaticum.
— lini sulphuratum.
— majoranæ.
— menthæ crispæ.
— petræ italicum.
— phosphoratum.
— sabinæ.
— succini rectificatum.
— terebinthinæ sulphuratum.
— valerianæ.
Olibanum.
Oxymel colchici.
— simplex.
Pasta guaranæ.
— gummosa.
— liquiritiæ.
Pilulæ odontalgicæ.
Pix navalis.
Plumbum tannicum pulviforme.
Pulvis aromaticus.
— arsenicalis Cosmi.
— ad limonadam.
— temperans.
Radix alkanæ.
— arnicæ.
— artemisiæ.
— asari.
— bardanæ.
— belladonnæ.
— carlinæ.
— hellebori viridis.
— pyrethri.
— saponariæ.
— scammoniæ.
— serpentariæ.
— taraxaci.
Resina draconis.
— guaiaci.
— pini.
— scammoniæ.
Rhizoma caricis.
— chinæ.
— circumæ.
Sandaraca.
Sapo domesticus.
— oleaceus.
— terebinthinatus.
Semen cydoniæ.
— hyoscyami.
— quercûs tostum.
— stramonii.

Serum lactis.
— lactis acidum.
— lactis aluminatum.
— tamarindatum.
Sinapismus.
Species ad gargarisma.
— pectoralis cum fructibus.
Spiritus ætheris chlorati.
— menthæ crispæ anglicus.
— rosmarini.
— serpylli.
Spongiæ cerata.
— compressæ.
Stibium sulphuratum levigatum.
— sulphuratum rubrum.
Stipites dulcamaræ.
Strychninum.
Succinum.
Succus sambuci inspissatus.
Sulphur iodatum.
Syrupus balsami peruviani.
— chamomillæ.
— croci.
— fœniculi.
— gummosus.
— menthæ crispæ.
— opiatus.
— rhœados.
Syrupus sarsaparillæ compositus.
— sennæ cum manna.
— succi citri.
Tartarus ferratus.
Terebinthina laricina.
Tinctura aromatica acida.
— bellodonnæ.
— cascarillæ.
— castorei sibirici.
— digitalis ætherea.
— euphorbii.
— ferri chlorati.
— formicarum.
— guaiaci.
— guaiaci ammoniata.
— hellebori viridis.
— iodi decolorata.
— kino.
— macidis.
— opii benzoica.
— pini composita.
— resinæ jalapæ.
— scillæ kalina.
— secalis cornuti.
— spilanthis composita.
— stramonii.
— strychni ætherea.
— thujæ.
— toxicodendri.
— vanillæ.
Trochisci ipecacuanhæ.
— magnesiæ ustæ.
— morphini acetici.
Trochisci natri bi carbonici.
Turiones pini.
Unguentum acre.
— arsenicale Helmundi.
— belladonnæ.
— conii.
— digitalis.
— elemi.
— flavum.
— hyoscyami.
— linariæ.
— majoranæ.
— mezerei.
— narcotico - balsamicum Helmundi.
— ophthalmicum.
— ophthalmicum compositum.
— opiatum.
— oxygenatum.
— populi.
— rosatum.
— sulphuratum compositum.
— sulphuratum simplex.
— terebinthinæ compositum.
Vanilla saccharata.
Vinum aromaticum.
Zincum ferrocyanatum.
— lacticum.
— valerianicum.

In the above list those preparations which are altered in a slight degree only are not inserted; thus, species lignorum of the present *Pharmacopœa Germanica* differs from species ad decoctum lignorum of the previous pharmacopœia, only in the omission of radix bardanæ, and in a slight alteration in the proportion of two other ingredients. This is not considered sufficient for species ad decoctum lignorum to be placed among the articles dismissed from the pharmacopœia.

The following is a complete list of the additions to the *Pharmacopœa Germanica* of 1882.

cidum carbolicum liquefactum
- formicicum.
- pyrogallicum.
- salicylicum.
luminium sulfuricum.
mmonium bromatum.
mylium nitrosum.
pomorphinum hydrochi.
qua carbolisata.
lsamum nucistæ.
lcium phosphoric. crud.
arta sinapisata.
rysarobinum.
rtex condurango.
lia jaborandi.
ssypium depuratum.
Hydrargyrum cyanatum.
Kalium bichromicum.
Linimentum terebinthinatum.
Liquor aluminii acetici.
— corrosivus.
— ferri oxychlorati.
— natrii silicici.
Manganum sulphuricum.
Natrium benzoicum.
— bromatum.
— iodatum.
— salicylicum.
Oleum cantharidatum.
— olivarum commune.
— rapæ.
Paraffinum liquidum.
— solidum.
Pepsinum.
Physostigminum salicylicum.
Pilocarpinum hydrochloricum.
Plumbum aceticum crud.
Podophyllinum.
Pulvis salicylicus c. talco.
Resina dammar.
Sal carolinum factitium.
Sapo kalinus.
Spiritus vini cognac.
Syrupus sennæ.
Talcum.
Thymolum.
Tinctura veratri.
Unguentum paraffini.

NATIONAL HEALTH SOCIETY.

A LARGE and influential meeting was held recently, under the auspices of the National Health Society, at Grosvenor House, by permission of the Duke of WESTMINSTER, who presided, to promote the objects of the above-named Society, and in furtherance of an exhibition of Sanitary Domestic Appliances, Hygienic Dress, and decoration, to be held next month.

The CHAIRMAN, in opening the proceedings, said that all legislation and government ought to have regard to and seek the attainment of the greatest happiness of the greatest number. When they wished their friends well, they were in the habit—to use a common expression—of wishing them health and happiness. Health and happiness fairly went together; and there could be no doubt that happiness had for its main constituent good health. Some years ago, Lord Beaconsfield, on the occasion of one of his great orations, adopted that which might well become a motto for their Association *Sanitas, sanitatum, omnia sanitas.* Without any large amount of words, that Society had been able to effect, by means of an energetic and active body of ladies and gentlemen, a very great amount of good, showing how well-directed efforts compensated in a measure for lack of funds. The way in which this Association carried on its work was principally by means of lectures and exhibitions; and as the exhibition last year was so fully attended, and proved so great a success, it was considered desirable to have another exhibition this year; and he hoped and believed it would be attended by similar results.

Mr. ERNEST HART (Chairman of the Executive Committee) said that was the first time the Society had held any meeting for the advocacy of its own immediate objects, or the promotion of its own organised success. It was founded twelve years ago by a very few persons, for the most part ladies. It was founded upon the modest basis of endeavouring to do work in a simple way, without any costly organisation; and, by enlisting the sympathies of both sexes and all classes in the work, bringing home to every individual a knowledge of the facts, and a perception of the duties which lay at every one's door, and which, if thoroughly perceived and well done, would tend more to lessen mortality and crime, and to increase happiness and morality, than the legislation of both Houses of Parliament. The Society had established a very large number of classes all over the metropolis, and had assisted in establishing other classes in various parts of the country for the teaching of the laws of health and sanitary regulations. It provided three popular lecturers, who went all over the country; a number of prizes were offered at public day schools, not forgetting the day schools for girls; particular attention was devoted to the teaching of cookery to poor people; park parties and sea-side excursions were organised for poor children; a series of lectures had been given at the Society of Arts to plumbers, and had proved remarkably successful; and a great deal of other useful work had been done, although the annual subscriptions had never exceeded £250. The chronic nuisance of London houses was their dustbins, and the Society had suggested means for getting rid of that nuisance. The subject of arsenical wall-papers and arsenical tablets was now under consideration, and the committee would be prepared shortly to make some recommendation to the Government to prevent the importation to this country of arsenical papers.

Sir RUTHERFORD ALCOCK moved: "That this meeting cordially recognises the valuable services which the National Health Society has rendered, and is rendering, in the diffusion among the people of a knowledge of the laws of health and the means of preventing disease." He advocated the necessity of establishing Sanitary Aid Societies, such as existed at Westminster. The total mortality in the metropolis annually was 80,000, and nearly 20,000 of these died from the seven infectious diseases, which were all preventible if proper sanitary measures were adopted. (Hear, hear.)

Professor DE CHAUMONT seconded the resolution, which was agreed to.

Sir FREDERICK POLLOCK moved a resolution in favour of the approaching Exhibition. He remarked that we had magnificent streets and houses, but many of them were dens of disease and originated disease; the purity of the air was darkened by smoke and polluted by noxious vapours of our own creation, and other evils too numerous to mention.

Dr. THORNE THORNE (Inspector of the Medical Department of the Local Government Board), seconded, and Mr. FREDERICK TREVES supported the resolution, which was carried unanimously.

Lord BRABAZON moved, and Rev. HARRY JONES seconded, the following proposition, which was also agreed to:—"That the preservation of open spaces, the laying out and beautifying of public places and playgrounds in the metropolis, is an object which has the warm sympathy and support of this meeting."

A motion by Mr. GEORGE SHAW, affirming the importance of the efficient sanitary plumbing of dwelling-houses and public institutions, was carried, and the meeting terminated with a vote of thanks to the Duke of Westminster.

PRESENTATIONS.—Mr. George Rigden, of Canterbury, has been presented with a gold watch, chain, and locket, of the value of one hundred guineas. On the watch is inscribed: "Presented to George Rigden, Esq., M.R.C.S.Eng., etc., Surgeon to the Canterbury Dispensary, by James George Beaney, M.D., M.R.I.A., Surgeon and Lecturer on Clinical Surgery to the Melbourne Hospital, as a slight recognition of Mr. Rigden's kind and valuable services to the sick and poor of Dr. Beaney's native city, for nearly half a century. Melbourne, Australia, Jan. 27th, 1883."—Mr. F. B. Pullin, of Tunbridge Wells, has been presented with an illuminated address, a list of the subscribers handsomely bound in morocco, and a dining-room clock. The clock bears the following inscription: "Presented to F. Bingley Pullin, Esq., F.R.C.S., L.R.C.P., by members of the Friendly Societies of Tunbridge Wells, as a mark of their esteem for the great care and kindness shown them in the discharge of his professional duties while medical officer of the Tunbridge Wells Medical Association. April, 1883."

ASSOCIATION INTELLIGENCE.

MEETING OF COUNCIL.

At a meeting of the Council, held at Birmingham on Thursday afternoon, May 17th, called especially to consider a report of the Council on the representation of the Branches in the Committee of Council, the principle of direct representation of the Branches in the Committee of Council was adopted. The necessary alterations of the by-laws, of which due notice will be given, will accordingly be considered at the Annual Meeting at Liverpool

COMMITTEE OF COUNCIL.

NOTICE OF SPECIAL MEETING.

A SPECIAL meeting of the Committee of Council will be held in the Council Room, Exeter Hall, Strand, London, on Tuesday, the 22nd instant, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, May 9th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The SECRETARY of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M., on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.—A joint meeting will be held in Worcester, on Tuesday, May 29th. Members having any paper to read or cases to bring forward, are requested to report the titles of such paper or cases to the Honorary Secretary, not later than Thursday, May 17th, after which date a second circular will be issued, giving full particulars of the meeting.—GEORGE W. CROWE, M.D., Honorary Secretary, Shaw Street, Worcester, April 13th, 1883.

EAST ANGLIAN BRANCH —The spring meeting will be held at Lynn, on Thursday, May 24th, under the presidency of John Lowe, Esq., M.D. Notices of papers and cases to be sent to the Secretaries before May 12th.—W. A. ELLISTON, Ipswich, MICHAEL BEVERLEY, Norwich, Honorary Secretaries.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st, at 3 P.M. At this meeting, in addition to the ordinary business, a debate will take place upon Acute Pneumonia and its Treatment. Dr. Arlidge (Chairman of the Local Investigation of Diseases Committee) will commence the discussion, and the following gentlemen have promised, if possible, to take part in the debate, viz.: Dr. McAldowie, Dr. G. H. Lowe, Dr. Malet, Dr. Monckton, Dr. Reid, Dr. Totherick, and Dr. J. H. Tylecote.—VINCENT JACKSON, General Secretary.—Wolverhampton, April 29th, 1883.

EAST ANGLIAN AND CAMBRIDGE AND HUNTINGDON BRANCHES.—President: W. M. Crowfoot, M.B. President-elect, John Lowe, M.D. A combined meeting of the above Branches will be held at the Town Hall, King's Lynn, on Thursday, May 24th, 1883. The following papers have been promised: Dr. Lowe, Lynn: Two Cases of Perforation of Stomach. Dr. Paget, Cambridge: A Case of Coincidence of Diphtheria and Typhoid Fever. Dr. Eade, Norwich: A Case of Asthma treated by Galvanism. Dr. Latham, Cambridge: Megrim, its Pathology and Treatment. W. Cadge, Norwich: Paracentesis Thoracis, with Remarks. Dr. Dale, Lynn: Pulmonary Consumption and Infection. Dr. Elliston, Ipswich: Lithotomy by Aston Key's Method. S. H. Lindeman, Lynn: Dislocation of Head of Radius in Children. A. C. Mayo, Yarmouth: Pregnancy Complicated with Carcinoma of Os Uteri. H. C. Allinson, Lynn: A Case of Imperforate Hymen, with Retained Menses. A. R. Manby, Rudham: Ten Cases of Puerperal Eclampsia, with special reference to Treatment. R. B. Marriott: Swaffham: Two Cases of Typhoid Fever, and their Sequelæ. S. H. Burton, Norwich: A Case of Scarlet Fever, followed by Pyæmia. L. Humphry, Cambridge: A Case of Morbus Cæruleus with Cerebral Complications. At 10.30 A.M. Meeting of the Council. At 11 A.M. The general meeting will commence with an Address by the President, Dr. Crowfoot. The Report of the Council will be received, and New Members elected. A Discussion on the Medical Acts Amendment Bill will be invited. Papers will be read by S.H. Burton, W. A. Elliston, S. H. Lindeman, and Dr. Dale. At 1.30 P.M. The President-elect, Dr. Lowe, invites the members to a luncheon at the Town Hall. At 2 P.M. The afternoon sitting will commence with an Address by the President-elect, Dr. Lowe. At 6 P.M. Public dinner (under the presidency of Dr. Lowe), at the Globe Hotel. Tickets five shillings, exclusive of wine. W. A. ELLISTON, M.D., Ipswich; MICHAEL BEVERLEY, M.D., Norwich; BUSHELL ANNINGSON, M.D., Cambridge, Secretaries. N.B.—The Collective Investigation Committee will present a Report (cards and explanatory memoranda relating to Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, and Syphilis, can be had on application to the Honorary Secretaries, W. A. ELLISTON, Ipswich, for Suffolk; S. H. BURTON, Norwich, for Norfolk).

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting (annual) of the above District will be held at the Kent and Canterbury Hospital on May 24th, Mr. Bower, of Herne Bay, in the chair. *Collective Investigation Committee:* A discussion on Card No. 2, Acute Rheumatism, will be opened by Dr. Gogarty. Two unusual cases of Paralysis, exhibited by Dr. Gogarty; Gastrostomy case, exhibited by Mr. Whitehead Reid. Messrs. Krohne and Sesemann, of London, will exhibit some of the latest improved instruments and appliances. Members are reminded that the following diseases—Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, Acquired and Congenital Syphilis—are being investigated, and that cards and explanatory memoranda can be had on application to the Honorary District Secretary, T. WHITEHEAD REID, 34, St. George's Place, Canterbury.—May 17th, 1883.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held on Wednesday, May 30th, 1883. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than the 19th instant.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace.—May 7th, 1883.

SOUTH WALES AND MONMOUTH BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D. Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th 1883.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held at Manchester, on Wednesday, June 13th. The Honorary Secretary will be glad to receive immediate notice of papers or communications.—J. DAVIDSON, Honorary Secretary, 2, Gambier Terrace, Liverpool, May 12th, 1883

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, May 24th, at half past seven o'clock, J. K. SPENDER, M.D., President. A Discussion will take place on the Work of the Collective Investigation Committee. Dr. F. A. Mahomed (Secretary to the Committee), will address the meeting. A Clinical Discussion on Pneumonia will be opened by Dr. E. Field.—R. J. H. SCOTT and MARKHAM SKERRITT, M.D., Honorary Secretaries.

DORSET AND WEST HANTS BRANCH.—The first meeting will be held at Sherborne, on Wednesday, May 23rd, 1883, under the presidency of Dr. William. The business meeting will be held at the Yeatman Hospital at 2.30 P.M. *Agenda*: Secretaries' accounts for 1882; Confirmation of branch rules; Election of branch officers; Election of new members. Place and time of the autumn meeting. address by the President: On some of the Relations of the Modern Medical Practitioner. Patients to be shown—Mr. E. O. Scallon: Growth of Hair-like Process on Tongue. Dr. Leach: Meningocele. Dr. Williams: Lymphadenoma. Specimen: Dr. Leach, Paget's Disease of the Nipple. Discussion: Is Typhoid Fever always due to previous Typhoid? Dinner at the Digby Hotel at 5.30 P.M. Charge 6s. each, without wine. Members intending to be present, and who have not already done so to Dr. Lush, are requested to notify the same to Dr. William Sherborne, on or before Monday, May 21st. Members are reminded that the following diseases: Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, Acquired and Congenital Syphilis are being investigated by the Committee of the Association, and the cards and explanatory memoranda can be had on application to Mr. Parkinson, West Street, Wimborne.—WILLIAM VAWDREY LUSH, M.D., Weymouth, and C. H. WATTS PARKINSON, Wimborne, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of the district will be held at the house of Dr. Norman Kerr, 42, Grove Road, St. John's Wood, on Friday, May 25th, at 8.30 P.M. Dr. Handfield Jones will read a paper on Cases Illustrating the Production of High Body-Temperature in various Anomalous Conditions. Dr. W. G. Walford will read a paper on Rectal Alimentation.—GEORGE W. POTTER, M.D., Honorary Secretary. 60, Highbury New Park, May 15th, 1883.

WEST SOMERSET BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Tuesday, April 3rd, at 5 P.M.; H. P. OLIVEY, Esq., President, in the chair. Twelve members were present.

Representative of the Branch on the Committee of Council.—It was resolved that J. Prankerd, Esq., of Langport, be appointed as a second honorary secretary, whose sole duty as such shall be that of representing this Branch on the Committee of Council.

Representatives of the Branch on the General Council.—It was resolved that the President, H. P. Olivey, Esq., the President-elect, J. D. Adams, M.D., with the second honorary secretary, J. Prankerd, Esq., be the representatives of this Branch on the General Council for the ensuing year, 1883-4.

The Medical Act Amendment Bill.—A petition in favour of the Medical Act Amendment Bill now before the House of Lords was signed by all present.

Question for Discussion.—The following question, of which due notice had been given to every member, was put from the chair and discussed:—"In what doses do you usually give the following drugs?: Aconite, alcohol, bromide of potassium, calomel, digitalis, hydrate of chloral, iodide of potassium, opium, quinine." Written answers from Dr. Cordwent and Mr. Cornwall, who were unable to attend, were read to the meeting.

Medical Provident Society.—Mr. SINCOCK (Bridgwater) read a paper advocating the formation of a Medical Provident Society. He pointed out the benefits which, he considered, would accrue from belonging to such a society, and stated his views as to its formation, constitution, cost of working, etc. His estimate of the probable annual payment, which would have to be made by a man of middle age for securing any given sum per week in sickness, was twenty-five per cent. added to the week's sick pay. Thus, for securing £6 a week sick pay, he estimated the annual premium should be £7 10s. He thought that a form of life-assurance should be combined with the society, by each member having to pay a small sum on the death of a member. He concluded by moving: "That this meeting cordially approves of the steps that are being taken to establish a Medical Provident Society, and is of opinion that it should be instituted in conjunction with the British Medical Association."—Mr. WINTERBOTHAM seconded the motion; and, in supporting that part of it which advocated the society being instituted in conjunction with the British Medical Association, he stated that he thought not only might the offices and organisation already existing properly be utilised in the undertaking, but that some of the large accumulated funds of the Association might also be devoted to establishing and working the society.—The motion was carried, and all present authorised their names being added to the list of those who were desirous of establishing a Medical Provident Society.

Plaster-of-Paris Splints.—Mr. RIGDEN exhibited specimens of plaster-of-Paris splints, as used at the Taunton and Somerset Hospital, in cases of diseased joints and fractures. He also explained and demonstrated the ready mode in which they could be made.

Syphilitic Endocarditis.—Mr. HENSMAN narrated the history of a case of this disease now under his care in a young soldier, and brought the patient before the meeting to be examined.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fifth ordinary meeting of the session was held at the Bristol Museum and Library, on Wednesday evening, April 25th; J. K. SPENDER, M.D., President, in the chair. There were also present fifty-nine members and two visitors.

New Members.—The following gentlemen were elected: F. Stockwell, M.D., Bruton; G. Smith, M.R.C.S., Axbridge; J. Wyndowe, M.D., Batheaston; and A. J. Cunningham, M.B., C.M., Bristol.

Parliamentary Bills Committee.—Mr. J. S. Bartrum, of Bath, was unanimously elected to represent the Branch on the Parliamentary Bills Committee, in the place of Dr. Davey, resigned.

Petitions in favour of the Medical Acts Amendment Rill, and in opposition to Mr. Hastings' Bill for the Compulsory Notification of Infectious Diseases were laid on the table for signature.

Communications.—The following communications were made.

1. Mr. F. R. Cross exhibited patients illustrating the results of some Surgical Operations.—Dr. Markham Skerritt and Dr. Elliott made some observations on one of the cases.

2. Dr. J. Fuller of Long Ashton, read a paper on Three Cases of Puerperal Convulsions successfully treated by Venesection, which gave rise to an interesting discussion, in which the following members took part: Messrs. J. G. Swayne, M.D.; E. L. Fox, M.D.; F. T. B. Logan; C. Elliott, M.D.; E. A. White, M.D.; E. C. Bousfield; S. Craddock; E. W. Aust Lawrence, M.D.; N. C. Dobson, and the President.

3. Dr. A. J. Harrison brought forward a Case of Lymphadenoma, and exhibited microscopical specimens. Mr. Ewens made some remarks on the case.

4. Dr. R. S. Smith read a paper on the Utility of the Bacillus Tuberculosis for Diagnosis, which was discussed by Mr. Bousfield and Dr. Markham Skerritt.

NORTH OF ENGLAND BRANCH: SPRING MEETING.

THE spring meeting was held in the Talbot Hotel, Bishop Auckland, on Friday, April 27th, at 2.30 P.M. The President, DENNIS EMBLETON, Esq., M.D., F.R.C.P., occupied the chair, and about thirty members were present.

Papers, etc.—The following papers were read.

1. Dr. Philipson read a paper on Visceral Gout; after which a spirited discussion took place on the subject of gout, in which the President, Drs. Gibson, Eastwood, E. C. Anderson, Foster, Fielden, Gibbon, and S. W. Broadbent took part. Dr. Philipson replied.

2. Mr. J. F. LePage read a paper on Hæmorrhage and its Treatment by Storing and by Intrafusion, with cases. The paper was discussed by the President and Drs. Anderson and Lyon. Mr. LePage replied.

3. Dr. E. C. Anderson read a paper on Septic *versus* Antiseptic Midwifery.

4. Dr. Foss read a paper on Pneumonia Coincident with Surgical Injury.

5. Dr. Drummond showed some specimens—a cast, and skull with tumour attached, and drawings from a case of Perforating Tumour of the Dura Mater.

6. Dr. Fielden showed a patient (a woman) from whom he had removed the tongue four months previously, for Epitheliomatous Disease. There was no appearance of recurrence of the disease, and the patient had almost entirely regained the power of deglutition and speech.

Dinner.—After the meeting the members and their friends dined at the Talbot Hotel. About twenty-eight sat down to dinner. The chair was occupied by tne President, and the vice-chair by the Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

A MEETING of the above district was held on Thursday, March 22nd, at Deal. Dr. DAVEY of Walmer, who very kindly entertained the members to luncheon, took the chair.

Communications.—The following communications were read.

1. The President exhibited three interesting cases: 1. A Female Child, aged 4 months, with an Extroverted Bladder; 2. A Female Child, aged 6 weeks, with Spina Bifida, and an opening into the rectum immediately in front of the tip of the coccyx; 3. A Male aged 22, with right complete Inguinal Hernia, reducible; below which was a globular, tense, thick-walled cyst, unconnected with the testicle, irreducible, and containing fluid blood. There was a history of a lump appearing after a strain twelve months ago, which had enlarged very slowly during the last ten weeks.

2. Mr. Raven read a paper on Acute Pneumonia occurring in otherwise healthy subjects; the points indicated by the Collective Investigation Committee were followed.

Collective Investigation.—A very interesting discussion followed on the use of Card No. 1, and the Etiology, Pathology, and Diagnosis of the Disease. It was suggested that each card should have printed on it the date and page of the JOURNAL referring to the "memorandum" on the disease under investigation, that the special points required might not be lost sight of.

Dinner.—Twenty-two members and visitors afterwards dined together at the Royal Hotel, Deal.

The Next Meeting will be held at Canterbury, on May 24th, when it is proposed to discuss Card No. 3 of the Collective Investigation Committee.

All extant cards and explanatory memoranda can be had by application to the honorary secretary of the Local Committee, who is desirous of receiving names of intending debaters at the May meeting.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

A MEETING was held at the Royal Hospital School, Greenwich, on Friday, May 11th, at 8 P.M.; Mr. HENRY W. ROBERTS in the chair.

The Coroner's Court.—Dr. ALEXANDER FORSYTH read a paper on Experiences in the Coroner's Court. In the course of his paper, Dr. Forsyth showed the inefficiency, uselessness, and expensiveness of the court. He objected to the manner in which the coroner was elected, the jury collected, and to the employment of private medical men as medical jurists, especially in cases where the practice of rival practitioners was called in question. He held that special officials should be appointed to examine all cases brought under their notice by the proper authority, probably the police. All his points were illustrated with examples, and he concluded by recommending a system like the Scotch, where the Procurator Fiscal inquired into and disposed of trivial cases, without cost; or, better still, the thorough Prussian system, explained by Casper in his book on *Forensic Medicine*.

Obscure Disease.—Dr. R. E. CARRINGTON reported five cases of somewhat obscure disease occurring simultaneously in the same family, living under very unfavourable hygienic conditions.

Secretary.—Dr. R. E. CARRINGTON was unanimously elected as Honorary Secretary to the district, in place of Mr. Nelson Hardy, who resigned office in October last.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Bradley Memorial Prize.—Cotton District Convalescent Fund.—Thought-Reading.—Southern Hospital.—Birth and Death Rate in Manchester and Salford.—Throat Hospital.—Medico-Ethical Association.—Victoria University.—Appointment at the Royal Infirmary.—Drainage of Manchester.—Bequest to Manchester Medical Society.—Meeting of Lancashire and Cheshire Branch.

WE are glad to announce that, as the result of an effort to perpetuate the memory of the late Mr. S. Messenger Bradley, for many years Surgeon to the Royal Infirmary, the committee have reported that subscriptions have been received amounting to £533 1s. 6d., which have been invested in the names of two trustees, viz., Dr. Cullingworth and Mr. Walter Whitehead. A resolution was adopted, authorising the interest on this sum, amounting at present to £20 *per annum*, to be placed at the disposal of the honorary medical staff of the Infirmary, for the purpose of offering an annual prize, to be called the Bradley Prize in Clinical Surgery, to such students as are attending the surgical practice of the Infirmary.

At a meeting of the governors of the Cotton District Convalescent Fund, recently held under the presidency of the Earl of Derby, the Hospital Committee reported that they expected the contractors for the new home at Southport to hand it over in July; that they had come to a provisional agreement with the trustees for the existing hospital for joint management; and that the trustees were erecting buildings to connect the two homes, which were to be rented by the governors. The beds at the new home are to be allotted as follows: one hundred to the affiliated hospitals in the cotton district, and fifty to be kept at the discretion of the hospital committee of the governors. The committee further reported the patients in the various hospitals at the cost of the funds during the past three months of the year as follows: at the Barnes Home, Cheadle, 66; Devonshire Hospital, Buxton, 53; Children's Sanatorium, Southport, 21; making a total of 140 patients.

The Rev. E. H. Sugden, B.A., B.Sc., recently delivered a lecture, with experiments, on thought-reading before the members of the Medical Society. He divided the phenomena into two classes; viz., those in which there was contact between the reader and the patient, and those in which there was absolutely no contact. After performing several experiments, such as finding hidden articles, ascertaining figures on a bank note, etc., Mr. Sugden said he was satisfied that the explanation of what they had seen was to be found in unconscious muscular action. It was not that the patient actually led the operator to the place where the thing was, or guided the hand in the case of figures, which was a more delicate experiment; it was rather that the operator followed what he might call the line of least resistance. As to the second class of phenomena, in which there was no contact, it had been discovered that some people possessed the power of finding out certain things that were thought about by other persons, without receiving any sort of indication through the ordinary sense-channels. He had found that children could do this well. Was this an indication of a development of this power of thought-reading, or the remnant of a power which the race had gradually lost? He was inclined to take the latter view. There was no doubt that the lower animals possessed some sort of power of thought-reading. If the human race had this power originally, as spoken language became developed, the race would lose it, just as other unexercised powers were lost. With regard to the scientific explanation of the phenomena, he suggested that with every thought there was a certain vibration of the molecules of the brain, and that this vibration in one brain might affect another, just as the magnet would affect a piece of soft iron. Dr. Leech (the President), Professor Boyd Dawkins, Dr. Simpson, and others, took part in the discussion.

The Committee of the Manchester Southern Hospital have issued a circular asking for funds to make certain extensions. They state that the hospital, which has now been established for over sixteen years, stands greatly in need of some alteration and extensions, in order to enable the work in it to be carried on more efficiently. In particular, there is occasion for an operating-room, private ward for special cases, and a bath-room upstairs. The number of beds at present—viz., thirteen for children and six for women—is below the requirement of the charity, and the number of beds for women requires to be doubled. A mortuary is also required. The estimated cost of these alterations is about £1,000. Classes for midwives have been established, and some medical students are gaining experience at the hospital. Four midwives are engaged in poor districts in connection with the maternity department. We sincerely hope there will be a hearty response to this deserving appeal.

The Committee of the Sanitary Association furnish the following comparative statement, compiled from the weekly returns of Mr. Leigh and Dr. Tatham, medical officers of health, for the quarter ending March 31st.

	Manchester.	Salford.
Total births	3,083 ...	1,796
Average birth-rate	36.1 ...	37 0
Total deaths	2,437 ...	1,092
,, under five years of age ...	875 ...	450
,, under one year of age ...	484 ...	284
Average death-rate per quarter	28.5 ...	23.0

The deaths from zymotic diseases were 8.2 per cent. of the total in Manchester, and 9.2 per cent. in Salford. The deaths under five years of age were 35.9 and 41.2 in Manchester and Salford respectively.

At the last monthly meeting of the Board of Management of the Hospital for Consumption, the following resolution was passed: "The Committee of Management of the Hospital for Consumption and Diseases of the Throat having expressed a wish for the sympathy and support of this board in aid of the establishment of a hospital for consumption, at Bowdon or elsewhere, containing much greater accommodation than at present exists, so as to enable them to more effectually afford relief to sufferers from that disease, this board desires to record its sympathy with and approval of the step about to be taken by the committee of the Hospital for Consumption towards providing in the neighbourhood of Manchester increased accommodation for the large number of consumptive patients. The board are only too cognisant of the fact that a considerable number of consumptive patients who seek admission to this infirmary are necessarily rejected, as, by the rule of the institution, they are inadmissible; and they earnestly hope that the efforts now being made to provide more adequate hospital accommodation to meet the pressing requirements of such cases may be attended with success." The appointment of Mr. Priestley as Assistant Physician to this hospital has given general satisfaction. His excellent training as Assistant Lecturer on Physiology to the Owens College will be of the greatest service to him in his new sphere.

At the last meeting of the Medico-Ethical Association, Dr. Buckley read a paper on an Epidemic of Puerperal Fever from an Ethical Point of View. He related the history of an epidemic of five cases that had come under his notice as medical officer of health, all of which occurred in the practice of an untrained and unqualified midwife, and all of which terminated fatally. This woman, in addition to her ordinary calling as midwife, was in the habit of washing and laying out dead bodies; and Dr. Buckley was of opinion that the infection had been transmitted in this way. He expressed a strong opinion, in which the meeting heartily concurred, that no one should be allowed to practise midwifery for gain without being properly trained and duly licensed.

The following gentlemen have accepted appointments as extern examiners in connection with the medical faculty of the Victoria University: Medicine and Pathology: Professor W. T. Gairdner, of the University of Glasgow; Surgery: Professor Lister, King's College

Anatomy: Professor Mitchell Banks, of Liverpool; Obstetrics: Dr. W. O. Priestley, London; Materia Medica: Dr. Lauder Brunton, London. The following lecturers in the Owens College have been appointed University examiners, in addition to the *ex officio* examiners: Medicine: Dr. Cullingworth; Hygiene: Dr. Ransome; Ophthalmology: Dr. Little; Surgery, Mr. T. Jones.

The authorities of the Victoria University are thus taking steps for availing themselves of the power given them to confer medical degrees. The regulations for the course of study and for the examinations to be required are now being actively discussed by the medical professors and other members of the board of studies. It is, therefore, likely that the chief functions of the first external examiners will be rather to aid in drawing up the regulations than to examine for the degree. If the example set by the art and science side of the University be followed, there will be no reason to complain that the medical degrees will be too easily granted.

Dr. Graham Steell, M.D.Edin., and Thesis Gold Medallist, has been selected to fill the vacancy in the medical staff of the Royal Infirmary caused by the resignation of Dr. Roberts. Dr. Steele has been the resident medical officer at the hospital for five years, and his tenure of office has been marked by ability, tact, and courtesy, which have raised him high in the esteem of board, staff, and students. For the office which he vacates, there are already two candidates in the field, both possessing exceptionally good qualifications—Dr. Maguire, of the Owens College School of Medicine, who last year took the M.D. (London) Gold Medal, and the year before the M.B. Scholarship in Medicine; and Dr. Grant, of the Edinburgh School, Ettles Scholar of his year, and for two years resident medical officer at the Cheadle Convalescent Hospital.

It seems probable that, if the ship-canal which is projected between Manchester and Liverpool be carried out, the drainage system of our town will be materially improved. At the present time, to our disgrace be it said, the whole of the sewage of Manchester is discharged into the Irwell. It is true that, owing to the adoption of the dry closet system, the quantity of sewage so discharged has of late been greatly diminished; but if the waters of the Irwell are to be used for docks and the upper part of the canal, the sewage must be altogether kept out, or the water in its semi-stagnant condition will become a source of discomfort, if not of danger. The neighbouring town of Salford has set us a good example, and very shortly will cease to pollute the river. Plans, I understand, have been drawn up for the Manchester corporation for diverting the sewage from the river; and should the ship canal be made, an excellent opportunity will be afforded for carrying out the work at a comparatively small expense.

Amongst other bequests of a similar nature, I am glad to hear that Mr. Robert Holt of Prestwich, until lately carrying on business as a bookseller in this city, has left a considerable sum of money—the exact amount is not yet officially announced—to the Manchester Medical Society. This bequest will arrive very opportunely, as the committee of that Society have been considering the advisability of putting by a certain sum of money yearly to form the nucleus of a fund which might become useful in an emergency.

The invitation of Manchester to the Lancashire and Cheshire Branch of the British Medical Association having been accepted by the Council, the annual meeting will be held here on Wednesday, June 13th. It is expected that the attendance of members will be very large.

CORRESPONDENCE.

MEDICAL PROVIDENT SOCIETY.

SIR,—Dr. Thurstan, in the JOURNAL of April 14th, speaks of an insuperable difficulty in the working of the society—namely, the inspection of the sick, and he very properly mentions the members of the profession whose honesty is secondary to their pocket. I believe these considerations are very much underestimated. Night work, extensive practice, exposure of all kinds, a certain respect for disease engendered by daily association with it, make medical men go on the shelf at least once a year. My medical acquaintance is, I believe, above the average, and I am sure this is true. Now, how much more would this be the case if facilities were given for the indulgence of sickness? There cannot be a shadow of a doubt that there will be plenty taking advantage of the Society, and it would be far more difficult to deal with a medical man malingering than one of the working-class.

I think there is a remedy; at one stroke doing away with the indelicacy of receiving a monetary payment, and with the expenses of inspection.

The Society would be for provision in serious and unexpected sickness. Let, then, a list of diseases be culled out of the nomenclature of the College of Physicians, leaving such complaints as bronchitis (counterfeited by relaxed throat) debility, etc., to be allowed only when they necessitated confinement to the bedroom. There could be no injustice if one rule applied to all.

Then, in place of a sick-payment, let a good *locum tenens* be sent (who would report case), the sick member paying travelling expenses. The Society might pay a salary to some good men constantly engaged as *locum tenens*. The uncertainty of employment makes a good *locum tenens* rather uncommon; and, with a reversed condition, a contrary result might be obtained, and no doubt the holiday taking practitioner would be glad of a reliable place to get his *locum tenens*.—Yours truly,

B. H. DALE.

Craven House, Devizes, May 12th, 1883.

SIR,—Surely the many urgent appeals for help, and the sad details of the necessities of those for whom help is besought, which are at present published in the columns of the medical journals, call for instant action on the part of those who, from the foremost position they occupy in the ranks of our profession, have the power and influence to take up successfully the question of the formation of a "Benevolent Fund," the contributors towards which shall be co-equal with, or even extending beyond the numbers of the members of our Association. Amongst these appeals we have the cases of: 1. Dr. Brown of Eastbourne; 2. The anonymous case, whose claims are advocated by Dr. Symes Thompson, and Mr. John Gay in the BRITISH MEDICAL JOURNAL, April 28th, p. 850.; 3. Of Dr. Hurford, (BRITISH MEDICAL JOURNAL, April 21st, p. 798); 4. The widow and three children of the late Dr. B. T. Moore of Kineton, who have been left penniless (*Medical Press and Circular*, April 25th, p. 374); all of which call loudly for help. Here in Sheffield, we have a sad case of a surgeon who is threatened with absolute want, having been compelled to give up practice on account of "paralysis," and for whom the members of the profession in Sheffield are doing what they can to get together a fund to help him.

I am satisfied that if the idea, which is embodied in my letter published in the JOURNAL for April 14th last, were once fairly set before the members of the Association, the scheme would receive large and generous support. As a result, efficient help could be given to deserving cases, without pressing too heavily upon individual pockets. Those whose means only permitted them to contribute to a limited extent, would have the satisfaction of knowing that, at least, they were doing what they could, and would not feel the sharp pang they must feel when having done what they could, they find they must be deaf to further appeals, hoping only that others may be able to do more. If the profession were able, and I believe they would be able to do so, to raise an annual income of £30,000, how rarely would the columns of the journals be called upon to record such sad stories as these which now meet our eyes! It would also be a noble proof of real brotherhood amongst the members of the profession and of our Association, and would certainly command for us increased respect in the eyes of the public generally. May I hope, sir, that you will take the matter up, and lend to it the undoubted influence of your approval and advocacy. If it be possible to establish on a safe, and not too burdensome a basis, a Provident Society in connection with the profession, by all means let it be done; but over and above that, let us have a large "Benevolent Fund" raised at once in connection with the Association, towards which each should give as his means permitted. A census might easily be taken, with the weekly issue of the JOURNAL, of those willing to support the scheme. Hoping that the idea may not be allowed to rest, but that you will take it up and carry it to a successful issue, and thus add one more to the many good things you have accomplished for the profession.—I remain, faithfully yours,

JOHN W. MARTIN, M.D.

76, Brunswick Street, Sheffield, May 4th, 1883.

SIR,—I hope that medical practitioners out of England (United Kingdom) will be allowed to join the Medical Benefit Society. I can see no just cause to prevent them from doing so; it will help to increase the funds generally. If this be allowed, please put my name on the list.—Yours faithfully,

T. d' O. PARTRIDGE, Civil Surgeon, Lakhimpur.

Dibrugarh Assam, India, April 2nd, 1883.

FURTHER letters of adhesion have been received from the following gentlemen:—

Mr. W. J. Beatty, Stockton-on-Tees; Mr. Edward Jepson, Durham; Mr. A. Devonald, Carnforth, Lancashire; Mr. S. B. Mason, Pontypool, Monmouth; and Dr. A. R. Graham, Weybridge.

THE following sums have been received and promised towards meeting the preliminary expenses, in accordance with Dr. Clibborn's suggestion contained in our issue of May 5th.

	s.	d.
Dr. Clibborn, Birmingham	10	6
Mr. T. H. Ravenhill, Bordesley, Birmingham	10	6
Mr. Alex. Morton, M.B., Crosshill, Glasgow	10	6
Mr. W. H. Twort, Camberley	10	6
Mr. A. P. Fiddian, M.B., Cardiff	10	6
Dr. John Watson, Manchester	10	6
Mr. C. A. Owens, Long Stratton	10	6
Dr. Woodcock, Old Trafford	10	6
Mr. James Denham Bradburn, Kettering	10	6
Dr. W. Lovell Hunter, Pudsey, Leeds	10	6
Mr. G. Dale, M.B., Grosmont, Hereford	10	6
Mr. W. Bartlett, Deal	10	6
Mr. C. E. Abbott, Braintree	10	6
Mr. Edward Bartlett, London	10	6
Dr. Samuel Barker, Brighton	10	6
Mr. Thos. Rickards, M.B., Birmingham	10	6
Mr. G. A. Rae, Devonport	10	6
Dr. R. L. Batterbury, Berkhamsted	10	6
Dr. Drummond, Birmingham	10	6
Dr. G. H. Batterbury, Wimborne, Dorset	10	6
Dr. Stanley Haynes, Malvern	10	6
Mr. G. J. Malcolm Smith, Hurstpierpoint, Sussex	10	6
Mr. F. Hayes, Dunster, Somerset	10	6
Mr. T. Clark, Dunster, Somerset	10	6
Mr. J. W. Wolfenden, Tutbury, Burton-on-Trent	10	6
Dr. F. S. Palmer, East Sheen	10	6
Mr. Clement Walter, Dover	10	6
Mr. W. F. Brook, Fareham	10	6
Mr. Richard Ellery, Plymouth	10	6
Mr. Barre L. Tandy, Haverhill	10	6
Dr. W. K. Giddings, Calverley, near Leeds	10	10
Mr. C. C. Burman, Belford	10	6
Mr. F. Boynton Lee, Heckmondwike	10	6
Mr. G. A. Brown, Tredegar	10	6
Mr. W. L'H. Blenkarne, Buckingham	10	6
Mr. Arthur Kempe, Exeter	10	6
Mr. James Alexander, Paington	10	6
Mr. J. H. Gilmour, Andover	10	6
Mr. William Pearson, Glasgow	10	6
Mr. Charles E. Lay, Peasenhall, Suffolk	10	6
Mr. J. M. Ryan, M.B., Colchester	10	6
Mr. Hy. Stubbs, Madeley, Shropshire	10	6
Mr. John Brown, Bacup	10	6
Mr. J. Bain Sincock, Bridgwater	5	0
Mr. Fredk. Wallace, Upper Clapton	10	6
Dr. W. Newman, Stamford	10	6
Dr. H. Tomkins, Manchester	5	0
Mr. A. T. Wear, Newcastle-on-Tyne	10	6
Mr. J. Brindley James, London	10	6
Mr. Edward Williams, Aberayron	10	6
Mr. W. B. Wall, Pembroke	10	6
Mr. S. Wellesby Coombs, Worcester	10	6
Mr. E. Wood Forster, Darlington	10	6
Mr. Wm. Donovan, Leicester	10	6
Mr. James Parette, Bristol	10	6
Dr. A. H. Bampton, Plymouth	10	6
Dr. C. E. Shelly, Hertford	10	6
Mr. James Altham, M.B., New Galloway, N.B.	10	6
Dr P. A. Young, Portobello	10	6

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL PATIENTS AND THEIR PAYMENTS.

SIR,—Your excellent article on the subject of the distressed financial condition of the chief of the London hospitals, and your plea for the general adoption of a system of patients' payments by all the great medical charities, induces me to offer my experience of what has been accomplished at two institutions where the plan has been introduced—in one case for twelve years, and in the other for two years and a half.

The Bolingbroke House pay-hospital was established in 1880, and is exclusively a "pay-hospital." Every patient admitted is required to pay such a weekly fee as his means will allow, the minimum charge being 10s. 6d. weekly, rising to three guineas for a bed in a private room. A register is kept of the occupation of the patients admitted, and it is extremely satisfactory to find that they are just the class of persons for whom the hospital is intended, viz., the lower middle and artisan classes. Those who are able to pay a fee slightly above their actual cost, which in the second year was £2 0s. 11d. each, help towards the deficiency incurred upon those who can afford no more than 10s. 6d. weekly. The result of this has been that, in the first year, the patients' payments supported the institution to the extent of 67 per cent. of the cost to maintain it. Last year, the percentage advanced to 73.5 per cent., the number of patients increasing from 34 to 65; while the total fees for the year increased from £202 to £652. During the past seven months, 57 patients have been admitted, while, in the corresponding period of the first two years, the numbers were 12 and 24 respectively. It is, therefore, expected that the third year of this interesting experiment will show a continuing success; it may then fairly be said to have passed through its experimental period, and the experience gained will be valuable to the managing bodies of purely charitable hospitals, who may be studying the question how best to provide against diminishing exchequers. What the general hospitals can hope to accomplish is the saving of expenditure, and not the making of a profit. By admitting the class of patients received at Bolingbroke House, who can pay 73 per cent. of their cost, the hospital would be saved the necessity for, and the expenses of, appealing for charitable donations of an equivalent amount. The general admission to ordinary charitable hospitals of patients from whom an appreciable profit could be made, would be generally disapproved. In fact, this would necessitate new wards, fitted and furnished as private bedrooms; and the fear would be that the treatment of the necessitous poor in the old true spirit of charity would gradually become of secondary importance in the anxiety to become financially flourishing.

Small payments can and will be cheerfully paid by almost all the patients who attend our hospitals, either for in- or out-door treatment. The greater proportion of applications I receive for admission to Bolingbroke House are from those who express their willingness to pay all they are able, usually 5s. or 7s. 6d. per week, in preference to entering a general free hospital. Hitherto, we have been unable to deal with such cases, although there is a plan under consideration for insuring in-door treatment by regular weekly payments.

At the second institution, the Chelsea Hospital for Women, both in- and out-patients have, for the past twelve years, been required to pay a small weekly fee, unless they are fit objects for charity, in which case gratuitous treatment is freely given, and they are treated in all respects as patients who are able to contribute. Out-patients also pay sixpence for medicine, if they are unprovided with a subscriber's letter.

Calculating every free and contributing patient who has entered the hospital, I find that each one has paid an average of 16s. 2d. weekly; while every one of the 26,701 out-patients, also allowing for those who are treated gratuitously, has paid an average of threepence on every visit. Taken as a whole, the amounts received from contributing in- and out-patients represent over a third of the entire cost to maintain the institution. Ordinary expenditure being so far assured, has allowed of efforts being devoted to raising funds to provide a new building of sixty-five beds. Nearly £20,000 have been accumulated in five years and a half, and the new building will be opened in July, with an exceptionally small proportion of debt for its construction.—I am, sir, your obedient servant,

Woodville, Upper Tooting, April 30th, 1883. J. S. WOOD.

A STEP IN THE RIGHT DIRECTION.

THE fourteenth annual report of the Croydon General Hospital differs notably from most pamphlets of the kind which find their way into our hands. The chairman, in moving the adoption of the report, spoke with satisfaction of the diminished number of out-patients, and said the governors might look forward to a still further reduction, for they could not fail to observe the great amount of good that was being done by the Croydon Provident Dispensary. We are so accustomed to hear hospital authorities boast of the great increase of out-patients from year to year, and to see the figures paraded in reports and advertisements, that it is quite refreshing to meet with a committee who are pleased that their out-patients should diminish in numbers, because it shows that provident habits are spreading among the poor of the neighbourhood. In seconding the adoption of the report, Dr. Alfred Carpenter said that with regard to the out-patient department he felt in some little difficulty, because, as they were aware, he had taken a prominent part in the establishment of the counter institution in Katharine Street. He did not do it in antagonism to the hospital, but his object had been one which he thought would commend itself to all those who were anxious for the welfare of their fellow men. His object had been to promote the interests of that dispensary, and to urge upon the govenors of the hospital the wisdom of connecting their own work with the work of the provident dispensary. His wish was to see the dispensary so arranged that the medical officers attached to it should have the first opportunities of getting upon the medical staff of the hospital. He should like to see an arrangement between the hospital and dispensary authorities, whereby those patients who belonged to the dispensary and could not be properly treated in their own houses should have priority as to admission into the hospital. He should like to see the officers of the dispensary seeking assistance from the medical officers of the hospital in consultation, and then if it was considered that a patient could not be properly treated at home, he or she, as the case might be, should be transferred to the General Hospital. This course would, he was sure, promote the principle of providence; for they would be encouraging the working classes to provide for themselves, to some extent at their own cost, medical assistance. It was hoped before long to have all the hospitals of London connected with provident dispensaries. Those persons who

subscribed a penny or twopence a-week to the provident dispensary did not have to wait until they had got a letter for the hospital; but, upon the appearance of illness, they were able to run at once to the dispensary. He thought the committee were to be congratulated upon the present condition of the hospital.

As Dr. Carpenter was subsequently elected a trustee of the institution, in the room of the late Baron Heath, we may feel assured that the committee have full confidence in the principle which he enunciated, and which he has done so much to recommend. The attitude which has been taken by the Croydon Hospital towards the Provident Dispensary deserves the highest praise, for it is decidedly a step in the right direction.

MILITARY AND NAVAL MEDICAL SERVICES.

PRIZES OF THE GENEVA INTERNATIONAL RED CROSS COMMITTEE.

In the JOURNAL of February 18th, 1882, at page 240, we announced that the International Committee for Aid to Wounded in time of War, at Geneva, had offered three prizes, each of the value of 2,000 francs (£80), for the best essays on (1) improvisation of means of treating the wounded; (2) improvisation of means of transport; (3) improvisation of field-hospitals. As then mentioned, the limit of time for sending in the competitive essays was fixed at April 1st, 1883. The date has now passed, and the number of essays sent in is found to be 29. The majority are from France and Germany; only two have been sent from England. The particular numbers are from France, 14; Germany, 9; England, 2; Switzerland, Holland, United States, and Italy, each 1. Fifteen of the essays are written in the French language, 10 in German, 3 in English, and 1 in Italian. The International Committee has appointed the following eminent professors the examine the essays, and to adjudge the prizes:—Dr. Gurlt, Professor of Surgery in the University of Berlin; Dr. Léon Le Fort, Professor to the Faculty, and Member of the Academy of Medicine of Paris; and Dr. Socin, Professor of Clinical Surgery at Bâle.

ARMY MEDICAL EXAMINATIONS.

SIR,—I have read with much pleasure the letters of Dr. Stoker and Mr. Hamilton in your issue of April 14th, on the army medical examinations. The latter part of Dr. Stoker's letter deserves important consideration, as it confirms in the most emphatic manner the prejudice that exists in England against Irish qualifications. Mr. Hamilton's letter merely defends the fairness of the last examination at which he was present, and which was not complained of by the Irish candidates, as, out of fifteen places, seven Irishmen were successful in the British Medical Service. Mr. Hamilton is entirely at fault in expressing his regret at Mr. Gibson's question being asked in the House of Commons, for I have heard the feelings of dissatisfaction expressed by dozens of unsuccessful candidates. I may, therefore, be competent to state that distrust at the system of examination adopted is general amongst Irish candidates. No one can deny that there has of late sprung up in England a certain prejudice against Irishmen of every class.

The defence that one of the examiners is an Irishman is weak indeed, as the gentleman referred to has but 100 marks at his disposal, and he examines only in optional subjects.

In addition to the candidates being known by numbers, and the amount of marks in each subject being furnished to every candidate, I would suggest that the examinations be held alternately in London, Edinburgh, and Dublin, as, at the present examinations, London students have an undoubted advantage at the clinical examination, as all the hospital cases are known to them. Until a change in the present system of examination is granted, discontent amongst Irish students will exist.

Surely, the service that is honoured by such Irishmen as the present Director-General, spoken of, deservedly, in such terms by Mr. Hamilton, himself a distinguished Irishman, not only in his profession, but as being one of the best rifle shots in the British Army, will not persist in making the service unpopular to men of the same nationality, by refusing to adopt a system of examinations that shall be above impeachment.—Yours, etc., B. G.

SIR,—Will any volunteer medical officer lend me a copy of Moor's *Manual of Instruction for Stretcher Bearers and Bearer Companies*, which is now out of print, and cannot be got at any of the shops?—Yours, etc.,

TH. JOYCE, M.D., Acting Surgeon, Weald of Kent Battalion, K.R.V.

THE EGYPTIAN WAR GRATUITY.

THERE is some dissatisfaction amongst naval medical officers as to the system under which they have received the Egyptian war gratuity, and Lord Northbrook would do well to make it the subject of inquiry. The present classification, as far as naval medical officers are concerned, dates from May 16th, 1871. At that time, however, medical officers did not hold their present relative rank. Army surgeons have received relative rank gratuities, whereas naval surgeons, though ranking with naval lieutenants, have only received gratuities such as have been given to boatswains, gunners, and carpenters, and so on through the higher medical grades in the navy. Chaplains have even received more liberal gratuities than ship surgeons. The anomaly requires early correction.

SOME important changes are, it is understood, under consideration in the Indian Commissariat Department; the most important being the appointment of a major-general as the administrative head of the department for all India and the dependencies under the Government of India.

SURGEON-MAJOR C. F. OLDHAM, of the 1st Goorkhas, has been appointed officiating secretary to the surgeon-general of the forces in Bengal. The appointment of Surgeon-Major McConaghy to be secretary to the surgeon-general of the forces in Bombay, has been officially notified in India.

DEPUTY SURGEON-GENERAL J. EKIN, C.B., who, a short time after his return from Egypt, was appointed to the Aldershot division, has been transferred to Netley as acting principal medical officer, in succession to the late Surgeon-General Holloway.

SURGEON-GENERAL A. J. PAYNE, M.D., has been appointed to officiate as surgeon-general with the Government of India, *vice* Surgeon-General Cuningham, who has been granted leave from India on furlough.

SURGEON-MAJOR J. P. BOILEAU, M.D., who recently vacated the post of assistant professor of pathology, at the Army Medical School, Netley, has arrived in India, and has been posted to the medical charge of the Allahabad station hospital.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

BOARDS OF GUARDIANS AND THEIR MEDICAL OFFICERS.

A MINISTER OF THE POOR.—We feel that we cannot agree with our correspondent that the happy result of the case of Grubb *versus* the Chesterton Board of Guardians has led to the intimation, on the part of Sir Charles Dilke, when receiving a deputation from the Birmingham Board of Guardians, "that he would shortly issue a general order permitting boards of guardians to determine the appointment of their officers after due notice." Already, as will be seen by our last week's issue, Sir C. Dilke has explained that his contemplated action was not intended to apply to existing officers holding permanent appointments, but only those who might be appointed after the issue of such orders. We believe that, if Sir C. Dilke had not qualified his observations, it would not have required much time, nor any very serious outlay, to have organised an irresistible opposition to his suggestion. We are aware of the feeling that has been already excited, not among Poor-law medical officers only, but among clerks, masters of workhouses, relieving officers, and all other officers who are equally at the mercy of boards of guardians. We do not believe that any order of the kind referred to will be issued.

As regards the other point in our correspondent's letter, if the order for attendance in sickness were so immediately antecedent to the confinement as to be associated therewith, then the order would cover such attendance, otherwise it would be safer to insist on an additional order, or to decline such attendance. It is always advisable, ere doing anything for the sick poor, to see that all possible chance of a board of guardians acting unfairly has been prevented by the caution of the medical officer.

DUTIES OF LOCAL AUTHORITIES AS TO BURIAL OF POOR PERSONS.

SIR,—In answer to the question of "Member & M. O. H.," as to who is the proper person to bury the body, you say, "the relieving officer was quite within his instructions in saying that it was no business of his." I think, if you will turn to Glen's *Statutes of the Poor-law*, 7 and 8 Vict., c. 101, s. 31, you will be convinced that not only is it stated to be in the power of the guardians to bury the body of a poor person in such a case, but it distinctly states "that they have also the power to charge the expense thereof to the parish to which such poor person was chargeable."—I am, sir, yours faithfully,

Ivy Lodge, Didsbury, April 30th, 1883. JNO. MILSON RHODES, M.D.

*** Poor-law guardians undoubtedly have ample power to provide for the burial of paupers who have died in workhouses; but in the circumstances mentioned by "A Member & M. O. H.," in our issue of April 28th, p. 845, the Poor-law authority would hesitate to undertake the interment, if another arrangement could by any means be made. Indeed, not long since, a board of guardians refused to bury the body of a man found in similar circumstances without the consent of the central authority, as they urged that the cost of a previous interment had been surcharged by the district auditor. The relieving officer has no power to proceed without the sanction of the guardians.

DEATH-RATES IN NOTTINGHAM.

SIR,—I beg to correct some mistakes in the table of death-rates in Nottingham which appeared in a letter from me in your last issue. The death-rates from seven zymotic diseases in that town in 1871-2-3-4 respectively should read 5.5, 5.1, 3.0, and 3.3. The death-rate from scarlet fever in 1878 was 0.44. The single death from small-pox in 1879 has been intentionally neglected. These errors do not in the least invalidate my demonstration that there is no foundation for Dr. Seaton's report that compulsory notification has been of "great benefit" in Nottingham.—Your obedient servant,

THOMAS WHITESIDE HIME

THE MERTHYR TYDFIL BOARD OF GUARDIANS AND MR. BIDDLE.

We learn from the *Merthyr Express*, of the 12th instant, that at a recent meeting of the board of guardians, a member of the board, a Mr. Davies, brought a charge against Mr. Biddle, one of the district medical officers, that he had neglected to give proper attention to a person named David Davies, a sick pauper, since deceased, in his last illness.

It would appear, from the statements made at the guardians' inquiry, that Mr. Biddle had been duly requested, under a relieving officer's order, to visit and attend this man, whom he found to be suffering from chronic bronchitis, and whom he at once advised to go into the workhouse infirmary. This the man declined to do; and we learn from the statements made that Mr. Biddle continued to attend the man, giving him such visits as his condition as a chronic invalid demanded. During the progress of the case, the guardian, Mr. Davies, obviously from over zeal, paid several visits to the sick man, and repeatedly asked whether he had any complaint to make; and finding that neither he nor the woman with whom he lived had any fault to find with Mr. Biddle, made a protest on his own account. We are pleased, however, to note that this pseudo-philanthropy or officiousness on the part of Mr. Davies, in the supposed interests of the deceased Davies, fell through; for, after hearing the explanation of Mr. Biddle, the guardians, with one dissentient voice, expressed their satisfaction with Mr. Biddle's explanation.

The case is instructive, as showing how much annoyance and possible professional injury may be inflicted on any honourable and kindly hearted man by the conduct of one Poor-law guardian.

IRISH POOR-LAW MEDICAL OFFICERS.

Sir,—As there is a Medical Bill now before Parliament, and as we are promised another by Mr. Herbert Gladstone on the superannuation of Irish Poor-law medical officers, I deem it a suitable time to draw the attention of the influential members of the profession, and through them of Government, to a grievance which presses very severely on the above body of public servants. I allude to the subject of vacations. I believe almost every civil servant of the Crown, from the Prime Minister to the policeman, has a certain number of days or weeks, as the case may be, within which he can recruit his health after his year's labour, or seek change of air and scene to enable him to discharge his duties with increased vigour and efficiency in the year to come. With the Irish Poor-law medical officer, the case is different; he must work from year to year under the most trying circumstances and the greatest difficulties; he must please the public, the guardians, and the dispensary committees; he must be ready, at all times of the day and night, to go to the most distant part of his district, often a distance of ten or twelve Irish—very Irish—miles, indeed, and attend perhaps a most difficult and dangerous case—all involving an amount of mental and physical exertion, which one unacquainted with the circumstances cannot realise; he must do all this, and continue to do it from year to year, until overcome by illness or death, but he must never expect the shortest holiday, no matter how severely his energies may be taxed. Boards of guardians will, indeed, grant him a short leave of absence if he provide and pay a substitute three or four, and in some cases five, guineas a week. But, I ask, how can any dispensary doctor, out of his miserable salary—although I do not complain of this latter now—take a vacation, and pay his *locum tenens*.

I feel that I have already trespassed at too great length upon your space; but if I could enlist your powerful advocacy in our cause, I know that I should not have written in vain. We are neglected; we are deprived of what I believe are our rights: and why? Because we have yet to learn the art of combining, the art of organising, of uniting for one common object, and keep "pegging away" until that object be attained. That we may awake from our lethargy, and that a clause embodying the above principle may be inserted into one or other of the Medical Bills—Mr. Gladstone's, I believe, would be the more suitable—is my purpose, and my apology for addressing you. Again asking your aid, I am, yours faithfully,

T. M. Gallagher.

Crossmolina, May 10th, 1883.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Huddersfield.—Dr. Spottiswoode Cameron has a very satisfactory state of things to report for 1881. The rate of mortality for the whole year is the lowest he has ever yet recorded, and it is also the lowest for any year since the town was incorporated in 1868. Estimating the population at 82,113, Dr. Cameron returns the death-rate for 1881 at 20.35 per 1,000. There was a striking decrease in the zymotic mortality. During the past year there were no deaths from small-pox, against two in 1880; seven from measles in 1881, against 33 the year before; from scarlatina 17, against 23; from diphtheria three, against four; from whooping-cough 34, against 12; from "fever" 11, against 55; and from diarrhœa 31, against 74. The total deaths from the principal zymotics amounted to 103, against 203, during 1880. Of typhoid fever, 77 cases were reported, 42 of which were admitted to the hospital, where five died, out of a total of 11 deaths from this cause. Scarlet fever was more prevalent, and of 206 cases which came to the notice of the health-officer, 17 proved fatal. In commenting upon the prevalence of this disorder, Dr. Cameron refers to the difficulty sometimes experienced by medical men in giving an appropriate certificate. He observes that it happens not unfrequently that a child may have so mild an attack that neither mother nor doctor feel sure what is the matter. The rash may be so slight as to be scarcely recognisable, or it may be entirely absent. Several cases of scarlet fever, in which other members of the family took the disease, were of this kind; and in one instance of four girls who took the disease, only one had a distinct rash. Fortunately small-pox was not fatal in any case, but several modified cases were reported, and removed to the hospital. There is little doubt that, as the health-officer observes, the early notification and isolation of these cases is the reason that Huddersfield has escaped so far from a visitation of variola. Dr. Cameron's experience is wholly in favour of the compulsory notification of infectious disease required in Huddersfield by the Local Act of 1880, and he observes that the public generally are now recognising the immense value attaching to early notification. The Birkby Hospital, which has recently been extended, admitted no fewer than 209 cases of infectious disease, but as Dr. Cameron explains, the large number of admissions need not indicate a greater prevalence of zymotic disease, but rather a better knowledge of the existence, and better means of contending with outbreaks. The report concludes with a detailed account of the health and condition of the various districts comprising the borough, and a series of elaborate statistical tables.

Dover Urban District.—The continued low rate of mortality at Dover may well be a matter of local gratification. The actual number of deaths registered in the borough during the past year was, curiously enough, exactly the same as in 1881, and was lower than any recorded during the three previous years, or average of preceding eight years. During the nine years 1873-81, the death-rate averaged 17.5, while for 1882 it was as low as 16.1 per 1,000. The infantile mortality also participated in this general decline. The proportion of infant mortality under one year of age to births was 10.4 per cent. In the fifty town districts selected by the Registrar-General, the average for the first three quarters of 1882 was in the proportion of 15.3 per cent.; Dover having the lowest average. Of the fifty-three deaths attributed to zymotic diseases during 1882, twenty-two were due to measles. Dr. Robinson laments that this disease is still regarded as a trivial form of malady, and urges that children suffering from it should be as completely isolated as if they were suffering from any other infectious disease. Diarrhœa, with the exception of whooping-cough, which caused six deaths, was the only other zymotic from which more than three deaths were recorded. An epidemic of scarlet fever threatened the town, but was happily averted by active isolation and disinfection. In referring to the sanitary condition of his district, Dr. Robinson comments on the danger of faulty drainage of houses, and well observes that, if the plumber and builder were more often employed, the services of the doctor would be in less request.

OBITUARY.

MAURICE LLOYD JONES, M.R.C.S., Welshpool.

Mr. Maurice Lloyd Jones died at his residence, Adgar, Welshpool, on April 30th, at the age of 77 years. He took the diploma of L.S.A. in 1827, and he became a member of the Royal College of Surgeons in 1829. He practised his profession with much success for many years in Welshpool, where he was held in much respect, but he withdrew into private life some years ago. He was a son of the late Rev. John Jones, formerly vicar of Berriew, and a brother to the late Mr. Robirson Jones, of Brithdir Hall, who died a fortnight ago, and to whose large estate the deceased succeeded. Mr. Jones twice served the office of Mayor of Welshpool.

HUGH LLOYD, M.R.C.S., Machynlleth.

We regret to record the death, which took place on April 29th, of Mr. Hugh Lloyd, of Machynlleth. Educated at St. Bartholomew's Hospital, he obtained the diplomas of M.R.C.S. and L.S.A. in 1831. Although 76 years of age, he attended to his professional duties until a few days before his decease. He conducted a large private practice, and held the local poor-law appointments. Liberal-minded, of kindly disposition, and benevolent to the poor and needy, he was deservedly popular, and his loss will be deeply felt. His remains were honoured by a public funeral in the old churchyard at Machynlleth, and many hundreds of the inhabitants were present to pay their last tribute of respect.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF DURHAM.

EXAMINATIONS.—At the recent first examination for degrees in Medicine and Surgery, and at the examination for certificate of proficiency in Sanitary Science, held at the College of Medicine, Newcastle-upon-Tyne, on April 23rd, 24th, 25th, 26th, and 27th, 56 candidates presented themselves. Of these, 55 entered for the first M.B. Of these 55, two came up for Chemistry only, having previously passed in Anatomy, Physiology, and Botany; and both men satisfied the examiners. Fifty-three entered their names for all the subjects, viz., Anatomy, Physiology, Chemistry, and Botany; of these 53, 19 satisfied the examiners in all the subjects, two taking second-class honours. Thirteen were rejected in all the subjects; 8 in Chemistry only; 4 in Botany only; 1 retired from the examination; and 8 failed to present themselves for examination. There was one candidate for the certificate of proficiency in Sanitary Science, and he succeeded in satisfying the examiners.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS, Friday, May 11th.

Contagious Diseases Acts.—Lord ORANMORE and BROWNE called attention to a paragraph in *The Times* of the 3rd inst., relative to orders stated to have been given by Her Majesty's Government to the police not to enforce the Contagious Diseases Acts at Chatham and other places; and inquired whether such was the case; and, if so, on what grounds Her Majesty's Government had discontinued to carry out an Act of Parliament. The paragraph to which he referred stated that the intelligence that the Acts were not to be enforced had been received with dismay at Portsmouth, Plymouth, Chatham, and other stations.—The Earl of NORTHBROOK said that the paragraph referred to by the noble lord was substantially correct. It had been considered no longer desirable to employ the Metropolitan Police in carrying out these Acts. Some parts of the Acts were optional, others compulsory, and the Government intended to bring in a Bill to carry out the optional measures only.—The Earl of HARDWICKE did not believe there would be the smallest probability that such a Bill as the noble earl mentioned would be passed this session. Those Acts had been most beneficial to the community at large, and he thought it most unwise and indeed most illegal for the Government to abrogate the most useful part of these statutes. The noble earl read letters from a naval officer of distinction residing at Portsmouth, in which the operations of the Acts were highly approved, not only for the physical advantages that resulted from their application, but for their great moral effect. He concluded by expressing a strong hope that Her Majesty's Government would in the discharge of a great public duty give earnest consideration to the question whether they should not further inquire into this matter before they attempted to repeal these Acts.—The Duke of CAMBRIDGE: I do not desire to prolong the discussion upon this painful though most important subject. I must, however, say that these Acts have done far more good than people out of doors suppose, and that the physical and moral benefits which they have conferred upon the community at large as well as upon the navy and army are enormous. It is perfectly true, as has been stated, that public opinion in all places where these Acts have been applied is uniformly in favour of their continuance. That being the case, it appears to me to be an extraordinary thing that it should be proposed to sweep away these Acts at once without more full discussion of the subject. I frankly admit that the question is a most difficult one, but I pray your lordships not to allow these most beneficial measures to be swept away simply because there has been a discussion in the other House which has led to a vote which it now appears will do away with the compulsory powers of the statutes, and thereby effect a change in them which will greatly modify their usual effect. I am aware that this is a very disagreeable subject to speak upon, but I must repeat that more good has resulted from these Acts than is generally supposed, and I trust therefore that they will not be repealed without the fullest further consideration. I can assure your lordships that I do not advocate the continuance of these Acts merely on the ground that they are most beneficial to the service with which I am connected, but because I conscientiously believe that they are of immense advantage to the community at large, and more especially to the unfortunate creatures who come under their operation, numbers of whom have been rescued from their unhappy life solely through the medium of these statutes. I should wish it to be thoroughly understood that the moral effect of the Acts has been very great.—The LORD CHANCELLOR remarked that the Government were fully justified in not making use of the police to carry into effect those parts of the Act which had been condemned by the resolution of the House of Commons.—The Marquis of SALISBURY said he was a little surprised at the doctrine laid down by the noble and learned lord on the woolsack. If that doctrine were correct, it was obvious that a vote of the House of Commons might practically suspend the whole criminal law of the country, so far as it depended upon the action of the police to set the provisions of the law in motion.—The LORD CHANCELLOR said that the Government had not power to prevent the police in these parts of the country from taking such measures as they might think fit to bring charges before the magistrates. What the Government had power to do was to abstain from taking active measures on their part to induce the police to make those charges.—The Earl of HARDWICKE thought the noble and learned earl did not understand what the Government had done, because the result of their action was the withdrawal of the Metropolitan police, who were the people appointed to investigate what was going on. That was the whole gist of the matter.

HOUSE OF COMMONS, Friday, May 11th.

The Contagious Diseases Acts.—Mr. J. TALBOT asked the Secretary of State for the Home Department whether it was correct that a protest had been sent to him from the Medway Board of Guardians against the withdrawal of the Metropolitan police from Chatham; and, if so, whether he had any objection to lay a copy of this document upon the table of the House, and further to state what action he proposed to take in the matter.—Sir W. HARCOURT: I have received the protest, but there is no object in laying the document on the table of the House. I have already explained to the House the course that the Government have felt themselves bound to take in consequence of the vote to which the House has come. I suppose the House was fully aware that the local authorities in places where the Acts were in operation were in favour of them. I do not see that a protest of this kind alters the situation at all. The action the Government has taken is consequent upon the vote of the House. The police generally will be withdrawn, but a limited number of inspectors will remain, so far as may be necessary for carrying out the Acts as to those who voluntarily submit themselves. This is almost a ministerial duty on the part of the inspectors of police.—In reply to Mr. Hopwood, Sir W. HARCOURT said the Act provided that the superintendent of police must sign a document in each case. The action of the Government would be restricted to giving effect to the vote of the House which had reference to compulsion.—Sir H. WOLFF asked the Secretary of State for the Home Department whether he would delay the withdrawal of the metropolitan police from the districts protected under the Contagious Diseases Acts until Parliament had been enabled to decide on the Bill for the protection of young girls, announced to be brought forward by the Government.—Sir W. HARCOURT said he was afraid that the course suggested by the hon. gentleman would not be consistent with the view which the Government had taken. The Government wanted to carry out strictly the recommendations of the Lords' committee. A Bill would be introduced into the House of Lords, the effect of which, it was hoped, would be to diminish the serious evils of juvenile prostitution. That was not the direct or immediate object of the Contagious Diseases Acts, though the administration of those Acts have tended indirectly to that object. (Hear, hear.)—In answer to further questions from Sir H. Wolff and Mr. Puleston, Sir W. HARCOURT said that, in order not to terminate the operation of the Acts too abruptly, the withdrawal of some of the inspectors would be postponed.

The Army Hospital Corps.—Col. ALEXANDER asked the Secretary of State for War if it was true that the officers of the Army Hospital Corps are now receiving lower rates of pay than any other departmental officers in the army; and if so, whether he could state the reason why.—The Marquis of HARTINGTON replied that officers of the Army Hospital Corps are paid at the same rates as quartermasters of the infantry. Their pay had only recently been augmented, and he did not see any ground to make any further change to put them in a better position than quartermasters of infantry.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 10th instant, and when eligible will be admitted to the pass examination, viz.:

Messrs. J. Albert Manton, E. Osborne Fountain, and A. E. Albert Pettingill, students of St. Bartholomew's Hospital; Arthur E. Wilson, H. John Blackler, and B. Campbell Gowan, of Guy's Hospital; Matthew Bates, R. Davey Brase, of the Middlesex Hospital; H. Lawton Swete, and David Williams, of the London Hospital; W. Henry Paine, of University College; O. Fraser Frohwein, of St. Thomas's Hospital; W. Wheeler Heelas, of the Westminster Hospital; H. Samuel Peeke, of St. George's Hospital; and H. Brandreth Lavies, of King's College.

Eleven candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and two for six months.

The following gentlemen passed on the 11th instant:

Messrs. Geoffrey Skill, C. Bruce Cranstoun, and A. Ebenezer Holding, of St. Thomas's Hospital; R. John Harvey, D. Allan Waite, and P. Nicholas Randall, of Guy's Hospital; G. Wills Blomfield, M. Percy Ladell, and Frederick Preston, of the London Hospital; W. H. Charles Candler, and C. Hamilton Conolly, of St. Bartholomew's Hospital; M. C. Robert Böhrsmann, and D. Campbell McArthur, of University College; C. C. Vacy Lyle, and G. Aston Pedley, of St. Mary's Hospital; Charles J. Ayres, of the Westminster Hospital; and H. Cæsar Hawkins, of St. George's Hospital.

Six candidates were referred to their anatomical and physiological studies for three months, and five for six months.

The following passed on the 12th instant:

Messrs. B. D. Zorapore Wright, W. Henry Stacey, N. John Goodchild, R. Edward Smith, C. T. Thornton Comber, and John Hutton, of St. Bartholomew's Hospital; F. S. Le Quesne, Hanway, C. J. Seddon Kelsall, E. Lewis Hickey, and Masilton St. G. Lange, of King's College; Henry Rockley, C. Nichol Graham, J. Northey Phillips, E. Williams Marshall, and G. F. Elliot Morgan, of Guy's Hospital; Mowbray Megginson, and C. Dwight Morris, of the London Hospital; Arthur E. Chilcott, and Mark Glanville, of St. George's Hospital; J. Quinton Bown, and J. Douglas Morton, of St. Mary's Hospital; and George Cranstoun, of St. Thomas's Hospital.

Four candidates were referred for three months, and two for six months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners on the 14th instant, viz.:

Messrs. H. George Hathaway, L.S.A., Battle, H. Leopold Dowsing, L.S.A., Hull, Henry Mitchell, L.S.A., Bradford, Yorkshire, students of St. Bartholomew's Hospital; H. John Hitchcock, L.S.A., St. Helier's Jersey, and A. Freeman Peskett, L.S.A., Leyton, Essex, D. Williams Whitfield, L.K.&Q.C.P.Ireland, Oswestry, and James Wilson, M.D.Q.U.Ireland, Moneymore, co. Derry, of the Dublin School; W. Robert Etches, Moreton-in-the-Marsh, and J. William Nicholson, L.S.A., Cheltenham, of Guy's Hospital; W. Smith Kay, M.B.Ed., Sheffield, of the Sheffield School; Anthony Dodd, L.S.A., Newcastle, of the Newcastle School; E. A. Gaynes Doyle, Trinidad, of the Westminster Hospital; Frank Gravely, L.S.A., Lewes, of University College; A. Mason Vann, L.S.A., Durham, Albert Morris, L.R.C.P.Ed., Teddington, Samuel Camps, L.R.C.P.Ed., Trinidad, and S. Cowell Philson, L.R.C.P.Ed., Cheltenham, of King's College; W. Ernest Walter, L.S.A., Stoke-under-Ham, Somersetshire, of the Charing Cross Hospital; and Edward Tatham, L.R.C.P.Ed., Hampstead, of St. Thomas's Hospital.

Three gentlemen passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College; and ten candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies—seven for six, and three for three months.

The following gentlemen were admitted members of the College on the 15th instant, viz.:

Messrs. A. Walton Rowe, Margate, and F. Arthur Rogers, Ealing, of St. Mary's Hospital; W. S. Neville Shorthouse, L.S.A., Croydon, Edward Roberts, L.S.A., Aberystwyth; W. Donald Smallpeice, Queen Anne's Gate, and Albert Martin, Wellington, New Zealand, of Guy's Hospital; M. Wilkins Gutteridge, Brook Street, and Edward Stewart, Harley Street, of the Middlesex Hospital; F. Fielder Walton, Hull, of St. Bartholomew's Hospital; Percy Edgelow, Cambridge Street, S.W., of St. George's Hospital; Thomas Wilson, Wolverhampton, of University College; and W. Haygarth Maling, Sunderland, of King's College.

Seven gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted members of the College, and seven were referred to their professional studies, viz., three for six months, and four for three months.

The following gentlemen passed on the 16th instant.

Messrs. J. Fuller Spong, Clapham, and E. R. Drummond Fasken, West Kensington, Edward Harrison, Michael's Grove, and V. Langford Oliver, South Kensington, of St. George's Hospital; Samuel Stephens, L.S.A., Camborne, and J. Rocheia Forrest, L.S.A., Fulham, of St. Bartholomew's Hospital; E. Percival Cockey, Frome, of St. Mary's Hospital; H. John Pulling, Ledbury, of the Westminster Hospital; E. George Carter, Leeds, of the Leeds School; and E. Octavius Croft, Edward Street, of University College.

Two candidates, who had previously qualified in Surgery, having passed in Medicine and Midwifery, were admitted Members, viz.:

Messrs. F. Alexander Stokes, Highbury, of University College, and J. Ronald Polson, Bromsgrove, of the Birmingham School.

Four candidates were referred for three months, five for six months, and one for twelve months.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Thomas Young, Rowberron; Edmund Arthur Lightburne, Newry; Benjamin George Brock, Caithness; Ernest John Lawrence, Dublin; James Wallace Moore, County Londonderry; William Alexander Warters, Ripon; Henry Goodwyn, Lucknow; George Andrew Storrar Gordon, Canada; Henry Hick, Bolton-on-Dearne; Louis Vallée, Paris; Vernon Edmund Russel Ardagh, India; Sidney Edward Percy Cade, Cork; Peter Campbell, Glenorchy; William Steuart, Edinburgh; Alfred Devonald, Pembrokeshire; John Thomas Jones, North Wales; Griffith Gryffryah Jones, Anglesey; William Chalmers, Cornwall; William Cautley Atkinson, Manchester; Henry Edward Richardson, Belgaum, Bombay; William Singleton Fulshaw, Leicestershire; Charles Graves, Dublin; Charles Thomas Blackwell, London; James Doyle, Manchester; William Valentine, Lancashire; Aubrey Blakiston, Yorkshire; Heather Bigg, London; Charles Dundas Grant, Edinburgh; Digby Patrick FitzGerald French, County Galway; Theophilus Edward Samuel Scholes, Jamaica; John Sullivan De Courcey, County Cork; Knox Robert Pilliner, Jamaica; William Alexander Neill, Dublin; Sydney Morse, Somersetshire; John Cromie, County Down; Thomas Joseph Jones, North Wales; John Thomas, Australia; Patrick Hehir, Templemore; Robert William Felkin, Beeston, near Nottingham; Thomas Roberts, County Cork; John Robert Henry Dubourg, Elgin; Alfred Ernest Woodforde, London; James Campbell, London; William Benson, Lancashire.

The following gentlemen passed their final examination, and were admitted L.R.C.P.Edinburgh and L.R.C.S.Edinburgh.

Thomas Leslie Crooke, Sheffield; James Albert Hunter, Ontario; Matthew Henry Gardiner, Campbeltown; John Small, Fifeshire; Percy Howard Day, York; Robert Greenwood Dempster, Liverpool; Walter Frederick Clark, Yorkshire; Hugh Gough Haines, Madras; Karl Wingvist, Sweden; Edwin Alfred Cormack, Edinburgh; Thomas Young, Rowberron; Arthur Ernest Marsack, Olney, Bucks; William Patterson, County Down; Tom Bairston, Halifax; William Henry O'Meary, County Limerick; Robert Williams, Anglesey; John William Dunbar Hooper, Dinapore, India; Edward Albert Warren, Cork; William Henry Piercy Fox, Madras; Hunter Urquhart Walker, Madras; Hartwell Woodhouse James, Bangalore; George Hessenauer, Germany; William Henry Harris, Stony Stratford; Richard Macartney, Ceylon; Robert McCall, Edinburgh; Robert Lowry Dickson, County Fermanagh; Arthur Hawkyard, Leeds; Wilton Mills, Whitworth; Thomas Alexander Papillon, Reading; Henry Edward Richardson, Belgaum, Bombay; William John Meharry, County Down; Edwin Gilmore Knill, Ontario, Canada; Henry George Myles, Limerick; Ernest Westbrook, London; Henry Frederic Horne, Bangalore; James Hamilton, Donegal; John O'Brien, Mitchelstowndown; John Allen Carr, Bentham; William Allen Fisher, County Cork; Edward Esdale Shiels, St. Louis, U.S.A.; Edward Bridges Townsend, Southsea; William Arthur Dickson, Irishtown, Dublin; Peter Forbes Jardine, Glasgow; Thomas Tenison Collins, Tipperary; Thomas Richardson-Griffiths, Woolwich; Lambert Houghton, New York; William Kidd, County Down; Alfred Devonald, Pembrokeshire; Cornelius Joseph O'Brien, Cork; William John Cregan, County Down; William Robert Fox, Melbourne; Henry Cromblehol me Bradley, Preston.

MEDICAL VACANCIES.

The following vacancies are announced:

ARMAGH UNION, Blackwatertown Dispensary.—Medical Officer. Salary, £14 per annum and fees. Election on the 28th instant.

ATHLONE UNION, Brideswell Dispensary.—Medical Officer. Salary, £140 pe annum and fees. Election on the 25th instant.

BRENTFORD UNION.—Medical Officer and Public Vaccinator. Salary, £10 per annum. Applications by May 22nd.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Su geon and Apothecary. Salary, £80 per annum. Applications to Mr. Georg Fell, Solicitor, Aylesbury, by May 21st.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—A sistant-Surgeon. Applications by June 9th.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. £100 per annun Applications by June 15th.

COUNTY ASYLUM, Whittingham.—Dispenser. Salary £50 per annum. Ap plications to the Medical Superintendent.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer. Salary £1 per annum. Applications addressed to the Chairman of the Visitors, und cover to Thomas Coombs, Esq., Clerk to the Visitors, 8, South Street, Dorchester, by May 28th.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annu Applications to the Secretary by May 26th.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeo Salary, £100 per annum. Applications by June 3rd.

DUNMOW RURAL SANITARY AUTHORITY.—Medical Officer of Healt Salary, £50 per annum. Applications addressed "Medical Officer of Health by May 21st.

GLASGOW ROYAL INFIRMARY.—Teacher of Chemistry. Applications June 15th.

GLASGOW ROYAL INFIRMARY.—Teacher of Physiology. Applications June 15th.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resid Medical Officer. Salary £50 per annum. Applications to the Chairman the Committee by May 21st.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Junior Resident Medical Officer. Salary, £50 per annum. Applications by May 30th.

MACHYNLLETH UNION.—District Medical Officer. Salary £30 per annum. Applications by May 22nd.

MACHYNLLETH UNION.—Workhouse Medical Officer. Salary £25 per annum. Applications by May 22nd.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Salary, £250 per annum. Applications by the 24th instant.

PAROCHIAL BOARD OF KILMORY PARISH, Arran.—Salary, £50 per annum. Applications to J. R. Thomson, Inspector of Poor, Lamlash.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—House-Surgeon. Salary, £100 per annum. Applications by the 22nd instant.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—Assistant House Surgeon. Applications by the 22nd instant.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Four Examiners in Medicine from the Fellows of the Royal College of Physicians of London. Applications by the 26th instant.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Two Examiners in Midwifery, either from the Fellows of the College or from Fellows of the Royal College of Physicians of London. Applications by the 26th instant.

RURAL SANITARY AUTHORITY OF THE ISLE OF WIGHT.—Medical Officer of Health. Salary, £300 per annum. Applications by June 6th.

ST. BARTHOLOMEW'S HOSPITAL.—Two Casualty Physicians. Applications by June 8th.

ST. MARY'S HOSPITAL, W.—Ophthalmic Surgeon. Applications by May 19th.

SURREY DISPENSARY.—Assistant Dispenser. Salary £60 per annum. Applications by May 22nd.

THE ODDFELLOWS' AND MECHANICS' CLUBS OF STAVELEY, Westmorland.—Resident Medical Officer. Clubs' fees yield £65 and upwards annually. Applications, addressed to Messrs. George Lucas and George Lishman, Secretaries, by the 19th instant.

UNIVERSITY OF CAMBRIDGE.—Professor of Anatomy. Applications to the Vice-Chancellor.

WEST KENT SANITARY COMBINED DISTRICT.—Medical Officer of Health. Salary, £800 per annum. Applications by May 19th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Physician (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Assistant Physician for Diseases of Women (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Two Surgeons (must be Fellows or Members of the Royal College of Surgeons.) Applications by May 28th.

MEDICAL APPOINTMENTS.

FIELD, J. W., M.R.C.S., appointed Surgeon to the Great Indian Peninsular Railway, Bombay.

GRANT, J. Dundas, M.A., M.D., appointed Assistant-Surgeon to the Central London Throat and Ear Hospital, *vice* G. R. Steil, M.R.C.S., resigned.

JENKINS, Percy, M.R.C.S., L.S.A., appointed Registrar and Pathologist to the Central London Throat and Ear Hospital, *vice* J. Dundas Grant, M.D., appointed Assistant-Surgeon.

KEITH, E. Noble, F.R.C.S.Ed., appointed Orthopædic Surgeon to the British Home for Incurables.

KEELL, G., M.D., appointed Honorary Assistant-Physician to the Manchester Royal Infirmary Dispensary and Lunatic Hospital or Asylum, *vice* J. Dreschfeld, M.D., promoted to be Physician in place of W. Roberts, M.D., resigned.

KERRALL, T. J., L.R.C.P., M.R.C.S., appointed Honorary Surgeon to the Brighton and Hove Lying-in Institution, Hospital and Dispensary, for the Diseases of Women and Children.

KOLFENDEN, R. N., M.B., appointed Physician to the West End Hospital for Diseases of the Nervous System, Paralysis and Epilepsy, *vice* G. Ogilvie, M.B., resigned.

WILLIAMS, Dawson, M.D., appointed Physician to the West End Hospital for Diseases of the Nervous System, Paralysis and Epilepsy, *vice* G. L. Laycock, M.B., resigned.

WRAITH, Oswald Samuel, L.R.C.P. and S.Ed., appointed Medical Officer and Public Vaccinator for the Darwen District of the Blackburn Union, *vice* John H. Wraith, M.R.C.S., L.S.A., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

BARON—ROBINSON.—On May 9th, at Plymouth, Barclay J. Baron, M.B., C.M., late Assistant to the Professor of Pathology of the University of Edinburgh, of 12, Richmond Hill, Clifton, Bristol, to Janey, elder daughter of Whinfield Robinson, of Torrhill House, Ivybridge, Devon.

DEATHS.

ARNISON.—On the 10th instant, at Allendale Town, Northumberland, William Campbell Arnison, Surgeon, retired, aged 85.

CAMDEN.—On May 12th, at 1, Crescent Terrace, Rhyl, George J. Stredwick Camden, M.R.C.S. and L.S.A., aged 78.

RUSSELL.—On May 12th, at Clapham, S.W., William John Russell, M.B.Edin., fourth son of the Rev. A. F. Russell, M.A., Colintraine, Argyleshire, aged 32.

SMITH.—On May 5th, at the residence of his son, Bisley Rectory, near Woking, George Pyemont Smith, formerly of Mount Stead, near Leeds, Yorkshire, aged 67.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Centra. London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. ..... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Knowsley Thornton: Case of Cysts in connection with both Kidneys opened and drained, and Tumour of Right Ovary removed, the Patient remaining in Good Health. Dr. H. G. Rawdon: Case of Nephrectomy for Rupture of Kidney, and Lateral Cystotomy for Relief of Cystitis caused by retained Blood-clots. Sir Spencer Wells: Case of Excision of an Enlarged Cancerous Kidney. Mr. Berkeley Hill will exhibit a patient after Nephrotomy for Calculus.

FRIDAY.—Clinical Society of London. Dr. R. G. Lee: On a Case of Nystagmus Infantilis. Mr. A. E. Barker: 1. On a Case of Goître producing great Difficulty of Breathing on Exertion: Excision: Recovery and Complete Relief; 2. On a Case of Sebaceous or Dermoid Cyst of the Tongue: Removal by Submental Incision: Cure. Dr. Habershon: On a Case of Ulceration of the Stomach at the Pylorus in which Food relieved Pain. The following cases will be exhibited: Mr. J. R. Lunn: 1. Myxœdema, male and female; 2. Peculiar Deformity of Wrist, probably of Rheumatic Origin. Dr. D. Drewitt: Myxœdema. Dr. F. Taylor: Infantile Hemiplegia with Unusual Reflex Phenomena.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CANNABIS INDICA.

SIR,—I wish to bear testimony to the truth of Dr. Oliver's complaint in your issue of May 12th, as to the varying strengths of preparations of cannabis Indica. This drug is in certain states of nervous irritation, stomach erythism for instance, invaluable; but the extract has lately been sold so much more active than was the case, that when I get a new sample, I have to feel my way to the right doses. Last winter I had four patients, who found a one grain dose of the extract quite specific in warding off attacks of migrainous headache. For months this had been the case. At length, my stock, being exhausted, had to be replenished; and the new specimen, given in the same dose, produced the strange cerebral symptoms spoken of in Dr. Oliver's article. Neither patient had any idea the medicine was altered, but each sent for me in great hurry, thinking herself poisoned, and the symptoms were so similar that they could only be referred to an over-dose of cannabis. I estimate my last lot of extract to be more than double the strength of the former, judging by the produced effect.—I am, etc.,

A COUNTRY DOCTOR.

PRIVATE DISPENSARIES.

SIR,—I regret I omitted to notice that you objected only to the name of our establishments, and not to the manner in which we conduct them. Those gentlemen, therefore, who have "Surgery" over their doors are free from all blame, but we who write up "Dispensary" are worthy of censure. If we mislead the public, and obtain their support on false pretences, I agree with you, and I would at once have the obnoxious word painted out; but as it exactly describes what our establishments are, and means to the public simply low fees and good medicine supplied by a private practitioner instead of a public institution, why should we remove it? When people see a place opened with the word "Dispensary" over the door, and the doctor's name on the doorplate, they know it to be a private affair; and if there be not one near them—though I confess such a spot would be difficult to find in London—they hail its advent as a boon to themselves and their families. They know perfectly well what they are doing when they come to us; the name first of all attracts them, for they know they will have to pay only such fees as their limited means will allow. Then, if they be well treated, they will come for the doctor's sake; for in time they will regard him as their friend, and his name, and not the name of his dispensary, will be used when directing others to go to his place; whereas, at a public dispensary, the patient often knows nothing of the gentleman who is treating his disease, and patients are directed there by the name of the place, and not of the doctors. I cannot deny that there are sham private dispensaries. Some men, unqualified alike by diploma and by knowledge, try to obtain a livelihood by carrying on this kind of practice; others again, qualified men too, have several branch practices under the management of unqualified assistants. These things ought not to be, but who will undertake to drive out these black sheep from among us?

Pray accept my apology for taking up so much of your valuable space; but I feel very strongly on this subject, and am sure that no body of men are more undeserving of the designation "quack" than the medical men who carry on private dispensaries.—Believe me, yours faithfully,

P. D.

*** We were asked by a Liverpool correspondent to say whether it was considered professional for medical men to conduct these sham dispensaries at all, and we had no hesitation in answering the question in the negative. It by no means follows that we approve of the manner in which they are generally conducted. The usual course appears, in such undertakings, to be, first, to write up "Self-supporting Dispensary," "Metropolitan Dispensary, —— Branch," or some other high-sounding title; the next step is to plaster over the walls or windows with "Midwifery," "Vaccination," "Hours of Attendance," "Charges for Visits," "Charges at the Dispensary," etc.; the third step, fatal, we consider, to self-respect, is the issue of handbills in the surrounding neighbourhood, describing the advantages of the dispensary, and the qualifications of its "physician," who is not, however, described as its proprietor. Then, if the venture succeed, its enterprising projector frequently either sells it or leaves it to be managed by unqualified assistants, while he confers a similar boon (?) on some other part of the town. The whole proceeding appears to be in the highest degree unprofessional. It is not an answer to say that good medicine is supplied at these places. So it is, we are sure, at numbers of surgeries all around them; so it may haply be at the nearest prescribing chemist's; but the fame of dispensaries on which the founders of dispensaries of this class are trading, was won long since by supplying medical advice superior to that of the apothecary of that day. An honourable rivalry used to exist between the old-fashioned dispensaries and hospitals as to which should do the most good; and this differs widely from the rivalry of the new so-called dispensaries with chemists and druggists.

SIR,—A recent editorial note on private dispensaries refers to a subject which, as you say, deserves more attention than it has yet received. This must be my apology for craving a little of your valuable space; and I hope to show that the much abused private dispensaries can supply a public want in a most satisfactory and legitimate manner, with advantage to the profession and without in any way compromising its dignity. And here let me express my hearty concurrence in your denunciations of advertisers and all their arts; and let it be well understood that, in supporting the cause of the private dispensaries, I commend those conducted by legally qualified medical men without advertising of any sort, and these only.

Between the strictly pauper class of the population and those able to pay the lowest fees chargeable in ordinary general practice, there exists a large class able and willing to pay for medical attendance in some way or other. Such people can make but very small payments, and they must not get credit. As is well known, two methods are being attempted for satisfying their medical requirements. These are: 1. The provident method; 2. The small fee method. The provident system comprises all medical clubs, and the provident dispensaries, which are seldom wholly self-supporting. It is the system which naturally has a fascination for the lay philanthropist, "What," it is said, "can be more proper than to provide while in health against sickness, which must come, sooner or later?" All will agree that, were it practicable to make this system work perfectly, one of the most puzzling problems of the day would be solved; but, unfortunately, difficulties exist so serious as to be necessarily fatal. A brief statement of some of these will suffice.

1. After subscribing for years in order to secure the services of the man of his choice, the sick men often finds, when his turn has come, that another doctor has been appointed.

2. The doctor's salary is always very insufficient, ranging between 2s. 6d. and 5s. per head *per annum*.

3. In return for this miserable pittance, he becomes a kind of slave of the lamp, at the beck and call of any member at any hour of the day or night.

4. If, by reason of his inability to be in two places at the same time, or any other cause, he do not attend to a summons as promptly as any one of his many masters considers proper, he is liable to be summoned to a meeting of the committee to hear and answer a complaint which is generally frivolous or unreasonable.

In short, such are the hardships and indignities connected with this kind of practice, that, but for the sharp struggle for life, no medical man would ever attempt it.

Let us now turn to the small fee method, which comprises the private or self-supporting dispensaries. The most serious charge that you allege against the proprietors is, that they "sail under false colours." But what better term can be devised than "self-supporting dispensary" for a place where patients are seen by a doctor (legally qualified, of course), and medicines dispensed, and where all expenses are met by the payments of the patients? Further, seeing that these dispensaries exist only where the working classes abound, these people must know, after a very little time, who the doctor is, and they must know that the balance of the income finds its way into his pocket, for they are practical enough to know that a doctor would not work among them if he could not earn a livelihood. They also know that the fees are much below those of ordinary private practice; if not, why are they content to submit to the regulations of the dispensaries? These considerations are, I trust, sufficient to show that a charge of misrepresentation ought not to have been made, and certainly cannot be sustained.

General practitioners make an objection of another kind when they assert that the fees are so low that it is beneath the dignity of the profession to accept them. But can it be seriously urged that to take small fees from the poor is less dignified than taking correspondingly high fees from the rich and *vice versâ*? Who best consults his own dignity, that of the profession and also that of the poor? Is it he who degrades the latter to the level of pauperism by refusing all payment, though the patient is able and willing to pay to the best of his ability, or is it he who sells himself at a pittance of a shilling per quarter (professing to place himself unreservedly at the disposal of any number of people at the same time!), or is it he who accepts for service actually rendered such remuneration (no matter how inadequate) as the patient is able and willing to give? Common sense can return but one answer in favour of the last, and that is the system of the private dispensaries.

Another objection frequently made is, that the fees charged are lower than the profession can afford; but this is effectually disposed of by your assertion that these dispensaries are more lucrative and less harassing than private practice, besides giving the advantage of not incurring bad debts. I suspect that in those respects you must have somewhat overcoloured one of the great advantages of these dispensaries, an advantage which the profession is not likely to be slow to appreciate. Your position in this respect resembles that of the prophet of Moab, who set forth to curse, but felt constrained to bless.

I trust, sir, that I have succeeded in showing that these dispensaries supply a public want without being fairly open to any of the charges alleged against them. But they do more than this—they prevent unfair trespassing on the time and energies of the overworked and underpaid parochial doctor; they relieve undue pressure on the out-patient department of hospitals (where patients are too often attended by unqualified students); and they will probably do more than anything else to check the illegal trade of the prescribing chemist.

For these reasons, they certainly merit, and will ultimately receive, the favourable verdict of the profession and the public.—Yours obediently,

AUDI ALTERAM PARTEM.

L.R.C.P.LOND.—At present, the Brussels degree of M.D. does not give its holder a legal right to call himself "Doctor" in England; that is to say, there is no formal legal authorisation to assume the title.

ITCH IN THE CAT.

SIR,—The cat in question, when seen for the first time (it being a stray cat) was greatly emaciated, and died on the following night (January 5th, 1883). The hair on one side of the face and neck, including the ear, was matted so as to resemble one large scab. The itch-insect and eggs were detected in large numbers. The cat's liver contained many abscesses of the size of a pin's head; the lungs, etc., appeared to be normal. Does the cat infect children, or do these infect the cat? or is there mutual infection?

JOHN REID, M.D.

Rochdale, April 19th, 1883.

Medical Etiquette.

SIR,—Will you kindly give an opinion upon the following little matter, and say whether it is in accordance with strict medical etiquette.

A., B., and C., are three medical men practising in the same town, the two latter having resided there over twenty years, the former, A., only four years, but all being members of the British Medical Association, and apparently upon friendly terms.

A. is in attendance upon a patient—a very urgent case—and, in consequence, A. visits him three times a day. Upon the morning of the third day, a request is made to A. for a consultation, and B. is taken at once. A. suggested that some operative interference was necessary, but B. decided not. The patient was visited twice again the same day by A., nine o'clock at night being the last visit. Early upon the morning of the fourth day, A. received an urgent message to go at once, and in consequence of which a special visit was made; but, upon arrival, A. found that C. had also been sent for, and he had taken charge of the case.

May I ask whether it would not have been more gentlemanly, as well as more professional, for C. to have been quite sure that A. had either withdrawn, or otherwise been dimissed by the friends. Moreover, I find that, on the following day, C. called B. in consultation, and they decided to operate at once, but with unsuccessful results.

This being only one of a series of a kind of actions by C., which are calculated to do A. serious pecuniary damage, A. feels obliged to ask advice, as the one wish of A. is to live in entire friendship with the other members of the profession.—I inclose my card, and remain, yours,

FAIR PLAY.

*** Assuming the above statement by A. to be a correct representation of the facts of the case, and also that C. was aware that A. had been in professional charge of the patient during the illness, his (C.) conduct should have been governed by the following general rule, viz.: "When a practitioner is called in to, or consulted by, a patient who has recently been, or still may be, under the care of another for the same illness, he should on no account interfere in the case, except in an emergency, having provided for which, he should request a consultation with the gentleman in previous attendance, and decline further direction of the case except in consultation with him." Any deviation from such rule would be unprofessional. The simple fact that A. had "received an urgent message to go at once, in consequence of which he made a special visit," precludes the idea that his professional services had been dispensed with by the family; and, therefore, under the exceptional circumstances that, on his arrival, he found C. had also been sent for, and had taken charge of the patient, it would, we think, have been well if he had (with or without brief counsel with the family) at once courteously but firmly asserted his professional right to the case, jointly with C. as consultant. At such a conjuncture, a courteously expressed but resolute remonstrance with C. would, in all probability, have effectively discouraged him from further undue assumption, or encroachment on the just right of a brother practitioner.

IR,—As a member of the Association, I write to lay before you the particulars of a breach of professional etiquette committed by a person of the name of W——. I should feel obliged by your opinion on the matter. Mr. S. has been a patient of mine for many years. I have been attending him and other members of the family for some weeks. I saw him on Wednesday, March 21st, and sent him medicine. Early on Thursday morning, a message was left at my house that Mr. S. had been taken worse. A friend of his had called, and they had sent for this Mr. W——. On calling at the house that day, I arranged with Mrs. S. that I should see her husband with Mr. W—— the next day; and I promised to write to him to fix an hour for consultation. I found that he had ordered medicine for my patient, which was being taken. I have never seen him. On looking into the *Medical Directory*, I could find no such name. He was also said to be connected with the staff of the German Hospital; but there was no such name there. I wrote to ask Mrs. S. for the address; she sent, written on paper, "F. J. W——, St. Mary Axe, City, No. 9." I posted a letter, accordingly, to this address on Thursday afternoon, requesting him to write or telegraph to me, fixing an hour, and I would meet him. Up to this date, I have had no answer of any sort from him. He continues to attend the patient, and I have retired. Who he is, or what qualifications (if any) he possesses, I know not.—Yours truly,

R. GILLARD,
122, Clapham Road, S.W., March 26th, 1883.

*** If Mr. Gillard's statement be accurate, there can, we think, be no doubt that he has just cause of complaint against Mr. W——. It is evident that Mr. Gillard has, like very many other practitioners, been the victim, so to speak, of an officious meddlesome "friend of the family." At the same time, we cannot altogether exonerate Mr. S. and family from blame; inasmuch as, if anxious to retain the professional services of their old medical adviser, they could, and, under the circumstances, should have insisted on Mr. W—— meeting Mr. Gillard in consultation, or retiring from the case. And here it will, perhaps, be well to remark, as an admonition to our younger brethren, that there are occasions on which it becomes necessary to courteously, but firmly, remind patients and their families that, in conjunction with the important anxious duties that devolve upon the profession in relation to their patients—and which, as a rule, are freely exacted—there are also reciprocal obligatory duties on the part of patients to their medical advisers, which are but too often ignored; and that a discourteous violation of such relative duties (tending, as it naturally must do, to a loss of personal self-respect, if passively submitted to), necessitates, on the part of the medical attendants, an enforcement of the duty they owe to themselves and to the faculty at large, by a courteous and dignified retirement from the case rather than suffer the profession to be "snubbed" (a trite but expressive term) and degraded in their person, either by the meddlesome busybody, the arrogant purse-proud, or the sometimes haughty aristocratic patient. A courteously firm remonstrance and a truly dignified bearing will, as a rule, scarcely ever fail to command respect, even from such imperious and undesirable patients.

University of Durham.

THE following questions were submitted to the candidates at the first examination for the degree of Bachelor in Medicine, held at the College of Medicine, Newcastle-on-Tyne, on April 23rd and 24th.—*Anatomy*. 1. What bones enter into the formation of the orbit? State their relationship to each other. 2. Enumerate the branches of the axillary artery. Mention their distribution. 3. What are the anatomical relations of the arch of the aorta? 4. Describe fully the position, relations, and structure (so far as can be made out with the naked eye) of the pancreas. 5. Give, in detail, the steps of the dissection by which you would completely expose the lingual artery and its branches. 6. Trace the obturator nerve from its origin to the ultimate distribution of its branches.—*Chemistry*. (Six questions only need be answered; two being taken from the last half.) 1. Give an account of the properties of the gas obtained by the action of concentrated sulphuric acid upon metallic copper. How may the composition of this gas be ascertained? 2. Describe, briefly, the more important compounds of phosphorus, mercury, and carbon. 3. What weights of nitre and sulphuric acid will be required to produce nitric acid sufficient to neutralise 230 grammes of marble? K=39 1, S=32, Ca=40, C=12. 4. Write a short account of the examination of a potable water, for organic impurities. 5. How is methyl alcohol prepared from wood spirit? What compound is formed when the product of the action of sodium upon methyl alcohol is treated with ethyl iodide? Describe another method of preparing this compound. 6. Starting from ethyl alcohol, by what reactions can you prepare succinic and tartaric acids? 7. Give a list of the more important glucoses and sucroses, describing one member in each class. 8. Describe, as fully as you can, lactic acid, uric acid, oxalic acid, and chloral.—*Physiology*. 1. Give an account of milk, physical and chemical. How are its different constituents digested and absorbed in the alimentary canal? 2. How is the heat of the body produced, how is it regulated, and how is it lost? 3. What are the different columns and tract into which the spinal cord may be divided physiologically? By what methods have they been discovered, and what are their functions? 4. Give an account of the lymphatic and lacteal vessels, from their commencement upon the free surfaces of the serous and mucous membranes respectively, to the efferent vessels of their glands; and mention the essential differences between the lymph, the chyle, and the blood. 5. What becomes of the effete red corpuscles of the blood? How are they produced? Describe the properties of hæmoglobin, and explain its agency in the body. 6. Explain the action of the accommodating apparatus of the eye, and how myopia, presbyopia, and hypermetropia are produced.—*Botany*. 1. Define the following botanical terms: *pappus, anthela, corona, plumule, perisperm, stroma*. 2. What is the difference in morphological constitution between the tendrils of the vine or passion-flower, and those occurring in many leguminous plants? 3. How are the tetradynamous stamens in cruciferæ placed as regards the sepals? 4. From what parts of the plant are the following substances obtained: tow, cotton, mace, saffron, sago, and opium? 5. Name natural orders in which *syngenesious, monadelphous, diadelphous* and *dynamous* stamens respectively occur, one natural order only to be given in each case. 6. Refer to their respective natural orders the following plants: *Arnica, Juniperus, Hyoscyamus, Sinapis, Ricinus*, and *Aconitum*.—On April 25th, the candidates were examined in Practical Chemistry; on April 26th, in Practical Chemistry, Practical Anatomy, and Practical Physiology; and, on April 27th, a *vivâ voce* examination in all the subjects was held.

The following questions were submitted at the examination for the certificate of proficiency in Sanitary Science, held on April 23rd and 24th. On the evening of April 23rd, a report on the actual condition of some locality was required.—*Physics, Chemistry, and Sanitary Legislation*. 1. Name the trades specified as "offensive," under the Public Health Act, 1875, and mention others to which the term may be applied. Show what power is given under the Act to prevent nuisances from such trades. 2. Define the term "nuisance," under the Public Health Act, 1875, and show the powers and duties of a sanitary authority relative thereto. 3. In what cases is power given under the Public Health Act, 1875, to remove to hospital persons suffering from infectious diseases? Describe how you would propose to carry such removal into effect, and show the duty of a medical officer of health in respect thereto. 4. What physical methods are employed for determining the amount of moisture in the air? 5. How would you determine the illuminating power of coal-gas in terms of that of a standard wax candle? 6. What are the impurities which you may expect to find in the air of a crowded theatre? Describe the methods you would adopt for their detection and estimation. 7. What are the characters which would determine the fitness of a water for drinking purposes? 8. How would you detect the presence of lead, copper, and iron, in a sample of water? Supposing a sample of water to contain lead and iron, how would you estimate the amounts of these metals present?—*Vital Statistics, Sanitary Medicine, etc.* 1. Give the natural history and symptoms of scarlatina anginosa. In an outbreak of scarlatina in a public school, what measures would be necessary to prevent the spread of the disease? 2. Define glanders, give the characteristic symptoms of the disease, and describe the treatment of the condition. 3. Define acclimation. Show, by the laws of climate, that each race of mankind has its prescribed salubrious limits. 4. What is commonly implied by the term "vital statistics?" What factors are required for the compilation of such statistics? How would you proceed to employ these factors, and what inferences would you expect to draw from the result? 5. Describe the different scales of the thermometer, and the principle on which each is based. Show how to convert readings on one scale to those of another. 6. Describe the characteristics of (*a*) butchers' meat fit for human food; (*b*) measley pork. 7. State fully and precisely the conditions under which you would consider a healthy person exposed to infection of small-pox to be safe from risk of catching the disease. Describe a typical vaccination cicatrix. 8. What diseases are especially associated with school-life, and to what hygienic defects of schools are they attributable? Describe a schoolroom in which such defects would be reduced to a minimum. On April 25th, there was a *vivâ voce* examination, also on the microscope and meteorological instruments.

ERRATA.—In Mr. Richard Davy's lecture on Club-Foot (BRITISH MEDICAL JOURNAL, page 899) in column 1, line 17, *for* "prime point," *read* "prime pivot;" in column 2, line 45, *for* "box," *read* "boxer;" and in line 47, *for* "sartorial," *read* "sutorial." In the JOURNAL for May 12th, at page 906, column 2, line 17, *for* "anterior portion of this," *read* "anterior portion of the head." At page 918, column 2, line 6 from bottom, *for* "empirical," read "tropical;" and at page 919, column 1, line 3, *for* "requirements," read "acquirements."

Sir Spencer Wells.

Our contemporary *Punch* has this week a fancy portrait of Sir Spencer Wells, who is represented as standing by a well, named "Truth," over which is suspended by a rope connected with a windlass a bucket marked "Medical Science." Accompanying the portrait are some justly complimentary verses.

Royal College of Surgeons of England.

At the written portion of the recent examination for the diploma of membership, the following questions in (A) Surgical Anatomy and the Principles and Practice of Surgery, (B) Midwifery and Diseases of Women, and (C) Principles and Practice of Medicine, were submitted to the candidates. A. *Surgical Anatomy and Surgery* (one of the first two questions, and three of the others, to be answered): 1. Describe the operation of tying the external iliac artery, and state how the blood-supply to the limb is afterwards carried on. 2. Describe the anatomy of the parts concerned in the operations of tracheotomy, laryngotomy, and excision of the thyroid gland. 3. Give the differential diagnosis of ovarian dropsy, pregnancy, and ascites. 4. How do bones unite after simple and compound fracture respectively? Mention the chief causes of non-union. 5. Mention the various forms of urinary calculi, and the appearances and composition of each. 6. Describe the signs and symptoms of disease of the hip-joint in children.—C. *Midwifery and Diseases of Women* (three questions to be answered): 1. What causes of danger to the mother are especially apt to complicate pregnancy and labour with twins? The first child of twins having been born, upon what rules would you act in interfering or not to accelerate the birth of the second? 2. What forms of insanity are met with in connection with pregnancy and childbed? Describe the treatment. 3. In what circumstances is the operation of craniotomy indicated, and how would you complete the delivery when the head has been perforated? 4. Describe prolapsus uteri in its different stages, and state the treatment most suitable in each stage.—C. *Principles and Practice of Medicine* (three questions to be answered, including No. 4): 1. What are the symptoms, complications, modes of propagation, and treatment of scarlet fever? 2. Enumerate the chief forms of enlarged liver, and point out the characters by which they are severally distinguished. 3. Give the causes, symptoms, physical signs, and treatment of acute lobar pneumonia. 4. Mention the important ingredients in the following officinal preparations, and indicate their therapeutic actions and uses, with their doses: vinum antimoniale, mistura ferri composita, liquor hydrargyri perchloridi, pulvis kino compositus, tinctura camphoræ composita, mistura sennæ composita, pulvis elaterii compositus, pilula ipecacuanhæ cum scillâ.

H. G. L.– Hydropathic Establishment, Ilkley Wells, Ilkley, Yorkshire.

The Medical Bill, 1883.

Sir,—I have put down a few of my thoughts, on reading through the new Bill now before Parliament (*Vide* Journal, March 24th, 1883), and trust you may think them worthy of publication for the purpose of eliciting opinions from others on some of the details of the Bill.

Clause 4. Who is to define the words, "or any fees to which he may be entitled?" I charge, say, five shillings a visit to a certain patient; he refuses to pay, and says I am not entitled to charge him such a fee. Who or what is to decide the point? Not custom, for that may vary; and there is no legally recognised scale of charges for visits.

Clause 5 refers to exemption from certain offices. I think the words "if he so desire" should follow the words "from serving on juries and inquests," and not precede them. Surely we should be exempted from those offices, as now, without the trouble of expressing our wish not to serve.

Clause 8 recognises the existence of unregistered as well as registered medical practitioners, for, by implication, it says that an unregistered medical practitioner may hold an appointment in an hospital supported by voluntary contributions; and yet Clause 28, paragraph 4, seems to say that such unregistered medical practitioner, if he practise for gain, shall not be entitled to call himself physician, surgeon, etc. Clause 28, paragraph 1, recognises the fact that an unregistered medical practitioner may possess titles he is entitled to use. There seems here to be something contradictory and confusing. If an unregistered medical practitioner (*i.e.*, one who has qualified, but who is not registered) can hold a hospital appointment, and yet not practise for gain, or, if doing so, may not call himself physician, surgeon, etc., the thing is an absurdity. Why not, in a few words, forbid every qualified medical practitioner from practising at all, and from holding any appointment, unless he be registered?—Yours, etc.,

Alfred Sheen.

Cardiff, May 1st, 1883.

Anæsthetics During Labour.

Sir,—In the interesting article on "The Use of Anæsthetics during Labour," by Dr. Savill in the Journal of May 12th, one very important point is not mentioned. It has more than once happened to me when giving chloroform in labour to find that when the head has passed the outlet, the patient who has seemed so little anæsthetised as to complain of excessive pain, and beg for more chloroform, suddenly passes fully under the influence of the drug, and becomes profoundly unconscious; complete delivery follows, and profuse flooding at once sets in. Subcutaneous injection of ergotine, Bonjean's, is the remedy I adopt, together with strong pressure on the uterus, and what other general measures may seem desirable.

The point I would wish to insist on is, that instead of "crowding-on" chloroform at the last, one should then be very sparing in its use, although loudly begged by the agonised patient to give more and more.

A Country Doctor.

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A LECTURE
ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture VIII.*—The Nervous System: Notions of Nervous Action Generally.

Anatomists were aware, from the earliest times, of the general appearance and position of the central nervous masses—brain, spinal cord, and ganglia—and of the nerves. For many years, however, the latter were confounded with ligaments and tendons. Galen first probably recognised the true nerves, and he satisfied himself by experiment that they were concerned in motion and in sensation. He upset the old theory of Aristotle that the brain was simply the organ in which the blood was cooled, the old notion being that the hot spirits carried from the heart to the brain with the blood were there cooled, and condensed into water, and that then this water was returned to the heart in the blood. Galen, however, imagined that the air passed from the nostrils through the ethmoid bone into the lateral ventricles. There it mixed with the vital spirit, brought to these ventricles through the arteries from the heart. Thus the animal spirits were generated, and were transmitted from the brain to the body by the nerves, thus causing sensation and motion. He also supposed that there was a kind of diastole and systole of the brain concerned in this function, and that, in addition, the ventricles were receptacles for effete matter, ultimately thrown into the nose, or, by the pituitary gland, into the palate. These notions were held for many centuries, and were generally taught by the Italian school of anatomists. Caspar Bauhinus (1559-1624), Professor of Botany at Basle, was amongst the first to assert that animal spirits were not generated in the ventricles, but in the brain itself. He was supported in this view by Caspar Hoffmann (1660-1743), a cotemporary of Stahl, and along with him, one of the Professors of Medicine at Halle. Stahl's views were entirely metaphysical. All bodily actions were directed by the conscious or unconscious interference of the soul, and it was therefore useless to pay any attention to anatomical investigation and to experiment. Hoffmann was less speculative, and did good service by insisting that all the nerves of the body arose either from the spinal cord or from the brain, and that the ventricles were not continuous with the nerves, but with the cavities of the body. Up to this time it was held that the nerves were tubular, conveying "animal spirits" from the brain to the body. Galen's notions received their final overthrow when Conrad Victor Schneider, Professor at Wittenberg, about 1641, proved by anatomical examination that matters could not escape from the ventricles into the nose in the way alleged.

The animal spirits, being thus dislodged from the ventricles, were now supposed to be secreted from the blood of the cortical substance of the brain—a notion originating with Malpighi (1628-1694). In England, Thomas Willis (1622-1675) made important investigations into the anatomy of the nervous system. Stimulated by the revival of interest in anatomy and physiology caused by the discovery of the circulation of the blood, he made numerous dissections, and figured and described the human and comparative anatomy of the brain and nerves. Whilst there is much fanciful and metaphysical matter in his writings, Willis occupies an honourable place in the history of nervous physiology, were it for nothing more than for insisting on the production of "animal spirits" (or, as we now understand the term, nerve-force) by the cerebrum and cerebellum.

The lecturer then briefly alluded to some of the old theories regarding the nature of nerve-force, and he pointed out that it had been a favourite speculation that mental faculties were located in definite portions of the encephalon. It was not, probably, until about the middle of the seventeenth century that nervous energy, call it by any term you will, was supposed to be due to the action of a kind of matter (whether it be matter in the ordinary state, or matter in the hypothetical condition of "ether") formed in the brain, and transmitted to various parts of the body. The brilliant discoveries of Newton (1642-1727) had an influence on theories of nervous action; and in the *Principia* he states his opinion that all sensations and movements were excited by the vibrations of a "very subtile spirit," propagated through the solid "capillamenta" of the nerves from the organs of sense to the brain, and from the brain to the muscles. This was the foundation of the well-known vibration-theory of David Hartley (1705-1757). He held that sensation was the result of a vibration of the minute particles of the medullary substance of the nerves, and he called into action the hypothetical ether of Newton. This notion of another medium than the matter of the nerves has frequently arisen, as when it was supposed that electrical and nervous conduction were the same in kind. The Cartesian notion of a fluid running in the nerves was not abandoned even by Haller, as we find that, in the fourth volume of his *Elementa Physiologiæ*, published in 1762, he discusses the question as to whether the nervous fluid be albuminous, acid, spirituous, sulphureous, aëriform, or etherial. Here he first uses the term "vis nervosa," as designating a kind of action which he found it impossible to explain. It is the correlative of the "vis insita" of contractile tissue, a recognition of which we also owe to him.

The next important thinker on this subject was John Augustus Unzer (1727-1799). The special merit of his work is, that he laid the foundation of most modern views held as to the intimate connection between mental and physiological phenomena, thus being really the founder of medical psychology. As regards the action of nerves, he specially pointed out that some change is caused at the excited point which is carried along the nerve, and that artificial stimulation of a nerve produces, in the organ to which the nerve passes, precisely the same changes as would have happened had the nerve acted normally in the body. He also foreshadowed the notion of reflex action, although in somewhat vague terms. After him came George Prochaska (1749-1820), who worked out in much greater detail the views of Unzer, and especially had clearer notions of the mechanism of reflex acts. In the lecturer's opinion, however, the special merit of Prochaska's writings is, that he gave precision to physiological notions regarding the action of the "vis nervosa." He showed that a stimulus is necessary to arouse its action; that this stimulus may be either from the body or from the mind; that whilst the effects of stimuli are not always the same, this may depend upon the state of the "vis nervosa" at the time; that the "vis" may be increased or diminished; that it may exist in the nerves independently of the brain, and that individuals may exhibit a peculiar condition of the "vis nervosa" or an idiosyncrasy. These statements were published in 1784.

It might be expected that the brilliant discoveries of Galvani and Volta regarding animal electricity and electricity in general, occurring between 1786 and the end of the century, would affect opinion as to nervous action, both on account of the remarkable similarity between the electric current and the nervous current, and because the nervous action could be so readily excited by electrical stimulation. Probably the first to put forward this opinion was Valli, in 1792, and it received the countenance of Dr. Thomas Young and Dr. Wilson Philip. The action of electricity on the nerves was also studied about the same period by Lehot and Bellingeri, and thus was laid the foundation of one of the most elaborate departments of physiological work, namely electro-physiology. Many years elapsed before it was clearly shown that the conduction of electricity along a wire, and the transmission of the nervous force, whatever it may be, along a nerve, are phenomena of entirely different character.

The lecturer then described at considerable length the well-known observations and experiments of Charles Bell, fully published in 1824, but indicated in a private pamphlet published in 1811. He showed how Bell had, by direct experiment, determined the functions of the anterior roots of the spinal nerves, and the functions also of a portion of the fifth cranial nerve and of the seventh cranial nerve. These fundamental experiments led to the recognition of special systems of nerves connected with various functions, such as those of respiration, circulation, and secretion.

The next great step was taken by Johannes Müller (1801-1858), when he showed that a stimulus excites in all the organs of sense different sensations in each organ, namely, the sensation peculiar to it. Thus, in whatever way a nerve of special sense may be stimulated, the effect is always the same. For example, mechanical, electrical, or luminous impressions on the retina always produce the same effect, namely, a sensation of light or of colour. In like manner, electricity applied to the auditory nerve causes a sensation of sound.

* Lectures viii, ix, and x (the last of the course) will be devoted to the nervous system. Dr. McKendrick has found it convenient to depart somewhat from the order in the Syllabus.

In the language of Müller, therefore, "the sensation of light in the eye thus produced is not a development of the matter of light, but is merely the reaction of the optic nerve, which is susceptible of the sensations of light and colours only, not of pain. It is a particular state of the optic nerve, just as pleasant and painful sensations are particular states of the nerves of common sensation." This important statement has been called the law of "specific nervous energy," and has led to very important physiological results. When it was found that no histological distinction existed among the nerves, and that the only anatomical difference observable was their mode of termination in special organs, it was suggested that this invariable result, observed by Müller, does not depend on differences between the nerves of the senses, but on the kind of apparatus in which they end. Thus, nervous filaments having the same appearance may cause very different physiological results when excited, and the result will depend on the nature of the apparatus in which the filaments terminate. If they end in muscle, the effect will be contraction; if in a gland, excretion; if in blood-vessels, increase or diminution of their calibre; if in an electrical organ, electrical discharges; if in certain ganglionic cells, a reflex act; and if in the cerebrum, sensation and other mental states consequent thereon. This law has been a guide in all recent physiological investigation. It is assumed that the nerves themselves are similar, and that the results of division, pressure, or irritation, depend on the apparatus in which the nerve ends.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

Lecture VI.—On the Embryology of the Batrachia.

The amphibia mostly lay their eggs on the water. These are small, almost spherical bodies, part of the surface of which is often black from a layer of pigment, while the rest is unpigmented. Each ovum is surrounded by a vitelline membrane, and receives, in its passage down the oviduct, a gelatinous investment. In the Batrachia, the eggs are fertilised as they leave the oviduct, and are laid in masses or strings. In the genus *Pipa*, however, the eggs are placed on the back of the female by the male, as soon as they are laid, and a pocket of skin becomes developed round each egg. The larvæ are hatched and undergo their metamorphosis in these pockets. The female during this period lives in the water. The female of one of the tree-frogs of Ceylon carries its eggs attached to the abdomen. Some anura do not lay their eggs in the water, but attach them to trees, or lay them in holes near ponds, which may become filled with water after heavy rains, or lay them under dead leaves in moist situations.

The development and formation of the germinal layers of the Batrachia has chiefly been studied in the frog. In it the segmentation of the ovum results in the formation of a vesicle, the cavity of which is situated eccentrically, the roof of the cavity being much thinner than the floor. The cavity is the segmentation-cavity. The roof is formed of two or three layers of smallish pigmented cells, and the floor of large cells, which form the greater part of the ovum. These large cells are the yolk-cells, and are part of the primitive hypoblast. The cells forming the roof of the cavity pass into these cells without any line of demarcation, but, at the junction, are a few cells of intermediate character. The cells both of the roof and floor continue to increase in number, and those of the roof become divided into two distinct strata. The upper row of these is formed of a single row of somewhat cubic cells, and the lower of several rows of more rounded cells. Both of these strata eventually become the epiblast, of which they form the epidermic and nervous layers. The roof of the segmentation-cavity seems to be entirely constituted of epiblast. The next changes which take place lead to the formation of the mesenteron, and to the enclosure of the yolk-cells by the epiblast. The mesenteron is formed, as in the lamprey and lepidosteous fishes, by an unsymmetrical form of invagination. This first commences by an inflection of the epiblast-cells for a small arc on the equatorial line, which marks the junction of the epiblastic and yolk-cells. The inflected cells become continuous with the adjoining cells. The region where the inflection is formed constitutes a kind of lip, below which a step-like cavity is soon established. This lip is equivalent to the embryonic rim of the elasmobranch blastoderm, and the cavity beneath it is the rudiment of the mesenteron. The mesenteron now rapidly extends by the invagination of the cells on its dorsal side. These cells grow inwards towards the segmentation-cavity, as a layer of cells several rows deep. At its inner end, this layer is continuous with the yolk-cells, and is divided into two strata —one of several rows of cells adjoining the epiblast, which becomes the mesoblast, and another of a single row of more columnar cells, lining the cavity of the mesenteron, which forms the hypoblast. The inward growth of the dorsal wall of the mesenteron, though in part a true invagination, is probably also due in large measure to an actual differentiation of yolk-cells along the line of growth. The mesenteron is at first a simple slit between the yolk and hypoblast; but, as the involution of the mesoblast and hypoblast extends further inwards, this slit enlarges, especially at its inner end, into a considerable cavity, the blind end of which is separated from the segmentation-cavity by a narrow layer of yolk-cells.

In the course of the involution, the segmentation-cavity becomes gradually pushed to one side, and finally obliterated; but before this occurs, in some forms, it seems to become completely enclosed in the yolk-cells. While the invagination to form the mesenteron has been going on, the enclosure of the yolk has been rapidly taking place. It is effected by the epiblast growing over the yolk at all points of its circumference. At the embryonic rim, it takes place by the simple growth of the rim; but, at other parts, the epiblast at first extends over the yolk, as a typical epibolic gastrule, without being inflected to form a definite lip. While a considerable patch of yolk is still left uncovered, the whole of the edge of the epiblast becomes, however, inflected, as at the embryonic rim; and a circular blastopore is established round the whole edge, of which the epiblast and intermediate cells are continuous. The mesoblast, derived from the small intermediate cells, grows inwards from the ventral lip of the blastopore, till it comes to the segmentation-cavity. The growth is not, however, so much due to an actual invagination of cells at the lip of the blastopore, as to a differentiation of yolk-cells *in situ*. Soon after this, the plug of yolk which fills up the opening of the blastopore disappears, and the mesenteron communicates freely with the exterior by a small circular blastopore. The blastopore is situated at the hinder end of the embryo. By this stage, the three layers of the embryo are definitely established. The epiblast arises from the small cells forming the roof of the segmentation-cavity, and consists, from its earliest formation, of two layers or strata. It becomes continuous at the lip of the blastopore, with cells intermediate in size between those of which it is formed and the yolk-cells. These latter, increasing in number by additions from the yolk-cells, give rise to the mesoblast, and to part of the hypoblast, while the yolk-cells must be considered to belong to the hypoblast layer.

St. John Ambulance Association.—At a meeting of the Central Executive Committee, held lately at St. John's Gate, Clerkenwell, Colonel Sir Henry Loch, K.C.B., Commissioner of Woods and Forests in the chair, it was reported that, at a recent inspection of the Egyptian Artillery by General Sir Evelyn Wood, the men went through a demonstration of the stretcher-drill of the St. John Ambulance Association, which had been introduced by the commanding officer. The demonstration was subsequently repeated in the presence of the Khedive, who expressed himself as greatly pleased with the men's progress. It was further reported at the meeting that 504 members of the Metropolitan Police had entered their names for a free course of instruction in and near London, and that 149 men of the same force attached to Devonport Dockyard were ready for examination. The Metropolitan Fire Brigade classes had been examined and forty-five certificates awarded, among the successful candidates being Captain Shaw and other officers. Many meetings for the distribution of certificates had been held in various parts of the country during the past month, the most notable one being that in Dublin, attended by over 1,000 persons. The presentation was made by Countess Spencer. New centres had been formed at Gibraltar, Bridport, Eastbourne, Cork, Bedworth, and other places.

The Duke of Westminster has contributed £100 to the fund for completing the buildings of the London Temperance Hospital, situated in the Hampstead Road.

ON THE LIABILITY OF SOLDIERS TO CONTRACT DISEASES OF THE CIRCULATORY SYSTEM.*

By Deputy Surgeon-General D. CULLEN, M.D.

In selecting a subject for discussion, I have had in view to bring forward one on which military medical officers have taken much interest, the annual reports presented since 1861 embodying a mass of information on diseases of the heart and great vessels; and to sift out some of the more prominent features of this combined labour is what I would now attempt.

First, the question arises, Are our soldiers deriving benefit, in respect of less liability to this class of diseases, from the modifications and ameliorations in their lot of recent years? Have they profited by the labours of those who have investigated in the past the causes, and the effects of the causes of cardiac disability, and who have been instrumental in reforming much which tends directly and indirectly to the soldier's detriment in this particular? I need but hint at the looser dress, the more scientific equipment, the easier carried kit, the improved transport service, the advocacy of the engagement of a more mature class of recruits, the regulation by means of the Contagious Diseases Prevention Act of crying evils in camps and various garrison towns, the opening in barracks of recreation and coffee-rooms, and the safeguarding of the troops on foreign service in the choice of healthier localities—reforms which had in view the correction of tight clothing, of badly adjusted dead-weight, of immaturity, syphilis, intemperance, and malaria—and even the partial operation of which would lead us to expect year by year a well-marked decline, such as has been the case with other old scourges now well-nigh extinct.

Starting from a statistical basis, I would ask you to look at the Table No. 1, which gives from 1861 to 1880, twenty years, the total admissions, deaths, and invaliding, year by year, of the circulatory class of diseases. There are columns for the home troops, and troops abroad, and the total; and each column has a corresponding ratio to show the rate per 1,000 of mean strength. By dividing the period into two decades, we get a ready method of comparison.

* Read before the Gloucestershire Branch.

From 1861 to 1870, the admission-rate for troops serving in the United Kingdom was 9.50, and from 1871 to 1880 it was 14.98; this shows no improvement, but very much the reverse. The lowest admission-rate in the first period was in 1867, when it was 8; the lowest admission-rate in the second period was 11 in 1871. The highest admission-rate in the first period was 12.2 in 1869; and in the second period, three years give an average of 17.

The troops on foreign service show an admission-rate of 10.10 in the first period, and of 17.24 in the second; the highest rate in 1870 is 13.07; while four years in the second period average 19.6.

Taking next the deaths, and comparing the two periods, 1861, 1862, and 1863, may be contrasted with 1878, 1879, and 1880, these being the lowest death-rates in each period. At home, the aggregate of the first three years is 2.36, and of the last three 2.42, showing slightly in favour of the earlier period. For the twenty years the ratio is 1.24 in the first decade, and 1.20 in the second, and the difference is equally slightly in favour of the second period in the army abroad. There is, in fact, a remarkable uniformity in the results of the two decades, the balance in favour of the second for the whole army being .03.

With the statistics of invaliding, or final discharge from disability, the rate for the first decade is in the home army 4.12, in the army abroad 2.46, and for the whole force 3.16; and these figures contrast advantageously with the second decade when the invaliding-rate was slightly higher in each corresponding section.

From this table may be calculated the proportion which the diseases of the circulatory system bear to the total admission, death, and invaliding rates for all diseases; and, again, the second decade will show a preponderating liability to the incidence of the diseases under review. The proportion of these to all admissions in the first decade is 1 in 113.2, and in the second 1 in 64.6; the proportion to all deaths is in the first decade 1 in 13.1, and in the second 1 in 10.5; and the proportion to all invalids in the first decade is 1 in 7.8, and in the second 1 in 6.2.

It seems, therefore, admissible that, in all three respects, diseases of the circulatory system appear to be assuming a more rather than a less important aspect in the long list of disabilities.

The average number of deaths *per annum* in the twenty years is 218, the average number invalided is 612, and the combined average

No. I.—*Table of the Diseases of the Circulatory System in the British Army at Home and Abroad, for Twenty Years, from* 1861 to 1880; *showing the Annual Total Admissions, Deaths, and Invaliding, and the corresponding Ratios per* 1,000 *of Mean Strength per annum; also the same by Decades.*

	Admissions.						Deaths.						Invaliding.					
Years.	Home.	Abroad.	Total.	Ratio at Home.	Ratio Abroad.	Total Ratio.	Home.	Abroad.	Total.	Ratio at Home.	Ratio Abroad.	Total Ratio.	Home.	Abroad.	Total.	Ratio at Home.	Ratio Abroad.	Total Ratio.
1861	916	939	1,855	10.3	8.83	9.49	70	65	135	0.79	0.61	0.69	482	144	626	5.41	1.35	3.20
1862	694	983	1,677	8.9	8.09	8.40	53	112	165	0.68	0.92	0.83	350	219	569	4.47	1.80	2.85
1863	702	1,019	1,721	9.2	8.32	8.67	68	117	185	0.89	0.95	0.93	268	248	516	3.52	2.02	2.60
1864	623	1,222	1,845	8.5	10.36	9.64	87	142	229	1.19	1.20	1.19	302	229	531	4.12	1.94	2.77
1865	703	1,184	1,887	9.7	10.49	10.15	95	146	241	1.30	1.25	1.29	302	258	560	4.13	2.29	3.01
1866	636	1,181	1,817	9.0	11.09	10.28	87	166	253	1.23	1.56	1.43	293	261	554	4.16	2.45	3.13
1867	589	1,103	1,692	8.0	10.76	9.63	102	133	235	1.39	1.29	1.34	225	258	483	3.07	2.51	2.75
1868	717	916	1,633	9.2	9.57	9.38	141	143	284	1.80	1.49	1.63	219	351	570	2.78	3.67	3.22
1869	899	1,072	1,971	12.2	11.79	11.96	131	142	273	1.78	1.56	1.65	350	346	696	4.75	3.80	4.22
1870	812	1,074	1,886	10.8	13.07	11.49	122	133	255	1.49	1.62	1.55	368	295	663	4.48	3.59	4.04
Total	7,291	10,693	17,984	9.50	10.10	9.85	956	1,299	2,255	1.24	1.22	1.23	3,159	2,609	5,768	4.12	2.46	3.16
1871	1,016	1,164	2,180	11.0	14.77	12.24	148	128	276	1.49	1.62	1.55	328	199	527	3.30	2.53	2.95
1872	1,362	1,216	2,578	14.8	15.32	14.39	129	115	244	1.30	1.44	1.36	494	214	708	4.97	2.68	3.95
1873	1,152	1,603	2,755	12.9	19.84	15.60	156	121	277	1.63	1.49	1.57	390	174	564	4.07	2.15	3.19
1874	1,462	1,714	3,176	16.8	20.87	18.79	132	118	250	1.42	1.43	1.42	499	244	743	5.35	2.97	4.23
1875	1,544	1,584	3,128	17.5	19.53	18.48	127	104	231	1.37	1.28	1.32	456	226	682	4.91	2.80	3.92
1876	1,313	1,479	2,792	15.0	18.16	16.50	121	91	212	1.30	1.12	1.21	400	329	729	4.31	4.04	4.18
1877	1,310	1,462	2,772	14.2	17.67	15.85	95	83	178	0.97	1.03	0.98		{ 216 }			{ 2.61 }	Not given
1878	1,716	1,291	3,007	17.0	15.39	16.25	90	80	170	0.86	0.95	0.90		{ 276 }			{ 3.29 }	Ditto
1879	1,056	1,360	2,416	13.1	16.20	14.67	54	70	124	0.64	0.83	0.73	389	251	640	4.61	2.99	3.82
1880	1,370	1,061	2,431	16.3	14.01	15.23	81	63	144	0.92	0.83	0.88	390	266	656	4.44	3.51	4.01
Total	13,301	13,934	27,235	14.98	17.24	16.03	1,133	973	2,106	1.20	1.20	1.20	3,346	2,395	5,249	4.53*	2.96	3.45* (Ratio for 8 years)
				Total in 20 years ...			2,089	2,272	4,361	Total in 18 years ...			6,505	4,512	1,1017			

Average deaths *per annum* ... 218 Average invaliding *per annum* ... 612

Combined loss by death and invaliding *per annum* ... 830

	Per 1,000 of Mean Strength.	Admission-rate.	Death-rate.	Discharged the Service as Invalids.	Invaliding-rate.
1861-70.	Annual average ratio of all diseases (10 years) ...	1115.	16.7	24.8	
,,	Of which by diseases of the circulatory system ...	9.85 } 1 in 113.2	1.23 } 1 in 13.1	3.16 }	... 1 in 7.8
1871-80.	Annual average ratio of all diseases	1036.5	12.63	21.5	
,,	Diseases of circulatory system	16.03 } 1 in 64.6	1.20 } 1 in 10.5	3.45 }	... 1 in 6.2

No. II.—*The Diseases of the Circulatory System, British Forces, at Home and Abroad—10 Years—1864-73.*

Diseases.	Table of Admission for 10 Years.											Table of Deaths for 10 Years.											Table of Invaliding for 10 Years.										
	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	Total 10 Years	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	Total 10 Years	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	Total 10 Years
Carditis, obsolete terms	132	127	163	115	32	6	...	...	...	...	575	8	2	6	7	2	...	...	...	...	...	25	15	15	14	14	2	...	...	...	...	...	60
Morbus cordis ,, ,,	29	4	18	4	16	...	...	...	...	...	71	7	2	2	...	...	...	...	...	...	...	11	23	6	6	2	...	...	...	...	...	...	37
Pericarditis	96	78	63	51	61	71	65	86	61	61	693	5	7	9	12	11	8	9	9	8	7	85	...	5	12	3	1	4	7	14	5	1	52
Adherent pericardium	...	...	...	...	...	...	4	2	...	...	6	...	...	...	...	...	...	1	1	...	...	2	...	...	...	...	...	1	1	...	...	...	2
Dropsy of ,,	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	2	...	3	3	...	...	...	...	2	...	1	2	...	8
Endocarditis	...	...	...	...	...	9	3	3	...	5	20	...	...	...	...	...	...	1	...	2	...	3	203	226	256	269	356	424	242	218	274	211	2,679
Dis. of valves of heart	601	727	621	597	659	587	455	531	573	583	5937	73	79	92	77	87	89	81	82	67	78	805	...	...	...	...	...	...	...	...	...	...	...
Fibrinous concretions in heart	...	...	...	...	...	...	...	1	2	...	3	...	...	...	...	...	...	...	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Myocarditis	...	...	...	...	...	3	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hypertrophy of heart	270	271	280	312	288	268	219	203	200	163	2474	13	23	24	5	18	12	14	17	10	15	151	83	98	96	56	40	48	106	110	84	82	805
Dilatation ,, ,,	...	...	...	...	...	4	6	12	8	5	35	...	...	...	...	1	2	4	1	4	3	15	...	...	...	...	2	...	18	3	4	...	27
Atrophy ,, ,,	...	...	...	...	...	4	6	12	8	5	35	...	...	...	...	1	2	4	1	4	3	15	1	...	...	1	...	...	1	1	...	...	4
Excess of fat on ,,	10	2	4	12	6	7	4	2	5	1	53	2	3	3	1	1	2	1	1	...	1	15	1	...	...	...	...	...	...	...	...	...	...
Fatty degeneration of heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...
Aneurysm of heart	6	8	10	16	16	10	6	8	14	12	106	6	8	10	13	18	10	11	17	12	16	121	...	12	...	2	1	4	2	...	4	...	25
Rupture ,, ,,	...	...	...	...	...	9	17*	4	...	...	30	...	...	...	...	...	4	1	3	...	...	8	...	...	...	...	...	1	...	...	...	...	1
Angina pectoris	57	44	39	49	27	9	5	14	15	9	268	2	2	...	...	2	...	...	...	...	2	8	6	2	8	2	4	1	1	1	2	1	28
Syncope	21	27	25	15	24	6	10	13	20	13	174	2	1	...	...	2	...	...	...	3	2	10	...	...	4	...	...	...	1	1	...	...	6
Palpitation	150	125	158	136	105	580	706	913	1206	1395	5474	...	...	...	...	...	...	...	...	2	...	2	26	16	8	3	21	73	136	88	188	121	683
Atheroma of aorta	...	...	...	...	...	...	...	2	...	1	3	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Degeneration ,, ,,	...	...	...	...	...	1	...	...	...	1	2	...	...	...	...	...	...	5	2	3	...	12	...	...	...	...	...	...	1	...	...	...	1
Narrowing ,, ,,	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Dilatation ,, ,,	48	48	79	75	92	118	104	128	122	129	943	50	41	59	68	77	98	91	104	99	101	794	2	6	7	1	8	27	23	15	43	34	166
Aneurysm ,, ,,	...	...	...	...	...	2	1	...	...	...	3	...	...	1	...	...	3	2	2	...	...	8	...	...	...	...	...	...	...	...	...	...	...
Rupture ,, ,,	...	...	...	2	1	...	1	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arteritis	...	...	...	...	...	...	...	2	...	1	3	...	1	3	1	1	...	...	...	...	...	6	...	...	...	3	2	...	...	...	...	...	5
Atheroma of arteries	...	...	...	...	...	...	1	...	...	1	2	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Degeneration ,, ,,	41	53	47	37	55	32	22	28	30	32	377	31	27	21	30	38	11	3	7	3	13	190	13	15	18	25	25	6	4	7	11	8	132
Aneurysm ,, ,,	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Rupture ,, ,,	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...
Embolism ,, ,,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
Dilatation ,, ,,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3
Phlebitis	13	11	4	8	7	8	13	7	11	11	93	3	...	...	...	...	1	...	1	...	1	6	...	...	...	...	...	...	...	...	...	...	...
Obstruction of vein	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Obliteration ,, ,,	...	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Varix	264	205	170	143	134	163	149	129	158	198	1713	...	...	...	...	1	...	...	...	...	...	1	160	159	125	100	97	100	105	48	78	94	1,066
Rupture of vein	...	...	...	...	...	...	2	1	1	...	4	1	...	...	...	...	...	1	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...
Hæmorrhage	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Varicose nævus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angioleucitis	...	...	...	...	...	...	...	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not specified	107	157	132	120	110	76	90	88	142	130	1152	23	42	20	20	25	22	26	24	27	30	259	...	...	...	...	2	7	3	14	18	13	11	68
Total	1845	1887	1817	1692	1633	1971	1886	2180	2578	2755	20,244	229	241	253	235	284	273	255	276	244	277	2,567	535	560	554	483	570	696	663	527	708	564	5,860

* Probably an error in return, 14 from Madras.

Admissions by Countries.

Year.	Home Army.	Mediterranean Group.	British North American Group.	West Indies.	Cape Group.	Australian, Straits, and China Group.	India.	Board-ship.	Abyssinia.	Total.
1864	626	110	67	16	120	118	776	12	...	1,845
1865	702	73	56	18	90	110	820	18	...	1,887
1866	635	95	78	9	109	53	822	16	...	1,817
1867	588	108	87	22	77	40	760	10	...	1,692
1868	717	83	74	21	79	26	615	8	10	1,633
1869	899	88	81	18	71	37	774	3	...	1,971
1870	811	95	36	9	62	40	825	8	...	1,886
1871	1,015	75	32	11	41	17	987	2	...	2,180
1872	1,361	102	22	16	33	33	1,009	2	...	2,578
1873	1,152	88	35	23	95	45	1,316	1	...	2,755
	8,506	917	568	163	777	519	8,704	80	10	20,244

Deaths by Countries.

Home Army.	Mediterranean Group.	British North American Group.	West Indies.	Cape Group.	Australian, Straits, and China Group.	India.	Board-ship.	Abyssinia.	Total.
87	9	23	1	14	18	73	4	...	229
95	10	16	4	11	27	73	5	...	241
87	17	17	3	11	23	89	6	...	253
102	13	22	5	8	3	79	3	...	235
141	14	21	3	6	11	85	2	1	284
131	13	19	1	9	7	92	1	...	273
122	11	7	3	9	7	94	2	...	255
148	12	4	2	5	...	104	1	...	276
129	9	5	1	4	3	91	2	...	244
156	7	6	...	8	4	95	1	...	277
1,198	115	140	23	85	103	875	27	1	2,567

Invaliding by Countries.

1864	301	45	13	6	27	26	117	...	...	535
1865	302	30	19	12	26	25	146	...	...	560
1866	293	29	26	3	27	19	157	...	...	554
1867	225	25	32	3	17	6	175	...	...	483
1868	219	28	36	11	32	3	219	...	...	570
1869	350	33	22	4	23	12	252	...	22	696
1870	368	50	12	1	9	12	211	...	...	663
1871	328	26	8	2	10	8	145	...	...	527
1872	494	30	6	3	8	5	162	...	...	708
1873	399	31	7	3	15	6	112	...	...	564
	3,270	327	181	48	194	122	1,696	...	22	5,860

Note.

In the Mediterranean group, Gibraltar, Malta.

,, British N. American group, Canada, Bermuda.

,, Cape group, St. Helena, Cape of Good Hope, Mauritius and Ceylon.

Australian, Straits, and China group, includes Japan and New Zealand.

annual loss is 830, or that of a strong infantry regiment. About 1870, it became a question if the alterations in the system of recruiting did not throw an inferior class of men into the service, their physical qualities giving a lower standard than obtained under the old system. I find that, in the first decade, of 209,763 civilians examined, the rejected for diseases of the heart, arteries, and veins were 60.6 per 1,000; and in the second decade of 364,187 civilians examined, the rejected for the same grounds were 42.8 per 1,000. This would seem to indicate a stricter examination in the former period; but be this the case or not, we have but 126,297 recruits passed in the one decade, and 248,873, nearly double, in the second; and from this fact alone, the area of selection being limited, the opinion may be held to be well founded that the standard of physical qualification on entrance is likely to fall rather than to rise.

A consideration not to be overlooked is that of age. In 1880, of 64,866 men abroad, 47,261 were between 20 and 30; 13,865 between 30 and 40; 2,294 under 20; and 1,446 above 40. In 1875, of 64,618 men at home 41,289 were between 20 and 30; 23,347 between 30 and 40; 3,444 above 40; and 12,771 under 20. These ages are favourable, though the number at home under 20 is higher than desirable, the period of training being doubly trying to an immature recruit.

I have now to place before you some information on the diseases, functional and organic, which soldiers contract; and have for this purpose constructed a table—Table II—showing for the ten years from 1864 to 1873 the diseases which have caused the admissions, deaths, and invaliding in the army at home and abroad, which exhibits at a glance the principal disabilities from which soldiers suffer. These ten years are taken for the following reasons: before 1864, the information afforded, in respect especially of invaliding, is not very complete; after 1873, from 1874 onwards, a species of atrophy, the atrophia inopiæ, has affected the Blue Books, which no longer give the constituents of a group of diseases, but present twenty-four (lately enlarged to thirty-three) statistical abstractions, in place of that definite classification and individualisation of disease which distinguished the earlier statistical reports. With your permission, I will make a few observations on this table.

[*To be continued.*]

A SUCCESSFUL CASE OF GASTROTOMY FOR INTESTINAL OBSTRUCTION.

By ALDER SMITH, F.R.C.S., M.B.Lond.,
Medical Officer to Christ's Hospital.

THE extreme rarity of a successful issue to the operation of gastrotomy, undertaken for intestinal obstruction, leads me to publish the following interesting case.

On January 2nd, at 11 P.M., Mrs. S., aged 53, a ward-matron at Christ's Hospital, who previously had been in good health, was seized with acute pain in the abdomen, which soon settled about the median line, just above the umbilicus. This was followed by sickness in about two hours; during the night, she was in great pain, and vomited a bile-stained fluid four or five times.

When first seen on the following morning, January 3rd, she was in such pain, that I immediately injected a quarter of a grain of morphia subcutaneously; and, as the sickness had ceased, gave her a black draught, and ordered hot fomentations to the abdomen. The pain was acute and paroxysmal, and near the situation of the gall-bladder; so that, at first, I thought the case was one of gall-stone colic.—2 P.M. The draught was only retained an hour, and was then returned. Mrs. S. was still in great pain; the abdomen was normal; there was no tenderness and no swelling. I gave her a quarter of a grain of morphia subcutaneously.—4 P.M. The sickness had ceased, and Mrs. S. was only in slight pain. Some castor-oil was ordered.—10 P.M. The castor-oil was returned in an hour, and the bowels had not been relieved. A quarter of a grain of morphia was given subcutaneously.

January 4th. Mrs. S. had slept most of the night, and was in very little pain; she had had no sickness since last night; she had retained some milk and beef-tea. As the pain was comparatively slight, and the sickness had ceased, I determined to try one more dose of castor-oil before deciding that the case was one of obstruction.—3 P.M. The oil was retained two hours, and then returned. The pain in the abdomen was increasing, but, in other respects, Mrs. S. did not appear to be seriously ill. The tongue, temperature, and pulse were normal; the abdomen was not distended; there was only slight tenderness about the umbilicus, and no tumour was to be felt. The case now appeared to be one of intestinal obstruction. A quarter of a grain of morphia was given subcutaneously, and an injection ordered by the rectum, consisting of a quart of gruel with castor-oil; nothing to be taken by the mouth but iced water and a little beef-tea, and fomentations and poultices to the abdomen. —10 P.M. The injection was retained half an hour, a few small pieces of fæcal matter being returned with it. Mrs. S. had just vomited matter, not fæcal, the first time since the morning. This sickness was not caused by food or medicine. She was not in much pain; the abdomen was in the same state. A fourth of a grain of morphia was given subcutaneously, and I left a quarter of a grain to be taken in the night, if she were in pain.

January 5th. She passed a quiet night, and had no sickness. There was still pain near the umbilicus. I gave a fourth of a grain of morphia, and ordered another large injection to be used. At 2 P.M., Dr. Andrew and Mr. Savory saw the case in consultation. The injection used this morning returned without any fæcal matter. Some beef-tea had been retained in the stomach; she had had no sickness. The tongue, temperature, and pulse were normal. The abdomen was a little more distended than yesterday, and there was slight tenderness near the umbilicus, but no tumour to be felt, no tenderness in the right iliac fossa. She was ordered to continue the morphia, and only to have iced water, and a very little beef-tea. A fourth of a grain of morphia was given subcutaneously.—11 P.M. Mrs. S. had not been sick, and was comparatively easy. She had some morphia at 6 P.M.. Tongue clean; temperature 98.4°; pulse 90. A fourth of a grain of morphia was given subcutaneously.

January 6th. She had had a quiet night; no sickness. The pain was the same; the abdomen was slightly distended; nothing to be felt. She had been taking five minims of tincture of opium every hour since 4 A.M. Temperature 98.4°, and pulse 88.—10 A.M. I passed a long stomach-pump tube as far as the transverse colon, and very quietly injected four pints of warm olive-oil. This caused a little pain, but it was retained; I gave one-sixth of a grain of morphia subcutaneously. There had been a free discharge of urine up to the present time.—3 P.M. Most of the oil was returned in half-an-hour, but no fæcal matter came away with it. Dr. Andrew saw the case, and it was considered one most suitable for the operation of gastrotomy, as the cause of the obstruction, from the history, seemed undoubtedly to be a twist, band, or internal hernia, and a fatal result seemed inevitable unless the patient were relieved by an operation.—5 P.M. Mrs. S. had lately vomited three-quarters of a pint of thin offensive fæcal matter; this was the first sickness since the night of the 4th. The abdomen had been rapidly swelling since the morning, and was very much distended with flatulence. The patient's appearance was quickly changing, and she had the marked look of one suffering from strangulated hernia.—8.30 P.M. During the last few hours a consultation was held, and consent obtained for the operation to be performed. The abdomen was greatly distended; the patient was deeply under morphia, with pin-hole pupils; temperature 98.6°, pulse 90. The apartment was ordered to be kept at 65°, and the air to be moistened with steam. Mr. Savory operated at 9 P.M., Mr. Howard Marsh kindly assisting us. All the instruments were thoroughly washed in carbolic lotion (1 in 40), and afterwards dried; the operator's hands and the patient's abdomen were likewise washed and dried. The greatest cleanliness was observed, but no steam carbolic spray was used, and no carbolic lotion, or other irritant, was allowed to enter the peritoneal cavity. The abdominal cavity was opened by an incision extending from the umbilicus to the pubes, and the intestines were found to be much distended with flatus. They were rapidly traced downwards until a portion of the ileum was found tightly nipped by some band or constriction; below this was seen the flaccid and empty intestine. On pulling this portion of the ileum, and breaking through a band, a loop of strangulated intestine came out. This portion was intensely congested, of a deep claret colour, and so tightly nipped, that gangrene must soon have supervened if the operation had not been performed. As soon as the constricted portion was found to be pervious to flatus, by gently squeezing a small quantity through the narrowed part, no unnecessary exploration was made as to the exact cause of the constriction, but the intestines were at once returned. A little blood-stained fluid was removed by clean and new sponges from the abdomen, and the wound was rapidly closed with silk and silver sutures. There was very little bleeding, and no vessels had to be tied. The dressing consisted of lint soaked in carbolic oil (1 in 40), long strips of plaster, and a broad flannel band-

age A quarter of a grain of morphia was given subcutaneously directly the patient recovered from the chloroform. Iced water only was ordered, and five minims of tincture of opium every hour; the temperature of the room to be kept at 65°.—12 P.M. She was very easy and quiet; had had no sickness since the operation and had slept occasionally.

January 7th, 9 A.M. She had had a quiet night, sleeping most of the time; passed urine at 4 A.M. She had no sickness, and was in no pain, except when flatus came up. The tongue was clean; the abdomen was still greatly distended, but not tender. Some offensive wind had passed upwards during the night. The opium had been continued every hour. Temperature, 99.3°; pulse, 100.—5 P.M. All was perfectly quiet. One ounce of beef-tea was given.—10 P.M. A considerable quantity of flatus was passed by the rectum this evening. The abdomen not so tense; there was no tenderness, no sickness. She was still deeply under opium, which had been continued every hour. Temperature, 100.2°; pulse, 92.

January 8th, 9 A.M. She passed a good night, and felt quite easy. Plenty of flatus had passed. She has only had iced water, and the opium, during the night. Tongue clean, but red and dry. Temperature, 100.2°; pulse, 88.—9 P.M. She was in the same comfortable state, and was still deeply under opium. She had had three teaspoonfuls of Brand's beef essence, and iced water, during the day. The opium was continued every hour. Temperature, 100.2°; pulse, 88.

January 9th, 9 A.M. She had had a restless night from flatulence; a large quantity of flatus had been passed; she had had no sickness. Temperature, 100.8°; pulse, 92.—3 P.M. The wound was re-dressed by Mr. Savory, with carbolised oil. It was all healed by the first intention, except a very small portion of the edges of the skin, about one inch. There had been no oozing of fluid, and the first dressing was only marked by a little blood-stained fluid. All the sutures were removed to-day, except one silver one. The edges of the wound were secured by long strips of plaster. There was no inflammation of the wound, and the abdomen was much less in size, and there was no tenderness on pressure—9 P.M. She was much relieved by the dressing. She had only had iced water, and a few teaspoonfuls of Brand's essence during the day. Opium was given every hour. Temperature, 99.4°; pulse, 88.

January 10th, 9 A.M. Patient had a good night; the abdomen was much less. Temperature, 99°; pulse, 84. I ordered 5 minims of laudanum to be given every three hours, and Brand's essence and arrowroot alternately, every two hours.—9 P.M. She had had a comfortable day, and was in no pain. Temperature, 98.8°; pulse, 88.

January 11th. Much flatus was passed during the night. The wound was dressed again this afternoon, and the remaining silver suture removed; all was firmly united, except the edges of the skin for about one inch. There was only a very little discharge on the lint. A little brandy was given to-day. Temperature, 99.4°; pulse, 92, in the morning; and temperature, 92°; pulse, 88, in the evening.

January 12, 9 A.M. Temperature, 98.6°; pulse, 84. The opium was stopped this morning.—9 P.M. Two small solid motions were passed naturally this afternoon. Temperature, 98.4°; pulse, 80. The abdomen was rapidly regaining its normal size.

January 13th. Temperature, 98.4°; pulse, 76. Two motions were passed during the day.

January 14th. Temperature, 98.4°; pulse, 80. She was very much better to-day. The abdomen was nearly of normal size; there was no tenderness. The wound was again dressed; it was all but healed. The bowels were open twice. Bread-and-milk and custard pudding were ordered.

After this, she made steady progress towards recovery. On February 5th she was able to walk out, and on the 17th she left town for change of air; perfectly well, but thin.*

REMARKS.—These notes show, I think, the value of an early diagnosis, of the avoidance of strong purgatives, and of the treatment by opium before and after the operation; as well as the possibility of the wound of abdominal section healing by the first intention, with entire absence of peritonitis, without the use of the carbolic-spray during the operation, although the intestines were exposed and freely handled. In many cases of intestinal obstruction, so much has been given and done, and the patient is so exhausted before an operation is suggested as "the last chance," that there is but little hope of avoiding a fatal peritonitis. In this case, the absence of sickness for forty-eight hours, prior to the vomiting just before the operation, and the deep narcotism of the patient, greatly helped, I believe, the favourable result.

* May 1st. Mrs. S. has now quite recovered, and has resumed her usual duties.

A CASE OF SYMPATHETIC OPHTHALMITIS SETTING IN SEVENTEEN DAYS AFTER EXCISION OF THE OTHER EYE.

BY ERNEST D. BOWER, M.R.C.S.,
Ophthalmic Surgeon to the Gloucester General Infirmary.

EXAMPLES of sympathetic ophthalmitis coming on not many days after excision of an injured eyeball, the good eye at the time of the operation being, to all appearance, perfectly sound and free from inflammation, are fortunately extremely rare; in fact, it is only quite recently that attention has been drawn to the possibility of such an occurrence. No account of it is to be found in any of the text-books that I have consulted, and very few instances of it have as yet been recorded. I have not been able to find reports of more than about a dozen cases, and nine of these were collected and commented upon by Mr. Nettleship, who, some little time ago, drew special attention to this subject; since then, Mr. Adams Frost, Mr. Anderson Critchett, Mr. Simeon Snell, and Mr. Lloyd Owen, have each recorded one case.

That the condition must be an exceedingly rare one can scarcely be doubted, when two men of such large experience as Mr. Soelberg Wells and Mr. Critchett had never seen a case. Mr. Wells, in his treatise on *Diseases of the Eye*, page 222, says: "I may state that, so far as I am aware, no instance has been recorded in which sympathetic ophthalmia ever attacked an eye after the injured eye had been removed, if at the time the other was still quite unaffected." And the late Mr. Critchett, as recently as last May, at a meeting of the Ophthalmological Society of Great Britain, was reported to have said that "he had not himself encountered cases where sympathetic ophthalmia came on after enucleation; indeed, he had believed enucleation was a sure preventive."

It is, indeed, hardly possible to imagine anything more distressing to both surgeon and patient than the occurrence of the condition I am about to describe; and it seems to me, therefore, to be not only advisable, but a positive duty, that every case of the kind should be carefully recorded.

CASE. Ellen Butler, aged 10, a healthy, well nourished girl, was admitted into the Gloucester Infirmary on October 7th, 1882, suffering from a wound of the eyeball.

Eight days previously to admission into the hospital, she was cutting a stick, when the knife slipped and penetrated the eye, dividing the cornea vertically in the middle of the lower half, the cut extending into the ciliary region for a distance of about two lines, wounding the lens, and enclosing between the edges of the wound a portion of the iris.

When first seen, the eye was very red and inflamed, there being also considerable lacrymation and slight photophobia, but no pain, and no increase of tension. The lens was becoming opaque, there were symptoms of iritis, and vision was reduced to the mere perception of light. The other eye was not affected.

It was decided that excision of the injured eyeball should be performed at once; unfortunately, however, the father of the child objected to this; and it was not until October 13th (nearly a week later) that his consent was obtained. On that day, the eye was removed in the usual manner, there being nothing special to note about the operation, and the other eye being then to all appearance perfectly sound and free from inflammation.

After enucleation, the eye was cut open and examined: the lens was wounded, but the iris and cornea presented a particularly healthy appearance, there being no exudation of lymph, nor any hæmorrhage into the vitreous body. The wound of the conjunctiva quickly healed, and, on October 28th, the patient was discharged well.

I regret now that the good eye was not examined with the ophthalmoscope either before or after the excision of the injured eyeball; but, for the future, I shall not omit to do this, as it is, I suppose, just within the range of possibility that the appearance of the disc might have given some evidence of the coming storm.

November 8th. The patient was brought again to the Infirmary, complaining that her eye felt weak, and watered a good deal, that the sight was misty, and also that she had great difficulty in reading ordinary sized print. Her mother stated that she first noticed something was wrong two days after the girl was discharged from the hospital. She did not, however, pay much attention to it then, as she thought that it might be merely a little cold.

On admission, the eye looked red and watery, but not to any marked degree; the conjunctiva was of pinkish tinge; there was also slight photophobia, and much lacrymation, especially if any

attempt were made to discern small objects. The pupil was contracted and irregular, there was some lymph thrown out at its upper and inner margin, also slight turbidity of the aqueous humour, but no pain, nor any increase of tension. Vision = $\frac{20}{100}$, and she read No. 5 (Jäger) with difficulty. She was ordered atropine drops (gr. ii to ℥j) thrice daily, forty drops of liquor hydrargyri perchloridi three times a day, and a leech to the temple.

On the following day (November 9th), the eye looked decidedly better. The pupil was widely dilated, the conjunctiva not so red, and there was also less lacrymation. An entire ring of lymph could be clearly seen adherent to the anterior capsule of the lens, occupying the site of the pupil before it was dilated with atropine. With the ophthalmoscope, the fundus could be seen, but not very distinctly, there being some haziness of the media; the disc appeared a little pink in colour, and the margin slightly blurred.

November 10th. Vision = $\frac{20}{100}$. There was slight haziness of the retina, the veins were full and tortuous; the details of the fundus were rather more distinct than on the previous day. She had no pain.

November 15th. The ring of lymph was much less distinct, the margin of disc clearer, the veins still rather full, the pupil well dilated.

November 20th. Vision = $\frac{20}{70}$. The ring of lymph was fainter; the disc was still a little pinker than normal; the veins less swollen. The atropine and mercury were subsequently discontinued, and the last note is December 30th: vision = $\frac{20}{20}$, and reads No. 1 (Jäger).

The only trace of the attack left is an exceedingly faint circular line, the remains of the exudation of lymph, which can only be observed with the ophthalmoscope; the pupil, however, is perfectly free from adhesions, and the eye appears in all respects to have completely recovered.

THREE PRESCRIPTIONS FOR HABITUAL CONSTIPATION.

By J. MORTIMER GRANVILLE. M.D., M.R.C.P.

Some apology may appear necessary for these "prescriptions," more particularly as it is likely that some of my readers will think I am scattering suggestions on subjects which do not, at first sight, seem to be at all closely related. I am, however, led to infer, from a very large and continuing influx of letters connected with the prescriptions for gout and rheumatism, that the hints thrown out are appreciated. Under these circumstances, I cannot hesitate to give the following formulæ for use in chronic or habitual constipation, than which few common maladies cause more trouble to the general practitioner, or are less readily relieved by treatment.

Still preserving what may be called the "nervous" standpoint, it is, I am convinced, indispensable to regard persistent inactivity of the bowels, when not demonstrably due to other causes, as the result of, either defect of peristaltic action; deficient glandular secretion; or, interruption of the *habit* of periodic evacuation.

1. When there is a lax and torpid condition of the muscular coat of the alimentary canal, we get food retained in the stomach or intestines until it ferments, or sometimes "decomposes," with the result of distension, pain mechanically induced, and either eructations or incarcerated flatus. I have recently seen a very considerable number of cases in which this last mentioned trouble had been so great, and at the same time so masked, as to have given rise to the impression that grave disease existed; whereas every anomalous symptom has quickly disappeared as soon as the muscular tone has been restored, and the contents of the bowel have commenced to pass naturally on their course. The essential fault is partial, in some instances almost complete, loss of the reflex contractility of the muscular coat, so that the presence of ingesta at any part of the canal does not excite the intestine to contract and propel it onwards. It is worse than useless to employ ordinary aperients in such a condition as this; they only irritate, without strengthening, the nerves on the healthy activity of which everything depends. When, therefore, this is the form of "constipation" which requires treatment, I give a prescription something like the following; and it is, in the majority of instances—of course nothing is uniformly—successful.

℞ Sodæ valerianatis gr. xxxvi; tincturæ nucis vomicæ ♏lx; tincturæ capsici ♏xlviii; syrupi aurantii ℥iss; aquâ ad ℥vj. Misce, fiat mistura, cujus sumatur cochleare magnum ex aquâ ter die semihorâ ante cibum.

2. The second form of constipation, in which there is a deficiency of glandular secretions, generally, throughout the intestine, manifested by a peculiarly dry and earthy character of the dejecta when the bowels *do* act, I treat by a mixture such as this:

℞ Aluminis ℥iij; tincturæ quassiæ ℥j; infusi quassiæ ℥vij. Misce, fiat mistura, cujus sumantur cochlearia duo magna ter quotidie, post cibum.

3. The third form, which depends chiefly on interruption of the natural habit of periodic discharge, often results from repeated failure to move the bowels, in consequence of one or other of the two preceding forms of this trouble. This may generally be relieved by directing a perfectly regular attempt to go to stool, and by the use of the following draught, taken the first thing after *rising* from bed—not on awaking—in the morning, as nearly as possible at the same hour. It will be observed that it is not an aperient in the ordinary sense of the term. It is, as a rule, neither necessary nor desirable to continue it for longer than a fortnight. In most instances, it will be found to re-establish the normal habit in a week or less.

℞ Ammoniæ carbonatis ℥i; tincturæ valerianæ ℥i; aquæ camphoræ ℥v. Misce, fiat mistura: capiat partem sextam in modo dicto.

CLINICAL MEMORANDA.

TWO DEATHS DURING THE ADMINISTRATION OF ANÆSTHETICS.

H. C., male, aged 54, was admitted to the Bristol Royal Infirmary, December 30th, 1881, suffering from a strangulated inguinal hernia of sixty-four hours' standing. He had vomited almost incessantly from the first, and for the last twelve hours the vomited matter had been fæcal. On admission his tongue was moist, his pulse weak but regular, and his aspect somewhat pinched. Chloroform was administered preparatory to an attempt at reduction by taxis, and everything went on well for the first minute and a half, a little over one drachm being inhaled, and this amount was divided into three parts. He then commenced to struggle a little, and his pulse was noticed to have improved, when he was seen to be about to vomit. The vomited matter measured almost a pint, and was stercoraceous and very fluid. Loud tracheal râles were now heard, and the breathing for the first time became embarrassed. He was immediately turned over, when nearly two quarts of fluid were ejected. His pupils were now widely dilated, his pulse failed, and he became cyanosed. Artificial respiration, inversion, cold affusion, and dragging forward of the tongue were at once tried; air entered the lungs freely, there were no tracheal râles, and the pupils became contracted. He now vomited again, or, rather, some more fluid poured out of his mouth. Attempts to resuscitate him were persisted in for over twenty minutes, but without avail. From the first arrest of pulse and respiration, neither heart-beat nor voluntary attempt at respiration was noticed. The first vomit occupied about a minute. The *post mortem* examination showed the heart healthy, aorta slightly atheromatous, kidneys granular, and a small quantity of food, which appeared to be partly digested milk, and which was about as large as a pea, was lodged just below the rima glottidis.

M. T., female, aged 45, who had been in the ward some days with an abdominal tumour, was, on April 19th, 1883, examined under the influence of an anæsthetic mixture consisting of one part of chloroform to three parts of ether. She was known to have chronic bronchitis, and was suspected of phthisis at the right apex. She had taken some beef-tea and egg a short time before the examination. She took the anæsthetic very well, becoming unconscious in three minutes, and remaining so for ten, when her breathing was noticed to be growing shallow, but her pulse, colour, and pupils remained unaltered. She took three respirations, each more shallow than its predecessor, and gave signs of being about to vomit. She was just about to be turned over on her left side, when her breathing stopped, whilst her heart could still be seen acting. Her pulse then failed, her face became livid, and her pupils about two-thirds dilated. Inversion and artificial respiration were immediately tried, and air entered the lungs freely, with a total absence of tracheal râles. The pupils were now noticed to be about three-fourths dilated, and some half digested liquid food oozed out of her mouth. In case any might have entered the larynx, although there was no reason to suspect such an accident, tracheotomy was performed. Artificial respiration was kept up for half an hour, and inhalations of nitrite of amyl, injections of ether, cold affusion, and an enema of brandy were also unsuccessfully tried, the patient showing no sign of returning animation from the first, with the exception of closing her jaws firmly about five minutes after the commencement

of artificial respiration. *Post mortem* examination showed the heart-vessels and brain to be healthy, and there was no food in the air passages. The abdominal tumour was due to tubercular peritonitis, and there was general bronchitis, and some tubercle was found in the apex of the right lung.

In both cases the anæsthetic was administered on a flannel mask which covered the nose and mouth.

J. H. LEE MACINTIRE, Medical Superintendent
Bristol Royal Infirmary.

THERAPEUTIC MEMORANDA.

CANNABIS INDICA; A VALUABLE REMEDY IN MENORRHAGIA

MY experience of Indian hemp confirms Mr. Oliver's in some particulars, especially its physiological action. In no case has it produced pleasurable feelings, generally most alarming symptoms, such as complete paralysis, horrible hallucinations, double consciousness, etc. A young practitioner should be most careful in prescribing, and warn patients of its action, or he may lose their confidence. Indian hemp has been vaunted as an anodyne and hypnotic, having the good qualities of opium without its evils. Also in dysmenorrhœa. In this complaint and insomnia it has not proved of much benefit. The drug has almost invariably produced some marked physiological effect even in small doses. Text-books give the dose as ten minims and upwards, but five minims is the largest dose that should be given at first. If bought from a good house, the drug is not inert or unreliable. A drug having such marked physiological action ought to have a specific use as a therapeutic agent. Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason, it ought to take the first place as a remedy in menorrhagia, then bromide of potassium and other drugs. The *modus operandi* I cannot explain, unless it be that it diverts a larger proportion of blood to the brain, and lessens the muscular force of the heart. A few doses are sufficient; the following is the prescription: ℞ tincturæ cannabis indicæ ℿxxx; pulveris tragac. co. ʒj; spiritus chlorof. ʒj; aquam ad ʒij. One ounce every three hours. Four years ago I was called to see Mrs. W., aged 40, multipara. She had suffered from menorrhagia for several months. Her medical attendant had tried the ordinary remedies without success. Indian hemp was given as above. Its action was speedy and certain. Only one bottle was taken. She was afterwards treated for anæmia, due to loss of blood. Twelve months after this my patient sent for a bottle of the "green medicine." I learnt afterwards that she had sent this medicine to a lady friend, who had been unsuccessfully treated by another medical man for several months for the same complaint. It proved equally successful. The failures are so few, that I venture to call it a specific in menorrhagia. The drug deserves a trial. It may occasionally fail; this, however, is not to be wondered at in a complaint due to so many different causes, and associated with anæmia and other cases of plethora. JOHN BROWN, L.R.C.P.Lond., etc., Bacup.

CANNABIS INDICA.

THE notes on the above subject, by Dr. J. Oliver, published in the JOURNAL of May 12th, are so decided in their tone of condemnation of the drug, that I feel called upon to record my evidence in its defence. Dr. Oliver considers it "hardly worthy of a place on our list of remedial agents," because apparently it has, in his hands, failed to relieve dysmenorrhœa. Had his remarks referred only to its action in this disorder, I should have nothing to say in the matter, having never used it in such a case; but considerable experience of its employment is menorrhagia, more especially in India, has convinced me that it is, in that country at all events, one of the most reliable means at our disposal. I feel inclined to go further, and state that it is *par excellence* the remedy for that condition, which, unfortunately, is very frequent in India.

I have ordered it, not once, but repeatedly, in such cases, and always with satisfactory results. The form used has been the tincture, and the dose ten to twenty minims, repeated once or twice in the twenty-four hours. It is so certain in its power of controlling menorrhagia, that it is a valuable aid to diagnosis in cases where it is uncertain whether an early abortion may or may not have occurred. Over the hæmorrhage attending the latter condition, it appears to exercise but little force. I can recall one case in my practice in India, where my patient had lost profusely at each period for years, until the tincture was ordered; subsequently, by commencing its use, as a matter of routine, at the commencement of each flow, the amount was reduced to the ordinary limits, with corresponding benefit to the general health. Neither in this, nor in any other instance in which I prescribed the drug, were any disagreeable physiological effects observed.

I could say a few words in its favour, as to its action in allaying irritative cough, but I prefer confining myself to a point on which experience has left me no room for doubt.

ROBERT BATHO, M.D., M.R.C.P., Castletown, Isle of Man.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF CIRRHOSIS OF THE LIVER ILLUSTRATING POINTS IN DIAGNOSIS AND TREATMENT.

(Under the Care of Dr. FREDERICK T. ROBERTS, F.R.C.P.)

[For the following Report of these Cases, we are indebted to Mr. E. A. DINGLEY, M.B., House-Physician.]

CASE I. *Cirrhosis of the Liver, with Localised Ascites simulating Hydatid Cyst of the Liver: Death: Necropsy.*—W. J., aged 39, a married man, a tobacconist by trade, was admitted on January 5th, 1883. He stated that his father died at the age of sixty-nine. His mother died at forty-six of "heart-disease;" of his two brothers, one was alive and healthy, but the other died from overdrinking. The patient had always been in good circumstances, had lived well, and, up to November 1882, had been in the habit of drinking about a pint of whisky a day; since that date, he had drunk much less. Previously, his general health had been good, but he had suffered from piles for eight years. About nine months before admission, he "suffered from his liver," having attacks of pain between his shoulders, flatulence, sleeplessness, and pain and discomfort after food. These attacks recurred every two or three weeks.

He had noticed a slight swelling in the upper part of his abdomen for five months; this gradually increased, and, at the same time, his dyspeptic symptoms increased. One month before admission, the swelling in the upper part of his abdomen increased very rapidly, and the lower part also began to swell. He also suffered very severe and constant pain in the back, and passed very little urine.

The patient was a slightly built man, very emaciated. His muscles were very small and flabby, and there was slight anasarca over the feet and legs. The skin of the face had a distinctly yellow tint, but elsewhere it was normal. The conjunctivæ were pale, and the sclerotic distinctly yellow.

There was marked tenderness in the dorsal and lumbar regions, especially over the ninth and tenth dorsal spines; the twelfth dorsal and first lumbar were unduly prominent.

Respiration was entirely thoracic, 20 in the minute; the alæ nasi worked slightly, but there were no other signs of dyspnœa. The chest had the "inspiratory shape," and the movements were slight and superficial; the chest was generally over-resonant in the upper part; dulness began at the third rib on the left, and at the fourth rib on the right side. The breath-sounds were inaudible below the fourth rib on the right, and slight friction was heard; on the left side, they were inaudible below the nipple. The cardiac impulse was diffused; the sounds were healthy, with the exception that the second was reduplicated at the apex, and the second accentuated at the base. The pulse was 100, regular, strong, and incompressible. The veins over the abdomen were considerably dilated. Appetite was bad, but there was no nausea nor vomiting; the bowels were open three times a day. The tongue was clean and red; there was a deep median furrow and scars on the right side.

The abdomen was greatly distended, especially in the epigastric region. Immediately above the umbilicus, there was a distinct groove, a quarter of an inch deep and two inches wide, running across the abdomen. Above this groove, there was a distinct rounded prominence running up to the ensiform cartilage. The swelling was most marked in the epigastrium, and was slightly fuller on the right side. The skin over it was peculiarly stretched. The lower part of the thorax was bulged out and everted, especially on the right side, where the lower intercostal spaces were obliterated. The general feel of the abdomen was that of tension from fluid, and

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no solid of any kind could be felt. When a deep breath was taken, a certain amount of abdominal movement occurred, and the upper swelling became very tense at the end of inspiration. There was no particular bulging of the flanks. Fluctuation was very easily produced over the upper part of the abdomen; it was almost absent in the groove, and fairly marked below it. Hydatid fremitus, indistinct but extensive, was felt over the upper half of the abdomen, especially to the left of the middle line towards the flank. When the patient lay on his back, the whole of the abdomen was dull, except an irregularly ovoid area, extending almost across the abdomen at the umbilicus, and rather wider and higher at the right end than at the left; its width varied from six inches to three inches. When he lay on his right side, this band of resonance became smaller, and moved upwards and to the left, occupying chiefly the left lumbar region. When he lay on his left side, the band of resonance moved up and to the right, going slightly under the ribs, and extending nearly to the umbilicus; and, when he sat upright, the area of resonance was in the same situation, but was larger, extending some way under the ribs to the iliac crest below and to the umbilicus. When he was on his hands and knees, there was a small resonant patch in each flank, that in the left being twice as large as that in the right. The upper border of the liver extended along the fourth rib, from the edge of the sternum to the nipple; outside this, it ran along the fourth space. He passed twelve ounces of urine in twenty-four hours; it contained bile, but no albumen nor sugar; the specific gravity was 1030.

January 10th. He complained of great pain in his abdomen. Circumference of abdomen at umbilicus, 36 ins.; at a point three inches and a half above, it was 37¾ ins.; and, at a point three inches below, it was 35¼ ins. He passed nine ounces of urine on this day.

January 15th. He had become much worse, and suffered great pain in the abdomen and back; the dyspnœa was much more marked; the abdomen was much more tense, the upper swelling was more prominent, especially on the left side; the left flank was much more distended than the right; the abdomen was very tender. The temperature, which had been normal when he was admitted, had risen to 100.4° Fahr.; the pulse was 104; and the respirations 32. A puncture was made with an aspirator three inches below the ensiform cartilage, and six inches above the umbilicus, in the middle line, but no fluid could be obtained; the aspirator was withdrawn, when the fluid at once spurted out with great force. A trochar and cannula were inserted, and four and a-half pints of fluid were drawn off, to the great relief of the patient. Towards the end his shoulders were lowered and his pelvis raised, and this increased the force of the stream. The fluid was lemon-coloured, and very turbid, but gave no deposit after twenty-four hours' standing; its specific gravity was 1010; it was slightly alkaline. Nitric acid almost completely solidified it by coagulating the albumen. It contained bile and 2 per cent. of urea, and traces of blood and uric acid. Microscopical examination showed the presence of large numbers of leucocytes and red corpuscles; there were also large granular cells and fat-globules, but no trace of hydatids or hooklets could be seen. The abdomen became less distended, and flatter in front. The measurements were: at umbilicus, 35 inches; 3½ inches above it was 37 inches; and 3 inches below it was 34½ inches. The area resonant on percussion was much the same as it was before tapping, but surrounding it was a large area, giving a peculiar muffled resonance. It was altered by position, in the same way as it was before.

On January 17th he was again tapped, a trocar and cannula were introduced midway between the umbilicus, and the pubes and nine pints of fluid were drawn off; the fluid precisely resembled that previously obtained. Afterwards, the edge of the liver could be distinctly felt, three inches below the margin of the ribs; the surface was very hard and irregular, three or four distinct prominences being felt. The liver was also tender.

January 24th. The patient was easier, but the abdomen was filling again. The measurements were now again the same as on admission, and on the following day he was tapped again, and sixteen pints of fluid were withdrawn. After this he continued free from pain, but at the same time he was getting worse. The weakness and emaciation were more marked, and the jaundice had increased. The pain in the back was very severe at times.

February 5th. For the last few days he had been very drowsy and apathetic, and he wandered at night. He had an attack of bronchitis accompanied with dyspnœa amounting to orthopnœa, and died exhausted on February 17th.

The necropsy was made sixteen hours after death. The body was greatly emaciated; rigor mortis was well marked. On opening the thorax, the heart and lungs were seen to be pushed upwards, especially on the right side; there was no fluid in the pleural cavity. In the lungs were some patches of old bronchopneumonia and fibroid induration at the apex. The lower and middle lobes were congested, and the bronchi filled with thick frothy mucus. The pericardium contained half-an-ounce of blood-stained fluid. The heart weighed nine and a half ounces; the walls were rather thin; the valves were healthy. The abdomen contained sixteen pints of fluid of the same kind as that obtained during life. The anterior abdominal walls were quite free from adhesions; there were no signs of recent peritonitis, and no trace could be discovered of the tapping-puncture. The left lobe of the liver was seen projecting two inches below margin of thorax. The right could not be seen. The great omentum was adherent to the left end of the liver, forming a distinct sac with the convexity downwards; it was bounded below by the colon. The interior of this sac communicated with the rest of the peritoneal cavity by a small opening, which would just admit three fingers. The right lobe posteriorly, and the posterior and left edges of the left lobe were firmly adherent. The intestines, stomach, and colon were adherent, forming one mass. The liver weighed sixty-seven ounces. Its greatest measurements were, transversely, ten inches and a quarter, and, longitudinally, six inches and a half. It was of a pale, yellowish brown colour, the surface being finely granular. Besides these, there were four deep longitudinal fissures; three of these were on the upper surface and the other on the under surface. The anterior edge was very sharp, and peculiarly hard and resistant. The capsule was very adherent. On section the liver was found to be very tough, and cut with great difficulty. The cut section presented the same granular appearance. The gall-bladder was very small and contracted, and only contained a little dark viscid fluid, and numerous small black gall-stones as big as a pin's head. The spleen was soft and friable, and weighed thirteen ounces. The stomach, intestines, and pancreas were healthy. The kidneys weighed five and a half ounces each. The surface was smooth; the capsule was not adherent; the substance was tough but otherwise normal. The brain was normal.

CASE II. *Cirrhosis of Liver; Ascites Cured by Tapping and Diarrhœa.*—J. H. O., aged 49, married, a painter by trade, was admitted on January 18th, 1883. He stated that his father died at the age of 53, his mother at 60; his family history was, in other respects, good. He had suffered no privations, and stated that he drank one or two pints of beer a day, and spirits only occasionally. Sixteen years earlier he had rheumatism; he had suffered a fracture of both thighs. Early in October he complained of morning retching, and was treated for indigestion. On December 30th he noticed his feet were swollen, and a week later that his abdomen was swelling. The abdominal enlargement steadily increased, but the œdema of the feet varied, and had not got much worse. He was a well built man, slightly emaciated; his face was pale, and of a peculiar brown, earthy tint; the conjunctivæ were rather yellow, and there was a slight arcus senilis. The respirations were twenty-four in the minute, and the movements of the chest were deficient, especially on the left side. Dulness began in front at the fifth rib on the right, and at the fourth on the left. The breath-sounds were weak, and at the bases quite inaudible. The arteries were rigid, the pulse was forty, regular, full, and incompressible; the veins were not dilated, except, slightly, in the flanks. The cardiac impulse could not be perceived. Appetite was bad, thirst great, the tongue clean and moist, the bowels constipated. There was a marked blue line on the gums. The abdomen was very much distended at the umbilicus; it measured forty inches, and four inches above this it measured the same. The flanks were bulging, and the umbilicus was unfolded; fluctuation was freely obtained. When he lay on his back the abdomen was resonant on percussion, except in the flanks. When he lay on the left side, the abdomen fell over to the same side, and the left half of the abdomen became dull, and the right resonant, and *vice versâ*. When he sat upright, the dullness reached half way between the umbilicus and ensiform cartilage. The liver-dulness began above at the fifth rib, and extended to the margin of the ribs. The liver could just be felt below the margin of the thorax. Twenty-three ounces of urine were passed in the twenty-four hours; the specific gravity was 1014; it contained no albumen nor sugar.

January 24th. The abdomen measured at the umbilicus 41 inches, and four inches above it was 42 inches. He suffered considerable pain in the abdomen. Eighteen ounces of urine, of dark colour, but containing no albumen, were passed daily.

January 29th. At the umbilical level, the abdomen measured 42⅛ inches, and, four inches above, 42¼ inches; the umbilicus was begin-

ning to protrude. He was given pulv. jalapæ co. gr. xx, but this only caused two stools.

The patient was tapped on January 30th, and 18½ pints of pale yellow ascitic fluid, of specific gravity 1020, were drawn off. After this, the abdomen was resonant, except in the flanks. The liver-dulness extended from the fifth space to one inch below the margin of the ribs inside the right nipple line; from this point, it extended across the epigastrium, the edge being three inches below the ensiform cartilage, and it disappeared under the left ribs, two inches inside the left nipple. The surface was hard and irregular, and the edge very sharp and hard. The circumference of the abdomen, four inches above the umbilicus, was 39 inches.

On February 5th, the abdomen measured, at the umbilicus, 40¼ inches, and, four inches above, 41 inches. Independently of any medicine, and, as far as could be ascertained, quite spontaneously, the patient had an attack of diarrhœa on February 6th, passing four loose stools during the night. On February 7th, the diarrhœa continued, and he had fourteen stools. The patient's subsequent progress may be best gathered from the accompanying table, showing, at a glance, the effect the diarrhœa had on the ascites.

Date.	Measurement of Abdomen four inches above Umbilicus in inches.	Measurement of Abdomen at Level of Umbilicus in inches.	Treatment and Remarks.
January 18	40	40	On admission.
,, 24	42	41	
,, 29	42¼	42⅜	Pulv. jalapæ co. gr. xx, causing two stools.
,, 30	39	...	Patient tapped, and 18½ pints drawn off.
February 2	39½	39¼	
,, 5	41	40¼	On February 6th, patient was ordered mag. sulph. 3iij, which was not given; in the night, he had an attack of diarrhœa, with no assignable cause. February 6th, 4 stools; February 7th, 14; February 8th, 10.
,, 8	41¾	40¼	
,, 9	39¾	39¼	Diarrhœa, 15 stools.
,, 10	39½	38½	,, 13 ,,
,, 12	39	37½	,, 8 ,,
,, 13	38	37¼	,, 8 ,,
,, 16	36½	36¼	,, 7 ,,
,, 20	34½	34¼	,, lessening, 3 stools.
,, 22	34½	34¼	No diarrhœa, only 1 stool.
,, 26	34¼	33¾	No fluid in abdomen. Bowels regular, sleep good, appetite better.

March 7th. The patient discharged quite well; no sign of fluid in abdomen.

April 29th. Patient still doing well. Abdomen quite free from fluid. He sleeps and eats well, and feels "quite another man."

FALSE CERTIFICATE.—Mr. Broughton, a surgeon of Batley, has been charged with making a false certificate (under the Births and Deaths Registration Act, 1874), concerning the death of one Ann Eliza Mundy. The prosecution was undertaken at the instance of the Medical Alliance Association. A brother of the defendant, who had been attending the schools in Leeds for four years, but had not passed the preliminary examination, said he had been attending the deceased, and saw her on the day she died. She had on several occasions been to the surgery, and the defendant had seen her on two occasions, the last time being in the latter part of December. He had represented to his brother that she was near her end, and suggested that he had better see her. The certificate given was signed by the defendant, and he (the witness) filled in the body of it, to the effect that the defendant saw the deceased on the 9th of January, knowing it to be false. The defendant was fined £5 and costs.

MORPHIA POISONING.—A case of morphia poisoning is reported by Dr. E. Stuver in the *New York Medical News*. The amount taken was eleven grains. When Dr. Stuver saw the patient she was profoundly under the influence of the drug, with the pulse at 100. A hypodermic injection of one thirty-fifth of a grain of atropia was immediately given, and though the symptoms for awhile grew worse, the respiration becoming laboured and shallow, and the pulse 150, she gradually improved. A second injection was given in an hour, after which recovery promptly took place. The next day there was a dull, heavy headache, with nausea and numbness in the knees, but no other bad results. There was some dilatation of the pupils from the atropia.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 22ND, 1883.

JOHN MARSHALL, F.R.S., President, in the Chair.

Renal Calculus.—Mr. Berkeley Hill brought under the notice of the Society a woman from whom he had, nine weeks previously, removed a renal calculus by lumbar incision. The patient had had symptoms of stone in the kidney for about seven or eight years, but was now in very good health. The stone was also exhibited; it was about the size of an olive.

A Case in which Cysts in connection with both Kidneys were opened and drained, and a Tumour of the Right Ovary removed, the patient remaining in good health. By J. KNOWSLEY THORNTON, M.B., C.M.—E. M., a single woman, aged 27, was admitted into the Samaritan Hospital in November 1877, under the care of Mr. Spencer Wells. She had had a child born alive at full term when she was only fifteen. When seventeen, she had inflammation of both kidneys, and from that time had been failing in health and had been unable to lie on her right side for fully a year. When admitted, she had a fluctuant tumour of considerable size in the right side of the abdomen, with a red, tender, and pointing swelling in the right loin behind this tumour. There was a smaller tumour in the left side of the abdomen, which occupied an exactly similar position to that in the right side, but did not distinctly fluctuate. There was nothing wrong with the urine, and no trouble with the bladder or kidneys, except pain across the loins and in the lower abdomen, which was not, however, constant. Menstruation was regular. The swelling in the right loin was freely incised by Mr. Wells under Listerian management, but nothing to account for its presence was found, and no communication appeared to exist between it and the kidney or ureter. It contained fluid very like that from an ovarian cyst, with an immense quantity of cholesterine. It was dressed antiseptically and drained, and in six weeks the patient went home well, all trace of the cyst having disappeared. Six or eight weeks afterwards, she had an attack of gout in both feet; then the wound opened, and a large discharge of fluid, with much cholesterine, took place, and the wound gradually healed up again. In January 1880, she was readmitted under the author's care, with a tumour of the right ovary, for which he performed ovariotomy. While the abdomen was open, he examined the kidneys and ureters. The right kidney was large and sacculated, and its ureter was much enlarged, especially at the pelvic brim. The left kidney and ureter appeared quite normal. The recovery after the ovariotomy was rapid, but, soon after getting up, the swelling in the right loin reappeared with fever, etc., and she was obliged to return to bed. It was poulticed antiseptically until it broke, and then drained as before, and she left the hospital apparently well in three weeks from the time it burst, and about six weeks from the ovariotomy. In six weeks, she returned with a swelling in the left iliac region, in the situation of the left ureter; this was opened and drained antiseptically, and again in about six weeks she went home well. Fifteen months later, the wound in the right side again opened, and discharge went on for fourteen months without apparently affecting her health at all. It had now again closed for two months, and she was in excellent health. The left side has not given any further trouble. After detailing the case, the author made remarks and suggestions as to the probable pathology of these various lesions, and invited suggestions from the Fellows as to this very curious case, and reports of any others at all like it.

A Case of Nephrectomy for Rupture of the Kidney where Lateral Cystotomy was also subsequently performed for the Relief of Cystitis caused by Retained Blood-Clots. By HENRY G. RAWDON, M.D.—Charles M., aged 12, was admitted into the Liverpool Infirmary for Children on December 7th, 1882. The previous day he had fallen into a stone basement, a distance of about eight feet. On admission he was found to be passing blood in his urine. He complained of some pain in his right side. The only other evidence of an injury was a small bruise-mark over the crest of the ilium. The diagnosis was that rupture of the right kidney had been caused by the injury. The hæmaturia for the first few days diminished, but it subsequently increased, and was followed by acute cystitis. With the object of preventing blood from entering the bladder, on the seventeenth day after the injury, the injured kidney was removed by a lumbar incision, and then it was found to have been torn nearly completely across. Relief followed the operation. Subsequently, symptoms of acute cystitis again showed themselves. On the twenty-first day after the injury, and four days after the nephrectomy, lateral cystotomy

was performed, when fœtid clots were removed, and a free drain for the urine was established. Relief was afforded by the cystotomy so far as the symptoms directly traceable to the bladder were concerned. The patient died on the fortieth day after the injury. The cause of death appeared to have been pyelitis and circumscribed suppuration of the left kidney, lesions probably traceable to an extension of the cystitis which had been occasioned, partly by the presence of decomposing clots, and partly by attacks of retention of urine. It was suggested that, if cystotomy had been performed earlier, the latter consequences might have been averted.

Case of Excision of an Enlarged Cancerous Kidney. By Sir T. SPENCER WELLS, Bart.—The author narrated the case of a gentleman, aged 58, whose left kidney he removed last December. It measured six inches by four, and was the seat of soft cancer. The patient died on the fifth day. The operative procedure was described, and the author urged the importance of uniting, in all cases of nephrectomy by abdominal section, not only the divided peritoneal coat of the anterior abdominal wall, but also the divided peritoneal covering of the kidney. In this case he was content with letting the two edges fall together, and he thought that blood or serum exuding from the tissues behind the peritoneum might have passed into the peritoneal cavity, or that some portion of intestine might have adhered there. This might have been prevented by a few sutures. He had not seen this detail in the operative proceeding referred to in any previously recorded case of nephrectomy.

A Case of Hæmatoma of the Left Kidney; Complete Recovery.—By JOHN MARSHALL, F.R.S. A girl, aged 13, was brought into University College Hospital, nine months after she had been run over by a cart. She had been laid up for five months by the accident, but then grew well enough to go to school. The pain in the left side, however, recurred, and led to her being brought to hospital. There was no hæmaturia, but a large tense fluctuating tumour in the left side, from which, by an aspirator, five ounces of purulent fluid were drawn off. This contained no bile and smelt urinous. On a second aspiration thirty-six ounces of chocolate-brown fluid were drawn off, containing 5½ per cent. of urea. This led to the diagnosis of a traumatic hæmatoma of the kidney. The recovery was complete.

The PRESIDENT invited discussion on this collection of cases, and drew attention to the many specimens on the table before him of cancerous, cystic, calculous and other diseases of the kidneys, which furnished examples of some of the formidable difficulties with which modern surgery endeavoured to cope.—Mr. LAWSON TAIT rose to draw attention to some of his own successful cases of excision of ruptured ovarian cyst, of excision of gall-stones in five cases, and of a case of cystic kidney removed by lumbar incision some months after failure by abdominal section.—Mr. REGINALD HARRISON said he had followed Dr. Rawdon's case throughout, and saw the value of such an operation as was there performed. The main difficulty of many such cases was the diagnosis, and when that could be made as successful as the operations, he looked forward to excellent results.—Mr. ALBAN DORAN very briefly referred to an operation for excision of the kidney in 1878. The patient did not live long, for it was found that the remaining kidney was the seat of extreme degeneration from small cysts, a point which it had been impossible to ascertain before the operation.—Dr. DICKINSON expressed, as a physician, his sense of the great debt of gratitude which was due to the surgeons who had brought stone in the kidney within the list of curable diseases. As to the excision of tumours in the kidney, there was more to be said. These were chiefly sarcomata of a very malignant type. He had examined the *post mortem* records of 19 cases, and found one point prominent, namely, that there were secondary growths in all of them but three. That showed their malignancy; and he was, on the whole, against their excision, for it was impossible to estimate them until they were far advanced, and then an operation was only rendered justifiable by some such accident as hæmorrhage. Sir Spencer Wells's case, he submitted, was not explained by the *post mortem* examination. The blood which was so freely passed could not have come from the kidney which was excised, for the malignant kidney did not bleed till it had fungated and broken through the capsule, which had not happened in the kidney which had been cut out. The blood, he was inclined to think, must have come from the remaining kidney.—Mr. BARWELL recommended a lumbar incision for removal, whenever it was practicable, but remarked that the last rib was, in many people, too near to the crest of the ilium to allow of this. He agreed with Sir Spencer Wells's suggestions as to sewing up the peritoneal covering of the kidney when an abdominal opening had been made, but wished to take a further step in such cases, and to drain through the loin the cavity behind the peritoneum, where there might be bleeding or suppuration.—Mr. LAWSON TAIT took objection to Dr. Dickinson's opinion against excision of renal tumours, on the ground that a diagnosis of malignant disease was often impossible. He believed that they were all malignant in patients under fifteen, and again almost all at an advanced age; but such a case as Sir Spencer Wells's, he thought, might have been one of hydatids. An abdominal incision in front was advisable, as securing an opportunity of investigating the state of the kidney which it was proposed to leave behind in cases of nephrectomy. The history of Dr. Rawdon's case led to a suggestion, made after the event, that it would have been desirable to open the bladder first to ascertain the origin of the bleeding, and then, if the urine had continued to show blood, to make an incision for the kidney.—Mr. KNOWSLEY THORNTON was sorry to admit that he had been unable to throw adequate light on his own case. He was inclined to think that the origin of the disease had been in the obstruction of both ureters in the very early pregnancy of his patient (aged 15), and the formation thereby of a sacculated kidney. In comparing the operations of nephrectomy and nephrotomy, he was inclined to prefer the former, as giving a better chance; and allowing, if performed from the front, of some evidence being taken as to the state of the other kidney, which would have been very important in such a case as Mr. Doran's. He could not agree with Sir Spencer Wells's suggestion as to the sewing up of the peritoneal covering of the kidney, to prevent fluid getting into the perinæum; for he thought that, if a fluid was aseptic and free from putridity, the peritoneum was the best tissue to absorb it. He felt, with Mr. Tait, the difficulty of diagnosing the malignancy of the renal tumour to be dealt with. One kidney, which he had excised, and which he showed as a specimen, was a case of alveolar sarcoma, which would certainly not recur soon. In another case, he had been so convinced of the malignant character of the growth by secondary deposits, that he had refused to operate; and, in some doubtful cases, he thought an exploratory operation would be justifiable. In a case in the country, he had come to the conclusion that excision would be the best treatment, had obtained the patient's consent, and arranged the operation. A clergyman, however, stepped in and imposed his veto, under spiritual penalties on the patient, and the man died without operation. After death, a non-malignant sarcoma of the kidney was found, which could have been easily removed by operation. Mr. Tait had expressed doubts as to whether a diagnosis of fresh bleeding from the kidney, or discoloration of the urine by blood-clots in the bladder, could be made in Dr. Rawdon's case; but he thought an examination of the urine would have very readily settled that. In conclusion, after having himself performed nephrotomy in three cases, and nephrectomy in four (two by median incision, two by Langenbuch's incision), he preferred the nephrectomy by abdominal incision.—Sir SPENCER WELLS said he very heartily agreed with what Dr. Dickinson had said in some points; but he thought the difficulty of diagnosis of malignant renal tumours was greater than Dr. Dickinson had estimated. For instance, one of the most distinguished physicians in the world had thought the tumour in the case he had brought forward to-night was splenic. Against its malignancy, he had the long duration of the tumour—for several years at least—and the absence of evidence of any secondary deposits; and, even if he had thought it to be certainly malignant, he was inclined to think he ought to have removed it; for the patient was bleeding to death before his eyes, and it was a surgeon's duty to stop that. In another case of tumour of an undescended testis, which was probably malignant, he decided to remove it, after consultation with Sir James Paget, as he certainly should have removed it if it had been in the scrotum. He was much obliged to Mr. Barwell for his suggestion of "draining" the cavity behind the kidney; and should be inclined to adopt it, keeping at the same time to his first idea of carefully sewing up the peritoneal covering of the kidney. Mr. Thornton's success in attacking kidney diseases through the abdomen had first led him to attempt such an operation; but many more facts were still necessary before the value of the various methods proposed could be fairly estimated.—Dr. SOUTHEY suggested that a physical exploration of the kidney to be left in the abdomen might be practically avoided by an estimation of the amount of urea passed; for from a normal amount of urea, a normal amount of secreting kidney-tissue might be inferred.—Mr. BARKER pointed out that a foreign observer had come to a conclusion opposite to Dr. Dickinson's, as to the great malignancy of renal growths; for, out of one hundred and thirty cases, he had found few instances of secondary tumours. In a cancerous kidney he had himself excised, he had only found one or two traces of recurrent tumour in the lung, and none anywhere else.

HARVEIAN SOCIETY.

MAY 3RD, 1833.

E. SYMES THOMPSON, M.D., President, in the Chair.

Cases Illustrating the Solution of Vesical and Renal Calculi.—Dr. BROADBENT read notes of two cases, one of renal, the other of vesical calculus, which had yielded to treatment by large doses of alkaline salts. The first case was that of a man, aged 55, who, after an attack of renal colic, developed characteristic symptoms of vesical calculus. He was ordered a mixture of an ounce of citrate of potash and half an ounce of acetate of potash; one drachm of these mixed salts to be taken three times a day, with a dessert-spoonful of succus taraxaci in a quart bottle of Salutaris water, the latter being selected as the vehicle, as it was stated to be simply distilled water aërated with carbonic acid. After persevering with this plan of treatment for a month, with no interruption to his business pursuits, the patient passed a small calculus, which, though of course it was impossible to say how far it had been reduced in size, bore marks of erosion from the solvent action of the urine; immediate relief was afforded the patient from his symptoms, and he had remained perfectly well since. A remarkable feature about this case was that this patient as a rule took singularly little fluid, either with or in the intervals between his meals; this, the author remarked, suggested an observation as to one of the causes of calculus, whether renal or hepatic. Antecedent to the formation of stone in his kidney, the patient had twice suffered from gall-stones, five years, and six months respectively, before the attack of renal colic. There was no history of gout or calculous disease; the patient's habits were regular and moderate, his circumstances and mode of life were such as were conducive to health, and the only cause which could be traced as likely to lead to the deposit of calculus was his remarkable abstinence from liquid. Water was required in the system not merely as a vehicle for excretory matters, and to wash out the ducts, but as a medium for the metamorphosis which was actively taking place everywhere, and an insufficient supply favoured the formation of stone, not only by concentration and inspissation of excretions and secretions, but by imperfect carrying out of chemical changes The second case was that of a gentleman, 50 years of age, who was suffering from renal calculus. The treatment adopted in this case was to give full doses of citrate of potash in the effervescing granular form with a large quantity of water; and it was followed by the passage of a small rough calculus which caused only slight uneasiness as it traversed the ureter and no pain at all in the bladder or urethra; it would have been unnoticed if the patient, warned by the slight pain in the ureter, had not been on the look-out in accordance with instructions.—Mr. GANT doubted whether the eroded appearance of the calculus was due to the treatment; he thought it was more probably its natural state. The treatment was only applicable to very small calculi, and to those composed of uric acid or urates, which could be cured by one application of the lithotrite.—Mr. CRIPPS LAWRENCE mentioned that calculi were sometimes developed *in utero*, and disappeared in early infancy under the influence of a similar treatment, the solvent in this case being the mother's milk. He had found that ricketty children were specially liable to phosphatic calculi, which should be looked out for, and even dealt with by anticipation.—Dr. RENNER and Dr. HICKMAN also spoke, and Dr. BROADBENT, in reply, said that he only recommended this treatment where there was reason to think that the calculus was of small dimensions, and he would add this caution to those who adopted the plan, viz., that there was a risk that a patient being relieved by the treatment, might think, either, that he had never had a stone in his bladder, or that he had got rid of it, and so might go on till the calculus had reached too great a size to be amenable to any treatment.

The Treatment of Catarrhal Deafness in Children.—Mr. GEORGE FIELD read a paper on the above-mentioned subject. Catarrh of the middle ear, while perhaps the commonest, was also, on account of its sequelæ, one of the most important causes of deafness; its early arrest was hence of the highest moment. It might be self-curative in spite of our English climate, but the popular plan of leaving it to itself when it occurred in children was eminently unsafe. For its cure, one had to abolish the *fons et origo mali*—catarrh of the naso-pharynx. One of the first effects of the latter disease was swelling and blockage of the Eustachian tubes, and consequent deafness from rarefaction of the air in the tympanum. Obviously, all sources of colds in the head must be studiously avoided by those who would escape the chance of an attack of aural catarrh. The disease was usually very insidious, and was commonly for a long time overlooked in children, who often, on account of it, were accredited with obtuseness and obstinacy. Thickening of the membrana tympani, clogging of the tympanic cavity, and interference with the movements of the ossicles, were amongst its ultimate serious effects, and autophony and noises caused by the movements of mucus in the tympanum might occur as symptoms. Nasopharyngeal catarrh could indirectly cause deafness by promoting mouth-breathing, and hence the constant closure of the Eustachian tube. In the more favourable cases, one usually observed variation in the hearing distance. Chief among the means of remedying the disease was Pollitzer's air-bag. The use of this bag, as also of Valsalva's method of ventilating the tympanum, might be rendered more than futile by a too frequent employment. Astringents, tonics, and mild aperients must not of course be ignored, as also the influence of hygienic and local conditions; and subjects of the disease should be cautioned to provide against the admission of cold water into the ear in bathing. The paper was followed by an account of a case of congenital absence of the external auditory orifices, causing considerable interference with audition, which Mr. Field had treated by operation. The procedure adopted was first by dissection through the posterior part of the auricle, to discover the osseous external meatus, and then to secure a permanent opening into the same, by an incision into the part of the auricle immediately overlying it, and the insertion of a speculum. The operation was both tedious and productive of severe hæmorrhage, but bid fair to prove in every way successful.—Dr. BUZZARD mentioned a case in which, after an attack of aural catarrh, there was perforation of both membranæ tympani; he asked how such an untimely result could be guarded against; was the use of Pollitzer's bag indicated in the early stages when severe pain was present? or should it be deferred until that had subsided? He thought it was unnecessary to make children swallow when using Pollitzer's bag.—Mr. CULVER JAMES remarked on the number of persons who were suffering from deafness in one ear through neglect of this disease in childhood. Rather than that mucus should perforate the membrana tympani, an incision should be made into it; this healed up much more readily than a natural perforation, the ragged edges of which showed little disposition to unite.—The discussion was continued by the PRESIDENT, Mr. GANT, Dr. HICKMAN, and Mr. R. OWEN; after which Mr. FIELD replied.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 2ND, 1883.

H. GERVIS, M.D., President, in the Chair.

Extra-uterine Fœtation.—Dr. J. A. MANSELL-MOULLIN showed a specimen of abdominal gestation. The fœtus, of about four months' development, was contained in a sac bounded by the Fallopian tube and broad ligament in front, and the intestines above and behind. In its primary stage, he thought it had probably been tubo-ovarian. The patient died from internal hæmorrhage from the placental site. The points of interest in the case were these: (1) the patient had recovered from an attack of internal hæmorrhage and peritonitis six weeks previously; (2) the intestines were so adherent over the cyst that, had its removal been attempted, it would have been impossible to complete the operation.—Mr. LAWSON TAIT said that, in such a case, all that was wanted was the removal of the fœtus and drainage of the cyst. He regretted that this had not been done. He had operated on seven such cases, of which six had recovered.—Dr. HEYWOOD SMITH said the patient was admitted in too low a state for operation; and the *post mortem* examination showed that any operation would have failed.—Dr. BRAXTON HICKS said that the treatment advocated by Mr. Tait was not new; and recorded cases showed that it was not so simple or so safe as had been said.—Dr. EDIS thought operation was advisable when the diagnosis was clear; but the difficulty was in diagnosis. He agreed with Mr. Tait that an exploratory incision was justifiable when the symptoms were grave enough.—The PRESIDENT remarked on the comparative safety conferred by antisepticism in peritoneal surgery. He thought that the condition of the patient, rather than the presence of adhesions, was the bar to operation in this case.—Dr. CARTER said that the patient was in too low a state for operation, and, from the *post mortem* examination, he thought it would have been unsuccessful.

Cystic Degeneration of Uterine Fibroid.—Dr. CARTER showed a uterine fibroid, which had undergone cystic degeneration. It grew from the fundus uteri, by a pedicle one inch and a half long and half an inch in diameter. It derived its blood-supply mainly from extensive adhesions. It weighed three pounds and three-quarters, and contained seven pints of fluid, in all weighing about thirteen pounds. The patient from whom he removed it had done well.

Cystic Disease of Ovaries.—Dr. CARTER showed two ovaries removed from a patient, and made up of a number of small cysts. They weighed one pound and twelve ounces respectively. They had been jammed down into the pelvis behind the uterus, and had been taken for uterine fibroids. The patient had done well.—Mr. LAWSON TAIT said the ovarian disease was one of a very rare kind, described by Rokitansky, Ritchie, and himself.

Submucous Fibroids.—The PRESIDENT showed three myo-fibromata, removed from the interior of the uterus.

A Cardiac Acephalic Fœtus.—Mr. F. E. COCKELL, junior, showed a monstrosity of this kind.

Ischiopagus Parasiticus.—Dr. CHALMERS exhibited (for Dr. HURFORD) a monster of this kind.

Hydrosalpinx.—Mr. LAWSON TAIT showed a specimen of hydrosalpinx, removed from a patient from whom, four years previously, an ovarian tumour had been removed.

Pyosalpinx.—Mr. LAWSON TAIT also showed a specimen of pyosalpinx, removed from a recently married woman. The symptoms had followed marriage, and he thought the disease due to latent gonorrhœa. He thought there must be hundreds of women in London suffering horribly from this disease, and that this operation was not done half often enough.

Suppurating Parovarian Cyst.—Mr. LAWSON TAIT also showed a suppurating parovarian cyst, which he had with much difficulty enucleated. Each of the patients from whom the exhibited specimens were taken had done well.—Dr. EDIS called attention to Dr. Noeggerath's paper on Latent Gonorrhœa. He (Dr. Edis) thought such cases of frequent occurrence, and that operative treatment offered the only hope of relief.—Dr. FANCOURT BARNES thought the results of Mr. Tait's operations justified their performance.

Case of Extra-uterine Gestation simulating so-called Missed Labour.—This paper, by Dr. RASCH, was then read. The patient, a multipara, aged 29, ceased to menstruate in March 1882. In August, she thought that she quickened. In October, she suffered from pain in the belly; fœtal movements ceased; and there was some hæmorrhage from the vagina. Then followed symptoms said to be due to inflammation of the kidneys and lungs. In December and January, a foul vaginal discharge was noticed. At the end of January, some fœtal bones came away *per vaginam*. At this time, a sound passed six inches into the uterus; and, on washing out the uterus, a pint and a half of fluid was injected into the organ before any returned. The patient died at the end of February. On necropsy, the fœtus was found in a cyst occupying the lower belly, inseparably connected with the pelvic viscera and abdominal wall, and opening into the sigmoid flexure and the uterus, the latter organ being of normal size. The author remarked on the similarity of the phenomena during life—the history of the case, the distance to which the sound entered, and the quantity of fluid which the uterus apparently retained—to those of so-called missed labour. The necropsy showed that removal of the fœtus by laparotomy would have been easy, and he regretted he had not done it.—Mr. LAWSON TAIT said that the case emphasised the rule that, in obscure cases of abdominal disease, not malignant, the abdomen should be opened.—Dr. GALABIN had met with a case much resembling that of Dr. Rasch, except that the cyst did not open into the bowel. In this case, the cervix was dilated with a tent, and then the opening between the cyst and the convexity of the retroflexed uterus could be felt with the finger, thus settling the diagnosis.—Dr. PHILIP JONES had attended the patient before she came under the care of Dr Rasch. He described more fully the early history of the case.

On the Behaviour of the Uterus in Puerperal Eclampsia, as observed in two Cases.—Dr. BRAXTON HICKS remarked that the condition of the pregnant uterus during a series of epileptiform attacks had not been very closely observed, the general idea being that the uterus participated in the general excitement of the muscular system. Passages were quoted from different works on the subject, in illustration of this. The author then described two cases in which he had carefully noticed the action of the uterus. In each of them, coincidently with a convulsion, a powerful and prolonged contraction of the uterus was observed. Between the convulsions, the uterine action was natural. He could not state the exact relationship in point of time between the convulsions and uterine contraction. He did not think that uterine contraction alone caused the convulsion; for, in the most severe cases of tonic or clonic contraction of the uterus, convulsions did not occur. But there might in these cases be increased excitability. It had been suggested that increased force of pains might result from carbonic acid intoxication due to the convulsions. He thought the immediate supervention of uterine contraction on the convulsive paroxysms, and the quietness of uterine action between them, told against this view. The presence of these contractions, together with the disturbance of the heart and vascular system, and the pupils, showed that the muscles of organic life were liberally affected during the paroxysms of eclampsia. These prolonged and powerful uterine contractions, as well as the carbonic acid poisoning of the mother's blood, were a source of danger to the fœtus; and, in its interest, speedy delivery was called for, if it could be effected without harm to the mother.—Dr. ROBERT BARNES regarded the paper as of extreme value. He did not doubt that the immediate cause of the uterine contraction was the convulsion. Dr. Hicks's observations would lead him to reconsider the rule which he had adopted, to reject the *accouchement forcé*, from which he had seen disastrous results. With chloroform and improved operative measures, delivery might be effected early and safely; but the mother must be considered first.—Dr. GRAILY HEWITT thought Dr. Hicks's observations novel and important. He thought the disturbances of the abdominal and renal circulation, caused by pressure of the gravid uterus on the renal veins, exercised a powerful influence in producing eclampsia. He had found benefit from diminishing this pressure by positional treatment and by unloading the bowels.—Dr. ROUTH had seen marvellous benefit in puerperal convulsions from placing the patient on her belly and knees—a confirmation of Dr. Hewitt's views.—Dr. HICKS did not recommend force in the delivery of the child. As to the effect of pressure, there was often no albumen in the urine before the first convulsive seizure.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY: ORDINARY MEETING.

FRIDAY, APRIL 6TH, 1883.

J. E. EDDISON, M.D., President, in the Chair.

Pulse-Tracings in Nephritis.—Dr. CLIFFORD ALLBUTT showed sphygmograms which had been taken from a case of nephritis during the acute stage of the disease and during convalescence. The difference of tension in the tracings was very well marked.

Optic Neuritis.—Dr. SILK showed two longitudinal sections through the optic nerve, papilla, and adjacent structures from cases of optic neuritis. In one case the neuritis was secondary to renal disease; in the other, to some obscure cerebral lesion (? cerebritis). In the former, the multiplication of the nuclei had occurred in the substance of the nerve-bundles as well as elsewhere; in the latter, it was mainly confined to the nerve-sheaths. Both specimens exhibited the characteristic swelling of the papilla, and œdema of the nerve-structure.

High Temperature in a Nervous Subject.—Dr. RABAGLIATI read notes of the case of a lady of excitable nervous temperament, who, after her first confinement had, without obvious cause, a temperature varying from 103° to 105° Fahr., and a pulse varying from 130 to 150. On the fourth day, these signs persisting, ice was applied to the head and the abdomen, but the temperature did not fall for several hours. During the night, however, it fell to 99°, and the ice-bags were then removed. A few days later some slight excitement caused a relapse, but the temperature subsided on the application of flannels wrung out of water nearly cold. Dr. Rabagliati discussed the theory of the reduction of temperature by the application of cold, and said that in the melting of ice we appeared to have a means of measuring the amount of energy required to lower the animal heat, and so of bringing vitality under the domain of the law of the conservation of energy. A step in the process appeared to be the determination of the specific heat of the animal body, which certain experiments led him to fix at 784 foot-pounds. Another step seemed to be the determination of a unit of resistance, and this, he suggested, might be defined as the amount of heat required to raise unit of weight through unit of temperature. He gave calculations, founded on these suggestions, having for their object the determination of the quantity of energy saved to patients when their temperature is kept down, and found that, in these circumstances, very large quantities of energy were dealt with. In conclusion, he suggested that when a drug like sodium salicylate was administered to reduce temperature, it might act by compelling the body to liberate a quantity of energy sufficient to break up the compound. This energy being expended to break up the drug instead of burning the body, the temperature fell. As a practical mode of treatment, independent of theory, he believed the application of cold to be one of the most valuable means of reducing temperature and of saving life in fever and inflammation.

The Value of Treatment in Catarrhal Deafness.—Mr. HEWETSON recognised three classes of this disease: 1. The deafness of an ordi-

nary cold, the normal calibre of the Eustachian tubes being preserved. In these cases spontaneous recovery usually occurred. 2. Deafness caused by closure of the Eustachian tube consequent upon a catarrh. In cases of this kind, Mr. Hewetson advised inflation by Pollitzer's air-douche occasionally, and daily syringing of the upper part of the pharynx (through the nostrils) with a warm solution of bicarbonate of soda (fifteen grains to one ounce). He had cured many such cases by this plan, using a syringe made for him by Mayer and Meltzer, and specially adapted for the purpose. The syringing should be daily used by the patient so long as any deafness remained. 3. In cases of old chronic catarrhal deafness Mr. Hewetson had also found great benefit to result from continued syringing, some patients having used it daily for several years. Deafness, otherwise apparently irremediable, had been greatly improved in this manner.

The Effect of Paralysis of the Palate on Articulation.—Dr. SOLOMON C. SMITH showed that the palate-muscles acted as a valve, stopping the exit of air through the nose, and thus permitting the air to be compressed in the mouth so as to be emitted with the degree of force necessary for the production of most of the consonant sounds. He stated that paralysis of the palate diminished the force of all the consonant sounds, except the resonants and nasals, and entirely abolished those which required for their production the greatest amount of compression of the air in the mouth, viz., the explosives; and that the labial explosives *p* and *b* were changed into the labial resonant *m*, the dental explosives *t* and *d* being converted into the dental resonant *n*. Cases were related illustrating these points.

The Actual Cautery in Ulceration of the Cornea.—Mr. SIMEON SNELL stated that the actual cautery had for some time been in use on the Continent for the treatment of corneal ulceration. He had found it useful in many cases. In hypopyon, he often employed it instead of making an incision; and in other forms of ulceration it was of service. Messrs. Pickard and Curry had made, at his request, a cautery with a platinum bulb, which he found advantageous. The instrument was shown.

Ingrowing Eyelashes treated by Electrolysis.—Mr. SNELL, in recommending electrolysis for the destruction of the bulbs of awkwardly placed hairs, mentioned that Chisholm had first employed this method for distorted eyelashes, and that Agnew had afterwards used it for misplaced hairs on the face. In Great Britain, Dr. Benson of Dublin had been the first to introduce the practice. Mr. Snell described the mode of application of the galvanic current, and commended this plan of treatment as being highly satisfactory and successful.

The Treatment of the Sac in Herniotomy—Mr. MACGILL read a paper on this subject, which will be published *in extenso*.

REVIEWS AND NOTICES.

POPULAR HEALTH PUBLICATIONS. Tenth Annual Report of the National Health Society, 1883: "A Desirable Residence;" "How to keep Scarlet Fever from Spreading;" "How to be Strong and Beautiful." London: Published for the Society by Allman and Co.

THE Tenth Annual Report of the National Health Society gives a summary of the good work done by this Society in educating rich and poor in the laws of health, a work the importance of which cannot be overestimated; for, as Lord Derby has well said, "sanitary education must precede sanitary legislation." Nearly a hundred lectures have been delivered under the auspices of the Society, mostly by Mr. J. J. Pope, Miss Barnett, and Miss Bradley, the latter lady being remarkably successful in securing the attention of the women of the working classes. "To think of all that being true, and we never knowed it before; and it all stands to common sense too," as one of her hearers exclaimed.

Dress reform has been inaugurated by a committee of ladies, an exhibition which will be repeated next June on an extended scale, and by special lectures by Messrs. Treves and Noble Smith.

An examination of plumbers who had attended Mr. Steven Hellyer's lectures was held, and three prizes awarded. The Society was combined with Lord Brabazon's Committee in promoting the opening of gardens and playgrounds in the poorer and more crowded parts of London. One of these, the Brewers' Gardens, Whitechapel, intended chiefly for the quiet enjoyment of the old, and not to be used as an ordinary playground, is well worth a visit. The efforts of the Smoke Abatement Committee are already too well known to call for notice here.

Among the latest publications of the Society are, *A Desirable Residence*, *How to keep Scarlet Fever from Spreading*, and *How to be Strong and Beautiful*, works of very unequal merit.

The writer of the first, whose style betrays her sex, gives an amusing account of the "desirable residences" in Mayfair, and their effects on the health of the unfortunate occupants, but does not attempt to indicate the nature of the sanitary defects, or the measures to be taken for their amendment. She, however, recommends an ingenious plan for the removal of ashes and kitchen-refuse in place of the odious dustbin, and recommends a device of her own, "the floral window-ventilator," the sanitary and artistic merits of which are obvious, without the insertion of a number of testimonials. In the story of two cases of scarlatina in her house, she gives capital suggestions for the arrangement of a domestic infirmary, and quotes the recommendations of the Society for preventing the spread of the disease. It is pleasantly written, but certainly does not fulfil one's expectation, or answer to its title.

The next in order is addressed to the poor in "language understanded of the people"—simple, practical, and sympathising. The nature and manner of infection, the advantages of removal to an hospital where isolation is not practicable, and the mode of carrying it out where it is, the details of sick-room management and disinfection, the treatment of convalescence, and the conduct of a funeral, are explained in a way that is beyond criticism. We have only one fault to find with this tract, viz., the undue trust reposed in "disinfectants," and in Condy's fluid in particular. We are certain that all so-called "aërial disinfectants" in an inhabited room are utterly delusive. When Koch, Cheyne, and others have shown that 5 per cent. solutions of carbolic acid have little or no effect on bacilli, it is idle to suppose that any gases or vapours can affect them, unless so concentrated as to be fatal to every living thing; still more worthless is Condy's fluid, which is not volatile; and, though valuable as an oxidiser and destroyer of organic matter in a state of putrescence, it actually favours the development of low organisms in solutions. We are disposed to put most faith in chloride of zinc for the disinfection of washable clothing and excreta; in ample ventilation of the sick-room and of the house separately for the dilution and removal of infected air; in chlorine, nitrous fumes, or sulphurous acid for the room when vacated; and in baking to a temperature of 300° Fahr., preferably by moist compressed air, for bedding, etc. The proper use of Condy is the cleansing of foul wounds.

How to be Strong and Healthy, or Hints on Dress for Girls, we heartily recommend to mothers and their daughters. It is thoroughly scientific, sensible, and practical. Not only the well known evils of tight lacing and narrow boots, but the less generally, if at all, recognised consequences of an unequal and unscientific distribution of weight and warmth are clearly exposed. The advantages of woollen underclothing and stockings, the best methods of supporting the weight of each article of dress, the superiority of flannel drawers kilted below, if the drawers be short, over flannel petticoats, which, however heavy, leave the legs exposed to cold air from beneath, of unions or combinations, as the Americans call them, or at least of having the skirts and drawers attached by buttons to the bodices, instead of being tightly fastened round the waist, are happily explained. Two facts, which may be new to many of our readers, speak volumes on the question of stays and tight sleeves; first, that a slim girl, whose waist during expiration and in the erect attitude measured 21 inches, and during inspiration 22½ inches, increased when stooping to 24 inches; and, secondly, that the girls at Lexington College, who are compelled by the rules of the institution to wear loosely fitting dresses, gained on an average, after eight months' residence, in the circumference of the forearm, 1 inch; arm, 1½; chest, 2½, and waist, 5 inches. The addresses of several shops where hygienic dresses may be had are given, as well as several figures illustrative of the deformity consequent on fashion. We may assure our lady friends that they may follow the recommendations here given to the letter without making themselves appear singular; indeed, except in the case of the kilted drawers for young girls, no one would suspect that they had made any change in their habits.

The Skin, by Mr. Shiel, Home and Colonial School Society, treats of cleanliness, clothing, chilblains, and burns, in a popular style, but falls far short of the preceding in matter and style.

MEDICAL MAGISTRATE.—Mr. William Edwin Williams, F.R.C.S. Edin., of Abertylery, has been appointed to the commission of the peace for the county of Monmouth.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 26th, 1883.

THE MEDICAL ACT AMENDMENT BILL.

THIS Bill, which has passed through the House of Lords, and which has been read a first time in the House of Commons, has now to encounter the rocks and shoals and bars which beset legislation in an assembly of 650 members, representing all shades of opinion on every conceivable subject. The whole session does not afford 1,200 hours, and one-half of that time is already gone. The Government have many measures in hand, the Grand Committees as yet have not proved their power to facilitate legislation, and it seems not improbable that the measures discussed in the Grand Committees will none the less be again subjected to the same ordeal when they come before the House.

The discussion of the Medical Bill while passing through the House of Lords did much to enlighten public opinion, and to stamp with approval the main features of the report of the Royal Commission, on the lines of which the Bill is framed; and it is an absolute and undeniable fact that no Medical Bill has ever before been known to reach the House of Commons in such favourable circumstances for commanding general support. The Bill is one universally admitted to have been long needed, and it has received the approval of the daily press; but, above all, several of the leaders of the Opposition have promised to support it. The Government are in earnest, and it has already been more than once placed on the notice-paper for second reading.

The Lord President, on introducing the Bill in the House of Lords, stated, in reference to preceding failures in attempts at legislation on the same subject, that he, at any rate, had the support of the profession at his back; and we need not recall to the members of the Association the importance and necessity of redeeming the promise made to the Government on their behalf when, in November last, the deputation from the Association, supported by representatives of the three leading medical journals, waited on the Lord President of the Privy Council to request his lordship to introduce a Bill, based on the report of the Royal Commission, with the assurance of the support of the profession. The Government have performed their part; and it now falls to the profession to support the Government, and to prove themselves worthy of the trust reposed in them.

The Association, when entering on its career of unexampled prosperity, aimed at the realisation of certain great objects as necessary for the good of the profession. In 1853, a deputation, accompanied by Lord Macaulay, Mr. Gibson, Mr. Bright, Mr. Cobden, Mr. Baines, and many leading members of the Legislature, waited on Lord Palmerston. On the part of the Association, Dr. Forbes, Dr. Conolly, Dr. Chadwick, Mr. Husband, and many others were present. Sir Charles Hastings, as Chairman of the Medical Reform Committee, specified the following requirements:

1. Uniformity of qualification;
2. Reciprocity, that is to say, equal right to practise throughout the United Kingdom;
3. Representative principle in formation of Medical Council;
4. A national *Pharmacopœia*, to replace those then published in each division of the kingdom;
5. A *Medical Register* of legally qualified medical practitioners.

The *Pharmacopœia*, the *Medical Register*, and reciprocity of practice, have been secured by the Medical Act of 1858; but the uniformity of qualification, on which it was intended that reciprocity should be based, and the representative principle in the construction of the Medical Council, have not yet been secured.

The Medical Bill of the present Government proposes:

1. To combine the medical universities and corporations in each division of the United Kingdom in the formation of one Examining Board for each division, before which a complete examination of every candidate for the medical profession, in medicine, surgery, and midwifery, shall be enforced before admission to the *Medical Register*;
2. To reconstitute the Medical Council, which is to exercise supervision over the proposed Divisional Boards, by the admission of representatives of the registered medical practitioners residing in the United Kingdom, in the proportion of one-half of those accorded to the universities and corporations.

These two points complete the whole of the programme laid down by the Association when waiting on Lord Palmerston in 1853. Points of detail will be the subject of amendment when the Bill gets into Committee after passing the second reading; but if any legislation is to take place during the present generation, it is essential that the Bill in its main features should receive the undivided support of the Association and the profession. The Bill is virtually the Bill of the profession; and the only hope of opponents is, that they may succeed in sowing disunion amongst the members of the profession in respect of side-issues and points of detail, and thereby break the force of the profession in their support of the Bill.

The General Council of the British Medical Association met at Birmingham on the 17th instant. A resolution to petition in favour of the Bill was proposed and carried unanimously; and every person present, including the President of the Association, the President of the Council, and the Treasurer, signed. Fifty members of Council, representing the Association and the Branches, men residing in all parts of the kingdom, signed this important petition. The old adage of "so many men, so many minds," did not hold good in this instance; and it may be confidently hoped that the profession generally, accepting this unanimity as their guide, will equally petition in favour of the Bill, and canvass their respective members to support it, and be in no way misled by those who seek to create disunion in the professional camp.

The universities and corporations, in face of a powerful government and an united profession, are making the best terms for their own individual interests. The Association has but one object, and that is the elevation of the profession by the improvement of the general and professional education of its members; and, in this respect, the important meeting of medical students in London last week has strenuously supported them.

REPORT OF THE COMMITTEE ON THE ARMY MEDICAL SERVICE.

AT length the report of Lord Morley's Committee, which has been inquiring into the question of hospital management and nursing in the field, the transport of the sick and wounded, and the organisation of the Army Hospital Corps, since the autumn of last year, has been presented to Parliament. The report, together with the minutes of the evidence taken by the Committee, contains a vast amount of matter worthy of careful perusal and consideration. The character of the medical officers of the Army Medical Department, as regards their professional conduct during the military operations of the late campaign in Egypt; the capacity of the department for hospita

management; the relative advantages of the two systems of hospital organisation—the former "regimental hospital" system and the present "general hospital" system; the quality of the attendance and nursing of the sick; the nature and sufficiency of the hospital supplies; these and various other matters connected with hospital arrangements have been subjected to a searching scrutiny, and the results are now exposed to public examination. No such inquiry has taken place since the time of the Crimean war. Not only the investigations which have been made with regard to the past and present condition of the medical service, but also the recommendations of the Committee as regards its future, are calculated to excite deep interest in the minds of all who are devoting themselves to medical practice in the army. Members of the medical profession in civil practice, too, concerned as they are in the supply of medical recruits for the army, and intimately associated in all that bears on the professional reputation and interests of their military colleagues, cannot regard the issue of the prolonged inquiry which has just been brought to a conclusion otherwise than as a subject of grave professional importance.

The particular topics on which Lord Morley's Committee have carried out inquiries are so numerous, and the published statements made and evidence taken on these topics are so voluminous, that obviously only a small portion can be subjected to analysis in our columns at the present time. Many points of great importance must be postponed to future opportunities for consideration. The principal recommendantions of the Committee are given on p. 1038. At present, we will consider the evidence laid before the Committee by Lord Wolseley regarding the condition of the hospitals at Ismailia and Cairo, and the conduct of the medical officers under whose superintendence they were placed. The evidence on these subjects of the General Officer in chief command, who was invested with supreme authority and power over the army in Egypt and all its parts, naturally occupies the most prominent place in that part of the inquiry which has reference to the hospital administration during the campaign. The information he gives to the Committee will certainly be looked to by the public generally as affording the most reliable means for furnishing correct conclusions regarding the hospital service—how far it was conducted with due regard to the welfare of the patients, and in accordance with the military rules laid down for the guidance of the medical officers entrusted with the hospital administration. Everyone who knows anything of military matters is aware that very strict regulations are issued as to the manner in which the duties of all departments of the army are to be carried out; and that in the medical department, as in other departments, any departure from the authorised regulations, or disobedience of orders, becomes a breach of discipline, and is liable to be punished accordingly. No one can be supposed to know the exact bearings of all the various codes of military regulations more thoroughly than Lord Wolseley, as well from his great experience in military matters, as from the fact that he is at present holding the position of the highest authority on these subjects—viz., that of Adjutant-General of the Army. Let us then glance at Lord Wolseley's evidence regarding the hospital service; and, if there were special faults on the part of the medical officers, let us see what these faults were, and how far the officers concerned infringed the military rules imposed on them in committing them.

According to the published evidence, Lord Wolseley stated to the Committee the experience which he had derived from his visits to two hospitals in particular—the hospital at Ismailia and that at Cairo. With regard to the Ismailia hospital, he says:

"On August 26th I visited the hospital, and went all over it most carefully, and I saw every man in the hospital that day. I must say I was immensely disappointed with the condition of the hospital; I thought it very discreditable. The men were very uncomfortable. There were quantities of flies, and they had no mosquito curtains, and they seemed to be short of hospital attendants. I saw the ration of bread for the day beside the beds of the men, and the bread that I saw beside them, and that was given them to eat by the medical officer, I should say, was unfit for human food. At that time, in the bazaars, or in the stores, or whatever you choose to call them at Ismailia, I am quite convinced that had there been any proper organisation on the part of the medical department to enable them either by their system, or by their custom, or by their directions, to take the initiative and obtain suitable and proper provisions from the town for those men, they could have done so, because at that time I had every morning on my table for breakfast, for dinner, and for luncheon (and I had a large number of people to feed) plenty of very good bread, which was obtained every day in the bazaars, and I think that every man who wished to have better bread might have obtained it in that way from the bazaars in the place. I spoke to the medical officer about it, and he immediately fell back upon the commissariat. He said the Commissary-General was the man who had to supply the hospitals with provisions, and I think he even told me that he had complained to the Commissary that the bread was bad, and the Commissary had told him that all the flour that was sent out from England for the purpose of making bread was unfit to make bread with; that the flour was bad, and they could not make any better bread. But the result was that the men had this bad bread, and I found fault with it, and I told him at once that I made every allowance for the difficulties of his position, but notwithstanding that, I must find fault with him for not having obtained good bread for those men when good bread was to be obtained, and I told him then that he must, from his own experience, have known perfectly well that I, as a general officer representing the Government, would have only been too glad to have given him any amount of money, or to have given him any amount of assistance to obtain this bread, and that money was no object whatever; whether he paid one shilling or one pound a loaf it made no difference. I do not profess to be quoting the words I said to him; I am only quoting what I believe to have been the general tenour of what I told him. I gave him to understand that what I believed was the great fault was not that the medical officer himself was inattentive to his duties, but it was the system that was bad; that there was no initiative on the part of the medical officers, that they were accustomed to have all these things provided for them by a department called the commissariat, and that the commissariat department never supplied any good bread during the whole of the campaign."

We have read this evidence several times, and have asked ourselves, Can this be the evidence given by the general officer who was lately in command of the expeditionary army in Egypt? Is it possible he can have stated that he spoke to the surgeon, whoever he was, who was in charge of the hospital at Ismailia on August 26th, and that he told him he did not consider him inattentive to his duties, but that the system under which he was acting—a system which had been organised by the War Department, and with the framing of which the surgeon had had nothing to do—was bad, and that "a department called the Commissariat" never supplied any good bread during the whole of the campaign? And this on August 26th, before the Commissariat had even got an oven on shore constructed? What other bread had the medical officer to give his unfortunate patients to eat but the bread supplied by the one and only department, the Commissariat, authorised to supply it? The medical officer in charge of the hospital did all that the regulations, in accordance with which he is bound to act, permitted him to do; he reported the bread to be bad, and made an urgent request for a supply of better bread. The reply of the Commissariat was, that the flour sent out from England had become sour, and that they could not make better bread until fresh flour could be got. "But," says Lord Wolseley, the "surgeon ought to have gone into the bazaar and bought bread for the patients in the hospital, whether it cost 1s. or £1 a loaf;" that is, for patients who were coming into the hospital in large numbers from day to day. Supposing the surgeon in charge could have spared the time from his hospital duties, and had had the money in his possession to go and buy the amount of bread required, and had bought it, what would the Commissariat Department have said on the subject? And, if the accounts for the expenditure had been sent in by the surgeon, can anyone in his senses believe the expense thus irregularly incurred would have been defrayed by the War Department when it reached that department for

settlement? It is simply amazing that any officer acquainted with the rules and customs of the service should ever have suggested such a mode of procedure. Why did the Commander-in-Chief not see, or send to, the Chief Commissary himself, whose department had been sent with the army for the special purpose of meeting the necessities of the hospitals and troops in respect to bread and the other ordinary articles of diet, and order him at once to supply proper bread to the hospital at Ismailia? Moreover, there was a distinguished military officer commanding the whole station of Ismailia, the hospital of course included; would he not have been the proper officer to have received and conveyed to the Commissariat Department the orders of the Commander-in-Chief for the supply, whether by purchase or otherwise, of suitable bread to the hospital? Yet the issue of this inferior bread is a leading point on which Lord Wolseley dwells in his evidence regarding the discreditable condition of the Ismailia Hospital. No allusion is given to the immense difficulties in which the Army Medical Department had been placed through the sudden change of base from Alexandria to Ismailia, of which the intended execution had been kept a profound secret from the head of the department; or through the hospital-ship, the *Carthage*, which had been organised and fitted to serve as the base hospital, being kept behind, quite irrespective of the medical department, while, in the meantime, large bodies of troops and military material were landed, and, shortly after, an advance was made, and action fought, throwing a number of sick and wounded on the hands of the medical officers before an opportunity had been given to them for landing more than a limited portion of the stores which were necessary for the hospital service. We have never understood the medical officers to say that the condition of the hospital at Ismailia was what they desired it to be; but they maintained that all they could do with the means and material placed at their disposal, and with the power entrusted to them, they did do; and, notwithstanding Lord Wolseley's evidence, we still believe that this was a correct statement of the case.

Lord Wolseley seems to have had more ground for his denunciation of the condition of the hospital at Cairo than he had for that of the hospital at Ismailia; because, as he states, Cairo being a large city, there was greater opportunity of getting supplies of every description, as well as servants, than there could be in a relatively small and unimportant place like Ismailia. But here again, according to Lord Wolseley's own showing, he sets all the ordinary rules of the service at defiance, and blames the medical officers for not making a sufficiently ample provision of furniture—bedsteads, mosquito-curtains, whisks, and other such articles, which a particular department of the army, the Ordnance Department, is specially organised and maintained for supplying. But let the Commander-in-Chief be also heard in his own words as regards the hospital at Cairo.

"I found very great fault indeed. I found much greater fault at Cairo than at Ismailia, because at Ismailia I made great allowances for the medical officers. I have described the Ismailia Hospital in the gloomiest possible way to you. I have not told you anything that I found was well done in it. I have only picked out the weak points in it, and described what I thought was wrong; but even as regards what I thought was wrong, I made considerable allowances, owing to the great difficulties that the medical officers were under. I knew that they had not an efficient staff about them to do what was required to be done, and I knew that they were working at high pressure, and I made great allowances for them; and besides, it was a very small town, where they had not the same means of purchasing that they would have in a big city. But, in Cairo, I think there was no excuse whatever, after the second or third day that we were in Cairo, why a hospital in Cairo should not have been as well supplied as a hospital in London. The population is about 300,000, and you can get any quantity of servants, and you can get any quantity of food of any description you like, and any quantity of materials that you require to fit up a hospital with. I found very great fault the first day I went to the hospital in Cairo, and I found there again every man lying on the ground. At the same time, I went to see Lady Strangford's hospital. . . . I am not quite certain as to how many days she may have been there. At all events, I found her hospital all ready to be opened; and I found in every room, for the number of patients in the room, a very neat, nice little bedstead allotted to each. I asked her where she got them, and she said, 'I bought them in the town, and I can get you any quantity you like.' I said, 'How much did you pay for them?' and she told me it was three francs apiece—or 2s. 6d. for each bedstead. It was made out of the stalk of a palm-leaf, and a charming bed it was. I cannot fancy a sick and wounded man wishing for a better bed. . . I was very angry with a hospital doctor the first day I went over the hospital at Cairo. It was on a Saturday, and I found the hospital very dirty. I found the men, as I have already said, lying on the ground, and lying in those filthy dirty clothes that they had fought the campaign in. They had no change of clothes, and they seemed to have very little opportunity of washing themselves. There was a washing-room, but it was very imperfectly provided with basins. The ophthalmic cases, too, were put in a tent outside the hospital in a garden, I think about as bad a place as it could possibly be for them, on account of the flies, which were so troublesome that I cannot give you any description of them, except that they were like the plagues of Egypt. They were in myriads and myriads, and they covered everything. You saw the poor sick men asleep, with their faces undistinguishable in some instances by reason of the quantities of flies on them. I have seen a man lying awake trying to brush them off with his hands, and I said to the medical officer in charge, 'Why do you not go out in the town and buy whisks? Every little dirty Egyptian boy has got a whisk to keep the flies off; why cannot you go and buy them for a few pence?' He said, 'I have not got any myself, but I have applied to the Commissary of Ordnance to get them.' I said, 'Never mind the Commissary of Ordnance; go out and buy them yourself, and I will pay for them.' Several other faults I found with him, and I said the same thing, 'Why do you not go out into the city and get everything you want?' I said I would come back in a week, and I came back in a week, and I found a small supply of those whisks, but very few with the men, and I naturally was very angry; but he sheltered himself behind the Commissary-General of Ordnance, that the Commissary of Ordnance had not supplied them. And the same thing with regard to the mosquito-curtains. . . . I give these things merely as illustrations of the system, not at all that I wish to find fault, or that I am wishing to throw blame upon the individual medical officer concerned; he acted according to his lights and according to the customs or the habits that he had been brought up in."

We will not dwell upon the unfairness of comparing a small private hospital like Lady Strangford's, at Cairo, having its administration unfettered by any service-rules or orders from higher authorities, having funds at disposal for employment in any way her ladyship might think best and most conducive to the comfort of the patients under her charge, with a hospital organised as a large garrison hospital, for dealing with a continued stream of patients suffering from every variety of ailment, its management conducted under authorised rules that dare not be infringed, and all its supplies ordered to be furnished by departments organised for the purpose, and over which the medical department was not empowered to exert the least authority or control. We do not wonder that Lady Strangford's Hospital should be well and neatly furnished; we only wonder that, if the military hospital at Cairo were not equally well furnished, the Commander-in-Chief could have found no one else to blame in the matter but the medical officers, whose alleged shortcomings are now spread broadcast over the land, through his Lordship's published evidence on the subject.

Our comments on Lord Wolseley's extraordinary evidence on the medical service during the late campaign in Egypt have already extended to a considerable length, and prevent us from referring to other topics perhaps of more practical importance. To these we shall shortly revert. We will for the present conclude with only one further observation, and it is this—If the hospital service were so utterly bad, and the mismanagement of the medical officers in charge of the military hospitals, and the consequent sufferings of the patients, so deplorable as Lord Wolseley has now represented them to be, how came it that in his well-known and important despatch dated Cairo, September 24th, 1882, in which he summed

up the work done during the campaign, he expressed himself in the following terms, without any reserve, regarding the army medical department? "The medical department, under Surgeon-General Hanbury, C.B., have done everything that could possibly be done for the care and comfort of the sick and wounded." We must leave Lord Wolseley himself to reconcile the discrepancy between the evidence concerning the medical service to which he attached his signature in that despatch, and the evidence he has since given concerning the medical service, before Lord Morley's Committee.

THE DEVELOPMENT OF MYOPIA IN EDUCATION.

IT is to be hoped that the admirable report by Fleet-Surgeon Hadlow on the development of short sight among the boys of Greenwich Hospital School, which appeared in our issue of May 19th, will impress upon the general practitioners of this country the dangers which attend the compulsory schooling of the present day.

Though the influence of long hours of study under defective illumination has for some time past attracted the attention of ophthalmologists both here and abroad, its evil effects have not been so apparent here as on the Continent, in accordance with the less bookish habits of the English, and their greater predilection to outdoor sports. Now, however, that we may expect myopia to become less rare with the development of compulsory education, it becomes incumbent on the medical profession to oppose, as far as lies in their power, the evils attending the formation of school-boards. Fortunately, much may be done, short of interfering with the amount of instruction given, by better illumination, and by the use of larger and more perfect types. Deficiencies in these respects cause the eyes to be approached to the paper more nearly than the normal standard distance of ten inches, thus necessitating undue pressure on the part of the external ocular muscles; and shortsightedness itself, when once developed, causes, in precisely the same manner, its rapid exaggeration.

But myopia is not the only evil developed in childhood by close work under unfavourable conditions. The committee specially appointed by the Würtemburg Government for this purpose found more than one-fourth part of both boys and girls in the primary schools of that country to have some degree of lateral spinal curvature, the convexity being in four out of five of the sufferers towards the right hand side, in accordance with the slope of the handwriting.

The use of spectacles will do much where the myopia has unfortunately already become developed; and to this, as well as to the other points, the attention both of parents and of the public in general may with advantage be called.

AT a General Court held on May 9th, the Governors of Guy's Hospital appointed Dr. Braxton Hicks, F.R.S., to be Consulting Obstetric Physician to the Hospital.

THE Right Hon. W. H. Smith, M.P., has consented to preside, and the Hon. Edward Stanhope, M.P., to speak, at a meeting to be held on June 6th for the purposes of the Metropolitan Provident Medical Association.

THE inaugural dinner of the Cambridge Medical Graduates' Club will take place on Wednesday, June 27th, at the Marlborough Rooms, 307, Regent Street; Professor Paget, M.D., F.R.S., in the chair.

THE HALIFAX MAGISTRATES AND ANTIVACCINATION.

ANTIVACCINIST agitators have recently been dealt with by the magistrates of the borough of Halifax with commendable spirit and promptitude. Some prominent antivaccinists on April 30th organised an antivaccination demonstration, which resulted in increasing the difficulty already experienced by the authorities in enforcing the Vaccination Acts. On May 4th, when several persons came before the bench charged with refusal to comply with the Acts, the Mayor publicly declared that the Watch Committee of the Town Council intended to bring before a legal tribunal the organisers of the demonstration, unless an apology were immediately forthcoming. Next morning, the local papers contained the required apology, signed by three prominent members of the antivaccinist party.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following lecture arrangements are announced—Mr. Henry Power will deliver three lectures, "On the Lacrymal Apparatus and Accessory Organs of the Eye," on Wednesday, Friday, and Monday, May 30th, June 1st and 4th. Mr. F. S. Eve, Erasmus Wilson Lecturer, will deliver three lectures, "On Cysts and Cystic Tumours in General," on Wednesday, Friday, and Monday, June 6th, 8th, and 11th. Professor Jonathan Hutchinson, F.R.S., will deliver six lectures, "On certain Diseases of the Tongue," on Wednesdays, Fridays, and Mondays, June 13th, 15th, 18th, 20th, 22nd, and 25th. Each lecture will commence at 4 o'clock in the afternoon.

SAD DEATH OF A SURGEON.

LAST week, an inquest was held at Newcastle-under-Lyme, on the body of Mr. Richard Corston Wade, surgeon. Deceased suffered from disease of the heart; and, to relieve his pain, he had been in the habit of taking chloral, laudanum, and other sedatives. On the day of his death, feeling unwell, he took a quantity of laudanum, after which he became comatose. In spite of unremitting professional aid, Mr. Wade remained insensible for eight hours, when he died. A verdict of "accidental death, from taking an overdose of laudanum," was returned. Mr. Wade was thirty-five years of age. He was educated at the Manchester School of Medicine, and became a member of the Royal College of Surgeons in 1869.

SALE OF PATENT MEDICINES IN ITALY.

WE are in receipt of a letter from the Foreign Office, stating that Lord Granville has received a despatch from Her Majesty's Ambassador at Rome, reporting that, in answer to representations addressed by his Lordship to the head of the Italian Commercial Department, respecting the restrictions on the sale of patent medicines in Italy, that officer has explained that the object of the Medical Board was to prevent the introduction into Italy of patent medicines containing drugs injurious to health; and that, if it could be shown that the medicines for which admission was applied were sanctioned in any properly authorised *Pharmacopœia*, there would probably be no difficulty as to their admission.

DIPHTHERIA AT DUNMOW.

DUNMOW is at present suffering from an extensive outbreak of diphtheria, as many as fourteen deaths having occurred in as many days. No specific cause has yet been assigned for this serious fatality, which is causing much alarm in the district; but suspicion points to the polluted state of a pond as a likely means of spreading the infection. On the banks of this pond, which receives the drainage of the western portion of the town, and which has not been cleansed for at least thirty years, a number of children attending a neighbouring school are in the habit of sitting during meal-times. A systematic inquiry into the circumstances attending the outbreak has unfortunately been delayed, owing to the unsatisfactory relations existing between the sanitary authority and the health officer.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

THE report of this Society for 1882-83, presented to the recen annual meeting, shows an increase in the number of members, o whom there are now two hundred and five. The proceedings o

the Society during the last session have been published in the JOURNAL. The names of the officers elected for the ensuing year are as follow: *President:* Mr. W. N. Price; *Vice-Presidents:* Dr. Bell and Mr. Jessop; *Treasurer:* Dr. Clifford Allbutt; *Librarian:* Mr. C. J. Wright; *Secretaries:* Dr. Churton and Mr. Mayo Robson; *Auditor:* Dr. James Braithwaite; *Committee:* Mr. E. Atkinson, Dr. J. Braithwaite, Dr. F. Hall, Mr. F. Boynton Lee, Mr. McGill, Dr. S. C. Smith, Dr. Jacob, Dr. Dolan, Dr. Oliver, Dr. Eddison, Dr. Dobson, and Dr. Major. At the annual general meeting, the thanks of the Society were unanimously voted to the retiring President (Dr. Eddison), for his services during the past year.

DRAMATIC ENTERTAINMENTS AT HOSPITALS.

AT the Southwark County Court, Mr. H. J. Stonor, the judge, has given his decision in the case of "Duck *v.* Bates." The plaintiff is the assignee of the comedy "Our Boys," and the defendant a member of an amateur dramatic club, which, in the month of January last, gave three representations of that piece at Guy's Hospital for the entertainment of the nurses, attendants, and others. The admission was free, and the expenses were defrayed by the governors of the hospital. The plaintiff sued the defendant for damages, or, on the alternative, for penalties of 40s. for each representation. The judge was of opinion, as a matter of law and fact, that the representation ought not to be held to be a public representation so as to infringe a right and expose the defendant to penalties or damages. It appeared to him that the performance was not public in its nature, and the invitations would not make it public. There would, therefore, be a verdict for the defendant.

ALLEGED DEATH FROM VACCINATION.

ON Thursday, the 17th instant, the Coroner for Central Middlesex (Dr. Thomas) resumed an adjourned inquiry as to the death of George Andrews, an infant three months old, whose death, it was alleged, had been caused by improper vaccination. According to the evidence of the child's mother, the child had been vaccinated by Mr. Claremont, the public vaccinator for the St. Pancras District, on April 17th. Before it was vaccinated, it had been well and healthy; but very soon thereafter it became poorly and fretful. On May 5th, it died. Dr. Burns, to whom the child was taken on the day of its death, believed its death to have resulted from improper vaccination; and it was in consequence of his refusal to certify that an inquest became necessary. Mr. Claremont said the child had been vaccinated by him in five places. When it was brought to him for inspection, he found it progressing well, and vaccinated other children from its arm. Both these latter, as also children who had been vaccinated with the same lymph as deceased, were well and healthy. In consequence of Dr. Burns's opinion, he suggested that the coroner should order a *post mortem* examination. The coroner acquiescing in this, the inquest was adjourned. On the reassembling of the jury on the date above mentioned, evidence was given as to the result of the *post mortem* examination, which had been conducted by Mr. H. F. Willoughby, in the presence of Messrs. Knaggs, Murphy, Makuna, Stokes, Claremont, and Burns. Mr. Willoughby deposed that he found the body plump; that the vaccinated arm was neither swollen nor discoloured; and that the five vaccination-wounds had not coalesced, but were surrounded by healthy skin. There was no evidence of blood-poisoning, and all the organs were healthy except the brain. The brain was deeply congested, and from this condition death had resulted. Mr. Willoughby's evidence was corroborated by all the other medical gentlemen present except Mr. Makuna. According to that gentleman, there was a deposit of lymph at the base of the brain; and the immediate cause of death was meningitis, which had been set up by the vaccination acting as a "constitutional irritant." After long deliberation, the jury returned a verdict to the effect that death had been caused by inflammation of the cerebral membranes, which had been set up by vaccination. They declared at the same time that the vaccination had been properly performed.

DISTRIBUTION OF PRIZES AT UNIVERSITY COLLEGE, LONDON.

THE Right Honourable the Earl of Kimberley, president of University College, distributed the prizes to the successful students in the Medical Faculty, on May 21st. The report, which was read by the Dean, stated that during the past year 362 students had attended the medical classes, and the practice of the hospital, and that, of these, 90 were new students; in addition, 52 students had been preparing for the preliminary scientific examination of the University of London. The Erichsen prize, which was presented for the first time this year, was gained by Mr. E. Wilson. Mr. W. A. Gostling took the Atchison Scholarship; Mr. E. T. Thring the Atkinson-Morley Surgical Scholarship; Mr. H. H. Brown the Cluff Memorial Prize, and Mr. J. E. Jefferies the Liston Medal. After the distribution, the Earl of Kimberley said that he was glad to be able again to congratulate the College on its continued prosperity and success. One or two matters in the report showed how strong was the feeling which pervaded all who were connected with the College, and how great was the desire to promote its prosperity in every way. He wished to allude particularly to the foundation of a new scholarship in the name of Mr. Erichsen, than whom no man had conferred greater honour on the institution; it was a source of pleasure that his name should be connected with it in the shape of a prize. As he had listened to the names of those who had won prizes or certificates of merit, he had been struck by the proof that the names afforded of the far-reaching character of the institution. Candidates came from all parts of the world to compete for the prizes, and many of the foreigners were successful. He had, from his connection with the East, been extremely gratified to hear the name of Madras over and over again, as also the names of other Indian towns. It gave food for agreeable reflection. It showed, on the one hand, how far-reaching the utility of an institution of the kind could be, and, on the other, that the links which bound this country to our enormous empire abroad were not imaginary links, but links of real solidity, links of social interest, and of common pursuits.

TYPHOID FEVER AND POLLUTED WATER.

IN reporting on the health of the rural district of Skipton, Mr. Atkinson gives a special account of an epidemic of typhoid fever at Barnoldswick, which is clearly shown to have been caused by a polluted water-supply. The first patient, a young man, was taken ill a few days before his return from Bradford (where he had been spending a holiday) with a disease which proved to be typhoid fever. Mr. Atkinson found that this man and the majority of the first cases were operatives at the "New Mill." Here the privies are situated one above the other, so as to communicate with the different storeys, and discharge their contents down a shaft into a large cesspit at its base The walls of the shaft were found to be lined with excrement the whole way down, the accumulation of years. At the top of the privy shaft a cistern is situated containing water, which was used for drinking by the mill hands. This is pumped into the cistern from a well below a place called Bentham Square. Here there are cesspools connected with privies on each side of the square. The liquid filth from the cesspools on the higher side of the square percolates into those on the lower, so that the whole ground is saturated with sewage, and there is no doubt that the water of the well was polluted from this source. Upon analysis it was found to be highly charged with organic matter, yielding free ammonia 0.2 part per million, albuminoid ammonia 0.16 part per million. Most of the mill operatives lived in the Bentham Square district, and some of them were known to have continued work at the New Mill during the earlier stages of the fever; hence the origin of the infection is very clear. The Bentham Square cesspools contained typhoid ex-

creta, and their contents soaked into the New Mill water-supply. Moreover, the mill privies themselves must have been infected with typhoid excreta, from which germs must have been disseminated through the workrooms in the mill by the strong draught up the privy shaft, a fact readily recognised by the noxious smell in these rooms. The disease invaded in all nineteen families, and attacked forty-eight persons, eight of whom died.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE Annual General Meeting of the Society was held in the rooms of the Royal Medical and Chirurgical Society, Berners Street, on Wednesday, May 16th, at 5 P.M. In the absence, through illness, of the president, Sir George Burrows, Bart., Mr. Charles Hawkins, vice-president, took the chair. The Chairman, before commencing the business of the meeting, moved a vote of sympathy with the president on his late serious illness, and regret at his inability to preside. The members cordially responded to the motion. The election of officers for 1883-4 took place. Dr. Johnson was elected a vice-president in place of Sir Thomas Watson, Bart., deceased; Mr. Cooper Forster, Mr. Garman, Mr. Freeman, Dr. Garrod, Dr. Grigg, and Mr. Warrington Haward, were elected in the place of the six senior directors who retired; Mr. Upton, solicitor to the Society, and Mr. John Croft, a benefactor, were elected honorary members. From the report and statement of finances read, it appeared that 18 new members had been elected in 1882, 9 had died, and 3 had resigned or ceased to be members; the number of members being only 370 out of at least 4,500 members of the profession who were eligible for election. Six widows had been added to those already receiving grants, 4 had died or become ineligible for further assistance, leaving 60 on the books at the end of the year. One fresh orphan had been relieved, 5 had become too old for further assistance, and only 5 remained on the funds. A sum of £2,871 10s. had been distributed in grants during the year, and the expenses had been £190 6s. 9d. The receipts available for the payment of grants and expenses had been £3,061 16s. 9d., the balance on receipts and expenditure being £130 16s. 9d. No legacies had been received during the year. A vote of thanks to the editors of the Medical Journals for their kind aid in forwarding the interests of the Society, was proposed by the acting treasurer and carried unanimously. Regret was expressed by many members present that so few medical men availed themselves of the benefits offered by the Society, especially since the alterations of the by-laws had made a great addition to the income allowed to a widow (from £50 to £80), and had in many other ways increased the powers of the Society to render assistance to the widows and orphans of deceased members. The secretary stated that the increase of the radius of the Society (now twenty miles round Charing Cross) had as yet made little or no difference in the number of the members. A vote of thanks to the Chairman closed the proceedings.

A FAMILY POISONED BY ARSENIC.

A MELANCHOLY case of accidental poisoning occurred on Sunday, the 13th instant, near Elphin, a quiet village in the west of Ireland. A herd, named McGreevey, with his wife and five children, varying in ages from six to eighteen years, had removed, about a month previously, to a house from which the former occupant had emigrated to America. On the morning in question, the woman, finding a whitish powder in a dirty kind of trough, which had been left by the former herd, concluded that it must be bread-soda, and proceeded to use it in making a soda-cake for the family's breakfast. The powder, however, was arsenious acid, which, it appears, is extensively used by herds to destroy lice on cattle and sheep; and, in about three-quarters of an hour after partaking of the bread, the entire family were seized with alarming sickness. Dr. J. A. Irwin, who happened to be staying on a visit in the neighbourhood, was called in, and remained in attendance during the day. The symptoms were persistent vomiting, a metallic taste in the mouth, and a weak and frequent pulse. The general condition in all the cases was one of extreme exhaustion. The entire absence of purging, dysuria, or cramp, and the almost entire absence of pain, would have been remarkable but for the probably small quantity of the poison taken, and the nature of the vehicle employed. The usual treatment was employed, with a satisfactory result in every instance except that of the father—a delicate looking man about fifty years of age, who died of sheer exhaustion about fourteen hours after taking the poison. The social aspects of this case are of painful interest. Dr. Irwin describes the apparent poverty of these people, and the utter barbarity of their habits, as being shocking to the last degree. The house was almost entirely devoid of furniture. They had absolutely no beds or bedding, and the entire family slept in the only clothes they possessed, huddled together on some hay shaken on the clay floor. Here, too, they answered the calls of nature, even in the same room where they slept. They had no fuel of any kind, and no food, except a limited quantity of Indian meal. It appears that, for over two years, these unfortunate people had had no milk, butter, or meat, and that this meal, varied in season by potatoes, had been their only diet. The result was manifest. The whole family, but more especially the younger children, were in a condition little removed from starvation. It is worthy of note, that this case has occurred, not in one of the poorest districts, and that these persons were not ordinary tenants, but were, and had been for many years, the servants of one of the middleman class, who is stated to be wealthy.

RAILWAY SIGNALS.

THE recent appalling railway disaster at Lockerbie ought to direct public and official attention once more to the vital question of railway signals. Do we use the best signals? By the best signals, we mean those least liable to misinterpretation, especially at night. Is the employment only of signals which are the best in this essential sense, and regardless of the cost of their provision and maintenance, imposed by law upon railway companies by risk of adequate pains and penalties? The proximate cause of the last great railway "accident" appears to have been a mistake on the part of the engine-driver of the passenger train from Stranraer, who passed by or overran the usual red danger-signal, which appears to have been duly "against" him. It is probable that similar railway catastrophes will not be prevented so long as railway companies persist in relying solely upon signalling by colours at night. By day the position of a railway signal is the point to be noted; by night, its colour. It is a well ascertained and indisputable physiological fact that errors of visual appreciation of the position of luminous objects are less likely to happen to ordinary individuals than mistakes as to their colour. Total inability to distinguish colours is an optical defect, which has been proved to be prevalent in civilised communities in about four persons out of every hundred, whose vision in other respects is good. This defect is often unsuspected by the subject of it. If twenty-five men were chosen as engine-drivers without reference to the sensibility of their eyes to colours, it is almost certain that one of them would be found to be colour-blind. Railway companies now endeavour to guard against this disability defect in the case of their engine-drivers by a colour-test examination. But the protection afforded by such a precaution is in many cases, possibly, incomplete under existing arrangements. It is likely that many persons, besides those totally colour-blind, would be found, upon sufficient examination, to fail in visual sensibility to colours in a comparatively minor measure, which in many occupations would be of no moment. Such persons can readily distinguish bright colours by daylight, and also by artificial light, when the illumination is good, and the object to be seen is not far distant, a

yet, while they are able well to see the outline of a distant object at night, they are quite unable, under certain circumstances of remoteness and illumination, to make out its colour. It would not be difficult so to arrange railway night-signals that their position, rather than their colour, should be the ground of their interpretation, as it now is with respect to day signals. The ordinary day signal is the well known semaphore or arm-signal; the engine driver is guided by its position, which is either horizontal or oblique. It has been suggested that this signal might be boxed in, and illuminated at night with a white light. But this is not the only way in which the position of a signal, instead of its colour, might be applied as the distinguishing mark of night signals. For example, signals might be given by variations in the position and form of a combination of separate lights, without respect to their colours. A subsidiary point, but one which is essential and needs complete investigation, is the choice of the best illuminating agent, both as to quality and intensity, for use in railway signalling by night. Science has done much in recent years to develop our powers of artificial lighting. The whole subject is one of pressing importance. In the interests alike of railway companies and the travelling public it urgently demands exhaustive and comprehensive enquiry.

THE REOPENING OF THE PARKES MUSEUM OF HYGIENE.

We may remind our readers that the Parkes Museum of Hygiene will be reopened, in its new premises in Margaret Street, Regent Street (opposite the Church of All Saints), by H.R.H. the Duke of Albany, K.G., at 11 o'clock this (Saturday) morning. It is expected that speeches will be delivered by Sir Charles Dilke (President of the Local Government Board), Professor Tyndall, F.R.S., Sir Spencer Wells, Bart. (President of the Royal College of Surgeons), and by the Regius Professor of Medicine in the University of Oxford, Dr. H. W. Acland, F.R.S. The Museum will be open to the public on Monday morning, May 28th; but the internal arrangements and fittings cannot be quite complete, as, owing to the very large number of persons who have signified their desire to attend, every inch of available space has had to be utilised to provide seats for the inaugural ceremony. On Friday next, June 1st, an introductory lecture will be delivered, at 5 P.M., by Professor François de Chaumont, F.R.S., the successor of Dr. Parkes in the Chair of Hygiene at Netley. The lecture will be "A Sketch of the Origin and Development of the Science of Hygiene," a subject on which the Professor of Hygiene at Netley is singularly well qualified to speak. The lecture will be addressed to the members of the Parkes Museum; but students of medicine and other gentlemen not members of the Museum, who may be desirous of attending, should apply to the Secretary.

LORD MORLEY'S COMMITTEE.

It is most unfortunate that the Press should have been compelled to begin to discuss the report of this committee before the publication of the report itself. Though the *Times* published what was, apparently, intended to be taken for an impartial *resumé* of the report, on Saturday last, we are informed that at that time, and for some days later, Her Majesty's Ministers, even the Minister for War, had not had copies issued to them. Under these circumstances, Sir William Mac Cormac, who was a member of the committee, has taken what seems to us to be a very proper course, and has reprinted the "Remarks" upon the proceedings of the committee, which he had prepared for publication as an appendix to the report. These 'Remarks," which we reproduce in another column, will be found to be a very full and able analysis of the evidence given before the committee, and we are glad to see that they are already beginning to attract the attention which they well deserve from the public press. We fully endorse the opinion expressed in the following sentences, which conclude a short leader in the *Daily News*.—"It is natural and inevitable that the Report of the Committee should deeply move public feeling. Experienced officers cannot, as Sir William Mac Cormac more than hints, be unable to distinguish between the inevitable and the remediable evils of war. But it is fortunate that the medical profession, whose unselfish efforts are never more beneficent than after a battle, should have their case presented by so able an advocate." It would seem to us that there has been an effort on the part of certain persons to prejudice the public mind against the Army Medical Department, and to obtain a judgment against the Department before the evidence on both sides was made public. Several of the charges made against medical officers will be found, on examination, to fall to the ground; one instance, we are informed, is a case of mistaken identity; others are trivial, or arise from ignorance or misapprehension, as, for instance, where men have complained of being starved, and it has subsequently been shown that they were under treatment for diarrhœa at the time, and therefore ordered to abstain from solid food. We may recall to our readers a short report, published by us on October 14th, 1882, on the condition of the wounded who had then recently arrived at the Herbert Hospital from Egypt. Our correspondent had the opportunity of seeing and questioning a number of men who had been wounded at Tel-el-Kebir, and treated at the base hospital at Ismailia. We may quote the following words from his report (p. 756). "All spoke in terms of warm praise of the treatment they met with at the base-hospital at Ismailia. Food, they said, was abundant, milk and beef-tea for those who could not take solid food, and fresh meat daily for those who could."

RESECTION OF THE INTESTINE.

Professor Edward von Wahl, of the Dorpat Hospital, has recently published, in the *St. Petersburger Medicinische Wochenschrift*, two highly interesting cases of resection of the intestine. Three years ago, Dr. von Wahl operated on a man, aged 47, for strangulated inguinal hernia. The intestine involved in the rupture was found to be partially gangrenous; the healthy portion on each side of the slough was, therefore, sewn to the edge of the external wound, and the gangrenous segment was cut away. An artificial anus was thus established. Six weeks later, in order to cure this complication, two inches and a half of the intestine around the abnormal opening were resected, and the edges of the gut above and below the seat of excision were united by a single row of fine catgut sutures. The portion of intestine that was excised proved to be part of the transverse colon. Death, preceded by symptoms of peritonitis, followed on the third day. At the necropsy, it was found that two of the sutures had become loose, allowing extravasation of fæces. Last October, Dr. von Wahl had occasion to perform excision of the intestine under more unfavourable circumstances. In removing a dermoid ovarian cyst from a woman, aged 26, a portion of the ascending colon was found to be intimately adherent to its surface. As the walls of the tumour, especially along the line of adhesion, were undergoing malignant degeneration, Dr. von Wahl did not consider it justifiable to merely separate the adherent intestine from the cyst, but determined upon performing excision. The ascending colon lay deep in the flank, owing to the shortness of the mesocolon. The pedicle of the tumour was first ligatured, and the omentum was separated from the tumour, which had no pelvic adhesions. A clamp-forceps was then applied to the colon on each side of the adherent part, the teeth being guarded by strips of India-rubber sheeting. The adherent portion, four inches and a half in length, was now cut away, and afterwards set free from the mesocolon. This last part of the operation was rendered difficult by the great size of the vessels in the peritoneal fold; but, by a careful arrangement of sponges over the adjacent viscera and peritoneum, no blood escaped into the peritoneal cavity. The ovarian tumour was then cut away. A double row of carbolised silk-threads was now passed through the cut edges of the colon. The first row, consisting of thirteen sutures, transfixed the serous and muscular coats

The second or higher row, including ten sutures, passed only through the serous coat. Apposition of the cut edges of the colon was found to be perfect. The patient made a rapid recovery, a free motion being passed on the eighth day. Unfortunately, a month after the operation, the patient began to complain of symptoms which led Dr. von Wahl to believe that the malignant disease of the ovary had recurred in other abdominal organs. It is clear that, in a case of this kind, excision does not present the difficulties which are encountered when the operation is performed for the relief of chronic obstruction, or the removal of a malignant segment of intestine. Dr. von Wahl found no difficulty in securing apposition of the cut edges of the upper and lower ends of the intestine, after that the sutures had been introduced, for there was no contraction of the inferior nor dilatation of the superior portion of the severed ascending colon, as seen in cases of stricture. Hence the clamps, applied in the simple manner above described, proved sufficient for the operator's purpose, without the application of the ingenious contrivance introduced by Mr. Treves, and exhibited at a meeting, last December, of the Royal Medical and Chirurgical Society; yet, even in this case, the use of the India-rubber dilating bag would have greatly facilitated the application of the sutures.

SCOTLAND.

MEDICAL ACT AMENDMENT BILL.

A MEETING for the consideration of the Medical Bill now in the House of Commons was held on the 18th instant in the Faculty Hall, Glasgow. It was convened by the Faculty of Physicians and Surgeons, and it was open to the medical profession of the West of Scotland. The resolutions that were submitted and carried at the meeting aimed at amending the Bill in the following important particulars: (1) increase of the representation of the Scottish medical corporations on the Medical Board; (2) the admission of all candidates to the Board examination on an uniform fee; (3) the granting of a medical title to those who pass the Board examination. While the meeting was open to all members of the medical profession, its utterances must be taken to represent the views of the corporation under whose auspices it was held; and an analysis of the chief speakers shows that they are the same gentlemen who recently did battle for the Glasgow Faculty of Physicians and Surgeons in London as a deputation to the Government. A special meeting of the Glasgow Royal Infirmary Medical Society was held on the 19th instant, to consider the new Medical Bill in its relation to students; the President in the chair. There was a large attendance of students, and several of the staff were also present. The Bill was very fully discussed, and its details considered. The following resolutions were proposed and seconded by students, and carried unanimously: That this Society approves of the principles of the Bill, subject to the following amendments: (1) that the fees of all candidates for the final examination of the conjoint board be uniform; (2) that a distinctive title be given to the candidates who pass the final examination of the conjoint board; (3) that no candidate be examined by his own teacher in any subject. A committee was appointed to draw up a petition embodying the foregoing resolution and amendments, to be presented to the House of Commons.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending May 12th show that the death-rate in the eight principal towns was 26.1 per thousand of estimated population, a rate which is 4.0 above that of the corresponding week of last year, and 1.1 above that of the previous week of the present year. The lowest mortality was recorded in Perth, viz., 15.3 per thousand; and the highest in Greenock, viz., 31.3 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 4.9 per thousand, or 1.1 above the rate for the previous week. Measles was the most fatal miasmatic disease, and the mortality from it was greatest in Glasgow and Leith. There were 121 deaths registered from acute diseases of the chest, which was 11 less than in the previous week. The mean temperature was 43.1°, being 1.4° below that of the week immediately preceding, and 4.2° below that of the corresponding week of last year.

THE HIGHLAND CROFTERS COMMISSION.

THIS Commission, which has been appointed to inquire into the destitution at present so rife in the western islands of Scotland, has been engaged for some time in its labours. At its meeting at Dunvegan, in Skye, we observe that the Commission very properly availed itself of the experience of the local medical man, and so far Dr. Fraser's evidence has been among the most important laid before it. He gave a considerable amount of valuable information as to the physical condition of the people; and his experience during his six years' residence there was that there had been a decided deterioration in their surroundings. To his knowledge, there had been some cases of real destitution. While the bad state of the houses and the scanty food and clothing do not seem to have led to any epidemic amongst the inhabitants, Dr. Fraser was certain that this state of matters has led to an increase in the amount of lung-disease, of affections of the eye, and of scrofulous diseases of bone. Dyspepsia, too, is very rife, and appears to be dependent a good deal on the exclusive oatmeal diet, which is not even combined with milk, owing to the great scarcity of that article. Such a state of matters as this evidence reveals must clearly be detrimental to health, and it must materially add to the difficulties and cares of medical practice when disease shows itself.

DEATH OF DR. JAMES YOUNG OF KELLY.

DR. JAMES YOUNG of Kelly, whose discovery of the process of making paraffin oil has led to the foundation of what is now one of the most important industries of this country and America, has recently died in his seventy-second year. All through life, he showed a great aptitude for chemical studies, and this love was fostered by his close connection with Professor Graham, a former lecturer on chemistry in Anderson's College, and subsequently professor at University College, London. By the death of Dr. Young, Anderson's College has lost a liberal supporter and benefactor; for, among other things, he founded and endowed, at a cost of over £10,000, a chair of Technical Chemistry in connection with the College. Before his death, it is understood, he had completed a very exhaustive series of experiments as to the utilisation of the sewage of towns, and considered that he had obtained a very satisfactory solution of this difficult subject. If so, he will have proved himself a still greater benefactor to his native city, whose river is sadly in need of some purifying scheme.

CHAIR OF MEDICAL JURISPRUDENCE IN THE UNIVERSITY OF ABERDEEN.

DR. OGSTON, Professor of Medical Jurisprudence in the University of Aberdeen, has intimated his intention of resigning the Chair of Medical Logic and Jurisprudence at the next meeting of the University Court. Professor Ogston has well earned his leisure, his connection with the Colleges of Aberdeen having lasted for forty-five years. Professor Ogston was Lecturer on Medical Jurisprudence in Marischal College from 1839 until he was appointed to the present chair on its foundation in 1857. He is therefore now the oldest teacher, though not the oldest Professor, in the University. He began to teach Medical Jurisprudence on his own responsibility privately for a year or two prior to 1839, when he became lecturer to the University. Besides bringing to his work a mind well equipped, and

always abreast of the times, he got up an extensive museum of wax casts, etc., which proved of the utmost value to the lecturer in illustrating, and to the students in understanding, the subject. This museum is, we believe, unequalled anywhere in the country. Dr. Ogston is the author of a work which is now one of the standard authorities on Medical Jurisprudence. Besides Medical Jurisprudence, Dr. Ogston also lectured on Medical Logic, a subject which, we believe, is taught in no other University or medical school in Britain except that of Aberdeen. It may be some time before the University Court, in whom the patronage of the Chair is vested, meets. Several local gentlemen have announced their intention of applying for the Chair: Dr. Simpson, Medical Officer of Health for Aberdeen; Dr. Angus Fraser, one of the physicians to the Royal Infirmary; and Dr. Frank Ogston, who has acted as assistant to his father for several years. The names of Dr. Beveridge of Aberdeen, and Dr. Husband of Edinburgh, have also been mentioned as likely applicants. It is highly probable that, when the time arrives, other candidates will be forthcoming. The Chair is a good one, and there can be no doubt that every effort will be made to secure the man best fitted to fill it, and who will, by prosecuting original work, and by the possession of good teaching powers, advance and maintain the reputation of the medical school.

IRELAND.

A MAN, named James Gilsenan of Collinstown, died last week at the alleged age of 114 years.

AT Naas Sessions this week, a presentment was passed for a sum of £700 for the maintenance of Kildare County Infirmary.

THE Master of the Loughrea Workhouse was last week dismissed by a sealed order of the Local Government Board, for, besides other offences, placing a strait waistcoat on an inmate without the order of the medical officer.

CORK FEVER HOSPITAL.

A DEPUTATION from the Committee of Management waited on the Town Council last week with reference to a grant of £700 to this hospital for the half year ending August 1st, and which the Law and Finance Committee of the Corporation had recommended should be allowed. Having made a statement, an amendment was proposed that the grant be reduced to £300, which, without a division was declared lost, and the recommendation of the Committee was adopted.

CORK OPHTHALMIC AND AURAL HOSPITAL.

A BAZAAR will shortly be held in aid of the funds of this institution, which deserves the support of the public. Affections of the eye and ear are especially prevalent among the poorer classes in this country, and their neglect in too many cases leads to irreparable injury. The hospital can accommodate thirty intern patients, and we trust it will receive the support to which it is so justly entitled.

BRANCH MEDICAL COUNCIL FOR IRELAND.

DR. ROBERT LYNN HEARD, formerly assistant-surgeon Army Medical Department, has been elected secretary and registrar to this Branch Council, in the room of the late Dr. Steele. The salary is £200 *per annum*; but the numerous candidates for it were informed, we believe, that the appointment would be temporary, and only tenable until the provisions of the proposed Medical Act became law, the five electors not deeming it proper to elect a gentleman who would otherwise, under the Act, be continued in office as the Registrar of the Branch Board for Ireland, and which would be composed, as the Bill at present stands, of eleven members.

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the quarter ending March 31st last, there were registered in the 800 registrars' districts in Ireland 32,065 births, a number equal to an annual birth-rate of 25.4 in every 1,000 of the population, and 29.558 deaths, representing an annual rate of 23.4 per 1,000. In the same period, 13,399 persons emigrated, so that a decrease of 10,892 would appear to have taken place in the population. The birth-rate was slightly under the rate for the corresponding quarter of 1882; while the deaths are above those registered in the March quarter of 1882, to the extent of 4,685. This increase in the deaths was due to the severity of the weather, and was chiefly confined to affections of the chest and excessive mortality amongst old people. Whooping-cough was the only prevailing epidemic, and the mortality was increased by the excessive cold. Measles and scarlatina prevailed in the province of Ulster, measles in the county of Armagh, and scarlatina in Belfast. The deaths from the principal zymotic diseases were somewhat in excess of the mortality from these causes in the preceding quarter, the annual rate in this group being 1.7 per 1,000. There were only four deaths registered from small-pox, three of which took place in Belfast. Measles caused 324 deaths, against 220 the previous quarter; scarlet fever 342, against 275; whooping-cough 501, against 240; diphtheria 69, and diarrhœa 439, being above the average. The deaths from typhus amounted to 280, being 97 over the number for the preceding three months; enteric fever 226, being 54 in excess, and simple continued fever 109. One death from hydrophobia was registered during the quarter.

UNIVERSITY OF DUBLIN BIOLOGICAL ASSOCIATION.

THE closing meeting for the session of this Association was held, as we announced last week, on the 17th instant. The President of the Association, Professor Bennett, occupied the chair, and a large number of visitors attended. Dr. J. Magee Finny, King's Professor of Physic in the University of Dublin, delivered an interesting address on "The Collective Investigation of Disease," and ably brought the objects and anticipated valuable results of this movement of the Committee of the Association before the meeting. Professor Walter Smith moved a resolution to the effect that the Collective Investigation of Disease was a subject that deserved the support of the Association. In doing so, he referred to the difficulties attending the investigation, and the care that should be taken in forming conclusions therefrom. Dr. Duffey, honorary secretary of the Dublin Branch Local Committee, seconded the resolution. He congratulated the Association on being the first body of its kind, an association of medical students, or rather, he would say, of future practitioners, to take up the movement. He spoke of it as being an educational movement of great importance, and said that its keystone was accurate observation. Dr. Duffey also entered into particulars as to the objects and mode of working of the Central Committee, and stated that its chairman, Professor Humphry, and secretary, Dr. Mahomed, had intimated to him their pleasure at hearing the University Biological Association had taken up the movement. The resolution was carried unanimously. A vote of thanks to Dr. Finny for his address was proposed by Professor Macalister, and seconded by Professor Purser, and passed by acclamation. Mr. Middleton proposed, and Mr. Shackleton seconded, a vote of thanks to the outgoing President, which was also carried with applause.

THE Liverpool Town Council have increased the salaries of Messrs. Edward Parker and Frederick Walter Lowndes, the medical officers to the police, from £130 to £150 per annum.

BRITISH MEDICAL ASSOCIATION.

REPRESENTATION OF THE BRANCHES IN THE COMMITTEE OF COUNCIL.

A Special Meeting of the General Council of the British Medical Association was held at the Queen's Hotel, Birmingham, on Thursday, May 17th, to consider the Report of the Committee of the Council on the question referred to it at the meeting at Worcester last year, as to the best way in which direct representation of the Branches could be secured in the executive body. The Chair was taken by C. G. WHEELHOUSE, Esq., President of the Council; and there were also present, Dr. W. Strange (President), Dr. W. F. Wade (Treasurer), Dr. C. Chadwick (Vice-President), Mr. W. D. Husband (Vice-President), Mr. Alfred Baker (Vice-President), Dr. M. M. De Bartolomé (Vice-President), Dr. J. T. Arlidge, Mr. F. J. Bailey, Mr. J. W. Baker, Mr. T. H. Bartleet, Mr. J. S. Bartrum, Dr. G. F. Bodington, Dr. L. Borchardt, Mr. G. A. Brown, Dr. J. M. Bryan, Dr. W. Carter, Dr. Sidney Coupland, Dr. J. Ward Cousins, Dr. G. W. Crowe, Dr. A. Davidson, Dr. A. Davies, Mr. H. N. Davies, Dr. E. Dewes, Dr. W. H. FitzPatrick, Dr. B. Foster, Dr. E. Long Fox, Mr. J. S. Gamgee, Dr. W. S. Gervis, Dr. C. E. Glascott, Dr. W. C. Grigg, Dr. J. Hardie, Mr. A. J. Harrison, Dr. S. Holdsworth, Mr. T. V. Jackson, Dr. James Johnston, Mr. Evan Jones, Mr. H. R. Ker, Dr. D. J. Leech, Dr. W. J. Lunn, Mr. C. Macnamara, Dr. D. C. McVail, Mr. F. E. Manby, Mr. J. Manley, Mr. Francis Mason, Mr. C. A. Newnham, Mr. R. H. B. Nicholson, Dr. E. Rickards, Mr. J. Reid, Dr. D. Lloyd Roberts, Dr. James Ross, Dr. S. S. Roden, Mr. R. J. H. Scott, Dr. A. Sheen, Dr. R. Shettle, Mr. W. D. Spanton, Dr. S. Spratly, Dr. A. Strange, Mr. J. V. Solomon, Dr. E. M. Skerritt, Mr. T. Sympson, Mr. H. Terry, Dr. J. R. Thomson, Dr. J. Y. Totherick, Mr. H. Vevers, Dr. E. H. Vinen, Mr. R. W. Watkins, Dr. W. Webb, Mr. E. F. Weston, Mr. W. Whitehead.

Mr. FOWKE, the General Secretary, read the notice convening the meeting.

The CHAIRMAN: I have to announce that I have letters of apology from several gentlemen who would gladly have joined us had they been able to do so, but who, by various reasons, have been prevented. It will be in your recollection that, at the annual meeting at Worcester last August, a resolution was brought forward by Mr. Ker, which has just been read to you by the General Secretary: "That the Committee of Council be requested to consider in which way the direct representation of the Branches can best be secured." The Committee of Council, accepting the duty thus imposed upon them, almost immediately after the annual meeting appointed a subcommittee to go into the whole question, for they were given to understand that this direct representation of the Branches was merely one of some other grievances; and that it would be well, before coming to any conclusion as to that matter, to find out, if possible, first of all, if there were any other grievances; and, secondly, if there were, what those grievances were; and then to report after the investigations were supposed to be concluded. The subcommittee took an early opportunity of meeting, and the first thing they did was to consider the work set before them. The consideration led them to the conclusion that they had, in the first instance, to find out what would be the most direct and best answer to a direct question, and then to ascertain if they could, whether there were any other matters bearing upon that question which it was right they should lay before the Committee of Council. The first thing they thought it right to do was to instruct me, as their President, to write a letter to be inserted in the JOURNAL, stating that a subcommittee had been so appointed, asking the members whether they had any grievance or not, and requesting them, if they had, to communicate those grievances either to the Council of their Branch, to the Secretary of their Branch, to me as President of the Council, or to the General Secretary; in fact, if they had a grievance, to make it known, and to make themselves heard then and there. The letter which I wrote, and the paragraph which I was also directed to write to the JOURNAL, in order that the matter might not be passed over without being well understood, you have before you. In that letter, I distinctly followed the instructions of the Committee of Council. I asked every member of the Association who had a grievance to make it known, and to place the Committee of Council in possession of his reasons. To that letter we appended, in order to make it all the more comprehensive, half a dozen leading questions which should show what our object was, and what kind of answers we wished to obtain. Now, I must tell you, because I think it bears most seriously upon the question, that not one single letter in answer to that appeal has been received either by myself as President of the Council, by Mr. Fowke as General Secretary of the Association, or by any member of the Committee of Council. Then, the only conclusion at which I can arrive from such a fact is, that in the mass of the Association generally there are no great grievances. [*Hear, hear.*] Nevertheless, there are in some of the larger Branches some grievances which they have made known, and these we have considered; and, as you will observe, they find a place in the report which I am about to present to you. That report, for convenience sake, has been divided into two parts. First of all, there is a direct answer to a direct question, supposing that the sense of the meeting should accord with the grounds upon which the conclusion therein expressed has been arrived at. Secondly, there is a consideration of those other grievances, or subjects of conversation, which have cropped up from time to time from various centres of the Association, and have apparently, therefore, to some extent, led up to the agitation which we are to consider this afternoon. The first part of the report, as you know, gives you a direct answer to a direct question: How can the Branches be best directly represented in the Committee of Council? And we say that unquestionably the best way, if it can be done, is to give a certain proportional direct representation of every Branch on the Committee of Council. But in order to do that and yet to keep your Council manageable in numbers, we should have so to arrange matters as to make room for the new members of the Committee of Council who would thus be created, and then the question arose—shall the twenty elected members be still continued as members of the Committee of Council? That is one question for consideration to-day. Another was—shall those members who have not chosen to join any of the Branches be represented in any way? There are also certain other questions which you will find fully discussed in the report, and to which we have given our answer. First of all, I have endeavoured to show you that there does not seem to be any great evidence of any real grievance existing to any extent amongst the mass of the members of the Association. [*Hear, hear.*] The next question put before you is this. You are about to consider an entire change, according to this report, in the constitution of the Association. Do you think that such a change is called for? Do you think that such a change will be to the advantage of the Association at large? Let me tell you what my experience of the Association has been. I remember thoroughly well when in this room, some fifteen or twenty years ago, it was shown that this Association was not sound. It was not sound as an Association itself; it was not sound in its financial condition, and it was necessary to make certain changes if the Association was to be continued, and was to become an Association of a flourishing character. At that time it was shown that the Association was £7,000 in debt, and that we had no available assets to meet that debt; it was shown that there were certain deficiencies in the management of the Association which required correction if we were to go on prosperously, and those matters we took into our consideration. The Committee of Council of that day determined on certain points, which have been carried out. Amongst other things they appointed a General Manager of the Association, who should take the whole working of the Association under careful supervision, and should report to them any flaws where he found them. He would guide the Association as far as he could in all business matters, and enable them to conduct it upon sound principles. At the same time the central office of the Association was changed to London. The results of the changes then instituted have been simply these. We were a weak Association, aiming at great matters; we were weak in funds, we were deep in debt. The present management of the Association enables me to state this as its position. We now number over 10,000 members—a matter of no small moment, because it makes us a power not only in the profession, but also in the State, and instead of being the feeble body that we were, we have now become a very powerful body indeed. We were £7,000 in debt, and we did not know how to pay it; we have now £14,000 invested in safe funds. We had a journal which at that time was small and feeble, but it is now equal to any journal, not in England only, but in the world. We have a journal of which we may be justly proud, and which, I may say, claims to have been the author of our prosperity. Now I would give that journal due praise. I believe the prosperity of the Association is, to a considerable extent, due to the JOURNAL, but I be

lieve it to be to a still larger extent due to the careful action of the Committee of Council, to the thoughtful way in which that Committee of Council has managed the affairs of the Association for you; and I would add that neither the work of the JOURNAL nor of the Committee of Council would have been as successful as they have been, or anything like as successful as they have been, if it had not been for the thorough business management of the Association by your General Secretary, Mr. Fowke. [*Cheers.*] I have no hesitation in saying that, to a very large extent, the prosperity of the Association is owing to Mr. Fowke's energy, activity, and thorough business management. Thus aided, the Committee of Council have done the best we could to place you in a thoroughly sound financial position, and, as I have said, we have invested £14,000 for you. You are, therefore, able to say whether we have done our work well or ill. You have now one of the best journals in the world instead of a feeble one; and instead of a few members, you have 10,000, who have become a thorough power, both in the profession and in the State, and I have no doubt that the numbers will steadily increase at even a more rapid rate than they have done hitherto. Now, gentlemen, we are asked to change that management wholly and entirely. Your subcommittee has put a plan before you by which you can effect that change if you desire to do so. It is for you to consider whether you think it worth while to do it or not. I know that there are those who feel strongly on these points; I beg of you, therefore, to consider the matter very calmly, as rationally as you can, and as temperately as you can; and in the meantime, if it be possible, to come to such a definite conclusion as can properly be laid before the annual meeting in Liverpool in August next. [*Applause.*]

Dr. FOSTER: I beg to move that the report be received and entered upon the minutes.

Dr. BODINGTON: I beg to second the motion.

The motion was put and carried.

Dr. STRANGE: I have now, sir, to ask your permission to propose the adoption of this report. I do it in the absence of Dr. Parsons, who was the mover in the Committee of Council for the subcommittee. If he had been here, it would have rightly fallen to him to propose the adoption of the report of the subcommittee. But I may perhaps be supposed to be justified in what I am doing by what took place at the meeting at Worcester. If priority in regard to this matter be worth anything at all—perhaps it is not—it belongs to me, because on the first evening I broached this question in a general manner. I referred to the frequent absence from the Committee of Council of the secretaries of the Branches, and I lamented that they did not take that share in the government of the Association which we thought they should do, feeling satisfied, as I do now, that the Branches must be chiefly looked to for the strength and organisation of the Association. On the succeeding morning, Mr. Ker made the motion which has brought us here to-day, that motion being that we should investigate the way in which the Branches could be more directly represented on the Committee of Council; and it is to that one point that I wish chiefly to call attention. In the succeeding meeting of the Committee of Council in October last, I put forward memoranda of my own, only for the use of my colleagues, which embodied my ideas at the time. They were simply these, that we should find some means to encourage, or provoke, or compel the attendance of the honorary secretaries as representatives of the Branches; or if that could not be done, that the Branches should be invited to elect some other member who could probably attend. Well, my proposition was merged in the proposal submitted to the Committee of Council by Dr. Parsons, that a subcommittee should be formed to investigate the whole subject. The subcommittee met several times, and it has produced this report, and I should not be loyal as a member of that subcommittee did I endeavour in any way to cast reflection upon it. At the same time, I am bound to say that I did object, and I object now, to some of its provisions; but I think you will agree with me, as business men, that this does not prevent my proposing the adoption of the report, because, generally speaking, I entirely agree with it. As to the minor details, some of which are only suggestions and not recommendations, we can deal with them afterwards. I beg, therefore, to protect myself in this way, and to say that, in proposing the adoption of this report, I mean especially the first part of it, leaving the suggestions in the second part to be dealt with as the meeting may think proper. I must detain you one or two minutes in recommending to you the first part of the report, because that, as the Chairman has properly said, is a direct answer to a direct question. If there has been any dissatisfaction in the larger Branches at having no more representation than the smaller ones, that, I think, has been fully met in this report. There are only two objections to which I may in anticipation refer. One is, that after all, if you adopt this plan, namely, to give an additional representative to every 200 members, that is a hard and fast line, and may produce some difficulties. It may be said that if you adopt the number 200, a Branch with 190 members would be left out in the cold. But would not that be the case in any representation? In the case of voting for members of Parliament, with electoral districts, supposing the smallest number to be 50,000, then a town with only 49,000 electors would be left out in the cold. There must be a line somewhere. It is immaterial whether you draw a line at 100, or 150, or 200. Another objection is this, that the addition of sixteen members (for that is what it comes to in this plan) would be too great, and would make the composition of the Committee of Council too cumbrous; and then comes, as the Chairman has very properly said, the question whether you should not reduce the number in another direction. And here comes in the question whether the twenty elected members should be eliminated. Now, according to my experience—and I think I shall be borne out by the General Secretary—there is no cumbrousness, nor is there any too large attendance on the Committee of Council. The honorary secretaries of Branches, although they attend to their duties much more than they formerly did, do not come in any large number. From 14 to 20 is what I have generally counted as an average number. Then, although the *ex officio* members, the President, the Treasurer, the President of Council, and the Vice-Presidents, may seem large in number, namely, 17, I have seldom counted more than 6 or 7 present. Now, to what does that bring you? To about 25 members, and to those must be added 20 elected members, who, I must say, as far as my experience goes, have attended most admirably to their duties. That makes the number of the Council 45. It is proposed to add 16, to gratify the natural desire of the Branches. Out of that number, probably not more than 8 or 10 would attend; so that, if it be resolved that the 20 should remain, or some other number should be added to the Council, it will not be a cumbrous body. The 8 or 10 additional members who would attend, if the first part of this report be adopted, will not swamp or overbear the Council. It does appear to me a natural thing that a Branch with 1,000, or 800, or 400 members (as at Birmingham), having amongst them a larger amount of talent than a little Branch, like mine, for instance, with 80 members—it does seem a natural thing that such large Branches should contain a number of men who are naturally and properly ambitious to take part in the government of the Association; and that being so, the number that has been adopted, namely, 200 for each representative, appears to me to be a very moderate proposal. It will strengthen the Committee of Council very much, it will gratify the larger Branches, and it is a sort of scale which can be altered according to circumstances at any time. If you adopt this first part of the report, if you give 16 additional representatives to the larger Branches, you will strengthen the present government; and it would be, notwithstanding any desire for ulterior changes, a very good one. Without troubling you, therefore, with any further remarks, I move the adoption of the report, with the distinct understanding that all its recommendations are for you to discuss. I do not bind myself to them in detail; but I do think that some scheme of this sort would do away with any dissatisfaction, and would carry us on for a number of years in a prosperous manner. It has been said that this meeting is to make or mar the Association; I am satisfied that this is not a meeting which will mar the Association. [*Hear, hear.*] I am sure that the meeting will take every pains to secure a proper representation of the Branches, and at the same time take care that it does not weaken what I consider its stronger element—the element which I call the Senate, the elected members, or some members representing them.

Mr. KER: I beg to second the motion. I think, sir, that you have given a wrong impression as to the motives with which this resolution was brought forward—I mean that you have rather indicated in your remarks that it would be like a vote of censure upon the Committee of Council.

The CHAIRMAN: No, no.

Mr. KER: That is my impression, and I wish to have it removed. We are perfectly satisfied, and I do not think there is a single member of the Association who is not perfectly satisfied, with the way in which the business from time to time has been conducted. [*Hear, hear.*] We are perfectly satisfied with a great deal that has been done, and we are perfectly satisfied that the finances of the Association are at present in a most satisfactory condition. But, having conceded that, surely it is no reason why we should not improve the executive; it is no reason why the executive in the future should

not be better than it has been; and I think I shall be able, before I sit down, to convince the meeting that such a scheme as is suggested in this report is desirable; and that, instead of weakening the Association, it will materially strengthen it. To begin with, the resolution is founded upon constitutional principles. It is proposed to elect out of the mass of the Association representatives from each Branch, so that each Branch may have a voice in what is done in the Committee of Council, or in the Council, as it will be in future, if this be carried. It is also proposed to retain a certain element of stationary members in the Council, to counterbalance, perhaps, at times, the too great eagerness of your newly elected members. I think there is very little doubt that, by infusing into your executive representatives from every Branch of the Association, you must add fresh life and vigour to that executive; and, in addition to that, I maintain that you will add fresh life and vigour to the various Branches themselves, you will give them an interest in the business in a way that we have never seen before; because it is known that a very large number of Branches at the present time have no voice whatever in the management of the Association. Then it is proposed to introduce into the executive fifty-two representative and independent members who are not in any way the nominees of the Committee. You will thus do away for ever with the stigma which has been cast upon the present Committee of Council—that it is a self-elected body. [*Hear, hear.*] Such a thing should not be possible to be said of the executive committee of a large Association like ours. In addition to that there are other details which I do not intend to go into very fully, for this very good reason: that there are many things in the second part of the report that are certainly open to discussion; but it will follow as a natural consequence that the present Council will be done away with. I think that matter was very fully discussed at the Branch meeting held in Birmingham, when we came to the conclusion (and I think a right one) that the present Council is perfectly useless, that it is a perfect farce, and is a body that it would be better to do away with. Called together at the eleventh hour to discuss a report, the rejection of which seems to be a vote of censure upon the Committee who prepared it—that is a thing which cannot be; it is utterly impossible that anything like criticism could be entertained. Then, immediately afterwards, we are perfectly aware that the report is going to be presented to the Association, and in all loyalty to the body to which we belong we are bound when we go to the meeting to vote for the report. Having sanctioned the report, we could not vote against it at the Association. In other words, our mouths are shut. Then there is another matter which has been talked about—a matter of considerable importance—with regard to the unattached members. It has been said that you are disfranchising a very large number of members of the Association. But those members have never yet been enfranchised, therefore you cannot disfranchise them; and to enfranchise those members would be, in my opinion, simply to weaken the various Branches. It is from that large body that every Branch must hope to increase its members. The small sum of 2s. 6d. is surely not too much to pay for the right of voting. I have ticked off a few Branches that might readily, by the addition of unattached members, increase their numbers very largely under this scheme. The South-Eastern Branch, for example, has 435 attached members, and there are 246 unattached. Birmingham would very nearly come up to 400, and get another representative—already they are 358. Yorkshire has 177 unattached members and 267 attached. The South-Western Branch is another instance of the same kind, also the East Anglian, the Dublin, the South Wales and Monmouthshire, the Glasgow and the West of Scotland, and the North of Ireland. There can be little doubt that if this scheme were carried out, a very large number of unattached members, such as the Branches would like to take in their nets, would become attached to them. But, in touching upon this point, I cannot help saying that, at present, admission of members into the Association is certainly an open question. It is known, at all events, that some of those unattached members who have been refused by the respective Branches have been accepted by the Association—by the Committee of Council. The President of the Council has told you that the amount of funds saved is £14,000, and you are saving now, I believe, at the rate of £3,000 a year. Well, surely, gentlemen, the usual age at which a man is supposed to be capable of taking charge of his property is twenty-one. Your Association has now reached the age of fifty, and surely it can be trusted with the care of its own affairs. There is very little doubt, I think, that the scheme now proposed gives the Association, or will give it, a greater hold and control of its affairs than it could have under the present *régime*. As your Committee say, you will, if this scheme is carried out, have a Council numerically workable; you will have a Council directly representative; you will have a Council elected by the members; you will have one representative in, and you will have a representation according to the strength of, each Branch. Let me say before I sit down that if this matter be again referred to the subcommittee, and be again thereby shelved, it is utterly impossible that any scheme of reorganisation can be carried out for another two years; you must give two months' notice before the annual meeting. Any change in the by-laws must be made at the annual meeting, and therefore it is quite impossible that this matter can come up for consideration for another two years. In addition to that, I would remind the Council that we are now nearly at the end of our life; we cease to exist at the annual meeting, and we cannot possibly bind our successors by anything we may express now; we cannot bind our successors to carry out the reform which we, possibly, to-day shall institute. I trust that the better wisdom of the Council will see that in this scheme lies the real strength of the Association in the future, and that all the members will sink any little differences they have with regard to some of the details in the first, and especially those in the second part of the report, and will simply regard it as giving us a principle which we accepted at Worcester, and that they will not cause any further delay (which must be a delay of two years, and probably will be an indefinite delay) by voting against the report. I trust that the vote this day will show distinctly, and not in a half-hearted way, that this reform is one that must be carried out.

Mr. HUSBAND: I should like to ask two questions. We ought to have a clear notion of what the report means. As I read it, it seems that the twenty elected members must be eliminated if the report be carried. Is not that the case?

The CHAIRMAN: Yes.

Mr. HUSBAND: In some of the speeches that have been made, some doubt has been thrown upon it. As I read the report, the twenty members are to be eliminated, and then it is not (as Mr. Ker stated) that the Council is abolished, but that the Committee of Council will be abolished, and the Council invested with executive powers. That, I understand, is the real recommendation of the report. [*Hear, hear*].

The CHAIRMAN: In answer to Mr. Husband, I may say that the report, if it be accepted, does away with the twenty elected members; and, consequently, the present Council and Committee of Council both cease to exist, and by the new executive body, which is proposed in the report, the affairs of the Society will be carried on.

Mr. VINCENT JACKSON: I do not rise to take part in the discussion on the report, but simply to put before you a suggestion. The report consists of two parts; the first part contains a suggestion—in other words, it elucidates a new principle of government. The second part simply deals with minor matters, with incidentals. My suggestion is that the first part should now be considered by the Committee, and voted upon before the second part is discussed. I believe there is considerable unanimity in reference to the first part, and, as regards the second part, I understand that many members have suggestions to make.

The CHAIRMAN: You have the whole of the report before you, and its adoption has been proposed and seconded. It is entirely for you to say how you will consider it. I think it is quite open to you to take the first part, and then the second part; and I will ask the meeting to express its opinion upon that point.

Dr. BORCHARDT: This is an important matter, and I hope you will not take the opinion of the meeting before the subject has been discussed.

Mr. VINCENT JACKSON: I would suggest to Dr. Strange that he should alter his resolution.

Dr. BORCHARDT: I am extremely surprised to hear the second part of the report spoken of as a matter of detail. In my opinion, the second part is by far the most important; and, before you can discuss and adopt the first part, you must know that, by adopting the second part, as a necessary consequence, you are going to alter the organisation of the whole Association. [*No, no.*] You will do away with the organisation which at present consists of a Council and a Committee of Council. If this be not an alteration of the organisation, I do not know what is. You have another body instead. I will not speak at present about this body, and whether it will be nearly as good as the one we have now. I simply wish the members to consider the matter as one of the greatest importance. It is the first time in my life—not only in my medical, but in my political life—that I have seen a proposal, in connection with an association which is most prosperous

under a certain organisation, suddenly to change that organisation. I have heard of associations looking for changes in organisation, if they were not doing well; but never in my life have I known of a society or organisation, in prosperity in all directions, in numbers and in finances, and foremost in scientific work, prospering as we do now, saying: "We want to change that which has made us a happy and prosperous, and dignified association." I certainly cannot give my vote for any change of that kind, until I am perfectly convinced of its necessity. I say, you alter the organisation by putting in a new body. If you are going to discuss the first part of the report, I may have something to say on that proposal. I am now speaking on the broad question of what you are going to put in place of what you take away. The Council and the Committee of Council are to go; you have secretaries and representatives, but you have not told us how you will get the attendance of these secretaries. This is nothing new. All the Branches have been represented by secretaries, so that there is no alteration there. I know they have not attended as well as we might wish. There is a strong feeling that they would attend better if their travelling expenses were paid. Now, I want to know whether, according to this proposal, they are to be paid or not paid; and are the other representatives to be paid their travelling expenses or not? You may call it a detail, but it is a detail very much connected with the well-being of the Association. Then there is another point in the second part of the report. We have been told that secretaries of distant Branches have not attended, and the President expected that they would not attend in future, and their non-attendance would meet the objection as to the body being a cumbersome one. Well, no one will convince me that that is a healthy mode to elect a body, and expect that part of it will not attend regularly—that some of its members may come up at times of agitation and excitement, and outvote those who have been doing the work and taking the responsibility of the Association. If you call that detail, I do not; it is a most important matter for the well-being of the Association. There are a great many questions to be considered before you can decide on the first part of the report. It seems to me there is no change of organisation in the first part at all; there is a change in the mode of election and selection, but no change of organisation or constitution. Before you consider whether it is advisable to make that change, I think you ought to decide the other matter, which, in my opinion, is the most important thing for the existence and wellbeing of the Association.

Mr. VINCENT JACKSON: I move, as an amendment, that the Council now discuss the first part of the report.

Dr. FITZPATRICK: I think it is a healthy sign when we find members of the Committee of Council falling out amongst themselves. [*Laughter.*] It reminds me of the old adage about honest men coming by their own. [*Oh, oh.*] Mr. Husband inquired what was to become of the twenty elected members. He forgot to say self-elected, for that is the case with what is commonly called the house-list of the Committee of Council. The list comes up at nine o'clock in the morning, and is hurriedly proposed, not many of the members of Council having arrived; or perhaps they have not finished their breakfast. Of course, the house-list is passed by acclamation, and woe betide any unfortunate member who would dare to substitute another name. You have told us, sir, that the presumption is, if any different course had been adopted in the past, the management of the Association would not have been as prosperous as it has been. Now, what association is there that has not, in the course of its existence, met with reverses? What man of commerce is there in our great towns and cities who has not, in a long course of years, met with occasional reverses, and overcome them? You gave us no proof, though you insinuated strongly, that the management was going to be wholly changed. I say it is not going to be changed one iota. You have referred to the change of offices to London, but you forgot to say whether, if the head-quarters had remained in this town, we should not have been as prosperous now in 1883 as we are under the present *régime*, in this town. I say, yes. Whence does your strength come? Though you attempt to bring it to London for the purpose of centralisation, whence does it come? From the provinces, from the Branches. You have the largest number in the Metropolitan Counties Branch, but there you have deserters or non-combatants, or, as you call them, unattached members. You are no stronger to-day in the metropolis than you were several years ago, while in the provinces we are increasing daily. The President told us, when it was suggested that Worcester should be the place of meeting, that until that year they had not had a Branch in Worcestershire, and that it has only been two years in existence. I have been connected with Lancashire and Cheshire for thirty-two years, and there we have gone on flourishing and increasing. Yet you told us that the whole of the success arises from the management being in London; and that we are very rich now, though we were very poor ten years ago. That is true, but we were not told what we are doing with our riches. We may have some great surprise in store for us. Perhaps we are going to build a palace, to be called the British Medical Association Palace Hotel Company, Limited, but there is nothing said about that. The report has been divided by the Committee into two parts. I do not agree with what Dr. Borchardt has said, but I think it would be a convenience if the first part of the report were taken first; and then the second part, which is entirely a matter of detail, can be discussed. When that part comes on, I shall have a great deal to say about it [*laughter*], and I shall be able to tell the Association what they are to do with all their riches, because, as the wise man tells us, there is a great danger in becoming too rich. There is a danger of plethora, which may require the good old practice of bleeding to be resorted to. [*Laughter.*] I trust that all the members present will agree in taking the first part of the report first, adopting as it does entirely the principle laid down at Worcester. It is said that the grumbling has been all on one side, and that there has been very little of it. Notices were sent out to the members through the JOURNAL, and it is said that the members did not answer the President's courteous letter by writing personally to him. A similar notice was sent out to all the Branches, and the members answered these. The Branches have behaved better than the Committee of Council, for they have not spoken separately and individually, but the Committee of Council have spoken both separately and individually. An anonymous circular was sent by an important member, the treasurer, which referred to certain resolutions that were to be brought forward if a certain thing were carried. Now, surely, if there is any reason for this report being taken *seriatim*, it is to be found in the fact that even in the Committee of Council there is a great diversity of opinion. I therefore second the amendment.

Dr. WARD COUSINS: Dr. Borchardt has spoken as one of the favoured twenty. I speak as an honorary secretary of a Branch.

Dr. BORCHARDT: I beg your pardon; I spoke as the President of the Council of the Lancashire and Cheshire Branch; and I may mention, though perhaps it has no official importance, that the Council of that Branch passed a resolution on Friday last, which I will hand in.

Dr. WARD COUSINS: Dr. Borchardt will not deny that he is one of the members who, by good attendance, is on for life. I do not say whether he ought or ought not to be. I am only speaking with reference to the organisation, and I speak as a Branch representative, an honorary secretary. I should like you to know that the Committee of Council have given the greatest attention to this question of representation. I should also like to add, in reference to the abolition of the Council itself, which a large number of members of the Council, in reading the report, would naturally think was suggested—the obliteration of the Council—that it is no such thing.

A MEMBER: Is not Dr. Ward Cousins travelling beyond the question, which is, whether we are to take the first part of the report by itself?

The CHAIRMAN: That is the first point to be considered.

Dr. WARD COUSINS: Then I shall have an opportunity of speaking afterwards?

The CHAIRMAN: Yes.

Mr. VINCENT JACKSON: I would say a few words in favour of the amendment. We cannot do better than take the first part of the report into consideration; because, if we talked about the details first, without any certainty whether the principle was to be carried out, we should be wasting our time; whereas, if the principle implied in the resolution before us, that of direct representation, be carried out, it will settle the main thing that we have to consider, and the matter of detail will ultimately right itself. The subcommittee of the Council who were appointed to take this matter into consideration have fully recognised, after long and continued earnest trouble and expense in attending the meetings, the difficulties that were before them. They have gone through these difficulties; they have considered them fairly, or they would not have mentioned those details which were to be noted as of importance in considering the propriety of bringing this matter forward. Knowing the difficulties, recognising the chances of failure in many points by the putting in details which may vitiate some portion of the machinery, they have thus recognised that, if you do not get a sound principle to begin with, the machinery will be vitiated throughout; but, if you get the details only vitiated, you may correct them. Let us examine, first, the principle which is brought before us, that of

the direct representation of the Branches in the executive department. We need not fight about the bush at all. We shall be happy to hear any arguments to the contrary; and, if you will show me that the principle is wrong, I will vote against it; but, on the other hand, so long as I hold and believe that we ought to adopt this principle in order to take a further step forward, I shall vote for it. It has been said that we are now in a more flourishing condition than we ever were. We know how things change; we know the condition in which the worm is before it gets into its chrysalis state, and how it afterwards comes out as a moth. You may go on eating and accumulating certain things, but you may be like the bees, and, having accumulated too much, will be smothered.

Dr. BODINGTON: I rise simply to support the amendment of Mr. Jackson, that we should take the first part of the subcommittee's report first. I believe, if we do not do that, we shall get into inextricable confusion over a multiplicity of details. We have, first of all, this principle to settle, as to representation by the Branches, and that, I think, should be considered singly. I would appeal to the mover of the resolution to alter it, so that he would be moving only the adoption of the first part of the report. I have the permission of the seconder to state that he is quite willing to adopt that course if it seem good to the mover and to the meeting. I am certain that, as a matter of business, we shall get into great difficulty if we do not take up this matter singly.

Dr. STRANGE: I will adopt the amendment, although it may seem strange that I should do so. You will gather from what I have said that I am in favour of the first part of the report, while I think that the second part is open to discussion. I cannot think that there need be any anxiety with regard to the first part of the report. I cannot see that the introduction of sixteen more representatives of Branches will affect in any way the general principle of the constitution of the governing body. I am prepared to move that we take the first part of the report first, and afterwards to move that the second part be adopted. I moved the adoption of the report simply as a matter of loyalty to the subcommittee, although there were many details in it of which I did not approve.

The CHAIRMAN: The amendment has now been converted into a direct resolution, which is, that the first part of the report be taken into consideration first.

The motion was put, and agreed to.

The CHAIRMAN: You have now before you the consideration of the first part of the report, totally regardless of any suggestions contained in the second part.

A MEMBER: What does the first part include? Does it include the doing away with the election of twenty members.

The CHAIRMAN: If the first part be adopted without the second, it will simply involve the principle of direct representation, one member for every 200 over and above the secretary. That is what will be involved in the acceptance of the first part of the report.

A MEMBER: The first part of the report says that the Council shall consist of so-and-so, and the twenty elected members are not there.

Dr. FOSTER: The report has been issued contrary to the instructions in the resolution that was passed. It should end at the words, "two hundred members." It is not issued in the form in which it was adopted. The portion we omitted has been inserted.

The CHAIRMAN: Then, as a matter of fact, the first part will end at "two hundred members;" and it will involve simply the addition of direct representatives from every Branch, without any other change in the constitution of the Association.

Mr. VOSE SOLOMON: The first suggestion is that there should be one representative from every Branch, such representative to be either the honorary secretary, or a representative chosen for the purpose. [*Cries of "Question." "Order."*]

Dr. STRANGE: I move the adoption of the first part of the report.

Mr. KER: I second the motion.

Dr. WARD COUSINS: I was about to say that this report does not involve the obliteration of the Council of the Association. It does not ask the Council to commit suicide. Undoubtedly it involves a great change in the Council; it involves the conversion of a lifeless body into a real, authoritative, administrative, representative Council; it will bring it into a form in which it will be workable, and will be able to exercise the whole power of the organisation. I should like to ask the members if they have ever studied the organisation of the Association. One speaker has told us that it is nothing more than a sham, and I firmly believe it. We gather together distinguished men from all parts of the country; their names are placed on the paper, but what are their responsibilities? What do they know about the work of the Association? The members of the Council since the last meeting—what do they know about the springs and actions of the British Medical Association? I daresay most of those whom I have the honour of addressing, know that the eminent Darwin, after beating about the bush with regard to human organic excrescences, came to the conclusion that, after all, the hair of the head was only an ornamental appendage. Now I have been looking into the question of the evolution of this Association, and that is just my opinion—that the Council is nothing more than an ornamental appendage. I admit that this proposal involves the obliteration of the Committee of Council. The real thing that is to be destroyed is the Committee of Council. It is a very imperfect part of the organisation; it is non-representative. I think we could not have a higher, a nobler instance of self-sacrifice than this body adopting the report—a report by which they sacrifice themselves and commit an act of self-destruction. I say it is a noble act. [*Laughter.*] I only wish that a great many members of the Council had been present at the last meeting of the Committee of the Council. It was a very extraordinary meeting. There was a certain amount of calmness in it that I had never seen before—what we may term resignation; something that seemed to say that things as they are are not going on for ever; that all the little springs, all the little curious machinery that has been at work in the organisation so many years, are about to stop to give room to something better, something higher, something more representative. When I received Dr. Wade's circular, I must say that I felt a little astonishment, as I have no doubt other members did when they received it. Dr. Wade, I need not tell you, is a member of the subcommittee. He is worthy of all respect, and I am confident that there is no member who has the interest of the Association more at heart than he has. Still I must say, speaking for myself, that I thought the circular had too much political weight about it. He actually, as a member of the Government, pours cold water at the last moment upon a Government measure; I cannot understand it. One thing is certain, that Dr. Wade by this circular, has done the best he could do to promote the representative system. I am sure that if there were any gentleman on the Council at all doubtful about the propriety of the Association adopting the representative principle, he would be convinced by reading Dr. Wade's circular. It opens in an extraordinary way. It speaks of the necessity of delay, and it advocates what in political circles would be described as an obstructive policy. At all events, I think the matter has been tolerably well discussed; it has been discussed in the Branches, we know, and it has been discussed in this Council and in the Committee. A subcommittee was appointed who thoroughly considered the matter; it has been carried back to the Committee of Council; it is presented to the Council to-day, and, therefore, I think it has been tolerably well discussed. But suppose you agree to Dr. Wade's proposal, the discussion will not be over. Dr. Wade will have it all his own way, and it will be discussed again on the great platform of the Association at Liverpool. When Dr. Wade speaks of grievances, I must say he has hit the right one. On the third page he absolutely admits that, after all, the Committee of Council is a non-representative body, and that it is self-elected. That is the whole point of the discussion. We, as members of the Council, and as members of the Association, turn round and say that, however eminent these gentlemen may be, we do not wish any longer to be under the direction of a non-representative body. You will agree with me that the Branches are the thorough backbone of the Association, and at this stage of development they have a right to speak their minds; not only have we a right to bring the power of the centre to bear upon the circumference, but to bring the power of the circumference back again upon the centre. Dr. Wade talks of the many difficulties and anomalies and incongruities in the adoption of a representative system. I do not wish to detain the meeting, but I should like to say two or three words upon that point. If there is anything to which the British Medical Association is adapted, it is the representative system. We have already the organisation mapped out into Branches; we have constituencies already made; and it is easy, therefore, to adapt a representative system to our organisation. I am willing to admit that if to-day we were to divide up the organisation on paper into Branches, I do not think we should exactly adopt the divisions we now have. But that has nothing to do with the question. The question is this: Branch organisation is accepted by the Association all these are recognised Branches and recognised constituencies; and therefore it clearly shows that, although the present organisation is one simply of accident and development thirty or forty years ago round this vital centre of the Association all these little outshoot

take place, and they have gone on accumulating year after year. You will be astonished to hear that there is a very little left in the British Isles to be divided into Branches. In England, we have only Oxfordshire; and Scotland and Ireland are filled up. When Dr. Wade talks about the difficulties of unattached members, I do not think the Association would accept anything less than all the members of the Association, by virtue of being united to the Association, having the right to vote in the areas in which they reside. I think that gets over the difficulty of unattached members—to give a man his representative rights in the area in which he resides. Dr. Wade thinks it necessary to touch upon the political sentiment of our great future, and he also refers to this scheme, and says that, after all, it is not a very exemplary liberal achievement. I ask, is this Association divided into parties? No. Is it divided into hostile camps? I think you will say No. We have no contentions, we have no difficulties, we have no questions to settle; all that we have to do is to adopt the simplest and best organisation we can; we want simplicity of organisation, and we want perfection of organisation, so that we may stand side by side and shoulder to shoulder, and help on those grand sciences which know nothing of party and nothing of creed, but which are universal blessings to mankind. I honestly tell the Council that by their vote to-day they will adopt the principle of progress—progress which will be felt a long way down time—or they will obstruct it. I sincerely hope that this scheme will be accepted by the Council, and that it will go before the platform of the Association. Depend upon it, every organisation has its crisis—individuals have crises; there is a time of birth, there is a time of rapid growth, and there is a time of rapid development, and there is also a time of what we may call senile decay. But, as Mr. Ker has told us, this Association is not fifty years old; it has attained its maturity, and is not likely to go off like an infant, in a fit of convulsions. We must bear in mind that an organisation that would suit us in our infancy would not suit us now. There is free will at work in the Association; our constitution is formed, and it has a right to exercise its free will. In the early days of associations they must always have central forces at work, and there must be a strong concentration of vital powers. [*Time! Time!*] I hope I do not weary you, but I should like to add a word or two on this point. I was saying that in the early days of associations you must have a concentration of vital powers, but as you get a developed condition of the circumference and the whole organisation, you must have an expansion at the centre. The fact is that every organisation is just what its vital centre is. I feel strongly that the whole organisation will be as its vital centre is—that if you have activity and development at the vital centre, you will have vitality throughout the whole organisation. Our duty is to look at the foundation to see if it can bear the weight of the growing superstructure, to see that there is no loophole or crevice by which the evil spirits of discord may enter, and so disturb our machinery and break up the bonds of union. [*Applause.*] My belief is we must have every part of this organisation duly balanced. [*Time.*] I will only say, in conclusion, that what we must go in for to-day is simplicity and perfection of organisation.

Mr. Vose Solomon: I have listened with great pleasure to the eloquent speeches we have heard; but, looking over the recommendations of the Committee of Council—numbers 1, 2, and 3—I am unable to discover anything that is new. The first is, that there is to be one representative for every Branch, such representative to be either the honorary secretary, or a representative chosen in his stead for the purpose. Now, an order to that effect from the Committee of Council was made in consequence of a resolution that I carried several years ago.

The Chairman: It is in operation now. The only addition is that there is to be an additional representative for every two hundred members.

Mr. Vose Solomon: That is all. Although it was generally known that the Branches, in the event of the secretary being unable to attend the Committee of Council, could appoint another gentleman to it would only be necessary to call him secretary—yet scarcely any Branches took advantage of that arrangement. Some remarks have been made upon the house-list; but I must confess that, after much experience with a great many societies with regard to the election of council and committees, I am persuaded, although no one is more fervently in favour of direct representation than I am, that there is an immense use in a house-list, and that, in numerous instances, men are completely at a loss without some such guide.

Dr. Foster: I rise to ask the members of the Council to confine their attention, as far as possible, to the principle embodied in the first part of the report. Since we met at Worcester, a resolution was submitted to us which we adopted, and that resolution carried with it the principle of direct representation. The members of the Council are now simply asked to adopt a scheme which carries out that principle. Nothing could be more simple. The consideration of the whole matter has been before the Association for nearly twelve months, and there has been no protest raised against the principle. Everyone recognises it as a thing which the Association has already conceded—conceded, in part, by allowing the secretary to be sent up from every Branch. All that the first part of the report asks the Council now to do is to adopt our own principle as expressed in the resolution adopted at Worcester, and to make one little change about which there has been much anxiety—adding sixteen members to the Committee of Council. Surely that is not a very disastrous radical change in the constitution of the Association. We simply ask that sixteen members be added to the Committee of Council, in order that those large Branches like Lancashire, Cheshire, the Metropolitan Counties Branch, the South-Eastern Branch, and others possessing a large number of members, shall have adequate power in the governing body. Other details are introduced into the second part of the report; and it is for you to adopt or reject them when they come before you for consideration. For my own part, I have no objection to the whole of them being rejected. I would rather see them carried; but if the principle be adopted in the first part of the report, the Association will be placed on a proper basis. For ten years or more, I have sat at the Committee of Council; and, when great principles have come before it, I have seen it divide. If I wanted to refer to any particular questions, I would mention the woman's question, as to which we had after all to take a plebiscite of the whole profession. Then there was the question of homœopathy—the question whether there should be homœopathic members of the Association or not. Whenever the question came before us, we felt we had no united body, and that we could not come to any definite conclusion. I want to see such a body formed, so that it may be able to vote in the name of ten thousand practitioners, and send out resolutions that will secure respect, dignity, and power, wherever they are read.

Mr. Husband: I cannot give a silent vote on this question. I do not agree with a great deal that has been said against the Committee of Council; but I will not reply to the animadversions that have been made, because the condition of the Association is now before the Council, and they know well its prosperity as an Association. You may talk about the inconvenience of being rich, but I knew for thirty years what was the inconvenience of the Association's being poor. I hope we shall never be in the same state again. I, for one, should be ready to work as I have done, even although I may be taunted with actions and motives which I am sure never influenced any members of the Committee of Council. The duties we have to perform are serious and responsible ones. This is a great change and worthy to be adopted, or it is not. If it be not, what is the use of bringing us here and asking us to consider it? For myself, I am singularly impartial in this matter. My health is not what it has been, and it so happens that I am in no way held by anything that has been done by this subcommittee. I was unfortunately not present at the meeting of the Committee of Council when the report was adopted, and I come here, therefore, unfettered, to express my honest and sincere opinion. I think the Committee of Council was elected much more directly by the Branches than some persons imagine; but we are not to consider what the Committee of Council has done, or what the Committee of Council is; we are to consider to-day whether the change that is proposed is one which is likely to benefit this great Association. This has been on the carpet for many months, and we have heard no alternative scheme proposed. It is impossible that things can go on as they are. There is no doubt that there is an agitation going on. I would have very much liked to go on longer as we are; but I think you must either keep to the organisation that you have had, or adopt some such principle as that which has been adopted by this subcommittee. What is this principle? I think it is one that will work safely, one that there is no reason to be afraid of. If the great body of the Council and members think there ought to be a strictly direct representative plan, I do not see that you can adopt any other than that which has been proposed. There are only two or three lines in the first part of the report which I should not like to adopt. When you throw the matter open to the Branches to send a representative directly elected by them, you ought not to give them any instructions as to the way in which the member should be sent, or in what capacity he should be sent. If the honorary secretary be doing his duty, there is no doubt he will be sent; but I think the Branches ought to have full powers to omit the honorary secretary if they think he is not quite the per-

son to send, and that there ought to be no sham direct representation, but that everybody ought to be elected on his merits. Then there is a very insidious recommendation which I do not like. I think there ought to be no instruction or recommendation as to who is to be sent. The recommendation is, "that there be one representative for every Branch." It ought to stop there, but it goes on to say, "Such representative to be either the honorary secretary, or a representative to be chosen in his stead for the purpose." It ought to be a clearly representative Council, and there ought to be no such recommendation as I have read; because if that be adopted, and if the honorary secretary be passed over, it will be considered a slight to him. Looking back for forty years, I have been proud of the work done by the secretaries; they have been most useful, and they have passed from being secretaries into useful members of the Committee of Council. With regard to the unattached members, I have no sympathy at all with them.

The CHAIRMAN: That is a subject that comes in the second part of the report.

Mr. HUSBAND: On the whole, this, I think, is a fair scheme, and I think it is one that will work well. It has been before us for many months, and there has been no alternative scheme proposed. I do not, therefore, see the use of delay. As an old member, and one who knows something of the working of the Association, I believe the scheme is a safe one, and that it will do away with a great deal of the feeling that has hitherto existed. The Council, which has met year after year, and has had nothing to do, will have full meetings during the year; and it will exercise an authority which it has hitherto deputed to others. It will take upon itself its own work, and I believe that, on the whole, the change will be useful for the Association.

Dr. LLOYD ROBERTS: With regard to doing away with the Council—

The CHAIRMAN: That is not in the first part of the report at all.

Dr. LLOYD ROBERTS: If the first part be adopted, it follows as a consequence.

The CHAIRMAN: No, no. You are now going to be asked to vote for the adoption of the first part of the report down to the words in italics, "two hundred members." I am going to ask you to say whether you will adopt that first part of the report, which simply implies the addition of a representative to every Branch for every two hundred members, leaving the rest of the report entirely out of consideration at present.

Dr. THOMSON: As we are to be asked to vote for Part I because it is a matter of principle, I would suggest that we should leave out the second and third lines of Section 1, because they involve a matter of detail.

The CHAIRMAN: It is merely an explanation of a rule that is already in force, that Branches have the right to send a secretary; or, if the secretary says, "I cannot go," then the Branch may choose another representative in his place. It is merely explanatory.

Mr. HUSBAND: I move the omission of those two lines.

Mr. NICHOLSON seconded the proposal.

Mr. Husband's proposal was put and carried.

Dr. HARDIE: I should like to say a few words on this subject [*Vote, vote.*] I think Part I is very illogical. We ought to state that in our opinion the machinery of the Association requires alteration, and then there ought to be a series of statements that the Council of the Association ought to be abolished and so on.

The motion for the adoption of the report as amended was put and carried.

Dr. STRANGE: I will move the adoption of Part II *pro formâ*.

Mr. SYMPSON: I will second it *pro formâ*.

Dr. HARDIE: I do not think the report, as it stands, is at all logical, inasmuch as it does not say how the management of the Association is to be carried on. We have committed ourselves to a new body which is called the executive body.

The CHAIRMAN: You have committed yourselves to the addition of sixteen members to the old body; that is all.

Dr. HARDIE: I move, as an amendment, that we should begin by stating that in the opinion of the Council, the executive of the Association should consist solely of the committee which has been elected in the manner proposed; that the Council of the Association should be done away with, and, therefore, that the Committee of Council should also be done away with; and that the committee now proposed should manage entirely the affairs of the Association. Having placed ourselves in that position, we shall be better able to devote our attention to the minor details which follow in the second part of the report.

Dr. LLOYD ROBERTS seconded the amendment.

Dr. BORCHARDT: This Council has adopted a principle with which I agree from my inmost heart, that is, the principle of direct representation; but how it is to be carried on, how it will affect the details of the organisation, is a very difficult question to decide. I think this is not the time or the place to go into the details as to the way in which this principle of direct representation is to work.

Dr. BODINGTON: I think if you were to present this second part of the report paragraph by paragraph, so that each might be considered separately, we should get over the difficulty mentioned by Dr. Hardie.

The CHAIRMAN: Two propositions are now before you: one is the adoption of the second part of the report, and the other is the amendment of Dr. Hardie, to the effect that the Council should cease to exist.

Dr. FOSTER: That would come on in the consideration of paragraph 3.

The CHAIRMAN: It comes before us by amendment now.

Mr. HUSBAND: Is not what I stated the fact? We are not going to abolish the Council, but we are going to have the Council differently elected, and to take upon itself its own functions. It is not abolishing the Council; it is the Committee of Council that we must do away with, and the powers which are given to it. The solicitor will have to go through these matters with the Committee, and the necessary rules will have to be confirmed. The Council will henceforth be an executive council, and the Committee of Council will be of no use. Every rule that applies to the Committee of Council will now be applied to the Council, which is not to be abolished. [*Cries of "Withdraw."*]

The amendment was withdrawn by permission of the meeting.

Dr. BORCHARDT: I beg to move "That a subcommittee of the members of the Council be elected to see in which way best, after adopting the principle of direct representation, the change in the constitution of the Association could be carried out, and to report to the meeting in Liverpool." Everybody has had a copy of the report, and I have no doubt that everybody has read it. I suppose that a great many of us find that, by adopting the principle which we have adopted, some very weighty questions will have to be considered, and that a Council, which is certainly a good deal tired from what has been going on, is not the best body to decide questions of such importance. There ought to be a subcommittee to report to the next meeting of the Council at Liverpool.

Dr. LLOYD ROBERTS: I second the amendment.

Dr. CARTER: If the subcommittee should be decided upon, it must have some kind of instruction; and we are not at present in a position to give that instruction, and to pass such a resolution without discussion would be altogether wrong. I wish to direct attention to what, in my judgment, is a very grave omission in Part II. It has been decided by the subcommittee not to recommend that the expenses of the representatives shall be paid. I think that is very injurious, and I wish to speak on that point.

Dr. FOSTER: I wish to ask the Council not to be led astray by any specious argument in favour of delay. We have come here after nine months' gestation, to consider a report which surely at the full time ought to be worthy of consideration, and ought not to be referred to another subcommittee. We have had the Committee of Council considering the report of the subcommittee which took nearly six months to draw it up; then the Council adopt the report; and we have had the report criticised in various informal ways, to which I will not allude. Now we have the spectacle of a member of the Committee of Council actually moving that the report, which his own body adopted, be referred to a subcommittee. If there be any other arguments wanted in favour of no change, surely we have had splendid examples in the irregular manner in which members, who ought to be bound by the action of the subcommittee, have refused to be bound by it. This last proposition means another two years' delay. The question has been before the Association year after year, and if you appoint a subcommittee now, what can it do? This Council must die in August. It is a moribund Council; there are only two months before it dies, and it has only fourteen days during which it can produce any report that can be placed before the meeting at Liverpool. A report of the Committee cannot be produced in time to give proper legal notice for the next meeting. Hence, if the subcommittee meet it can produce nothing for the Liverpool meeting to consider. If it suggest any alteration in the law after next Tuesday, notice of such alteration cannot be given; therefore the action of the subcommittee would be useless, because it can do nothing in the way of altering the laws at Liverpool. Why then appoint a subcommittee which can do nothing? It is only another argument for delay.

is insulting to the Committee of Council, and practically insulting to the subcommittee.

Dr. Borchardt's amendment was then put and rejected.

It was decided to discuss the second part of the report paragraph by paragraph.

The CHAIRMAN read paragraph 1: "The compulsory retirement for non-attendance which at present affects the twenty elected members could not, in its opinion, be extended to members elected on the new plan, though a record of attendance might and ought to be kept and published annually in the JOURNAL."

Mr. HUSBAND: The words "might" and "ought" should be left out, and then it would read: "A record of attendance shall be kept," etc. I move the adoption of that paragraph with that alteration.

Dr. LLOYD ROBERTS: If you take paragraph 4 first, it will simplify matters very much.

The proposal to take paragraph 4 first was agreed to.

Dr. GRIGG: The adoption of this paragraph would alter the name of the governing body, which is fixed by the Articles of Association that we cannot alter. I think we must keep to the name of "Committee of Council."

The CHAIRMAN: Mr. Fowke has taken an opinion on that point, and he finds that the Articles of Association can be altered.

Mr. FOWKE: It is the memorandum that cannot be altered.

Dr. GRIGG: The title is in the memorandum.

Dr. WADE: It is doubtful whether, as a matter of fact, we may not be compelled to keep the name of "Committee of Council;" but it does not matter what it is called. When you have established the system, we shall be able to take a legal opinion as to how far we are compelled to retain any particular name, or how we may change it.

Dr. GRIGG: I was going to call attention to that. It is perfectly immaterial what we call it. The Committee or the solicitor will not be committed to any particular name; that will be left an open question.

The CHAIRMAN: The question now before the meeting is the adoption of paragraph 4, with the word "would" altered to "shall."

A MEMBER: This would put an end to the life of the Council.

The CHAIRMAN: Yes; we must be off with the old love before we are on with the new.

The adoption of paragraph 4 as amended was then put and carried.

The CHAIRMAN: The next paragraph to be submitted to the meeting is No. 5: "On full consideration, it was determined to recommend that the payment of travelling expenses should be left to the Branches."

Dr. CARTER: That is a very grave recommendation. It will neutralise much of the advantage that a representative scheme would give to us. If we were a trading community anxious to present a good balance-sheet to the shareholders, and to give large dividends, there might be good reason for this; or, if we were very poor, and had a difficulty in making both ends meet, I could understand this ill-judged parsimony, as I consider it; but we are putting by £2,788 for last year, and yet we refuse to give this very just and necessary payment to those who do our business. The subcommittee complains that there are three causes why the meetings of the Committee of Council have not been so well attended as they ought to have been. One of these is the distance of some of the branches from London; the second, is the fact that a great deal of time is consumed in travelling to the meetings; and a third, is the expense. The first two will of course be beyond the control of the Association. Whatever rules we pass, the distance from London will be always as great, and also the time consumed; indeed, it may probably be greater and greater as the Association expands. But this third matter can be controlled to a considerable extent by the Association; yet the subcommittee declines to control it. It seemed to me, from the request made by the subcommittee, that all the Branches should send in an account of their income, and that the General Secretary should ascertain the travelling expenses of the honorary secretaries from each town, that they were really coming up to this point. They received a statement from each branch as to the income, and one Branch actually proclaims itself insolvent, its income being £9 16s. 5d. and its expenditure £10 9s. 8d.; yet they are asked to bear the additional burden of £6 on £9 in sending a representative to London. If the constitution of the subcommittee had not precluded the possibility of their committing a joke on any subject, much less on so serious a matter as this, I should have thought that this was a great practical joke. There are a number of Branches whose expenditure is considerably over their income, and yet they are asked to incur a serious additional expenditure in sending their representatives to London. What renders it still more unjust, is that every representative who comes to attend these meetings must, in order to do the work of the Branch, be a member of the Branch Council. He must know from the Branch Council what are the needs of his Branch, or he will not represent it. He will therefore have four or five meetings to attend in the Branch every year; he will have to do that at a considerable cost of time and trouble and money, and yet, in addition to that, he is asked to attend from four to seven meetings—because there have been as many as seven meetings of the Committee of Council in some years—sometimes from very distant parts, and all at his own expense. I have made out something of a calculation as to the expense that would be incurred by the Association if the expenses of the representatives were paid. Supposing that every person, according to this new scheme, were to attend every meeting, and first class railway expenses were paid, the outside sum would be £499 12s. 9d; second class, £388 13s. Now, we can never expect anything like that attendance. And here I should like to correct an error into which the President fell. The President stated that he supposed there were not more than forty-five members attending the Committee of Council. There never have been forty-five, or anything like it. The largest number I have found, on looking over the attendances, has been forty-three, and the general average would certainly be under thirty. Here we have a smaller constituency, and we must expect a proportionately smaller attendance. Now, taking the outside attendance at two-thirds (never upon any occasion have there been two-thirds attending a meeting), then, we have an expenditure for first class railway fares of £333 1s. 11d., second class £255 16s. 8d. Now, I say, that is a just expenditure, and it should be made, even if we were not very rich; but, being very rich, as we are, we should not fail to pay it. I have no doubt that it would increase very much the number of attendances. If you look at the answers by the various Branches on this question, you will find that there is a decided majority of the members represented in favour of this change being made. Some of the expressions on this subject are very strong; and I think it would be altogether unwise and impolitic to leave a grievance of that kind, which can be so easily remedied, to fret and work further changes in the Association, because it must come up again. I therefore propose that the travelling expenses of the representatives be paid by the parent Association.

The CHAIRMAN: Do you mean all the representatives?

Dr. CARTER: Only the elected members—the Branch representatives. It would not, in my opinion, be just to pay the railway expenses of gentlemen whom we do not ask to represent us.

Dr. FITZPATRICK: I second the proposal. I consider this forms part and parcel of the first part of the report. None of the Council can complain that this has been kept in the background. It took form at Worcester after Mr. Ker's resolution that the representatives should be paid out of the funds of the Association. The Committee of Council acknowledge it, but in a half-hearted way. They say that the Branches may do it or not as they please, although they have reports before them that several Branches are unable to do it, and if the Branches were compelled to do it—and many of them do it willingly—it would prevent them from having any investigations into scientific subjects, which I am glad to say many of the Branches prosecute as vigorously as the parent Association. I hope therefore, as forming a very large portion of the representative system, this motion will be adopted.

Dr. BRYAN: I think that the expenses should be paid where the distance is over sixty miles; if the distance be under sixty miles, the Branch could well afford the expense. Take the case of Cardiff. The expense to London and back would be £5. I should like to make a proposal to the effect I have mentioned.

Dr. GRIGG: I was the prime mover of this at the Committee of Council. I sent round a circular to every one of the honorary secretaries, and I must say that the views I received from the various honorary secretaries did not appear to be generally in favour of this proposal. I sent a private letter, and I had an answer from everyone. Several who lived at long distances stated that even if their expenses were paid, it would be impossible for them to come. At the same time, others said that they had funds to pay, and they did not see why the parent Association should be taxed. I should like to move, "That it be a recommendation that the payment of travelling expenses should be supplemented or defrayed by the executive body." [*No, no.*]

Dr. J. R. THOMSON seconded Dr. Grigg's amendment.

The CHAIRMAN: The proposition is that railway expenses, first

class, of every person attending a meeting of the Council shall be paid. You must understand that that involves a very great deal more than this table would show, which is calculated only upon present attendances. I think that, instead of an expenditure of £300 a year, you are probably committing yourselves to an expenditure of £1,000 year.

Dr. CARTER: I made my calculation on the basis of the new scheme being passed.

Dr. DAVIES: I should like to suggest that, instead of paying the whole of the railway fares, the Association should pay half, leaving the other half to be defrayed by the Branches.

Dr. FOSTER: I have great sympathy with Dr. Carter. It would be a disgrace to an Association that has saved £3,000 a year to tax with their expenses gentlemen who come to manage its affairs, and who do the work so well. I have the strongest sympathy with Dr. Carter in his resolution; but I think it would be much better that the matter should be worked out deliberately, instead of passing a resolution now, involving an expenditure that may mean £700 or £800 a year. I think I would refer it to the executive body. It is purely a matter of detail, and involves no question of organisation.

Dr. GRIGG's amendment was put and lost.

Dr. CARTER's motion was then put and carried.

Mr. NICHOLSON: I move the adoption of paragraph 6.

Dr. JOHNSTON: I second the motion.

Dr. FITZPATICK: I have an amendment to move against it. It is not fair that this difference should be made. What does it involve? We are told that the attendance—it is not said whether of Vice-Presidents or not—has not been what it should be. This would involve that a Vice-President need only put in an appearance once in four years; that is what the resolution really comes to. It is only necessary that he should attend a meeting for two consecutive years. If he put in an appearance in 1883, he need not put in an appearance again until the end of 1885. I desire to give the greatest credit to past Vice-Presidents and Presidents; at the same time, I must say, that there are many Vice-Presidents of the Association who have had no experience in the working of the Association. Many of them, before the day of their appointment, have hardly ever attended an annual meeting; but I say now that, in gratitude for past favours, we should continue the Vice-Presidents, but that they should go out for non-attendance on the same principle as the representatives.

The CHAIRMAN: You have no principle at all for them at present.

Dr. FITZPATRICK: Then I move, as there is no principle with regard to the representatives, that it be the same with regard to the Vice-Presidents. I would propose that we omit the part of the clause beginning with the word "but."

The CHAIRMAN: I think you ought to take the next paragraph in connection with this, as it is a continuation of the same thing.

Dr. FITZPATRICK: I want to make all on an equality. I would expunge it all.

Mr. HUSBAND: Do you mean that the paragraph should cease at the word "Association?" that all the following words be left out?

Dr. FITZPATRICK: Yes, I consider it is an invidious distinction.

Mr. HUSBAND: I thoroughly support the omission of those last words—making the paragraph end at "Association."

The CHAIRMAN: I should like, as my contribution to this discussion, to say how much I think you owe to your Vice-Presidents, and I should like very much that there should be some recognition of that; that we should not throw away services that have been so freely and readily given; and which have been, as I think, of greater value almost than any other.

Dr. ROBERTS: I am in favour of leaving it as it is. I do not think the Vice-Presidents should be removed, but I would shorten the period; and, instead of saying two consecutive years, I would say one year.

A MEMBER: I second that.

Dr. BORCHARDT: I need not say how thankful I am that the Vice-Presidents are on the executive, and I hope they will continue to be so; but at present, according to what you have passed, there do not exist any Vice-Presidents or any executive. You have resolved that there should be the principle of direct representation; that there should be one representative of every Branch; and that such representative should be elected directly—one representative for two hundred members, and so on. There are no direct representatives on this executive body; you must find a place for them.

The CHAIRMAN: You have at present a certain body of Vice-Presidents; you have not disfranchised them; you are now to say whether you will do so or not.

Dr. DE BARTOLOMÉ: The Articles of Association state that the Council shall consist of the President, the President-elect, the Vice-President, the President of the Council, the Treasurer, the Readers of Addresses, and the Presidents of Sections at the annual general meetings of the Association for the current and last preceding year, together with all such other members of the Association as are to be elected annually by the Branches, in accordance with the by-law to that effect. Now, I maintain that you have not impugned that rule in the least, and that you have merely altered the law by which the representatives are elected. The original law remains exactly as it was. I therefore maintain that you have Vice-Presidents in the Council.

Dr. WADE: It is simply a technical matter, and it will be dealt with by those who draw up the regulations by which these arrangements are to be carried out. If some one would move simply that the Vice-Presidents be retained on the executive as before, that would be an instruction to those who are to draw up the new minutes. It is doubtful now whether the President of the Council or the President of the Association, or the President-elect, or the Treasurer, are on the executive body.

Dr. BODINGTON: I believe the Vice-Presidents have a claim upon us and upon the executive body. They are men of great eminence and, moreover, they are men who have devoted a large amount of time to the work of the Association as carried on in the Branches and also as carried on in the Association itself. In that sense, they are representative too, they have been representative of their Branches for a considerable time; and again, when they become Presidents, they are representative likewise. I, therefore, strongly advocate the retention of the Vice-Presidents.

Dr. FOSTER: I would suggest that we say that the President, the President-elect, the President of the Council, the Treasurer, and the Vice-Presidents, should be members of the Executive Council.

The CHAIRMAN: It is proposed that the President of the Association, the President of Council, the President-elect, the Treasurer and the Vice-Presidents, be members of the executive body.

The motion was put and carried.

Mr. HUSBAND: You have passed new resolutions to-day, and the laws of the Association must be altered in conformity with them. I have drawn up this resolution, which I think is logically required: "That, as the Council, as proposed to be elected in Parts I and II of the Report, will in future be the executive or governing body, the Committee of Council, no longer being required, will cease to exist, and that the required alterations in the laws and by-laws be made by the subcommittee, with the assistance of the solicitor of the Association." There must be an alteration, or your wishes will not be carried out. What are we to be? There cannot be a Committee of Council, because you cannot have a committee of a body which does not exist. Let Mr. Upton go through it, and he will tell you what alterations in the by-laws will be required.

Dr. WADE: The subcommittee is defunct.

Mr. HUSBAND: We must move that the subcommittee be reappointed.

Dr. WADE: I dislike being on a subcommittee which I do not attend. The subcommittee will be very much too large to do what is merely clerical work. We have to settle principles, and it will be simply clerical work to put the resolutions into shape.

Mr. HUSBAND: The Committee of Council will meet on Tuesday, and they can delegate the duty to a committee of their own body.

The CHAIRMAN: We went from paragraph 1 to paragraph 4; and I take it that it is your wish that paragraphs 2 and 3 should form part of the report?

Dr. WADE: I move that they be dropped.

The CHAIRMAN: You cannot drop them altogether without making the report into nonsense.

Dr. ROBERTS: I should think they might be dropped.

The CHAIRMAN: You have passed part of No. 1.

Dr. LLOYD ROBERTS: All except part of No. 1 may be dropped. I move that.

Mr. MASON: I second it.

Dr. WADE: As the Association is at present worked, there is nothing to prevent any member of the Association from becoming a member of any Branch; therefore, if you leave matters as they are you practically adopt the feasibility of that which these paragraphs repudiate. The subcommittee ought to have had some instruction on that point.

Mr. HUSBAND: The Branches are to elect from among themselves. This report is in favour of that. Why spend time in discussing it? I think there is nothing to object to.

Dr. WADE: Anybody can be a member of any Branch of the Association. There is nothing to prevent your being a member of

Metropolitan Counties Branch and any other Branch at the same time. I think the meeting ought to decide what they mean to do with that question.

Mr. BARTRUM: There should be a distinct understanding from this body that no member other than one living within the area of the Branch should be accepted. I will move that.

Dr. WARD COUSINS: I second it.

Dr. BODINGTON: The Branches have no area. One area overlaps another. There are frequent instances of that. Many members of the Birmingham Branch are likewise members of the Staffordshire Branch.

Dr. LLOYD ROBERTS: It is suggested that no gentleman, unless he be a member of the Branch, shall represent that Branch on the new Council.

Dr. FOSTER: This question is not likely to arise, at all events, at present. If colonial or distant Branches claim representation, it will be our duty to consider how it can be given, but we have no claim from colonial or distant Branches. It is impossible to define by a strict line every area, because the areas overlap one another; a man may live within the area of three Branches.

Mr. BARTRUM: If a man be a member of the Birmingham Branch, he ought to be elected by the Birmingham Branch; and I do not see why he should not represent the Birmingham Branch, whether he lives in Birmingham or in Liverpool, if he is a member of the Branch, and is elected as a member of the Branch. Take our worthy friend Mr. Husband, living at Bournemouth. Why should he not represent his Branch, of which he has been so long an ornament, even though he is living at Bournemouth?

Dr. WARD COUSINS: I understand that every member of the new Council must be resident in the area of his Branch.

Mr. BARTRUM: Not the geographical area.

Dr. WARD COUSINS: This shows the importance of an annual chart of the Association.

Dr. SHETTLE: One important question arises here. After the passing of Resolution 5, are the expenses of members residing out of the United Kingdom to be paid?

Dr. HARDIE: If any Branch wish to elect a member of the Association as its representative who is not a member of the Branch (say if a Branch in Aberdeenshire wishes to have a representative in London) all it has to do is to elect a gentleman in London as a member of the Branch.

Dr. WADE: If it be the desire of the meeting to carry out the restriction which has been suggested, there would be no difficulty in saying that a man who represents a Branch must live within a certain number of miles of the chief town of the Branch.

Mr. BARTRUM: I would suggest that no member shall represent a Branch unless he be a subscribing member of the same.

Mr. NICHOLSON: I presume the object of the gentleman who has just sat down is to prevent the Branches from electing members who are not absolutely their own members, but are only what may be called honorary members, that is, metropolitan gentlemen who, they believe, would represent them thoroughly well, but who are not actually local men.

The CHAIRMAN: I understand the proposition to be that no member shall represent a Branch in the executive unless he be a resident member in the Branch. I will put that to the meeting.

The motion was put and carried.

Dr. BODINGTON: I move "That the Committee of Council be requested to give due notice before the annual meeting of such alterations in the laws and by-laws of the Association as may be necessary for carrying into effect the change in the constitution of the government of the Association embodied in the report of the subcommittee on the representation of Branches in the Committee of Council, as amended by the Council this day."

Dr. LLOYD ROBERTS: I beg to second that.

Mr. HUSBAND: I was going to propose what I think will meet the case more fully, "That as the Council, as proposed to be elected Parts I and II, will in future be the executive governing body, and the Committee of Council, thus being no longer required, will cease to exist, the required alterations in the laws and by-laws be made by the Committee of Council, with the assistance of the solicitor of the Association, and submitted to the annual meeting at Liverpool." This is what must be done. These resolutions must be gone through, and the solicitor will assist the Committee of Council in the matter. They must tell him their wishes, and he must embody them in legal phraseology in conformity with law. After that the Committee will submit them to you at Liverpool, and it will be for you then to see that they have been carried out according to your wishes. That is the proper mode.

Dr. LLOYD ROBERTS: I seconded the resolution of Dr. Bodington on these grounds, that, if due notice be not given at once, the thing cannot come into effect for another twelve months.

The CHAIRMAN: Then I will put the resolution, which is to the effect that the Committee of Council be requested to give due notice of such alterations as may be necessary to carry into effect the change in the constitution of the government of the Association, embodied in the report of the subcommittee on the representation of Branches in the Committee of Council, as amended by the Council this day.

The motion was put and carried.

The CHAIRMAN: Then there is the resolution of Mr. Husband, to the effect that the Committee of Council and the solicitor shall bring the laws into accordance with what we have done to-day.

The motion was put and carried.

The Council then adopted a resolution in favour of the Medical Acts Amendment Bill (*see* page 1028).

Dr. De BARTOLOMÉ: I have not asked the Chairman's permission to move the next resolution, because I am afraid that I have so ruffled his feathers that he would not grant permission. I propose the resolution, not perfunctorily, but because I consider that to the Chairman is thoroughly due a vote of thanks for his great display of good temper, consideration, impartiality, and proper management in presiding over this meeting.

The motion was put and unanimously agreed to.

The CHAIRMAN: Gentlemen, I am very much obliged to you.

COLLECTIVE INVESTIGATION COMMITTEE.

AT a General Meeting of the Collective Investigation Committee, held at 161A, Strand, on May 16th, 1883, at 4.0 P.M., there were present: Professor Humphry (in the chair); Dr. Abbott (Tunbridge Wells); Dr. Atkinson (Kingston-on-Thames); Mr. Butlin; Dr Cheadle; Dr. Dyce Duckworth; Mr. George Eastes; Mr. Warrington Haward; Dr. Herringham; Dr. Stephen Mackenzie; Mr. Macnamara Mr. Shirley Murphy; Mr. Charles Palmer (Great Yarmouth); Dr Sharkey; Dr. Veale (Southampton); Dr. Burney Yeo.

Letters, regretting their inability to attend, were received from Dr. Mackenzie Booth (Aberdeen); Dr. Lauder Brunton; Dr. Bury (Manchester); Dr. Handford (Nottingham); Mr. De Vere Hunt (Bolton); Dr. Pearse (Liphook); Dr. Jones-Morris (Portmadoc) Dr. Sheen (Cardiff); Dr. Sieveking; Dr. Uhthoff (Brighton).

Letters, containing suggestions for future investigations, were received from:

Dr. Bury (Manchester), on Whooping-cough, and further history of cases already reported;

Dr. Sheen, on Aids in Case-taking;

Dr. Jones-Morris, on Deviations from Normal Labour;

Mr. De Vere Hunt, on Typhoid Fever, Erysipelas, and the Medicinal Use of Alcohol.

The "Note-taking" Subcommittee presented the following report and recommendations:

1. That Mr. Palmer be requested to prepare an account of his simple method for combining prescribing paper, visiting list, day-book, ledger, and note-book.

2. That Dr. Veale and Dr. Abbott be requested to prepare an article on methods of abbreviation in case-taking.

3. That Dr. Mahomed be requested to prepare some "Directions for Note-taking" for the use of students and others, and to submit them to the Committee.

That these should, if possible, form a series of four articles on case-taking, for insertion in the Collective Investigation Record.

It was proposed by Dr. Stephen Mackenzie, and seconded by Dr. Duckworth, that the following gentlemen be appointed as a subcommittee, to consider in detail the papers proposed by the Note-taking Subcommittee, and to report to the General Collective Investigation Committee: Professor Humphry, Dr. Veale, Mr. Palmer, Dr. Abbott, Mr. Butlin, Dr. Sharkey, Dr. Cavafy, Dr. Francis Warner, and Dr. Mahomed.

A proposal for an inquiry concerning Puerperal Pyrexia, made by Mr. Eastes, was considered; and the Secretary was directed to ask the following gentlemen to act as a subcommittee to prepare a scheme for such an inquiry, and to report to the Committee before June 20th: Dr. Matthews Duncan, Dr. Edis, Mr. John Galton (Norwood), Dr. Braxton Hicks, Dr. Priestley, and Mr. Eastes (Honorary Secretary); with power to add to their number.

A proposal for an inquiry concerning the Treatment of Acute Gout, made by Dr. Duckworth, was discussed; and it was resolved that a subcommittee, consisting of the following gentlemen, be requested to draw up a scheme of inquiry on this subject, and to report

to this Committee before June 20th: Dr. Lauder Brunton, Dr. Cheadle, Dr. Duckworth, and Dr. Mahomed.

The appointment of an executive committee was postponed for further consideration.

ROYAL COLLEGE OF PHYSICIANS.

At the extraordinary meeting of the College on May 17th, the minutes were confirmed. The following were admitted Fellows: James Sawyer, M.D.; G. F. Elliott, M.D.; R. M. Gover, M.D.; J. Dreschfeld, M.D.; F. Warner, M.D.; W. Murrell, M.D.; H. Cook, M.D.; T. C. Allbutt, M.D. Licence to practise physic was granted to Mr. George Arthur Johnson. W. Osler, M.D., was elected a Fellow. The Examiners reported that, of 126 candidates at the first examination for the licence, 87 were approved. The Baly Medal for 1883 was awarded to C. E. Brown-Séquard, M.D. It was resolved that a *conversazione* should be given during the year. The finance report was adopted. The report on protection from fire was referred to the Committee. The Recommendations III and IV of the Council report were considered, and the following were adopted: 1. That the examinations on Hygiene and State Medicine be conducted by special examiners appointed by the College. 2. That registered practitioners be admitted, under conditions, to the examinations on Hygiene and State Medicine, in order to qualify for a distinct diploma or certificate of proficiency on that subject. Dr. Garrod was elected a councillor.

THE MEDICAL ACT AMENDMENT BILL.

At the Special Meeting of the Council of the British Medical Association in Birmingham, on Thursday, the 17th instant, Dr. Waters moved "That the President, the President of the Council, and the General Secretary of the British Medical Association, together with the members of Council, sign the petition to the House of Commons in favour of the Medical Act Amendment Bill, presented by the Lord Privy Seal, as providing for the direct representation of the profession in the Medical Council, and for the compulsory formation of one Conjoint Board of Examination in each division of the United Kingdom of Great Britain and Ireland, for the examination of all candidates for the medical profession." He said that he simply moved the resolution as embodying the two remaining principles with which the Association started fifty years ago, and which now seem likely to be recognised.

Dr. De Bartolomé: I second the motion.

Dr. McVail: Do I understand that this petition commits the Association in any way to the special construction of any single Board? [*No, no.*] With that understanding, I assent to it.

The motion was put and carried; and the petition was signed by all the members of the Council present.

The subcommittee appointed by the Council of the Metropolitan Counties Branch to examine the Medical Act Amendment Bill have decided to apply for the following amendments.

In Clause 9, division 9, the insertion of words to prevent women from occupying seats on the Medical Boards.

In Clause 18, the insertion of a provision that medical schools shall not be compelled to admit women to their medical classes.

In Clause 27, division 4, the absolute prohibition of unregistered persons from practising medicine in any of its branches for gain.

In Clause 34, the alteration of the clause in such a way as to prohibit the issuing of their lowest diplomas without examination by the medical authorities. It is considered that the clause, as it at present stands, favours the creation of "bogus" diplomas, over which the Medical Council would have no control.

In Clause 36, provision for a *compulsory* annual audit by professional accountants.

In Clause 44, the increase of the quorum of the Privy Council from two to five members.

The Committee have applied to Mr. Mundella to receive a deputation from the Branch on the subject of the Bill.

We are asked by the Honorary Secretaries of the Metropolitan Counties Branch to request those gentlemen who have not yet signed and returned the form of petition sent to them, to be good enough to do so without delay.

Dr. Julius Althaus has been elected a Corresponding Fellow of the New York Academy of Medicine.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883:

ELECTION OF MEMBERS.

Meetings of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

Midland Branch.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M. on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. Marshall, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

Cambridge and Huntingdon and South Midland Branches.—*Preliminary Notice.*—A combined meeting of the South Midland and the Cambridge and Huntingdon Branches will be held at Bedford on June 29th. Members of the former Branch, who are desirous of reading papers or showing specimens, are requested to communicate with G. F. Kirby Smith, Honorary Secretary South Midland Branch.—Northampton.

Staffordshire Branch.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st, at 3 P.M. At this meeting, in addition to the ordinary business, a debate will take place upon Acute Pneumonia and its Treatment. Dr. Arlidge (Chairman of the Local Investigation of Diseases Committee) will commence the discussion, and the following gentlemen have promised, if possible, to take part in the debate, viz.: Dr. McAldowie, Dr. G. H. Lowe, Dr. Malet, Dr. Monckton, Dr. Reid, Dr. Totherick, and Dr. J. H. Tylecote.—Vincent Jackson, General Secretary.—Wolverhampton, April 29th, 1883.

East York and North Lincoln Branch.—The annual meeting will be held on Wednesday, May 30th, 1883. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary. E. P. Hardey, Honorary Secretary, 17, Brunswick Terrace.—May 7th, 1883.

Lancashire and Cheshire Branch.—The annual meeting of this Branch will be held at Manchester, on Wednesday, June 13th. The Honorary Secretary will be glad to receive immediate notice of papers or communications.—T. Davidson, Honorary Secretary, 2, Gambier Terrace, Liverpool, May 12th, 1883.

South-Eastern Branch.—A meeting of the Executive Council of this Branch will be held at the Bridge House Hotel, London Bridge, on Tuesday, May 29, at 3.15 P.M.—Charles Parsons, M.D., Honorary Secretary.—St. James's Street, Dover, May 21st, 1883.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital on Thursday, June 14th, at twelve o'clock.—ALEXANDER DEMPSEY, Honorary Secretary.—Clifton Street, Belfast.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH AND GLOUCESTERSHIRE BRANCHES.—A joint meeting of the above Branches will be held, under the presidency of Dr. Strange, at the Worcester Infirmary, on Tuesday, May 29th, at 3 P.M. *Business.*—Dr. Strange, President of the Association, will give a short address on The Duties and Privileges of the Branches. Dr. Currie: Faith-Cures and Modern Miracles in their Medico-psychological Aspect. Mr. Lawson Tait: Ruptured Pyosalpinx, resulting in Acute Peritonitis, successfully treated by Abdominal Section in Five Cases. Dr. Wilson: Bleeding from the Trachea simulating Acute Pulmonary Hæmorrhage. Mr. Miles A. Wood: Some Cases of Diphtheritic Growth on Wounds. Dr. Strange: A Case of Thrombosis from Anæmia. Mr. W. Smith Batten: A Case of Dislocation of the Spine (with specimen). Members can exhibit patients and pathological specimens at the commencement of the meeting. The dinner (five shillings, exclusive of wine) will be at the Star Hotel, at six o'clock.—GEO. W. CROWE, RAYNER W. BATTEN, Honorary Secretaries.

MIDLAND BRANCH MEETING.

A MEETING of this Branch was held at the Johnson Hospital, Spalding, under the presidency of C. Harrison, M.D., on May 17th. The meeting inspected the newly erected hospital.

A discussion was opened on the subject of Diphtheria.

Papers.—The following papers were read and discussed. 1. A Case of Hypertrophy and Prolapsus of the Tongue, by Edwin Morris, M.D. 2. A Few Words on Intermittent Fever, by W. Newman, M.D.

Dinner.—After the meeting, the members dined together at the Red Lion Hotel.

PROCEEDINGS OF COUNCIL.

AT a meeting of the Council held at the Queen's Hotel, Birmingham, on Thursday, May 17th, 1883, called specially to consider the report of the Committee of Council on the representation of the Branches in the Committee of Council, there were present: Mr. C. G. WHEELHOUSE, President of the Council, in the Chair; Dr. W. Strange, *President;* Dr. W. F. Wade, *Treasurer;* Dr. C. Chadwick, *Vice-President;* Mr. W. D. Husband, *Vice-President;* Mr. Alfred Baker, *Vice-President;* Dr. M. M. De Bartolomé, *Vice-President;* Dr. J. T. Arlidge, Mr. F. J. Bailey, Mr. J. W. Baker, Mr. T. H. Bartlet. Mr. J. S. Bartrum, Dr. G. F. Bodington, Dr. L. Borchardt, Mr. A. A. Brown, Dr. J. M. Bryan, Dr. W. Carter, Dr. Sidney Coupland, Dr. J. Ward Cousins, Dr. G. W. Crowe, Dr. A. Davidson, Dr. A. Davies, Mr. H. N. Davies, Dr. E. Dewes, Dr. W. H. FitzPatrick, Dr. B. Foster, Dr. E. Long Fox, Mr. J. S. Gamgee, Dr. W. S. Gervis, Dr. J. E. Glascott, Dr. W. C. Grigg, Dr. J. Hardie, Mr. A. J. Harrison, Dr. S. Holdsworth, Mr. T. V. Jackson, Dr. James Johnston, Mr. Evan Jones, Mr. H. R. Ker, Dr. D. J. Leech, Dr. W. J. Lunn, Mr. C. Macnamara, Dr. D. C. McVail, Mr. F. Manby, Mr. J. Manley, Mr. Frederick Mason, Mr. C. A. Newnham, Mr. R. H. B. Nicholson, Dr. E. Rickards, Mr. J. Reid, Dr. D. Lloyd Roberts, Dr. James Ross, Dr. S. S. Roden, Mr. R. J. H. Scott, Dr. A. Sheen, Dr. R. Shettle, Dr. W. D. Spanton, Dr. S. Spratly, Dr. A. Strange, Mr. J. V. Solomon, Dr. E. M. Skerritt, Mr. T. Sympson, Mr. H. Terry, Dr. J. R. Thomson, Dr. J. Y. Totherick, Mr. H. Vevers, Dr. E. H. Vinen, Mr. R. W. Watkins, Dr. W. Webb, Mr. E. F. Weston, Mr. W. G. Whitehead.

Read circular convening the meeting.

Read letters of apology for non-attendance from Mr. John Bastick, Dr. Embleton, Dr. Stanley Haynes, Dr. Myrtle, Mr. A. Arthur Cooper, Dr. H. Sutherland, Dr. Robert Tiffen, and Dr. John Woodman.

Moved by Dr. B. Foster, seconded by Dr. Bodington, and

Resolved: That the report of the Committee of Council be received and entered on the minutes.

Moved by Dr. Strange, seconded by Mr. Hugh Ker,

That the report of the Committee of Council on the representation of the Branches in the Committee of Council be adopted.

Whereupon an amendment was moved by Mr. Vincent Jackson, seconded by Dr. FitzPatrick,

That the first part of the report be now considered.

The amendment having been put from the chair, the same was declared to be carried.

Moved by Mr. Husband, seconded by Mr. Nicholson, and

Resolved: That Part I be adopted, with the exclusion from the words "by this scale" to the end of Part I on page 6.

Moved by Dr. Strange, seconded by Mr. Sympson,

That the second part of the report be adopted.

Whereupon an amendment was moved by Dr. Borchardt, seconded by Dr. Lloyd Roberts,

That a subcommittee of the Council be appointed to consider in which way the first part of the report can be carried out.

The amendment having been put from the chair, the same was declared to be lost.

Whereupon a second amendment was moved by Dr. Bodington, seconded by Mr. Vincent Jackson,

That the report be considered paragraph by paragraph.

The amendment having been put from the chair, the same was declared to be carried.

Resolved: That paragraph 4, page 8, be adopted.

Moved by Dr. Carter, seconded by Dr. FitzPatrick,

That the return first class railway fares of every member to meetings of the executive body be paid by the Association.

Whereupon an amendment was moved by Dr. Grigg, seconded by Dr. J. R. Thomson,

That the railway fares of representatives of Branches to the quarterly meetings of the Committee of Council be supplemented by grants from the funds of the Association.

The amendment having been put from the chair, the same was declared to be lost.

The original motion was then put, and declared to be carried.

Moved by Dr. FitzPatrick, seconded by Dr. Bodington, and

Resolved: That the President, the President-elect, the President of Council, the Treasurer, and the Vice-Presidents, be *ex officio* members of the executive body.

Moved by Mr. Bartrum, seconded by Dr. Ward Cousins, and

Resolved: That no member, unless resident in the area of a Branch, can represent such Branch.

Moved by Dr. Bodington, seconded by Mr. Hugh Ker, and

Resolved: That the Committee of Council be requested to give due notice, before the annual meeting, of such alterations in the laws and by-laws of the Association as may be necessary for carrying into effect the change in the constitution of the government of the Association embodied in the report of the subcommittee on the representation of Branches in the Committee of Council, as amended by the Council this day.

Moved by Mr. Husband, seconded by Dr. De Bartolomé, and

Resolved: That, as the Council as proposed to be elected will in future be the executive or governing body, and the Committee of Council, thus being no longer required, will cease to exist, the required alterations in the laws and by-laws be made by the Committee of Council, with the assistance of the Solicitor of the Association.

REPORT OF SUBCOMMITTEE APPOINTED BY THE COMMITTEE OF COUNCIL ON THE REPRESENTATION OF BRANCHES IN COMMITTEE OF COUNCIL.

AT the annual meeting of the Council held at Worcester in August, 1882, the questions of the constitution and government of the Association were raised by the following motion, of which due notice had been given, viz.

Moved by Mr. Hugh Ker, seconded by Dr. Ward Cousins.

"That the Committee of Council be requested to consider in which way direct representation of the Branches can best be secured."

From this point of view the matter was discussed by the Council, and the above resolution was carried.

In response to this resolution, and after due consideration, at a meeting of the Committee of Council on October 18th, 1882, it was determined to refer the matter to a subcommittee, with instruction to report to the Committee of Council at its next meeting; and a subcommittee was appointed consisting of the President of Council, the President, the Treasurer, Dr. Alfred Carpenter, Dr. Ward Cousins, Dr. Alexander Davidson, Dr. Grigg, Dr. Holman, Mr. Arthur Jackson, Dr. Parsons, and Dr. A. P. Stewart.

On November 19th, 1882, the subcommittee held its first meeting, and, after carefully considering the subject referred to it, came to the conclusion that its first duty was to ascertain the mind of the Association generally concerning the matter in question. With this object in view, it was determined to issue, through the President of Council, a series of questions, together with a circular letter, addressed to the president and secretary of every home Branch of the

Association, asking for information on the subject. The following is a copy:

Hillary Place, Leeds, November, 1882.

Dear Sir,—For some time past a feeling appears to have been growing up in the Association, and is said, by some, to be already of widely spread extent, that, whatever may have been the case in former years, the Branches of the Association are not now properly and adequately represented on the Committee of Council. At the recent annual meeting at Worcester, this feeling found expression not only at the general meetings, but also at the meeting of the Council, and that body, the Council, passed a vote requesting the Committee of Council to consider the question: and if, after ascertaining the mind of the Branches on the subject, it should be found that any grievance really existed, it would consider and report upon the way in which the evil could best be remedied. The existing by-law of the Association on the subject reads thus.

By-law 25. "The Committee of Council shall consist of the President, the President-elect, the President of the Council, the Vice-Presidents of the Association, the Treasurer, and of the Honorary Secretary for the time being of each Branch, who shall be, *ex officio*, members of the Committee of Council, and also of twenty members of the Council, to be elected by the Council, as hereafter described."

In 1879, in consequence, probably, of the rapidly increasing growth of the Association, a feeling, similar to that now supposed to exist, having made itself heard, the question of the representation of the Branches on the Committee of Council was considered, and the following resolution was passed at the meeting of October 15th, 1879.

That every Branch be informed that it is competent to it to appoint more than one secretary, and to prescribe the duties of each so that one may be required to discharge no other duty than that of representing the Branch on the Committee of Council.

It was argued that the honorary secretaries were men who received their appointments because they had sufficient leisure at their disposal to give to the local duties of their office, and had good personal knowledge of all the members of their Branches, but who had often neither the means nor the time at their disposal to act as the representatives of their respective Branches at the meetings of the Committee of Council, and were so placed at a disadvantage. And yet it was neither ignored nor forgotten that much of the real success of the Association was due to the exertions of the honorary secretaries, a body of men who have never ceased to use their utmost endeavours to advance the interests of the Association, and who have never received any adequate reward for their labours, and it was felt that to deprive them, when they wished to use it, of the right to attend the meetings of the Committee of Council, would be not only a hardship, but a decided injustice. But few Branches have availed themselves of this power, and yet the feeling of insufficient representation is not allayed, and, consequently, the Committee of Council has appointed a subcommittee to reconsider the entire subject, and to report to it as speedily as possible whether any, and what, further steps are advisable. In order that a definite conclusion may be arrived at, the subcommittee so appointed desires to ascertain the opinion of your Branch, and requests that you will kindly consider this matter as an urgent and an important one, and that you will send in your reply, if possible, by December 31st next.—Believe me, dear sir, yours very truly, C. G. WHEELHOUSE, President of the Council and Chairman of the Subcommittee.

QUESTIONS.—1. Is your Branch satisfied with its present method of representation in the Committee of Council by honorary secretary *ex officio?* 2. Has your Branch, having the power to elect a special honorary secretary to represent it in the Committee of Council, availed itself of that power? 3. What is the total number of members of your Branch, and what is the income of your Branch from Branch subscriptions? 4. Are the travelling expenses of your honorary secretary to the meetings of the Committee of Council defrayed by the Branch? 5. Is there any feeling in your Branch of inadequate representation? 6. Is the attendance of your honorary secretary at the meetings of the Committee of Council influenced by the payment, or non-payment, of his travelling expenses? 7. Have you any other suggestions to offer to the subcommittee with regard to the representation of your Branch in the Committee of Council?

This circular letter was also published simultaneously in the JOURNAL, and a short paragraph was appended directing the attention of the members of the Association generally to the subject (see JOURNAL, December 2nd, 1882, page 1111), and requesting those who were unable to attend any meeting called to consider the question, to communicate their views to the President or Secretary of their Branch. The following is a copy.

THE REPRESENTATION OF BRANCHES ON THE COMMITTEE OF COUNCIL.—It will be seen by reference to our "Association Intelligence," that the Committee of Council has lost no time in grappling with the question referred to it at the annual meeting at Worcester, as to the alleged deficiency of representation of the Branches on the Committee of Council, and we are asked to call attention to the steps which have been taken. At its first meeting subsequent to the annual gathering, the Committee of Council, recognising the importance of this question, appointed a subcommittee to investigate it, and to report, at as early a date as possible, the result of its deliberations. The subcommittee had its first meeting on Tuesday, November 21st, and, after very careful deliberation, starting from the desire to arrive at the real wish of the Association at large, determined, in the first instance, to issue a "circular letter" from the President of Council to the president and secretary of every Branch, and, through them, to the Branches, stating what the grievance is said to be, and seeking their assistance to probe it thoroughly. To effect this end, the subcommittee appends to the letter a series of "questions" calculated, it believes, to elicit the wishes of each Branch on the subject. The letter and the questions appended we publish today; and we hope that, after perusing it, any member who takes an interest in the inquiry will, without delay, place his views before the president or secretary of his Branch, and thus assist them in their official replies to lay those views before the subcommittee. The subcommittee asks that the replies may be handed in at as early a date as is possible, in order that time may be given for their classification and consideration, and for the formulation of a definite scheme of reform to be submitted to the deliberations of the Committee of Council at its meeting in April. Time will thus be given for the Committee of Council duly to consider any scheme so propounded, and to put it into a complete shape for presentation to the annual meeting at Liverpool. It is greatly to be desired that all members interested in the subject will give such aid as is in their power to the subcommittee in its endeavours.

It was hoped that every member would thus have an opportunity to make himself directly heard. It will be observed that, in this circular letter, information is sought upon several topics which were not, strictly speaking, included in the reference made by the Committee of Council to the subcommittee, viz., "To consider in what way direct representation of the Branches in the Committee of Council can best be secured."

It was apparent that possibly the outcome of the inquiry might lead to some alteration in the constitution of the Committee of Council, consequent on the introduction of new elements; and involve, perhaps, a reconstruction of the entire executive machinery of the Association itself. In the preparation of a comprehensive scheme of this nature, it was felt that a broad view, not only of our present wants, but also of our possible future needs, would have to be taken; and that any information which the subcommittee could accumulate, bearing on these points, would certainly prove most useful and important in any discussion of the subject which might hereafter ensue.

This report, therefore, consists of two parts: 1st. The subject specifically referred to the subcommittee; and 2nd. Pertinent—if somewhat extraneous—matters. This leaves it open to the Committee of Council to deal with the two parts separately if it thinks fit to do so.

By January 16th, 1883, replies had been received from a large majority of the Branches, and on that day the subcommittee held its second meeting, and proceeded not only to consider the replies, but also to formulate the principles on which this report should be based.

It seemed clear to the subcommittee that, in a majority of the Branches of the Association, no dissatisfaction with its existing constitution had been felt; but that in some—chiefly the larger Branches—a decided opinion in favour of some change was expressed.

The results obtained by the replies to the circular letter are difficult to summarise.

If the answers to question No. 1—"Is your Branch satisfied with its present method of representation in the Committee of Council by honorary secretary *ex officio?*"—be taken as the basis of calculation, it will appear that twenty Branches are content with the *status in quo*, and that these Branches comprise, in round numbers, about 4,064 members; that seven Branches are in favour of direct and proportional representation; and that these Branches comprise, in round numbers, about 1,671 members. Five home Branches, numbering 306 members, have made no reply; and five colonial Branches have not been consulted.

But if the replies to question No. 5—"Is there any feeling in your Branch of inadequate representation?"—be taken as the basis, the result comes out differently thus:

	No. of Members.
Eleven Branches say "Yes"	3,047
Fifteen Branches say "No"	2,504
Six Branches send no reply	490
Unattached members number	2,889
Foreign Branches	486
Total	9,416

The replies to the questions were given in some Branches by the president or secretary alone; in some Branches by the Council of the Branch, called specially to consider them; and in a few cases by the Branches themselves in general meeting. Your subcommittee is unable to say whether, in any instance, other possible changes in the constitution of the Committee of Council were considered, or whether only the specific change which has been placed under consideration was discussed.

There is also, besides the members of the Branches, a large number (about 2,889) of members of the Association who are not Branch members, but who have a voice in the general meetings, and from whose opinions the subcommittee has still no knowledge, as in no instance has any unattached member communicated his views to the subcommittee.

Should the principle of direct representation be adopted by the Association, the following is the plan which your subcommittee would suggest:

1. That there be one representative for every Branch.
2. That such representatives be elected "directly" by the Branches.
3. That they be elected annually.
4. That the larger Branches should have the right to elect out of their members additional representatives on the following scale:

that in Branches numbering more than 200 members, there shall be one additional representative for every 200 members.

Your subcommittee desires, in the second place, to refer to certain considerations, some of which, though incidental to the matter specifically referred to them, are not, or may not be, considered to be strictly comprised within the reference.

1. A record of attendance shall be kept and published annually in the JOURNAL.

2. It appears to your subcommittee, from the replies received to the questions published with the circular letter, that many of those who have now the right to attend the meetings of the Committee of Council habitually fail to attend. This it conceives to arise, in the main, from a combination of causes, amongst which are—(*a*) the distance to be travelled; (*b*) the time to be devoted to the business; (*c*) the expense to be incurred. And it is of opinion that, under the proposed constitution, there will still be a large proportion of members who would remain habitual non-attendants, especially as regards the more distant Branches.

In view of this difficulty, your subcommittee discussed very fully the advisability of allowing such Branches to elect, as representatives, members of the Association outside their own limits. By a large majority, it was held that such provision would soon result in an overwhelming balance of power being given to members of Branches in or near the metropolis, and it was felt that it would be impossible to define strictly what was, and what was not, a "distant Branch," and therefore that this privilege, if conceded to one Branch, must be conceded alike to all.

3. It appears to your subcommittee that, if the plan of proportional representation should be adopted, it would be undesirable to maintain the present dual system of government in the Association. The election of representatives on the executive would cease; the executive would cease to be, in any sense, a "Committee of Council," which body would no longer have any share whatever in appointing it; and the annual report would be made direct to the Association by the executive; the choice of place of annual meeting might also be properly left entirely to the "executive."

4. The Council, and therefore the Committee of Council, would cease to exist, and would be replaced by the new governing or executive body.

5. On full consideration, it was determined to recommend that the payment of travelling expenses should be left to the Branches.

6. Your subcommittee has reason to think that the Association would not desire to remove the Vice-Presidents from the executive. Their removal was not requested by any Branch; was earnestly protested against by one; and their retention was recommended by another, and that the largest Branch in the Association; but it suggests that the right of attendance should lapse in the case of any Vice-President who should fail to attend a meeting for two consecutive years. It was of opinion, however, that it might be well to reserve to the Association the power to restore this forfeited right to any Vice-President who should at any time express a desire to resume active co-operation in the work of the Association.

C. G. WHEELHOUSE, *President of the Council* (*Chairman*)
London, March 7th, 1883.

APPENDIX.

The following answers to the questions issued by the subcommittee have been received from the Branches. † denotes President; * Honorary Secretary.

Bath and Bristol Branch.—1. Yes. 2. No. 3. Bath, 72, £14 8s.—Bristol, 144, £28 16s. 4. Yes. 5. No. 6. A resolution was proposed and carried, "That the travelling expenses of the secretaries of the various Branches should be borne by the parent Association. Doubtless, payment of expenses conduces to regularity of attendance. The following resolution was passed at the meeting of December 7th: "That in the opinion of this Branch, the travelling expenses of the honorary secretaries of the Branches in attending the meetings of the Committee of Council should be borne by the parent Association. 7. No. *Richard J. I. Scott. *E. Markam Skerritt.

Birmingham and Midland Counties Branch.—1. No. 2. No. 3. 342. The income of the Branch from Branch and sectional subscriptions is about £55 per annum. 4. Yes. 5. Yes. 6. The expenses are paid. 7. The two following resolutions were passed at a meeting of the Branch at which the circular was considered: 1. "That in the opinion of this Branch, no change in the laws which regulate the election of members of the Committee of Council, will be satisfactory, which does not provide for the election by the Branches of one or more representatives from each Branch, in proportion to the number of its members." 2. "That this Branch is of opinion that the principle of direct representation which the British Medical Association insists upon in the constitution of the General Medical Council under a reformed Medical Act, should be applied to the Government of the British Medical Association." *Edwin Rickards. *A. Carter

Border Counties Branch.—1. Have no means of judging. 2. No. 3. 100, £12 10s. 100, £12. 4. Was once done I believe. I believe this was done on one occasion. 5. Cannot say. When the matter was brought forward on a former occasion—1879—there was a feeling that the Branch should be more frequently represented in the Committee of Council. The question of appointing a special secretary has never been before the Branch; why, I do not know. One suggestion as to this way of meeting what is, I believe, really felt to be a weak point; it seems to me that members who have the time and means to attend the Committee of Council probably do not care to appear as *Secretaries* to Branches. I think we could get members who would represent us with fair regularity whom we could not ask to appear under this denomination. 6. Should think not: rather the loss of time and length of journey involved. 7. That either of the honorary local secretaries may represent the Branch at meetings of Committee of Council, was that Committee might alternate its place of meeting with other large centres. †Alexander A. H. Knight. Roderic Maclaren, Honorary Secretary, *pro tem.*

Cambridge and Huntingdon Branch.—1. No opinion has been expressed. Yes. 2. No. 3. 90, £4 10s. or under, per annum. 4. No. 5. None has been expressed. No. 6. The honorary secretary has usually attended the meetings when he has been in London on other business, and has occasionally attended specially. Unavoidable engagements have prevented his attendance sometimes, but the non-payment of travelling expenses has scarcely been a consideration. No. 7. See resolutions on addenda. †William Groom. *Bushell Anningson.

Resolutions passed at a Special Meeting of the Cambridge and Huntingaon Branch of the British Medical Association, January 5th, 1883.—1. The Branch is well satisfied with the present constitution of the Committee of Council under By-law 25. The Branch doubts whether any addition to the number of members would increase the efficiency of the Committee of Council as a working body. 2. If there be a wide-spread feeling of inadequate representation of Branches, as suggested in the circular addressed to the secretary, it may be desirable to introduce some system of proportionate representation. 3. The Branch would much regret the exclusion of Vice-Presidents, inasmuch as, having been elected Presidents of the Association in their respective districts, they are essentially representative men, and from their experience and the part they have taken in promoting the interests of the Association, they are particularly well qualified to be *ex officio* members of the Committee of Council. 4. The secretaries also have been elected to their several offices, and the knowledge possessed by them of the affairs of the Branches, as well as their frequent communications with the members, qualifies them in an especial manner for the Committee of Council.

Dublin Branch.—1. Yes. 2. No. 3. 172 members, about £40 per annum. 4. Yes. 5. No. 6. It is the opinion of the Branch Council that the travelling expenses of every Branch honorary secretary should be paid. 7. No. *G. F. Duffey, M.D.

East Anglian Branch.—1. There has been no agitation. 2. Yes. 3. About 180, about £20. 4. The honorary secretary when attending has had his railway fare paid. 6. Yes; he would not attend as an *ex officio* member unless his travelling expenses were paid. 7. I am of opinion that the Council of the Association should be abolished. There should be direct representation of the Branch in the Committee of Council. A Branch of 100 members and upwards should send a representative. Smaller Branches might combine to elect. There should be direct representation. The Council might be abolished. Every Branch of upwards of 100 members should elect a representative. Small Branches might combine for election. *W. A. Ellison—*Michael Beverley.

East York and North Lincoln Branch.—1. Yes. 2. Yes. 3. 81 members. Average income from Branch subscriptions for last six years, £9 16s. 5d.; ditto expenditure, £10 9s. 5d. 4. No. 5. There is not. 6. The honorary secretary does not attend the meeting of the Committee of Council for the reason indicated in the question. The Branch elected the present special honorary secretary to represent it in the Committee of Council because he had exceptional facilities for getting to London, and had offered. 7. The Branch suggest that the person who represents it in the Committee of Council, whether he be the honorary secretary or not, should be called the representative of the Branch. There was also a suggestion that the President of the Branch be, *ex officio*, a member of the Committee of Council. This suggestion was not carried at the meeting held to consider this circular. *E. P. Hardey.

Edinburgh Branch.—1. I have heard nothing to the contrary. So far as I am aware it is. 2. No. 3. Between 60 and 70—£4 to £5. 4. No. 5. Not that I am aware of. I am not aware that there is. 6. I do not think so. No. 7. I consider that the Edinburgh Branch should have a representative in the Committee of Council. No. †Thomas Annandale. *C. E. Underhill.

Glasgow and West of Scotland Branch.—1. Never been referred to. It has considered the question 2. No. No; the senior honorary secretary is *ex officio* a member. 3. (??) 133—£16 13s. 6d. 4. No. 5. Never been referred to. No feeling on the subject has been expressed. 6. I do not know; but certainly the Branch will never pay his expenses. The cost of a journey to London debars the honorary secretary from attending. 7. I think the chairman of the Branch, besides the secretary, should be a member of the Committee of Council. It seems reasonable that the travelling (but not hotel) expenses of the representatives of the Branches should be paid by the Association. †G. Buchanan. *Joseph Coates and James Christie.

Lancashire and Cheshire Branch.—1. So far as it goes, I believe so. 2. No; the secretary has attended the meetings pretty regularly. 3. Over 800. Last year, £91 2s. 6d. 4. Yes, the railway fare. 5. Yes, a strong one. 6. No doubt. 7. Resolutions passed by the Council of the Branch on this subject have been forwarded to the President, copies of which are as follows, viz: "That no change in the mode of election will be acceptable which does not include direct representation from each Branch in proportion to its numbers." "That the travelling expenses of the representative members of the Branches be defrayed out of the funds of the Association." *A. Davidson, M.D.

Metropolitan Counties Branch.—1. See No. 7. 2. No. 3. 906. Income about £113. 4. No; but when the Committee of Council met in Birmingham the Branch paid the travelling expenses of the honorary secretary from the time when it had sufficient funds. 5. See No. 7. 6. No. 7. See recommendations on Addenda. †Thomas Bridgwater.

Recommendations approved by a Special General Meeting, held on Wednesday, December 20th 1882.—I. *Recommendations as to the Council:* 1. That every Branch President for the time being be, *ex officio*, one of the representative members of the Council. 2. That not less than fourteen days prior to the date of nomination of the members on the Council of the Association, the honorary secretary shall write to each proposed representative of the Branch on the Council, inquiring whether he will be able to attend the forthcoming meeting or not.—II. *Recommendations as to the Committee of Council:* 1. That the present system of placing past Presidents and Treasurers of the Association, and Presidents of

Council, on the Committee of Council as *ex officio* members remain unaltered. 2. That Branches with not more than two hundred members be represented, as at present, on the Committee of Council by the honorary secretary, or such person as they may specially appoint to represent them, who should be designated the "*ex officio* representative." 3. That, in addition to this, power should be given to every Branch with over two hundred members to nominate to the General Council a second representative; over four hundred, a third; over six hundred, a fourth; and so on in proportion; and that such nomination of members take the place of the existing nomination of twenty members by the Committee of Council. 4. That these representatives should not be obliged to retire until they have completed their second year of office. 5. That in cases where the payment of the honorary secretaries is desirable, each Branch should, as far as possible, defray the travelling expenses of its representative; but that in any particular case in which a Branch desires to pay the expenses of its representative, but does not possess adequate means, the Committee of Council should have power to grant a subsidy towards the payment of such expenses.

THOMAS BRIDGWATER, President, Metropolitan Counties' Branch.

Harrow, January 1st, 1883.

Midland Branch.—1. I have heard nothing to the contrary. I think not. 2. No; the matter has not come forward. No. 3. About £20. Over 200; £25. 4. No. 5. I have heard of none. I think so. 6. That is unquestionably the reason for not doing so. No. 7. That the travelling expenses of the representative members of the Branches be defrayed out of the funds of the Association. No. *L. W. Marshall. †C. Harrison.

North of England Branch.—1. Yes. 2. No. 3. 239; income (1881) £43 16s. 4. Yes 5. No. 6. No. 7. Quite satisfied. †G. H. Philipson, M.B., Chairman of meeting when this letter was considered. *David Drummond.

North of Ireland Branch.—1. Hitherto no complaints have been made on this matter. 2. No. 3. This year's membership numbers about 140, and the income from these in subscriptions was £17 10s. 4. No. 5. No. 6. The secretary has never applied for travelling expenses. The income of our Branch would not permit of the payment of the travelling expenses of its representative. 7. *Alexander Dempsey.

Northern Counties of Scotland Branch.—1. No. 2. No. 3. 36; about £16. 4. No; so far as I know, he has never attended any meeting. 5. I believe there is, but the subject has never come up for discussion at any of our meetings. 6. Perhaps the absence of our secretary from the meetings is due, not so much to the non-payment of expenses, as to the fact that the distance being so great, he cannot be supposed to spare the necessary time. 7. I would suggest that distant Branches like ours should have the power to elect any member of the Medical Association as their representative. †G. Forbes.

Reading Branch.—1. Consider representation might be improved; *vide* question 7. 2. No; but has declined to do so. 3. 44; £5 10s. 4. Yes. 5. Yes; *vide* question 7. 6. *Vide* question 4. 7. Yes; that the president for the year be *ex officio* a member of the Committee of Council, and that the travelling expenses of both representatives be paid by the parent Association. *Richard C. Shettle.

Shropshire and Mid-Wales Branch.—1. No; it has elected a special honorary secretary for that purpose. 2. Yes. 3. 86; the income for Branch subscriptions is £21 10s. 4. No. 5. Not that I have heard. 6. I should say that hitherto it has been influenced by the non-payment of his travelling expenses. 7. No. †J. R. Humphreys.

Southern Branch.—1. I think they have great satisfaction in the present honorary secretary, but from circumstances he is rarely able to be present. This Branch is satisfied with the representation in the Committee of Council. 2 No. 3. About 180; 260. 4. No. Yes. 5. I think every Branch should be better represented than now. There is some feeling of inadequate representation, and that representation on a numerical basis ought to be adopted. 6. I cannot say whether it is so or not, but I think if the Branch had the power, they would nominate some member whose time and means would enable him to attend the Council meetings frequently. The honorary secretary is not influenced by the payment of his expenses. 7. My suggestion is that each Branch should elect one member of their Branch for this special duty, who should represent the Branch at the meetings of Council in case the honorary secretary could not. Although satisfied with the present representation, a fear is entertained that it may lead to the disunion of Branches for the purpose of increasing representation by secretaries. *Ernest Elliott, M.D. *W. C. Maclean, M.D.

South Eastern Branch.—1. Yes. 2. No. 3. 445; £89. 4. Yes. 5. None whatever, as regards the persons or number of our representatives; but they might be better distributed geographically through the Branch. 6. Naturally it is and must be. Payment ought to be made either by the Branch or Association, or in part by each. 7. The attendance of honorary secretaries, as of other members, should be counted, and in case an honorary secretary has not attended at one meeting of the Committee of Council during the year, that he be ineligible to be re-elected for the space of twelve months, and that the Branch he represents be required to elect a different representative for the ensuing year. *Charles Parsons, M.D.

South Midland Branch.—1. Yes.—Yes, if the honorary secretary attends the meetings of Committee of Council regularly. 2. Yes. 3. 105. The treasurer will inform you.—105. About £11 6s. (£13). 4. Yes; if required. 5. No. 6. No. 7. No.—No; but a very strong feeling is expressed in the Branch, especially by the officers thereof, that the JOURNAL does not sufficiently represent the Branches, by declining to insert addresses and papers read at the annual and other meetings of the Branches. The following resolution has been forwarded to me: "That reports of meetings or papers read should always be inserted in the BRITISH MEDICAL JOURNAL, when forwarded by the Honorary Secretary and countersigned by the Branch representative of the Committee of Council. One officer is of opinion that births, deaths, and marriages, should be inserted in the JOURNAL free of charge."—*G. F. Kirby-Smith.—†C. J. Evans.

South Wales and Monmouthshire Branch.—1. No. 2. Yes.—We have two Honorary Secretaries, and it has always been the practice for the senior to attend as our *ex officio* member of the Committee of Council. 3. 160—about £24.—165—£24 15s. 4. Yes. 5. Yes. 6. Yes. 7. The members of this Branch are of opinion that there should be a more general representation of Branches on the Committee of Council, and a different mode of electing them than exists at present.—We think our Branch should have another representative. But we feel strongly that the whole question of the constitution and mode of election of the Committee of Council requires consideration, and I have appended our recommendations on the other side. See Addenda.—†Evan Jones.—*A. Sheen.

As to the Council of the Association: We are of opinion that the business arrangements of the Association would be facilitated and simplified, and its interests equally as well cared for, if the Council were abolished. *As to the Committee of Council:* We recommend that this body should be called the "Executive Council," and should consist of—The President of the Association; the President-Elect; the Treasurer; such Vice-Presidents as consent in writing to act; the Honorary Secretary of each Branch having seventy-five members and upwards (who shall be *ex officio* members); and other elected members, to be elected by the various Branches, in the following proportion, according to their numerical strength, that is to say: Branches of 150 to 300 members, one representative; Branches of 300 to 600 members, two representatives; Branches of 600 members and upwards, three representatives. Where the members of Branches do not amount to seventy-five, it shall be competent to two or more of such Branches to coalesce so as to bring up the number to seventy-five, and entitle them to send one of their honorary secretaries as their *ex officio* representative on the Executive Council. We recommend, further, that the travelling expenses of honorary secretaries who attend the Executive Council, should be paid out of the funds of the Association. In forwarding these recommendations, I think it well to make a few explanatory remarks. As the duties of the Council are practically performed by the Executive Council, we think it would be a saving of time and labour if the latter body were reported direct to the Association, and, in reality, did all the present work of the Council. (The Council only meets at the annual gathering, and, from my experience, is rather obstructive than otherwise.) Seventy-five members is mentioned as the lowest limit for *ex officio* representation by the honorary secretaries. The number is unimportant; it is the principle we contend for, viz., that there should be a limit in this direction. The argument used was, that it was unfair that two Branches, having together, say, 50 members, should have two representatives, whilst one Branch having 190 should only have the same number. Nevertheless, I think myself, that each Branch should be represented by its honorary secretary. Again, the limiting number as additional representatives are not of so much importance as the principle involved, viz., that there shall be some sort of direct representation, according to the numerical strength of the Branches, and that these representatives shall be elected by the Branches. (Some of us thought we should have the power to elect any member of the Association, not necessarily a member of the Branch.) (I think myself, that the travelling expenses of all members who attend the Executive Council should be paid out of the funds of the Association.) By-law 9 should read:—"The President of the Executive Council shall be elected by the Executive Council. He shall hold office for three years," etc.—A. SHEEN, Honorary Corresponding Secretary.

South-Western Branch.—1. The question has not been raised in the Branch.—No meeting of the Branch has been held since the circular was received, and as the circular must be returned before December 31st, and our next meeting will not be held until the second week in January, I can only give the result of conversation with individual members, and should say No.—I believe so. 2. No; it is doubtful if anyone else would be willing to undertake the duty of attending meetings in London at his own expense.—No; perfectly satisfied with our secretary if only one representative is permitted.—I believe so. 3. 187—about.—Income should be about £23, but there are a few defaulters.—About 180, 2s. 6d. each, £22 10s.—Between 180-190 4. Yes, if funds permit, but without an increase of subscription the funds would be quite insufficient, as Exeter is at such a considerable distance from London.—Dr. Rees Philipps has replied to this question. 5. No.—Yes; our only genuine band with the Association is the weekly JOURNAL. We are isolated, and the quarterly meetings begun two years ago are as yet puny and feeble.—Yes. 6. Not in my case, but the second Wednesday in each month is committee-day of the asylum I superintend. If the Committee of Council was on any other day I would attend regularly.—No. 7. If the Association would pay railway fare, our Branch representative would no doubt be able to attend, but the feeling is that it is too much to expect a member to give two days up and pay railway fare as well.—The Committee of Council is even now a huge body to act in the capacity of the Executive Committee. For my own part, I have most faith in committees of three workers, with the rest honorary members who are never expected to attend; but if it could be enlarged by the addition of the President's name for the time being of each Branch, few might take the trouble to attend, but in occasional years it would give an energetic President many opportunities for benefiting the Branch and the Association.—*S. Rees Philipps, M.D.—†R. S. Hudson.—†Joseph Harper.

Staffordshire Branch.—1. Yes. 2. No. 3. 131. Each member pays 2s. 6d., and last year 111 subscriptions were received—£13 17s. 6d. 4. No. 5. No. 6. No. 7. It was unanimously considered that, when the general secretary of the Branch attends the meetings of the Committee of Council, his travelling expenses (railway fare) ought to be paid by the parent Association.—†J. Y. Totherick.

Thames Valley Branch.—1. Not altogether. 2. No; not until now, but they have at their last meeting elected a special representative. 3. 58—about £10 o £11 *per annum*. 4. No. 5. Yes. 6. No. 7. Having (now that the question ha been raised) determined to elect a special representative in addition to th honorary secretary, the Branch will now rest satisfied. See Addenda.—*E. I Fenn.

Richmond, Surrey, December 26th, 1882.

Dear Sir,—I have already, on behalf of the above-named Branch, returne you a reply to the various questions referred to on the subject of the represent tion of the Branches on the Committee of Council, and I therein stated th my Branch would be satisfied by the appointment of an extra honorary secr tary, whose duties should be exclusively to represent the Branch on the Cor mittee of Council, the right of the local honorary secretary of the Branch st to attend *ex officio* the meeting of the Committee being maintained intact. find, however, from a letter received from the General Secretary, dated D cember 18th, 1882, that, in making this appointment, the Branch has misund stood the resolution of the Committee of Council, passed October 15th, 1879, he now informs me that the local honorary secretary of the Branch, in con quence of his appointment having been made, ceases to be a member of t Committee of Council. As this is, I know, entirely opposed to the spirit a wording of the resolution passed by the Branch at their last meeting, when unanimous opinion was expressed that the privilege of the local honor secretary to attend the meetings of the Committee should remain as heretofo I feel it is my duty to forward to you this explanation, which must be read connection with the replies already sent to your circular.—Believe me, dear yours very truly,

EDWARD L. FENN, Honorary Secretary

C. G. Wheelhouse, Esq., President of the Council and Chairman of the Subcommittee.

Copy of Resolution, passed by Thames Valley Branch, at a Meeting held at Kingston-on-Thames, December 14th, 1882.

Resolved: That, in accordance with a resolution of the Committee of Council, passed October 5th, 1879, Dr. J. Langdon Down be appointed an extra honorary secretary to represent the Branch upon the Committee of Council, in conjunction with the honorary secretary, who would still retain his position as an *ex officio* representative.

West Somerset Branch.—1. Yes. 2. No: the subject was considered at a general meeting on April 3rd, 1879, when it was resolved: "Not to move for altering existing arrangements." 3. At this time 57. The Branch subscription is 1s. 6d. *per annum;* the income is, therefore, £4 5s. 6d. 4. No: but if the Branch requested its honorary secretary to attend for any special purpose, it would doubtless defray his expenses. This was done with a former honorary secretary. 6. I was going to say no, positively; but I may qualify this direct negative by adding that, although the great hindrances to my attendance have been sometimes other engagements, often the state of my health, and always the great sacrifice of time (more than a day and night), yet I think that if the inducement had always been present that my travelling expenses would be paid, I might sometimes have gone to meetings from which I have habitually stayed away. 7. No. See Addenda.—*W. M. Kelly, M.D.

Taunton, December 16th, 1882.

Dear Sir,—With a view to my sending you, as fully as possible, answers to the questions opposite, I arranged with the President of our Branch that a special general meeting should be called, to be held on Thursday last, the 14th instant; and the meeting has been held accordingly. In the notice convening the meeting, which was sent to each member, I requested, should it not be convenient for him to attend, that he would send me a written reply to Questions 1, 5, and 7, copies of which I appended to my circular; but altering the initial words so as to make the questions apply personally; *i.e.*, 1. "Are you satisfied," etc. 5. "Are you aware if any feeling exists," etc. 7. "Have you any suggestion," etc. To this circular, I received answers from twenty-five members, who replied in monosyllables "yes" and "no," or in words equivalent thereto, as follows: to question 1, "Yes;" to question 5, "No;" to question 7, "No." At the meeting held on the 14th, there were only six members present. Your letter and the questions were read and freely discussed. Three of those present expressed their dissatisfaction to the effect that the general practitioner is practically not sufficiently represented on the Committee of Council. Resolutions were passed as follows: 1. That, in the opinion of this meeting, the existing by-law of the Association, No. 25, and the resolution passed by the Committee of Council on October 15th, 1879, defining the powers given by that by-law to Branches for appointing an *ex officio* representative are sufficient, and that no alteration in the laws of the Association on this subject is required. 2. That, under the circumstances of Dr. Kelly having intimated to this meeting that he is unable, from the state of his health, to attend the meetings of the Committee of Council, and that he should be glad to be relieved of that representative office, in the opinion of this meeting, the power to elect a special honorary secretary to represent this Branch in the Committee of Council should be considered, and, if thought proper, be acted upon by the next general meeting of the Branch.—I am, dear sir, yours very truly, W. M. KELLY.

To C. G. Wheelhouse, Esq.

Worcestershire and Herefordshire Branch.—1. Yes.—No (see answer to Question 7). 2. Yes; once Dr. Strange was elected special honorary secretary to arrange for the meeting in Worcester this year.—Yes, once. 3. 80—£16. 4. Yes. 5. Not that I am aware of.—Yes (see answer to Question 7). 6. No. 7. No.—At a meeting of the Branch held January 8th, 1883, it was resolved unanimously to suggest: "That in the event of the honorary secretary being unable to attend any meeting of the Committee of Council, his place may be taken at such meeting by a deputy, who shall be elected at each annual meeting of the Branch.—*G. W. Crowe.

Yorkshire Branch.—1. The Branch Council has every reason to believe so. 2. No. 3. 261—£26 2s. 4. No. 5. The Branch Council has no reason to believe that there is. 6. No. 7. This Branch Council does not consider it desirable to increase the number of elected representatives on the Committee of Council.—†T. R. Jessop, *Arthur Jackson.

Replies from the following Branches have not yet been received: Aberdeen, Banff, and Kincardine Branch; Gloucestershire Branch; North Wales Branch; South of Ireland Branch; West of Ireland Branch.

List of Branches placed according to Number of Members in each Branch.

	Branches.	Attached.	Unattached.
1	Metropolitan Counties	906	496
2	Lancashire and Cheshire	827	173
3	South-Eastern	435	246
4	Birmingham and Midland	358	34
5	Yorkshire	267	177
6	Midland	260	82
7	Southern	259	65
8	North of England	251	36
9	Bath and Bristol	241	52
10	South-Western	194	67
11	East Anglian	184	38
12	Dublin	175	66
13	South Wales and Monmouthshire	167	39
14	Glasgow and West of Scotland	137	150
15	North of Ireland	131	67
16	Staffordshire	128	18
17	Border Counties	108	48
18	South Midland	94	28
19	Shropshire and Mid Wales	93	18
20	Cambridge and Huntingdon	92	20
21	Worcestershire and Herefordshire	81	31
22	Aberdeen, Banff and Kincardine	81	19
23	East York and North Lincoln	80	9
24	North Wales	77	25
25	Gloucestershire	75	21
26	Thames Valley	62	33
27	Edinburgh	61	127
28	West Somerset	59	4
29	South of Ireland	50	90
30	Reading	47	19
31	Northern Counties of Scotland	38	31
32	West of Ireland	23	21
	Army and Navy (No Branch)	0	434
	Scotland	0	63
	Oxfordshire	0	27
	Channel Islands	0	15
	Total	6,041	2,889

Foreign Branches.

33	Melbourne and Victoria	86	6
34	Adelaide and South Australia	57	9
35	Sydney and New South Wales	51	31
36	Jamaica	40	7
	Foreign and Colonial	0	199
	Total	234	252

Travelling Expenses.

The General Secretary was instructed by the subcommittee to get out the cost of the travelling expenses of the honorary secretary to each Branch.

Name of Branch.	No. of Members.	Residence of Secretary.	2nd Class Return.	1st Class Return.
			£ s. d.	£ s. d.
Aberdeen, Banff, and Kincardine	81	Aberdeen	5 0 0	6 13 6
Bath and Bristol	241	Bristol	1 7 6	1 16 0
Do. Do.	241	Bath	1 4 6	1 12 6
Birmingham and Midland Counties	358	Birmingham	1 5 0	1 13 6
Border Counties	108	Carlisle	3 4 0	4 1 0
Cambridgeshire and Huntingdonshire	92	Cambridge	0 13 4	0 15 10
Dublin	175	Dublin	3 11 0	4 15 6
East Anglian	184	Ipswich	0 15 6	0 19 6
East York and North Lincoln	80	Hull	1 17 6	2 11 0
Edinburgh	61	Edinburgh	4 5 0	5 9 6
Glasgow and West of Scotland	137	Glasgow	4 5 0	5 10 3
Gloucestershire	75	Gloucester	1 6 0	1 14 0
Lancashire and Cheshire	827	Liverpool	2 3 6	2 18 0
Metropolitan Counties	906	6, Curzon St., W.	0 0 0	0 0 0
Midland	260	Nottingham	1 6 10	1 12 8
North of England	251	Newcastle-on-Tyne	3 0 6	3 16 6
North of Ireland	131	Belfast	3 15 0	5 0 0
North Wales	77	Wrexham	1 18 6	2 11 9
Northern Counties of Scotland	38	Elgin	5 11 0	7 8 6
Reading	47	Reading	0 8 3	0 11 8
Shropshire and Mid Wales	93	Shrewsbury	1 15 0	2 7 3
South-Eastern	435	Dover	1 5 0	1 13 6
South of Ireland	50	Cork	4 7 6	5 16 6
South Wales and Monmouthshire	167	Cardiff	2 3 3	2 19 6
South-Western	194	Exeter	2 0 0	2 15 0
South Midland	94	Northampton	0 14 8	0 18 8
Southern	259	Southsea	0 18 6	1 6 0
Staffordshire	128	Wolverhampton	1 8 0	1 17 3
Thames Valley	62	81, Harley St., W.	0 0 0	0 0 0
West of Ireland	23	Galway	6 10 8	7 2 10
West Somerset	59	Taunton	1 17 9	2 10 0
Worcestershire and Herefordshire	81	Worcester	1 5 0	1 15 0
Yorkshire	267	Sheffield	1 14 10	2 1 10
			72 18 1	94 14 6
		Four Meetings ...	291 12 4	378 18 0

BEQUESTS AND DONATIONS.—The Salop Infirmary, Shrewsbury, has received £1,000 under the will of Mr. T. Hewitt of Meole-Brace.—Mr. Joseph Shuttleworth of Heighington, has bequeathed £1,000 to the Lincoln County Hospital, and £1,000 to the Lincoln General Dispensary.—Messrs. Horrockes, Miller and Co., have given £250, with a conditional promise of £250 more, and Messrs. Swainson, Birley and Co., £100 to the Preston and County of Lancaster Royal Infirmary.—The Great Northern Hospital has received £271 under the will of Mrs. Barbara Caslake.—The Lincoln County Hospital has received £200 under the will of Mrs. Marten of Beverley.—Mrs. Elizabeth Rebecca Churchill of Exeter, has bequeathed £100 each to the Hospital for Sick Children, Great Ormond Street, the Western Counties Idiot Asylum at Starcross, the West of England Eye Infirmary at Exeter, and the Devon and Exeter Hospital, and £50 to the Exeter Lying-in Charity.—The Grocers Company have given £100 to the Victoria Hospital for Sick Children, and £100 to the Royal Hospital for Incurables.—The General Hospital, Birmingham, have received £100 under the will of Mr. John Jackson, and £50 under that of Miss Elizabeth Simpson.

NOTICES OF MOTION AT THE ANNUAL MEETING, LIVERPOOL.

JULY 31ST; AUGUST 1ST, 2ND, 3RD.

NOTICE is hereby given, that at the Annual Meeting to be held at Liverpool, on the 31st day of July next, and three following days, it will be moved on behalf of the Committee of Council that the present by-laws be rescinded, and that the following be the future by-laws of the Association.

DRAFT OF THE PROPOSED NEW BY-LAWS OF THE BRITISH MEDICAL ASSOCIATION.

ELECTION OF MEMBERS.

ANY qualified medical practitioner not disqualified by any by-law of the Association who shall be recommended as eligible by any three members may (subject as hereinafter mentioned) be elected a member by the Council, or by any recognised Branch Council, provided that the power of such Branch Council shall only extend to the election of male persons.

No person shall be elected a member unless he has the votes of not less than three-fourths of the members present at the meeting of the Council or Branch Council at which he is proposed for election, and has agreed in writing to become a member, and to pay his subscription for the current year.

Any member may be expelled from the Association by a resolution of the Council if carried by three-fourths of the members present, subject to confirmation by the next annual meeting, and he shall thereupon cease to be a member and shall not be eligible for re-election. One month's notice of the intention to propose such resolution shall be given to any member affected thereby.

SUBSCRIPTION.

The subscription to the Association shall be one guinea *per annum*, which shall entitle each member to the privileges of membership, and to receive the publications of the Association for the current year. The subscription shall date, and be considered due in advance, on the 1st of January in each year, except in the case of a member admitted on or after the 1st July, when the subscription for such part of a year shall be half a guinea in advance.

Any member whose subscription shall not have been paid on or before the 31st December of the current year shall be suspended from all privileges of membership; and, at the end of the succeeding year, if the arrears be still unpaid, he shall cease to be a member, and shall be ineligible for readmission until he shall have paid all arrears due at the period of his suspension. Any member wishing to withdraw from the Association shall give written notice of his intention to the General Secretary on or before the 1st December of the current year.

HONORARY MEMBERS.

Any person of professional or scientific eminence, and recommended by the Council, may be elected an honorary member at the annual meeting of the Association.

ANNUAL MEETING.

The date of the annual meeting shall be fixed by the Council; the place of meeting being determined prospectively in each year by the vote of the Association.

OFFICERS.

The President of the Association shall be elected annually, at the annual meeting, and shall enter upon the duties of his office at the next annual meeting, and until then shall bear the title of President-elect. Each retiring President shall be eligible for election as a Vice-President for life, provided that he continue to be a member of the Association.

The President of the Council shall be elected by the Council. He shall hold office for three years; and at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the then ensuing three years; and every member who has served the office of President of the Council shall be eligible for election as a Vice-President of the Association, provided that he continue to be a member of the Association.

The Treasurer shall be elected at the annual meeting. He shall hold office for three years, and shall be *ex officio* a member of the Council, and every member who has served the office of Treasurer shall be eligible for election as a Vice-President of the Association for life, provided that he continue to be a member of the Association.

The Treasurer of the Association shall receive the subscriptions and other monies payable to the Association, and discharge all accounts which have been ordered by the Council to be paid.

The Editor of the JOURNAL shall be elected by the Council, and be remunerated in such manner as the Council shall think fit.

The Secretary of the Association shall be elected by the Council. He shall reside in London, and devote his whole time to the business and affairs of the Association and the office of the JOURNAL.

The duties of the Secretary shall include being present at the meetings of the Association and Council, the recording their respective minutes, the conducting of the correspondence of the Association; the superintending the collection of subscriptions; the enforcement of the regulations as regards those in arrear, and acting in general obedience to the directions of the Council.

The Secretary shall be remunerated in such manner as the Council think fit.

The Editor and Secretary shall hold their respective offices during the pleasure of the Council, subject to receiving or giving (as the case may be) three months' notice to determine their respective appointments.

The offices of Secretary and Editor of the JOURNAL shall not be held by the same person.

COUNCIL.

The Council shall consist of the President, the President-elect, the President of Council, the Vice-Presidents of the Association, and the Treasurer (who shall all be *ex officio* members of the Council); and of members representing the Branches, who shall be elected as follows:

(*a*) Every Branch shall be entitled to elect directly one representative member.

(*b*) The election of such member shall be annual.

(*c*) The return of the election of such member shall be communicated to the Secretary not less than one month prior to the annual general meeting of the Association.

(*d*) No person shall be eligible as such representative unless, at the time of his election, he shall be resident within the area of the Branch nominating him as their member.

(*e*) Every Branch the number of whose members amounts to 200, shall be entitled to elect a further representative for every 200 members of such Branch, subject in all other respects to the conditions of election and membership before mentioned.

(*f*) In default of and until election by any Branch of a representative member or members, or so far as such election shall not be complete, all the powers conferred on the Council shall belong to and be exercised by the *ex officio* members thereof alone or by the *ex officio* members and such representative members of the Council as may have been duly elected by any Branch or Branches, and of whose election return shall have been duly made as before mentioned.

Notice shall be given forthwith to the Secretary of the Association by a Branch, of a representative having ceased to belong thereto; but until such notice shall have been received by the Council, no resolution or vote shall be deemed invalid by reason of a disqualified member taking part in its proceedings.

The Council shall annually prepare a report of the general state and proceedings of the Association for the past year, to be presented by them at each annual meeting of the Association.

The Council shall, at each annual meeting, propose the place of meeting for the next annual meeting, and nominate the President-elect.

A record of the attendance of each member of the Council at its meetings shall be kept and published annually in the JOURNAL.

The Council shall meet not less than four times a year, and shall be presided over by the President of the Council, or in his absence by a chairman to be appointed by the meeting. Its meetings shall be held at such time and place as the Council shall appoint. Seven members shall be a quorum.

The President of Council may, if he think right, and upon receiving a requisition, signed by not less than ten members of the Council, and specifying the business for which a special meeting is required, shall call together a special meeting thereof, but at such meeting no business shall be transacted other than that for which such special meeting was called.

The Council shall manage the general affairs and business of the Association, except as otherwise provided by the articles or by-laws. They shall also regulate the order of business, and shall nominate the readers of addresses at each annual meeting. They shall decide what shall constitute a section, and who shall preside over the same; and shall also arrange the division into sections of the matters to be discussed and considered at such meeting.

The Council shall direct the publications of the Association, and shall take cognisance of any matter which may require immediate decision.

The Council shall at each meeting next after the annual meeting of the Association, appoint a public accountant to audit the accounts of the Association, and if directed by them, to prepare a balance-sheet, financial statement, and report, up to December 31st in each year. A financial statement shall be published in the JOURNAL within the first four months of each year.

In the event of the incapacity of any officer of the Association during his term of office, the Council may appoint any member to act for him. In the event of the death or resignation of any officer, the Council may appoint a successor till the next annual meeting.

JOURNAL AND FINANCE COMMITTEE.

At the meeting of the Council held next after the annual meeting in 1883, a subcommittee of fifteen members of the Council shall be elected, who, together with the President, the President-elect, the President of the Council and the Treasurer (who shall be *ex officio* members), shall constitute the Journal and Finance Committee. Three members shall form a quorum. Three of the elected members shall retire annually by rotation, and shall be ineligible for re-election for the ensuing twelve months. Members shall be annually elected by the Council to fill places vacant by retirement, death, or otherwise.

The Journal and Finance Committee shall meet not less than four times a year, twice at least at the office of the Association, and shall enter a report of its proceedings in a book which shall be read to the Council for adoption.

The Journal and Finance Committee shall examine into the general working of the office and JOURNAL, and certify the quarterly accounts, prior to their being presented to the Council.

TRUSTEES.

The property of the Association shall, when necessary, be vested in three trustees chosen by the Council. The Trustees shall be eligible for any other office of the Association.

COMMUNICATIONS.

All communications to the Association shall be the property of the Association, unless the Council allow the right of property therein to be specially reserved to the contributors.

BRANCHES.

Any number of members, not being less than twenty, may form themselves into a Branch of the Association, subject to such Branch being recognised by the Council.

Each Branch shall be free to govern itself as its members shall think fit, but no Branch law shall be valid which, in the opinion of the Council, may contravene any fundamental law of the Association.

Each Branch shall pay its own expenses, and no Branch shall be deemed for any purpose the agent of the Association, or have power to incur any obligation in its behalf.

ALTERATION OF BY-LAWS.

No by-law shall be made, altered, or repealed, except at an annual meeting nor unless a written notice, specifying the nature and object of the proposed amendment, shall have been given to the Council at least one month previously. Such notice shall be forthwith published in the JOURNAL.

The President of the Association gives notice that he will move the following addition to the by-laws:

"That the President, the President-elect, be *ex-officio* members of all committees and subcommittees of the Association."

"That, in order that members of Colonial and Indian Branches; members in the army, navy, and those residing abroad; and members of distant Branches in Scotland and Ireland, may be represented on the Executive Council, the members of the Association assembled at the next annual meeting shall elect twelve members to represent the above named Branches as persons of the Executive Committee, or other named governing body of the Association:

"Of the twelve representatives so chosen, four shall retire by ballot of the Executive Council at the end of the first and second years, and afterwards by rotation according to date of election, and shall not be eligible for re-election until after the expiration of one year."

The election of such twelve representatives shall be conducted after the following manner:

"Any five members of the Association may nominate a representative, such nominations to be forwarded to the General Secretary not less than one month before each annual meeting, and the General Secretary shall insert the names of such nominees, and of the members nominating them, in the JOURNAL on two successive weeks before the annual meeting.

"The election shall be by members entering their names in a poll-book to be kept open, under the superintendence of the General Secretary, from 12 to 6 o'clock of the second day of the annual meeting, and signifying therein the names of those persons, nominated as above, whom they propose to vote for, not exceeding twelve in all. The number of votes recorded for each proposed representative shall be declared at 11 o'clock in the morning of the third general meeting, and the President shall then declare the twelve persons having the highest number of suffrages, who shall be the representatives accordingly.

"At each succeeding annual meeting, four persons shall be elected to supply the places of those who retire, in the same manner as in the case of the twelve."

Dr. Fothergill hereby gives notice that, at the annual meeting to be held at Liverpool, he will move that By-law 12 be altered by the addition of the words following, viz.:

"That the editor shall be elected for a period not exceeding five years; but shall be eligible for re-election for a like period."

Dr. Ward Cousins hereby gives notice that he will move the following alterations in the by-laws, at the annual meeting to be held at Liverpool on July 31st next, viz.:

40. Any number of members, not less than 100 residing within, or not less than 25 residing without, the limits of the United Kingdom of Great Britain and Ireland, may form themselves into a Branch of the Association, subject to such Branch being recognised by the Committee of Council.

41. The existing Branches of the Association, as now recognised by the Committee of Council, shall constitute the Branch organisation of the Association. An outline of such organisation shall be annually published in the form of a chart, showing the areas and distribution of the Branches, together with any other particulars that may be determined upon from time to time by the Committee of Council.

42. Any modification or division of an area of a recognised Branch shall be subject to such modification or division being recognised by the Committee of Council.

43. In the event of any two or more recognised Branches being desirous of uniting to form one Branch, a requisition specifying the particulars and objects of such union must be forwarded by each of the Branches to the Committee of Council. In the event of such union being recognised by the Committee of Council, the recognition shall date from the first day of January then next ensuing.

44. Any number of members, not less than 100, residing in a district of a recognised Branch, being desirous of forming within the area of such district a new and separate Branch of the Association, may hold a special meeting of the members residing in such district, and then forward through the honorary secretary of the Branch the requisition adopted by such meeting, specifying the particulars and object of the proposed separation to the Committee of Council. In the event of such separation being recognised, the recognition shall date from the 1st day of January then next ensuing.

45. Same as By-law 41.

46. Same as By-law 42.

47. The honorary secretary of each Branch shall forward to the General Secretary, on or before the 31st day of March, on or before the 30th of June, and on or before the 31st day of October in each year a statement of the moneys received by him on behalf of the Association; and on the 31st day of October in each year he shall close the Branch account for the current year, and shall give notice that all unpaid subscriptions must be forwarded direct to the General Secretary of the Association. A notice of the annual closing of the Branch accounts shall be inserted in the JOURNAL during the month of October.

FRANCIS FOWKE,
General Secretary British Medical Association.

London, May 24, 1883.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—The following members have been appointed office-bearers for 1883-84. *President:* Dr. H. F. Banham. *Treasurer:* Mr. G. S. Taylor. *Secretary:* Mr. J. Snell. *Members to complete Committee:* Dr. Bartolomé, Dr. Law, Mr. Keeling, and Mr. B. Walker. *Pathological Committee:* Dr. Tyson, Dr. Gwynne, Dr. Cleaver, and Mr. Pye-Smith.

QUEEN'S COLLEGE, BELFAST.—The following have been awarded prizes at the termination of the winter session:—*Anatomy and Physiology. Second Year:* J. J. Redfern, W. A. Cameron, Andrew Buchanan, J. P. Jameson, J. K. Close, W. Baird McQuitty. *First Year:* E. M. Woods, M. C. Steer.—*Practical Anatomy. Third Year:* James Morwood, John Barron, G. A. Junk, R. J. Purdon, Robert Sayers, J. P. Jameson. *Second Year:* J. J. Redfern, J. K. Close, W. Baird McQuitty, A. S. Thompson, James Tomb, John Menary. *First Year:* Andrew Buchanan, E. M. Woods.—*Practice of Medicine. Second Year:* J. J. Brownlee, Isaac Crawford. *First Year:* James Morwood, Nicholas J. McDonnell, R. H. Sproule.—*Surgery:* J. R. Burrows, James Morwood, J. J. Redfern, Thomas Buchanan, R. H. Sproule.—*Materia Medica:* W. Baird McQuitty, D. J. McKinney, David Mark, J. W. Wilson, T. D. Smyth, James Tomb and John Menary equal.—*Practical Chemistry:* D. J. McKinney, J. E. Shaw.

CORRESPONDENCE.

THE PROPOSED MEDICAL BENEFIT SOCIETY.

THE following additional sums have been received and promised:—

	s. d.
Messrs. Vawdrey and Johnstone, Handsworth	10 0
Mr. Thomas Clarke, Pewsey	10 6
Mr. W. Owen Hackney	10 6
Dr. J. H. Daly, Chippenham	10 6
Mr. George Jackson, Plymouth	10 6
Mr. B. D. Taplin, Binbrooke, Market Rasen	10 6
Dr. J. Ward, Sparkbrook, Birmingham	10 6
Mr. A. H. Boys, Pill, Bristol	10 6
Mr. M. R. J. Behrendt, Birmingham	10 6
Dr. Ptolemy S. H. Colmer, Yeovil	10 6
Dr. C. E. Gosling, Moseley, Birmingham	10 6
Mr. W. E. Stainton Stanley, Wellow, Bath	10 6
Mr. James Stewart Harris, N.B.	10 6
Dr. A. B. Munro, Bradford	10 6
Mr. Thomas M. Watt, Hovingham	10 6

SIR,—I have been preparing a scheme, some weeks now, to present to the medical profession, similar to what is proposed in the BRITISH MEDICAL JOURNAL, with regard to a medical provident society. It struck me, that as a profession, we have no provision amongst ourselves for old age, or for our more unfortunate, or invalid brethren, who in most cases have commenced life under as good auspices as the more fortunate amongst us. To make a society such as this, however popular, it must not be a "charity," but a "mutual provident society;" also all profits, except the expenses that are necessary for carrying on such a society, must go to the benefit of the members. No paid agents being required, if the profession will give that help which is necessary, and which is of mutual benefit to all, a considerable advantage must accrue to the society. The name I had adopted of "The Medical Mutual Benefit Society," being longer and more cumbersome than that used by writers in the JOURNAL, I resign, for the more simple and equally comprehensive one of "The Medical Provident Society." The main points of the scheme I would propose, and which are offered here merely as a suggestion, are open to criticism and remark:—

1. The Society to admit only qualified practitioners, resident in the United Kingdom, as members.

2. The Society to consist of a Central Court of Directors, President, Vice-President, and Trustees; also a Court of Members in each county, and Honorary Secretaries, all of whom must be members of the Society.

3. The Society to appoint a secretary at a salary of £300 a year, whose office shall be in London, and called the Central office.

BENEFITS.

4. The claims upon the Society's funds to be as follows:

a. When a member is ill and unable to attend to his professional duties, not exceeding 26 weeks, £1 10s. per week. *b.* After a sick member has received benefit for 26 weeks; or, when a member is totally incapacitated; or, on attaining the age of 70 years, £1 per week. *c.* Widows of members, as long as they remain unmarried, for ten years, £1 per week; after ten years, 15s. per week. For every child born in lawful wedlock, until each shall attain the age of 18 years, 5s. per week extra.

5. No benefit to be received until the expiration of six months after date of entry.

6. No practitioner over 65 years of age eligible for membership.

7. Every policy to become void if:—

a. A member shall enter or be employed in actual war service beyond the limits of the United Kingdom, or shall go beyond the limits of Europe, unless licence shall have been first obtained from the Court of Directors, upon such terms as they shall think fit. *b.* If the premiums of assurance shall remain unpaid above fifteen days after the date on which the same become due; but it may be revived within twenty-two days upon payment of a fine of 10s.; within twenty-nine days, £1: within thirty-six days, £1 10s.; and after that time and within three calendar months, £2. If the member shall die within the fifteen days next after the day on which the premium becomes due, the policy to remain in force, but the premium to be deducted before any benefit can be granted. *c.* A member shall be found guilty, by the Court of Directors, of practising any fraud upon the Society; notwithstanding it is left to their discretion to fine the offending member, and allow him to retain his policy.

8. Each applicant for membership must undergo an examination by a doubly qualified practitioner who has been in practice for at least five years, and who must reside in the same county. The life to be submitted to the next Court of Members, and elected or rejected by ballot as they may think fit.

PREMIUMS.

Age next Birthday.	Annual Premium. £ s. d.	Age next Birthday.	Annual Premium. £ s. d.	Age next Birthday.	Annual Premium. £ s. d.
22	10 9 6	37	15 2 6	52	26 12 0
23	10 13 6	38	15 12 0	53	27 15 6
24	10 17 6	39	16 2 0	54	29 0 0
25	11 2 0	40	16 12 6	55	30 6 0
26	11 6 6	41	17 3 6	56	31 13 0
27	11 11 6	42	17 15 6	57	33 1 6
28	11 17 0	43	18 8 0	58	34 11 0
29	12 2 6	44	19 1 6	59	36 2 0
30	12 8 6	45	19 16 0	60	37 15 0
31	12 15 0	46	20 11 6	61	39 10 6
32	13 2 0	47	21 8 6	62	41 9 0
33	13 0 6	48	22 7 0	63	43 11 0
34	13 17 0	49	23 6 6	64	45 16 6
35	14 5 0	50	24 7 0	65	48 5 6
36	14 13 6	51	25 9 0		

SICK MEMBERS.

10. In case of illness, a certificate, to be obtained from a medical man in practice, if possible a member, and sent to the Secretary within seven days, at the same time a notice to the Honorary Secretary of the county; a weekly certificate shall also be sent to the secretary so long as the sick member shall remain on the funds. At the termination of such illness, a certificate shall be sent to the Secretary as well as a notice to the Honorary Secretary, informing both of the fact.

11. During the time a sick member remains on the funds, he shall perform no duties connected with his profession.

12. A sick member who has been receiving benefit from the Society for more than 13 weeks, is not eligible to receive further benefit after he throws off the funds until the lapse of 12 calendar months.

13. All applications for benefit from the funds shall be brought before the Court of Members at each half-yearly meeting by the Honorary Secretary, and all necessary information to be gathered by the Honorary Secretary concerning each applicant.

MANAGEMENT, ETC.

14. No one to be eligible for the office of President, Vice-President, Director, or Trustee, who has not paid five full years' premiums.

15. The President and Vice-President to be appointed by the Court of Directors, from amongst themselves, and hold their offices for four years, unless they shall resign or become disqualified; but they may be re-appointed at the expiration of the four years.

16. The four Trustees to be appointed by the Court of Directors, from amongst themselves; and, in case of death, resignation, or removal, the vacancy to be filled up by the Court of Directors.

17. All moneys, stocks, funds, and securities, to be vested in the Trustees.

18. The Directors to be appointed, one for each county, by the Court of Members, and to remain in office for four years; each Director from any county in England or Wales, present at the Annual Court, to be paid £5; each Director from any county in Scotland or Ireland, present at the Annual Court, to be paid £7.

19. One-fourth of the Directors to go out of office by rotation annually at the conclusion of the General Court in July, but to be eligible to be re-elected. The election for the vacant county to take place at the next Court of Members of that county.

20. If any Director shall die, resign, or become disqualified before the term of his going out of office, the vacancy to be filled up as in Section 19.

21. A general Court of Directors to be held in each year, on the third Wednesday in July, or within fourteen days after.

22. A Court of Members to be held every half-year in each county, on the second Wednesday in January and July.

23. An Honorary Secretary to be appointed by the Court of Members annually for each county, who will receive notices of applications for benefit from sick members, and duly inquire into them. He will also be present at both the half-yearly meetings during his term of office.

24. If the Honorary Secretary shall die, resign, or become disqualified before the time of his going out of office, the vacancy to be filled up by the Court of Members at a special meeting which shall be called by the Directors.

25. The Secretary in London shall have the accounts audited ready for each annual meeting of the Directors; and a printed statement of all accounts, together with reports from the county meetings, shall be sent to each member. It shall be his duty also to receive all premiums and fines, and pay all benefit moneys.

26. The auditors to be elected at the General Court of Directors for the ensuing year.

27. The Honorary Secretaries shall have power to call a special Court of Members in case of suspicion, founded upon evidence, of any fraud being practised by any member upon the Society; and the Court of Members shall have power, at their discretion, to withhold all or any benefit which might have been due to any offending member, until the next General Court of Directors takes place.

28. In the event of a fraudulent case being brought before the Court of Directors at their Annual Court, it is to be considered by them at that meeting, and decided upon before the conclusion of the same meeting; their decision to be final.

29. All payments to members under Section 4 to be made monthly (of four weeks).

I have endeavoured in this scheme to put as much working power in the hands of members as possible. Members being mutual assessors with each other, there would be no proprietary body with whom to share the profits. In process of time, if it be found that the Society can be worked with less premiums, it would be advisable to form two classes of members; the first class consisting of members who assured before a certain date, and who would pay a *reduced* premium. The schedule of premiums is, of course, subject to revisal by the "Secretary," who would also act as "Actuary." But the amounts, as there calculated, may be taken as a good guide until the formation of the Society. Whatever scheme be adopted, my proposal is that a committee of medical men be formed at once, and the affair put into motion.—I am, sir,

WM. W. HARDWICKE, M.R.C.P., L.R.C.S.

Rotherham, April, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

SIR,—The question of note-taking, broached by Mr. George Abbott in the JOURNAL of April 7th, has an important bearing, not only upon the collective investigation of disease, but upon the whole training and work of each member of the medical profession. Students waste much time in purely clerical work, and important clinical observations are irrevocably lost to the general practitioner for want of a ready and reliable method of note-taking. Self-invented abbreviations of the ordinary long-hand writing are employed often enough to meet the exigencies of the moment; but such methods are unsatisfactory, and even the more elaborate system of Dr. Veale is not without disadvantages. If it should be adopted, as Mr. Abbott suggests, it is doubtful which abbreviations would be used by different men, some selecting a few and rejecting others; and, speaking from a personal experience of eight years as a *verbatim* shorthand writer, as well as that of a teacher of shorthand, I am of opinion that it would be more advantageous to spend the extra time required to learn the elements of shorthand, than attempt the acquirement of Dr. Veale's invention. Moreover, long-hand writing, unless written with some care, is often illegible, much more so would an abbreviated long-hand be; a similar objection does not apply to shorthand. For the purposes of collective investigation, it would not be necessary to be an expert writer of shorthand; and several students whom I have known have derived advantage from a very limited acquaintance with the art.

In your contemporary, the *Medical News* for April 14th, 1882 I pointed out the uses of shorthand during a medical student' career, and suggested that it might, with advantage, be made a optional subject of the preliminary examination. I write from a appreciation of benefits my acquaintance with shorthand has con ferred upon me, and I have occasion to thank it for contributing t my success in a recent undertaking. Shorthand-writing (and b this term I mean phonography, the invention of Mr. Isaac Pitma is of use in the lecture-room, the laboratory, at the bedside, and the study; while in practice, its utility in medico-legal cases, a for making memoranda of all descriptions, need only to be felt a known to be appreciated.

Trusting that the importance of the subject may be sufficie excuse for occupying your space, I remain, sir, yours, etc.,

NORMAN PORRITT

31, New North Road, Huddersfield.

ACCORDING to a London City missionary in Westminster, t Duke of Westminster has closed no fewer than twenty-four pu houses on his Grosvenor Square estate within the last five ye His Grace had closed thirteen others previously. Of the twen four still remaining several are already doomed, as the Duke i not renew the leases for the continuation as public houses.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE MEDICAL PROFESSION AND FRIENDLY SOCIETIES' MEDICAL ALLIANCE.

A PLYMOUTH correspondent writes: A large and influential meeting of the medical practitioners of Plymouth, Devonport, Stonehouse, and neighbourhood, was held at Plymouth on May 3rd, 1883, to consider what course should be adopted towards the Three Towns Branch of the Friendly Societies' Medical Aid Alliance, recently started in Plymouth and Devonport, on a low system of fees, the vaccination being at present done for nothing by its medical officers, and women and children admitted as members; thereby unfairly competing with and injuriously affecting the regular practitioners—a line of action savouring more of a trading spirit than that which should actuate every member of a liberal profession. The following resolutions were passed, with only one dissenting vote.

1. That the principles of the Three Towns Friendly Societies' Medical Aid Alliance, being contrary to the just interests of the medical profession, be it resolved, that the medical profession of the Three Towns and neighbourhood decline to act in concert with the medical officers of the friendly societies aforesaid.

2. That this meeting pledges itself to refuse to act in concert with any medical man acting in opposition to the plain meaning of the foregoing resolution.

3. That this meeting pledges itself to make known the advantages of existing public provident dispensaries, which, being watched over by an investigation committee with regard to earnings as qualification for membership, are not inimicable to the interests of the medical profession.

It was pointed out, in the course of the meeting, that at Exeter, where the same condition of things obtained, it was estimated that the medical practitioners lost from £1,500 to £2,000 a-year, and that one practitioner lost £500 the first year the Friendly Societies' Medical Alliance was started in that town. The speech of the President of the Alliance, delivered at Exeter, at their annual conference, was quoted to the following effect: "The medical profession had offered a great deal of opposition to the establishment of these societies. In Exeter they had suffered considerably. Owing to the indirect influence of medical men, the Exeter association had been involved in legal proceedings, which were no doubt intended to destroy it—in fact, when it was originally established, he (the President) was threatened that, whenever they brought a new medical man into the city, the profession would 'blackball' him. The aggregate income of the forty-two associations in 1882 was about £24,000; and nearly £13,000 was spent in the shape of salaries to the medical men employed."

It was pertinently pointed out that it appeared, from the last statement of the President, that more than £11,000, or nearly half their income, was *not* spent in the shape of salaries to medical men employed, though this was professedly purely a medical alliance.

Surprise was expressed that any medical man could be found who allowed his professional services to be farmed out at so low a rate, when the Alliance was not in any way a charity, and where there was no limitation as to earnings in order to qualify for membership. Not the least objectionable feature in the establishment of such societies is, that it floods a town with new men, who obtain, by means of the Alliance, an introduction to a sort of practice by underselling their brethren; and perpetuating, when they leave the Alliance, the same low system of fees, at a time when medical education and the means of living are becoming more costly every year. The extension of these societies will bring the question of a statutory minimum of medical fees—such as they have in the Dominion of Canada—within the range of practical politics. It is to be regretted that any medical man supports a system, which is harmful to the profession, by lending his services to it.

A HOME HOSPITAL FOR INDIA.

A NEW European hospital has been opened at Darjeeling, which is intended to serve the purpose of a sanatorium for Calcutta and the local stations in Bengal, as well as to meet the wants of the European resident in its immediate neighbourhood. The institution has met with Government support. It was recommended by the late Lieutenant-Governor, Sir Ashley Eden; and he sanctioned a grant of 50,000 rupees.

The site which has been selected is a small detached hill in the centre of Darjeeling. The top of this hill has been cut down, so as to make a level space of about two acres. In a sanitary point of view, the situation is admirable.

The building, with its out-offices, on which it is now estimated that nearly 1,50,000 rupees will be expended by Government before it is completed, is ornamental, and forms one of the most striking features of the station. The shape is that of three sides of a square, the centre or front block being for the accommodation of first class patients, the two wings for second and third class patients respectively. The building is double-storied, and separate dining and sitting-rooms are provided for the use of the patients of each class. For first-class patients, sixteen separate bed, dressing, and bath-rooms are provided, each set of rooms being entirely private. On the upper floor there are a sitting-room and a dining-room for ladies, and on the lower floor the same common rooms for gentlemen. The charge for first-class accommodation has been fixed at eight rupees daily. This will cover rent of rooms, diet (exclusive of wine, beer, or spirits), lighting, firewood, as well as medical attendance and medicine. The second-class wards are divided into small rooms, each containing two beds, and provide accommodation for twenty patients in all. On each floor there are separate sitting and dining-rooms, so that one floor can, if required, be given up for female patients. The charge for second-class patients will be four rupees a day. The third-class patients will be accommodated in a general ward containing ten beds on each floor, or twenty beds in all. For them also there will be separate sitting and dining-rooms on each floor. The charge for third-class patients will be one to eight rupees daily. It is estimated that the monthly cost of working the hospital, exclusive of diet, will be about 1,500 rupees; and, to meet this charge for the first few years, it is desirable to obtain, in the form of annual subscriptions, a sufficient certain income in aid of the permanent working expenses. The committee therefore solicit annual subscriptions of 100 rupees from tea-estates, the persons employed on which are likely to make use of the hospital; from large firms in Calcutta and Lower Bengal employing European labour, from mills and iron-works, from railway agents and managers, from banks, from the large steam navigation companies, and generally from all institutions having European assistants. To these, the advantages offered by the new hospital of a change to the hills and treatment in a comfortable semi-private hospital during illness or convalescence, or when suffering from the effects of long-continued residence in the plains, would be of inestimable value.

THE LIVERPOOL INFIRMARY FOR CHILDREN.

THE committee of this institution have, on the recommendation of the Medical Board, appointed Dr. Oxley honorary consulting physician, and have placed six beds under his care. Herein the Liverpool Infirmary for Children has followed an example lately set by the Leeds Infirmary. Dr. Oxley's term of office has expired, and his colleagues, being unwilling to lose his co-operation altogether, have suggested this means of keeping up his active interest in the institution. Dr. Oxley well deserves the compliment, and his continued connection with the children's infirmary cannot fail to be beneficial to it. But if the plan which has been adopted at Leeds and at Liverpool is likely to become general, would it not be well to place a limit upon it, and to say that it should hold good only for a term of years? Unless this be done, the arrangement may prove unsatisfactory. Supposing a hospital had several consulting physicians and surgeons, and that each retained six beds for an unlimited length of time, we can easily imagine that difficulties might arise. But these difficulties could easily be avoided if the arrangement, as far as it concerned the care of patients, were made subject to revision every five or seven years.

QUEEN'S COLLEGE, CORK.—The following prizes and certificates have been awarded at the Sessional Examinations:—*Practice of Medicine. Fourth Year:* William Barter, William John Moynahan, James H. Swanton, prizes; John Bolster and John Sheedy, certificates.—*Medical Jurisprudence:* William Barter, William John Moynahan, James H. Swanton, prizes; Daniel O'Mahony and John Bolster, certificates.—*Practical Anatomy. Third Year:* Benjamin Hosford, John Kearney, James F. Magner, Philip Augustine McCarthy, prizes.—*Anatomy and Physiology:* John Kearney, Benjamin Hosford, prizes.—*Surgery:* John Kearney, Philip Augustine McCarthy, Cornelius O'Doherty, Benjamin Hosford, prizes; James F. Magner, certificate.—*Midwifery:* Daniel O'Mahony, Benjamin Hosford, prizes; James F. Magner, certificate.—*Exhibition in Practical Surgery:* William Barter.—*Exhibition in Practical Midwifery:* William Barter and J. Moynahan (equal).

MILITARY AND NAVAL MEDICAL SERVICES.

RECOMMENDATIONS OF LORD MORLEY'S COMMITTEE FOR THE IMPROVEMENT OF THE ARMY MEDICAL SERVICE.

THE following are the chief recommendations with reference to hospital organisation in time of peace.

Undivided control over a hospital should, as at present, be vested in a medical officer. Inspection of hospitals by military officers should, they say, be regular and systematic. Hospitals should be open at all hours to inspecting officers, and closed only during certain hours to regimental officers visiting their men. The responsibility of general officers, as to the medical arrangements for their troops and supervision over hospitals, should be clearly understood. The power of punishing their own men for minor offences should remain with medical officers, but imprisonment should not be awarded by medical officers; and for the investigation and disposal of grave offences, whether summarily or by court-martial, non-commissioned officers and men of the Army Hospital Corps should be relegated to a military authority to be dealt with. The administration of a hospital should rest with the medical officer in charge. The responsibility of the quartermaster or steward under the medical officer ought to be clearly defined. Medical officers should exercise personal supervision over the hospital subordinates. The medical officer in charge should reside as near the hospital as possible, and in the larger hospitals there should be a resident surgeon.

The employment of nursing sisters should be extended to all large hospitals at home and abroad, but not to hospitals with less than one hundred beds. Nursing sisters to be not less than twenty-five years of age on appointment. They should act as superintendents, and not undertake the actual bedside attendance to the exclusion of the orderlies. The annual increments of their salary ought to be doubled, so that the maximum may be attained in five years.

In arranging the distribution of medical officers, the convenience of the troops should be the most important consideration. The medical officers appointed to attend officers and their families should have quarters in barracks, or reside as near the barracks as possible. Officers ought to be entitled to medical attendance for their families without regard to position of their residence, provided their place of residence has been approved by the officer commanding the station, and he has sanctioned their receiving medical attendance there. The medical service of the Household Troops should be assimilated to that of the rest of the army. Opportunity of practice with war equipment during peace should be afforded, both as regards field hospitals and bearer companies. The establishments of a certain number of field hospitals ought to be fixed and worked as such during peace.

The recommendations of the Committee referring to the organisation in time of war are:—

The evacuation principle, under which sick are constantly sent to the base, should be checked. The medical appliances with regiments should be increased by a pair of field panniers and a surgery tent. A corporal and a private of each battalion or unit should assist the medical officer, and provision should be made to train soldiers for this service. Bearer companies should be reduced to one-half the present establishment, sections should be attached to field hospitals, and when the troops are in movement, should concentrate and march with them. Provision should be made for mounted bearer companies.

Field hospitals should be distributed by brigades and not by divisions. Their establishment should be reduced to one-half the present strength. The nursing staff should be increased to one for seven patients, instead of one for eleven as at present. Equipment of field hospitals, the committee state, is too bulky and heavy. It should be arranged so that every package shall be capable of being carried on a mule if necessary. The present transport regulations for field hospitals are stated to be satisfactory, and no change is required. Whether a field hospital should be "dicted" or "non-dicted" must be decided according to local circumstances. Medical officers should be held responsible for procuring the best quality of supplies obtainable. Reliance ought not to be placed on a soldier bringing his rations to hospital on the day of admission.

In base hospitals a separate establishment should be provided for officers. Civilian cooks may be hired to superintend cooking. Regimental depôts at the base should receive arms and equipment of men arriving at the hospital, and should give information to regiments. Medical officers should be authorised to draw and supply to patients, without payment, such necessaries as they may require; also they should take care that invalids embarking are sufficiently provided with underclothing.

General officers and commandants should realise their responsibility as to the proper working of the hospital system. Hospitals should be inspected and facilities afforded for officers to visit them.

Nursing sisters should be employed. Distribution should be made by the principal medical officer, assisted by a lady-superintendent attached to the staff under the principal medical officer.

Sufficient attendance should be provided on board invalid transports. In ships conveying invalids alone, the crew should assist in washing decks. When available, a proportion of men in health should be embarked with invalids. The food of the sick should always be supplied according to scales of diet; when a ship is provisioned for men in health only, rations should be freely supplemented by extras and medical comforts. One or more combatant officers always should be embarked for command and duty.

With regard to the Army Medical Department and Army Hospital Corps, the Committee recommend that examination of medical officers for promotion should be restored, and that it should be conducted by independent examiners; and that facilities for study in London hospitals should be afforded. Sanitary training of medical officers and Army Hospital Corps should be provided for. A conservancy body in connection with the Quartermaster-General's Department should be organised. The Army Hospital Corps should be amalgamated with the Army Medical Department, which may be constituted a Royal corps, and uniforms should be assimilated. The corps should be recruited from all sources, except the Reserves. A limited number of transfers from the Line may be accepted. The character of recruits from civil life should be inquired into. Connection with Volunteer Ambulance Corps should be encouraged. Military training should be limited to drill without arms; this, as well as ambulance and stretcher-bearer drill, to be carried on at the Army Hospital Corps depôt, which should remain at Aldershot. Ward training should be carried on at hospitals where nursing sisters are employed, and this training ought to last at least three months. Men at home ought not to be appointed to the nursing section or stewards' section of the corps, until they have obtained certificates both from the depôt and hospital.

Schools of cookery should be established at Netley and Woolwich Hospitals. As large a number of men as possible to be retained as cooks. Guards and sentries of Army Hospital Corps men ought to be abolished. All fatigue duties not special to the corps should be performed by the Line or by unenlisted labourers.

The organisation of the non-commissioned officers and men should be in three sections—viz., the nursing section, the stewards' section, and the general section. The privates of the nursing section should be termed first and second class orderlies; the privates of the stewards' section, first and second class cooks. Privates ought to be more highly paid in these sections than in the general section. Change of section ought not to be made without special sanction, except in transferring privates from the general to the nursing or stewards' section, or in relegating privates to the general section for inefficiency or misconduct.

Non-commissioned ranks below full corporal should be abolished. The number of quartermasters ought to be decreased; the warrant officers to be augmented. Medical officers in charge of hospitals should stand in the same relation to their quartermasters and stewards, as regards their responsibility for the pay and equipment of the corps, as a commanding officer of a regiment does to his paymaster and quartermaster. Non-professional clerical work ought to be transferred to Army staff clerks. Ward orderlies should be distinguished from all other men of the corps by a special badge.

Privates should be liable to punishment by medical officers as follows: First and second class orderlies and cooks to be exempted from minor punishments, other than reduction to a second-class, and transfer to the general section, respectively. Privates of the general section should be liable to punishment, according to the Queen's Regulations, except imprisonment. If more severe punishment is required, the offender should be sent to a regiment for punishment. For slackness in duty, men should be liable to be attached to a regiment for instruction. In all cases of suspension from hospital duties, men should forfeit their departmental pay. Men who frequently misconduct themselves should be discharged.

A considerable percentage of selected orderlies and cooks should be permitted to extend their service and re-engage. The Reserve may be strengthened by forming a Volunteer Reserve in Volunteer Ambulance Corps, on the plan of the Army Post Office Corps. All soldiers who have been trained regimentally as bearers should be noted when they pass to the Reserve. Marching past at general

parades in review order, as at present frequently practised, should be discontinued. Detachments of the corps should be exercised as field-hospitals, with transport and equipment as on service. Voluntary aid in war should be taken into consideration, and a system organised for its proper utilisation.

HOSPITAL MANAGEMENT IN THE FIELD.

THE following memorandum by Sir W. Mac Cormac, which has been appended to the Report of Lord Morley's Committee, and was sent with that Report to the House of Commons, is here published for general information.

As a non-official member of the Committee, but surgeon to a great metropolitan hospital, and happening to possess experience of surgical work in time of war, I think it right to express my dissent from the substance of paragraph 148 of the General Report, and to state some of the conclusions at which I have independently arrived.

In discussing the defects, real or alleged, of the medical service in Egypt, it should first be determined how far these are attributable to the nature of the expedition itself, and to the exceptional circumstances which characterised the war. It must be further considered whether the complaints and adverse criticisms are just, or, on the other hand, exaggerated out of all proportion.

The late war was very arduous, very successful, and very short. The plan of the campaign, whose brilliant design we owe to the General Commanding, was admirably executed in the briefest possible period.

The expedition was of a very exceptional character, and was provided with an ample medical equipment, specially adapted to its requirements. The General-Commanding-in-Chief was cognisant of the provisions made beforehand, and approved of them. No complaint has ever been made on this head.

The Director-General had arranged that the equipment should be on as light and portable a form as possible. It was anticipated that the campaign would be short, and it was, therefore, never contemplated that a general hospital on the English scale would be required at Ismailia.

Much misapprehension and discontent have certainly arisen from the fact that the hospital in the Khedive's Palace at Ismailia was a *field* hospital. Few of the officers or men probably had ever seen a field hospital before, and presumably were not aware of the fact that it is not provided with the bedsteads and furniture of a station hospital. The position of this hospital, at the base of operations, and its establishment in the palace of the Khedive, led many to consider that it would have had all the equipment and facilities for feeding and treating the sick and wounded which a general hospital, such as the Herbert Hospital, possesses.

The *system of dieting* at the field-hospital in the Ismailia Palace was the same, I believe, as that pursued by the European portion of the Indian Contingent in Egypt, regarding which we heard no complaints, and it had been successfully carried out during the whole period of the recent Afghan wars, where a field-hospital system almost identical with that adopted in Egypt, was followed by the European portion of the force. The sick in the field-hospitals received the ordinary field ration, supplemented by medical comforts; and, in the report on the hospital organisation of the war in Afghanistan, 1878, 1879, 1880, it is stated that this system answered admirably, and met all the requirements of the sick. At Ismailia, rations were issued, supplemented by an ample supply of medical comforts.

Colonel Butler mentions that many officers, more especially those who had not been brought face to face with the realities of war before, complained of their food in hospital, because they received the same rations as the soldier. Sir Owen Lanyon says much the same thing, that the officers, and not the men, complained of the cooking. No distinction has hitherto been made on a campaign between the food given to the officers and to the men, and there is no regulation in the service for dieting a sick officer differently from a sick soldier.

Owing to military conditions, only a field-hospital could at first have been established at Ismailia, but when the lines of communication were assured, there was nothing to prevent the base-hospital at Cyprus being ordered up to Ismailia, had it been considered desirable to do so. The Surgeon-General, however, considered Ismailia would have been, for certain sanitary reasons, an objectionable position for a large dieted base-hospital.

The Surgeon-General, as soon as he received orders that Cyprus was not to be used, strongly recommended a building called the Dutch Hotel, at Port Said, as a suitable and convenient place for a base hospital. This proved not to be available, and the sick and wounded were despatched in the transports, in some cases very hurriedly, and with little time for selection, to the more distant destinations of Malta and England. The Surgeon-General is asked, if he had not been informed on reaching Egypt that the Chief of the Staff had received orders from the Secretary of State, dated August 9th, that Cyprus "was not to be used or relied upon by him in any way until the autumn," and he replies that he then, February 19th, 1883, heard of this for the first time. Had he been aware of this decision on his arrival, he would have had ample time, as he states, to move the hospital from Cyprus to a suitable place in Egypt, and I think it would have been an obvious duty to do so.

Great pressure existed during the first few days of the occupation of the Ismailia Hospital. The Surgeon-General had not been informed at Alexandria that the base of operations was to be Ismailia. The possession of this knowledge might have materially assisted him in making the needful arrangements.

A delay (in no way attributable to the Medical Department) took place in the arrival of the hospital ship *Carthage*, which did not reach Ismailia till the afternoon of August 25th. The landing of stores and hospitals did not commence, owing to difficulty in obtaining lighters and launches, until the morning of the 27th; nevertheless, on that day, and on the 28th, sick were sent on board.

At first, all available transport was employed to land the fighting men and material of war, as military considerations overrode all others. The troops were immediately sent to the front. In thirty-six hours fighting commenced, and the sick and wounded began to come in. Of course all medical requirements must be made subservient to the main object of war, but excessive labour and strain were thereby entailed on the service at the Ismailia Hospital. In addition to their proper duties of attending the sick, the Army Hospital Corps had to transport their own material to the hospital. They had also to discharge numerous extraneous duties in connection with conservancy work, fatigues, fetching commissariat rations, forming stretcher parties for the sick and wounded arriving by the railway and canal. This labour, in the heat of the season, was very exhausting; nevertheless, these men, with few exceptions, did their work well, according to their powers and training.

Sir John Adye, as Chief of the Staff, was the official representative of the General in command; he had to carry out all the working details, and with him the heads of departments communicated. To whatever Sir John Adye says, great weight must be attached, as from his official position he was probably better acquainted with the medical organisation than any man in the army. He tells us he was in constant communication with the Surgeon-General as to every detail connected with the medical arrangements, "every day and all day." The Khedive's palace was handed over to Surgeon-General Hanbury on August 22nd. An engagement took place at daylight on the 24th, another on the 25th, and another on the 28th. Notwithstanding the very great stress caused by the necessity for quickly landing men and horses, guns, carriages, munitions, and stores, "I found," Sir John Adye states, "the wounded were fairly provided for and carefully tended," and that "even on the 25th of August, when I visited the hospital, the wounded were all in bed, and surgical operations were being conducted, and I thought a great deal had been done in the way of arrangements, considering that this was an empty building, without a chair, or a table, or a bed in it, when I went there on the 22nd." He heard no complaints as to food, either then or later. None of the many complaints which officers made to this Committee reached his ears. He never heard a word about any of them. The question has been asked again and again, and invariably the medical officers reply that, while doing duty in Egypt, these complaints, with few and trifling exceptions, never reached their ears (Medical Officers' Evidence, *passim*, and App. 26). They appear to have first learnt that there were complaints from statements in the newspapers. The engagement of the 28th of August took place at Kassassin, twenty two miles from Ismailia, and the chief of the staff says he was very much struck by the arrangements which, on the morning of the 29th he found had been already made for the wounded there. Sir John Adye, after the battle of Tel-el-Kebir, about five in the afternoon rode along the whole line, some three and a half miles in extent, and did not find a single wounded English soldier anywhere. He never saw wounded so quickly carried off, nor so promptly attended to. And, speaking of the general provision made for the medical service in Egypt, he further states, "I was very much satisfied with the great attention which they," the medical officers, "always paid to

their duties, and I heard of nothing that was deficient in their arrangements, except what I considered to be inevitable from the fact that military considerations bore down upon us so heavily at the commencement that everything had to give way to them."

At Tel-el-Kebir, the facts speak for themselves. Early on the morning of September 13th, a hospital was organised at the enemy's forsaken earthwork, close to the Canal dam. It was being established whilst firing was still going on. About 400 wounded men, counting Europeans and Egyptians, were dealt with at that hospital in the course of that day; they were well fed, their wounds dressed antiseptically, the necessary operations performed, and they were embarked by canal or rail to their destination without mishap. At another place, about 500 Egyptian wounded were also cared for after Tel-el-Kebir, and twenty-seven operations were performed.

All natural advantages were utilised; in fact, so excellent were the arrangements, that water-transport was provided directly from the field of battle to the base. Several times along the route, halts were made in order to administer to the wounded beef-tea, brandy, and lime-juice. At Ismailia Station, a surgeon in attendance handed round mugs of tea, and thence the patients went direct to the hospital door, on the line of rail constructed for the purpose. It would be difficult to imagine anything better than this.

The men of No. 1 bearer company were so well up to the front, as to see the soldiers going over the trenches, and were, of course, under fire. The work performed throughout by this company was exceptionally arduous.

Lord Wolseley considers there was no excuse whatever for the Citadel Hospital at Cairo not being as well supplied after the second or third day as a London hospital. But does he recollect that a great hospital had to be improvised in a very large, long, disused, and very filthy building? He finds great fault with the cooking, the flies, and the mosquitos, the absence of whisks and mosquito curtains, and thinks the doctors were wanting in "initiative." These statements are discussed and, I consider, fairly met, by the Surgeon-General, Brigade-Surgeon Barnett, and others. No grievance appears to have been alleged, and no complaint to have been made by the patients under treatment there.

Much stress has been laid on the absence of bedsteads and mosquito curtains, and hardship alleged as the consequence, especially at Cairo; but the medical officers tell us that they never used these curtains themselves, that they were not generally required, that patients objected to them, and that, practically, they seriously interfered with the circulation of air in the wards. Mosquito curtains were used, however, in all serious cases of sickness, and on October 8th, as many of them as the Surgeon-General considered necessary were in use.

The Surgeon-General states, that up to the 8th of October, the day on which Lord Wolseley visited the Citadel Hospital, and expressed strong disapproval of the arrangements, the sick in the hospitals at Cairo were not suffering from want of any article of equipment, except blue clothing. The stores of the Cyprus Hospital had then arrived. They were coming in gradually from the 2nd to the 8th of October, and were immediately utilised. By the latter date, October 8th, the whole of the equipment from Cyprus had arrived, and 270 beds were actually in use in the Citadel Hospital about the 4th or 5th of October. The number of patients in the Citadel on October 8th was 300. And with regard to the temporary deficiency of bedsteads, which has called forth such strong disapproval it must not be forgotten that the sick were lying on beds laid upon a clean wooden or marble floor, and that in no medical respect did this entail any disadvantage whatsoever.

The cooking apparatus is also stated to have been quite insufficient for the requirements at the Citadel Hospital. Deputy Surgeon-General Marston, however, thought the cooking arrangements good, but he did not approve of the cooks. Deputy Surgeon-General Ekin states the cooking equipment was quite enough to enable the cooks to prepare very good food. Brigade Surgeon Barnett says there was no difficulty in the rations being cooked in any conceivable way that the medical officers wished. He had also power to supplement the ordinary diet, and did so to a very large extent. The Surgeon-General himself, it may be added, had specially selected the site for the cookhouse. He further states that, with the before-mentioned exception of hospital clothing, he was perfectly satisfied with the then existing arrangements in the hospital, and he therefore decided, as the stores from Cyprus were actually in the country on the 29th or 30th September, it would be neither necessary nor expedient to equip the Citadel Hospital at Cairo from the local market. All reasonable provision, in short, appears to me to have been made as soon as was practicable for the sick at Cairo.

Very frequently in the course of this inquiry, we find the administration and working of the field-hospitals condemned by combatant officers, some of whom have had no previous knowledge of hospital work, at all events in time of war. On the other hand, the medical officers, some of whom possessed a wide and varied experience in the field, entertain a contrary opinion, and maintain that everything essential to the successful treatment and good care of the sick and wounded had been provided; and the results obtained would seem to support their contention. To which class of evidence, I should ask, is greater consideration to be given?

Persons unfamiliar with hospital work, and with the sight of large numbers of sick and wounded, can scarcely be competent judges of what is being done for them. They are apt to be chiefly impressed by what, under the circumstances, is really inevitable—the dreadful fact of so much human suffering. They have not the education requisite to form a just opinion whether the suffering could be made less than it is; and they may fail to appreciate that all important requirements have been provided for.

There were, doubtless, considerable inconvenience, some privation, some hardship; but inconvenience and hardship are things which may be fairly regarded as inevitable in time of war, and doubly so in a war which was pushed forward with such exceptional rapidity—where a base had first to be seized, and the transport was dependent on the captured lines of rail and canal and where all other considerations were made subservient to speedy success. Of course this was rightly so, for rapidity, though it may entail individual discomfort and even hardship, saves in the end the greater number of lives.

The difficulties which did arise were principally in connection with the hospital at Ismailia during the first week of its existence. They were unavoidable; the exceptional character and rapidity of the campaign threw an immense strain on every one connected with the medical department. That there was no "break down," and there was none, may fairly be attributed to the devotion and self-sacrificing spirit of the medical officers. Their personal exertions have been fully recognised by non-medical witnesses, several of whom have told us of their incessant efforts, that they worked like slaves, and as hard, the Commander-in-Chief himself says, as any men in the whole army.

In the largest of our London hospitals, with their numerous staff and most complete and disciplined arrangements—the London Hospital, for instance, with nearly 800 beds, and having the largest casualty practice of any of our civil hospitals—the number of patients daily admitted to the ward is under twenty, and about the same number leave, able either to walk out or to be taken away by their friends, the hospital having no further concern with them. In the Palace Hospital, 767 cases were admitted from the 23rd to the 31st of August, which is at the rate of 85 a day; and 1,311 from the 1st to the 15th of September, or about 88 daily. After Kassassin and up to the battle of Tel-el-Kebir, 200 sick would sometimes arrive during the night, and after that action, as many as 3[illegible] were brought down at one time. The first batch after Tel-el-Kebir, numbering 194, arrived after midnight at Ismailia, and the telegram which was meant to order preparations for their reception arrived two hours after they were in the hospital. In the Citadel Hospital at Cairo, the admissions from September 18th—the day the hospital was opened—to September 23rd, were 763, or, on the average, [illegible] daily. In addition to this, the authorities had to arrange where the sick and wounded men were eventually to go—whether to the hospital ships, the transports, or back to the front. As many as [illegible] patients have had to be selected and sent on board ship in one day. During the month of September, the period of greatest pressure, 2,315 invalid officers and men were embarked from Ismailia. In view of the battle of Tel-el-Kebir, 382 patients were sent off. From September 18th to September 26th, 1,469 invalids were embarked on September 18th, 270 officers and men left in two transports; and on September 24th, 494, in two other transports. All this must immense labour and anxiety, and the organisation must indeed be very complete which does not give way under so severe a strain.

I attach importance to the evidence of Mr. Crookshank, recently house-surgeon to King's College Hospital. He was detailed for duty as a civil surgeon in the surgical wards at Ismailia. He was thoroughly qualified to form an independent judgment, and enjoyed exceptional opportunities for arriving at one, both at Ismailia and the front. His evidence strengthens my opinion regarding the Palace Hospital. He says the cases there were attended to as promptly after their arrival as they would have been in a London hospital; the wounds as carefully and as regularly dressed (the dressings being of the most complete kind), while the satisfactory progress

made by the wounded was universally acknowledged. He heard no complaints about the food. He saw the patients get beef-tea or milk given to them immediately on arrival in the central hall of the Palace. He frequently looked at the diet given to the patients, and found it much the same as that which would be prescribed in a civil hospital.

Surgeon Davies, formerly resident officer in a London hospital, and a gentleman who distinguished himself at Netley, gives a similarly favourable account of the hospital. He praises the behaviour of the Army Hospital Corps, both men and officers; says that the strain, however great, was met, food and medicine given to the patients, their wounds dressed, and comparative comfort afforded them in a short space of time, however large the numbers suddenly coming in might be; and that the condition of the hospital was as far removed from a breakdown as could be.

The Sanitary Officer of the Expedition, in an official report on the condition of the Ismailia Hospital on the 17th of September, says that it would not have compared unfavourably with a hospital in London, or in any large provincial town.

On September 30th (in consequence of allegations made in the newspapers), a telegram to the following effect was despatched by the Surgeon-General to the Director-General:—"Sick and wounded were never more carefully attended to." And it may be presumed that the Commander-in-Chief must, at this time, have entertained a similar opinion, for he also telegraphed on the same date to the Director-General:—"The medical department is working to my entire satisfaction." The Surgeon-General also says he had at that time good reason to believe that everything was working most satisfactorily; and, before that date, he had been more than once complimented by the Chief of the Staff on the general arrangements.

Judged by results, the patients at Ismailia could scarcely have been exposed to prejudicial influences, since from August 23rd to September 29th, when the hospital was closed, the mortality among the patients was but at the rate of 0.5 per cent., and yet some of them were very sick, and others badly wounded. Looking back at the history of this hospital, I can only express satisfaction and surprise at so much good work accomplished in so brief a period. I agree with the praise bestowed by very competent witnesses, and I think it would have been quite impossible under the circumstances to have done more, and unreasonable to expect that more should be done.

The complaints which have been made against the medical service appear, in many instances, to have been greatly exaggerated; some are trivial in character; many have been known to be untrue. These complaints for the most part, as the evidence shows, were not made at the time. A large proportion of them came from one division of the force—principally from its officers—and there is nothing to show that this division was in any respect less well cared for than the rest of the troops. The difficulty of meeting charges made long after the event is obvious. It would surely have been better for the interests of all concerned that they should have been made at the time and place when and where they could have been at once investigated, and, if substantiated, redressed.

It has been repeatedly urged that, whenever anything is wanting in the hospitals, the medical officers should go into the market to get it. I think it would be unwise to throw any such duty on medical officers, who should be far differently occupied. No medical officer would hesitate to get anything he might consider necessary for the sick under his care, if it could not be otherwise procured, either in consequence of the absence of the persons whose duty it was to make these purchases, or in case of their neglect to obtain what was asked for. The supply departments of the army, not the medical service, should, however, be held responsible for any failure to meet the requirements of the medical officers.

While holding that every effort ought to be made to provide all things necessary for the sick and wounded, it should not be forgotten that the medical provisions for war must be such as to entail no serious military embarrassment. These cannot keep pace with the growing requirements and luxuries of society, nor can individual fancies and desires in regard to medicines and surgical appliances be always gratified.

It has been suggested, during this inquiry, that there exists a lack of sympathy between the medical officer and the sick soldier. I believe this to be utterly without foundation. Unless, indeed, military medical men are something wholly different from their civil brethren, it cannot be true. For a man to be sick and suffering is sufficient to ensure him the fullest medical sympathy. Most certainly, it is not for the advantage of the sick soldier to have anyone interposed between the doctor and himself, or to have lessened in the smallest degree the responsibility of the medical officer for everything concerning the sick under his care.

The assimilation of the medical service of the Household troops to that of the army at large (recommended in the report), might lead to the establishment of a great military hospital in London, as in other European capitals. I feel sure that this would much enhance the position of military surgeons. To be attached to such a hospital would be regarded as a prize which the best medical officers would eagerly seek. In such a hospital, courses of special instruction might be given; and here, too, should be established a head-quarters for the medical service. This change, if made, would afford to a number of medical officers, in turn, the opportunity of being stationed in London, and of attending the practice of the metropolitan hospitals, and of taking part in the work of the London medical societies. I believe it would prove grateful to the army medical service, and be advantageous to the efficiency of its officers.

If I may be permitted a personal allusion, I would refer to an occasion on which I found myself placed in circumstances somewhat similar to those which obtained at Ismailia.

In Sedan, on the eve of the battle which took place there during the Franco-German war of 1870-71, a large barrack was handed over to the Anglo-American ambulance to do the best they could with it. The barrack furniture was there, and we had certain stores which we had brought from Paris. Before daybreak on September 1st the fighting commenced, and soon afterwards the wounded began to arrive. They came in all that day and night in great numbers. Our 400 beds were soon filled with very serious cases; many others had to lie upon the floor. Patients suffering from less grave injuries, and even many severely wounded, we had to turn away, after having attended to them and given them food. At first the pressure was intense (we had to work night and day), and our means were limited; but afterwards everything became abundant, and our staff was largely increased. The towns-women first volunteered their help, then some female nurses arrived; supplies of every kind were sent to us, and whatever it was possible to do was done. In the beginning there was much to complain of. We were very short-handed, for the great number of wounded suddenly poured in upon us. For a few days we had only horse-flesh to eat, and our bread wholly ran out, although we got every loaf the town bakers could give us. We had other hardships to endure, but no one thought of complaining. Far from it, we were overwhelmed with expressions of gratitude, both from officers and men. They saw we were trying to do our best for them.

When I look back on the six weeks I spent as surgeon-in-chief of that field-hospital in Sedan, and compare it with the accounts of the manner the sick and wounded were cared for during the recent campaign, I cannot but express astonishment at the character of some of the complaints which have been made against our medical service.

The orders issued by the Surgeon-General to the medical officers for the conduct of business during the campaign, and his regulations for the preservation of the health of the troops, appear to be both comprehensive, and admirably devised as a basis for sound administration.

During this campaign, there was never any outbreak of those infective diseases that have hitherto decimated the wounded in time of war. There was no pyæmia, no erysipelas, and no hospital gangrene as the result of wounds. Not a single man lost his eyesight, though there were 1,494 cases of inflammatory affections of the eyes admitted to hospital.

The amount and severity of "Egyptian ophthalmia" during a former campaign are well known. Sir James MacGregor, surgeon to the Royal Regiment of Horse Guards, relates, in his *Medical Sketches of the Expedition from India to Egypt*, published in 1804, that, in the course of the first week after the landing of the troops from India, most of the corps sent one-twelfth, some one-tenth, of their strength to hospital. In three weeks, the number of the sick exceeded 1,000. He adds that, plague excepted, the most formidable disease in the army was ophthalmia. In September, the total number of cases exceeded 600. In October, the great prevalence and severity of the disease are described as really alarming. Of the Indian Contingent, 50 were invalided blind, while the French are said to have sent home 1,000 blind men from Egypt.

Surely such a contrast may be taken as some evidence that the provision in the last war for the care of our sick and wounded was skilfully turned to account.

What were our medical results in Egypt? There was an exceedingly small mortality amongst the sick (*résumé* of Surgeon-General's

evidence). The death-rate among the European land force during the period of active operations was only 1.32 per cent. The total number of wounded was 430, and the mortality 3.02 per cent., and the surgical arrangements for the care of the wounded were so successfully carried out, that not a case of infective wound-disease occurred in the hospitals. I know this to be almost unprecedented in military surgery. At Sedan, under comparatively favourable conditions, so many of the subjects of operation and other cases died of pyæmia, that I felt completely disheartened.

So far as the merits of the case can be tested by practical outcome with regard to the welfare of the sick and wounded in Egypt, it deserves to be noted that the results of the campaign were perhaps better than those of any previous war, and probably at least as good as in our civil hospitals with all their means and appliances.

At the outset there was, without doubt, a period of some confusion and shortcoming. Such ever has been, and ever must be the case, however complete the preliminary arrangements are. This period was, however, of the shortest practicable duration, and entailed no serious consequences on any one.

In my opinion the medical officers engaged in the recent campaign displayed the most self-denying devotion to the sick and wounded. The duties and responsibilities imposed on them probably exceeded those of any other branch of the service, and the duties were most ably carried out under very trying circumstances, and in a manner which, if we may judge by accomplished results, could scarcely have been better. Notwithstanding their untiring efforts, the medical officers have been singled out for severely hostile criticism. If this be ill founded, as in many instances it has been proved to be; if accusations, based on mere hearsay, and not even purporting to have been verified by those who make them, are to be urged against a body of honourable men; and if difficulties arising from causes beyond control be not fully recognised, then the position of medical officers will become intolerable; and there can be little doubt that the medical service of the army, at present much sought after and highly esteemed by the younger members of the medical profession, will cease to possess the attractions it has hitherto held out.

WILLIAM MAC CORMAC.

PROSPECTS OF THE ARMY MEDICAL DEPARTMENT.

SIR,—The letter on the above subject, in your recent issue, states, very truly, that promotion to the administrative grade will, in a few years, be hopeless. I think provision has been made for this by the very liberal retirement scale in the last Warrant. Surgeons-major over twenty years' service, if they be wise, will, I fancy, take the £365, or £410 per annum, *plus* £150 for a Brigade Depôt (or a private practice). Far better for a man to do this than to go abroad again and risk his health when, after all, he must go at the age of 55. So many men over 20 or 25 years' service have taken the above course, that I feel sure it is the wisest thing to do. It is useless to hope that the present period of administrative service will ever be curtailed.—I remain, yours truly, A. M. D.

IRISH STUDENTS AT THE ARMY MEDICAL EXAMINATION.

SIR,—Permit me briefly to reply to the letter of "A Non-Successful Competitor," published in your issue of May 12th. The first paragraph contained an intimation to the effect that, because of Mr. Gibson's question, Irishmen were allowed to be more successful at the last examination. This is a point unworthy of notice; the characters of the examiners raise them above the motives attributed. The second paragraph alludes to a point that I thought I had explained pretty clearly in my first letter, viz., the difference between the "cases," some being easy, some difficult to diagnose. Dr. Aitkin distinctly told me the marks were awarded for the "system of case-taking," not for diagnosis or treatment. It is asserted that candidates suffer because the examiners get irritable! Granted; what difference would it make to candidates, in such a case, whether he was known as Mr. Jones, or No. 33? None, so far as I can see. In the third paragraph it is asserted that, "since Mr. Gibson's question in the House, a great many have noticed the large proportion of Irishmen who have been successful." I understand five or six Irishmen got places among the fifteen successful competitors—an absurd datum on which to reassert so unjust an accusation as had been levelled at the examiners. The last paragraph reasserts the accusation that the Director-General "selects" candidates. I assert, as a matter of fact, that the Director-General does not select any candidates, or in any way influence the results of the examination. The candidates are physically examined at Whitehall Yard, by two of the staff there, and, in a case of doubt, a "surgeon-general" decides. It is assumed that, because the examining medical officer enters into a little conversation with the candidate, he must be fishing for information to enable the Director-General to treat the candidates unfairly. The baseness of such insinuations is only equalled by their untruth. I had not intended to address you again on this subject, but it must be remembered that such insinuations as those alluded to above, reflect not only on the Director-General and his staff at Whitehall, and on the examiners, but also on all medical officers now serving, as they might be regarded as having obtained their commissions through favouritism and injustice, if the true facts of the case were not understood.—Yours, etc.,

J. B. HAMILTON, M.D., Surgeon-Major.

THE MILITIA SURGEONS OF THE UNITED KINGDOM.

WE would direct the attention of the militia surgeons throughout the kingdom to the notice of motion which Sir Eardley Wilmot has given for June 8th, to bring before the House of Commons, when in Supply, the injustice done to the militia surgeons in depriving them of their appointments, and enforcing compulsory retirement without pension or compensation, and we would urge on these gentlemen to lose no time in addressing, and bringing influence to bear on their several members, to be present and support Sir E. Wilmot in having their grievances referred to a Committee of the House. The success of this motion, we need hardly say, will depend very much on the members who may be found supporting Sir E. Wilmot.

This is not a party question, but one simply of justice to a body of professional gentlemen who have rendered good service in their day, and are certainly being treated with gross injustice in being deprived of any compensation, and also loss of their appointments, from no fault of theirs, but from the exigencies of, and through changes in, the service. It is a well-established principle of our constitution, that no can one, or ought, to be deprived of any portion of their income without receiving compensation. This is the last chance the militia surgeons have of their claims being brought under public notice, and we therefore urge on these gentlemen the absolute necessity of their addressing their representatives and urging on them to support this motion of Sir E. Wilmot.

AN ex-Militia Surgeon writes: I am forty-three years of age, active and robust; an M.D., F.R.C.P., M.R.C.S., etc. For seventeen years I was on the honorary staff of the North Staffordshire Infirmary. I became full surgeon, and in sole charge, of the then King's Own Stafford Rifles, now the 4th Battalion North Staffordshire (Prince of Wales's) Regiment, in July 1868. At that time the headquarters were at Newcastle, and here both the recruits and the regiment assembled for drill; and the staff, consisting of twenty-four sergeants with wives and families, lived in the town. For the staff, I was paid all the year round. I was on full pay for three months every year. Then came a change. The recruits assembled here for drill for eight or even ten weeks, during which time I was on full pay, and the whole regiment used to go under canvas for twenty-seven days' training. I always accompanied it, for I could still afford to do so. Now, the old headquarters are gone, and the barracks sold. The staff are removed to Lichfield, and the drilling of both the recruits and the regiment takes place at the dêpot. I am still summoned for the twenty-seven days, when the regiment goes up—an utter waste of public money and my time. I got 20s. a-day pay; 4s. a-day mess allowance; 2s. a-day lodging; total, £35. The charges are: Mess president, £19 13s.; subscription to mess, £2 10s.; making, and other matters, £22; leaving a balance in round numbers of £13 a nice sum per month, if it included extras, and if a *locum tenens* were paid by Government at half-a-guinea a-day. The uniform had been changed from the dark-green of the Rifles to the scarlet of the fantry. My brother officers had £30 each allowed, but the order did not apply to the medical officers, so I have no clothes; and I have therefore, retired without sending in a claim for a pension.

POISONING OF CATTLE WITH RED LEAD.—It is reported that an extraordinary case of cattle poisoning has occurred on the estate of Major Roberts at Holborough, near Chatham. About fifty head of cattle were grazing on some marsh land when they came across some red lead, which had been incautiously left there, and all the animals partook of it, with the result that they were all poisoned. Fourteen have already died.

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MEDICAL JOURNALISM FOR THE ARMY.

SIR,—The author of the pamphlet, *The Present and Future of the Army Medical Department*, I observe, hits the right nail, when he says, "No matter how good a physician or surgeon a man may be; no matter how hard he works at his profession, no promotion can be gained, nor can he extricate himself from the dead level of mediocrity. Is there an instance on record of a medical officer being promoted for special proficiency in professional knowledge? We think not. Can a remedy for this be found? And, how can the authorities be enabled to judge of men's professional abilities?" So far we agree with our author. It is a well known fact that in service (be it the British or the Indian), it is seldom that the right man is put in the right place; for, beside the lack of knowledge referred to by him, there are other coincident circumstances, to wit, interest, etc., whereby the less deserving, *per se*, are advanced to positions of importance, of professional and of pecuniary interest. But our concern is not with these points. What it is with, is with the author's suggestion to establish military medical journals in order that they might prove to afford the panacea for these ills. For he tells us not a little complacently that, "another plan to assist the authorities in forming a judgment would be the establishment of a departmental professional magazine, in which medical officers could publish their cases or operations, and could put forward their views on medical and sanitary matters—an *United Medical Service Magazine*, published, say, monthly, and open to the medical officers of the Army, Navy, and Indian services." Now, we must confess that we fail to see the *raison d'être* for the appearance of a contemporary to the many excellent medical journals and magazines extant—some of them having on their staff men belonging to the public services, who devote a part of their time to journalism as a business—especially one with red coat, spurs, gold lace, etc. Is this want really felt, and can it be supplied? Can there be sufficient literary and pecuniary assistance forthcoming to meet it? Is the work or nature of cases which a physician or surgeon in the Army, Navy, or Indian Medical Services meets with of a different nature to those met with by others outside them? Are there not quite a sufficient number of medical weeklies, and monthlies, and quarterlies already published? Take, only in the United Kingdom, and the author of the pamphlet under notice will find the BRITISH MEDICAL JOURNAL, *Lancet*, *Medical Times and Gazette*, *Medical Press and Circular*, the *Practitioner*, *Edinburgh Medical Journal*, *Glasgow Medical Journal*, *London Medical Record*, *Sanitary Record*, *Dublin Journal of Medical Sciences*, *Birmingham Medical Review*, *Specialist*; besides some devoted solely to special subjects such as physiology, mental diseases, etc. Are there not most excellent medical journals published abroad? We take America, and we find coming to us from there the *New York Medical Record*, the *New York Medical Journal*, *Philadelphia Medical Times*, and their new but excellent and vigorous contemporary the (Philadelphia) *Medical News*. Moreover, if a man wants to learn and keep abreast of the daily advances, it is not likely that he will be able to do this with the aid of any *United Service Medical Magazine*; the leaders of the profession will not send their lectures and articles to such a journal, nor will the learned medical societies their *Transactions*, nor the publishers their books for review. It is also doubtful whether many of the medical journals will exchange copies. Even if the journal manage to get around its flag a number of subscribers and a fairly good editorial staff, it will find it difficult to keep up the work without the requisite literary materials. In fact, we are inclined to believe, that such a journal, if started, would be doomed before long to die a premature death from simple inanition. As far as the Indian Medical Service goes, it would, as it does, much prefer, both for perusal and for publication of cases, one or other of the existing periodicals of a non-official character to a *quasi* demi-official organ which, we think, would only be utilised for the purpose of setting forth grievances, or in other words prove to be the *Grumbler's Magazine*. In India, besides, there is an excellent medical periodical published under the title *Indian Medical Gazette*, the columns of which are open to the profession, both in and out of the services.—I am, etc.

INDIAN MEDICAL SERVICE.

SURGEON-GENERAL J. E. CLUTTERBUCK, M.D., late Principal Medical Officer at Malta, will be placed on the Retired List on June 1st, when he attains his sixtieth birthday. His retirement promotes Deputy-Surgeon-General James Irvine, M.D., Principal Medical Officer in Egypt. Dr. Clutterbuck's retirement will be followed, from a like cause, on June 14th, by that of Surgeon-General J. A. Woolfryes, M.D., C.B., C.M.G., late Principal Medical Officer in South Africa, and at present holding the appointment of Chief Medical Officer at Portsmouth.

SURGEON-MAJOR ALEXANDER ADAM RENTON, M.D., F.R.C.P.E., late of the Madras Army, died on May 3rd at Edinburgh.

DEPUTY SURGEON-GENERAL J. EKIN, M.B., C.B., has been appointed Principal Medical Officer at Netley.

DR. AITCHISON, of the 29th Punjaub Infantry, has been appointed officiating secretary to the Surgeon-General, British Forces, Bengal.

SURGEON-GENERAL ROBERT HENRY RENNICK, Madras Army (retired), died on May 14th, at Tours, France, aged 72.

DEPUTY SURGEON-GENERAL T. G. HEWLETT, C.I.E., has been appointed Sanitary Commissioner with the Government of Bombay, in succession to Deputy Surgeon-General J. Lumslaine, Bombay Medical Establishment, who retired from the Service on a pension of £950 per annum. The salary of the appointment is Rs. 2000 a month.

BEQUESTS.—The Rev. George Henry Shield, rector of Holy Trinity, Exeter, bequeathed £4,000 to the Devon and Exeter Hospital and £4,000 to the West of England Eye Infirmary.—Mr. Henry Walsby, of Woolwich, bequeathed £500 to the Royal Kent Dispensary, Greenwich.—The York Dispensary has received £100, free of duty, under the will of Mrs. Elizabeth Johnson; and £100, less duty and expenses, under that of Mr. Edward Elgin.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

MEDICAL ATTENDANCE ON THE SICK POOR.

A CONTRIBUTOR sends the following remarks.

Our contemporary, the *Midland Echo*, in its issue of the 1st inst., states that, "the attention of the guardians of the West Bromwich Union having been called to the almost exclusive employment of unqualified assistants by their medical officers, to attend pauper sick, have issued instructions to them to the effect that, in future, they must be more careful as to the professional qualifications of those to whom they depute so large a portion of their work."

Our contemporary, whilst commending generally the action of the guardians, and condemning the laxity of the system which too generally prevails, whereby such employment of unqualified assistants has been permitted to continue, proceeds to point out how highly desirable it is that some modified arrangements should be introduced, whereby the partly fledged medical man should, in the character of an assistant, be enabled to aid his principal in his work. As it is, if the prohibitive action of the Defence and similar societies be strictly carried out, the race of unqualified assistants, such as have, under careful supervision, rendered much valuable aid, will be completely weeded out, and the general practitioner will have to rely for aid on the raw youth, who, by dint of grinding, etc., has managed to obtain sufficient knowledge to get a pass, but who will be probably ignorant of the most rudimentary knowledge of pharmacy, and still more ignorant as to his capacity for diagnosing those small ailments among children especially which constitute much of the work of the general practitioner.

Our contemporary recommends that a modified examination should be demanded of all those who intend to become assistants. We go further, and express our opinion that much benefit would accrue were it rendered compulsory that all such assistants should be required to spend one, two, or even three years under the supervision of some general practitioner, ere they be permitted to practise on their own account. By the introduction of some such modified arrangement, the profession, the assistant class, and the general public would alike be the gainers: the profession, by its feeling that their assistants did possess more than a mere show of educational attainments; the assistant class, in the higher estimation in which their services would be held; and the public, on learning that, if the services of the principal were not at the moment attainable, the gentleman who visited them had something more in him than a mere varnish of professional knowledge.

EXTRACT FROM THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH TO THE KIRKLEATHAM LOCAL BOARD FOR THE YEAR 1882.

"IN making my annual report for the year 1882, I have taken the population at 4,000. During the year, there were 120 births and 59 deaths, making a birth-rate of 30 and a death-rate of 14.75 per 1,000 *per annum*. The birth-rate for the previous year was 31.14, and the death-rate 16.67, per 1,000 *per annum*. The deaths occurred at or under the following ages: under one year, 15; one and under five, 3; five and under fifteen, 3; fifteen and under twenty-five, 3; twenty-five and under sixty, 17; sixty and under seventy, 7; seventy and under eighty, 6; eighty and upwards, 5. Of these deaths, 7 were in persons not belonging to the district; 2 deaths occurred only from contagious or infectious diseases, and one of them did not belong to the district, dying a few days after arrival. The contagious diseases death-rate in persons belonging to the district for the year was 25 per 1,000 *per annum*. Deducting 7 cases not belonging to the district, and a premature birth, the deaths would be reduced to 51, making a death-rate only of 12.75 per 1,000 *per annum* in persons belonging to the district; and, among these 51 deaths, 7 were in persons over sixty, 6 were over seventy, and 5 were over eighty. Twenty-six deaths only occurred between the ages of one year and sixty years, which gives a death-rate for the year between those ages of 6.5 only per 1,000 *per annum*. The sickness during the year has been slight, a throat-affection lasting about a month, several cases of scarlatina, and a few cases of enteric fever, mumps, and chicken-pox. A false report was circulated through Cleveland during the year, that we had scarlet fever badly, arising, no doubt, from the presence of the scarlet uniforms of the militia then stationed here, there being only one case of scarlatina at the time, and that an imported one."

REPORTS OF MEDICAL OFFICERS OF HEALTH.

KENSINGTON.—As a matter of record, Dr. Dudfield's portly annual volumes are always useful, but he himself largely discounts their immediate interest by the capital monthly reports that he presents to his vestry. It would be futile to attempt to make an efficient abstract of any of the Kensington annual reports, since this would needs mean that the whole sanitary history of the kingdom for the year must be passed under review. Leaving these general subjects with a warm word of praise for the ability and perspicuity with which they are treated, the mortality statistics of Kensington need a few words of remark. The general death-rate shows a satisfactory decrease. For 1881 it was 16.6 per 1,000; for 1882 it was even lower, 16.2 per 1,000. The latter rate was 2.2 below the decimal average, and 5.0 per 1,000 below the metropolitan rate (21.2) which moreover was 1.2 per 1,000 below the decimal average. In 1881, 1,067 out of a total of 2,726 deaths were amongst children under five years of age; and in 1822, 1,114 out of a total of 2,691. The deaths under one year of age were 644 and 635 respectively, equal to 14.6 of the registered births in each year. The deaths from zymotic diseases, which in 1880 were 469, were 383 in 1881, and 382 in 1882, or 94 and 69 below the corrected decennial average. In 1881 the deaths from small-pox were alone in excess of the corrected decennial average, but in 1882 the deaths from measles, scarlet fever, diphtheria, and whooping cough were above the average. In marked contrast to 1881, when 369 cases of small-pox were recorded, and 55 were fatal, there was not in 1882 a single death from small-pox, though 16 cases occurred during the year. There was in 1882 something of a recrudescence of scarlet fever in the parish. In 1880, 105 deaths from that disease were recorded; in 1881, 38 deaths and 287 cases; and in 1882, 60 deaths and 319 cases. As usual, many cases were concealed, and great difficulty was often experienced in obtaining information of the occurrence of the disease, and in persuading parents to let their children be removed to hospital. In many instances, when too late, the refusal came to be lamented. A severe epidemic of whooping-cough set in towards the end of 1881, and continued through the first half of 1882. In the last three months of 1881 there were 38 deaths; and in the first six months of 1882, 101 deaths. In 1881, 22 deaths occurred from enteric fever; and in 1882, 25 deaths. The disease was somewhat prevalent, especially in the northern part of the parish, towards the end of 1882. The deaths from diarrhœa were 101 in 1881, and only 65 in 1882. The latter was an unprecedentedly small number, the nearest approach to it being 71 in 1879. The comparative immunity from the disease is due to the unseasonable weather that prevailed to so large an extent in summer and autumn of both 1882 and 1883. Diseases of the respiratory organs were fatal to 518 persons in 1881, and 600 in 1882, both being below the average; and phthisis killed 371 and 334 persons in the two years. The uncertified deaths were only 7 in 1881, and only 6 in 1882, some of the deceased being infants only a few hours or days old, whose deaths were registered on the information of midwives.

KINGSTON-ON-HULL.—The epidemic prevalence of scarlatina in Hull, during the last six months of 1881, is a subject to which Mr. Mason devotes much attention. The disease accounted for no fewer than 682 deaths, of a total of 934 attributed to the principal zymotic diseases, and represented a rate of 4.48 per 1,000. It first assumed an epidemic form in July, and seems to have spread by the reckless exposure of persons to infection, and by the congregation of children at schools. In this last connection, Mr. Mason observes that, whatever may be the difference of opinion as to the propriety of school closure during fever epidemics, the procedure in Hull had a marked effect in diminishing the mortality. No information was received of the occurrence of fresh cases, and the epidemic soon became beyond control, the efforts of the sanitary officers being limited to isolating those cases occurring in the centre of the town, and these with very partial success. Mr. Mason observes that the pawnbroker's shop, the public mangle, the exposure of people in public conveyances, the visiting of neighbours to infected houses, and the attendance of children at school from infected families, defied all efforts to secure isolation. As regards the compulsory notification of infectious diseases, imperial or otherwise, Mr. Mason's experience teaches him that, until the public mind becomes educated, all efforts in this direction will fall short of the object wished to be attained. In the Hull Extension Bill, powers were sought to secure this provision; but after much discussion, the clause was eventually withdrawn. With the exception of the fatality from scarlatina, the zymotic mortality calls for little comment. There was a considerable diminution in the deaths from small-pox, measles, and diphtheria, which together occasioned but eleven; while whooping-cough accounted for 37, against 144 in the previous year. From diarrhœa there were 141 deaths, 104 of which occurred in children under one year—a mortality which Mr. Mason holds to be due, in a great measure, to the use of improper food, and notably to tainted milk. "Fever" is credited with being fatal to 68 persons, representing a rate of 0.43 per 1,000, which maintains the gradual decrease in this mortality commenced in 1875. From all causes, the death-rate was 23.0 per 1,000, identical with last year's rate. Mr. Mason's history of sanitary improvement in Hull shows that progress continues to be made, especially in the removal of refuse; but the unsanitary condition of the midden-privies calls for serious attention. The slaughter-houses were subjected to systematic inspection, and were found satisfactory; but the authority would do well to consider the suggestion for the provision of a public abattoir. An useful disease-map of the borough is appended to the report; but Mr. Mason's chart of the scarlatina epidemic might easily have been made less unwieldy.

GLOUCESTERSHIRE.—The ninth report of Dr. Bond maintains the high character of his previous reports for interest and completeness. The mortality from diseases of the zymotic class exhibits a persistent and steady decline. In 1874 the total number of deaths from these causes were 301; in 1875, 271; in 1876, 298; in 1877, 273; in 1878, 234; in 1879, 183; in 1880, 210; and in 1881 they were as low as 152. The increase in 1880 was due to the excessive infantile mortality from summer diarrhœa. The importance of the decline is seen on contrasting the zymotic mortality of 1881 with that of 1874, the first year of the series, which is as nearly as possible double the amount. It would not be fair at present, as Dr. Bond observes, to claim the whole of this reduction in the death-rate of what is certainly the most preventible class of diseases as the result of the continued sanitary supervision under which the district has been during this period, as it may, no doubt, be partly accidental in character. Time alone can decide the point. But it is not unreasonable to assume that the supervision in question has exercised a most important influence in producing this result, and it is a very tangible proof that the expenditure which the ratepayers of the district have been called upon to provide for the maintenance of the sanitary machinery which the Public Health Act of 1872 created, has borne very solid fruit in protecting the health of the community. For it must be remembered, Dr. Bond adds, that the evidence in this direction, which is afforded by the decline in the death-rate, is only a portion of that which goes to establish this conclusion; since every death may be taken to represent at least four cases of illness, in which, therefore the diminution must have been proportionately greater. The general death-rate of the district also exhibited a considerable decline being at the rate of 14.3 per 1,000, against 16.3 in 1880, and 18.5 in 1879, and a point lower than had been reached in any of the seven preceding years. Whatever may have been the causes of the fluctuating rate of mortality, it is a matter of congratulation that the present rate, indicating the district as a whole, is some 25 per cent. healthier than the whole of England and Wales. In analysing the zymotic mortality Dr. Bond has, as usual, much of interest to say. There was only one death from varioloid disease, but to scarlatinoid disease 51 deaths are attributed, 32 being from scarlatina and 19 from croup and diphtheria. Dr. Bond has already discussed, in a valuable paper read at the last meeting of the British Medical Association, the question of scarlatinal sore throat, and its relation to other throat affections. Measles and whooping-cough together caused 34 deaths; while continued fever accounts for 17 against 24 registered in the previous year. Of these 17 cases, 4 were of a very undefined and doubtful character; the other 13 were all of an isolated kind, there having been nothing like an epidemic in any part of the district, the outbreak being, in most cases, confined to a single person. The mortality registered from continued fevers has fallen in 1881 to less than half that of the mean of the previous 7 years. This affords another illustration of the operation of the sanitary machinery which has been created during the last few years in improving the public health, since, as Dr. Bond has pointed out in previous reports, it is with this type of disease, that we are able to cope more effectively than with any other, except small-pox, by general sanitary precautions. The mortality from diarrhœa also exhibited a marked diminution, only 26 deaths being registered against 64 in 1880. Septicæmic affections account for 23 deaths, more than half of which were from erysipelas. Dr. Bond descants upon the value of a system of compulsory notification of infectious disease, but thinks that it is less needed in rural districts, such as largely compose the Gloucestershire combination, than in places where the population is more compact. In the Chipping Sodbury district, an arrangement has been effected for a systematic notifi-

ion of infectious disease, the sanitary authority having agreed to ay the district medical officers a fee of half-a-crown for each case eported within a certain time. Referring to the sanitary condition f the district, Dr. Bond has no schemes of water supply or drainage o suggest. In the Gloucester district steps have been taken for the ormation of a special drainage district, as a preliminary to the con- truction of the necessary works. Nuisance removal appears to ave been systematically and expeditiously performed.

OBITUARY.

PETER BRENDON, F.R.C.S

ETER BRENDON, who has recently passed away at the ripe age of , was one of the oldest Members of the Royal College of Surgeons, ving received his diploma in 1817. In 1813-14, he was a pupil at e Plymouth Royal Naval Hospital, under the late Sir Stephen ammick. There he saw much practice, both surgical and medical, ongst the men engaged on board His Majesty's ships during the r with France. His anatomical studies commenced there; and erwards, when he became a student at St. Bartholomew's Hos- al, he was appointed by Abernethy his prosector. He was the t to use a vermilion composition for injecting arteries in subjects dissection, and was in consequence called at the time *rouge* endon. Frederick Skey, on his first visit to the prosector's room h Abernethy, was introduced by him to Brendon with this re- rk: "Brendon, teach this young man how to hold a scalpel." The ndship then commenced between the two young men continued the death of Skey. In 1817, he commenced practice in Launceston, his home and relatives. There he was successful in making a e practice; and he earned the confidence and esteem of the rich the poor by his gentleness and kindness, no less than by his at power of comprehending the nature of disease, and by its suc- sful treatment. After over twenty years' hard work in a large ntry practice, he sought relief by coming to London, where he ed Mr. Amesbury in partnership; but special practice was not to taste, and he two years afterwards threw that up, and pur- sed a share of the late Mr. Snow's practice at Highgate. soon acquired the whole of the practice, and, by his gy and sterling qualities, made it one of the largest in the north London. Retiring from the active duties of his profession in , to enjoy that rest he had well earned, he since lived a eful life, enjoying the many friendships he had made, and died of years.

THOMAS WILLIAM CATTELL, M.R.C.S.Eng., L.S.A.

of those numerous scholars who, though attaining no extra- nary position among their own professional brethren, yet do h to maintain the reputation of the faculty for learning and re- ch, has just been taken to his rest, at a good age, and full of ur from all to whom he was known. But, as again is often ase, it was but a comparatively small circle in which he moved; through his unwearying industry, his extraordinary mental ers, and his vigorous zeal, he attained results in his own line of iry that seem to call for wider notice than that of the few who his presence. Of a Northamptonshire family, and born in , Thomas William Cattell studied at St. Bartholomew's Hos- , and became M.R.C.S. and L.S.A. in 1831. After working at hing and Birmingham, he settled at Liverpool, where with success he practised until 1863, when he retired. For many past he resided at Kingstanley, in Gloucestershire, where he on the 24th of April last. On relinquishing his professional tions, he gave himself to genealogical research, and the industry which he followed his pursuit was remarkable. In many in- es, he has transcribed whole sets of parish registers, and his cripts from documents in the Public Record Office are most sive. He was forming, for the history of some of the families ed in the clothing trade, a collection which must, it is be- , exceed anything of that particular kind hitherto attempted, which cannot fail to be most valuable to future local historians. atisfactory to know that his collections will come into appre- e hands.

C. J. R. ALLATT, M.D., F.R.C.P.

CHRISTOPHER JOHN ROBERT ALLATT has recently died at , where he had long practised, at the advanced age of 89. One of the few survivors from the eighteenth century, he had the honour of being, at his death, the oldest Fellow of the Royal College of Physicians. His fellowship dated from 1828; and he had become a Member in the year previously, when he took the degree of Doctor of Medicine of the University of Cambridge. He entered Trinity College in 1818. In London, he studied at St. George's Hospital and the School of Anatomy in Great Windmill Street.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, May 24th.

Medical Act (1858) *Amendment Bill.*—On the motion of Lord O'HAGAN, this Bill passed through Committee without amendment, and was ordered to be reported to the House.

HOUSE OF COMMONS.—Monday, May 21st.

The Report of Lord Morley's Committee.—Sir H. FLETCHER asked whether the Secretary of State for War would postpone the consideration of the medical vote in the Army Estimates and the vote for Royal Hospitals at Chelsea and Kilmainham until after the distribution of the report of the Committee on the Medical and Commissariat Departments.—Mr. BRAND promised that the votes referred to would not be taken before the distribution of the report.

The Contagious Diseases Acts.—Sir H. WOLFF asked the Secretary of State for the Home Department when it was intended to bring in the measures in substitution for the Contagious Diseases Acts, and the Bill for the protection of young girls.—Sir W. HARCOURT said that, in the absence of his noble friend the Secretary of State for War, he could not state when the measures in substitution for the Contagious Diseases Acts would be brought in. It was expected that the Bill for the protection of young girls would be introduced into the House of Lords next week.

Tuesday, May 22nd.

Vaccination with Calf-Lymph.—Mr. HOPWOOD asked the President of the Local Government Board whether a memorial had been received by him from Mr. Henry Allen, of Holloway, respecting the death of his child Mabel Emma, on April 19th, 1883, alleging that she died from the effects of vaccination with calf-lymph from the Marylebone Institution; whether, as the inquest was held without a *post mortem* examination or other evidence available to prove the cause of death, he would grant the prayer of the memorialist for an official inquiry; and whether it was the fact that calf-lymph was usually followed by more inflammatory and severe effects than even human-lymph.—Sir C. DILKE: The memorial has been received, and the coroner has been communicated with, who informs me that the jury, in view of the evidence given at the inquest, gave as their verdict that the child died "from the mortal effects of pneumonia, following septicæmia from a labial abscess; and the jurors further say that the death was from natural causes." I have had before me the depositions in this case, and I have been advised that the course of the disease in this child, beginning in an altogether different part of the body from the vaccinated arm, and extending to altogether different parts of the body, while the vaccinated arm showed no undue inflammation, was not such as to suggest any connection whatever between the disease and the vaccination. The Board have accordingly replied that they have no power to review the decision of the coroner's court; and that, after fully considering the circumstances of the case, they are unable to satisfy themselves that there exists any sufficient ground for an inquiry, such as the memorialist suggests. It is a fact that calf-lymph does produce somewhat more decided constitutional symptoms than are produced by average humanised lymph.

MR. PETER TAYLOR has given notice that, on June 19th, he will call attention to the vaccination laws.

Thursday, May 24th.

The Army Medical Inquiry.—Sir W. BARTTELOT asked the Secretary of State for War by whose authority a full report of the Army Medical Inquiry was sent to the newspapers before that report had been communicated to the House; and, if sent without authority, if steps had been taken to find out the person who furnished to the papers a copy of the report. He wished also to know whether the

noble lord was aware that the report was not even yet in the hands of members, although it was published in the newspapers last Saturday.—The Marquis of HARTINGTON: I deeply regret what has occurred. For some time past, the *Times* has devoted considerably more space to military matters than other papers; and, having regard to that, and also to the fact that, from time to time, unauthorised and inaccurate statements had somehow or other got out of the War Office; considering also that, if questions of this kind were discussed at all, it was desirable that they should be discussed in a careful and deliberate manner, it has been the practice for some time past to allow a person connected with the *Times* to have an early proof of papers intended to be presented to Parliament to publish them. The Department had satisfactory proof of the good faith and discretion with which the papers would be used, and they were always given on the distinct understanding that nothing whatever should be published until the papers were in the hands of members. Acting upon that practice my noble friend Lord Morley, Chairman of the Committee, gave to a gentleman connected with the *Times*, immediately before the Whitsuntide holidays, his own proof of the report and the evidence taken, in the belief that the papers would be in the hands of members on the House reassembling, and on the understanding that nothing whatever should be published until they were so distributed. He was himself extremely surprised to see the report and extracts from the evidence published at great length in the *Times* of Saturday and subsequent days. He had communicated with the editor of the *Times*, who had expressed great regret for what had occurred. But I must say that, looking to the great want of care, to say the least, which has been exhibited in this case, it appears to me necessary that that practice should be altogether abandoned. I am sorry to say the evidence and report are so voluminous that they will not be in the hands of members till Tuesday, and the Army Medical vote will accordingly be postponed. The vote relating to the Contagious Diseases Acts will also be postponed until members have had an opportunity of considering the Government Bill on the subject. —Sir W. BARTTELOT: But this is what has happened before. I think the Prime Minister gave us an assurance that no publication of any sort should take place until the papers were in the hands of members; and yet immediately after that we have this full authentic report of the Committee at the War Office.—Mr. GLADSTONE: The promise to which the hon. member refers was of a departmental character.—Dr. CAMERON, complaining of the unfair character of the extracts as given, gave notice that to-morrow he should question Lord Hartington as to their accuracy.—Mr. CALLAN gave notice that he should ask whether Lord Morley had not simply followed the bad example set by the late Chief Secretary for Ireland, who gave the report of the Land Commission to the *Times* two days in advance.—The Marquis of HARTINGTON: One of the reasons why I regret this improper and premature publication is, that it is not only premature, but, in my opinion, has been done in a manner altogether calculated to mislead the public.—Mr. A. BALFOUR: Can the Prime Minister now give us a promise not of a "departmental character"?—Mr. GLADSTONE: I don't think my answer called for such a taunt. —Mr. BALFOUR: I certainly did not mean to taunt the right hon. gentleman.—Mr. GLADSTONE: If the question of the hon. gentleman does not imply a taunt, I must be more obtuse than on former occasions. As to the matter of fact, I entirely concur in the letter and the spirit of my noble friend's (Lord Hartington's) decision, and I would wish to act upon it on all occasions.—Mr. O'DONNELL: I wish to ask the Secretary of War whether the understanding on which early copies of documents are given to the *Times*, is that the review in the paper shall, on the whole, be favourable to the Government of the day.—The Marquis of HARTINGTON: So far as I am aware, the object of the practice was as stated by me in answer to the first question. If the object had been to obtain a review of a favourable character, that object has not been attained.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

THE PROFESSORSHIP OF ANATOMY.—Applications of candidates for the Professorship of Anatomy, vacated by the resignation of Professor Humphry, must be sent in to the Vice-Chancellor of the University before June 7th, and the election will take place soon after that date. The board of electors are Professors Paget, Liveing, and Newton, Dr. Michael Foster, and Mr. J. W. Clark (Cambridge), Professors Huxley and Flower, and Dr. Allen Thomson.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Fellows, May 17th, 1883:

James Sawyer, M.D.London, Birmingham
George Frederick Elliott, M.D.Dublin, Hull
Robert Mundy Gover, M.D.St. Andrews, Home Office, S.W.
Julius Dreschfeld, M.D.Wurzburg, Manchester
Francis Warner, M.D.London, 24, Harley Street, W.
William Murrell, M.D.Brussels, 38, Weymouth Street, W.
Henry Cook, M.D.St. Andrews, Shaldon, Teignmouth
Thomas Clifford Allbutt, M.D.Cambridge, Leeds

Admitted Licentiate:

George Arthur Johnson, Guy's Hospital, S.E.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma were admitted members of the College at a meeting of the Court of Examiners on the 17th instant, viz.:

Messrs. J. Philip Glover, L.R.C.P.Lond., Osborne Terrace, S.W., J. Edward Kershaw, Richmond, and R. Edward Rouse, L.S.A., Worcester Street, S.W. students of St. Thomas's Hospital; Reuben Levi, M.D., McGill, Montreal of the University of McGill; Frederick W. Cock, L.S.A., Westbourne Park Terrace, of University College; A. P. Henry Griffiths, Kennington, of Guy's Hospital; William Brewster, L.S.A., Manchester, of St. Bartholomew's Hospital; G. Beaman Hicks, Hackney, of the London Hospital Herbert Mickle, M.B., Toronto, of the Toronto School of Medicine; and H. W. Steele Verity, L.S.A., Cheltenham, of King's College.

Two candidates were referred to their studies for three months three for six months, and one for twelve months.

The following gentlemen were admitted members on the 18th instant, viz.:

Messrs. E. Treaches Collins, L.S.A., Primrose Hill, and St. John Thornton L.R.C.P.Lond., Strand, of the Middlesex Hospital; R. B. Drury Bat L.S.A., Camden Road, and Robert Jones, M.B.Lond., Tirnadoc, Nort Wales, of St. Bartholomew's Hospital; R. F. Bestall Halpin, Arklow, c Wicklow, and H. Wheatley Hart, L.S.A., Putney, of the Westminst Hospital; A. Henry Mason, L.R.C.P.Lond., Hampstead, of Universit College; Mark Style, L.R.C.P.Lond., Acton, of St. Mary's Hospital; William Buckley, L.S.A., Betley, near Crewe, of St. Thomas's Hospita and V. Norman Bindley, L.S.A., New Wandsworth, of the London Ho pital.

Three candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the Colleg Eight candidates were referred to their professional studies six months, including one for three months.

At the half-yearly primary examination for the Fellowship of t Royal College of Surgeons, the following gentlemen were successf on the 21st instant, viz.:

Messrs. Edward J. Lewis, of the Cambridge School; Thomas Thyne, Charing Cross Hospital; Percy Fleming, of University College; E. F Castle, of St. Bartholomew's Hospital; F. Herbert Mayo, of the Le School; R. J. Bliss Howard, of McGill College; W. Brewster Platt Harvard University; and Archibald Watson, of the University of Pari

Twelve candidates were referred to their studies for six mont

The following passed on the 22nd instant, viz.:

Messrs. J. Michell Clarke, B.A.Cantab., and E. Waymouth Reid, B.A.Can students of the Cambridge School; C. Edward Tanner, and F. Pin Maynard, of St. Bartholomew's Hospital; W. Henry Bowes, and Leonard Braddon, of Guy's Hospital; C. Leopold Hudson, of the Mi sex Hospital; Frederick Edge, of the Manchester School; and C. Ye ton Pearson, of the Cork School.

Eleven candidates were referred for six months.

The following gentlemen passed on the 23rd instant, viz.:

Messrs. L. Asher Lawrence, and J. Paul Roughton, of St. Bartholomew's pital; Reginald R. Whishaw, of the University of Cambridge; Prie Leech, of the Manchester School; J. P. Williams Gray, of King's lege; G. W. Henry French, of St. Mary's Hospital; F. Henry Me St. George's Hospital.

Nine candidates were referred for six months.

APOTHECARIES' HALL.—The following gentlemen passed Examination in the Science and Practice of Medicine, and rec certificates to practise, on Thursday, May 17th, 1883.

Bindley, Victor Norman, Southborough Road, South Hackney.
Hearnden, Walter Carrington, Sutton, Surrey.
Jones, David Llewellyn, Llandilo, Carmarthenshire.
Leech, Arthur Herbert, Woolpit, Suffolk.
Sinclair, Robert Duffy, South Wellington Street, Glasgow.
Tuckett, Walter Reginald, Daniel Street, Bath.
Webster, Trevor, High Street, Bewdley.

The following gentlemen also on the same day passed the mary Professional Examination.

Benson, Christopher Richmond, St. Bartholomew's Hospital.
Swindlehurst, Thomas Newton, Guy's Hospital.

UNIVERSITY OF DURHAM.—The following candidates pas first examination for degrees in Medicine and Surgery, held 23rd, 24th, 25th, 26th, and 27th:

Second-class Honours.—Simpson Powell, M.R.C.S., L.S.A.; Francis Henry Mead. *Pass List.*—William Baigent, Raymond Courteen, James H. Crouch, Robert T. J. Crosier, Charles R. Davidson, Solomon A. Erulkar, Robert L. Hildyard, Frederick P. Maynard, Reginald Pollard, Frederick Proud, William Rawes, Francis A. Saw, William Slater, Joseph S. H. Sumner, M.R.C.S., L.S.A., Charles J. Tabor, Charles E. Tanner, Francis J. Walker, Francis Winter, William M. Yeoman.

The following failed to satisfy the Examiners in Chemistry, but passed in the other subjects:

William G. Richardson, Basil C. Simpson, William J. Ruddock, Charles F. Rumboll, John Straughan, John Barker, Edgar B. Sugden, James Hindle, M.R.C.S.

The following failed to satisfy the Examiners in Botany, but passed in the other subjects:

Fallon P. Wightwick, L.R.C.P., M.R.C.S., Robert Crosby, F. J. Malden, George Cranstoun.

The following (the only candidate) passed the examination for proficiency in Sanitary Science:

Arthur W. Wheatley, M.R.C.S., L.S.A.

UNIVERSITY OF CAMBRIDGE.—The following have passed the examination for the degree of Bachelor in Surgery:

Morrison, B.A., Christ's; Wallis, B.A., Gonville and Caius; Ward, M.A., Trinity.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—During the last sittings of the Examiners, the following gentlemen passed their final examination, and were admitted L.R.C.S.E.:

David Prain, Fettercairn; James Whitton, Queen's County; John Clancy, County Kerry; Frank Sturges, London; William Guy, Kent; Arthur Herbert Butcher, Ripon.

The following gentlemen passed their first professional examination for the Licence in Dental Surgery:

James Maynard Dunlop, Dumfries; James Graham Munro, New York; John Wood, Dalbeattie.

The following gentlemen passed their final examination, and were admitted L.D.S.

William John Mason, Somersetshire; William Thomas Elliott, Diss, Norfolk.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—Examinations for the Licences of the College were held on Monday, Tuesday, Wednesday, and Thursday, May 7th, 8th, 9th, and 10th. The Oral Examinations took place, at four o'clock, on Tuesday, Wednesday, and Thursday. The following candidates were successful:

For the Licences to practise Medicine and Midwifery.—Alfred John Charlick, Birkdale Park, Southport; Jones Henry Davis, Dublin; Paul Robert Dillon, Dublin; Richard Thacker King, Rathgar, Dublin; Herbert Harrison Marsden, Birkenhead; John Latimer Parke, Tideswell, near Sheffield; Robert Dixon Patterson, Moy, co. Tyrone; Henry Robinson, Liverpool; John Joseph Todd, Omagh, co. Tyrone; William Henry Waterfield, Dublin; Edward Wynne, Upper Rathmines, Dublin.

For the Licence to practise Medicine only.—Thomas Wetherall Sproulle, Moville, co. Donegal; George Albert Walpole, Strokestown.

For the Licence to practise Midwifery only.—Arthur Wellington Fenton, M.B., B.Ch., Easkey, co. Sligo; Samuel Alexander Swan, M.D., Belfast.

UNIVERSITY OF EDINBURGH.—At the graduation ceremonial on April 20th, the following degrees were conferred by the Chancellor of the University:

Degree of Doctor in Medicine.—Petrus Jacobus Retief, Cape of Good Hope, M.B. and C.M. of 1880.

Degrees of Bachelor of Medicine and Master in Surgery.—William Alexander Mackay, Scotland, and Thomas Wood, Scotland.

Degree of Doctor of Science.—Archibald Campbell Munro, M.B., B.Sc., in the Department of Public Health; Alexander Scott, B.Sc., in the Department of Chemistry; John Muirhead Macfarlane, B.Sc., in the Department of Natural Science.

Degree of Bachelor of Science.—George Goudie Chisholm, M.A., Edmund Wearne Clarke, Edmund Wyatt Gibson, George Lovell Gulland, M.A., John McFadyean, M.B., and John Rattray, in the Department of Natural Sciences; Hugh Robert Mill, Andrew Thomson, M.A., and Samuel Walker, M.A., in the Department of Physical Experimental Sciences; William Edward Bailey, M.B., James Crombie, M.B., Francis William Grant, M.B., William Atkinson Harrison, M.B., Henry Aubrey Husband, M.B., and William Robert Smith, M.D., in the Department of Public Health.

The following is a complete list of those students who have passed the second professional examination for the M.B. and C.M. degrees of the University of Edinburgh, viz.:

Charles Aitken, M. S. P. Aganoor, M. S. Altounian, Samuel Arnold, E. H. Bannister, J. B. Batten, D. G. Bennet, Wm. Bird, Robert Blair, Frederick Bond, J. E. Bottomley, C. K. Bourne, Paul Bowes (with distinction), T. M. Buncle, P. B. Bury, J. M. Cadell, Edward Carmichael (with distinction), W. R. Carter, R. L. Clark, J. G. Cossins, R. S. Coulthard, A. S. Cumming, Richard Davidson, T. W. Dewar, W. O. Dow, H. J. Dring, T. G. Evans, H. S. Fairbank, W. C. Faulkner, J. E. A. Ferguson, William Flett, W. G. Galletly, D. J. Galloway, A. R. Gray, F. G. Greenbury, C. G. D. Hailes, P. B. Handyside, E. B. Hector, J. R. Henderson, R. S. Hubbersty, B. E. Iastrzebski, Thomas Johnstone, J. E. H. Kelso, G. H. Kenyon, D. O. Kerr, William Laing, W. S. Lang (with distinction), T. A. Leishman, G. S. P. Loubser, W. W. R. Love, R. H. Lucy (with distinction), C. M. Macalister, W. G. M'Fee, H. Mackay, F. W. Mackenzie, N. J. M'Kie, W. R. M'Kinnel, Murray MacLaren, W. H. M'Lean, Jas. M'Leod, John M'Myn, G. D. Malan, Angus Matheson, Alexander Menzies (with distinction), Duncan Menzies, Gustave Michel, David Milligan, Robert Mitchell, A. E. Morison, Daniel Mowat, W. J. Munro, Frederick Murray, J. T. Nesbit, John Noble, F. B. O'Flaherty, James Paterson, R. J. Paton, F. A. Pockley (with distinction), J. M. S. Preston, A. W. G. Price, C. A. Renny, F. G. Retief, John Rigg, John Robertson, A. H. Robinson, F. H. Simmons, Wm. Sneddon, A. C. Stark, J. S. Stephen, H. F. D. Stephens, G. H. H. Symonds, J. C. Taylor, Wm. Taylor, Geo. Thomson, H. A. Thomson (with distinction), T. J. Thyne, C. G. Traill, G. A. Tullis, J. W. O. Underhill, Edmund Walker, N. H. Walker, N. P. Walker, David Wallace, T. A. Watson, S. F. Wernich (with distinction), Algernon Westlake, Claude Wilson (with distinction), J. T. Wilson, J. E. Wolphagen, and A. J. Wood.

The undernoted gentlemen passed the first professional examination (Chemistry, Botany, and Natural History) in the University last month:

Messrs. A. R. Aldridge, J. A. Armitage, W. S. Armitage, J. W. Astles, O. R. Bain, G. A. Ballingall, W. H. Bansall, H. L. Barker, A. A. Bartholomew, Victor Black, G. M. Brown, James Brown, J. H. Bruce, W. J. Cameron, J. M. Campbell, J. J. Carson, R. L. Caunter, W. W. Chamberlain, P. P. Chetti, W. S. Counsell, Wm. Craig, A. J. Cross, F. E. Crossley, J. E. Davies, H. G. Dickman, Arthur Drury, Thos. Edwards, Wm. Elder, L. G. Fischer, Alex. Fisher, T. H. Fiske, H. S. R. Freeborn, G. V. Gilray, T. P. Gray (with distinction), J. A. Guthrie, F. J. Hart, J. T. Harvey, T. H. Hayton, F. W. Hennessy, J. R. Hill, Robt. Howden, Saml. Hughes, C. W. Hunter, W. H. M. Ingham, G. L. Jenkins, E. J. Jennings, F. M. Johnson, J. J. Johnson, S. G. Kinloch, J. A. Kynoch, R. F. C. Leith, H. H. Littlejohn, Thomas MacDonald, Thomas MacGregor, C. R. M'Guffie, T. M. Macknight, C. J. R. M'Lean, G. H. Mason, C. H. Melville, W. F. Menzies, S. H. Merryweather, A. van der Merwe, R. H. Mitchell, W. G. Mitchell, Wm. Murphy, Glenmore Ozanne, F. G. Phillippo, E. E. Pringle, G. F. Rhodes, J. K. Robinson, Robt. Robinson, J. G. da Rocha, Tennent Ronalds, J. R. H. Ross, D. H. Scott, K. M. Scott, F. R. Shepherd, A. W. Shields, R. B. Simmins, J. L. M. Smith, C. E. Southwell, W. C. Spiller, A. J. M. Stenhouse, K. T. Stewart, R. C. Strode, Jas. Strother, G. A. Sutherland, W. H. Sutherland, J. W. Talent, Inglis Taylor, William Evans Thomas, A. E. Thomson, J. K. Tomory, W. H. Turton, W. J. Visser, Hen. Ware, Duncan Watters, J. A. Wetherell, J. H. Whiteside, J. C. Williams, James Wilson, W. C. Wilson, and Andrew Young.

UNIVERSITY OF GLASGOW.—At the recent medical examinations, the following candidates passed:

First Professional Examination.—Messrs. John Allan, W. Carrick Allan, John Baird, Samuel J. Baird, David Reid Barrie, Charles W. Bell, H. Duncan Brown, Hugh D. Buchanan, William M. A. Butchart, Archibald S. Campbell, Robert Corbett, Alexander D. Crawford, William C. Crichton, Donald Currie, William Davidson, George W. Davis, Josephus L. Downs, William Findlay, W. J. Gibbin, Adam Hamilton, Robert Hamilton, Charles S. Harris, James E. Hunter, William M. A. Huntly, William J. Keir, George Marshall, John Marshall, Alfred E. Miller, George Miller, Alexander Munro, Donald S. MacCall, J. R. Ronald MacCrindle, George G. M'Donald, Hugh M. M'Houl, Archibald Maclachlan, Alexander H. MacLean, David T. Macleod, Charles Mactaggart, Andrew H. Richmond, John Ritchie, John Rowatt, Pramath Roy, Walter Sandeman, William Shand, John S. Stewart, Robert Stirling, John Thorburn, James Watson, Robert Whitelaw, Leonard Williams, and William Yorke.

Second Professional Examination.—Messrs. Samuel P. Alexander, William Allan, Harry Bamber, William T. Blakely, William Brown, John J. Brownlee, William Buchanan, Quintin Chalmers (3), George M. Connor, James Crawford, Alexander Dewar, William Downie, M.A., Robert Eaglesham, James D. Farquharson, James Findlay (3), Alexander Frew (3), Andrew B. Fulton, Robert C. Gilroy, John Graham, W. James Holme, John A. Kerr, Alexander M. Kinghorn, William Kirkland, Alexander Kirkpatrick, J. Begbie Laing, Robert Livingstone, W. Gray Marshall, R. Gibson Miller, David Moffat, William C. C. Mair, Andrew Murdoch, Thomas C. M'Culloch, Roderick M'Donald, Alexander M'Kean, Ernest M'Kenzie, Charles M'Kinnon, M.A., Donald J. M'Intosh, Digby M M'Phail, James Ralley, William Rankin, John O. Reddie, George C. Rodger, Robert Routledge, David Roxburgh, Thomas Russell, Gavin S. Scott, J. Charles A. Smith, Miller Temple, John White, and Andrew Wilson.

Third Professional Examination.—Samuel Alexander, Alexander G. Auld, John Beveridge, George Clark, John Clark, William Colquhoun, Francis H. Colvin, J. B. Cumming, John Cunningham, David Finlay, Alexander Frew (2), Herbert M. Gay, Michael H. Greener, Thomas Howard, Alexander Jack, Arthur G. Keogh, George A. Morris, James W. A. Murdoch, Duncan Macartney, M.A., Wm. M'Cracken, William M'Creadie, David MacDonald, Neil C. M'Donald, Duncan M'Gilvray, Hugh M. Mackintosh, David Orr, Alexander B. Paterson, Alexander Peacock, John Ritchie, Richard A. D. Robb, Alexander Robertson, Frank Russell, James Shaw, Alexander J. F. Skottowe, William F. Somerville, M.A., James P. Smith, Joseph Thornley, George B. Todd, R. Bruce Young, M.A., and Robert H. Young.

UNIVERSITY OF ABERDEEN.—The following registered medical practitioners, having passed the required examinations, have had the degree of Doctor of Medicine conferred upon them:

Messrs. James Lawton Andrew, L.R.C.P.Ed., M.R.C.S.Eng., L.M.Eng., L.S.A., Mossley, near Manchester; Harvey Eustace Astles, F.R.C.P.Ed., Adelaide; Andrew Brown, M.R.C.P.Ed., L.R.C.S.Ed., London; Henry Francis Fisher, L.R.C.P.Ed., L.F.P.S.G., Liverpool; Thos. Gambier, M.R.C.S.Eng., L.S.A.Lond., St. Leonards-on-Sea; William Kitto Giddings, M.R.C.P.Ed., M. and L.M.R.C.S.Eng., L.S.A.Lond., Calverley, Leeds; James Jamieson, F.R.C.S.Ed., Edinburgh; Frederick Fitzherbert Jay, L.R.C.P.Lond., M.R.C.S.Eng, Slough; Wm. Hen. Kempster, L.R.C.P.Ed., M.R.C.S.Eng., London; Thomas Smith, F.R.C.P.Lond., F.R.C.S.Ed., Woodley, Stockport.

John Edward Hanson, M.B. and C.M. St. And., Huddersfield, has also proceeded to the degree of M.D.

At the same time, the following gentleman passed the first pro

fessional examination for the degree of Bachelor of Medicine and Master in Surgery:

John Martin, L.R.C.S.Ed., L.A.H.Dublin, A.M.D., Cork.

At the recent graduation, the following candidates received degrees in Medicine and Surgery:

Degree of M.D.—John Barrett, M.B., C.M., P. and O. Service; Harry A. Benham, M.B., C.M., Dundee; Alexander H. Griffith, M.B., C.M., Manchester; Frederick M. Hawkins, M.B., C.M., London; William Reid, M.B., C.M., Kensington; Charles B. Richardson, M.B., C.M., Brighton; William D. Steel, M.B., C.M., Abergavenny; David Tulloch, M.B., C.M., Winnipeg, Canada.

Degrees of M.B. and C.M.—John Baker, Aberdeen; Robert Milne Beaton, Aberdeen; Alfred Brown, M.A., Welshpool; George Buchan, Aberdeen; Sylvester J. Cole, Freetown, Sierra Leone; Henri Cook, Greenock; Alex. Cowley, Dublin; George F. A. Da Costa, Kingston, Jamaica; Francis Falconer, M.A., Aberdeen; James T. Fraser, Longsight, Manchester; John Gerard, M.A., Aberdeen; John Gordon, Aberdeen; Andrew Hosie, Aberdeen; John Inglis, M.A., Aberdeen; David Ireland, Brechin; Charles Jeffrey, Tarland; George Johnstone, Fintray; Thomas M. Johnstone, Ellon; John B. Kerr, Manchester; James F. Macdonald, Aberfeldy; John Matheson, M.A., Plockton, Ross-shire; Frederic Maude, Highgate; John M'Combie, Oxton, Morayshire; Grenville E. Moffett, Calcutta; James Moir, St. Kilda, Victoria; James Murray, Nairn; Alexander Nicoll, Rhynie; David Petty, Montrose; James Robert Purdy, Morpeth; Alexander Rennie, M.A., Wester Fintray; James T. Robb, Keith; William Scott, Auchairn, Keith; William J. H. Sinclair, Dunbeath, Wick; William A. Stewart, Buxburn, Newhills; James Taylor, M.A., New Deer; George J. K. Turner, Ellon; John Turner, Portsmouth; George Vincent, Bedfont, Middlesex.

Of the above-named candidates, John Gerard M.A., David Ireland, James F. Macdonald, Alexander Rennie, M.A., and William Scott, received their degrees in Medicine and Surgery with honourable distinction.

At the same time, William Kelty, William L. Ruxton, James L. Smith, and George C. Still, were certified as having passed all the examinations, but did not graduate.

The following candidates have passed the first division of the first professional examination:

Messrs. John F. Cumming, John G. Dallas, Edward G. W. Deane, Frederick A. Foy, John J. Gray, James W. M. Gunn, Albert E. Henderson, James T. Lewis, James T. Macpherson, John Malcolm, James Melvin, Edward R. Orchard, David A. Shirres, Charles Smith, John W. Smith.

The following candidates have completed the first professional examination:

Messrs. Charles M. Aird, Alfred W. Alcock, Charles S. Anderson, Matthew F. Anderson, Joseph Marshall Barnes, James W. Bett, John Harley Brooks, David M. Brown, John Christie, James F. Craig, Alexander G. Davidson, John S. Davidson, James S. Dickie, Leslie Durno, George Forbes, John F. S. Fowler, William S. Geddie, David Gill, Henry W. Godfrey, George Gordon, William H. Gray, George N. Henry, F. G. Jones, David A. F. Kydd, John M. Lamb, Andrew A. Maclennan, Farquhar M'Rae, Alexander S. Manson, Alexander Milne, James Black Milne, James Shaw Milne, William V. Morgan, James Murray, John C. Myles, Arthur E. Paterson, Eapen Poonen, Patrick W. Rattray, Cecil Robertson, William Robertson, Hugh Ross, George Scott, David Simpson, William B. Simpson, John R. Skinner, William G. Stott, Alexander J. Stuart, James T. Thorne, Andrew Whyte, Reginald G. Wills, and James M. Young.

The following candidates have passed the second professional examination:

Messrs. Henry M'K. Adamson, George H. Allden, John Anderson, Joseph Anderson, John Baker, Christopher G. Battiscombe, Charles G. Bennett, William R. Clark, James W. Cook, Alexander M. Cowie, George B. Currie, Augustus W. Dalby, George Duffus, Walter A. Elmslie, Henry Gibbons, John Gordon, Thomas B. Graham, Arthur S. Inglis, James Logie, Stuart Macdonald, Frank I. Mackintosh, Alexander Maclean, James M. Munro, Alexander Murchison, Robert D. Presslie, Alexander Reid, Herman Thiole, John E. Webb, Arthur M. Whitehead, and John T. Windle.

The next professional examination for degrees in Medicine commences on Saturday, July 28th.

MEDICAL VACANCIES.

The following vacancies are announced:

ADELAIDE HOSPITAL, Dublin.—Surgeon. Applications by June 1st.

ARMAGH UNION, Blackwatertown Dispensary.—Medical Officer. Salary, £140 per annum and fees. Election on the 28th instant.

BOARD OF MANAGEMENT OF THE NORTH SURREY SCHOOL DISTRICT, Anerley.—Medical Officer. Salary, £200 per annum. Applications to Mr. H. J. Chaldecott, 68, North End, Croydon.

BRISTOL GENERAL HOSPITAL.—Physician's Assistant. Salary, £50 per annum. Applications by May 28th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—Assistant-Surgeon. Applications by June 9th.

CHELSEA HOSPITAL FOR WOMEN.—Four Assistant Physicians, a Pathologist, and an Administrator of Anæsthetics. Applications by June 6th.

CHELSEA HOSPITAL FOR WOMEN.—Resident Medical Officer for the new hospital. Salary £60 per annum. Applications by June 6th.

CITY AND COUNTY LUNATIC ASYLUM, Stapleton, near Bristol.—Assistant Medical Officer. Salary, £150 per annum. Applications, addressed to th "Chairman of the Committee of Visitors," by June 7th.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer. Salary £140 per annum. Applications addressed to the Chairman of the Visitors, under cover to Thomas Coombs, Esq., Clerk to the Visitors, 8, South Street, Dorchester, by May 28th.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. £100 per annum. Applications by June 15th.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum. Applications to the Secretary by May 26th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental House-Surgeon. Salary, £40 per annum. Applications by June 11th.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £120 per annum. Applications to Mr. T. E. Drake, Solicitor, Exeter.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 3rd.

GLASGOW MATERNITY HOSPITAL.—Out-door Accoucheur. Applications by May 31st.

GLASGOW ROYAL INFIRMARY.—Teacher of Chemistry. Applications by June 15th.

GLASGOW ROYAL INFIRMARY.—Teacher of Physiology. Applications by June 15th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Junior Resident Medical Officer. Salary, £50 per annum. Applications by May 30th.

QUEEN'S HOSPITAL, Birmingham.—Resident Physician. Salary, £50 per annum. Applications by June 20th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Two Examiners in Midwifery, either from the Fellows of the College or from Fellows of the Royal College of Physicians of London. Applications by the 26th instant.

RURAL SANITARY AUTHORITY OF THE ISLE OF WIGHT.—Medical Officer of Health. Salary, £300 per annum. Applications by June 6th.

ST. BARTHOLOMEW'S HOSPITAL.—Two Casualty Physicians. Applications by June 8th.

ST. GEORGE'S HOSPITAL.—Assistant Physician. Applications by June 7th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary £200 per annum. Applications by July 14th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Physician (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Assistant Physician for Diseases of Women (must be Fellow or Member of the Royal College of Physicians, London). Applications by May 28th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—Two Surgeons (must be Fellows or Members of the Royal College of Surgeons.) Applications by May 28th.

MEDICAL APPOINTMENTS.

BARKER, H. M., M.B., M.R.C.S., appointed Civil Surgeon to the Garrison and Military Hospital, Sandown, *vice* G. J. Thurston, M.R.C.S., resigned.

BLAKENEY, Edward J., L.K.Q.C.P., appointed Surgeon to the Roscommon County Infirmary, *vice* R. Peyton, M.D., deceased.

HOWELL, J. B., M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest.

JULER, Henry, F.R.C.P., appointed Senior Ophthalmic Surgeon to St. Mary's Hospital.

LAIMBEER, F. J., L.R.C.P.Lond., M.R.C.S.Eng., appointed Resident Medical Officer to the Liverpool Royal Infirmary, *vice* Henry Briggs, M.B., C.M., M.R.C.S., resigned.

LEACH, J. Comyns, M.D.Durham, B.Sc.Lond., S. Sc. C. Camb., reappointed Medical Officer of Health for the Sturminster Rural Sanitary District for a period of five years.

TYLER-SMITH, Ernest Louis, M.B., B.A.Cantab., appointed Honorary Physician to the Brighton and Hove Dispensary, *vice* T. W. Fuller, M.B.Lond., deceased.

VINRACE, E. Dennis, M.R.C.S.E., L.S.A., appointed Assistant Resident Medical Officer to the Children's Hospital, Birmingham, *vice* J. Allman Powell, B.A., M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcements.

BIRTHS.

COLEMAN.—On May 20th, at Hill View, Streatham Common, the wife of Charle A. Coleman, M.D., of a daughter.

LUNN.—On the 19th instant, the wife of John R. Lunn, Medical Superintenden of the Marylebone Infirmary, Notting Hill, W., of a son, who only survive his birth a few hours.

DEATH.

EVANS.—Suddenly, at 40, Berkeley Street, Glasgow, on the 20th instan Ebenezer Evans, M.B., C.M., late of Beaumaris, North Wales. Friends wi please accept of this the only intimation.

AMBULANCE LITTERS IN HYDE PARK.—The First Commission of Works having given permission to a committee lately formed Mrs. Priestley to establish ambulance stations in Hyde Park, a Ashford litter and a hamper containing splints, bandages, and oth things necessary for the first treatment of injured persons we placed at the Hyde Park Corner Lodge on Saturday by Mr. Furle Deputy Chairman of the St. John's Ambulance Association, who ga instructions as to their employment. A second litter will in a f days be put at another lodge; meanwhile it has been left at the Hy Park Police-station, in order that the constables, many of wh hold certificates of the St. John's Ambulance Association, may ha an opportunity of practising with it.

OPERATION DAYS AT THE HOSPITALS.

MONDAY......Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY......Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY......St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TODAY.—Clinical Society of London. Mr. R. J. Godlee: On Cases of Stretching of the Facial Nerve. Mr. Clutton: On a Case of Spondylitis Deformans. Dr. Lediard (Carlisle): On a Case of Combined Spondylitis and Osteitis Deformans. Mr. A. T. Norton: On a Case of Melanotic Sarcoma of Antrum: Excision of Superior Maxilla: Recovery. Mr. G. Lawson: On Two Cases of Epithelioma occurring on Tight Cicatrices. Dr. Crocker: On a Case of Multiple Nodes in Congenital Syphilis. Dr. F. Taylor: Infantile Hemiplegia with Unusual Reflex.—The Parkes Museum of Hygiene. Introductory Lecture, by Professor F. De Chaumont, F.R.S., Professor of Hygiene in the Army Medical School, Netley: "A Sketch of the Origin and Development of the Science of Hygiene."

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PRESCRIBING AND DISPENSING.

SIR,—When Bills are being introduced into Parliament to amend both the Medical Acts and the Pharmacy Act, this may be a fitting time to make the endeavour to prevent druggists from prescribing medicines, of the physiological and therapeutic effects of which they know little or nothing. Whilst druggists should not be allowed to prescribe, I cannot help sympathising with them in their attempts to get the monopoly of selling and compounding all—with a few exceptions—the medicines enumerated in the *British Pharmacopœia*. This concession would be a graceful act, and is only fair to them after the prolonged study and expense to which they have been put to qualify themselves. At present, grocers and others have largely invaded the distinctive territory of the druggist, and medicines ordered offhand by the medical man are not unfrequently procured from the grocer's shop or general store. A student may be refused his druggist's certificate if he fail to tell all about the natural history, chemistry, etc., of saltpetre, cream of tartar, magnesia, senna, etc., yet it is open to anyone without knowledge to sell and dispense any or all medicines in the *Pharmacopœia*, with the exception of a few poisons.

To prevent the sale of substances or articles used in medicine by incompetent persons, I would suggest that (with the exception of a few scheduled articles to be kept by the grocer and drysalter) all medicines should only be allowed to be kept by legally qualified druggists.

To prevent druggists from prescribing, I would suggest that a clause something like the following should be inserted into the amended Pharmacy Act: "It is hereby enacted that all scheduled poisons are only to be prescribed by a legally qualified medical man, who must have his full name and address affixed to his prescription, and no chemist, or druggist, or pharmacist shall be allowed to prescribe in any shape whatever the scheduled poisons, or dispense in any prescription the said poisons unless the medical man's name and address in full is attached thereto; and it shall be unlawful for said chemist, or druggist, or pharmacist, to repeat the prescription of any medical man in which any of the scheduled poisons are ordered unless said prescription shall be marked with the word 'repeat' and have the initials of the prescriber and date of repetition affixed, and in order to cancel the prescription after it is dispensed, the name of the dispenser shall be written thereon in addition to affixing the business stamp of the chemist who may have dispensed the medicines. The above enactment, so far as it bears on dispensing poisons, shall also apply to all medical men keeping open shop as regards the prescriptions of other medical men; and it shall be imperative on every medical man who keeps open shop or dispenses his own medicines to enter in a book kept for the purpose all prescriptions ordered to his own patients that may contain any of the scheduled poisons, and have attached thereto the date of dispensing and the signature of the dispenser."

Hoping that the present opportunity of rectifying clamant evils may be taken advantage of, I am, etc.,

DIVISION OF LABOUR.

THE FEEDING OF INFANTS.

SIR,—I cannot agree with Dr. Neale in his strong condemnation of the use of condensed milk as a food for infants, as from experience with my own children and the children of others, I have found "Nestlé's Swiss Condensed Milk" most excellent food for infants, and I cannot call to mind a single instance in which I have known or heard of its being injurious.

As regards my own children—the first I had fed on Nestlé's milk is now twenty-three months old. It was given to him exclusively until he was over nine months old. I came to use it from the following circumstance. He was nearly dying of infantile diarrhœa when about six weeks old, being then fed on diluted cow's milk, which I discontinued from the day on which the diarrhœa showed itself, and a good healthy wet nurse was procured, but still the diarrhœa continued, notwithstanding the most approved treatment being constantly applied, and as a last resource, I was led to try Nestlé's condensed milk, which produced the most decided improvement in twenty-four hours; the second child, now seven months old, has had nothing else but this as food since he was two weeks old, and two finer and stronger children for their age could not be found. There may be other brands as good as "Nestlé's," but this is the only one I am acquainted with.

The milk should not be made too strong. I have found a moderately heaped teaspoonful in a teacupful (eight ounces) of warm water quite strong enough until the infant reaches three or four months, and from four months to eight months one teaspoonful and a half in eight ounces of water.

I am now speaking from experience only, and I have found infants to grow and thrive splendidly on this. The mistake generally made, is the milk is used not sufficiently diluted, under the impression so small a quantity will not sustain the infant's life, or the error lies in the feeding bottle not being properly cleansed, and thus disrepute is brought upon, in my opinion, one of the most valuable of all the infants' foods known.—Yours faithfully,

GEORGE HAMILTON WYSE, L.R.C.S. & P.Edin.

Queensborough Road, Bray, Ireland, April, 1883.

Income Tax and Medical Practice.

SIR,—Will you kindly inform me, through the BRITISH MEDICAL JOURNAL, how I am to make out my income tax return. I have been in the habit of guessing at, or lumping it, but find that does not answer. Should I go by my booking accounts (deducting what I think fair for bad debts), or by what I actually receive in cash during the year? My parish work entails a surgery some miles away, for which I have to pay rent. I, of course, deduct this. Could you let me know where to apply to become a member of the Poor-law Officers' Society?—I am, yours truly, INCERTUS.

*** With the view of aiding other professional gentlemen who may be similarly in doubt, we will proceed to give the words of the Act, which runs as follows. The balance of profits is to be returned at the place where the profession is carried on, on an average of three years preceding; or, if set up or commenced within three years, on an average from the period of commencing the same, either ending on the day of the year when the annual accounts of the profession have been usually made up, or on April 5th, 1882; or, if commencing within the year of assessment, that is to say, the year commencing April 6th, 1882, and ending April 5th, 1883, according to the best of your knowledge and belief; and the grounds on which the amount shall have been computed should be stated, for the information of the Commissioners. In estimating such profits and gains, deductions are allowed for repairs of premises occupied in carrying on the profession, and for supply of instruments, drugs, utensils, etc., such not exceeding the sum usually expended for such purposes, according to the average of three years. The salary and maintenance of an assistant or assistants, bad debts—or such part thereof as shall be proved to the satisfaction of the Commissioners to be such—and doubtful debts, may be charged according to their estimated value. The rent or value of any dwelling-house or surgery used for the purpose of such profession, such sum, not exceeding two third parts, of such rent or value as the Commissioners shall, on consideration, allow. For the sum representing diminished value, by reason of wear and tear of plant. In addition thereto, the professional man may be permitted to deduct the expenses incurred in keeping a horse or horses, and the cost, etc., and wear and tear of his carriage or other conveyance. Having had personal experience as a local Commissioner, we further inform our correspondent that, if an account be presented based on the terms we have shown, it will be accepted; and we would further point out that it is an exceedingly dangerous expedient to guess at the amount of the sum that should be returned. Finally, we advise our correspondent that, on forwarding his subscription of five shillings annually, either to the Treasurer, Charles Frost, Esq., 47, Ladbroke Square, Notting Hill, W., or to the Honorary Secretary, J. Wickham Barnes, Esq., 3, Bolt Court, Fleet Street, City, he will at once become a member of the Poor-law Medical Officers' Association.

The Use of the Ophthalmoscope by the Myopic.

SIR,—May I ask any of your correspondents who work much with the ophthalmoscope and are myopic, if they will kindly help me, being myopic (—9). I find that working with spectacles is most inconvenient, for they are in the way of getting a good view of the fundus, especially when different lenses have to be tried. In estimating cases of refraction with the ophthalmoscope, if I correct my own myopia by putting on a minus 9 lens, I am in constant difficulty; at least, I am with the ophthalmoscope I use (Wecker). Any practical suggestions will be esteemed a favour by, yours obediently, EDWD. M. OWENS.

The Hydropathic Establishment, Leamington.

*** If minus 4 D ($\frac{1}{9}$) expresses the measure of our correspondent's error of refraction, then he will, with a little practice, be able to see perfectly well by the indirect method without the use of spectacles. If, however, the degree be greater, he will find it desirable to use them. With regard to the direct method, he will be able to work perfectly, without spectacles, starting with the instrument at the minus glass which corrects the myopia. Then the deduction of this amount from the glass used will give the measure of refraction in each case. But this is open to the objection that it leaves a comparatively slight number of glasses available for determining myopia. If, however, it be not used, he must, notwithstanding the inconvenience he experience, continue wearing his spectacles.

Aneurysm in Young Persons.

SIR,—In reply to your correspondent, aneurysm from injury is by no means rare in young persons. I have successfully treated with pressure two cases of popliteal aneurysm, the patients being about twenty years of age. Aneurysm from disease at that early age is, however, extremely rare.—I am, etc., MEDICUS.

Haeckel on Bathing among Coral Reefs.

PROFESSOR HAECKEL'S recent work on the lower forms of marine life in Ceylon contains an interesting passage on his experience as a diver amongst the coral reefs of that island. In order that he might thoroughly explore these remarkable formations, he learned to dive with his eyes open. The reality of this kind of exploit is less agreeable than the ideal. "The Oceanides, under whose protection these coral fairy bowers of the sea flourish, threaten the intruding mortal with a thousand perils. The Millepora, as well as the Medusæ which float among them, burn him wherever they touch, like the most venomous nettles; the sting of the fish known as *Synanceia* is as painful and dangerous as that of the scorpion; numbers of crabs nip his tender flesh with their powerful claws; black sea-urchins (*Diadema*) thrust their foot-long spines, covered with fine prickles set the wrong way, into the sole of his foot, where they break off and remain, causing very serious wounds." Such were the Professor's experiences, as expressed in C. Bell's English translation of *A Visit to Ceylon*. Any attempt to detach a piece of coral of necessity involves the risk of severe injury to the hand. What is, however, most interesting to all who are likely to visit the tropics is that a bath in a coral reef may involve serious inconveniences not encountered by sea-bathers in high latitudes.

The Examinations at the Royal College of Surgeons.

"A VICTIM" naturally takes exception to certain questions that were put to him at the recent final examination for the membership of the College of Surgeons. Examiners ought not to use a term like "epiphora" in a paper, since the examination is not instituted for testing a knowledge of synonyms, but any candidate may appeal to the member of the court of examiners who is in the chair while the written examination is in progress, and the examiner, under such circumstances, is generally ready to explain to all the candidates as much as he deems justifiable. As for questions upon excision of the scapula, and the relations of the profunda branch of the femoral artery, the latter refer to facts that every surgeon should know; the former are probably designed, not so much for testing a candidate's capability of performing an operation rarely required, as for detecting his knowledge of anatomical structures in the neighbourhood of the shoulder-joint. Disputes about auscultation, referred to by our correspondent, are, we admit, highly unsatisfactory; but, having witnessed a very large number of oral examinations, we have often been struck by the fact that a candidate often totally misunderstands his examiner, even in regard to subjects less complicated than auscultation. "A Victim" also states that two surgical examiners "made exceedingly merry over the idea of giving quinine in acute pneumonia, and were liberal of sarcasms at the notion of the use of that drug in any febrile condition." This is certainly surprising, but the sarcasms and laughter were probably meant good-naturedly, though banter of this kind, not rare amongst examiners, is strongly to be deprecated. It is much to be hoped that the new Bill, when passed, will remedy many abuses; still, examiners will always be liable to err, or, at least, to make occasional errors of judgment.

THE following questions in Surgery, Midwifery, and Medicine, were submitted to the candidates at the pass examination for the membership, held on May 11th and 12th.—*Principles and Practice of Surgery.* (Candidates were required to answer at least four (including one of the first two) of the six questions.) 1. Describe the operation for removal of the scapula. Mention the origins and insertions of the muscles in their order, and the vessels and nerves that must be divided. 2. Describe the course, relations, distribution, and inosculations of the profunda femoris. 3. Mention the causes, sequelæ, and treatment of epiphora. 4. What are the causes that may give rise to chronic abscess in the right loin? Mention the treatment appropriate to each case. 5. Give the differential diagnosis of a scirrhous cancer and a cystic sarcoma of the female breast; and lay down the principles which would guide you in respect of their operative treatment. 6. Describe the varieties of stricture of the urethra, the chief points of diagnosis in each, and the proper treatment.—*Midwifery and Diseases of Women.* (Candidates were required to answer three of the four questions.) 1. What are the dangers of lingering labour, and what indications would lead you to interfere to complete delivery? 2. How would you distinguish the following presentations: brow, knee, shoulder? How would you treat a case in which the brow presented at an early stage of labour? 3. Describe the mechanism of labour with the child in abdomino-anterior position with the breech presenting. 4. What are the symptoms of retroversion of the gravid uterus, and the dangers that may arise from it?—*Principles and Practice of Medicine.* (Candidates were required to answer three of the four questions, including question No. 4.) 1. Discuss the symptoms, progress, and morbid anatomy of locomotor ataxy. 2. What are the physical signs of mitral valve disease? What are its usual effects on the form, size, and action of the heart; on the lungs; and on the rest of the organism, including especially the liver and kidneys. 3. What are the causes, symptoms, consequences, and treatment of hæmorrhage from the stomach and bowels? Surgical injuries and piles to be excluded. 4. What are the medicinal properties, doses, chief uses, and more important ingredients in, or strength of, the following preparations: liq. hydrarg. perchloridi; liq. morphiæ acetatis; liq. strychniæ; oxymel scillæ; pil. coloc. comp.; pil. rhei comp.; pil. plumbi cum opio; tr. lobeliæ ætherea; acidum nitro-hydrochloricum dilutum; glycerinum acidi tannici.

THE following questions in Anatomy and Physiology were submitted to the candidates at the primary examination for the diploma of Member, held on May 4th. They were required to answer four in each subject. *Anatomy.*—1. Describe the dissection required to expose the posterior surface of the popliteus muscle. 2. Give the differential characters of a typical cervical, dorsal, and lumbar vertebra. 3. Give the relations of the flexor tendons in the hand. Describe the arrangements of the synovial sheaths in the palm and the finger. 4. Describe the origin, course, and distribution of the arteries supplying the cerebrum. 5. Describe the duodenum and its relations. 6. Describe the boundary walls of the tympanum.—*Physiology.* 1. Describe the structure and mode of action of heart-muscle, and compare it in these respects with skeletal muscle. 2. Describe the digestion of starch; by what tests may the successive changes in it during digestion be detected? 3. Explain the term "arterial blood-pressure"; how may it be demonstrated, and by what conditions is it modified? 4. Describe the action of the oblique muscles of the eye; what is their nerve-supply? 5. What qualities can be distinguished by the sense of taste? Describe the taste-buds; by what channels are taste-impulses conveyed? Describe the manner in which ossification occurs in membrane; enumerate the bones formed entirely in membrane. In what way does this method of ossification contribute to the formation of other bones?

Charges to Members of Friendly Societies.

SIR,—Will you kindly inform me whether it is usual or not, in the case of members of the Foresters' Society, to charge extra fees for attendance in fractures, and for extracting teeth? I have always done so myself, but recently members seem to be unwilling to pay extra for extraction of teeth. Of course, for fractures the extra fee is paid out of the funds of the Society, but I am not quite sure what is the usual custom, and should be glad of your advice on the subject.—Yours faithfully, H. T.

*** The usual course is to contract for medical attendance and medicine, which includes attendance on fractures, and extraction of teeth if the surgeon practises in that branch.

M.D.—Your suggestion with respect to the proposed Medical Provident Society is already being carried out.

The Contagious Diseases Acts.

SIR,—My views thoroughly agree with Dr. Whittle's as to the course the medical profession should adopt now Mr. Stansfeld's motion has been carried. I would suggest that the Parliamentary Committee take up the matter.—Yours, etc., JNO. BROWN, L.R.C.P.Lond., etc.

Bacup, May 15th, 1883.

Sea-Sickness.

SIR,—Your correspondent who asks a question on the treatment of sea-sickness, in the JOURNAL of May 12th, will find communications on the subject in the BRITISH MEDICAL JOURNAL for 1880, vol. ii, pages 368, 507, 511, 691, 801, 838, 874, 908, and 952; also for 1881, vol. ii, pages 611, 730, and 804.—I am, sir, your obedient servant,

NAUSEA.

SIR,—Your correspondent "A Member," who asks in this week's JOURNAL for information as to sea-sickness, cannot do better than consult Dr. Neale's valuable *Medical Digest*, Sections 861-5 and 862, where he will find numerous references to the subject, and suggestions for treatment.—Yours obediently,

May 14th, 1883. S. PHILLIPS.

SIR,—In your issue of the 12th a member asks "What is the best means for the prevention and cure of sea-sickness." Permit me to give him my experience on the subject. Some years ago I had the misfortune to read an article on nitrite of amyl as a specific for that disorder. A short time afterwards, having had to cross the Channel in a gale of wind, I gave the nitrite a trial, and though it no doubt relieved the sickness, it had a most unpleasant after-effect. In fact, I suffered all sorts of after-consequences, such as headache, insomnia, dyspepsia, etc., for over a week. Since then I have had some further experience as a surgeon in the Cunard Company, and have arrived at the conclusion that sea-sickness is best treated in the following manner: If possible by prevention, viz., take a full dose of some purgative a couple of days before going to sea. As soon as you are once fairly started, take thirty grains of bromide of soda, go to bed and keep quiet, having the head as low as possible. Don't take any food until you are forced to by hunger; as soon as you have had a good sleep and a feed, take a seidlitz powder, and then put yourself, or patient, on a mixture of citrate of potash and tincture of gentian. If you must drink, take brandy and ginger-beer. If you can do without stimulants, so much the better for you. The most refreshing drink possible is lemon squash; it also relieves the nausea.—Yours, etc.,

Whitwick, May 14th, 1883. WILLIAM DONOVAN, F.R.C.P.Lond.

SIR,—In reply to your correspondent, I beg to offer the following: Some persons have so great a tendency to be sick at sea that no medicine will absolutely prevent it; but with good ventilation and a scientifically swung "cot," my own patent, almost any one may escape sickness, except in very stormy weather. The "cot" will cost £5, and must have space to move in. Further particulars will only be given in case the inquirer really desires to try the cot. Diet should be sparing, but not too much so; say, a hearty meal one hour before starting, and then nothing for four hours; tea or coffee and beer are not objectionable if desired; but cheese, tobacco, and greasy food (especially bacon) must be avoided—*crede experto*.—Yours truly,

A MEMBER.

SIR,—In answer to "Member" respecting the prevention and cure of sea-sickness, may I, as an old ship-surgeon, advise him to try a pil. hydrarg. B.P. two nights prior to going to sea, followed by the haustus niger in the morning. Cottam's nautine lozenges I found very efficacious amongst lady passengers. My own experience has taught me that the best cure is to clear all the bile off the stomach before sailing. When at sea, take effervescing drinks, especially champagne, remain on deck as long as possible and eat freely. If only a short voyage of a few hours is being taken, a draught of pot. brom. and chloral hyd. will be found serviceable in order to sleep the best part of the time.—Yours, etc.,

AN OLD MARTYR TO SEA-SICKNESS.

Holidays at Sea.

SIR,—I shall be glad if any of your readers will kindly give me some information on the following points. 1. Are the months of June and July fairly suitable for a Mediterranean cruise? I wish particularly to know whether the heat will be very great. 2. If these months be unsuitable, what time from the end of July to Christmas would be the best for this purpose? 3. What line of steamers could any of your readers recommend as giving good accommodation, and touching at most points of interest?

I am obliged to leave my practice for some months to get complete rest and change, and it seemed to me that a Mediterranean trip, and perhaps as far as to Constantinople, might form a pleasant and beneficial portion of my holiday.—I am, yours truly,

A MEMBER.

Sea-side Residences.

SIR,—I shall be obliged to anyone who will forward to me the names of any institutes at the sea-side where a female patient of mine could be boarded and receive medical attendance, if possible, for about £1 a week.—I am, etc.,

108, Denmark Hill, S.E., May 16th, 1883. R. C. BENINGTON.

Malarial Fever in the Punjab.

SIR,—I see in the JOURNAL of March 24th, an article referring to a very severe endemic malarial fever, experienced in Amritzar, Punjab, in 1881. As I am in a position to be able to state facts on this subject, perhaps I may be allowed to give my experience. I had the misery of being senior medical officer to the British forces in that station from March to December, 1878. For the five latter months that place was plague-stricken with a virulent type of malarial fever, markedly intermittent, but with dangerous complications. I suffered from it during those months more or less, having before contracted it in Ferozepore, fifty miles distant. This is shown by Parkes to be the hottest station in India, one excepted. He calculated that into the sand of that arid district the sun's rays penetrated four feet, and yet in 1876-1877 there was a perfect plague of "marsh fever." This was unknown until the fatal "canal project" was instituted. I was there when the first canal burst and flooded miles of the red-hot plain. Then the heat of the sun, combined with the steam of foul water on over-heated sand produced the curse. The same cause existed in Amritzar. Your informant states that the cause was excessive rain-fall. In 1878 that was not the case. The fall was scanty; but the district was a reeking sponge from "canal irrigation." Authorities do not like this fact to be brought forward; but I am happy to say that when in work at the above named places, I brought this subject without shrinking to their notice (officially) weekly, quarterly and annually, and was in hot water accordingly; but no harm accrued to me ultimately. Even after years of residence in England, I can state from personal experience that the fever recurs. As in the period named by your informant, so in 1878, the whole population, white, medium, and black, was prostrate; and I assert that as fever of this description was unknown in the Ferozepore and Amritzar until the "canal system" was introduced, that it, and it alone is the origin of this ruinous curse. I could relate some extraordinary cases of dangerous collapse (simulating that of cholera) which occurred during the progress of this fever, but they would not be suitable to this letter.—Yours truly,

H. C. P.

Preparation for Matriculation at the University of London.

SIR,—I have two sons just leaving school, and wishing to matriculate at the University of London; one destined for law, and one for physic. Can any of your readers kindly inform me whether I am likely to be able to find tutors and other necessary aids to the required course of learning as well in France or Germany as in London? and if so, where in each country?—Yours very truly,

H. L.

Case of Placenta Prævia on Board an American Steamer.

SIR,—During the spring of 1882, when we were carrying large numbers of foreign emigrants to the United States, I was, one afternoon, when about half way across, called to see a German woman in the steerage who, I was informed by the steward, was dying. Having proceeded at once to the deck hospital, where she had been removed by the ship's matron, I found a woman presenting the following appearance. She was extremely pallid, and had severe rigors; cold beads of perspiration were running down her brow; she was also unconscious, and almost pulseless; there had been profuse hæmorrhage from the vagina. Upon examination, I found the os uteri dilated to about the size of a florin, and a soft substance protruding. Owing to a heavy swell and the ship rolling much, I had some difficulty in placing my patient as comfortably as I would wish in bed. I then administered a little brandy, and had hot jars put to her feet, which had become very cold.

When she became conscious, I learned, through an interpreter, that she had pain in her back and abdomen during the day, which was succeeded by hæmorrhage; this she tried to hide as long as possible. She also informed me that she wanted yet one month of full time.

About one hour after she had recovered consciousness, the pain recommenced, together with slight hæmorrhage. Knowing there was no time to lose, I at once made a second examination, and found the os more dilated, and the soft substance before mentioned pulsating. Without withdrawing my hand, I detached the placenta in the cervical zone, and, having ruptured the membranes, turned and delivered a large male child, which had been dead for some time. My patient made an excellent recovery, but, on arrival in port, five days after delivery, she could not be persuaded from continuing the remainder of her journey by rail to the west, although advised by the company's officials to remain and rest for a few days.

The patient stated that, out of nine births, one child only survived ten months; the others were born dead, owing to placenta prævia.—Yours faithfully,

L.R.C.S.I., L.K.Q.C.P.I., late Surgeon S.S.
American Line.

Anomaly in Hearing.

SIR,—Between forty and forty-five years since, a case occurred in my practice which should certainly be recorded. Mr. W. Harshaw, of Coleraine, consulted me about his ears. He was so thoroughly deaf that he could not hear a word that was said to him. He could not even hear the noise from the firing of a cannon. On examination, I could find nothing wrong with his ears; but in the course of the investigation, I made a most extraordinary discovery. Although he could not hear any sound which came through the air, he could hear the sound from a mouse running on the floor. I asked him to go to Edinburgh to show himself to Sir Charles Bell, Dr. Abercrombie, and Dr. Alison. He did so, and they kept him under daily examination and observation for ten days. They wrote to thank me for having given them an opportunity of seeing such a remarkable case, but they could not in any way account for it, and they thought there was no similar case in the records of the world. I wrote to suggest that it went to prove that the nerve of hearing, in place of being a single organ, was double; and that one portion was for hearing through the air, and the other for hearing through the body by a sort of touch.—Yours truly,

Coleraine, Ireland, 1883. JAMES C. L. CARSON, M.D.

Braces or Waistband?

A CORRESPONDENT writes—"Having worn a Spanish sash for some time, many years ago, while walking in the Pyrenees, I am decidedly of opinion that the weight of the trousers is supported much more easily, and pleasantly, by a sash than by braces; these last are narrow, about 2 inches wide, and though custom enables us to wear them without conscious inconvenience, I think any one using them for the first time would find them very unpleasant. The sash worn by the middle and lower class in Aragon is of wool 8 or 9 inches broad, and (if my recollection is correct) about 4½ feet long; when of such width and length it does not need to be drawn tight, but only closely wrapped round the waist and the end tucked in. I should certainly wear one constantly, but that I do not wish to have an eccentric appearance. Medical men, I believe, attach great value to the wearing of sashes or bands round the stomach, especially in hot countries. A narrow silken sash which must be drawn tight is, I should suppose, far less pleasant to wear."

SIR,—I should be glad to know of a vegetarian restaurant at the West End. Perhaps some of your correspondents may know of one.—Your obedient servant,

A. C. L.

Foreign Medical Degrees.

SIR,—With reference to foreign degrees and the new Bill, and to those letters on the subject which have of late so frequently appeared in the medical journals, I desire, with your permission, to make a single suggestion, which, were it carried out, would at once end the necessity for the registration of any foreign degree.

Medical practitioners, doubly qualified and registered, frequently find, after they have been in practice for some time, that necessity compels them to seek a degree of M.B. or M.D. The British Universities, by reason of certain restrictions as to earlier examinations and prolonged residence at the university, debar a hardly worked man in the practice of his profession from obtaining these degrees. St. Andrew's University makes an exception for men who have been fifteen years in practice, or who have arrived at the very mature age of forty years.

My suggestion is, that an university should grant to medical practitioners of five years' standing, possessing two qualifications, and registered, an examination granting with it an M.B. or M.D. This examination would be a final test, acknowledged by the British Medical Council as a thoroughly practical guarantee to the public that the man possessing it was well versed in the practical treatment of disease. I request that you will kindly bring this letter before the profession and the public.—Believe me, sir yours truly,

45, Southampton Row, W.C. H. MILEY.

British Medical Benevolent Fund.

Mr. Edward East, of 18, Clifton Gardens, has succeeded Mr. Malcolm Morris as honorary secretary of the British Medical Benevolent Fund.

B.D.T. gives no information in his letter upon which an opinion can be formed. He should consult a competent valuer, who would charge a small fee for such advice.

Medical Etiquette.

Sir,—Will you kindly give me your opinion in the following case? A. is the medical attendant of a family living in the town in which he practises. A member of the family goes to a neighbouring town five miles distant, where he meets with a serious accident, and is attended at once by B., a practitioner of that town, who accompanies him home. Is it usual, under these circumcumstances, for B. to continue his attendance on the patient, or to hand the case over to A., when the patient himself is indifferent as to which practitioner shall attend him? I enclose my card, and am, sir, yours truly,

G. H. R.

*** The following rule, extracted from the *Code of Medical Ethics*, is strictly applicable to the above case. "When a practitioner is called in to an urgent case in a family usually attended by another, he should (unless his assistance in consultation be desired), when the emergency is provided for, or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

Medical Titles.

Sir,—"Surgeon" inquires, "What titles will the new licentiates of the Medical Council be allowed to use?"

I would wish to ask whether, under the new Act, licentiates of the Colleges of Physicians will be permitted to call themselves "Doctor So-and-So;" as a penalty may be inflicted on those who use wrong titles, and some of the above colleges expressly order that their licentiates are not, on the strength of being licentiates only, to style themselves "Doctor."—I am, etc.,

A Country Doctor.

Colonial Practice.

Sir,—I shall be glad if you, or any of your readers, will give me some information respecting medical practice at the Cape. I am married, no children, aged 40, good health, do not mind work, capital about £500; what degrees are required other than English or Scotch? What is the best town to start in? Should I be obliged to dispense my own medicine? What are the fees as a rule? Are there any appointments to be had? What language is most used? This, or anything further, I should be glad if you could tell me.—I am, yours faithfully, M.D., M.R.C.S.

Sir,—If your correspondent, Mr. J. Brindley James (see Journal, March 17th, p. 511), will state—1. Whether he injected the ether locally in the muscles of the back, or otherwise? 2. Whether he used the same daily in the doses mentioned? 3. Whether he found dry cupping alone sufficient in many cases? he will oblige, yours, etc, Medicine.

Localised Diaphoresis.

Sir,—Your correspondent, in attempting to produce diaphoresis of one arm by means of the vapour-bath, does not appear to recollect that the heat applied to the arm renders more rapid the evaporation from the remainder of the body, and this increased evaporation tends to neutralise the effect of the heat locally applied. To obtain the result he desires, he must first limit the evaporation from the general cutaneous surface. This may be done by enveloping the patient in a couple of blankets. Heat may be applied to the arm by the vapour or hot-air bath, or if the patient has a brisk circulation, cold wet packing of the limb is preferable. Under any circumstances perspiration of the limb can only take place a short time prior to general diaphoresis of the body, so that the bath will have to be discontinued within five or ten minutes of the sweating.—Yours respectfully, Percy R. Wilde, M.B.

Bath.

The British Pharmacopœia.

Sir,—Now that a new edition of the *Pharmacopœia* is contemplated, it may not be out of place to notice any defects in the present one with a view to their being remedied. For instance, the preparation of liquor bismuthi et ammon. citratis, may be improved upon by simply adding solution of citric acid to the solid crystals of nitrate of bismuth, subsequently neutralising with ammonia. The latter should be that known as volcanic ammonia, being free from tarry products present in that obtained from gas-works. The advantages of the above method are absence of all excess of nitric acid, and the much greater purity of the crystals if properly prepared than the solution of the metal in nitric acid, besides the simplicity of the formula, the crystals not being precipitated by water if the right quantity of citric acid be first added.—Yours faithfully, A. N. C.

Treatment of Croup.

Sir,—In reply to "Anxiety," each case of true croup must be treated on its merits. In debilitated children, we must be careful in the administration of remedies that have a depressing effect upon the system. I will describe the treatment I adopted in a case of croup, which recovered. Perhaps the little patient might have got better without my aid; anyhow, I had great faith at the time in the measures I then employed. The patient was at once put in a warm bath, then dried and wrapped in a dry warm blanket. The temperature of the room was kept between 65° and 70°, and the air rendered moist by means of a steam-kettle. Sponges wrung out of hot water were diligently applied to the throat. The bowels were kept open. The drugs I prescribed were iodide of potassium, aromatic spirits of ammonia, and oxymel of squills. As regards emetics, Niemeyer says: "They are only indicated when obstructing croup-membranes play a part in producing the dyspnœa, and when the child's efforts at coughing are insufficient to expel them." When the breathing became laboured, as Niemeyer describes, I used a spray of saccharated lime-water for about fifteen minutes, and immediately afterwards I administered a teaspoonful of ipecacuan wine. If that did not effect the expulsion of the false membranes, I gave another teaspoonful of the wine, which generally had the desired effect. The hot applications to the throat should be used every half-hour, and for ten minutes at a time. The diet should consist of milk, broth, and beef-tea. I attach more importance to the use of the spray of lime-water than any other remedy prescribed.—I am, etc.,

Heaton Chapel, Manchester. W. Bain.

Principals and Assistants.

Sir,—In the event of no special agreement having been made between principal and assistant in reference to attendance at inquests, has the principal the right to claim the fee paid by the coroner to his assistant for such attendance? My own feelings in the matter are that the assistant is entitled to the fee, because he is performing a special duty.—I am sir, yours respectfully,

Hypericum.

Treatment of Sycosis.

Sir,—Through the medium of the Journal, I would invoke the assistance of your readers in the treatment of a case of sycosis under my care, that has so far foiled all the well known modes of cure. The subject of it is very slightly gouty, but in the best of health; says he has an inherited tendency to skin-disease, but not markedly so. Ten years ago, he had a similar affection, which, in spite of all treatment, lasted six months, and at last yielded to time, or unguentum hydrargyri—he is not sure which. A sea-voyage has had no effect upon it; arsenic, limejuice, sulphur waters, applications of ointment of iodide of lead, have at different times been tried, but so far to no purpose. Hoping to get some fresh light from some one with longer experience—Believe me, yours, etc., Monreale.

Morning Cup of Tea.

Sir,—The sudorific properties of hot tea would seem to indicate that it is certainly out of place in the morning, especially with those who habitually use the cold bath. The object of the latter I take to be, in addition to washing away the accumulated insensible perspiration of the night, the partial closing of the skin pores. Perspiration is to be encouraged in circumstances which do not favour exposure of the perspiring surfaces. Tea at night, therefore, when exposure is unlikely, is a sound rule, but tea in the morning, with the exposure of the day to follow, is surely unphysiological.

As to its effect upon the nervous and digestive systems, I thought there was no doubt that it tended to produce both nervous irritability and gastric catarrh. —I am, yours faithfully, Kenneth W. Millican.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. W. A. Bonney, London; Mr. W. Hartigan, Hong Kong; Dr. W. Newman, Stamford; Mr. J. R. Somers Vine, London; Mr. E. Fenn, Dover; Dr. Bushell Anningson, Cambridge; Dr. J. Hunter, Linlithgow; Mr. W. D. Symington, Wolverton; Mr. Jordan Lloyd, Birmingham; Mr. George David Ellis, Manchester; Dr. W. E. Steavenson, London; A Member; Dr. E. Seaton, Nottingham; Mr. T. M. Stone, London; Mr. H. D. Crighton, Manchester; Dr. H. E. Dixey, Great Malvern; Dr. Quinlan, Dublin; Mr. T. M. Watt, Hovingham; Dr. N. F. B. Fitzmaurice, Dunning, Perthshire; Mr. F. W. Jordan, Heaton Chapel; Mr. E. Bryan, Sale; Dr. Grant Bey, Cairo; Mr. W. de Rosario, Lahore; Dr. H. Rayner, Hanwell; *Habitans in Sicco*; Disappointed; A Junior in the Bengal Medical Service; Mr. S. S. Ryerson, Toronto; Messrs. G. and T. Carlyle, Liverpool; Dr. Clibborn, Birmingham; Dr. Dobell, Bournemouth; Messrs. Orridge and Co., London; Mr. W. Owen, Hackney; The Secretary of the Meteorological Society; Dr. S. Weir Mitchell, Philadelphia; Dr. T. Pearse, Plymouth; Dr. F. Ernest Pocock, London; Dr. F. B. Stephenson, Washington; Mr. De Watteville, London; Mr. John Holm, London; Dr. Eklund, Stockholm; Mr. James Dinholm, Polton, Midlothian; Mr. B. F. Stevens, London; Mr. F. W. Lowndes, Liverpool; Dr. D. Manson Fraser, London; Dr. H. Fisher, London; Dr. Willoughby, London; Dr. P. T. S. Colmer, Yeovil; Dr. D. Cullen, Cheltenham; Mr. C. R. Thompson, Westerham; Mr. A. Boys, Pill; Dr. Churton, Leeds; Mr. Blackett, London; Mr. D. C. Cox, Annan; Mr. W. H. Day, Norwich; Dr. J. Leach, Sturminster, Newton; Mr. M. J. R. Behrendt, Burringham; Dr. Sawyer, Birmingham; M.D.; Mr. F. J. Laimbeer, Liverpool; G. N. T.; Dr. J. W. Hayward, Liverpool; Mr. A. H. Benson, Dublin; Mr. H. Meymott, Ludlow; Dr. Fairlie Clarke, Southborough; Mr. Thomas Clarke, Pewsey; Dr. A. Davidson, Liverpool; Messrs. Turnbull and Wood, Newcastle-on-Tyne; Mr. Lister, London; Dr. E. L. Tyler Smith, Hove; Dr. W. A. Carline, Lincoln; Dr. S. C. Smith, Halifax; Dr. Andrew Spearing, Shaw; Mr. H. Raven, Litcham; Messrs. Vawdrey and Johnstone, Smethwick; Mr. W. Dunnett Spanton, Hanley; Dr. J. Braxton Hicks, London; Dr. C. A. Cameron, London; Mr. Ernest Blacker, Midsomer Norton; Dr. J. Ward, Sparkbrook; Dr. Strange, Worcester; Dr. Styrap, Shrewsbury; Dr. A. Chadwick, Heywood; Dr. C. Parsons, Dover; Mr. J. Byrne, London; Mr. Samuel Stretton, Kidderminster; Dr. Sinclair, Dundee; Mr. W. Whitehead, Manchester; Mr. T. S. Verrall, Brighton; A Victim, London, etc.

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REMARKS
ON
THE SITE AND MECHANISM OF THE CARDIAC MURMURS IN DEBILITY AND ANÆMIA.

By WILLIAM RUSSELL, M.B.Edin.,
Honorary Physician to the Carlisle Dispensary.

In approaching this subject, it seems almost unnecessary to contend for the general proposition, that in debility and anæmia the heart shares in the morbid condition; that the inevitable result of this is relaxation of its muscular structure, and consequent dilatation of its cavities. Hope, Walshe, and Stokes all recognise this more or less fully. Parrot, writing in 1866, says: "In anæmia and chlorosis, Beau, who admits a dilatation with hypertrophy of the left heart, explains it by the impoverishment of the blood, which entails a relaxation (*relâchement*) of the tissues, and especially of the muscular substance of the heart. Bamberger, Friedreich, Wunderlich, Vogel, and Shark think that in chlorosis the fibres of the ventricular walls undergo relaxation, brought about by disordered nutrition, from diminution of the coloured corpuscles in the blood" (*Archives Générales de Médecine*, Août 1866, page 153). More recently, Schroetter says: "After certain febrile affections, there ensues, on account of the breaking-down of the muscular fibres of the heart into a molecular detritus, and the consequent relaxation of the muscular tissue, an acute dilatation of the heart. Doubtless, the changes which occur in chlorosis may be explained in this manner" (Ziemssen's *Cyclopædia of the Practice of Medicine*, vol. vi, p. 201). Hayden places anæmia at the head of the list of causes producing "primary dilatation" (*Diseases of the Heart*, Dublin, 1875, p. 558 *et seq.*). Dr. Balfour has so recently and so strongly advocated this, that it must be fresh in the memory of everyone. Dr. Goodhart evidently holds similar views. The further proposition, that dilatation may lead to regurgitation at the auriculo-ventricular orifices, occupies an equally positive place in the literature of cardiac disease.

Although the foregoing propositions led to the inevitable conclusion that murmur might result from the dilatation of debility, the principle was but falteringly applied. Hope (1839) seems to have been the first, in this country at least, to teach that murmur was, in certain pathological states, due to altered physical properties of the blood, to unfilled vessels and modified velocity of current, and that the cardiac murmur of anæmia was to be thus explained. From his time this doctrine has, with various modifications, been tenderly handed down from authority to authority. Skoda, in 1853, expressed some dubiety that watery blood should necessarily create murmur; but he was overridden and buried under the weight of other authorities. Parrot, in 1866, attacked the position from a clinical standpoint; but a belief, which had nearly completed the third decade of its existence, seems to have been but insignificantly affected by the effort. More recently, and in our own country, Dr. Balfour has assailed the position, offering an explanation which would place the murmurs partly in the domain of dilatation murmurs, and rob them, at least in the first place, of their classic site and mechanism.

It would occupy too much space to follow closely the history of the supposed site of the blood-murmur. Hope (1839) placed it at the aortic orifice; Hughes (1854) advocated the claims of the pulmonary artery; Parrot (1866) argued that it was a regurgitant murmur due to tricuspid insufficiency from dilatation of the ventricle; Walshe, with whom Hayden agrees, placed it in the aortic and pulmonary areas, and over the body of the heart, nearly as far to the left as the nipple-line; Balfour places it, in the first place, over the left auricular appendix, which, he holds, reaches the chest-wall to the left of the pulmonary artery, thereafter at the tricuspid orifice, and, finally, in the aortic and pulmonary arteries. In the more advanced cases, there are, according to this view, four murmurs; in fact, we have here a concretion of all former opinions, with the addition of the left appendix.

Dr. Macalister of Cambridge (BRITISH MEDICAL JOURNAL, October 28th, 1882) has lucidly and ably brought before the profession generally the work done by Ludwig and Hesse, demonstrating the manner in which regurgitation may take place in a debilitated heart.

The aim of this paper is to try to remove the cardiac murmurs from their classic position of hæmic murmurs, and to explain them wholly by the facts of dilatation and regurgitation.

The cardiac phenomena in debility may be illustrated by a series of cases culled from those which have lately been under my care. Occasionally we have the opportunity of following the various stages in an individual case; such has not been my privilege recently.

CASE I. *Pulsation in the Second Left Space; no Murmur.*—A. H., aged 15, had been confined to bed for weeks suffering from Bright's disease, with obstinate hæmaturia. She was pale but plump. There was slight precordial tremor, becoming pulsation in the second left space, where it extended for over an inch from the sternal edge. There was marked accentuation of the pulmonary second sound, but no murmur anywhere. There was no venous pulsation, and no *bruit de diable*.

CASE II. *Pulsation in the Second Left Space, and Systolic Impurity.*—J. R., aged 18, had evidence of commencing phthisis at the right apex, and was subject to recurring and slight hæmoptysis, with rise of temperature. After one of these attacks there was precordial pulsation, visible, when lying down, from the fifth to the second left space. In the second space the pulsation was distinctly divided into two parts; the inner extended for a quarter of an inch to the left of the sternum, and conveyed the idea of continuity with the pulsation in the other spaces, while beyond this there was a feebler, and seemingly separate, pulsation extending for one inch. The external jugular was visible, but did not oscillate. The pulmonary second sound was loudly accentuated, and the first sound in the pulmonary area was prolonged, and occasionally murmuring. In some days this passed off, only leaving a slightly accentuated pulmonary second sound.

CASE III. *Pulsation and Murmur in the Second Left Space, only present after Exertion.*—Thomas L., aged 11, was suffering from a mild attack of articular rheumatism. On the third day of treatment, the pulse was 80 and the temperature 99.2°. There was pulsation in the external jugular, and at the root of the neck. There was a slight and diffused heaving visible over the precordium. The apex could be felt in the fourth space, an inch outside the nipple. There was no murmur, but the pulmonary second sound was loudly accentuated and slapping in character. On slight exertion, either by rising up in bed and lying down again several times, or by taking several deep inspirations, followed by very complete expiration, the precordial heaving became more marked, and, especially during expiration, there was a marked pulsation in the second left space, about an inch from the sternum, and over this a loud but localised murmur was heard.

CASE IV. *Bruit de Diable: Murmur in Second Left Space, and no Pulsation.*—Miss G. H., aged 17, was anæmic, but plump; there was undulation at the root of the neck, and for some distance along the course of the internal jugular. There was a *bruit de diable*. There was no precordial pulsation; but a rough systolic murmur was audible in the second left space, followed by a loudly accentuated pulmonary second sound. The murmur entirely vanished even on incomplete inspiration.

CASE V. *Murmur in Second Left Space: No Pulsation: Faint Apex-Murmur.*—Miss F., aged 23, was very pale and chlorotic. The pulse was 100 to 120 (excited), empty, and jerking. The external jugular vein pulsated synchronously with the radial pulse, and the vein collapsed and disappeared between each systole. There was a *bruit de diable*. There was no precordial pulsation. There was a faint and localised systolic murmur at the apex, and a murmur of the same rhythm in the second left space, completely lost on partial inspiration. The pulmonary second sound was accentuated. When she was standing up, there was no pulse in the external jugular veins, and no murmur over the heart.

CASE VI. *Pulsation in Second, Third, and Fourth Spaces: Systolic Murmur in Second Space.*—James H., aged 13, was suffering from a mild attack of typhoid fever. He had a thin-walled chest, with marked interspaces. The pulse was 80, regular, and of fair force and volume. There was precordial pulsation in the second, third, and fourth spaces; in the second, it extended outwards for one inch and a half; in the fourth, it reached one inch beyond the nipple. There was a systolic murmur confined to the second space, and loudest over the outer part of the pulsation. The pulmonary second sound was accentuated. There was oscillation in the external jugular veins, and no *bruit de diable*. The leading changes which occurred during the progress of the case were, that the apex-pulsation de-

scended to the fifth space, one inch outside the nipple-line; that the murmur disappeared, in a day or two, for one day, and then reappeared; that it again vanished when the boy was at his worst, with a pulse of 60, very small and weak, and when the precordial pulsation was much less. As he improved, the murmur again developed, and finally vanished when the rehabilitation of the heart was evidenced by a stronger and more frequent pulse, by the venous pulsation being reduced to a mere flicker, by the apex retreating under the fifth rib, and by the area of pulsation in the second left space lessening in extent.

CASE VII. *Slight Precordial Pulsation: Distension of Veins: Systolic Murmur over Body of Heart, and in Second and Third Right and Second Left Spaces.*—Mrs. H., aged 33, was very pale and slightly chlorotic. She was examined lying down, the external jugular vein was not only full, but so distended that it quite stood out, and did not collapse during any part of the circulatory cycle; it, of course, pulsated. There was faint precordial pulsation visible in the fourth left space inside the nipple, and in the third space, one inch from the sternum. There was no apex-beat; but, over its normal site, there was a systolic murmur, lost one inch outside the nipple-line; it was louder over the site of pulsation in the fourth space; less loud in the third and second spaces; also audible over the sternum, from the level of the second space downwards; heard also in the second, right and in the third right space, for nearly two inches from the sternal edge, and not present over the manubrium sterni, or in the carotids. It was louder in the second right than in the second left space; and, in the third right space it gradually lessened in intensity as the stethoscope was carried outwards, until it could only be detected with the greatest attention as a very distant faintly blowing sound. The pulmonary and aortic second sounds were about equal in intensity, and neither of them loud. There was a venous murmur between the origins of the sterno-mastoid muscle, presenting two distinct periods of loudness during a cardiac revolution. The veins running down in front of the trachea pulsated visibly. In the erect posture, the external jugular was only marked by a thin blue line during ventricular systole, and no murmur could be heard anywhere over the precordia. This patient rapidly improved under appropriate treatment, the veins becoming much less engorged; the murmur disappearing first from the third, then from the second right space, and from over the sternum, until it was only present in the second, third, and fourth left spaces.

The sequence of phenomena revealed by the stethoscope is thus (1) accentuation of the pulmonary second sound, with perhaps systolic impurity in the second left space; (2) murmur in the second left space; (3) murmur in the third and fourth left spaces, in addition to the second; (4) murmur from about the nipple-line inwards over a triangular area, the left boundary of which is formed by a line drawn from below the nipple to a point in the second left space, one to two inches from the edge of the sternum, and often heard at the same time over the sternum adjoining this area; (5) murmur in the second right space ("aortic area"); (6) murmur in the third right space.

There are, of course, modifications of the first sound audible in the various regions, before the supervention of murmur, which herald its approach, and are quite appreciable; and the degree to which these modifications go on to murmur, and the appearance of murmur in the various positions referred to, often afford an accurate, ready, and speedy indication of the effect that treatment is producing. I say nothing here of precordial pulsation, which is too much affected by the physical qualities of the chest-wall in individual cases to be of much value. The evidence given by the various pulsations in the neck of the condition of the right side of the heart provides a most interesting and valuable study, but one which cannot at this time be entered upon. The effect of the recumbent position in allowing the development of a tricuspid murmur in cases of extreme debility, and occasionally in cases of organic disease at the left auriculo-ventricular orifice, has important bearings upon cardiac disease in general, which seem to have been largely overlooked.

I shall now endeavour to explain the clinical phenomena. The accentuation of the pulmonary second sound, if no lung affection be present, must be taken as indicating an abnormal accumulation of blood behind the mitral orifice. Whether this be due to the incomplete emptying of the left ventricle during its weakened systole, and consequent imperfect relief to the full auricle; or, from the first, due to a certain amount of regurgitation; or to both these causes, it is unnecessary to discuss here. The fact of accumulation of blood in the pulmonary circuit, including the left auricle, is sufficient for our present purpose, and is warranted by the evidence given by pulsation at the root of the neck, by the course of the external jugulars becoming visible, and perhaps by pulsation appearing over the right ventricle, that a like accumulation is taking place in the right chambers of the heart and the large vessels leading to it.

With reference to the murmur in the second left space, it is necessary to consider, in the first place, where it is produced; and this investigation may, with all respect to the great ones who have given their authority to other views, be confined to a consideration of the claims of the pulmonary artery, and the left auricular appendix. The latter may be taken first. Hitherto, although the claims of the appendix have been somewhat warmly advocated, no *post mortem* observations seem to have been recorded in its support in this country, and only this would justify the confidence reposed in the future of the theory. So far, it has been based on the fact in normal anatomy that the appendix is seen to the left of the pulmonary artery, and on a belief that it has been seen overlying the base of the ventricles in cases of mitral stenosis; and, as the murmur attains its maximum intensity about one inch to the left of the sternum, it is contended that this point is to the outside of the pulmonary artery, and therefore over the appendix.

The fact of cardiac dilatation is accepted by the advocates of this theory; we therefore have only to learn, from *post mortem* observations, made with the heart *in situ*, the changes which occur in the relations of the various parts of the heart to the thoracic wall in this condition. It will, I submit, be found that in less degrees of dilatation the conus arteriosus occupies part of the second left space, that the same space is occupied by the pulmonary artery, and that the left limit of the vessel is from one to one and a half or two inches from the edge of the sternum. In greater degrees of dilatation, the conus arteriosus occupies the inner part of the second space for about two inches, and the origin of the pulmonary artery is under the second rib. In both degrees of dilatation the left appendix is invisible from the front, and is deeply buried behind the root of the pulmonary artery and adjoining ventricle. The following six *post mortem* observations are offered in support of this; five have been made lately; the other was somewhat accidentally preserved from a time when I was investigating this subject simply for my own satisfaction.

OBSERVATION I.—Mr. A., aged 65, died of general paralysis. He was a patient of Dr. Lockie, and the necropsy was made by me in his presence. The sternum and its attached cartilages were removed with care, so as to avoid disturbing the parts beneath; the pericardium was freely incised, and along with the overlapping lung drawn aside. After removing the intercostal muscles, the sternum and its cartilages were replaced, when it was seen that the second left space was occupied by the conus arteriosus and the pulmonary artery for one inch and a half, the junction of the two running diagonally across the space from above outwards and downwards. The left auricular appendix was invisible. The second right space was occupied by the appendix of the right auricle, which also lay under the sternum opposite this space. The aorta did not become uncovered by the appendix until it reached the cover of the second rib. In the third right space, the outer wall of the right auricle was full one inch and a quarter from the edge of the sternum. The apex of the heart was opposite the fourth space and fifth rib. Again raising the sternum, the left wall of the pericardium was drawn outwards so as to permit a view of the heart in partial profile, when part of the appendix, about the size of the tip of the little finger, was revealed nestling against the left postero-lateral aspect of the pulmonary artery; a line drawn from the second rib, where the cartilage had been severed from it, traversed a course of two inches before reaching this point. Both auricles contained fluid blood. All the chambers of the heart were relaxed and somewhat dilated. The valves were healthy. The muscular fibres showed various degrees of fatty degeneration when examined microscopically.

OBSERVATION II.—J. F., aged 35, a male patient under Dr. Lediard, in the Cumberland Infirmary, died of "surgical kidneys." The body was plump, and there was considerable subcutaneous fat, which, as well as the skin, had a peculiarly yellow hue. The second left space was occupied for about one inch and a half by the conus arteriosus and pulmonary artery; the junction of the two traversing this space. The left appendix was invisible; but its tip could be seen by getting a profile view, as in the former case. The second right space was occupied by the appendix of the right auricle, which entirely covered the aorta here. The right auricle extended for about one inch outwards in the third right space.

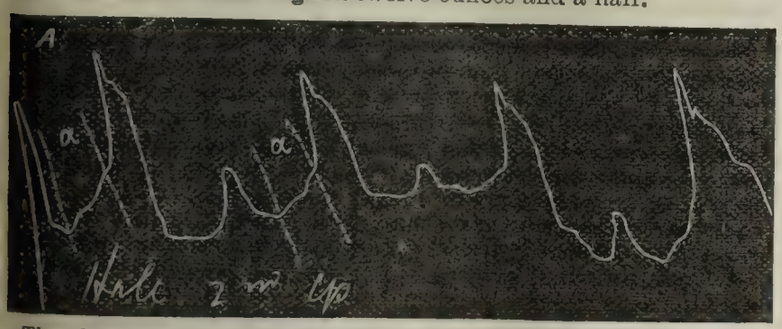
OBSERVATION III.—G. N., aged 46, a male inmate of Garlands Asylum, died of pernicious anæmia. The conus arteriosus occupied the second left space, and the origin of the pulmonary artery was under the second rib. The left appendix was invisible, and its

was only revealed by drawing aside the conus arteriosus and adjoining artery. The heart was very fatty, with a mottled endocardium, and its cavities were relaxed and dilated. It weighed twelve ounces and a half.

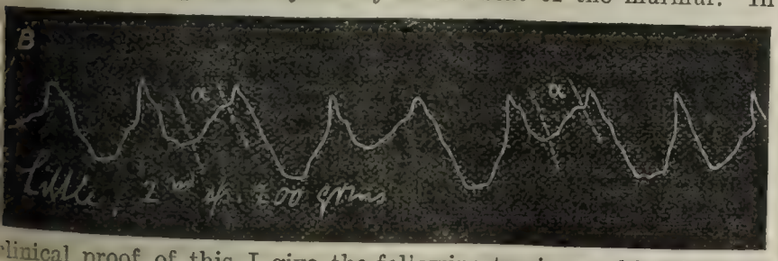
OBSERVATION IV.—J. S., aged 35, a female patient under Dr. Lockie, in the Cumberland Infirmary, died of pernicious anæmia. The conus arteriosus occupied the second left space for about one inch and a half, and extended upwards under the second rib, under which rib also lay the origin of the pulmonary artery. The left appendix was invisible, and could only be seen by turning the heart round, and removing about an ounce of fluid from the pericardium. The heart was fatty and dilated.

OBSERVATION V.*—A man, aged 30, died in the Wolverhampton General Hospital of pernicious anæmia. The origin of the pulmonary artery was under the second rib. The conus arteriosus occupied the second left space for fully two inches. The left appendix was not visible, and the heart had to be turned upwards to bring it into view.

OBSERVATION VI.—J. B., aged 47, a female patient in the Garland's Asylum, died of what is clinically known as general paralysis. This case, although not bearing directly on the question at issue, has some interesting relations to it, and is therefore given here. The patient was greatly emaciated. The origin of the pulmonary artery was at the level of the lower border of the second rib. The second left space was occupied, for two inches, by the conus arteriosus and a narrow margin of the left ventricle. There was a strip of left ventricle from this point to the apex, occupying the anterior surface of the heart as it lay in position. At the apex, it occupied fully one inch of this aspect, and presented a large milk-spot. The apex was under the fifth rib. The second right space was occupied by the right auricular appendix. The tip of the left appendix could only be seen by getting a profile view in the manner already mentioned. The left ventricle was in a state of concentric hypertrophy, its wall measuring one inch and a quarter in thickness. The mitral orifice barely admitted two fingers, and, when viewed from the auricular side, it showed a thick hard ring round its orifice. The left auricle, considering the size of the heart, was probably enlarged; its appendix was not lengthened, but was, perhaps, somewhat increased in width. The wall of the right ventricle was not much thicker than the wall of an empty urinary bladder; and when opened, by carrying the knife from within the pulmonary artery downwards to the apex, keeping close to the septum, it gave the idea of being simply a flap stretched over the greatly hypertrophied left ventricle, which bulged far into its cavity. All the valves were healthy. The coronary arteries were very atheromatous, the anterior one being a calcareous tube. The arteries throughout the body were in a similar condition. The heart weighed twelve ounces and a half.



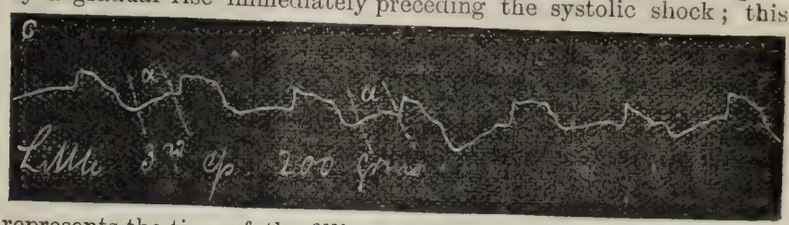
The above cases are typical, and, as such, they materially interfere with the acceptance of the auricular appendix theory, which is, perhaps, to be regretted, as it is a theory of intrinsic beauty and considerable charm. We are thus reduced to accept the popular belief that the pulmonary artery is the seat of the murmur. In



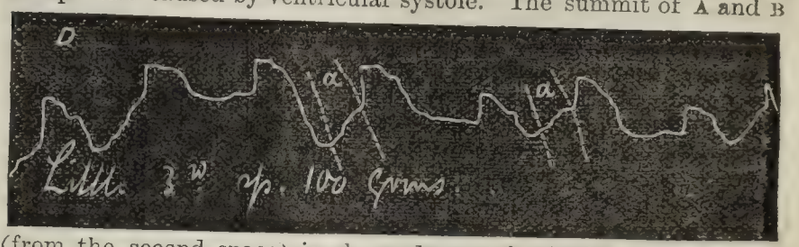
clinical proof of this, I give the following tracings, which bear an essential resemblance to some of those taken by my friend Dr.

* This case I have referred to before (*Edinburgh Medical Journal*, August 1882).

Gibson, and on which Dr. Balfour partly founds his theory, although I am not aware of his having publicly ventured on an analysis of them. Tracing A was taken from Case VI; B, C, and D were taken from Case III. Here I may say that, in chlorosis, the chest-wall is too thick, and the patients, as a rule, too plump, to give tracings of any value whatever. A and B were taken from the site of pulsation and murmur in the second left space; C and D, from the third left space, with different pressures. All four present the common feature that the space α, between the dotted lines, is occupied by a gradual rise immediately preceding the systolic shock; this



represents the time of the filling of the ventricle, and of course the auricular systole. This is succeeded, as already indicated, by the abrupt rise caused by ventricular systole. The summit of A and B



(from the second space) is sharp, descent beginning at once, and interrupted, as is well seen in B, by two slight halts in its course, only faintly produced in the tracing, when the button is raised from the vessel during inspiration, and which resemble the tidal and dicrotic waves of an ordinary arterial tracing. A does not show this so well, as it was taken with the button of the sphygmograph resting lightly on the chest. On the other hand, the summit of C and D (from the third space) is broad, with a slightly downward inclination; and following this is a sudden fall, at the end of which the cycle begins again. The tracings C and D, from the third space, are, of course, from the right ventricle; and its sustained summit is the result of a heart well in contact with the chest-wall. The tracings A and B, from the second space, may be explained thus: the space α represents, as has been said, the filling of the ventricle, and must, therefore, have been obtained from the conus arteriosus; but, with the contraction of this part of the heart downwards, the pulmonary artery comes under the button of the sphygmograph, and gives the arterial character to the down line. This is consistent with our *post mortem* observations, and with our knowledge of the change occurring on the right side of the heart during ventricular systole, and may, therefore, be claimed as a clinical demonstration of my contention.

Having thus come to the conclusion that the murmur can only have its site in the pulmonary artery, the question next arises, How is it produced there? Lack of space forbids an examination of the various answers given to this question; suffice it to say, they all present insuperable difficulties to their general acceptance. Some months ago I had the honour of making a communication on this subject to the Medico-Chirurgical Society of Edinburgh,* when I advanced the explanation, based on anatomical facts, and a consideration of the condition of the heart and of the pulmonary circulation, that, owing to the dilatation of the left auricle and the instantaneousness of its diastolic fulness, due to its imperfect emptying into the ventricle on the one hand, and, on the other hand, from the volume of blood pressing into it from the surcharged pulmonary veins, the pulmonary artery was, during ventricular systole, compressed by it; and that this was the cause of the murmur heard in the vessel. This might more accurately be regarded as an interference with the calibre of the vessel, from partial flattening, as it is stretched, during systole, over the excessively full base of the left heart. It will be understood that this fulness increases the distance the vessel has to cover to reach the root of the lungs. I further contended that, in more advanced debility, the murmur which appeared in the third and fourth spaces was a tricuspid regur-

* See *Edinburgh Medical Journal*, August 1882, and *Transactions of the Medico-Chirurgical Society of Edinburgh*, vol. i, 1882, Oliver and Boyd. Dr. Balfour's criticism of that communication appears in the same journal for September, and in the same volume of *Transactions*. My reply to Dr. Balfour appears in the same journal for November.

gitant one; and that, at a certain stage, the murmur in the second left space was also tricuspid, for the conus arteriosus occupied that space; and that the murmur disappeared from the pulmonary artery by its being carried upwards and outwards, and thus away from the line of pressure of the auricle. This change allows the vessel to reach the root of the lungs with greater ease, and relieves it from the traction it had, up to this point, to endure as its root descended with the contracting ventricle.

On that occasion, I did not go beyond what has been here called the third stage. In the fourth stage, the murmur is, as a rule, heard all over the cardiac dulness to the left of the sternum; it may not extend quite as far as this in the space below the nipple, but it is heard exceedingly rarely beyond it. At the same time, it is often heard over the greater part of the sternum, and may attain its maximum loudness in the fourth space; but this is not invariably the case, although, as a rule, it no longer attains its maximum in the second space. The fifth stage is characterised by the extension of the murmur to the second right space, and has often added to it part of the preceding stage. In the sixth stage, the murmur is heard in the third right space. In the communication referred to, it was submitted that the murmur in the third and fourth left spaces was heard over the part of the right ventricle which, when the ventricle was enlarged, was the first to approach the chest-wall, and might be seen or felt pulsating there; that this fact, combined with other clinical facts, and clenched by the undenied presence of tricuspid regurgitation, led to the conclusion that the murmur must be attributed to this cause. The further extension of the area of audition of the murmur, which continues to be a tricuspid one, is explicable by the continuance and progress of the cardiac changes; for it will be found that, with the enlargement of the right chambers, what is practically a rotatory movement of the organ takes place to the left round its longitudinal axis, that this has the effect of bringing more and more of the right side into closer contact with the chest-wall, and that this change proceeds from left to right until the right ventricle approaches the sternum sufficiently for the murmur to be heard over this bone. But the murmur also appears in the classic "aortic area" (the second right space), and has, from Hope's time to Dr. Balfour's latest utterances, been regarded as produced at the origin of the aorta.

Case VII, and one or two other cases which I have seen recently, had a murmur here, and it was louder here than in the second left space, but it was quite lost over the sternum above this space, and not a trace of it was conducted into the carotids. The murmur was so loud that, had it been produced at the orifice of the aorta, it would have been a physical impossibility for it not to have been carried onwards with the advancing stream; on the other hand, our *post mortem* observations show that the second right space is occupied by the appendix of the right auricle, and that here the aorta is under its cover. The inference that the murmur is a tricuspid regurgitant one carried into the appendix, and not aortic in origin, is unavoidable; and when we get the sixth stage, with the murmur appearing in the third right space, which space we have seen to be occupied by the right auricle, and the murmur gradually fades on going outwards, until it is only audible as the softest of breath-sounds, the clinical evidence is surely incontrovertible, and amounts to demonstration.

I do not seek now to go beyond this stage, as I have had no illustrative cases lately; but it is to be remembered that the right side of the heart may be still further dilated than the stage to which it has been followed here.

The foregoing was mainly attained before I knew aught of Parrot's work; but to him undoubtedly belongs the credit of being the first to recognise that, in the more advanced stages of debility, the cardiac murmur was due to tricuspid regurgitation; how he overlooked, or did not attempt to explain, the primary murmur produced in the pulmonary artery, I know not. It is for me heartily to accept, while honestly trying to extend, his work, believing the site of this murmur at the tricuspid orifice, and its regurgitant mechanism, to be in accordance with the facts of pathological anatomy, in harmony with clinical observation, consistent with reason, and bearing in its simplicity evidence of its truth.

I have to acknowledge the kindness of Dr. Lockie and Dr. Lediard, honorary members of the Infirmary staff, and of Dr. Campbell, Superintendent of Garland's Asylum, in allowing me to utilise the above cases. At the same time, I have to acknowledge the skill and readiness with which Dr. Waters, House-Surgeon to the Infirmary, and Dr. Macphail, Assistant Medical Officer at the Asylum, carried out my suggestions in the *post mortem* room, and their courtesy in permitting me to take part in the examinations.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

By JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

Lecture IX.—The Nervous System: Reflex Action.

All mental operations were referred to the action of the soul or mind, residing in the material frame, and it was long before such operations were in any way associated with physiological changes. Even many animal movements were supposed to be caused by the direct operation of the spirit. At last, movements were divided into voluntary, involuntary, and mixed. These are clearly defined by Robert Whytt (1714-1766) in his celebrated essay published in 1751. He taught that a certain power or influence lodged in the brain, spinal marrow, and nerves, is either the immediate cause of the contraction of the muscles of animals, or is at least necessary to it. He also studied involuntary motions, such as the contraction of the pupil by light; but he explained many such phenomena by the action of a "sentient principle," residing in the part and in the central nervous organs. He recognised that the stimulus applied to a sensory nerve excited something which was transmitted to the central nervous organs, but he called the direct effect of the stimulus a sensation occurring in the part affected.

In his work on "Nervous, Hypochondriac, and Hysteric Disorders," published in 1764, he shows that so-called sympathetic actions of one part of the body with another, could not be explained by anastomosis of nervous filaments, but by the transmission of impressions to nerve-centres, and the retransmission outwards to the parts affected.

For many years the term *sensorium commune* was used by physiological writers, and may be met with in the works of Lancisi (1654-1720), Willis (1622-1675), Boerhaave (1668-1738), and Camper (1722-1789). It usually meant the portion of the nervous system affected by all kinds of nervous impressions. Its function related more to what we would now term sensation, as all other kinds of mental activity were referred to the action of the immaterial principle or soul. In the *sensorium commune* also, as expressed by Descartes (1596-1650), the mind came into relationship with the body.

Little advance was made until the publication by Unzer of his *Principles*, in 1771. In this work he discriminates between movements with "conceptions," and those without "conceptions." He had the idea of "a transformation of the external impression into the internal without any conceptions being experienced." Thus, he describes the movements produced on irritating the foot of a decapitated frog, and he clearly refers the conversion of sensory into motor impressions to changes occurring in ganglia.

These views of Unzer were expressed more fully by his intellectual successor, Prochaska, in his *Dissertation*, published in 1784. Both of these writers, however, supposed that, when a nerve is irritated at one point, the influence will travel to each end, and the effect produced may be either sensation or motion. Whilst we know that an irritation of a nerve-filament does produce something which travels in both directions, we also now understand that the physiological effect observable to the senses depends on the arrangement at one end of the nerve. This view, however, influenced both Unzer and Prochaska in their theories of reflex action. They both say that external impressions reached the *sensorium commune*, and were, by it, converted into motor impressions. Neither of them recognised clearly the fact that the sensory impression was conveyed inwards by one set of nervous filaments, and that the motor impression was conveyed outwards by another set. Nor did they know the parts of the *sensorium commune* involved in specific nervous actions, such as we would now term reflex.

The lecturer then described the experiment of Gilbert Blane, in 1788, in which he divided the spinal marrow of a kitten, by cutting it across the neck. The hind paws being then irritated, by pricking them, the muscles belonging to the posterior extremities were thrown into contraction, so as to produce the effect of shrinking from the injury. In repeating the experiment, he found that when

the spinal marrow was cut through between the lumbar vertebræ and the sacrum, the posterior extremities did not move when irritated, whilst the tail still did so. Thus he showed that some motions occur independently of the brain, and came very near the truth as to reflex action. Le Gallois, in 1812, in his *Expérience sur le Principe de la Vie*, describes numerous experiments of a similar kind, showing that certain movements were due to the integrity of the spinal marrow. Further, Le Gallois had the notion that such movements could be influenced by the action of the brain itself.

The important generalisations arrived at by Charles Bell, between the years 1811 and 1824, had a great influence on opinion as to the action of the nervous system generally, and undoubtedly they paved the way for the inductions of Marshall Hall, whose ideas were first communicated to the Zoological Society in November 1832. It would serve no good purpose to give an account of the controversies and misunderstandings that arose in connection with Marshall Hall's papers, and which apparently embittered his spirit, and thus prevented him from being a fair judge of how much he had actually contributed to science, and of how much he owed to the labours and suggestions of his predecessors. It is interesting to know that it was whilst he was studying the pulmonary circulation, and was watching the movements of a decapitated animal, that he first thought of investigating reflex actions. He performed numerous experiments, and arrived at the theory of reflex action as now generally understood. In particular, he formulated the expression 'excito-motor system of nerves," which still expresses generally the opinions of physiologists. The excito-motor system was formed (1) of an *incident* nerve-fibre, which carried a nervous impression inwards to (2) a nerve-*centre*, from which emerged (3) an *excident* nerve carrying the impression outwards to muscles. This statement may appear to be very similar to those already referred to Unzer, Prochaska, Blane, Le Gallois; but none of these expressed it so clearly, nor had they the notion that the centres were in the spinal marrow. Further, Marshall Hall applied this principle to the explanation of many animal movements. For example, he showed that deglutition, the movements of respiration, the actions of the sphincters, the closure of the larynx, or rather of the *rima glottidis*, when irritated by a foreign body, and other movements, were all examples of excito-reflex mechanisms. These mechanisms were, further, "exclusively functions of the spinal marrow, and of a peculiar system of excitor and motor nerves, of which it is the centre or axis." Again, Marshall Hall, imitating the anatomical precision of Sir Charles Bell, identified the nerves concerned in a number of these mechanisms.

Thus, Marshall Hall's researches constitute a great epoch in physiological discovery. It is quite true that some of his contemporaries supplied important data. Thus, Charles Bell showed that the medulla oblongata was the *primum mobile* in respiration, and he also indicated the motor nerves involved in the respiratory mechanism. Again, Magendie demonstrated the actions of the superior and inferior laryngeal nerves; but it was the triumph of Marshall Hall to work out the complete mechanism of all such nervous acts. The only physiologist who grasped the notion of reflex action in its entirety, was Johannes Müller, and as he did this after independent thought and investigation, it must be considered as one of the many splendid achievements of that distinguished man.

The lecturer then showed that in 1837, William B. Carpenter, in a paper read to the Royal Medical Society of Edinburgh, referred instinctive actions, as seen in invertebrates, and even in man, to reflex mechanism; and he here enunciated, for the first time, the theory of sensori-motor acts. He draws a distinction between excito-motor instincts and sensori-motor instincts. The first are entirely irrespective of sensations, whilst the second begin with impressions giving rise to sensation. By frequent repetition, however, the latter become automatic and instinctive. The lecturer quoted from the *Observations on Man* of David Hartley, first printed in 1749, to show that the doctrine of acquired automatism originated with that philosopher. Hartley illustrates the principle by the very illustration so often given by later writers, namely, the movements of the fingers in performing on an instrument—the harpsichord.

The theory of reflex action has also been applied to account for many of the movements of invertebrates, and the lecturer gave a short account of the researches by which this was accomplished as a good illustration of the value of comparative physiology. In 1833 and 1834, George Newport described the nervous system of sphinx ligustri. In this paper he also describes the nervous cords of the lobster, the scorpion, and a species of scolopendra. He described the gangliated cord in the lobster as showing indications of a double nervous system, one portion for sensation and the other for motion. In this paper, however, Newport says nothing as to any reflex function performed by the ganglia on the sensory tract. This has escaped the notice of writers on physiology, and they attribute the discovery of the reflex actions of these ganglia to Newport. The fact, is, however, that the reflex activity of the ganglia in invertebrates, or in other words, the application of Marshall Hall's doctrines, is due to Carpenter, who stated the matter very clearly in his inaugural thesis for M.D. in 1839. In this paper, Carpenter asserted that the ganglia were so many centres concerned in excito-motor, or sensori-motor actions. These views were adopted by Newport, and were referred to as being those of Carpenter in a paper, in 1843, "On the Nervous and Circulatory Systems of Myriapoda and Macrourous Arachnida." Newport described many interesting experiments on invertebrates, showing that the seat of sensation and volition is in the cerebral ganglia of such animals, usually called the œsophageal ganglion. The result of Newport's experiments is that all the phenomena which occur in the posterior parts of the body, after the supra-œsophageal ganglion and the nervous cord have been separated, are of the nature of reflex movements. Making allowance for the influence on Newport of the discoveries of Charles Bell, Marshall Hall, and Carpenter, there can be no doubt that this research was really the beginning of a new period in comparative physiology, whilst, at the same time, it strengthened the conclusions reached by the observers of similar phenomena in vertebrates.

In 1853, Pflüger indicated the purposive character of many reflex movements, and in 1869 Goltz made similar observations. Apparent purposive movements, however, do not indicate association with sensation or other mental states, and may be explained by the older theory (Hartley), that, as every movement at first is really purposive, it may, by frequent repetition, become automatic or instinctive, and then be transmitted from generation to generation.

The lecture was concluded with a short reference to the experiments of Pflüger, showing the irradiation of reflex irritations in the centre, caused by different strengths of stimuli; to the theory of the inhibition of reflexes, originating with Setschenow, in 1863; and, finally, to the recent researches of Kronecker and Stirling, showing that to produce a reflex action, there must be in the central organ a summation of the effects of rapidly succeeding peripheral stimuli. The latter research bears a resemblance to nearly all those of modern physiology, in giving an insight into mechanisms of a molecular character, occurring in the protoplasm of the nerve-substance, rather than into mechanisms visible to the naked eye.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE VII.—EMBRYOLOGY OF THE BATRACHIA—*Continued.*

THE epiblast, at the period when it has become completely invaginated, forms a continuous layer enclosing the whole ovum, and is constituted, throughout its whole extent, of two strata. The medullary canal commences by the nervous layer along the axial dorsal line becoming thickened, and giving rise to a somewhat pyriform medullary plate, the sides of which form the projecting medullary folds. The medullary plate is thickest at its two sides, and is grooved in the median line by a delicate furrow. The dilated extremity of the medullary plate, situated at the end of the embryo opposite the blastopore, is the cerebral part of the plate, and the remainder the spinal. The medullary folds bend upwards, and finally meet above, enclosing a central cerebro-spinal canal. The point at which they first meet is nearly at the junction of the brain and spinal cord: from this point their junction extends backwards and forwards, but the whole process takes place so rapidly, that the closure of the medullary canal in its whole length is effected nearly simultaneously. In front, the medullary canal ends blindly, but behind it opens freely into the still persisting blastopore, with the lips of which, as in the other and higher types, the medullary folds become continuous. On the closure of the medullary canal, its walls become separated from the external epiblast, which extends above it as a

continuous layer. In the formation of the central nervous system, both strata of the epiblast have a share, though the principal portion is derived from the nervous layer. After the central tube has become separated from the external skin, the two layers forming it fuse together, but there is little doubt that, at a later period, the epidermic layer separates itself again as the central epithelium of the nervous system. Both the nervous and epidermic strata have a share in forming the general epiblast, and though eventually they partially form together, yet the horny layer of the adult epidermis, where such can be distinguished, is probably derived from the epidermic layer of the embryo, and the mucous layer of the epidermis from the embryonic mucous layer. In the formation of the organs of sense, the mucous layer is the most active the lens of the eye and the auditory sac being entirely derived from it, the latter having no external opening. The outer layer of epiblast cells becomes ciliated after the close of the segmentation, but the cilia gradually disappear on the formation of the internal gills. The cilia cause a close rotatory movement of the embryo within the egg, and probably assist in the respiration after it is hatched. They are especially developed on the external gills.

After the disappearance of the segmentation-cavity, the mesoblast forms, according to most authorities, a continuous sheet round the ovum underneath the epiblast. The first important differentiation in it takes place in the axial dorsal line, along which a central end of mesoblast becomes separated from the two lateral sheets to form the notochord. After the formation of the notochord, the mesoblast may be regarded as consisting of two lateral plates continuous ventrally, but separated in the middle line dorsally. By the division of the dorsal parts of these plates into segments, which commences in the region of the neck, and then extends backwards, the mesoblast of the trunk becomes divided into a vertebral portion cleft into separate somnites, and a lateral unsegmented portion.

The hypoblast is continuous with the yolk-cells laterally and in front. The definite closing in of the mesenteron by the true hypoblast cells begins in front and behind, and takes place last of all in the middle. In front this change takes place with greatest rapidity. The cells of the yolk-floor become continuously differentiated into hypoblast-cells, and very soon the whole of the front end becomes completely lined by these hypoblastic cells, while the yolk-cells become confined to the floor of the middle part. The front portion of the mesenteron gives rise to the œsophagus, stomach, and duodenum. Close to its posterior boundary there appears a ventral outgrowth, which is the commencement of the hepatic diverticulum. The yolk is therefore post-hepatic, as in vertebrates generally. The stomodæum is formed comparatively late by an epiblastic invagination. At first, the mesenteron communicates freely with the exterior by the opening of the blastopore. The lips of the blastopore gradually approximate and form a narrow passage, on the dorsal side of which the neural tube opens. The external opening of this passage finally becomes obliterated, and the passage itself is left as a narrow tract leading from the hinder end of the mesenteron into the neural canal. It forms the post-anal gut, and gradually narrows, and finally atrophies. At its front border, on the ventral side, there may be seen a very slight diverticulum of the alimentary tract directed downwards ventrally. This becomes longer, and meets with an invagination of the skin. This invagination is the proctodæum, and an anal perforation ultimately appears at its upper end. The differentiation of the hinder end of the præanal gut takes place in the same way as that of the front end, though somewhat later. It gives rise to the cloacal and intestinal part of the alimentary tract. From the ventral wall of the cloacal section, there grows out the bifid allantoic bladder, which is probably homologous with the allantois of higher vertebrates. After the differentiation of the ventral wall of the anterior and posterior ends of the alimentary tract has proceeded so far, the yolk only forms a floor for a restricted median region of the alimentary cavity, which corresponds to the umbilical canal in the amniota. The true hypoblastic epithelium then grows over the outer side of the yolk, which then constitutes a true, though small and internal, yolk-sac. The yolk-cells enclosed in this sac become gradually absorbed, and the walls of the sac form part of the intestine.

WE are requested to state that Dr. J. A. Menzies, of Cannes, having obtained the necessary permission, will in future practice at Geneva from May to October.

ON THE LIABILITY OF SOLDIERS TO CONTRACT DISEASES OF THE CIRCULATORY SYSTEM.

By Deputy Surgeon-General D. CULLEN, M.D.

(*Continued from page* 999.)

THE examination of the table of diseases shows two obsolete terms —carditis and morbus cordis—which disappeared with the introduction of the new nomenclature in 1869. The former term was largely used in the returns from India, and embraced cases of palpitation from irritable heart, dilatation and hypertrophy. Its inaccurate use led to criticism in the Madras Statistical Report for 1866, when 127 cases were returned from that command, and only 10 from Bengal, and 3 from Bombay. The 18th Hussars gave 47 cases attributed by the surgeon to the inordinate use of tobacco, the men appearing "to be regularly saturated with nicotine." The term morbus cordis had an equally wide interpretation—embracing both functional and organic ailments: thus, 10 cases from the Straits Settlements, in 1868, had "excited action of the heart, accompanied by severe dyspnœa and pain in the cardiac region, sometimes followed by syncope." Under these now happily obsolete terms will be found 646 admissions, 36 deaths, and 97 invalided. The organic diseases of the heart show 9,634 admissions, 1,230 deaths, and 3,629 invalided; while functional diseases cause 5,648 admissions, 12 deaths, and 689 invalided, syncope and palpitation being included in this section. The diseases of the aorta present a total of 959 admissions, 818 deaths, and 167 invalided; diseases of arteries, 389 admissions, 201 deaths, and 137 invalided; diseases of veins, 1,816 admissions, 11 deaths, and 1,073 invalided; while unspecified diseases of the heart and vessels constitute 1,152 admissions, 259 deaths, and 68 invalided.

In the first of these five sections, pericarditis shows no very marked annual variation; 69 admissions, 8 deaths, and 5 invalided are the average annual results. India has a predominance of admissions, the home army of deaths and invalids. The other diseases of the pericardium are unimportant. Endocarditis is a term little employed in the returns.

Disease of the valves has a large significance, the greatest for the decade in all respects of admissions, deaths, and invaliding although, in the second quinquennial period, palpitation gives the higher admission-rate. The annual average admissions by this disease are 593, in one year reaching 727, the admission-rate for that year in the Madras Presidency being 8.78, or more than double the average of all India, which is 4.20 per 1,000 of mean strength. For the decade, the troops stationed at home, in the Mediterranean, and British America have the smallest admission-rates, varying from 2.68 to 2.88; the garrisons in China, Australia, Japan, and the Straits Settlements give a ratio of 3.51; the West Indies of 4.01 and the group consisting of Mauritius, Ceylon, the Cape of Good Hope, and St. Helena of 5.57; this being the highest annual average with the exception of Madras, which is 5.69. The annual average death-rate is highest in the China group, being .85; Bengal, the Cape group, and West India garrisons are .61; Madras, .58; British America, .51; Home, .34; and the Mediterranean the lowest, .3 The invaliding rate is highest in the Cape group—1.79, and lowest in British America—1.02; in the Mediterranean, 1.61; in India and at home, 1.59; but the Presidencies of India vary from 1.64 Bengal to 1.38 in Bombay. The high invaliding rate at home due to the number of recruits who break down in their first year service.

In 1870-71, of 41,763 recruits joining, 442 were invalided in the first year, of whom 101 were from diseases of the circulation, being 2.42 per 1,000; Dr. Balfour, then the able head of the statistical branch, makes the following comment on the occurrence. Among the recently enlisted soldiers who have broken down, the third great cause of invaliding (coming after tubercular and nervous chiefly epileptic, diseases) "has been the class of diseases of the circulatory system, and especially valve-disease and hypertrophy of the heart." He names "pack drill, severe exercise, constriction of the chest from tight clothing or accoutrements" as tending by their development, a tendency "aggravated by habits of intemperance or debauchery." This liability among recruits to break down was greatest in the Foot Guards, next in the Artillery, and lowest in the Cavalry and Infantry. Among matured soldiers of the different arms of the service, the liability appears greatest in the Artillery, next in the Infantry, third in the Cavalry, fourth in the Foot Guards; whilst it is lowest in the Household Cavalry.

death-rate is slightly highest in the Foot Guards; the invaliding rate is highest in the depôts of the Line and Artillery, where the older soldiers are massed, and where it reaches 7 to 8 per 1,000 of mean strength. It has been shown that the highest invaliding rate for valve-disease was in that group of stations associated with the Cape. In 1866, Inspector-General Lawson wrote regarding this affection: "The cause of the valvular disease of the heart seems connected with a rheumatic diathesis, and in this country generally accompanies rheumatic fever with well-marked affection of the joints. Such cases of highly developed rheumatic fever are extremely rare among the troops in South Africa, but muscular rheumatism implicating the parietes of the chest is particularly common during the warm weather." He refers to the easily induced excitable action of the heart at that season, and the possibility, in certain diatheses, of the rheumatic affection inducing structural changes in the valves; while he combats the idea of overexertion or excesses in "Boer brandy" or tobacco causing this relative frequency of cardiac disease.

The effects of the campaign in Abyssinia in 1867-68, in inducing valve-disease, are notable. The whole of the men invalided at Netley after the operations were 76, of whom 16 were for this affection, being in respect of invaliding the most prominent of all diseases. It is, in fact, equal to the whole of the invaliding for miasmatic disease, both being 10.7 per 1,000 of the average annual strength. Inspector-General Currie remarks on the intensely cold nights and hot days—the one Siberian, the other tropical, during the progress of the expedition; these climatic features being accompanied by a remarkably dry condition of the atmosphere. It will be remembered that the forces were six months employed, and marched 800 miles to and from Magdala, some of their campingrounds being over 10,000 feet above the sea level, and the paths deep, difficult, and precipitous. "The long ascents and descents of mountain passes and formidable ravines proved excessively fatiguing, and demanded greater physical exertion and powers of endurance than British troops have probably ever undergone." Previous Indian service rendered the men more liable to dysentery, diarrhœa, and ague, which were prevailing diseases; rheumatism was not uncommon, one admission in nineteen being due to this cause. No native liquors were procurable, and there was no intemperance.

The recent operations in the Transvaal and Zululand afford an opportunity for comparing that period of unrest with one slightly preceding it when the troops were settled. From 1867 to 1871, the annual ratio of admissions for diseases of the circulatory system was 9.54 in South Africa; the death-rate was 1.12; the stational invaliding-rate, 3.16; and the final invaliding at Netley, 3.74. Valve-disease of the heart gave, during these five years, nearly half the admissions, more than half of the deaths, and two-thirds of the final invaliding in this class. In the later war period, 1878-80, the annual ratio of admissions for diseases of the circulatory system was 20.93, the death-rate 1.13, the stational invaliding-rate 9.39, and the final invaliding at Netley 4.55. There are no data to carry out the comparison farther.

Deputy Surgeon-General Woolfryes remarks of the Galeaka-Xosa war, that palpitation was common amongst the young soldiers, "brought on by overexertion and excessive fatigue," while "muscular rheumatism, so common in South Africa, did not affect soldiers in the field to any appreciable extent." The 99th Regiment, which was relieved from active service in Zululand, and proceeded to Berbera, carried with it this tendency to palpitation; while in the 58th Regiment, at Mauritius, cases of valvular disease of the heart occurred attributed to "the hardships and overexertion undergone by that corps while on active service at the Cape of Good Hope."

Taking the year 1869, which gives the highest number of admissions, deaths, and invaliding in the second quinquennial period of the decade on the table, it will be found that diseases of the circulatory system gave a high ratio for that year at home in the depôt battalions of the line, and the depôt brigade, R.A.; valve-disease, hypertrophy, and palpitation being the prevailing forms. The comment is made: "The excess in the artillery may probably be to some extent, a result of the duties of the men, and in the depôt brigade and depôt battalions it may be a consequence of tropical service, of age, and of the habits of the old soldier."

As a rule, in India the depôts give a high admission-rate for diseases of the circulation; invalids, convalescents, and pensioners being tempted to indulge in the cheap spirit of the country, and intemperance accordingly prevailing. In the foregoing observations, my object has been rather to bring forward the wear and tear of a soldier's avocation, than to lay stress on his vices and irregularities, the effects of syphilis being better understood in regard to the production of aneurysm and dilatations than valve-disease.

Hypertrophy of the heart comes second in the list in point of importance among the organic diseases of the heart, causing

This Table gives the Ratio per 1,000 *of Mean Strength, and admits of a Comparison being made between the different Arms at Home, and the Troops serving in India for* 1869.

—	Diseases of the Circulatory System.			Valve-Disease only.		
	Admission.	Deaths.	Invaliding.	Admission.	Deaths.	Invaliding.
HOME:						
Depôt Battalions	17.3	2.25	7.48	6.08	0.84	3.65
Royal Artillery	13.9	3.16	7.20	3.54	1.26	2.91
Infantry Regiments...	12.3	1.17	4.47	4.33	0.35	2.15
Cavalry ,, ...	5.4	1.64	2.90	2.77	0.38	1.64
INDIAN:						
Madras Troops	12.1	1.95	4.50	4.47	0.48	3.46
Bengal ,, ...	13.9	1.71		4.47	0.85	
Bombay ,, ...	15.2	1.14		2.00	0.28	

2,474 admissions, 151 deaths, and 803 invalided. In the home army this disability is evenly distributed throughout the ten years; each quinquennial period giving, as compared with other groups of stations, a small admission-rate, the smallest death-rate, and the highest invaliding-rate, due to the number of immature recruits discharged the service under this head. Among the troops abroad, there is a remarkable diminution in the admissions and deaths, with an increase in the invaliding, in the second quinquennial period, probably due to the introduction of the term palpitation in the nomenclature of 1869.

The phenomena of dilatation and hypertrophy vary according to which condition predominates, and both are frequently associated with palpitation. Dr. Maclean, writing in the report for 1867, of 151 cases of heart-disease under his observation at Netley, remarks "82 were under 30, 39 between 30 and 40, the youngest 16, the oldest 40. In only 6 was there a history of acute rheumatism; 22 had a distinct history of syphilis, and 1 of gout. In 72 the aortic valves were diseased, with more or less hypertrophy of the left ventricle, when the disease was aortic obstruction. In 54 the mitral valve was affected, in 25 there was palpitation, often with dilatation of the right side of the heart." The Cape group, India and China, show the highest admission-rates; troops at sea, in the West Indies, the Cape, and India, the highest death-rates; and troops at home the highest invaliding-rate. In the home returns, the annual average is 88 admissions, 5 deaths, and 41 invalided, with no great inequality. Its causes, apart from valve-lesions and obstructions from disease of the great channels, have been ably discussed by Mr. Myers in his Alexander Prize Essay, in which he has fully shown the evils of the mechanical obstruction induced by the soldier's dress and accoutrements in exercising a special influence not at work among civilians. Surgeon Davy has contributed a short essay, written in 1877, to elucidate still farther the special conditions by which mechanical obstruction and excessive strain are induced in the recruit. He discusses the effects of the artificial dilatation of the chest in preliminary setting-up drill, and the subsequent training—four hours a day for six months—as "certain to lay the foundation of much heart-disease in the army, with or without the present uniform." His argument is that hypertrophy commences in the drill-field, the abnormally distended chest causing shallow respiration, an excited action of the right ventricle, and irregularity of the cardiac rhythmical movements, the diminished expiratory acts disturbing the balance of both pulmonary and systemic circulations, and thereby embarrassing the right side of the heart which is over distended with venous blood, the consequence being that when the recruit is made to double, dyspnœa becomes apparent, excessive strain with corresponding cardiac exhaustion results, and, in the end, hypertrophy of the right ventricle with or without dilatation. The impeded respiratory movement is the starting point of the sequence; the training exercises induce excessive muscular pressure on the venous system, and the recruit is thus "the victim of the drill-sergeant's ignorance and superstition." The injudicious handling of recruits at drill was attacked in 1862 in a report by the Professors of the Army Medical School. Atrophy of the heart appears as the cause of 53 admissions, 15 deaths, and 4 invalided; 35 of the admissions and 8 of the deaths occurred in India.

Dilatation of the heart occasioned 35 admissions, 15 deaths, and

27 invalided; of whom 20 admissions, 7 deaths, and 18 invalided are in the returns from India. Fatty degeneration of the heart has given rise to 106 admissions, 121 deaths, many of them sudden, without doubt, and 25 invalided. In the first quinquennial period, the term in use is degeneration, but I have here arranged them under the one heading. The men most liable to this disability are those employed as canteen and mess waiters, or in situations where tippling habits may be indulged in with considerable impunity. The effect of loss of tone from nervous exhaustion induced by malaria, tropical service, etc., is seen in the higher admission-rates in India than at home. The death-rate and invaliding-rate are almost equal in both armies. The small admission and high death-rate indicate a disease which is insidious in its progress, and rapid in its fatal termination. The abuse of alcoholic liquors, the effects of overfeeding in warm climates, and the tendency to inactive habits engendered by excessive solar heat, account for the predisposition to weak, flabby, fatty hearts so often exhibited in soldiers returning from foreign service. These points have been fully insisted on by a succession of able administrative medical officers in India.

Aneurysm of the heart is given as the cause of 30 admissions, 8 deaths, and 1 invalided. Madras is credited with half the admissions and half the deaths in one year, which is singular if not due to an error in the returns.

Rupture of the heart has occasioned 5 admissions and 13 deaths, 4 admissions and 6 deaths being from India.

Angina pectoris figures largely in the first quinquennial period, causing 216 admissions, and but 52 in the second; nearly two-thirds are from India. There are 8 deaths, and 28 invalided in the decade. [*To be continued.*]

EXPERIMENTS ON THE INFLUENCE OF DRUGS ON THE EXCRETION OF UREA AND URIC ACID.

By EDMUND ALLEYNE COOK, L.R.C.P.Ed., L.R.C.S.Ed.

(*Continued from page* 858.)

Action of Powdered Malt on the Excretion of Urea and Uric Acid.—The commencement of this set of experiments was somewhat irregular, inasmuch as the excretion of uric acid was not normal in amount when the administration of the malt-powder was commenced; and the experiments were somewhat marred by a meeting in close rooms, which had its own influence on the excretion. The experiments were commenced November 17th, 1881, immediately after the last tomato experiments, and when the uric acid excretion, which had been sent up to 19.3 grains, had gradually decreased to 15.3 grains.

Date.	Urine.	To Litmus.	Sp. Gr.	Urea.	Uric Acid.
November 17	30 oz.	acid	1023	345 grs.	16.0 grs.
,, 18	43 ,,	,,	1023	385 ,,	16.6 ,,
,, 19	39 ,,	,,	1023	447 ,,	13.5 ,,
,, 20	37 ,,	,,	1026	477 ,,	20.0 ,,
,, 21	51 ,,	,,	1018	443 ,,	15.8 ,,
,, 22	36 ,,	,,	1028	493 ,,	15.0 ,,
,, 23	30 ,,	,,	1029	416 ,,	15.0 ,,
,, 24	34 ,,	,,	1026	400 ,,	14.4 ,,
,, 25	33 ,,	,,	1028	385 ,,	12.5 ,,

On the 16th, the first dose of malt-powder—sifted, to free it from large husks—was taken in the evening. The diet was as stated in former papers, and the quantity of liquid consumed was about six ounces more, *i.e.*, fifty ounces. On the 17th, after each meal, half a teaspoonful of malt-powder was taken, and the diet in all other respects was without variation. All day, a semi-headache was experienced, such as would ordinarily be expected with constipated bowels, but the bowels continued regular. On the 18th, the same amount of malt in the same manner, as also on the 19th; but a meeting was attended on the evening of the 19th. No change of diet. On the 20th, the regular doses of malt were taken, and again on the 21st, and then its administration was discontinued. When the malt administration began, the health was perfect. The second day, an ill-defined headache and sense of bodily fulness was experienced, and this continued more or less throughout the administration; the bowels were regular, and the exercise and sleep as usual. Setting aside the meeting, which apparently caused the large increase of uric acid in the collection of the 20th, the effect of the malt-powder seems to have been to increase the urea excretion considerably, and the uric acid also. There was no other assignable cause for the excretion continuing so much above the normal than the use of the malt; and, on the cessation of its use, the amount excreted fell. The amount of malt used would not itself produce uric acid or urea, but the action of its diastase on the food would convert the cooked starchy material into maltose much more completely than would ordinary digestion; and this, being conveyed to the liver, and probably stored as glycogen, would increase the liver-activity; and, if the urea be a product of liver-action, the increase would be explained. These experiments are, perhaps, best considered in conjunction with the following.

Action of Pepsin on the Elimination of Urea and Uric Acid.

Date.	Urine.	To Litmus.	Sp. Gr.	Urea.	Uric Acid.
December 18	30 oz.	acid	1025	431 grs.	11.6 grs.
,, 19	34 ,,	,,	1022	400 ,,	13.1 ,,
,, 20	36 ,,	,,	1022	447 ,,	18.0 ,,
,, 21	54 ,,	,,	1016	478 ,,	18.8 ,,
,, 22	40 ,,	,,	1023	424 ,,	17.0 ,,

Christmas irregularities of diet interfered with and confused the conclusion of these experiments.

On each day, pepsin-elixir, of Symes and Co. of Liverpool, was taken in three separate doses of one drachm after each meal, the digestion and bodily health being perfect. On the second day after commencing the pepsin, there existed a feeling of great depression and restlessness, with feverishness, and this continued on the 20th, but in less degree. On the 20th, eight ounces more water were taken, and also on the 21st.

These experiments with malt-powder and with pepsin are by no means perfect, but they point to an increase of both urea and uric acid, caused by the administration; and, since the administration may be presumed to cause increased liver-action because of more perfect digestion, and there exists nothing in either malt or pepsin in the doses given, sufficient to produce by its presence the increased excretion noted, the tendency of these results is to fix the production of both urea and uric acid on the liver; or, if we cannot go so far as that, we may say that increased liver-action is coincident with increased excretion of these substances. It must be noted that the increased liver-action was caused by increased nutrition, *i.e.*, an increase of nutritive material must have been carried to that organ although the same diet was continued, because the diet was better digested.

To throw a little more light on the subject, in November 1882 with a diet in most respects similar, and of great regularity, the following was tried.

Influence of Euonymin on the Elimination of Urea and Uric Acid.

Date.	Urine.	To Litmus.	Sp. Gr.	Urea.	Uric Acid.
November 1	38 oz.	acid	1020	360 grs.	11.7 grs.
,, 2	34 ,,	,,	1022	382 ,,	14.3 ,,
,, 3	50 ,,	,,	1020	340 ,,	17.4 ,,
,, 4	46 ,,	,,	1020	375 ,,	14.3 ,,
,, 5	43 ,,	,,	1020	340 ,,	12.5 ,,

On October 31st, no drug was taken. On November 1st, one grain of euonymin (brown) was taken on an empty stomach and in solution. On the second, this dose was repeated, and again on the 3rd. On the 4th and 5th, no drug. The life was regular, and the increase of uric acid must be put down to the euonymin. It is seen there is no notable increase of urea. Now, euonymin is reported to be a pure excitant of the liver, and has no other action which has been well studied or which is prominent. The elimination of uric acid after increasing, is seen to decrease, in spite of the continued administration of the drug; but it must be remembered that euonymin produces an increased action of the bowels, and this would carry off water and, doubtless, other material, which would otherwise pass by the kidneys. This looseness began on the 3rd, and continued, necessitating the conclusion of the experiment.

It has been proved that, when the liver is eliminated from the general circulation, the secretion of urine is entirely suppressed and only recommences on injecting urea into the general circulation; hence has been deduced the proposition that the liver is the seat of urea formation. Parkes states his belief that urea is largely formed in the liver, and that in acute disease, the deficiency is in proportion to the amount of liver involved. I have not been able to ascertain whether this observation has been continued to the elimination of uric acid, though, of course, if the secretion of uric ceases when the liver is eliminated from the circulation, the excretion of uric acid must cease also.

The question whether urea and uric acid are converted, the one into the other, in the animal organism, has been often discussed and as often left unproved. Parkes remarks: "While the complete destruction of uric acid introduced into the body is quite certain, it is as certain that uric acid, or some amount of it, produced in the body, is not so destroyed, but passes off with the urine. Why should we not suppose that the unknown conditions, which in this case protect the uric acid, may be also protective if uric acid is formed directly from food? In other words, is the parallel drawn between

uric acid artificially introduced and uric acid supposed to be produced from food in the circulation a correct one, and the argument deduced from it valid? We do not at present know enough of the transformation of uric acid into urea to enable us to give an answer; but we may safely say that if uric acid be produced from food in the circulation, it must be destroyed and pass into urea, unless sound protective influence is present. So that, unless we introduce an unauthorised conjecture, we must suppose that if urea be formed only from tissues, uric acid must have a similar origin."

I do not think I can yet offer any further light on this supposed conversion, but I would submit that these experiments, so far as they go, show: 1st. That an action on the food, which will certainly tend to increase liver action, tends also to increase uric acid and urea; 2nd. That a direct action on the liver by a drug, while it increases markedly uric acid, does not increase urea elimination. If, then, the liver be probably the seat of formation of urea, it is also, probably, the seat of formation of uric acid; but the excitation of the liver which is sufficient to increase the acid, is not sufficient to increase the urea, unless digested food be conveyed to it at the same time.

SOME COMMON AFFECTIONS OF THE ANUS OFTEN NEGLECTED BY MEDICAL MEN AND PATIENTS. *

By A. S. MYRTLE, M.D., Harrogate.

NOTHING has impressed me so forcibly with the importance of a close investigation, even to minute, sometimes disagreeable details, regarding the condition of every case coming before us, than the fact that I have, in a very great number of instances, been consulted by patients who have suffered for months and years from affections of the anus; and neither they, their medical men, nor consultants even, have been aware of the nature of the mischief or its extent. Patients are to blame for this oversight as much as their attendants. They are often very reticent: women especially dislike to speak of symptoms, however distressing, occurring daily, or at least after each defæcation; and even men in like condition seem ashamed to own that there is anything wrong with them. We, at all events some of us, are cursed with an excess of modesty, or, because the part is not the most savoury, are disposed to fight shy of it; or we attach too little importance to the patient's statements, and fail to make a physical examination.

Moreover, whilst every week's publications are rich in literature upon uterine displacements and ovarian growths, anal difficulties seldom find a place, although I believe that the latter are infinitely more frequent than, and of equal importance with, the former.

The commonest affection is itching; pruritus ani, I dare say, is so common, that every one of us has had some personal experience of the nuisance, but few know what a terrible thing it becomes when it obtains a firm hold of one; the agony then is something maddening. The causes are carelessness in cleansing the part, acrid discharge from mucous follicles, irritation from reflex action, the presence of certain eruptions, and functional derangement of the peripheral nerve-filaments, all requiring special treatment for the successful removal of this intolerable evil. When it has existed for long periods, the mucous membrane, from scratching and the action of remedies, becomes thick, hard, and corrugated; then nothing will afford a cure but removal of the whole affected skin and mucous membrane by the knife. I had a case of this kind, in a young lady, whose life had become a burden to her on account of the itching, where Mr. Jessop dissected away all the hardened hypertrophied part with the most complete success. To show the alarming symptoms which may arise from pruritus ani, I shall relate one case which came before my notice in March last. An Indian merchant was found in his office in London on his back in a death-like faint; he remained so for about half an hour. When he came to himself, he complained of giddiness, and loss of memory and brain-power; he could not understand the purport of certain business letters, and had to give up work for the day. These attacks became rather frequent; and, becoming alarmed, he consulted me. He was quite well, he said; everything was natural. On cross-examination, I found that there was something wrong with the anus, and I examined it; there was a ring of chronic eczema, and the itching was so fearful, that, when a fit of it came on, the dread and agony were so great, that they induced the serious functional derangement of nerve-centres I have just described; and one local ailment was making life very bitter, and causing him to fear that he was suffering from serious disease of the brain. The eczema yielded to treatment, and in three weeks a cure was effected.

Fissure is of much more common occurrence than any one would believe; and it is found in the most unlikely subjects, delicate young ladies leading the most regular lives, and jolly middle-aged fellows not quite so regular in their habits; it is very frequently overlooked. In 1878, I had ten cases among visitor-patients, every one being ignorant of the nature of the local affection. Mr. Teale operated on the whole of these successfully. I shall only give one case. A young lady, the subject of general debility from anæmia, was sent to Harrogate for treatment. She was very tall, very spare and feeble, and complained of various neurotic pains, and of great mental depression, as well as physical. After seeing her two or three times, I was struck with the pinched suffering look she had; and at that visit I went more thoroughly into her case. I learned that she had a dread of going to the closet; that, after she passed a motion, she had to lie down flat on her back from a sense of pain and faintness; this occurred with every motion, and had been in existence for over eighteen months. I diagnosed fissure. She was operated on; and the third morning, to her amazement and joy, she passed a tolerably formed motion without discomfort; after that she rapidly recovered, neuralgia, anæmia, low spirits, all vanished, and now she is in perfect health. I believe that, in cases like this, the constant fear of what must be endured has the most injurious influence on all the functions of the body.

In August 1881, a lady aged 60 was sent to me on account of irritability of the mucous membrane of the bowels. She suffered from diarrhœa, alternating with constipation, flatulence, and dyspepsia. She had been under her own medical man for nearly two years, and during the last six months she had been seen by a celebrated physician once a fortnight. Something about the old lady made me ask her about the condition of the lower bowel, and this led to an examination. I found two small piles, an ulcer, and fissure. I at once sent for Mr. Wheelhouse, who came the same day, operated, and at the end of a week my patient left me quite well and hearty. I heard of her last season: she had never required a dose of medicine since the operation. Wherever there is a fissure there is spasmodic stricture, so that stretching is necessary as well as division.

With hæmorrhoids I need not take up your time, although they deserve much more attention than they receive. Patients who suffer from them, who are constantly losing blood, are too often put off with the remark, "Never mind, bleeding piles are safe. Do not interfere with them, and do not be operated on; take a spoonful of electuary at bed-time." And so the patient goes on thinking that, were this safety-valve closed, the roof of his head would be blown off, or he would have a fit. Now I do not hesitate to say this is bad advice. I have met with cases where the most grave symptoms have developed under these circumstances. Last year I had a young Austrian whose life was nearly lost in this way. He had consulted several German surgeons and physicians, without one going into his case. He was a keen sportsman, and fond of going out with his gun after big game. Sometimes he would lose so much blood as to be so weakened he could not reach his camping ground for a considerable time. A friend and patient of mine met him on one of his hunting tours, and, learning something about his symptoms, never allowed him to rest till he brought him here. On examining him, I found him suffering from an enormous cluster of piles, ulcerated and offensive; the least touch caused hæmorrhage; I allowed him two days' rest. After that Mr. Teale removed the mass. The operation was a very tedious one, but in a fortnight the patient was quite well.

The last affection I shall mention is not quite so painful, is purely neurotic in its nature, and very fitful in its attacks, coming on at long intervals, and when the subject of it is apparently in the best form; he will go to bed perfectly well, and awake at any hour with a gnawing, grinding pain in the sphincter. This gradually increases in intensity, acquires its maximum in a few minutes (which seem very long), and then gradually goes off without treatment; the patient feels very faint and exhausted, and is held down by the commanding nature of this pain. This is a form of neuralgia, produced by exposure to cold, either from the bedclothes getting off the part, or being too scanty or insufficient to protect it. During the day it may arise from sitting on a cold seat. However or whenever caused, it is at once relieved by the application of warmth. I have never seen any signs of local mischief in these cases, and I know one gentleman who has suffered from repeated and severe attacks during the last forty years. It was he who directed my attention to heat as the best remedy. One severe frosty morning, he was seized with

* Read before the Yorkshire Branch.

the worst attack he ever had, just on entering a first-class railway carriage; there was no other passenger, and, in despair, he sat down on the hot tin. In an instant, the pain was gone; and since then, when attacked, he flies to the fire and toasts himself, or applies an India-rubber bag full of hot water, with the best results.

In conclusion, let me point to the fact that, in all these and similar cases, medical treatment is worthless; and that the surgeon alone can effect a speedy and radical cure. I would, therefore, impress on our teachers of surgery the necessity of showing their class-pupils how to deal with common affections of the anus. The young practitioner too frequently begins his professional career with a competent knowledge of operations he may never be required to perform, and in total ignorance how to proceed in dealing with the simplest and commonest affections requiring operative skill.

ON THE FEEDING OF INFANTS DEPRIVED OF BREAST-MILK.

By GEORGE CRICHTON, M.B.Edin., Twickenham.

The question of the feeding of infants is not settled by the simple formula of "milk and water" in certain proportions, or "milk and lime-water." It is a rule, not absolute, but of expediency. Cows' milk is not the best obtainable substitute for the sustenance generally provided by Nature. Asses' milk is acknowledged to be superior. Nevertheless, being universally obtainable, cows' milk will always form the important factor in any general rule on this subject of infant-feeding. But suppose the supply of this should fail? Suppose, as everyone, at least in towns, finds, cows' milk, if obtained fresh, be not of such good quality as may be desired, nor to be had in such quantity, then, I think, it must be permissible to advise the use of condensed or "Swiss" milk. It has, indeed, some advantages, *e.g.*, it turns sour less readily, and the supply is not so apt to run short. It is difficult to see why the addition of sugar only to the normal constituents in milk should make this, as has been said, less suitable than ordinary fresh milk; for cane-sugar is always added to the usual mixture of milk and water. Children of all ages can take in considerable quantities of sugar. I am of opinion that the amount of sugar in condensed milk makes no difference to a healthy child, but that, in those of inherited weakly constitution, whose digestive powers are feeble, or where even the slightest intestinal catarrh from whatever cause has arisen, it undoubtedly acts injuriously, and must be at once and entirely withdrawn. Is it not probable—at all events, it is possible—that, however carefully conducted, the process of manufacture has induced some slight change in the solid constituents, inappreciable except through the subtle alchemy of digestion? Suppose, for instance, some transposition of elements should make the casein less digestible. The various sugars have the same chemical formula, but properties varying considerably.

To return, however, to ordinary cows' milk: let us at once ask the question, Why do we add one-third or two-thirds of water? I mean, other than empirically. Because it would be too strong without, says the nurse, thinking of her brown tea-pot, as if milk were like tea, and had to be watered down to suit tender stomachs. But ought we not to give the little one the least possible trouble? and the more weakly the infant, ought not the diet to be as nourishing as we can make it? For instance, I have never found other than good from the addition of an extra teaspoonful of cream to every meal. Cream is supposed to be "rich," and is certainly indigestible in the cases of some "bilious" adults. But there are few children to whom cream is not beneficial. We do not, by the addition of so much water, come nearer to the proportions found in human milk. The quantity is too great. In fact, soon after delivery, human milk contains less water than ordinary cows' milk, in the proportion of 828 to 870. The amount of sugar, on the other hand, is greater, in the proportion of 70 to 47.7. Hence we easily see why sugar should be added. Again, the proportion of fat is 50 to about 31; therefore, cream should likewise be added. The casein, however, is in excess in cows' milk.

There can be no question as to the propriety of adding sugar and cream to cows' milk, to bring it nearer to a child's natural diet. As the composition of cows' milk varies in no particular more than in the proportion of butter it contains, doubtless, in some instances, the addition of cream may be scarcely necessary. As to casein, if we cannot easily abstract a portion of it, by the addition of water we may make it fall into a proper proportion, and accommodate itself to a suitable percentage. In such manner, we indeed get a tolerable substitute for mother's milk: one that is found to answer fairly well. It may be that the somewhat excessive amount of sugar usually added makes up for the neglect in adding cream, both being heat-producers in the animal economy.

We have now approximated to the ideal milk. But, on account of the behaviour of the casein of cows' milk, practical experience obliges us to further water the milk. Our fine percentages are thus rather ruthlessly shaken.

Some months ago, I was summoned late in the evening to an infant five months old. It was in a condition almost of collapse, pale, with sunken eyes, and greatly depressed fontanelle. It had been fed since three months old with Swiss milk; the last week, with cows' milk diluted. It was sinking from diarrhœa. An injection *per rectum* of a few drops of laudanum checked the diarrhœa to some extent. Wine whey in teaspoonfuls frequently administered (it was unable through weakness to suck) revived it. This diet was continued for twenty-four hours, and the injection was repeated. Subsequently it was fed on equal parts of whey and bread jelly (white decoction of Sydenham), with a teaspoonful of cream in each meal. It recovered on this diet, and nearly regained infantile plumpness, suffering, however, occasional relapses of diarrhœa. Medicines did only some good, apparently answering fairly for three or four days, and then failing to have any effect. I found, as Dr. Eustace Smith points out, that changes of the drugs employed, or of the form in which administered, were effective. Opium, in various forms, and bismuth seemed most beneficial. Ultimately the diet was varied, *e.g.*, veal broth, yolk of egg, etc.

The point to which I would draw attention was the child's inability to digest milk. This was tried in the smallest proportions, alkalinised with bicarbonate of soda, with lime-water, and with barley-water Condensed milk, which was said to have agreed with it before, was likewise tried. The common result was either a renewal of the intestinal catarrh, or else sickness. Yet everything else it took agreed. I mentioned above that it took whey and cream well, *i.e.* de-caseinised milk.

Here, then, we have a case, not perhaps very rare, of inability to digest casein, at least, the casein found in cows' milk. Amounting almost to an idiosyncrasy, it nevertheless points very decidedly to one definite cause of infantile indigestion and consequent diarrhœa.

The comparative indigestibility of the casein of cows' milk depends upon its coagulation in one mass instead of in flakes, and the consequent difficulty—a chemical and mechanical one—of its re-solution This occasionally happens with mothers' milk, and is apparently modified by the addition of water, lime-water, or bicarbonate of soda only (Vogel), to cows' milk.

It is apparent, from the foregoing observations, that the unsuitability of cows' milk unmixed depends upon the casein (1) as to its excessive amount; and (2) as to its rapid coagulability—so that extra stress is laid upon the delicate infantile digestive powers. It is, therefore, mainly in rectifying these two points that we may hope to obtain success. By means of a process suggested by Professor Frankland, more than twenty years ago, both these indications seem to be carried out. Many independent observers attest this, and to theirs I would add my humble opinion, drawn from closely observed cases. That the method is not in more universal use is, perhaps, to a small extent due to the want of sufficiently specific details as to its preparation. Having in this paper propounded queries, I may be permitted, in conclusion, to give (what I consider) the answer, by stating in detail how I am accustomed to have Frankland's process carried out.

In the morning, put half a pint of new milk into a convenient vessel, *e.g.*, a thin china breakfast-cup, and place it in a cool place. In the evening, skim it, preserving the cream; and into the skimmed milk put a piece of rennet an inch square, and stand the cup in a saucepan of hot water in a warm place. In from five to fifteen minutes, the milk curdles. Break up the curd with a spoon, remove the rennet (which will serve again), and pour off the whey. Boil the whey for a second, when a further curdling takes place; then strain the whey. To the quantity mentioned, add one quarter of an ounce of sugar of milk, the cream removed at the first, and one pint of new milk. The process is complete. It is generally sufficient to make it once a-day, though probably in larger quantity than we have taken for illustration. The process requires care; but, after a few trials, it is really very simple and easy. Of course, everything must be kept perfectly clean.

Some remarks are necessary on the procuring of rennet. This is not to be obtained through the ordinary channels. So-called "essence of rennet" will not do. Application must be made to the

family butcher for a fresh rennet. Should he have lived in the country, he will be able to prepare it for you. "A rennet," I may observe, is the term given by butchers to a calf's stomach. If not obtained ready prepared, the stomach is to be cleansed, with as slight washing as is absolutely necessary, and buried in salt. It is now ready for use, and keeps for an indefinite time. "Rennets" are easily to be procured in the cheese-making counties. I had at first some trouble in finding where to go to for a supply; one grocer, to whom I applied, advising me to try the corn merchants', understanding that rennet was some kind of seed. This must be my apology for entering into a somewhat trivial matter.

A little cream may be added, if the milk be poor. To sum up: we have in the result a milk containing sugar, fat, casein, and salts, in due proportions; and, more than this, although the explanation is not quite evident, a food perfectly digestible, which is, of course, the point to be regarded above all merely chemical considerations.

CASE OF ACUTE PERITONITIS FOLLOWING INTESTINAL PERFORATION.

By WILLIAM JULIUS MICKLE, M.D., Grove Hall, Bow.

M. M., aged 45, formerly a soldier in the 17th regiment, was a helper at a laundry for some years, and had made no complaint of any malady whatever, although some mitral obstruction had been made out. Early one morning, complaining of constipation, he was given an aperient. After breakfast, the bowels were freely moved. Then, seeming well, he worked all day until about 4.30 P.M., when he felt abdominal pains, or "cramps," as he called them, coming on, returned to his ward, laid himself down, and looked pale. Next, he was doubled up, groaning, breathing noisily, and complained of "cramps" over the belly, which was tender, and which he would not allow one to examine. The pain was obviously intense. The pulse was frequent, and variable in this respect; somewhat sharp. Tincture of opium was given internally, and a light hot poultice and turpentine were applied to the abdomen. At 9 P.M., there was slight vomiting of food and mucus, and later of a greenish fluid.

Next morning, he lay either on his back or on the right side, with the knees drawn up. The pain was continuous, and he stated it to be worst along the middle line; the tenderness, however, was highly marked over the cæcum; and in both flanks were slight dulness on percussion, and doubtful obscure fluctuation. He was eructating, and then spitting out in mouthfuls, a dark-greenish, flaky and flocculent, soup-like material, with brownish, soft, lather-like flakes floating on the surface. Temperature 99.7°; pulse 117, soft, feeble; respiration 38, somewhat laboured, moaning. No urine was passed. The bowels were not moved; the tongue was moist, with a greenish and brownish coat. The tips of the ears, nose, and fingers were chilly. The eyes were heavy; the face was of leaden hue. The pain was heavy and continuous, with exacerbations, during which it resembled the piercing of knives. There was no sign of tumour, strangulation, or intussusception of bowels.

I ordered him to have one-third of a grain of morphia hypodermically; also to take, each hour, five minims of tincture of belladonna, one minim of dilute hydrocyanic acid, and one-sixteenth of a grain of morphia. He took three doses of this. Half an ounce of milk was given every half-hour.—At 1.30 P.M., his nose was cold, his features collapsed; pulse feeble; prostration was advancing.—At 3 P.M., he was somewhat drowsy; respiration varied from 18 to 24, and the pulse from 110 to 120, feeble, soft, small, becoming imperceptible. The pupils were moderately contracted. The patient, in reply to inquiries, said that the pain was relieved. After this, he gradually became comatose, and the respiration irregular, jerking, as if by several contractions of diaphragm; and, later, hiccough came on. Brandy was given by the mouth, and it and carbonate of ammonia by the rectum, while heat was applied to the feet. The pulse remained at from 110 to 120, and death occurred at 5 P.M., or twenty-four hours and a half after the first complaint of abdominal pain.

Necropsy.—Omitting most of the parts examined, it need only be said that the abdominal cavity contained some turbid fluid, partly escaped from the bowel, and with sanguineo-purulent material floating in it. These were mainly on the left side of the abdomen. The parietal peritoneum was of an almost uniform scarlet redness. The great omentum was converted into a red fleece, the under surface of which was smeared in parts with purulent fluid. The appendices epiploicæ were smeared in a similar way, as were also some coils of the small intestine, the other coils being slightly lymph-glued together. There was general inflammatory redness of the outer coat of the exposed coils of intestine. In the upper part of the small intestine were much yellow mucus and semifæcal matter. In the descending colon and rectum was patchy redness, and in parts slight excoriation. In the lower part of the sigmoid flexure was a perforating ulcer, with bevelled edges and sloughy surface, which was open through an appendix epiploica into the abdominal cavity. Another ulcer with greenish edges was just beginning to perforate. The heart contained clots and treacly-fluid blood; the endocardium was deeply blood-stained; there was mitral stenosis; the mitral valve was thickened, calcareous, and deformed. There was some hypertrophy and dilatation, especially of the left auricle. The heart weighed fifteen ounces. Some large gall-stones were found in the gall-bladder.

REMARKS.—As to the duration of this case—at least twenty-four hours and a half—it may be said that, writing of peritonitis, Dr. Habershon stated that instances of intestinal perforation are generally fatal in from five to ten hours; and Dr. J. R. Wardell mentions that, in his cases, death occurred in from seven to twenty-three hours, and cites duration-periods from other authors varying from four to one hundred and five hours.

Possibly constipation, or passing gall-stones, led to the irritation and ulceration of old cicatrices in the colon, results of disease, contracted when campaigning long before.

OBSTETRIC MEMORANDA.

REMARKABLE MONSTROSITY.

ON November 2nd, my late partner, Dr. H. C. Linden, sent for me to a case of a primipara, aged 28, who had been some hours in labour. It was a breech presentation, and favourable progress had been made until the pelvic outlet was reached. There the head became jammed tightly, and, during the next two hours, did not advance in the smallest degree. As the pains were ceasing, notwithstanding the administration of ergot, it became necessary to deliver instrumentally. Several attempts at extraction by forceps proved futile, and, as exhaustion was threatened, the blunt hook was employed, and, after an hour's hard work, delivery was accomplished. The child was a full-grown anencephaloid male; life was extinct but very recently. The bones of the face were normally developed, but there was no calvarium. The cerebral substance was wanting, and its place was filled with bloody serum and a material which looked like a placenta; to this the placenta proper was attached by its membranes. It was very large, measuring 6¼in. by 3½in., and was deeply fissured at its anterior third. Two abortive cerebellar lobes were present. At the upper portion of the spine there was an opening into the spinal canal, from which sprang a lobulated body. Four cords were present, three focussing at this point; one running from the placentoid cerebral substance, the other from the placenta, and the third joining the cord proper, a few inches from the umbilicus; the fourth passed from the placenta in the usual way, and presented a slight degree of fatty degeneration. It was rather large. The other cords had undergone fatty degeneration to a great extent. Being rather pressed for time, we were obliged to be content with a cursory examination.

Upon what hypothesis it can be accounted for, I would be glad to elicit the opinions of the members of the Association. The mother attributed it to being frightened by rats. I may add that she made an excellent recovery, without the slightest drawback.

J. MULVANY, M.D., 381, Holloway Road, N.

CLINICAL MEMORANDA.

HABITUAL CONSTIPATION.

I WOULD desire to supplement Dr. Mortimer Granville's prescriptions for habitual constipation by some with which I have frequently succeeded? Looking at it that, as a rule, constipation is due to want of tone in the muscular coat of the bowel, and to diminished glandular secretion, I usually prescribe a pill composed as follows. ℞ Ext. aloes soc. aquos. gr. ij; ext. nucis vomicæ gr. ss; ipecac. pulv. gr. ss. M., ft. pil. To be taken each day with dinner. Strict orders must be given to the patient never to neglect going to stool at a fixed hour daily. This prescription usually answers within a month. Another remedy, not so nice, but nearly as efficacious, is a drachm of castor-oil, the first thing each morning, persisted in for some weeks. Should these remedies fail, a small enema, of about half a pint of

thin gruel, used every morning, will often overcome the difficulty, but there must be the attempt at defæcation made at the same hour each day. By this practice, the bowel at last, so to speak, recognises the necessity of waking up from its torpor, and, aided by the medicines, regains its lost tone.

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THERAPEUTIC MEMORANDA.

CANNABIS INDICA.

Referring to recent letters respecting this drug, I may say that I have used it pretty extensively, and that the disagreeable effects complained of have rarely occurred in my practice—never, I think, in male subjects. Where a hypnotic is required in delirium tremens, cannabis has considerable advantage; so, too, in pneumonia, as it does not check the expectoration like opiates. Patients who have really slept well under its use are frequently quite unaware that they have slept at all, though the testimony of nurses and friends to that effect may be irrefragable. If it be desired, on account of the evil taste of the extract, to administer it in pill, it may be mixed with an equal or somewhat greater quantity of sulphate of potash, which divides it so minutely that its action is tolerably speedy and certain.

John Beddoe, M.D., F.R.S., Clifton.

THE OXYTOCIC ACTION OF QUININE.

In the Journal of February 24th, Dr. McLeod of Shanghai calls attention to the "problematic oxytocic action of quinine." In three different cases I have had on several occasions to discontinue the use of quinine, because it brought on "labour-pains," though the doses used were small, varying from three to five grains. In one of these, during a previous pregnancy, another medical man used quinine, and discontinued it for a similar reason. All three were in fair general health, suffering only from slight malarious fever, and had never aborted. One case has come under my notice in which abortion took place, without apparent cause, after a ten-grain dose of quinine. The patient was the mother of several children, had not previously aborted, was in good health, and took the quinine to cure facial neuralgia. I know of another case of abortion occurring under similar circumstances after quinine. This action of the drug is known to the Chinese, who take it (I am told with success) for the purpose of producing abortion, following its use by copious draughts of hot tea. I have myself heard a Chinese "amah" (*i.e.*, female servant), recommend it. Quinine certainly, in some cases, increases the menstrual flow.

William Hartigan, M.K.Q.C.P., Hong Kong.

NITRITE OF AMYL IN URÆMIC ASTHMA.

With reference to Dr. Sanctuary's letter, published in the Journal for May 19th, I had a case recently which fully confirms his statements, by the great relief that the inhalation gives in cases of uræmic asthma.

I found J. F., a man aged 56 (who has suffered for some months from albuminuria and slight dropsy), pulseless, extremities cold, forehead covered with clammy perspiration, battling for breath, clutching the back of a chair, and in dread of instant death. I immediately broke one of Morson's capsules of nitrite of amyl, and applied it on wadding to his nostrils. The relief was instantaneous; the arterial spasm relaxed as if by magic, respiration became fuller at every breath the pulse became perceptible, and the radial artery soon so dilated as to exhibit its usual fulness and tension. A calm expression of intense relief spread over the face, and with eager craving he buried his nostrils in the wadding, and explained that he was quite well now, and his chest free. There was not, on this occasion, nor has there ever been, any angina pectoris. The heart is slightly hypertrophied, secondary to the albuminuria, which dates back to repeated attacks of nephritis, caused by exposure to great hardship.

Half an hour after seeing this case, I saw P. M., a man aged 60, who was suffering from severe dyspnœa, the result of chronic bronchitis, dilated right heart, and congested liver. His urine was free from albumen or sugar; he also was cold and nearly pulseless, battling for breath in a severe attack of cardiac asthma. His jugular veins were turgid and pulsating. I tried the same treatment as in the first case, but the inhalation gave but slight relief, and had, in this case, no effect on the arterial pulse, nor on the general circulation, as was well proved on my cupping him, and finding that, even with the assistance of the amyl, the blood would not flow. An heroic dose of digitalis, ergotine, and ammonia, with a brisk purge, gave some relief. The contrasting results of the same treatment in these two cases were very instructive, both being similar in their rough symptoms. The uræmic asthma was at once relieved by the unlocking of the spasm-dammed arteries in its case, while the cardiac asthma was in no way benefited by opening wider the lax and toneless capillaries in P. M.'s case.

John Ringwood, Kells, Co. Meath.

SURGICAL MEMORANDA.

FOREIGN BODY IN THE URETHRA.

Mr. Curtis's case, narrated in the Journal of May 19th, recalls to my mind a similar one which occurred in my practice six years ago; but with this difference, that neither incision nor subsequent catheterism was necessary.

An elderly gentleman, the subject of dysuria from prostatic enlargement, thought to aid the efforts of his bladder in its evacuation by insinuating the rounded head of his wife's veil-pin into the orifice of his urethra, and thereby opening up the passage. To his dismay, in its descent downwards it slipped from his fingers, and the point of the pin disappeared from his sight. His attempts at removal only caused it to make its way further back, and soon a discharge of blood from the meatus, and urgent but ineffectual attempts to pass urine, alarmed him, and induced him to send for me. On my arrival, I could just make out the head of the pin in the membranous urethra in front of the prostate, and could feel the point anterior to the scrotum. To remove it, I fixed the head by pressing on it from behind forwards, and then impaled the urethra against the point. By steady pressure and traction on the point as soon as it emerged from the under surface of the penis, the whole length of the pin was pulled through, only the head remaining in the urethra. The point was then depressed towards the perinæum, and by compressing the flaccid penis in its longitudinal axis, the round head of the pin was easily passed through the meatus, and the entire pin withdrawn. In its removal, not a drop of blood was lost, and the puncture remaining was not more severe than that resulting from the use of the ordinary hypodermic needle. Beyond enjoining rest and quiet for the first twelve hours, nothing further was prescribed, and my patient was next day in his usual health.

George Hunter, M.D., Linlithgow.

CASE OF HYDATID CYST OCCURRING IN THE LUMBAR REGION.

E. G., a police-constable, aged 57, about eighteen years ago received, whilst in the discharge of his duty, a blow on the back which gave rise to a good deal of pain. Some twelve months after this he observed a small lump, a few inches above the crest of the ilium, which increased in size until it became as large as a hen's egg. After a time a second tumour formed immediately above the other, extending above the margin of the last rib. Latterly this caused him great pain, owing to the pressure of his belt. Six months ago the man came under treatment. I then found that there were two swellings, separated as it were by a septum globular in form and cystic to the touch. I passed a seton (as I thought) through the lower tumour, but without result, and then advised its removal.

May 1st, 1883.—Having made a long free incision from the last rib down to the crest of the ilium, I found that the tumour was deep seated, and was situated amongst the muscles. On opening the cyst, there poured out numbers of hydatids, varying in size from that of a pea to a large plum, and on introducing the finger, I ascertained that there was free communication between the two cysts. The upper cyst I laid freely open, but could only partially open up the lower one, owing to its depth, into which I then injected a solution of iodine, and repeated the injection on four alternate days, keeping the wound open by means of lint, and inserting a drainage-tube. For several days after the operation cysts continued to be discharged, but for the past week (the third since the operation) none have been noticed. The patient's health has greatly improved, and the wound is fast healing. The microscope showed the echinococcus with its hooklets.

Helston, Cornwall. C. F. Bullmore, Surgeon.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

LEEDS GENERAL INFIRMARY.

PULSATILE TUMOUR OF TIBIA.*

(Under the care of Mr. ATKINSON.)

A. A., a spare but tolerably healthy man, 67 years of age, was admitted on July 28th, 1882, complaining of a painful swelling about the middle of his left shin-bone. His attention had first been called to it, about ten months previously, by pain in the limb, which centred in the situation where the swelling afterwards appeared; but for four months afterwards, there was nothing to be seen.

About January 1882, he first noticed a small lump, of the size of a filbert, which felt firm and hard, and was tender to the touch. This gradually increased in size, and caused an aching pain when he walked; but the pain was relieved on lying down. He stated that his mother died of cancer of the womb at the age of 44, and his father of dropsy at the age of 66. The patient had never had syphilis; and he had not lost flesh lately. He was employed as a cloth-dresser.

August 1st. There was a tolerably well defined tumour, as large as a walnut, on the front of the left tibia, about the middle of the shaft. There was no discolouration of the skin over it. The periphery of the swelling was firm and resistant, but towards the centre it was somewhat softer or more elastic; and on laying the fingers flat upon it, there was distinct pulsation, which was at once arrested by compressing the superficial femoral or the popliteal artery. There was no enlargement of the femoral or other glands, no cachexia, and the general state of the arteries elsewhere was healthy for a man of his age. A plaster cast was taken of the leg, as a record of the size of the tumour, and rest in bed was enjoined.

At first, for several weeks, the tumour remained stationary, and was even thought to have decreased somewhat in size, although it became increasingly painful, and the pulsation was exaggerated. At the end of seven weeks, the margins were less defined, the tumour felt much softer than when he came in, and was quite half as large again.

Mr. Atkinson now decided to ligature the superficial femoral, in the hope of arresting the growth of the tumour, as its character was still a matter of doubt. Accordingly, on September 21st, under full antiseptic precautions, a carbolised catgut ligature was placed on the artery, at the apex of Scarpa's triangle, both ends were cut short, and the wound closed, with the exception of a small drainage-tube. Pulsation ceased entirely in the tumour, which, however, did not appear to shrink much. The limb was swathed in cotton-wool as usual, and the temperature of the limb was maintained by hot bottles. At first, the patient complained of intense pain in the whole limb, and distressing cramp. These symptoms gradually diminished as the collateral circulation was established; and by the end of the second week all pain was gone. On changing the dressings on the third day after the operation, the tumour was somewhat shrunken, and was more soft and diffluent; while around the margin a sharp rim of bone could be felt, inside which the bone seemed hollowed out.

October 9th. The wound over the femoral artery was quite healed. The tumour was, however, increasing in size, and becoming more tense and elastic, but there was no return of pulsation.

October 13th. The tumour had attained twice its original size, and was becoming more painful. There was now observed for the first time a manifest curving inwards of the shaft of the bone, though the patient had never moved out of bed. This curvature increased so much within the following week that it was evident the bone was giving way; and it was determined, therefore, to amputate.

October 19th. Amputation by the rectangular method was performed immediately above the condyles, the patella being removed from the long anterior flap. The operation was done under the carbolic spray. During the removal of the patient to the ambulance, before operation, it was found that the bone had given way.

On section of the tibia longitudinally, a dark purplish somewhat lobulated mass of growth, about the size of a small hen's egg, was seen to involve nearly the whole thickness of the bone opposite the seat of the external tumour; it was apparently perfectly circumscribed; the bone and medullary cavity above and below looked normal. The nutrient artery of the bone could be traced directly into the growth, where it ramified freely in branches of large size; this explained the pulsation. A microscopic examination of the growth proved it to be composed mainly of carcinomatous elements.

November 15th. The patient had made a good recovery from the amputation, and was discharged with the wound healed.

* Read at a meeting of the Yorkshire Branch.

MANCHESTER ROYAL INFIRMARY.

STRANGULATED UMBILICAL HERNIA: HERNIOTOMY: RECOVERY.

(Under the care of Mr. F. A. SOUTHAM.)

JANE P., aged 46, an extremely stout woman, was admitted on February 27th, suffering from a strangulated umbilical hernia. The hernia, which had been present for about fourteen years, and had never previously caused any trouble, having always been partially reducible, had suddenly increased in size about thirty-six hours prior to admission. At the same time, it became extremely painful; vomiting set in shortly afterwards, and had continued ever since. The tumour, which was about twice the size of a fist, was found to be very tense, tender, and devoid of impulse; general tenderness was also present over the front of the abdomen; sickness still continued, but it had not become of a distinctly stercoraceous character. An attempt to reduce the hernia, by Mr. Pollard, the resident surgical officer, under chloroform, and after employment of a warm bath, having failed, Mr. Southam was sent for, and upon arriving, at once proceeded to operate. A vertical incision was made over the tumour; and, on opening the sac, its contents were found to consist mainly of omentum, firmly adherent to its walls. Beneath the omentum, enveloped by it and completely concealed from view, was a knuckle of intestine, considerably congested, and tightly constricted at some distance from the surface by the neck of the sac. The stricture was divided in an upward direction, and the bowel was then readily reduced. The adhesions between the omentum and the inner surface of the sac were broken down with the finger as far as its neck. The whole mass of omentum, which was much congested, was then removed, its pedicle being tied in eight separate portions with catgut, and divided on the distal sides of the ligatures just outside the abdominal opening. When this was done, the opening was left completely plugged by the divided portions of pedicle, and as these were firmly adherent to the neck of the sac, it was hoped that a radical cure would take place by the union with one another of the divided surfaces of the several portions of the pedicle, which were left in opposition just within the margin of the abdominal opening. The redundant skin and sac were then removed, just sufficient being left to cover in the wound; a drainage-tube was laid across it, and it was closed with eight silk sutures. No food was given for the first twenty-four hours; the patient was kept well under the influence of opium, one grain being given by the mouth every three or four hours for the first two days, and afterwards at gradually increasing intervals. Recovery took place without a single bad symptom; the operation was followed by immediate relief and cessation of vomiting; there was never the slightest evidence of any peritonitis, and the temperature did not rise above 100.8°. The wound, which healed with very little suppuration, was dressed every third day, and at the end of a fortnight was completely closed. The bowels were moved for the first time by an enema on the 11th day. On April 2nd, the patient left the hospital wearing a truss, there being no indication of any tendency to recurrence of the hernia.

REMARKS by Mr. SOUTHAM.—The very high mortality which attends operation for strangulated umbilical hernia is doubtless owing to two main reasons, namely: (1) the delay in operating, owing to the fact that in many cases the symptoms of strangulation are at first of a subacute character; consequently, peritonitis of a low type is often well-established before the patient comes under the surgeon's care; (2) the fact that the communication between the sac and the abdomen is in a directly dependent position; consequently, if no means be taken to close this (either by the ligature of the neck of the sac, or by some such method as the one adopted in the present instance), the inflammatory products tend to make their way directly backwards into the abdominal cavity, and in this way, especially if they be septic, to set up peritonitis. The successful result in the above case is no doubt to be attributed

partly to the fact that the operation was performed without much delay, viz., within forty-eight hours after the first evidences of strangulation showed themselves, and therefore before peritonitis had set in; partly to the fact, that, by plugging the abdominal opening with the divided portions of pedicle, and at the same time by providing an exit for the discharges externally, drainage backwards into the peritoneal cavity was prevented.

At the same time, the performance of the operation with careful antiseptic precautions was doubtless an important factor in contributing to the successful termination of the case.

ROCHDALE INFIRMARY.

A CASE OF RECURRENT SARCOMA OF FEMUR: AMPUTATION AT HIP-JOINT: RECOVERY: EVENTUAL DEATH FROM RETURN OF DISEASE.

(Under the care of Mr. RICHARD BURDETT SELLERS, M.R.C.S.)

T. E., aged 50, a factory operative (loom-jobber), fell over a piece of iron in the mill-yard in October 1881, and hurt his right knee. The skin was not broken, and, after a few days' rest, he was able to follow his work. Towards Christmas, he first noticed a small lump on the inner side of the right knee, which was quite painless, but continued to grow gradually larger till, in April 1882, it incommoded him in walking, and he began to have shooting pains in it. The tumour at this time was punctured, but nothing came away. It was large and doughy, painful after handling, and there was general venous congestion. He was strongly advised to have the limb amputated, but this he refused, therefore on April 22nd, 1882, the tumour was removed. It was found to grow from the inner side of the right femur, about three inches above the condyle. It was examined microscopically, and found to be a sarcomatous growth of the round-celled type. The wound was dressed with solution of resorcin (1 in 50), and soon healed up. In June, the disease had again returned, and had implicated the whole of the joint; and so severe was the pain, that consent was given to remove the whole limb.

On June 22nd, amputation at the hip-joint was performed by the ordinary flap-method; there was a moderate amount of blood lost, chiefly venous. The patient nearly succumbed to the shock, but was brought round by inhalation of nitrite of amyl. The stump was dressed with the solution of resorcin, and healed up rather slowly, owing to the general weakness of the patient. At the last, a very troublesome sinus was left, which never did close up. The man was able to go out on crutches in two months, and was sent into the country, where he got very much stronger, and completely recovered from the shock of the double operation.

The disease again for the third time returned in November 1882, first in the acetabulum, and afterwards in the iliac fossa, and grew almost daily till December 1st, when he died. No *post mortem* examination was allowed.

REMARKS BY MR. SELLERS.—The patient, up to Christmas 1881, had always been healthy; and all his family were said to be healthy. He had never had syphilis. After his death, it was found out that his mother had died of cancer, but of what kind or in what region was not known. This case differs from one published in the BRITISH MEDICAL JOURNAL of April 28th, by Dr. Curgenven, by the rapidity with which the disease made its appearance after the accident (two months), its rapid growth, and the rapidity of its return after each operation. After his recovery from the capital operation, it was most disappointing to the patient and all concerned to find how little good it had done.

DEATH FROM CHLOROFORM.—Sir John Humphreys held an inquest recently at Shoreditch, on the body of Charles A. Merrick, aged 10.—Mr. C. T. Merrick stated that the deceased was his son. During the latter end of February, he was suffering from an abscess on the ankle, and was admitted as an in-patient to the North-Eastern Hospital for Children, Hackney Road. Witness last saw the deceased alive on Sunday last. On Tuesday evening, he heard that he was dead. His life was insured for £10.—The house-surgeon at the Children's Hospital stated that the boy was admitted on the 26th February last, suffering from an abscess near the ankle-joint; and on Tuesday last it was deemed necessary to perform an operation. Chloroform was administered, every precaution being taken. He examined the heart and lungs of the boy, and found them perfectly healthy. The operation was begun, when suddenly the breathing and pulse stopped. Witness tried all means to restore animation, but without effect. The cause of death was paralysis of the heart, due to chloroform.—The jury returned a verdict of Death by misadventure.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 25TH, 1883.

ANDREW CLARK, M.D., F.R.C.P., President, in the Chair.

Cases of Nystagmus Infantilis.—Dr. ROBERT LEE said that the first case was one of instrumental delivery with consequent asymmetry of the cranium, atrophy of the right hemisphere, ventricular effusion, and other changes of the right side of the brain. The chief symptoms were frequent attacks of excitement and active movement of the head and body of a few minutes' duration; also nystagmus with left internal strabismus. The question discussed was, the value of nystagmus as a measure of central lesion, and its help in prognosis. Other cases were mentioned where nystagmus had followed convulsions, falls on the head, or was traced to maternal influences preceding birth.—Dr. CLARK inquired whether any microscopical examination had been made.—Dr. MONEY said that no obvious sclerosis was to be found in stained sections from the cervical enlargement of the spinal cord; the case was interesting more from a point of view of cerebral atrophy, probably due to hæmorrhage, the result of a forced instrumental delivery.—Mr. BERNARD ROTH said that he had seen nystagmus in an albino, and inquired whether the child would lose this form of involuntary movement as it grew older.—Dr. LEE, in reply, said that he thought physicians had rather neglected the symptoms of nystagmus, and relegated it to the ophthalmic surgeon. He was of opinion that intra-ocular conditions were rarely the cause of nystagmus. He did not think that effusion into the ventricles could be regarded as the cause of nystagmus, because it was found in many cases where no ocular movement was observed during life. He considered that two classes of cases could be distinguished; in one, there was rapid oscillation; in the other, only slow jerkings.—Dr. CLARK said that ophthalmic surgeons had not denied that central changes could cause nystagmus, but that, in the majority of cases, they found an adequate explanation in the intra-ocular structures.—Dr. HADDEN said that there was great atrophy of the right temporo-sphenoidal lobe, and, whether this atrophy was the cause of nystagmus or not, there was no doubt of the importance of the case.—At the request of the President, Dr. MONEY promised to report further on the histological examination.

Excision of Small Goître: Recovery.—Mr. BARKER read the following notes.—The case brought forward was one in which a small goître produced great difficulty of breathing on exertion. Excision of the tumour was required, and this operation was followed by complete relief. The patient was a woman, aged twenty-one, who had noticed a swelling in her neck first when fourteen years old. Two years later she began to suffer from difficulty of breathing. Three years ago she was under treatment for a considerable time at a special "throat hospital." This treatment consisted, in the first place, of simple puncture of the tumour, with evacuation of about half-an-ounce of brown fluid. Then leeches were applied. Thirdly, injections of tincture of iodine were tried at intervals for three months. Fourthly, a seton was passed through the tumour, and left *in situ* fourteen days. It had to be removed on account of constant vomiting. After this, she was treated by "electricity" at another hospital. Ever since, the tumour had increased. It measured, at the time of operation, three inches in the transverse diameter, and two in the vertical, and reached to the top of the sternum. It was firm and elastic, but not fluctuating; was movable, and marked by dilated veins. It moved upwards with the larynx in the act of swallowing, and slight pressure upon it produced considerable distress of breathing. The patient was unable to follow her calling as domestic servant, on account of the difficulty in breathing, which was greatly aggravated on exertion, and became, by her own account, paroxysmal at times. There was no exophthalmos. As all the ordinary means of relieving the condition had failed, Mr. Barker removed the tumour on August 24th, 1881. This was done with all Listerian precautions as to asepticity. A median incision, about four inches long, gave access to the tumour, which was cautiously dissected out as much as possible with blunt instruments. It proved to be the enlarged right lobe of the thyroid body, the left lobe and isthmus being normal. The latter was ligatured and divided, and the left lobe was not removed. During the dissection the vessels were tied with double ligatures, and divided between the latter. In this way, seventeen silk and six catgut ligatures were used and left in the wound. Hardly any blood was lost, and the

important structures around were not interfered with in the dissection. A drainage-tube and gauze packing completed the operation. The next morning, all the dressings were found to have slipped and become loose during the night, and salicylic wool was substituted without the spray. The wound healed almost entirely by first intention, and without any inflammatory reaction, and the patient left the hospital well on September 14th. On her return from the country, she was found to be quite relieved of her former trouble. The patient had been under constant observation now for nearly two years, and had had none of her former distress, though she had returned to service. She had had some neuralgia in the neighbourhood of the wound at one spot, which was also a little tender to the touch. Not one of the ligatures left in the wound had ever come away or shown signs of its presence, unless the neuralgia alluded to might be taken as such. As the patient suffered from amenorrhœa, however, neuralgia might well be due to other causes. The author suggested the importance of collecting evidence as to the behaviour of aseptic silk in wounds of parts easily accessible to examination, seeing that, as regarded security and uniformity of texture, most surgeons would prefer it to catgut; and if it were shown to be tolerated by the tissues as well as the latter, the choice of ligatures would be simplified. This case offered in this direction several points for reflection. The author further pointed out that this was one of those cases which were probably far less uncommon than was supposed, where small bronchoceles had produced very serious symptoms. He drew attention to other cases recorded or referred to, where small tumours of the kind had produced fatal attacks of dyspnœa, and he concluded by suggesting much earlier operation for such bronchoceles than had hitherto been customary.—Dr. CLARK remarked that it would be interesting to know whether any other symptoms of Graves's disease were present, either anæmia, nervousness, or vascular excitement, with acceleration of circulation.—Mr. BARKER said that anæmia and vascular excitement were present. The full notes described accurately the condition of the various functions of the different systems.—Mr. SYDNEY JONES referred to a case of severe dyspnœa, threatening dissolution, in which a goître existed. In this case, he removed the isthmus; this was exposed by a cutaneous incision, and then dissected off the trachea. The rings of the trachea were closely approximated, and tracheotomy would have been impossible. Complete success attended the operation, not only at the time, but permanently. Atrophy of the lateral lobes after removal of the isthmus was known to occur, and this happened in the case narrated. There was no doubt that atrophy of the cartilages of the trachea occurred after prolonged pressure by an enlarged thyroid on each side of the trachea. The operation mentioned had been done on the Continent a few times, but not previously, so far as he knew, in England.—Mr. HOWARD MARSH thought the case of great interest; and he mentioned an instance which occurred in St. Bartholomew's Hospital, of great dyspnœa due to the condition of the thyroid. Tracheotomy was performed. The trachea was much flattened from before backwards. The dyspnœa was considerably relieved, but not removed. The patient subsequently died in a severe breathless paroxysm. He considered it to be quite clear that the removal of the isthmus was called for, because it was this structure which led to the secondary changes in the trachea. He fully agreed with all the remarks of Mr. Sydney Jones. He could also believe with Mr. Barker that silk ligatures might be tolerated by the tissues, and spoke of a deligation of the subclavian artery which he had performed with a silk suture; the tissues tolerated its pressure apparently without limit in time. Other examples from the practice of Mr. Lister, illustrating the tolerance of the tissues for various sutures, were mentioned.—Mr. PEARCE GOULD thought that the operation performed by Mr. Sydney Jones was much to be preferred to the larger operation; the lateral lobes would act as good splints, and prevent the collapse of the trachea, which was liable to occur after the entire removal of a goître. The outlines of a case in which sudden death occurred after an apparently successful removal of a bronchocele, were given as an example. A short time ago, he had ligatured the femoral artery with silk; the suture was retained and tolerated by the tissues. In a similar way, silver wire would be tolerated, as happened in a case where Mr. Gould wired together the fragments of an old fracture of the olecranon.—Mr. R. W. PARKER assisted Mr. Reeves in the removal of a thyroid gland from a child. The operation was carried out without trouble, but the dyspnœa was not relieved. He thought, in these cases, that there was an implication of the recurrent laryngeal nerves, and the dyspnœa was not due to the mere mechanical pressure on the trachea. If the plan of Mr. Jones had been adopted, it might have been more successful than the selected operation. The goître was a vascular solid growth, not cystic. The difference in result might be explained sometimes by the nature of the bronchocele.—Mr. WARRINGTON HAWARD thought it would be generally allowed that the small bronchoceles were those which caused dyspnœa; also that it was the fibrous variety which surrounded the trachea and produced atrophy of that tube, as well as involved the laryngeal nerves. The lateral grasping of the trachea seemed to be more frequent than the backward tension, except in those examples where the thyroid spread down beneath the manubrium.—Dr. LEE said that iodine was painted on bronchoceles for long periods without sufficient reason. He mentioned one case which entirely disappeared in nine months whilst hot-water ablutions only were applied.—Mr. BARKER, in reply, said that he found no difficulty in believing that it was not always pressure which caused dyspnœa. He was glad to find that his experience was borne out by other surgeons of larger practice in goîtres, to the effect that it was rather the smaller tumours which were accompanied by dyspnœa. Everything had been tried, and nothing had succeeded, unless it were the seton, in his case; but the seton could not be continued. It must be remembered that one lobe only was enlarged. He believed there was no alteration in the condition of the trachea. Dr. Poore had found that there was considerable bulging backwards of the anterior wall. The incision was perfectly median in position. He concurred with Mr. Jones that a milder operation was to be preferred; but a great number of cases would be required to prove that this simple operation was always followed by a successful result. Microscopic examination showed that the goître was chiefly fibrous in structure, with a small amount of colloid degeneration of the alveoli. It was certainly possible that the anatomical structure might be of importance in the clinical aspect of different bronchoceles.—Dr. CLARK said that Mr. Barker would have gathered that it was the general opinion that the operation was quite as justifiable as it was successful.

Ulceration of the Pylorus, situated at the Valve, the Floor of the Ulcer being formed by the Neck of the Gall-Bladder.—Dr. HABERSHON said that this case occurred in a gentleman aged 60, who began to suffer about nine months before death from pain at the stomach, and vomiting; the pain was very severe in character, but most irregular in its onset; and the point of great clinical interest in the case was, that "at no time during his illness did food aggravate the pain." The words were quoted from a letter of his medical attendant, Dr. Archibald. There were considerable intervals of relief, and, after some weeks of comparative comfort, he was suddenly seized, after taking luncheon with his family, with intense pain in the abdomen, followed by collapse and death in about fourteen hours. The ulcer had extended through the coats into the peritoneum, and thus extravasation of the gastric contents caused fatal peritonitis. The absence of one of the most prominent symptoms of gastric ulcer—viz., pain produced by food—was remarkable. It was stated that the pain of gastric ulcer ceased from various causes, such as the healing of the ulcer, the relief of congestion from hæmorrhage, the division of the nerve from sloughing, or from the position of the patient. In the case narrated, there was no evidence of hæmorrhage, nor was there any destruction of the nerve-connection. The ulcer was situated at the pylorus itself, and it was doubtful at first whether it was on the duodenal or the gastric side of the valve. It was divided into two parts by a central contraction, as if there had been a healing process, or as if the ulcer had been double. The base of the ulcer was formed by the neck of the gall-bladder, and it was at this part that perforation had taken place. The walls of the stomach were not thickened, as if there had been pyloric obstruction. It was suggested that the situation of the ulcer had to do with the absence of pain, and that when food was taken the pylorus contracted and the pain ceased.—Dr. CLARK inquired whether there was any pain referred to the back, and received a negative answer.—Dr. MAHOMED had a similar case in a man, aged 20, who also had a sensation as of a ball, and in whom a tumour of the size of a cricket-ball could be seen at the epigastrium. It was clear that the swelling was due to pyloric contraction. In this patient also the food did not cause much pain. The man surreptitiously ate large quantities of food, and one day, after a large meal of shrimps, signs of perforation occurred. At the necropsy a perforation of the œsophagus was found, and a healing ulcer at the pylorus.—Dr. DREWITT asked whether it was not possible that a large number of out-patients really suffered from gastric ulcer, when they were merely treated for dyspepsia; food, by causing rupture of an abscess in the wall of the stomach, might relieve distress.—Dr. HADDEN said that when the stomach was empty the ulcerated surfaces were in contact; the ingestion of food led to their separation, and conse-

quent relief from pain.—Dr. MONEY thought that the presence of various curious phenomena might point to a nervous origin of trophic sort for gastric ulcer.—Dr. HABERSHON had seen such cases as Dr. Mahomed had mentioned; there was no distension in this case, however, and nothing like an hour-glass contraction. He could not agree that gastric ulcer was of frequent occurrence. He concurred with the remarks of Dr. Hadden.

In the course of the evening a curious case of bony deformities about the joints, disease of the ungual phalanges and nails, with atrophy of the left deltoid and other muscles, and other remarkable associations, was exhibited in the large room before the members of the Society by Mr. LUNN. This case was referred to a committee consisting of Drs. Coupland, Dyce Duckworth, Messrs. Howard Marsh and Gould, and the exhibitor.

Living Specimens.—Dr. DREWITT: Case of Retarded Congenital Syphilis with Perforations of Soft Palate. Dr. DREWITT: Case of Myxœdema. Mr. LUNN: Case of Myxœdema. Dr. FREDERICK TAYLOR: Case of Infantile Hemiplegia with unusual reflex phenomena. In this case a clap of the observer's hands set up a tonic contraction of the affected limbs.

The PRESIDENT said that the report of the Committee on Spina Bifida would not be ready for this session: the Committee desired it to be understood that they will be very glad to receive and acknowledge accounts of any cases of the affection from members of the profession.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

APRIL 6TH, 1883.

E. H. VINEN, M.D., President, in the Chair.

Ankylosis.—Mr. C. B. KEETLEY read a paper on ankylosis, especially of the hip-joint, and showed a splint invented by him for use after osteotomy. He said that although ankylosis was generally a very desirable termination of hip-joint disease, in the majority of cases it occurred in a bad position. The commonest form was a compound of adduction and flexion. By it an apparent and practical shortening of five inches or more was produced, when the real shortening was only an inch. The necessity then arose for a large and unsightly cork boot. The treatment, for cases of a certain grade of severity, was antiseptic osteotomy, done with the chisel, and, generally, above the trochanter, through the so-called neck of the femur, which, in most instances, was a mass of new bone forming the uniting medium. Subtrochanteric osteotomy merely hid one deformity by adding a second. Although supratrochanteric osteotomy with the chisel was more difficult to a beginner than subtrochanteric, it became easy enough with a little practice. Strict antiseptic precautions should be used. Usually, the first dressing did not require renewal, and had to be kept on less than three weeks. He had had seven cases—five supratrochanteric, and two subtrochanteric; each of which had followed an even course, without suppuration or other disturbance, no one remaining in bed more than six weeks, and each then convalescing rapidly. Subcutaneous osteotomy with a saw was an impossibility in the sense of subcutaneous tenotomy. Referring to the forms of bony ankylosis of the hip, Mr. Keetley said that he passed a rather large osteotome downwards, backwards and inwards towards the bone of ankylosis from about an inch outside and below the anterior superior iliac spine, taking care to get it well inside the great trochanter near enough to the innominatum. The plane of the surface of the chisel must be at right angles to what would be the neck of it if really a neck existed. The incision for the passage of the chisel was made by a scalpel passed along the groove of a sharp-pointed director. When the bone was nearly divided, the chisel was removed, and force was applied to break the neck. The force used should be partly rotative. The limb was then put into good position once for all; and he applied a splint of his own design, on which the sound limb was made to unconsciously exercise the force which kept the limb operated on in a good position, and the relative apparent lengths of the two limbs could be absolutely regulated. In conclusion, Mr. Keetley stated that in a case of spastic stiffness he had stretched the great sciatic nerve, and, putting in practice an idea of Dr. Macewen, the anterior crural nerve. The patient, an adult woman, was well satisfied with the result of the operations.—Dr. THUDICHUM remarked that where there was a neck, he regarded Mr. Adams's operation as excellent; and he suggested that it was of the utmost importance when treating bones to avoid the introduction of infective particles. Where there was a short neck. he thought a circular saw ought to be used.—Mr. LUNN inquired if Mr. Keetley could get movement on a stiff joint. He had a case of fractured clavicle in a man, aged 52, where an attempt to get movement ruptured some muscles, and produced a nonpulsating swelling. In consequence of the temperature suddenly increasing he made an incision an inch below the clavicle. He cleared out a quantity of blood, but could not control the subclavian artery, and he was obliged to amputate at the shoulder-joint. The patient did not long survive.—Dr. ALDERSON asked if the splint exhibited was applicable to fractured femur.—Mr. KEETLEY, in reply, said that he intended to use the circular saw as soon as he had a surgical engine. It was very difficult to give a general answer to Mr. Lunn's question. The amount and character of force and movement justifiable in treating ankylosis could only be decided in each case. Cicatricial adhesions in the neighbourhood of both the joint and the great vessels should induce great caution, so should advanced age. Fortunately one rarely thought of operating on aged people at all. The splint shown would be quite applicable in the case mentioned by Dr. Alderson.

Enlarged Prostate; Dilated Bladder and Ureters.—Mr. F. S. EDWARDS, through the kindness of his colleague, Mr. Coulson, showed a specimen of dilatation and hypertrophy of the bladder and ureters, with disorganisation of the kidneys, due to prostatic enlargement. The patient, W. B., was a postman, aged 67, and was admitted into St. Peter's Hospital on the 26th December last on account of frequent desire to micturate, accompanied by great pain of a cutting and burning character in the urethra, which pain was also referred to the anus. For two years previously he had had to have frequent recourse to catheterism. On admission he was obliged to pass his catheter every hour and a half. On rectal examination the prostate was felt to be much enlarged, as was also the right testicle. The vas deferens was thickened; the arcus senilis was well marked; the arteries were hard and tortuous; the urine was somewhat albuminous. On December 27th, to relieve the pain and provide a free exit for the urine, Mr. Coulson performed cystotomy by a median incision in the perinæum. On passing his finger into the bladder, a portion of the middle lobe of the prostate was found to be pedunculated. This was seized and excised by means of a long straight probe-pointed bistoury. In the evening, as the urine did not escape freely from the wounds, a cannula was passed through the wound into the bladder and fixed there. On the following day the patient still complained of severe pain in the urethra, and as the pain increased towards evening, his bladder was washed out and the cannula removed. On January 1st, the patient being in great pain, and little urine having escaped, a catheter was passed, and about six ounces of urine drawn off. As the patient felt easier with it, the cannula was retained in the bladder. On the 6th the patient gradually became weaker; sickness and hiccough supervened, and the urine became scanty. Death occurred that evening. In the specimen exhibited the three lobes of the prostate were much enlarged, especially the lateral. At the apex of the middle lobe was a projecting piece of tissue, which marked the site of the attachment of the portion which was removed, and, at the time, prevented the escape of three or four ounces of urine which the bladder contained. The kidneys were good examples of the so-called surgical kidney. The right contained about five ounces of pus, and the left rather less. There was an aneurysmal dilatation of the arch of the aorta, with extensive atheromatous disease; a fibrous clot occupied both ventricles.

Rheumatic Subcutaneous Nodules.—Dr. DREWITT showed a boy, aged 9, who had had rheumatic fever. He had on the knees, elbows, knuckles, and occiput, about thirty-six small, slightly movable painless bodies, lying in the fibrous tissue immediately beneath the skin. He had also a loud mitral murmur, which varied at times, and a dilated heart.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

QUARTERLY MEETING, FRIDAY, MAY 18TH.

D. HACK TUKE, M.D., in the Chair.

Prognosis in Cases of Refusal of Food.—In this paper, read by Dr. SUTHERLAND, the following propositions were laid down, illustrated by numerous cases which had been under the care of the speaker. 1. The prognosis is good when there is only a disinclination for, and not a distinct refusal of, food; prognosis is bad when there is a persistent refusal of food. 2. Prognosis is good when disinclination and refusal of food depend upon some removable bodily cause; prognosis is bad when the bodily cause is irremovable, and most un

avourable in cases of general paralysis of the insane, complicated rith some severe bodily disorder. 3. Prognosis is good when the efusal of food occurs during a first attack of mental alienation; rognosis is bad if the refusal occur during a second or subsequent ttack. 4. Prognosis is good, if, after once being fed artificially, the atient take his food naturally; prognosis is bad if the patient re- uire to be fed more than once, the recovery to mental health being ss likely to occur in cases which have been fed a great number of imes. 5. Prognosis is good if the health and weight of the patient emain about the same; prognosis is bad if the patient lose flesh, lthough fed daily, the tendency to death being very marked in such ases; it is also bad if the patient gain much flesh under the feed- ng, at least as regards the recovery to mental health, such patients rifting usually into a contented state of dementia. 6. Prognosis is ood if the patient wish to recover. Prognosis is bad if the patient ave persistently suicidal tendencies. 7. Prognosis is good if the reatment both by drugs and by feeding be resorted to early; rognosis is bad if the treatment by drugs and proper feeding be de- yed. The paper concluded in the following words. From what as been advanced, it will be readily seen that the therapeutic value f food administered against the patient's inclination depends far ore upon the condition of the patient himself than upon the mode administration or the kind of food administered.—The paper icited an animated discussion, in which Drs. Gardiner, Newington, ayner, Savage, Mickle, Fox, Huggard, Needham, and Hack Tuke ined, some of the speakers agreeing with, and others differing en- ely from, the propositions brought forward. Many interesting ints as to diagnosis, indications for feeding, mode of administra- on, and varieties of diet were alluded to, by which much new light as thrown on the subject of artificial feeding.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, MAY 7TH, 1883.

JOSEPH WALKER, M.D., President, in the Chair.

Impacted Wisdom-Teeth.—Among the casual communications re two cases brought forward by Mr. F. CANTON, and one by Mr. KERY, in which a horizontally directed wisdom-tooth had caused rtial absorption of the roots of the second molar in front of it. In ne of the cases had this condition of things given rise to any pain, e discovery being made accidentally.

The Characters of the Teeth in Persons of the Arthritic Diathesis. Dr. DYCE DUCKWORTH read a paper with this title. He began saying that, although it was the fashion of the present day to believe in diatheses, he was himself a firm believer in their exist- ce. He believed that there existed an arthritic habit of body, or thesis, and that this comprised at least two branches—the rheu- tic and the gouty. These were essentially distinct, one would t produce the other, though they might be mixed. The rheumatic thesis was more widely spread than the gouty, but the latter was y common in the south of England, and especially in London. e result of a somewhat extended series of observations, made th no other view than to record exact facts with reference to this ease, had convinced him that the teeth of the gouty were, as a e, remarkably strong, well-enamelled, and enduring, and also re- rkably far from decay. On this point he differed entirely from e opinion expressed by Dr. A. Carpenter, in a paper recently read fore the Society. Dr. Carpenter's statement that gouty people re specially prone to caries, might be true of those who lived relessly and intemperately, but he held it to be an undoubted fact at persons who inherited gout, but were themselves temperate—of om there were many—had generally strong and sound teeth. Dr. ckworth then referred to the tendency which existed in persons gouty inheritance, for the teeth to be worn down, so as sometimes en to open the pulp-cavity; he had never heard this satisfactorily plained. Another peculiarity of such people was the tendency shed perfectly sound teeth, the loss being preceded by a process absorption of the alveolus. Gouty people were, no doubt, liable ttacks of alveolar periostitis, but he knew of no careful obser- ions confirming Dr. Carpenter's statement, that it was due to a posit of lithate of soda in the circumdental membrane. The aracters of the teeth in persons of the rheumatic habit of body re certainly less distinctive than those which could be noted in gouty, but as a rule such persons had strong, well-enamelled eth; the modifying influence of a mixed diathesis, especially the istence of a strumous taint, would account for most of the ex- ptions of this rule. Attention had been called to a remarkable exception to the rule that the teeth of persons of the arthritic diathesis were large and regular. This was a tendency for one or more of the lower incisors to be pushed forward, an irregularity to which Dr. Laycock, of Edinburgh, gave the name of "back teeth." It might not appear till middle life. He was quite at a loss to suggest any explanation for it, and could only call attention to it as a well observed fact. In conclusion, Dr. Duckworth compli- mented the dental profession on the progress it had made in its endeavours to repair the ills consequent on habits of luxury. It was a great thing that the study of the pathology of the teeth was now founded on a thorough knowledge of their anatomy and physiology. It would be a further important step when the great doctrines of diathetic predisposition, and of scientific physiognomy were care- fully worked out and applied to practice. He hoped that his com- munication might have contributed something to this end, or might at least enlist the interest of dental surgeons in this subject.—An interesting discussion followed.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MAY 2ND, 1883.

D. J. LEECH, M.D., President, in the Chair.

Excision of the Elbow.—Dr. FOX showed a patient whose elbow-joint he had excised some time ago.

Cystinuria.—Dr. WILLIAM ROBERTS related a case of cystinuria which had been under his care recently, and exhibited some cystin crystals from the patient's urine.

Nephrolithotomy.—Mr. JONES showed a calculus, weighing 105 grains, which he had removed, through an incision in the loin, from the right kidney of a man forty-six years of age. The symptoms commenced four weeks previously, with an attack of renal colic (referred to the left loin), which was followed by the passage, *per urethram*, of a small uric acid calculus. At varying intervals since then, calculi of a similar nature had been discharged. The symptoms, on admission, were those of chronic cystitis, but examination of the bladder gave negative results. On examining the loins, a distinct fulness was detected in the right; and, during exploration with an aspirator, the presence of a calculus was determined by the needle coming into contact with a hard substance. The operation of removal was carried out by an oblique incision placed below the last rib, then dividing the muscles and fasciæ until a large fluctuating tumour was exposed. Exploration with an acupuncture needle at this stage confirmed the diagnosis of a calculus. The pus-containing cavity was now laid open, and the calculus easily removed. The operation was not attended with any difficulty, but, unfortunately, the patient sank and died in twenty-four hours. After the operation, there was total suppression of urine. At the *post mortem* examination, a calculus of an irregular shape was found in the left kidney, which was completely disorganised.

Rare Forms of Muscular Atrophy.—Dr. DRESCHFELD remarked on the pathology of some forms of muscular atrophy, and on the difficulties of classification and correct diagnosis in respect of some of these forms; and exhibited some patients. Case I, a man, aged 26, had progressive muscular atrophy of the thenar and hypothenar eminence of both hands, with complete analgesia and loss of the sense for temperature in both hands; while tactile sensibility was perfectly normal. The disease commenced seven years ago, slowly and insidiously, and for the last six years had remained *in statu quo*. The electric reactions of the affected muscles were somewhat peculiar. Case II, a man, aged 23, was admitted into the Manchester Infirmary, with colic and constipation, and albuminuria; soon after admission, he developed paralysis and atrophy of the extensors of the fingers in both hands, and this was soon followed by atrophy of both upper and lower extremities, and of some of the muscles of the trunk. The muscles showed degenerative reaction. During his stay in the hospital, the patient suffered from an attack of gout in his left hand; he improved under treatment, and took his discharge, but returned some months afterwards, suffering again from extensive atrophy of all his muscles, from which he was now slowly recovering. The albuminuria was persistent, but the patient showed no cardiac hypertrophy, nor was there evidence of increased arterial tension. The patient worked in a factory where he had much to do with yellow velvet (no sample of this could be obtained). The symptoms, resembling closely those seen in chronic poliomyelitis, were probably due to lead. There was, however, an absence of the blue line on the gums. Case III, a man, aged 43, commenced to show

symptoms of atrophy of the anterior group of muscles of his right leg two years ago; for which he was treated then without any benefit. The atrophy had since then gradually extended, and now affected all the muscles of both lower extremities. The deep reflexes were absent. There were no sensory troubles, and the upper extremities were free, whilst the lumbar muscles were now being affected. The affected muscles did not respond to the faradic current. Case IV was under the care, and shown by kind permission, of Dr. Ross. It was a case of commencing progressive muscular atrophy, affecting the deltoids of both sides, the serratus magnus, trapezius, and rhomboid of one side, whilst the sternocleidomastoid and the muscles of the face of both sides again were affected, the diaphragm remaining intact. Cases V and VI were cases of reflex atrophy after joint-affections. A fuller description of these cases will be published shortly.

The Treatment, Operative and Expectant, of Chronic Ovarian Disease.—The discussion on Dr. SINCLAIR'S paper, adjourned from last meeting, was opened by Dr. Walter, the other speakers being Dr. Thorburn, Dr. Leech, Mr. Hardie, Dr. Rhodes, and Dr. Sinclair.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, MAY 4TH, 1883.

J. M. PURSER, M.D., President, in the Chair.

Deformity of the Upper Extremity and Arrest of Development following Injury of the Median Nerve.—Dr. J. S. MCARDLE showed a patient who, twenty years ago, in his sixth year, sustained a fracture of the humerus and dislocation of the elbow. Paralysis followed, and, after the reduction of the dislocation and repair of the fracture, contraction of the flexors gradually set in. At present, the temperature of the hand was two degrees below that of the sound side. The forearm was two inches shorter, and the wrist an inch and a half less in circumference. Cyanosis was always present on the affected side. A neuroma was present in the antecubital fossa, pressure on which caused numbness in the arc of the median nerve. The nails and skin were all ill-nourished, and a cicatrix on the flexor aspect marked the point at which bullæ had appeared since the injury.

Impacted Alimentary Bolus.—Mr. CORLEY described the following case. Patrick S., aged 49, married, was brought to the Richmond Hospital on the 14th of April last, quite dead. The following facts were elicited from his wife at the coroner's inquest. Deceased came home on the evening of the 14th considerably under the influence of drink, and sat down, along with several others, to eat his supper. After having eaten quietly for some minutes, he suddenly attracted the attention of one of the others by giving a violent smothered cough. On looking round, his wife said she saw him all black in the face and staring at her. She ran over and hit him on the back, and succeeded in getting a small piece of the meat (corned beef) out of his mouth, but without any effect on him. He was then brought to hospital. The piece of meat did not enter the larynx, but was firmly impacted into the pharynx, in this way completely occluding the opening of the larynx.

Malformation of the Thorax.—Dr. E. H. BENNETT read a paper describing the characteristics of a congenital malformation of the thorax, in which the anterior extremities of a single rib failed to reach its cartilage, and there existed in consequence a depression of the thoracic wall on one side, while the cartilages attached to the corresponding part of the opposite side were hypertrophic, and projected as tumours in front of the level of the sternum. Having referred to the description of this malformation given by Otto and Rokitansky, in which no mention is made of excessive development on the side opposite to the defect, Dr. Bennett showed a preparation which presented the characters mentioned in a most marked degree. He pointed out the importance of a knowledge of this malformation in relation to diagnosis of lesions of the costal cartilages, illustrating the point by the facts of the case from which he had obtained the specimen, and from two other clinical observations. In all three cases, injuries had occurred which suggested that the thorax had been crushed; and the diagnosis had been erroneous in one, that from which the specimen exhibited had been taken.

Influence of Fracture on Growth of Bone.—The SECRETARY (Dr. Bennett) read, for Mr. J. DAVIDSON, a paper on the influence of fracture on the growth of bone, in which the author recorded the results of his observations on the fracture of the long bones of the lower animals, chiefly fowls, in which the injury occurred during the active growth of bone. Comparison of the injured bones with their fellows showed that there existed a marked increase of size in all dimensions, the bones being heavy and longer on the fractured side.—Drs. FRASER, STOKER, CORLEY, MCSWINEY, BENNETT, and ABRAHAM discussed the foregoing paper, and expressed their sense of the exactness and care displayed by the author in his investigation.

Hydatid Disease of the Femur.—Dr. COPPINGER read a paper on this subject. The patient and the parts removed which established the diagnosis having been exhibited to the meeting, he alluded to the unfrequency of the occurrence of hydatid tumours in Ireland, notwithstanding the known prevalence of the echinococcus-disease in sheep, mentioning that hydatid tumours, even in countries where the affection is comparatively common, seemed scarcely to invade the bones, and that no instance of the disease in the bones had, up to the present, been recorded in this country. The patient (exhibited, and from whom the cysts and portions of bone had been removed) had been under observation for three years, having been admitted to the Mater Misericordiæ Hospital on receipt of a spontaneous fracture of the upper third of the femur, due apparently to its invasion by the parasite. The disease was not diagnosed until Mr. Coppinger had made an attempt to excise the patient's hip-joint, and discovered a large cavity in the dilated upper part of the femur containing hydatid cysts and loose pieces of bone studded over with small echinococcus-vesicles. These (some of which were shown as microscopical specimens) exhibited the characteristic features of echinococcus-cyst, scolices, etc. The complicated excision was abandoned; but the great trochanter was removed with a saw, and the cavity finally laid open and syringed out with chloride of lime solution. It was then ascertained that the shaft of the femur was firmly connected with its neck by means of the thin walls of the bony tumour; and it was hoped that the disease, having been apparently removed, the space would fill by granulation-bone from below. It had since become much smaller; but the patient's condition was so unsatisfactory, even now, after treatment extending over nearly two years, that another operation would be performed for the purpose, if possible, of eradicating the disease. The limb was three inches shorter than its fellow. The man was obliged to have a crutch, being unable to rest his weight upon the limb; and the wound, which was still open, led through a narrow slit in the bone into a cavity in its centre, extending upwards into the femoral neck as well as downwards into the shaft of the femur. Although this cavity was daily washed out with carbolic and boroglyceride solution, and although all disease was apparently removed, collapsed cysts and shreds of membrane still escaped from it occasionally, proving that the peculiar disease caused by the presence of small exogenous cysts in the cancelli of the bone had not yet been eradicated.

Thrombosis of Pulmonary Artery.—Mr. THORNLEY STOKER read notes of a case of thrombosis of the pulmonary artery, occurring in a boy, subsequently to the removal of the thyroid body, and proving fatal. He exhibited the specimen.—Dr. BENNETT expressed his doubt as to the character of the thrombus, regarding it as a *post mortem* production; and a discussion followed, in which Drs. Thomson, Corley, Kidd, and Abraham took part, and Mr. Stoker replied.

Dr. R. A. HAYES exhibited on a screen, with the lantern, photographs of the microscopic appearances of the normal and diseased tissues, and explained the details of the process.

SURGICAL SECTION.

FRIDAY, MAY 13TH, 1883.

J. K. BARTON, M.D., President, in the Chair.

Removal of the Thyroid Gland.—Mr. THORNLEY STOKER read a paper on removal of the thyroid gland in cases of bronchocele. He detailed the case of a boy on whom he had himself operated, the disease being the most extensive of which he could find any operative record. The tumour extended nearly from ear to ear, and hung down nearly as low as the navel. He removed two-thirds of the mass, comprising the right lobe and isthmus, in March 1882, and the remainder on the left side a year later. Complete recovery followed the first operation; but the patient died five days subsequent to the second, from pulmonary thrombosis. The patient was incompletely cretinish, but developed greatly after the first operation. Mr. Stoker showed that while, ten or twelve years ago, the ablation of the thyroid gland for disease had been practically abandoned during the last decade a revulsion of surgical feeling on the subject had occurred; and that now it should be held justifiable, as the result of late experience, to perform the operation, the patient desiring, not only in cases where the disease threatened life, but

here discomfort or disfigurement existed, and minor treatment had ailed. He emphasised his argument by quoting a series of cases rom the practice of various surgeons, commencing in 1871 with Dr. William Warren Greene of Boston, whom he regarded as the pioneer f the most modern opinion on the subject. The freedom with hich the operation had of late been undertaken was, he thought, part due to the results of Listerism, and in part to the greater oldness which increased knowledge and improved appliances have enerated in the surgeons of our day.—Dr. R. McDONNELL was resent on both occasions. The first operation might be regarded quite successful, and taught the lesson that, in cases of the kind, e operation was justifiable. The second had a fatal issue, from a use not necessarily connected with the operation.—Mr. CORLEY ated that, in his hospital practice some years ago, a similar case ose, where the pressure of a large thyroid gland became so great, to render operation necessary. It was shortly after Dr. P. H. atson published his paper. He was forcibly struck with the lemnity of the undertaking to remove the thyroid gland, as an eration in which the surgeon must be prepared in some cases to the patient die on the table.—Dr. H. KENNEDY drew attention the treatment of thyroid tumours by the seton, and mentioned ase in which, at the end of some months, the disease was entirely ed.—Mr. THOMSON differed from Dr. Kennedy in his suggestion to the surgical practice in the case Mr. Stoker had detailed. atever use the seton might be in some cases of small thyroid nours, it would be useless in Mr. Stoker's case, in which the sels were of enormous size.—Surgeon-Major HAMILTON remarked t 10 or 15 per cent. of the population in the Himalaya valleys fered from bronchocele. Sometimes, twenty or thirty coolies ht be seen climbing mountains 2,000 feet to 3,000 feet high, ying enormous loads of 50 lbs. or 60 lbs. weight, and each wear- a tumour. It seemed extraordinary that the pressure on the nx did not interfere with their breathing. By rubbing in binio- of mercury ointment with a spatula, as they lay on their backs he sun, they always obtained relief. The great benefit seemed e derived from doing it in the sun. He had seen many cases reated, and had not known any of the men to die from it. When imla, an epidemic of bronchocele broke out—no fewer than sixty s—and the same treatment was adopted. In the Himalaya ys, syphilis was supposed to be the cause, and the people lived nferior food in overcrowded dirty houses, badly ventilated.—Dr. instanced the case of a woman, aged 22, who had a very rapidly ing thyroid tumour, which caused her inconvenience both in thing and swallowing. It became urgently necessary to do thing, and he applied a blister on the back of the neck, with best result. A seton was subsequently inserted, and the gland short time assumed its normal size.—Mr. STOKES endorsed what Stoker had said regarding the inutility of using any mild ures in such cases as he had described; but, in those referred y Dr. Kennedy, Dr. Foy, and Surgeon-Major Hamilton, the urs were probably of extremely simple structure. He recollected cases in which merely tapping, followed by a weak solution of ure of iodine, sufficed. The employment of setons found little r in his eyes. In Mr. Stoker's case, nothing short of the very cally performed operation adopted would have given the nt the slightest chance of recovery. The introduction of air he veins was avoided by the application of the double ligature, ividing the veins between them. Thus the operator need not prehensive of the fatal accident which he had heard and read t had never witnessed, namely, the so-called canalisation of —Dr. BENNETT thought that some of the observations made directed to a class of thyroid tumour which had never been bject of removal; for instance, acute enlargement of the gland, umours as occurred in epidemic *goître*, or acute *goître* in preg- or menstruation. He did not suppose any surgeon would e to operate, knowing that, if the epidemic influence, or the ular exciting cause, such as pregnancy or menstruation, were the tumour, troublesome and dangerous at the time, would e quiescent, or even disappear. The point that struck him as lt of explanation was, how it was possible to make the tumour ear by biniodide of mercury. If the sun were a powerful agent, hey had not that, the second element of the treatment, in this e. It would be interesting to know whether such treatment ccessful in the case of Europeans in India, or was the success d entirely to the natives. He was inclined to think, how- hat, if an European were exposed for a sufficient time to m of the *goître*, the result would be to kill him with the sun. eat desideratum was to diagnose exactly the kind of tumour ght to be the subject of removal.—Surgeon-Major HAMILTON observed that it was the smaller tumours which were very often radically cured. Europeans were treated for enlargement of the glands in the same way as the natives. The only danger was from sunstroke, but this was avoided by placing the upper portion of the body in the shade.—Mr. WILLIAM STOKER mentioned that similar treatment was the rule in Switzerland.—Mr. WHEELER said that no one would think of extirpating the thyroid gland due to anæmia, or the thyroid enlargement of menstruation, or what might be termed the cystic bronchocele; but he was of opinion that bronchoceles of large size and when very chronic, if causing dyspnœa, dysphagia, and pressure on the jugular vein, and vertigo, ought certainly to be removed. He did not agree with Mr. Hamilton in thinking that the rays of the sun were essential to act on the biniodide ointment. Such practice was common in India, but the heat of the fire would answer very well.

Orthopædic Cases.—Mr. SWAN read a paper on the primary consideration of orthopædic cases. From a prolonged observation of a limited number of examples made by himself, and from the results obtained from the records of Dr. H. Culbertson and Dr. Virgil Gibney of New York, he arrived at the following conclusions. 1. The advantages of excision or evidement in tarsal caries do not appear to be so obvious as to warrant their frequent application. 2. As there is no evidence of amyloid degeneration of viscera in long-continued suppuration of the tarsal joints, that conservation, in its widest signification, may be specially applied to disease of these structures. 3. An ankylosis of the tarsal articulations, a result of the generation of plastic material during the course of the disease, will occur; but this process, though diminishing the mobility of the foot, will leave it fairly useful. In referring to angular curvature of the spine, the impossibility of predicting the amount of deformity was maintained. The supervention of paraplegia, on the other hand, might be confidently anticipated to occur only in caries of the cervical or upper dorsal vertebræ. So far as the paralysis was concerned, the prognosis might be stated to be usually favourable. The probability of the development of abscess was shown to be chiefly the result of motion, and not necessarily the sequence of extensive gibbosity or even extensive implication of tissue. Scoliosis was stated to be, except in an early stage, an incurable affection, and one in which prevention was better than remedy. Mr. Swan showed an apparatus which he stated he had used with success in early curvatures. In equinovarus, a section of all resisting structures was insisted on, and relapses were said to be often due to a neglect of this rule. Mere congenital distortions of the feet were divided into—1, those the result of nervous lesions; 2, those depending on ligamentous relaxations; 3, neuro-mimetic affections; and 4, those of traumatic origin. In the treatment of deformities of the lower limbs depending on essential paralysis, as usually adopted, whether by counter-irritation, localised galvanism of Duchenne, massage, or the Swedish movement-cure, the writer did not put much faith, but held a strong opinion on the utility of the direction of volition to the limb, whilst by proper means maintaining symmetry—holding that the development of the use of the unaffected muscles even remotely attached to the member established a compensating power, and believing that, in many cases, some of the fibrillæ of muscles, the bulk of which were paralysed, retained contractile power.—Mr. WHEELER was of opinion that Mr. Swan was not sufficiently explicit in his paper with reference to the disease of bones of the foot and the excision of bones, etc. A tolerably accurate diagnosis of the extent of the disease could be formed by observing where the disease commenced. There were four distinct synovial sacs in the foot; hence it would be easily understood that the extent of the disease would be greatly influenced by its starting-point. For instance, it would be plainly much more limited if starting in the os calcis than in the cuneiform bones. Complete excision of the os calcis was not a very common operation. The results in two cases he had were most satisfactory; a third, however, was not quite so successful. He deprecated the use of the gouge as dangerous and unscientific practice, especially in disease of the ankle-joint. It was not always easy to say when the entire disease was removed. He agreed with Mr. Swan's statement that, in talipes equino-varus, the anterior tibial muscle, and, if necessary, the tibialis posticus, should be cut before the tendo Achillis.—The PRESIDENT remarked that the partial removal of carious bone was exceedingly unsatisfactory. Although Mr. Wheeler had condemned gouging, his experience of it had been attended with marked success.

ALDERMAN Dr. William Taylor has been appointed by the Lord Chancellor a Justice of the Peace for the Borough of Cardiff.

REVIEWS AND NOTICES.

ANNUAL REPORT OF THE HEALTH AND SANITARY CONDITION OF THE BOROUGH OF LEICESTER, WITH QUARTERLY AND YEARLY TABLES OF DEATH FOR 1882. By WILLIAM JOHNSTON, M.D., Medical Officer of Health. Leicester: G. Gibbons and Co.

THIS report is one which will be read with great interest by those concerned in sanitation, inasmuch as Leicester is one of the towns which has led the van in the question of compulsory notification of infectious diseases by medical men. The working of the Act in Leicester will be narrowly scrutinised, and its success or failure will be of moment to the future of many towns.

Knowing the way in which Leicester has been in the van in this matter, it is not to be wondered at that Dr. Johnston throws down the controversial gauntlet on the very first page of his report. He says.

"I would respectfully draw your attention to the sections under 'Fever Hospital' and 'Scarlet Fever,' where the benefits to the town arising from the compulsory registration of infectious diseases have, to my mind, been clearly established. Here I have shown that, although the late epidemic of scarlet fever had not been rendered shorter in its duration than in other towns where it prevailed, still the large number of patients removed to the Fever Hospital in the last three years arrested the full prevalence of the disease, and reduced the mortality below that experienced in those towns where isolation was not secured on so extensive a scale."

It is, therefore, in the sections and statistical tables relating to zymotic diseases and to scarlet fever that the interest is chiefly centred, and these we will at once proceed to consider; and, in so doing, the first point which strikes us is the curious discrepancy between what should be corresponding figures in various tables. For instance, in Table I (p. 8), the zymotic death-rate of Leicester is given as 3.746 per 1,000 population, while in Table X, when the Leicester rate is compared with that of the other 19 principal towns, it is given as 3.0 per 1,000; and the average being 3.6, Leicester thus appears to great advantage. It is true that the quarterly returns quoted by the author from the Registrar-General's reports, when cast up, certainly give an annual rate of 3.0 per 1,000; but in that case, how does Dr. Johnston's own statement in Table I come to give the rate as 3.746?

Passing from this matter, we find an equal inaccuracy pervading the figures elsewhere. In the section on scarlet fever (p. 27), we find that a total of 72 deaths from this disease was registered as occurring in the borough and hospital. A comparison is then drawn between an epidemic stated to have originated "about the eighth month" in 1879, and to be still continuing, and four previous epidemics, viz.—1857-9, 1862-4, 1870-1, and 1874-7. From this comparison it is claimed that the introduction of a system of compulsory notification has resulted in a much diminished mortality, notwithstanding the longer duration of the epidemic, and the greatly increased population, which involves the employment of much more extensive measures for the prevention of disease.

When, however, we come to scrutinise the statistics, we fail to find any real ground for this conclusion. For while the death-rate in the first epidemic, as stated by the table, was 4.7, in the second 4.0, in the third 4.0, and in the fourth 3.7 per 1,000 population, that in the present one, calculating (with the table) in the second monthly period of four weeks (not the eighth, as stated in the text), is 4.0, and not 3.9, as stated in Dr. Johnston's table. The fact is that his total deaths, during the epidemic to the end of 1882, should be, according to the figures in the table, 489 and not 478, whence it follows that, instead of compulsory notification having reduced the mortality to considerably below that in the first, second and third epidemics, and to a mere fraction above that in the fourth, it is, in point of fact, not much (0.7) below that of the first, equal to that of the second and third, and considerably above that of the fourth.

Nor is Table XII more happy in its results. Here a comparison is again drawn between the zymotic death-rate in Leicester, and in nineteen other large towns, for two periods which are apparently intended to correspond with the two epidemics of 1874-7, and 1879-82. But a comparison of the two tables shows that while the first epidemic has its mortality raised in Table XII by the omission of 1874 (which, having a very slight death-rate, would lower the average), the present epidemic has, in this table, the benefit of having the very light year 1878 included, which reduces the average zymotic death-rate from 0.95 for the last four years to 0.78 (not 0.52 as stated in the table) for the last five.

But even here a close scrutiny will not allow these figures to stand, for, dealing with the author's own statistics in the table of scarlatinal epidemic mortality, we find that the rate for 1879 should be 0.96, not 0.84; for 1880, 0.98, not 0.92; for 1881, 1.56, not 1.49 and for 1882, 0.57. This gives us a total of 4.07, instead of 3.91 for the last four years, and adding 0.09 for 1878, and dividing by 5, we find that even with 1878 the average should be 0.83, and not 0.78 much less 0.52, as stated in Table XII.

We have thought it desirable to dwell on these figures for the reasons given above, viz., that Leicester being a pioneer in the compulsory notification movement, its results will probably be made the occasion of dogmatic assertions, and we therefore call attention to the fact that a conclusion, based upon premises derived from this report, will be logically fallacious.

HUMAN MORPHOLOGY. A Treatise on Practical and Applied Anatomy. By HENRY ALBERT REEVES, F.R.C.S.Ed., formerly Demonstrator of Anatomy at the London and at the Middlesex Hospital Medical Colleges, and Lecturer on Anatomy at the London School of Medicine for Women; Surgeon and formerly Pathologist to the Hospital for Women; Surgeon to the Royal Orthopædic Hospital; Surgeon to the East London Children's Hospital; Assistant-Surgeon, London Hospital; etc. Vol. I. The Limbs and the Perinæum. With Five Hundred and Sixty-four Illustrations. London: Smith, Elder and Co.

THIS work appears to be an attempt to treat human anatomy from all sides simultaneously. Man is an animal, says the scientist; therefore, in works on science, we find him under such a heading as "the *anthropidæ* represented by the single genus and species, man," and the description of *Homo sapiens* is mostly limited to an enumeration of the anatomical differences between that interesting animal and the tailless apes. It is true that, strictly speaking, Mr. REEVES has not made his work in any way scientific—at least, not after this pattern; but it has been the fashion lately for men of science to write exhaustive treatises on the morphology of a single animal at a time. Feeling that the tendency to look upon every living being merely as an animal which differs from others has led to certain abuses, these authorities reverse older methods and subordinate comparison to description. In this sense alone the purely descriptive work of Mr. Reeves scientific; but, notwithstanding its title, it can in no way rank with the special morphologies of Huxley and Mivart. The second kind of work on human anatomy is the systematic form, illustrated by the standard productions of Quain, Cruveilhier, and Hyrtl. The third variety is practical anatomy or dissector. *Human Morphology* is chiefly a hybrid of these two latter forms. Professedly practical, it is at fault wherever it most approaches the systematic type, and appears to advantage wherever it assumes the familiar appearance of a manual for the dissecting-room. In other words, it is overloaded with a collection of details quite unsuitable for a handbook intended as an aid to the dissector. The physical bulk of the book itself, which is one-third of the entire production, is hardly less a disadvantage than the heavy matter that overburdens every description of familiar anatomical regions and spaces. It cannot, however, be denied that Mr. Reeves has laid stress on anatomy, as seen from without, in a manner highly creditable to him as an experienced demonstrator. Thus, at the beginning of the chapter on dissection of the upper limb, the student is recommended to pay much attention to the bony prominences as felt subcutaneously. Surface-markings and relative positions of condyles and tuberosities are too often entirely overlooked in the dissecting-room; the student generally studies them on a live subject employed for the primary purpose of practising the art of bandaging and chalking out the course of arteries. As these accomplishments are required for surgical examinations only, they are apt to be completely neglected during the first winter sessions. The most valuable portion of the work is the chapter on Anatomical Technics; it treats of the preservation of bodies, injecting and preservative fluids, frozen sections, and kindred topics. A section headed "Hints on How to Study Anatomy" interpolated in this chapter between "Methods to Preserve Anatomical Dissections" and some paragraphs of the same kind on the preparation of frozen sections, is a fair example of the whole method which characterises a great part of this work, for it is entirely out of place. The illustrations are very abundant, but are repeated more than once; a large proportion are taken from very familiar sources, British and foreign. The author ex-

his pride in the multiplicity of his woodcuts. "The reader will observe," says he, in his preface, "that the number of figures in this volume, which only deals with a part of my subject, nearly equals the whole number in similar works which embrace the entire subject and include histology." There is, however, a want of homogeneity in the illustrations, very apt to puzzle the student. Some of the diagrams are clear and useful; others are practically valueless. We agree with our author in the exclusion of histology; but in a work which professes to include all that concerns naked-eye anatomy, we should have liked to have found more information about the bones. We also must strongly deprecate the prominence given to technical terms seldom used elsewhere, the avowed invention of other terms, and, most strongly, the employment of expressions like "the norm" or "technics". Anatomy can well dispense with proposed innovations like "sarcology" for myology, or "aponyosis" for aponeurosis. Such a term as "macroscopic" is, unfortunately, sanctioned elsewhere; but it is open to great objection. "Æsthesiology" is an utterly useless term for the science of organs of special sense; and we find several other expressions that need not even have been mentioned in introductory chapters. Such words are out of place anywhere in these days, excepting in a dictionary of medical terms.

Human Morphology must have cost its author a great expenditure of time and trouble. It is published in a most acceptable form for the library, but, as we have said before, is too bulky for dissecting-room purposes. It will prove of actual use not so much to students as to demonstrators and to all connected with the management of dissecting-rooms and anatomical museums.

PRINCIPLES OF HEALTH, IN CHILDHOOD, MANHOOD AND OLD AGE. By LOUIS KING, M.R.C.S. London: Hamilton, Adams and Co., Bath: William Lewis and Son. 1883.

THIS book is evidently intended for popular use. From a fourth to a fifth of its contents relates to the matters above indicated, while the remainder consists of an *olla podrida* of physiology, food, ventilation, brain-stimulants, disinfection, nursing, first aids to the wounded, and how to act in other emergencies. These are all important subjects, judged either from a medical or domestic standpoint, and while it is the province of the medical profession to disseminate useful information regarding them, it is no less the duty of those who undertake the task, that they should be competent in a marked degree by knowledge and experience to convey that information to others. If his lessons are to be acted on or even listened to, the public instructor must show not only his acquaintance with the leading authorities on the subjects of which he treats, but be prepared to defend his own opinions should he have occasion to differ from those of leading men whose works have already earned for their authors a lasting fame and confidence. Whether the exaggerated statements too often indulged in by writers on health subjects, with reference to the dangerous conditions in which we live, are more likely to accomplish their object by inspiring awe and terror, rather than by a lucid conviction of their reality, is a subject which we would rather avoid discussing; at the same time there can be little doubt that the popular mind requires from time to time occasionally stimulation to accept facts and conclusions intended for its benefit.

Mr. KING'S book is a praiseworthy effort to deal with the physical infirmities of everyday life, and although it cannot in any way be regarded as a guide to health, or, indeed, as taking a matured or comprehensive view of subjects which have been often dealt with both separately and collectively by others, it contains much that cannot fail proving useful to the large class for whom it is specially intended. We would have liked, however, to have seen less of the medical practitioner and more of the sanitary instructor, and the sources of his information, in these pages. Little or no reference is made to the works of Simon, Farr, Parkes, and other well known hygienists, unless we except a table on the chemical constituents of food from Parkes's *Hygiene*, where the author's name is spelt Park, an inexcusable oversight. In the same article the writer refers somewhat in detail to the results of Dr. Beaumont's experiments on digestion, a well worn subject, fraught with much that is open both to doubt and credulity. Other people's stomachs are fortunately not like that of Alexis St. Martin's, and the process of digestion is far from being completed when the food leaves the stomach. The article, Drainage, is fairly illustrated by a drawing of a section of a house, in the style of the illustrations in Pridgin Teale's book, showing ventilating traps to lock off the sewer gas when, as it has unfortunately happened in this case, there is no drain in the basement, but separate sewers to conduct from the front as well as from the back of the house. The arrangements recommended respecting the internal fittings and means of ventilation of the house leave little to complain of; the writer in the course of his remarks prefers to be guided by the Bath sanitary authority rather than by the by-laws of the Local Government Board, and it is quite possible he may be correct in his judgment. A chapter on Brain-Stimulants, comprising alcohol, tobacco, tea and coffee, contains a good deal of matter of historical interest which might have been spared, to exhibit more clearly the baneful effects of narcotics on the system. At the same time it is clear from the annually decreasing returns in the revenue obtained from spirituous and malt liquors, that there is a silent revolution taking place in the social habits of the people with regard to their use, which augurs well for the progress of the nation.

In the remarks on sick-rooms in private houses, and in the instructions to nurses, the author has taken care to give explicit directions on most points connected with nursing the sick, dwelling especially on the dangers associated with contagious diseases and the means of lessening their extension. We question, however, the possibility of impregnating the air of a sick-room sufficiently with a disinfectant to destroy infection so long as it is occupied, although much may be done with these agents to render it less noxious. The nurse is further enjoined to avoid stimulants, to take exercise, how best to administer disagreeable medicine and shift helpless patients, the latter operation being further illustrated by a somewhat grotesque drawing. A good nurse will always adapt herself to the circumstances of each individual case, but few patients can remain without much discomfort for any length of time, without the bed under them being made afresh, and the best way of doing this is to remove the patient bodily by means of the bedclothes to an adjoining bed, or what is better, if it can be had, to a stretcher supported with uprights to the level of the bed, until the operation is completed. Mr. King has some excellent remarks on the prevention of bed-sores, of more importance than their treatment, and refers at some length to the application of leeches, the making of poultices, and to other details associated more or less with the duties of the nurse. The book finishes with articles on accidents and emergencies inclusive of some remarks on the more common poisons, subjects which of late years have been made so popular by ambulance lecturers. These are all in good taste and much to the purpose, while the unprofessional reader may instruct himself by aid of a diagram in the whereabouts of the main arteries of the limbs in the event of his being called on at an unlucky moment to check hæmorrhage. We might enter a mild protest, however, against the practice so universally recommended in books of this description of treating the common accidents of burns and scalds by means of the Carron oil liniment. A much more cleanly, and in every respect better application is a mild antiseptic dressing, such as boracic lint and vaseline, or boracic ointment, or even carbolic oil, when it can be borne with impunity. A large experience of both methods of treatment has long since convinced us that the antiseptic method of treating burns, combined with the cotton-wool when necessary, is infinitely preferable to the offensive-smelling linimentum aquæ calcis.

THE MESSAGE OF PSYCHIC SCIENCE TO MOTHERS AND NURSES. By MARY BOOLE. London: Trübner and Co.

THIS is a thoughtful little book, written by a woman of a subtle and reflective turn of mind, who is deeply imbued with a reverent and religious spirit. The history of the work is told in the preface: "A few ladies, more than twenty years ago, alarmed at the tempest of discussion about all things human and divine, which threatened to sweep them from their accustomed anchorage, asked me to help them to find out whether anything was left which we might still venture to believe without finding ourselves in antagonism with something else which seemed to have equal claims to be considered true." Accordingly, a set of lectures was delivered, dealing with the idea of evolution as it affected old-established beliefs, and arranging themselves under the titles of the Forces of Nature, Development, Mental Hygiene in Sickness, the Respective Claims of Science and Theology, Thought-reading, and Homœopathy. In the treatment of all of these subjects, much originality of mind, and even philosophic power, is displayed, with a considerable amount of information; and though the book nowhere transcends the field that is occupied by the simple questionings of women engaged in bringing up young children, and never attempts to draw light from the illuminating history of philosophic discussion, it may yet be read with advantage by most readers. We think, for instance, that the too commonly expressed regret that man is becoming a more and

more nervous animal, is well dealt with. We need hardly say the writer feels no regret on this score at all; and her way of putting her view is at once original and striking. Man, she says, "is destined to be an increasingly intellectual being; and as a necessary, though not a sufficient, condition of that, he must become a nervous being." "You might as well go and bid the next gnat-grub you see breathing through his tail not to change to a grub which shall breathe through his head, when the appointed time for that change has arrived, as quarrel with the increasing nervousness of civilised man." This is vigorous as well as subtle, and the plain inference is drawn that, in the training of the young, the nervousness of their character is to be studied and dealt with in a suitable manner.

If we wished, however, to be very plain, we should say that the subtle character of the writer's mind is at once her strength and her weakness. In passages such as we have quoted, we see the strong use she makes of it; but in the use of such phrases as "crisis of development," applied to infantile fever, and in many of the remarks on homœopathy, we find her led away by far-fetched analogies and word-paintings to unsound conclusions. For instance, what shall we say of a sentence like this: "When an epidemic breaks out in the house, say 'Our family life is undergoing a crisis; our home organisation becoming richer and fuller. . . . The family is cutting some fresh teeth,'" etc. Surely it is abusing language to compare the normal process of tooth-cutting, even when accompanied by feverishness, with the entirely abnormal conditions in which an epidemic breaks out in the house. The same far-fetched subtlety of mind leads astray the writer, as we have said, in dealing with homœopathy. For instance, we find her saying that the doctrine that *vitality is given by resistance to adverse circumstances* (the italics are her own), is a homœopathic doctrine! The reasoning here almost requires to be set forth that it may be appreciated. Thus, the thinker would say, if she were to put her ideas into words: "Fighting with adverse circumstances lowers vitality; but a less degree of such fighting is good for us morally; therefore, fighting with adverse circumstances is homœopathic to a low state of vitality!" This metaphysical or semi-scholastic phase of mind is not uncommon in the little book, and we can see how it has been a danger to the writer; but mingled with its meanderings we find valuable streams of thought. Thus she strongly dissuades from the adoption of any "pathy" in treatment; and her remarks on the use of the term reaction are really very able.

The conclusion of the book, as, in fact, the whole of it, has a fine moral tone about it, which cannot fail to have a soothing influence on the mother who is seeking for more power and better means to manage restless and irritable children; and, on the whole, we feel that if we cannot agree with all that the writer says, it cannot but have a good influence on the mothers and nurses for whom it is written. The verses by George Boole, which form the dedication, are really very beautiful, and are in keeping with the whole spirit of the book.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION. — The quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on Friday, May 18th, Dr. D. Hack Tuke in the chair. An interesting paper was read by Dr. Sutherland on Prognosis in Cases of Refusal of Food, in which he advanced certain propositions based upon the circumstances under which, according to his experience, prognosis would be good or bad. A long and interesting discussion followed, embracing the causes of the refusal of food, the best method of administering it—whether by the stomach-pumps, the nasal tube, or enema—the beneficial effect of enforced rest at the first appearance of the symptoms, etc., several of the speakers concurring in the desirability of varying the treatment. The members dined together in the evening at the Holborn Restaurant, Dr. Willett in the chair.

THE METEOROLOGICAL SOCIETY.—The usual monthly meeting of this Society was held on Wednesday evening, May 16th, at the Institution of Civil Engineers, Mr. J. K. Laughton, M.A., F.R.A.S., President, in the chair. The following papers were read. 1. Composite Portraiture adapted to the Reduction of Meteorological and other similar Observations, by G. M. Whipple, B.Sc., F.R.A.S. 2. Note on Atmospheric Pressure during the Fall of Rain, by H. Sowerby Wallis, F.M.S. 3. New Method of Reading a Thermometer and Hygrometer at a Distance by means of Electricity, by Arthur W. Waters, F.G.S. 4. An Integrating Anemometer, by W. F. Stanley, F.M.S. 5. Observations on the Force of the Wind at Sea, by D. W. Barker, F.M.S. 6. Meteorological Observations at Zanzibar, East Coast of Africa, during 1880 and 1881, by Surgeon-Major C. T. Peters, M.B. 7. Diurnal Rainfall at Bangkok, Siam, by Captain G. H. Inskip, F.R.G.S

NOTES ON BOOKS.

The Local Loans of England and Wales. London: Knight and Co. 1883. Pp. 438.—The second title of this book describes it as "an exposition of the law relating to the borrowing of money by local authorities, together with other practical information with respect to local securities." Though published anonymously, internal evidence shows it to have been written by Mr. C. N. Dalton, one of the most clear-headed and painstaking of the officials at the Local Government Board. Mr. Dalton's intimate connection, as Inspector of Local Loans and Local Acts, with all the intricacies of this question, gives a peculiar fitness to his compilation of a treatise on the subject, which is one beset with all sorts of pitfalls. So far as we can judge, the book contains everything that either borrower or lender on the security of municipalities can desire to know.

The Student's Handbook of Surgical Anatomy. By JOHN MCLACHLAN. Edinburgh: Livingstone; London: Baillière, Tindall and Cox.—This work is a brief epitome of surgical anatomy in its conventional sense; anatomical descriptions of organs, bones, joints and regions being combined with brief recapitulations of the steps of operations. Open to the objections which apply to all condensed manuals, objections for which the student is generally more to blame than the author, Mr. McLachlan's work is certainly a good sample of its kind. Being small, light, and thin, and at the same time well-printed, it is specially fitted for the only use to which it should be turned, that is to say, for reference in the dissecting-room and the anatomical museum.

The Student's Handbook of Forensic Medicine and Medical Police. By H. A. HUSBAND, M.B., C.M. Fourth edition. Edinburgh, 188. This is the fourth edition of Dr. Husband's well-known handbook, a work much appreciated by students preparing for examinations. It is admirably adapted for this purpose, the chief points treated of in the larger works on forensic medicine being merely touched upon and details being rarely given. The volume is scarcely adapted for the commencing student, as it is little more than a summary of the subject treated of. For its special purpose, Dr. Husband's manual can be highly commended, as being in the main accurate, useful, and sufficient for the special purpose we have indicated. From the preface, we learn that the previous edition was exhausted in a little over two years—a fact which speaks sufficiently for the popularity of the work. The present edition is enriched by new sections on various topics of medical jurisprudence and medical police; and an appendix on engineering formulæ will prove useful to the sanitarian.

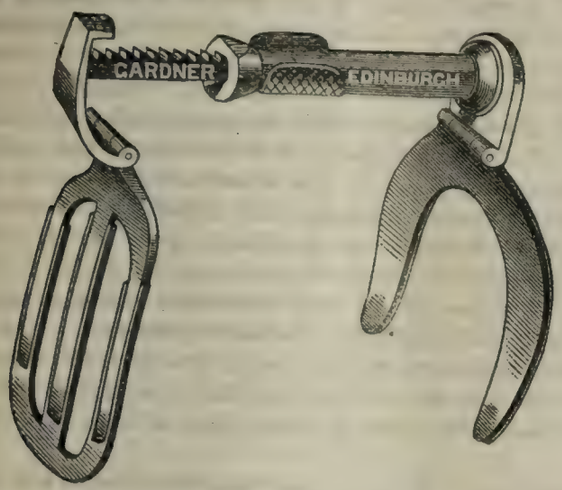
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTION
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN AUTOMATIC TONGUE-DEPRESSOR.

I BEG to submit for professional approval a tongue-depressor devised by me, and which I have found to suit very admirably operations on the mouth which require time, such as excising tonsils. My little instrument is essentially automatic, the pressure upwards exercised by the tongue being the fixing power. I shall try and explain its mechanism from the annexed woodcut.

First there is the blade, which applies to the tongue, and which is so constructed, on a sliding principle, as to suit it to any size of tongue. The chin-plate, of horse-shoe shape, and lined with morocco leather, which comfortably adapts itself to the bony ridges of the lower jaw. (I might humbly submit here that it is a common error, in tongue-depressors, to apply the chin-plate or pad of resistance to the soft parts; such an arrangement clearly tends to press the tongue upwards, and thereby lessen the oral cavity—a condition by no means favourable to examining or operating inside the mouth or throat.) There is a ratchet in the arm attached to the tongue-blade, and which is caught by a tooth in the tube attached to the chin-plate when pressure is exerted upwards by the tongue. The more pressure the greater the security against slipping of the instrument. In disengaging the appliance, pressure is made with the forefinger on the little plate on the end of the tongue-blade while the lit-

plates on the tube attached to the chin-plate are firmly held between the thumb and second finger.



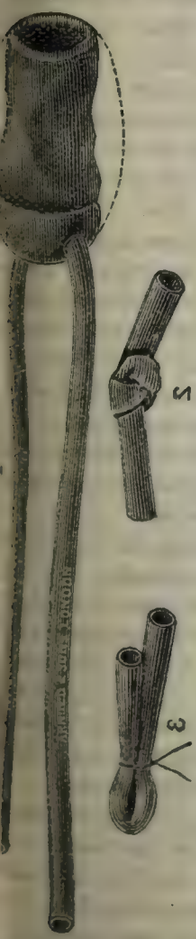
As may also be seen from the woodcut, the upper and lower blades re jointed, thus rendering the instrument extremely portable—apable of being carried in the vest pocket. The elegance of the ivention is also a recommendation. Mr. Gardner, of Edinburgh, the aker, has, at my suggestion, plated the instrument in gold, and yet ept it inexpensive. I may add that the tongue-plate and arm atched, being easily disengaged, can most efficiently do duty for he tea-spoon, when a brief examination of the throat only is necesary.

I might further say that a dentist of eminence has found it very seful in tooth-stopping, an application never thought of when the strument was designed. ALEXANDER FERGUSSON, M.D.

NEW DRAINAGE-TUBE.

Y J. WARD COUSINS, M.D.Lond., F.R.C.S., Surgeon to the Royal Portsmouth Hospital.

HE ordinary India-rubber drainage-tube is often difficult to fix curely, and it is liable to accidentally slip into deep cavities. Occasionally it has been lost in a wound, which has, of course, remained unhealed until the foreign body has been detected and removed. In empyema, the tube is generally introduced two or three inches into the chest, and thus gets blocked up at the bottom of the abscess by the ascent of the diaphragm; at the same time, the tube offers very little obstruction to the gradual contraction of the intercostal incision.



The drainage-tube represented in the engraving (Fig. 1) is intended, by a very simple contrivance, to remove many of the disadvantages of the ordinary instrument. It consists of an elastic tube, enclosed at one end in an elastic air-pad, to which a fine tube is attached, and by this the pad can be inflated to the required extent. The inflating-tube is then securely closed with a knot, or ligature (Figs. 2 and 3. The open orifice of the drainage-tube projects only just within the cavity to be drained, a matter to many surgeons of great practical importance. It is especially serviceable in cases of empyema treated by free incision; for, when the pad is inflated, it becomes fixed in position betwen the ribs; the pad, moreover, forms an elastic wedge, which prevents the escape of fluid around the tube, and exerts a comfortable and even pressure in sustaining the open and dilated condition of the incision. The tube must be introduced with the pad in a state of collapse, and, after insertion, it can be rendered persistently patent and fixed by inflation. Similar elastic pads, containing two tubes, can be conveniently used for the treatment of empyema by irrigation. The drainage-tube is made in several es by Messrs. Arnold and Sons of West Smithfield.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 2nd, 1883.

THE MEDICAL ACT AMENDMENT BILL.

IN the circular summoning the Special Meeting of the Council of the Association, at Birmingham, on Thursday, May 17th, under the head of Business, there was placed on the agenda the consideration of a resolution in favour of the Medical Acts Amendment Bill. Due and sufficient notice was given of the resolution, so that objectors might have an opportunity to oppose it; but, as stated in our last issue, the resolution was carried unanimously, and the petition in favour of the Bill was not only signed by the President of the Association, the President of Council, the Treasurer, and the General Secretary, but by every member present, numbering fifty representative members of the Association.

The Council of the Lancashire and Cheshire Branch of the Association also unanimously passed a resolution, on March 20th last, to petition both Houses of the Legislature in favour of the Bill. The Medical Officers of the Leeds General Infirmary, the Lecturers and Teachers of the Leeds School of Medicine, have also forwarded separate petitions; and petitions from various localities, in many instances signed by all the medical men, have been forwarded for presentation to the House of Commons in favour of the Medical Bill, thereby endorsing the mandate imposed on the Medical Reform Committee, at the last annual meeting at Worcester, to memorialise the Government to legislate on the basis of the Report of the Royal Commission—a mandate of which due notice had also been given in the JOURNAL. On January 5th, Dr. Jacob of Dublin, then President of the Medical Alliance Association, also presented a memorial to the Vice-President of the Privy Council, praying, on behalf of the Irish Medical Association, for legislation on the basis of the Report of the Royal Commission. Dr. Jacob, at this interview, informed the Right Hon. the Vice-President that the Irish Medical Association was, in all essential respects, of one mind with the Medical Reform Committee of the British Medical Association; and that it would have joined the deputation of the latter—at which, however, Dr. Glover, as representative of the *Lancet*, and Dr. Norton, as Editor of the *Medical Press and Circular*, were present—but that separate representation was considered better.

The difficulties that overspread and impede medical legislation have been amply manifested during the last half century. It was only by the concurrence of the then existing Government, that the present Lord Mount-Temple was enabled to carry the Medical Act of 1858; and, in doing so, he was compelled to submit to its mutilation, by the omission of clauses to provide adequate preliminary education on the part of medical students, and to enforce a double qualification—a qualification in medicine and in surgery—as indispensable for registration.

Admirable theoretical schemes of what is best for the profession, various as admirable, may be propounded; but the best of these schemes has to face the difficulty of enactment, and past experience constrains reformers to accept that which is practicable, and not to lose the great proffered benefits by aiming at the unattainable. At

the present time, the profession is fortunate in being aided by the Government, a Government backed by a very large majority, in the formation of a conjoint board of examination in each of the three divisions of the United Kingdom, by which all candidates for the medical profession shall be examined before obtaining admission to the *Medical Register*; and in the reconstruction of the Medical Council, whereby the profession will be enabled to make its own voice heard, and its influence felt in all its deliberations, the Medical Council being itself invested with greater controlling power in every respect than is confided to the present body. In this respect the profession has been granted a very real power on the Medical Council, and has obtained all that the Association asked for, by being given representatives in the proportion of one-half of those allotted to the universities and corporations. Considering all the opposition to these two points which has existed for years past, and indeed still exists, in many influential quarters, the profession may well be congratulated that these important points have received the approval of the Royal Commission, and have been embodied in a Medical Act Amendment Bill, which the Government evidently intend to press forward, if properly supported. The deepest debt of gratitude is due to the Government for undertaking this arduous task in the midst of other pressing legislation, in respect to which the Government is beset by difficulties. Let it not be a reproach to the profession that it has regarded with indifference this boon to the public; that, when the whole of the daily press of the country is in favour of the Bill, when leaders on the Opposition side of the House, not looking on the measure as one of party, are anxious to support it, when even the Universities and the interested Corporations evince something like willingness to accept it, the profession has stood aloof and even shrank from accepting what it has so long professed to desire.

The members of our hard-working profession, amid the daily round of unceasing toil which is their general lot, have but scant time for the study of Acts of Parliament, even though relating to their own special calling; and, to add to the difficulty in the present instance, numerous Acts relating to the profession, from the time of Henry VIII downwards, have to be studied; for, in the intended Medical Act we are now considering, the repeal of most of these Acts is involved, in order to effect the consolidation of the law in the Medical Act—an undoubtedly desirable object, provided it can be accomplished without injury to the profession, whose privileges are too few to be lightly dealt with. The general body of the profession, like all other sections of the community, is, of course, liable to misapprehension in the interpretation of legal enactments. Under these circumstances, the wisest and safest course for the profession may probably be to be guided by the mature judgment of those who, by long connection with the work of the Association, and particularly with that work in connection with medical reform, are peculiarly qualified to direct it aright. The presence of Hastings, Forbes, and Conolly, is, alas! lost to us, though their memory, and, let us hope, their example, remain; but we still boast veteran reformers in Chadwick, Husband, and Stewart—men who have ceased working at the practice of the profession they adorned by their labours, but who still give their thought, their time, and their indomitable activity to the work of the Association. These men, the true *patres conscripti* of the Association, loving their profession beyond aught else, seeking its elevation in the social scale, tenacious of its rights—men who promoted and worked for medical reform years before the passing of the Medical Act of 1858—were a party to accepting that Bill as an instalment of medical reform, being the utmost that could then be attained. These men are zealous members of the present Medical Reform Committee; they have served on it for years, have sacrificed their time in attending its meetings during the most disheartening periods, and they still exert their influence in its deliberation and action. These men look forward to the passing of the present Government Medical Bill as the crowning achievement of their labours in the cause of medical reform, because offering the prospect of a grand future to our profession, a future of acknowledged social position, a future of ever-increasing usefulness, and, above all, a future of the highest influence in relation to the public weal. It has been asserted that this Bill "compels medical students, after passing other portals, to pass a final examination by a State board." The fact is, that all candidates for the medical profession will be obliged to pass the examination of one of the conjoint boards in medicine, surgery, and midwifery, before admission to the *Medical Register*. All candidates, even the most brilliant students of the universities, will be compelled to go through this ordeal, with the view of insuring something like a minimum uniform but complete qualification before registration. Men with so-called half-qualifications will no longer get upon the *Register*, and the public will thus be protected from the imperfectly educated and examined men who have hitherto been able to gain admission to it.

The formation of these conjoint examining boards will rest with the divisional boards, which latter are to be elected by all the existing medical authorities in each of the respective divisions of the kingdom (Clause 10); and "the rules with respect to final examinations shall be framed in such a manner as to secure, as far as is practicable, in each part of the United Kingdom, an equality of standard in each final examination, and an equal capacity for testing proficiency." Among the duties of the Medical Council will be the "power from time to time (Clause 14), by visitation or otherwise, to inquire into the sufficiency of any examinations conducted or recognised for the purposes of this Act." The visitation of three examining boards will not present the existing difficulty of visiting nineteen or twenty examining boards.

Further, "the Medical Council shall have power, by order, to regulate the performance of their duties by each medical board, and a medical board shall conform to any orders so given by the Medical Council," subject to appeal to the Privy Council. The division boards will be formed of representative men from all the existing medical authorities; and the threefold check resulting from such a board, from the Medical Council, and the Privy Council, will, it is believed, secure a fair, impartial, and efficient examination, far more reliable and trustworthy than many of those which now admit to the *Medical Register*, and which will no longer be available for that purpose if this Bill should become law. Amendments in the clause relating to examinations have been introduced, in order more effectually to secure uniformity; but further amendments are projected, when the Bill gets into Committee, to entrust the framing of the examination rules to the Medical Council. Whether this be carried or not, it cannot be disputed that the present provisions of the Bill are decided improvements on the existing state of things, and therefore, in default of anything better, devoutly to be wished for. One fact is undeniable: once this Bill becomes law, no medical degree or title can be registered, unless the examination of one of the conjoint boards have first been passed.

Great objections have been raised to creating in the conjoint board another title-giving corporation; not to go farther, the Royal College of Surgeons of England strenuously resisted the attempt, and, it is believed, with the power of causing the rejection of the Bill in its passage through the House of Lords, had the attempt been persisted in. The Vice-President of the Privy Council, when receiving a deputation from the London Apothecaries' Society, is reported to have said that the representative of that body on the English divisional board was struck off for a similar reason.

If a powerful Government is thus forced to give way in order to save the Bill, the lesson should not be lost on the profession.

In regard to some other disputed matters, the Medical Reform Committee have consulted Mr. Upton, the solicitor of the Association. He states that there is nothing in the Bill in any way extending existing powers of, or conferring new powers on, chemists and druggists

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or relieving them from prosecution in case of their practising medicine; that there is nothing affecting the privileges of practitioners of dispensing under the Apothecaries' Act; and, in fact, nothing to facilitate the practice of illegal practitioners, or to increase the difficulty of prosecuting them.

Though passing strange, it would appear that there are some who cannot see one good feature in the Report of the Royal Commission on the Medical Acts, notwithstanding the untiring labours of the many great men who served upon it, all actuated by one motive—the desire to benefit the public and to improve the profession. The untimely death of the late Sir George Jessel, the great judge who devoted so much of his valuable time and transcendent legal ability to the service of the Commission, enhanced, if possible, the respect with which the report was received by the Legislature. The report must undoubtedly block all attempts at medical legislation unless mainly based upon it. It has been on all hands considered a triumph for the Association, by stamping with approval the objects for which the Association has unswervingly contended. It was received as such at the jubilee meeting at Worcester, when the Association gave the Medical Reform Committee distinct instructions with regard to it. The Medical Reform Committee has loyally carried out those instructions, and the result is the Medical Acts Amendment Bill, recently brought from the House of Lords to the Commons, and which now awaits the support of the profession, and such amendments as may be required when the Bill reaches Committee.

THE ISMAILIA HOSPITAL DURING THE EGYPTIAN CAMPAIGN.

We published in last week's JOURNAL a valuable memorandum by Sir William Mac Cormac, which was appended to the Report of Lord Morley's Committee, and which, together with the greater part of the report itself, had been made public, although not, as we were led to suppose it had been, then presented to Parliament. The complete report, together with the evidence on which it was based, has since been placed in the hands of members of Parliament, and we are thus enabled to elucidate many points which before were obscure, as well as to demonstrate what an erroneous impression regarding the nature of the management of the hospitals in Egypt has been spread already by the partial extracts from the above mentioned documents which have appeared in certain quarters. Had it not been for the well-timed appearance of Sir William Mac Cormac's remarks on the evidence collected by the commission of which he was a member, the injury done to the medical service by Lord Wolseley's statements, and the use to which they were turned, would have been far greater than it has been. We have every reason to believe that, just as has happened in some other campaigns in which there has at first been raised an outcry, probably by interested parties, against the Medical Department, so, with regard to this Egyptian campaign, a reaction will occur as statements are more fully inquired into, and facts become better understood, and that all impartial persons will acknowledge, whatever may have been the privations to which the troops were exposed, either in the movable or stationary field-hospitals—and we have yet to learn that any war can be carried on, especially a war in which the military occupations succeed each other with great rapidity, without privations—whatever these privations may have been, at any rate the officers of the Medical Department have not been in any way responsible for them. We need hardly refer to the manner in which personal attention was given by the surgeons to their patients; for even those who have been the loudest detractors of the Medical Department with regard to the discharge of its administrative functions, have testified, almost without exception, to the zeal and devotion with which the executive medical officers in charge of the sick and wounded performed their professional duties.

We have now before us the history of the hospital establishment at Ismailia, about which so many disparaging observations have been made. It will be remembered that Lord Wolseley, when giving his evidence regarding the Ismailia hospital, stated that he was immensely disappointed with its condition, and thought it very discreditable. He referred to the absence of mosquito-curtains, notwithstanding that there were quantities of flies, and to the deficiency of hospital attendants. He pronounced the bread which he found there on the 26th of August as "unfit for human food." This last statement shows how completely at fault the memory of the General must have been at the time when he made it; for it is a matter of fact, as shown in the report, that, at the date mentioned, no bread at all had yet been issued by the Commissariat. The Commissariat Department was not able to begin supplying bread until the following day, the 27th of August. There is no doubt that the Commissariat bread, when it was first issued, was of bad quality, owing to much of the flour having become musty, though hardly so bad as the expression "unfit for human food" would imply. It was certainly, however, not fit for sick men; but it appears to be substantiated that there was no better bread to be got at the time. There was good biscuit in abundance; but this also would not be suitable for many of the patients. Surgeon-General Hanbury states that there was nothing procurable in the bazaar at Ismailia for the first four or five days after his arrival; but the evidence shows that a few days after the date of Lord Wolseley's visit, on September 2nd, apparently as soon as the limited resources of Ismailia could furnish it, another description of bread, called the "French bread,' was obtained for the hospital. There is a remarkable discrepancy between the evidence given to the Committee by Lord Wolseley, and the evidence given by the medical officers in charge of the Ismailia hospital, as to what took place on the occasions of the General's visits to the hospital. Lord Wolseley says he found fault with the medical officers; on the other hand, Surgeon-major Dr. Beath, the senior medical officer in charge when Lord Wolseley visited the hospital on August 26th, states that the General spoke to him "in the most complimentary way," and expressed himself as "highly satisfied with everything in the hospital." Brigade-Surgeon Dr. Veale, the principal medical officer when the General visited the Ismailia hospital on two successive days at the close of the same month, told the Committee that Lord Wolseley "found no fault whatsoever; on the contrary, when leaving the hospital on the second day, he thanked me emphatically, twice over, for the care and attention which he said he saw that I and the other medical officers had given to the sick. Not a syllable that could be construed into disapprobation emanated from Lord Wolseley at that time."

Very important evidence regarding the state of affairs at the Ismailia hospital was given to the Committee by General Sir John Adye, the chief of the staff, who was in direct communication with the heads of all departments of the army respecting their official arrangements. This officer stated: "Even on August 25th" (that is, the day before Lord Wolseley's first visit), "when I visited the hospital, the wounded were all in bed, and surgical operations were being conducted, and I thought a great deal had been done in the way of arrangements, considering that this was an empty building, without a chair, or a table, or a bed in it, when I went there on the 22nd." And a little further on in his evidence he states: "I was very much satisfied with the great attention which the medical officers always paid to their duties, and I heard of nothing that was deficient in their arrangements, except what I considered to be inevitable from the fact that military considerations bore down upon us so heavily at the commencement that everything had to give way to them." The military considerations referred to are explained in the report. Although Ismailia had been destined from the first to be the point from which the advance upon Cairo was to be made, it was in the hands of the enemy up to the very day of its occupation; who were also threatening the Canal, through which the fleet

of transports had to pass in single file. The occupation of the Canal was a dangerous operation, and had consequently to be planned and executed with the greatest secrecy; and the report of the Commission states "no previous arrangements for organising military or medical depôts at Ismailia were possible."

Immediately after the occupation of Ismailia, it was decided to use the Khedive's palace as a hospital, and it was given over to the principal medical officer with the army, Surgeon-General Hanbury, on August 22nd. It was a large building, but destitute of all furniture, and deficient in many of the sanitary arrangements to which Englishmen are accustomed. On the same day that the building was given over to the medical department, a portion of a movable field-hospital was placed in it, and, on the following day, the remainder of this field-hospital was landed, and also disposed in the building. The men of one of the bearer-companies were employed in getting the hospital into order as fast as circumstances would allow. These men were greatly overworked, as were all the men of the Army Hospital Corps at Ismailia in the early days of the occupation. They had to land the hospital stores, and to draw them in carts to the Palace Hospital, and were employed in all sorts of fatigue duties outside the hospital, in addition to the regular duties within the hospital itself. There was no native labour available, and all the transport which was landed was devoted to military purposes, conveying munitions of war and other army stores and materials to the front. The Medical Department had no transport of its own. An engagement took place at daylight on the 24th, another on the 25th, and a third on the 28th, causing a considerable number of wounded to be brought very early to the hospital. There were also many men requiring aid for sickness of various kinds. Had the hospital-ship *Carthage* been at hand when the Khedive's palace was taken over for a hospital on August 22nd, the arrangements for the reception of the sick, who began to apply for medical aid even on that day, would have been more complete. On board the *Carthage* were not only all the establishment belonging to the vessel as a hospital-ship, but it also carried the establishments of two stationary field-hospitals. It seems necessary to explain that a movable field-hospital is a hospital arranged for moving with the troops, and is organised in the highest possible manner from military considerations. It is not provided with bedsteads or many of the articles that are to be found in the stationary field-hospitals, which are arranged to occupy positions on the lines of communication between an army and its base; and still less with the full equipment and means for feeding and treating patients which are to be found in fixed military hospitals. The patients in field-hospitals receive the ordinary field-rations, supplemented by numerous articles which are known as "medical comforts;" and, as regards the hospital at Ismailia, it is abundantly proved that, from the very first, there was a sufficiency of fresh meat, biscuit, and all essential hospital supplies. Although there were not bedsteads, pailliasse-cases, which form part of the equipment of field-hospitals, were filled with straw and used as beds, while stretchers, supported on short legs, were used for the more serious cases, and are stated to have answered remarkably well. The *Carthage* arrived at Ismailia on the evening of August the 25th, and on the 27th the movable field-hospitals, by which the Palace Hospital had been temporarily occupied, were sent away to the front, and their place taken by two stationary field-hospitals, which the *Carthage* had carried on board. Of course this change caused extra work and some inconvenience, in the early administration of the Ismailia Hospital. That the stationary hospitals and their stores were not landed on the 26th, the day after the arrival of the *Carthage*, appears to have been wholly due to the fact that no lighters could be obtained on that day for the purpose. It was during the first week, that is, between the 22nd of August, when the building was given over for hospital purposes, and the 28th or 29th of the month, that the principal difficulties were experienced. Notwithstanding the great strain which was thrown on the medical service at this time, it does not appear that anything required for the successful treatment of the sick and wounded was deficient. Between the 23rd and the 31st of August 767 cases were admitted at the Palace Hospital. After Kassassin, and up to the time when the battle of Tel-el-Kebir was fought, 200 sick would sometimes arrive during the night; and after that action, as many as 350 patients were brought down at one time. It is remarkable, under the circumstances in which the medical department was placed by the military operations in progress, that the medical service was able to meet the great and incessant strain, to which it was subjected, without the occurrence of a breakdown; but that none did occur, ample proof is afforded in the Committee's report. Besides the evidence of the military medical witnesses and others on the subject, there is the testimony of Mr. Crookshank, who was detailed for duty as a civil surgeon, in the surgical wards at Ismailia, to this effect. Mr. Crookshank, who had been recently a house-surgeon to King's College Hospital, states that the cases on their arrival at the Palace Hospital at Ismailia, were as promptly attended to as they would have been in a London hospital, the wounds carefully and regularly dressed, and that the progress made by the wounded was universally acknowledged to be very satisfactory. He saw the patients get beef-tea or milk given to them immediately on their arrival, in the central hall of the palace. He frequently looked at the diet given to the patients, and found it much the same as the diet prescribed in a civil hospital, and he heard no complaints about the food. That the general administration of the hospital was satisfactory, from a hygienic point of view, is borne out by the fact that there was no occurrence of erysipelas, hospital gangrene, or pyæmia in it, nor any outbreak of infective disease; while the ratio of mortality among the sick was exceedingly small. We must, however, defer consideration of the general medical and surgical results of the campaign in Egypt until after we have taken an opportunity of examining the manner in which the duties of the medical department were conducted at and after the battle of Tel-el-Kebir, as well as of discussing the hospital management at Cairo, on which Lord Wolseley made such unfavourable comments in the evidence which he gave before Lord Morley's Committee. Ample means of arriving at correct conclusions on these topics are afforded in the evidence, and in the report of the Committee, which the Secretary of State for War has recently presented to Parliament.

COMPULSORY REVACCINATION.

THE enormous benefits conferred on this country by the vaccination laws are so patent, that the question has often been seriously debated, not whether the compulsory clauses of the Acts should be abolished, but rather whether the laws should not be extended so as to make compulsory not only primary vaccination, but revaccination also. Through the operation of the law as it now stands, the infantile death-rate from small-pox (the larger part of which moreover occurs among the small residuum who succeed in evading the law) has become but the merest fraction of what it was before the introduction of vaccination. Among adults, however, there is still a considerable mortality from the disease, and a large proportion of such adult mortality occurs among those who have in infancy undergone vaccination. The question, therefore, arises—why should not an attempt be made to diminish also the adult mortality? That this result would be attained by making revaccination compulsory there can be no reasonable doubt. Abundant evidence exists to prove that, as efficient vaccination in infancy confers a large measure of protection against small-pox during infancy and childhood so efficient revaccination on the threshold of adult life affords a large measure of protection during the remainder of life. Isolated instances of the value of revaccination may be found scattered throughout the medical literature of the last few years. Cases in point are those related by Dr. Green in his account of the prevalence of small

pox in Gateshead, referred to in our issue of May 12th. Examples of its efficacy on a larger scale are furnished by our own army and navy, from which, through the influence of revaccination, small-pox has been practically abolished. Another proof, and a very striking one, is afforded by the contrast in respect of mortality from small-pox between the French and German armies during the Franco-German war. "In the German army," writes Dr. Carpenter in a recent letter to a contemporary, "the total number of deaths from small-pox was 263, while in the French army it was 23,469, or very nearly ninety times as great." The German army was thoroughly revaccinated; the French army (not the first army, which was annihilated, but the second, in which the excessive mortality occurred) was practically unrevaccinated. It is not enough in explanation of this very considerable difference to point to the moral effect of defeat in the case of the French army. It may be true, as Mr. P. A. Taylor asserts, "that a victorious army is almost certain to be in a moral condition more likely to escape any pestilence than a defeated and disheartened one." We are rather inclined to believe that "history" does not confirm this fact so emphatically as Mr. Taylor would have us believe. Granting, however, the full measure of power to this moral agency, we question whether anyone will have the courage to affirm that the moral difference between the two armies will satisfactorily account for the enormous difference between their small-pox mortalities. Mr. Taylor has apparently felt this difficulty, and he suggests another cause of the excessive prevalence of small-pox in the French army. He quotes a German physician (who, however, as Dr. Carpenter points out, was ignorant of the true circumstances) to the effect that the "general vaccination (in the French army) tended rather to extend the disease than to protect from it." He goes on further to point out that notwithstanding in the early days of 1870 "all Paris rushed to be revaccinated," "the deaths from small-pox were double what they had been in the aggregate of the previous ten years." Even were it the fact that "all Paris" had succeeded in being revaccinated, it would not follow that revaccination was the cause of the large prevalence of small-pox which followed. Revaccination is held to be preventive, not curative; and those presenting themselves for revaccination might have already contracted small-pox. Moreover, during such a panic as Mr. Taylor describes, there is serious danger that small-pox lymph may accidentally come to be used instead of vaccine lymph; and that, instead of being revaccinated, many may become inoculated with small-pox.

Apart from these *primâ facie* objections, however, there is the fatal objection pointed out by Dr. Carpenter, "of that lamentable 'penury' of good vaccine during the Paris epidemic, which prevented the intention of the authorities from being carried out, the supply being quite unequal to the demand, first for the civil, and afterwards for the (new) military population." It cannot, therefore be urged with success, that revaccination increased the prevalence of small-pox in Paris, nor is there any ground for the belief that this was the explanation of the greater mortality from small-pox among the French troops. There does not, indeed, appear to be any satisfactory explanation of that occurrence other than the absence of efficient revaccination.

A still more unequivocal and unquestionable proof of the value of revaccination is furnished by the experience of the small-pox asylums of the metropolis. In these hospitals, revaccination has afforded to the nurses and servants an almost absolute protection against small-pox, notwithstanding their constant exposure to its contagion. This immunity cannot be explained on the plea that the nurses and servants are protected by having already had the disease, because only a very small proportion have actually been so protected. Nor can it be explained by that mysterious agency, "tolerance," which some antivaccinationists have confidently evoked. Apart from the difficulty of explaining how the contagion is so good as to hold itself in check till "tolerance" has been established, there is the objection that no "tolerance" exists in the case of the other infectious diseases. Nurses who are not protected by a previous attack, contract scarlet fever when they nurse patients suffering from that fever. Attendants on typhus fever patients also, almost without exception, contract that disease; and we may mention, as exemplifying this fact, that, in the Eastern District Fever Hospital, during the last two winters, no fewer than fourteen of the staff contracted that fever, two of those attacked dying. Moreover, when small-pox attendants are not protected by vaccination, no "tolerance" exists for them; and, in our experience, such attendants as have succeeded in evading revaccination have invariably contracted the disease. The fact, therefore, is, that hundreds of persons, with no protection except that of efficient vaccination and revaccination, have been daily and hourly exposed to the contagion of small-pox, with almost perfect immunity; but, if so great a measure of protection be afforded to the members of small-pox hospital staffs, it may surely be expected that a large measure of protection would be afforded by the same means to the general public. We are convinced, therefore, that, if revaccination were made compulsory, the adult small-pox mortality would speedily undergo a diminution as great as that which, through compulsory primary vaccination, the infantile small-pox mortality has already undergone.

THE inaugural address for the next session of the Midland Medical Society will be given by Mr. Jonathan Hutchinson, F.R.S.

IN consequence of the greatly increased number of students attending the classes at the University of Durham College of Medicine, the anatomical department has been reorganised, the joint lectureship and demonstratorship having been combined into a single chair of anatomy. To this post Dr. W. P. Mears has been appointed.

DR. CRAWFORD, Director-General of the Army Medical Department, will take the chair at the introductory lecture at the Parkes Museum, given by Professor De Chaumont, F.R.S., this (Friday) afternoon, at 5 P.M. On Thursday, June 7th, at 8 P.M., Dr. J. C. Steele, of Guy's Hospital, will give a lecture, which will be illustrated by models, on the Management of the Sick-room.

THE annual dinner of the Army Medical Department took place, at the Inns of Court Hotel, on May 25th. One hundred and eleven officers—past and present—sat down, under the presidency of the Director-General, T. Crawford, M.D.; the vice-chair was occupied by Inspector-General R. Lawson (retired). The guests were Sir J W. Reid, K.C.B., Director-General of the Navy; and Sir Joseph Fayrer, K.C.S.I., of the Indian Medical Service.

IN addition to the collections prepared by Dr. Cobbold and others now exhibited in the International Fisheries Exhibition, a new series of preparations illustrating the diseases of fishes and the parasites attacking them, will be on view in the Russian section directly that department is opened. The collection has been formed by a Polish scientist, M. Girdwoyn, author of the *Pathologie des Poissons*, a valuable work, published at Paris in 1880, and chiefly treating of diseases of the ovum and embryo. Several rare parasites, peculiar to fishes found in the large rivers of Poland and Russia, are included in the series.

CONFIDENCE IN THE PROFESSION.

THE following story, told in connection with a terrible outbreak of cholera on board an emigrant steamer, illustrates a remarkable degree of confidence in the profession. The deaths on board were so numerous that, for the purpose of indicating to the boatswain em

ployed in removing the dead for burial, a cross was chalked against the berths where the corpses lay. By mistake, the fatal mark was attached to a berth where the inmate was engaged in a sound sleep. On the boatswain seizing him by the legs for removal, the intended victim called out loudly that he was not dead, but asleep—a remonstrance which drew from the old Scotch sailor the rejoinder, "Tut, tut, mon; the doctor knows better than you;" and who forthwith proceeded to endeavour to execute his commission.

YELLOW FEVER.

DR. DOMINGOS FREIRE of Rio de Janeiro has recently reported experiments in which he has communicated yellow fever to fowls and guinea-pigs, primarily by injection of blood from the heart of a deceased patient, afterwards by transmission from one animal to another, and also by confinement of a guinea-pig for five days over earth from the grave of a yellow-fever patient buried a year before. In consequence of his representations of the great peril created to public health by the inhumation of persons dead of yellow fever, the Minister of the Empire has, according to the *Anglo-Brazilian Times*, ordered the Director of Public Works to proceed to the erection of a furnace at Jurujuba, for the purpose of cremating the bodies of those who die there of yellow fever in the hospital, in whose neighbourhood, in fact, yellow fever has now appeared among the local population.

THE SANITARY INSTITUTE OF GREAT BRITAIN.

As previously mentioned in the JOURNAL, it has been decided that the next meeting of the above Association shall take the form of a Congress, to be held in Glasgow next September. A committee was appointed to make all necessary arrangements, and from the report they have just issued nothing has been left undone to make the gathering a success. The Congress will open on September 25th, and terminate on the 29th; and the scope of its labours is to embrace a wide field, as it will take up not only sanitary science and preventive medicine, but engineering and architecture, chemistry, meteorology, and geology in their relations to public health. It is also intended to hold a Sanitary Exhibition of articles and appliances illustrative of the latest advances in sanitary science. The expenses of the Congress are estimated to amount to £1,500, but there should be no difficulty in raising this sum, looking to the many advantages that are likely to accrue to a city like Glasgow from having such a gathering in its midst.

THE SPREAD OF CONTAGION BY DEAD BODIES.

THE Boston Board of Health (*Boston Medical and Surgical Journal*, May 10th) has recently issued a regulation, which might be copied with advantage by sanitary authorities in this country. According to this regulation, the bodies of all persons who have died of smallpox, scarlet fever, diphtheria, or typhus fever must immediately be wrapped in a sheet, saturated with a solution (10 per cent.) of chloride of zinc, and placed in an absolutely tight coffin, which is not to be re-opened. With a similar view, a Bill has just been passed by the Legislature of Massachusetts, at the request of some railway companies. The Bill forbids the transportation through the State of bodies dead of certain contagious disorders, unless they have been so incased and prepared as to preclude any danger of the communication of these diseases through their agency. The diseases named in the Bill are the same as those enumerated in the regulation above referred to, save that "typhus" is replaced by "typhoid." This substitution seems to have been made under the mistaken impression that "typhus" and "typhoid" are synonymous terms. Although we are not prepared to agree with our contemporary, from whom we quote, that "the remains of a person dying of typhoid fever" are "harmless," we are quite of opinion that the omission of such a highly contagious fever as typhus is greatly to be regretted.

HEALTH LECTURES AND EXHIBITION.

THE National Health Society's Exhibition of Hygienic Dress and Sanitary Domestic Appliances and Decorations opens on Saturday, June 2nd, at Humphrey's Hall, Knightsbridge, and will remain open during the next fortnight. It includes a great variety of interesting and useful sanitary articles. The following is the list of lectures to be delivered each day at four o'clock. The admission is free. June 4. Professor Corfield, M.D.: Mistakes about Health. June 5. Professor De Chaumont, F.R.S.: Food. June 6. T. Pridgin Teale, Esq., F.R.C.S.: Dangers to Health. June 7. Ernest Hart, Esq.: Smokeless Fires and Economical Fuel. June 8. Mr. Wynter Blyth (Medical Officer of Health for Marylebone): Disinfectants. June 9. Professor Flower, F.R.S.: Fashion and Deformity. June 11. Captain Douglas Galton, C.B., F.R.S.: Steam Heating. June 12. Miss Lückes (Matron London Hospital): Sick Room Appliances. June 13. Dr. Percy Frankland: Water. June 14. Henry Carr, Esq.: Our Domestic Poisons. June 15. Lewis Day, Esq.: Common Sense House Decorations. June 16. Dr. Andrew Wilson (Lecturer in the Edinburgh Medical School): Our Unbidden Guests; A Chat about Food; Parasites, and How to Avoid them. A second course of lectures on similar subjects will be delivered at two o'clock, on days to be announced hereafter, by Dr. J. J. Pope; John Slater, Esq., F.R.I.B.A.; W. Eassie, Esq., C.E.; R. S. Moncrieff, Esq. Frequent cookery demonstrations, also free, will be given from day to day. The admission to the Exhibition is one shilling, and on Wednesdays half-a-crown.

MALARIA IN ITALY.

THE Italian Ministry of War has, we read, had prepared for the use of the military authorities a statistical map, showing the extension and relative intensity of malaria throughout the peninsula. This map has been compiled from an exhaustive series of sanitary observations that have been carried on for years in all the provinces of the kingdom. Italy is divided into sixty-nine provinces, of which only six are completely free from this scourge, while it is felt with great severity in twenty-one. It is estimated that 40,000 men, or more than 10 per cent. of the army, are annually victims, many fatally, to malaria; and the annual cost of special hospital arrangements to meet this amounts to over 10,000,000 francs. The general damage to the whole population from the ravages of this plague must be very great, if we remember that it strikes down hundreds of thousands of working men at the most industrious period of their lives, and that it is the tangible cause why many districts are allowed to remain barren and uncultivated. It is noteworthy that malaria seems to have increased both in extent and intensity with the development of railways. This is attributed to the large excavations which are allowed to remain unfilled, becoming in time the seats of stagnant pools or marshes. There are some of the Italian lines which have acquired the reputation of being permanent homes of malarial fever, so that the strongest constitutions cannot resist its continuous attacks. Hence there is great difficulty in securing the supply of personal service necessary to fill the gaps that are being perpetually made by this insidious disease.

POST HOC, PROPTER HOC.

WE reported last week a death after vaccination in the St. Pancras district, which the coroner's jury considered to have some obscure connection with that operation. We confess that the proof on this point was not convincing, and we think a few remarks on the case will not be out of place. It is to be noticed that death occurred three weeks after vaccination. It was preceded (which we omitted to state in our first notice of the case) by convulsions; the punctures on the arm were healed, with the exception of one, which was healthy; there was no erysipelas, no sign of septic enlargement of glands, no outward sign of disease. The internal organs were healthy, except the brain, which was deeply congested. This congestion, however

was not bright and arterial, but dark and venous. There was also a slight opacity of the basic meninges, a condition not essentially pathological. Now it is remarkable that, though the brain and its membranes were seen and examined by half a dozen medical men, and its congested condition generally admitted, to only one of these, and that one not the maker of the *post mortem* examination, did the basic opacity appear to constitute a proof of meningitis. Nevertheless, the jury allowed the solitary opinion to surmount that of the other medical witnesses collectively, though among these were men equally competent to diagnose such a simple matter of cerebral pathology. With proof of this kind in a case of death occurring at a time when properly-performed vaccination had reached its normal termination in the healing of the punctures, we cannot but think that here the decision of *propter hoc* with respect to the vaccination has been given when *post hoc* alone was warranted. To our mind, the history and appearances present merely the usual signs of a death from convulsions, of which the passive cerebral congestion is particularly characteristic. The cause of the seizure need not puzzle us to find, when we consider the frequent exposures to cold and the omnipresent errors in diet to which the children of the poor are subject. We should certainly have expected that, if vaccination had to do with it, the attack would have occurred during the onset, or at the height of the vaccine fever, though even at that time highly improbable, and not at the completion of convalescence. In this case the jury, in a measure just, added to their verdict a statement that the vaccination had been properly performed. So far good. Less they could not have said; but in the meantime a medical man, Mr. Claremont, who has conscientiously done his duty, has had his name dragged into disagreeable prominence in connection with a death, the cause of which has not been satisfactorily shown, and for which neither he nor vaccination is accountable. We may end with expressing a hope that the public mind in dealing with this question may bring to it more judgment, if not more technical knowledge, than the jurymen of St. Pancras.

ANTIVACCINATION LOGIC.

On the evening of the 21st instant, Dr. Henry Tomkins, of the Manchester Fever Hospital, read a paper on "The Amount of Protection afforded by Vaccination against Small-pox," at the rooms of the London Society for the Abolition of Compulsory Vaccination, 114, Victoria Street, Westminster. Dr. Tomkins pointed out that the vaccination question was one affecting not the medical profession merely, but the whole community, and every citizen had a right to form an opinion on the subject. For his own part, he was strongly in favour of vaccination, and he had had practical experience of its utility. During the period he was in charge of the Fever Hospital at Manchester, he had had 1,138 cases of small-pox under his care. Of these, 932 had marks of vaccination, and 96 had never been vaccinated, while 46 were said to have been vaccinated, but showed no marks, and in 64 he could obtain no information as to vaccination. Of the 932 vaccinated cases, 86 died, giving a mortality of about 9 per cent.; of the 96 unvaccinated cases, 60 died, giving a mortality of about 62 per cent. Dr. Tomkins further declared that he should uphold vaccination in every shape and form, and that, if repeated after proper intervals, no man need be afraid of dying from small-pox. He concluded by moving that "in the opinion of this meeting, vaccination properly performed has the power, for a limited number of years, to protect mankind almost absolutely from death from small-pox." An amendment, moved by Mr. Young, the secretary of the Society, was, however, carried unanimously. The amendment affirmed that the statistics adduced by Dr. Tomkins demonstrated (!) the failure of vaccination to protect against small-pox. We presume that, in the presence of their author, even such an ardent antivaccinist as Mr. Young scarcely felt equal to following the usual discourteous tactics of his fellow agitators by impugning the good faith of the statistics. Granting the good faith of Dr. Tomkins's statistics, the inference which alone can be drawn from them is certainly not that contained in the amendment. It is idle, however, to expect logic from determined hobby-riders. The passing of Mr. Young's wonderful amendment unmistakably justifies the language in which a lay contemporary recently wrote of the antivaccinist agitation. "We know," observed the *Globe*, "that the original objection to compulsory vaccination, like objections to other legislation in the interest of the public health, was based upon sentiment, and that facts are duly taken into account by the objectors when they seem capable of being twisted to their own purpose."

ROYAL ALBERT ASYLUM, LANCASTER.

Dr. T. B. Wilbur, well known as the able Superintendent of the New York State Idiot Asylum, died suddenly on May 1st, of heart disease. From the report of a meeting of the Syracuse Medical Association we take the following remarks by Dr. Pearce, which give an idea of the estimation in which he was held by his professional *confrères*. "There is much to be said of Dr. Wilbur. He belonged not only to this continent, but to all others as well. He represents the highest achievements of human effort on behalf of the feeble-minded; and pioneer as he was in the establishment of institutions for improving and rendering useful a class of people who had previously been regarded as utterly beyond the pale of educational influences, he lived to see the best sympathies of race enlisted in his work." Dr. Wilbur was born in 1820.

ALLEGED DEATH FROM VACCINATION IN ST. PANCRAS WORKHOUSE.

On Saturday last Dr. Danford Thomas resumed an inquiry (adjourned from May 17th) as to the death of the infant child of Rosina Walsh, whose death, it was alleged, had been caused or accelerated by vaccination. On the first day of the inquest the jury had before them the evidence of the mother and of Mr. C. C. Whitefoord, who had attended the child previously to its death. According to the statement of the mother, the child had been born in St. Pancras Workhouse on February 9th, and on the following day, both she and the infant were vaccinated by the medical officer. She remained in the house three weeks after the child's birth. On Sunday, March 11th, the child became ill, and she took it to Mr. Whitefoord, who prescribed for it. After that date it gradually grew worse, and on May 13th it died. The child had been fed on half a pint of boiled milk daily, and a biscuit and a half. Mr. Whitefoord stated that he had seen the child on March 11th, and again on May 12th. In his opinion death had been caused partly by the vaccination of the mother, which had stopped the flow of milk, and partly by the vaccination of the child, which had set up chronic blood-poisoning. The only evidence of blood-poisoning was the anæmic condition of the child. He thought that half a pint of milk in twenty-four hours was sufficient nourishment for a child under one month old. On the resumption of the inquest on the date above mentioned, Mr. Dunlop gave evidence as to the performance of vaccination. Dr. S. J. Sharkey, who had conducted the *post mortem* examination, stated that he found the child extremely emaciated; there was nothing abnormal about the vaccine scars, and death had been caused by inanition, there being no evidence whatever of blood-poisoning or irritation, or improper feeding. He was strongly of opinion that revaccination had nothing to do with the failure of the mother's milk. Corroborative evidence was given by Dr. G. C. Henderson, and by Dr. Livingstone. After long deliberation, the jury returned a verdict to the effect "that the deceased died from inanition or wasting, caused by the absence of the mother's milk, and want of proper nourishment." They strongly condemned the revaccination of the mother at so early a date after her confinement, and they desired to call the attention of the Local Government Board and the Board of Guardians to the case. They further expressed their opinion that the mother "did her best for the child."

THE BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixty-first annual meeting of the Birmingham Medical Benevolent Society was held on May 25th. The following officers were elected for the ensuing year: *President*, Mr. William Smith (Redditch); *President-elect*, Mr. Sampson Gamgee; *Vice-Presidents*, Mr. R. B. Nason (Nuneaton) and Mr. Lloyd Owen; *Directors*, Dr. Baker (Leamington), Dr. Foster, Mr. Marriott (Leamington), and Mr. Solomon; *Treasurer*, Mr. Bartleet; *Treasurer and Secretary*, Dr. Sawyer. The annual report showed a prosperous and active condition of the Society's affairs. During the year 1882, the sum of £405 was expended in grants to disabled and distressed members, and to the widows and children of deceased members. At the end of the year, the invested funds amounted to £10,136. After the meeting, the members dined together at the Grand Hotel, Dr. Bassett occupying the chair, and Dr. Sawyer the vice-chair. The toast of the evening, "Prosperity to the Society," was given by Mr. Sampson Gamgee in an eloquent speech. The directors made an earnest appeal for new members. The roll of the Society contains only 249 names, although the work of the Society extends over an area containing about 3,000 medical practitioners. Any registered practitioner, "regularly practising his profession," and living within fifty miles of Birmingham, is eligible for membership; and members do not lose their privileges by removal beyond the radius prescribed for their admission. The annual subscription is one guinea, and this payment ceases when twenty-one subscriptions have been completed. The financial position of the Society is sound and secure. The directors, by prudent management, have accumulated an invested capital of upwards of ten thousand pounds, which is placed in the charge of well-known professional trustees. This considerable sum, by the laws of the Society, must never, on any account, be diminished; the interest arising from its investment, together with all donations, may, at the discretion of the directors be given to suitable applicants. The working expenses are exceedingly small. The Honorary Secretary will gladly afford information to applicants for membership or relief, and gratefully receive and acknowledge donations. The brethren in the Midlands, whether providently or benevolently disposed, or both, ought not to forget the claims of this old and useful Society.

DISEASES OF THE KIDNEYS WITH REFERENCE TO THE ADMINISTRATION OF ETHER.

IN spite of a vast and increasing experience in the use of anæsthetic agents, our knowledge of their real action and dangers progresses but slowly. Sadly familiar as we are with the perils of chloroform, we have still much to learn as to the special dangers of ether, which has of late come for the second time into general use. Dr. Van Santwood, of New York, has recently collected a number of cases in which death occurred soon after the administration of ether, and was attributed, at all events by the surgeons in attendance, to the kidneys of the patient being seriously diseased. From time to time during the past few years attention has been drawn in our columns to this possibility, and in the list of deaths from anæsthetics, which have periodically been published, the note "Kidneys Diseased" appears nearly as often as the "Fatty Heart," so frequently the apparent cause of death from chloroform. Dr. Van Santwood draws attention to the remarkable observation by Mr. Lawson Tait of the suppression of urine during etherisation, which he had noticed in several patients operated on for vesico-vaginal fistula, a statement which calls for renewed observations, and then proceeds to remark on eleven cases of death after the administration of ether in which disease of the kidney, verified by the necropsy, attended by coma, convulsions, and other symptoms of uræmia, appeared to be the main cause of death. It is to be regretted, however, that in so important a subject the details should be so scant. Six of the cases are merely referred to as having occurred in the gynecological practice of Dr. T. A. Emmett, particulars being given of one only of these, in which the operation was that of incision into the bladder for chronic cystitis. Two more cases are those referred to by Dr. M. Sims, in an article on deaths from ethylic chloride; two more occurred in the practice of one ophthalmic surgeon, after operation for cataract, in a child and an aged woman, respectively; another occurred in an aged man, the subject of cancer of the glands of the neck. This last, Dr. Van Santwood attempts to explain by the theory that the ether disabled a heart only just able to drive the blood through the hypertrophied arterioles of a contracted kidney; but it is difficult to see how this argument would not apply with greater force to the case of chloroform, in the pathological record of which renal disease does not figure so frequently as in that of ether. Dr. Van Santwood acknowledges the difficulty of explaining the rest of the cases, but refers to the well-known fact, brought prominently under the notice of the profession in Sir James Paget's lectures, of the frequent failure of operations in the subjects of renal disease, and suggests that this experience may possibly be partly due to the influence of the anæsthetic. However this may be, there appears to be ground for a more careful investigation of the subject, both in the way of observation and of experiment. We cannot urge too strongly, first, the careful noting of all cases where symptoms of renal suppression or irritation, whether fatal or not, follow at a short interval the administration of ether; secondly, a complete examination, microscopic and otherwise, of the kidneys of every fatal case, especially if renal symptoms were noted. Lastly, there should be undertaken a series of experiments on the effect of ether; on animals, with special reference to this point, not only healthy animals being observed, but also those in whom nephritis has been induced by the action of cantharides or otherwise, as in M. Cornil's recent investigations into the lesions of albuminous nephritis. Pathological experiment has given much valuable information on the action of chloroform, and has indisputably established its power by depressing the action of the heart, showing it to be far inferior to ether as regards this danger. There ought to be little difficulty in ascertaining if the latter anæsthetic has really any action on the organs of excretion.

REPORT OF THE METROPOLITAN BOARD OF WORKS.

THE Report of the Metropolitan Board of Works is always important, dealing, as it does, with many matters which affect the health and comfort of the enormous population of London. After enumerating the various powers conferred upon the Board by the Legislature, the report refers to sewers now in progress and to others recently constructed, and especially to the overflow-sewers which are being made to prevent the overflow of storm-water from overcharged main sewers in several parts of London. Much injury to health and property has, at times, occurred from these floodings, which will in future be prevented. The report also refers, at some length, to the origin of the Royal Commission, now sitting, on the pollution of the Thames by the Metropolitan sewage, and records a protest against the presence of Professor Williamson and Mr. Abernethy on the Commission, because they have already taken a prominent part in opposition to the existing arrangements. After noticing the progress made as regards new streets, the report proceeds to set out the new powers conferred on the Board by the Amended Artizans and Labourers' Dwellings Act, which will assist in removing some of the great difficulties that have prevented the Board from clearing injurious sites, and letting the ground for building new artizan dwellings. There is no doubt that considerable injury to health and morals has arisen from the present crowded state of the dilapidated houses occupied by the lower working classes; but it is somewhat doubtful if the erection of new dwellings on the same sites will materially assist in counteracting these evils, as it is found by experience that only a small proportion of the old inhabitants find their way to the new dwellings, especially, if by so doing, they have to place themselves in any way under control. However that may be,

it is now proposed that the "dispensing power" may reduce the provision of dwellings for the working classes to one half of the number of such displaced inhabitants. Vestries and Boards of Works can also take action when their medical officer certifies that a group of less than ten houses should be dealt with under Torrens's Act. The Metropolitan Board has also had additional powers conferred upon it by the Metropolitan Building Amendment Act, which, amongst other things, enables the Board to prevent the building of new streets which do not communicate with other streets at each end. Also, if a magistrate shall order a building, set up in advance of the line of frontage, to be pulled down, or a dilapidated house to be repaired or demolished, the Board will now be able to carry out the order at the expense of the owner, if he should neglect to do the necessary work. This is a very important sanitary enactment, as it will enable the Board to deal in a summary manner with single or small blocks of dilapidated houses which are too few in number to be included in a scheme for an unhealthy area. The inspection of cowsheds and dairies seems to be actively carried out, as no fewer than 14,201 persons have been registered as dairymen, including 931 cow-keepers, whose sheds have also been inspected more than once during the year. As 14,479 inspections have been made during the year, it is evident that several dairies cannot have been visited, which shows either that the staff is too small, or that some have been inadvertently omitted. The inspection of slaughter-houses and offensive businesses also entails much work and considerable responsibility on the officers of the Board, as 8,568 inspections and reports were made, 6,567 of which related to slaughter-houses, and 2,001 to offensive businesses. The number of slaughter-houses now licensed in the Metropolis is 883; so that, on an average, each must have been inspected nearly eight times in the year. Eleven applications have been made for new slaughter-houses, but only two were granted. As regards the other offensive trades, it is stated that manure-manufacturers, blood-driers, fat-melters, and others, have generally carried on their business to the satisfaction of the Board, but that some have been summoned, and their works temporarily suspended, for neglecting to make the necessary alterations in their premises. More active measures than those previously adopted have been carried out during last year for the protection of infant life, so that 312 inquiries have been made respecting persons who advertised for the care of children. The police, registrars of births and deaths, relieving officers, and others, have been supplied with forms upon which to communicate to their inspector information concerning suspicious cases, and 102 inquiries have been made in consequence of these communications, This shows a great advance on the work done in former years, especially as prosecutions were successfully instituted against several persons who had infringed the provisions of this act. Altogether, in a sanitary point of view, the report is very satisfactory, especially as the already large number of open spaces, containing nearly 1700 acres, has been increased during the year by the addition of Peckham Rye, Goose Green, and Nunhead Green, which make up the goodly number of 1,769½ acres, under the care, and in the custody of, the Board. The amount spent on parks and open spaces last year, partly for maintenance, but chiefly in payments of the nature of capital, was £59,022.

THE REOPENING OF THE PARKES MUSEUM.

THE Parkes Museum was reopened by His Royal Highness the Duke of Albany on Saturday morning last, May 26th. His Royal Highness was supported by a large number of distinguished men, including the Duke of Westminster; Earl Granville; Lord Mount-temple; Lord Reay; Sir E. Lechmere, M.P.; Sir Joseph Fayrer; Mr. Sclater Booth, M.P.; Mr. Edwin Chadwick, C.B.; Mr. Robert Rawlinson, C.B.; General Cotton, R.E.; and Dr. Wilson Fox. The Report of the Council of the Museum was read by Captain Douglas Galton, C.B.; it gave an account of the gradual development of the Institution; but, to our readers who have been kept informed of the progress of the Museum from time to time, this would be a recapitulation. Sir Charles Dilke (President of the Local Government Board) made a short telling speech, in the course of which he referred to the words in the report, which were evidently, he said, carefully chosen, to distinguish between a mere exhibition and a museum. The greatest danger attending the formation of a health-museum was, that it might become merely a place for advertising trade wares, a place where apparatus were exhibited, not so much with the view of improving public health, as with a view of selling the goods. Sir Charles Dilke, in this part of his speech, dealt with a very difficult subject, and put the issues very clearly before the audience. The Council of the Museum are, as has been already sufficiently shown, fully awake to their duties in this respect; but constant vigilance must be exercised in order to keep the Museum a really representative collection of apparatus illustrating a variety of principles, and, therefore, suitable for purposes of instruction. In concluding his speech, the President of the Local Government Board said that, in the discharge of his office as administrator of the Public Health Acts throughout the country, his mind was sometimes almost filled with despair, so enormously extended was the field; and he was impressed with the great importance of facilitating the working of these laws by bringing home to the minds of the people the purposes for which the laws were imposed by the Legislature. Sir Charles Dilke was followed by Professor Tyndall, who spoke with his accustomed eloquence about the germ-theory of disease, taking a good deal for proved that is still matter of discussion, but undoubtedly putting the theory of contagion with a directness and simplicity well calculated to impress the public mind. He referred to a fact not generally known, namely, that in founding, in 1800, the Royal Institution of Great Britain, Count Rumford had in view, as a portion of his project, something closely similar to what the Council of the Parkes Museum were attempting to realise. Mere descriptions were insufficient to interest and instruct the public, who demanded something tangible and visible, and a collection of models and apparatus supplemented by oral instruction; and, to meet this want, he said that he was glad to see that the Parkes Museum had organised courses of appropriate lectures. There was good hope that the scheme, which failed of realisation eighty years ago, might now succeed, for the interval had been a period of latency, during which the public mind had been slowly permeated, and had come to understand the vast importance of the science of hygiene. The Archbishop of York followed with a characteristic speech, in which humour and practical wisdom were pleasantly mingled, and touched upon the true meaning of the fact brought out by the Registrar-General's Returns, namely, that two years had been added to the average duration of life; nothing, he said, could better prove the vastness of the field before the sanitary reformer, since such reform would not only increase the quantity, but also the quality of life would be improved. The Duke of Albany, in an admirable and comprehensive address, which showed a firm grasp of the important points of his subject, said that, through the labours of many eminent men in the past generation and in this, we had now advanced some way towards an accurate knowledge of the conditions necessary for health. Most of these conditions had long been familiar to the few; it was the object of such an institution as the Parkes Museum to make them familiar to the many In crowded centres of population, the complexity of life reached a maximum, and the necessity for attention to hygienic laws became more and more evident, lest the very increase in luxury and convenience might lead to increased danger. His Royal Highness went on to instance our system of sewerage, which, while a great and necessary convenience, yet brought us to encounter the difficulty of keeping the air of the sewers out of our dwellings; our system of gas-lighting, which, for its wholesome use, involved questions of ventilation which scarcely troubled those who were content with the comparative dimness of a candle. An open fire was one of the

chief luxuries of a Briton, but the collected smoke of the fires of four millions of people had become a nuisance too grievous to be borne, and one for which a remedy must be sought. After reference to the intention of the Council of the Museum to arrange for the systematic instruction of plumbers, and other artisans engaged in the building trades, to the admirable food-collection presented to the Museum by Mr. Thomas Twining, and to the library of reference which had been formed, His Royal Highness said that the sole object of those who had laboured for the establishment of the Museum was to disseminate a knowledge of the laws of health, and that they were ready in any way in their power to help others who had the same end in view. His Royal Highness concluded by paying a warm tribute to the memory of the man in whose honour the Museum had been founded—Edmund Alexander Parkes, the first professor of hygiene in this country. A vote of thanks to the Duke of Albany was moved by Sir Spencer Wells, and seconded by Professor Acland of Oxford, who spoke of his friendship with the late Dr. Parkes, and of Parkes's many public and private virtues. At the close of the meeting, it was announced that the honorary secretary (Dr. Dawson Williams) had just received a telegram from Professor Virchow of Berlin, in the following terms: "My warmest wishes for the growth of your admirable institution." A letter was also read from the Marquis of Hartington, who spoke of his appreciation of Dr. Parkes's services to the Army Medical Department, and of the useful character of the Museum founded in his honour. The Museum open daily from 10 A.M. to 7 P.M., and on Mondays and Saturdays to 9 P.M. The lecturers for this summer session are Professor De Chaumont; Dr. Steele of Guy's Hospital; Professor Corfield; Mr. Rawlinson, C.B.; Mr. E. C. Robins, F.S.A.; Mr. Rogers Field, M. Inst. C.E.; Dr. C. H. Ralfe; and Captain Douglas Galton, C.B. The lectures, with the exception of the Introductory Lecture (on June 1st) by De Chaumont, Professor of Hygiene in the Army Medical School at Netley, will be given each Thursday evening, at 8 P.M., and will be followed by discussions. The arrangements for the lectures of the summer session are as follows: On Friday, June 1st, at 5 P.M., Introductory Lecture by Professor F. de Chaumont, M.D., F.R.S., Professor of Hygiene in the Army Medical School: "A Sketch of the Origin and Development of the Science of Hygiene;" and on Wednesday, June 13th, at 5 P.M., Professor T. Hayter Lewis (Emeritus Professor of Architecture in University College) will give a special address on "The Employment of Artistic Materials in the Architecture of Houses and Hospitals." Professor Lewis has given much attention to this subject, and will illustrate his address by reference to objects in the Museum. The ordinary lectures of the session will be given every Thursday evening, at 8 P.M., up to July 19th, as follows: June 7th, at 8 P.M., Dr. J. C. Steele on "The Management of the Sick-room." The lecture will be illustrated by models.—June 14th, at 8 P.M., Professor W. H. Corfield, M.D., on "Common Defects in the Sanitary Arrangements of Houses, and their Remedies.—June 21st, at 8 P.M., Mr. Robert Rawlinson, C.B., C.E., on "The Hygiene of Armies in the Field."—June 28th, at 8 P.M., Mr. E. C. Robins, F.S.A., F.R.I.B.A., on "Hospital Construction." The lecture will be illustrated by drawings and plans.—July 5th, at 8 P.M., Mr. Rogers Field, B.A., M.Inst.C.E., "A Description of the New Drainage carried out at the Museum, with Demonstrations of Sanitary Appliances in Action."—July 12th, at 8 P.M., Dr. Charles Henry Ralfe, on "The Hygiene of Schools."—July 19th, Captain Douglas Galton, C.B., R.E., on "Recent Improvements in Artificial Lighting, and their bearing on the Purity of Air in Rooms." The lectures will be followed by discussions. The fee for admission to each section is sixpence; for the whole course, half-a-crown.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

MR. HENRY POWER, F.R.C.S., commenced his course of three lectures on the Protecti and Lacrymal Apparatus of the Eye on May 30th. The following are the subjects of the lectures for this day (Friday) and Monday next. Friday, June 1st: The disposition of the protective and lacrymal apparatus in Mammalia; special characters of the Harderian glands of Rodents; the Meibomian follicles; the lacrymal bone and naso-lacrymal passages in various animals; disposition of the parts in Man; relative and minute anatomy of the lacrymal gland; form and structure of the canaliculi, lacrymal sac, and nasal duct; attachments of ciliary portion of the orbicularis muscle and of Horner's muscle. Monday, June 4th: Nervous and vascular supply of the lacrymal gland; effects of direct stimulation of the gland through fifth nerve and through sympathetic nerve; reflex stimulation of the gland; influence of blood-pressure and of poisons; chemical composition of the Harderian and lacrymal secretions; mechanism by which the tears are caused to flow from the conjunctival sac into the nose; total quantity and uses of the tears; development of the glands and naso-lacrymal duct. Mr. Power will be succeeded by Mr. Frederic S. Eve, the "Erasmus Wilson Lecturer," who will deliver three lectures on the Pathology of Cysts and Cystic Tumours. The following is his syllabus. I. Wednesday, June 6th: Classification of cysts; description of different varieties in various organs and structures. II. Friday, June 8th: Cysts of misplaced or persistent fœtal structures:—Dermoid and allied cysts; relation to teratomata; congenital sacral tumours. Congenital serous cysts. Cysts of urachus, omphalo-mesaraic duct, great omentum, etc. Of remains of Wolffian duct and body in male and female, and of Müller's duct in male; cystic tumours of ovary. III. Monday, June 11th: Cystic tumours of the breast and testicle. The lectures will be illustrated by specimens from the museum, and by diagrams; and microscopic specimens will be demonstrated after each lecture. Professor Jonathan Hutchinson will commence his course of six lectures on Certain Diseases of the Nose on the 13th instant.

SCOTLAND.

DEATH FROM THE BITE OF A HORSE.

AT Airdrie, a man named Torrance, the chief of the horse-drivers at Monkland Iron Works, was on Tuesday, last week, bitten in the arm by a horse so severely, that on Friday, in the same week, he died from its effects.

THE NORTHERN INFIRMARY, INVERNESS.

AT the annual general meeting of the Northern Infirmary, held at Inverness last week, it was stated that unfortunately the expenditure during the year has exceeded the income by over £700, the income having been £1,474, and the expenditure £2,200. However a legacy of £360 will help to make up, and it has been resolved to appeal more vigorously to the public for the necessary pecuniary support, and a committee has been appointed for the purpose.

THE CHAIR OF MEDICAL JURISPRUDENCE IN ABERDEEN.

Two candidates from Edinburgh for the chair of Medical Jurisprudence in Aberdeen University have to be added to the six already in the field. These are Dr. Matthew Hay, at present assistant to the Professor of Materia Medica in Edinburgh University, and Mr. H. Aubrey Husband, M.B., Lecturer on Medical Jurisprudence in Edinburgh.

UNIVERSITY OF EDINBURGH BUILDING FUND.

THE second list of subscribers and their subscriptions was published on Saturday; the sum already announced amounts to about £30,000. At a meeting of the Society of Writers to the Signet in Edinburgh, held on Tuesday, it was agreed to give a donation of £250 to the building fund, and a hope was expressed that other

public bodies would see their way to give subscriptions for an object so well deserving the support of all in Edinburgh, and many resident elsewhere.

LOCH KATRINE WATER.

THE monthly report for May of the quality of Loch Katrine water has been issued by Professor Mills, of Anderson's College. The results are returned in parts per 100,000: Total solid impurity, 3.12; organic carbon, 0.130; organic nitrogen, 0.017; nitric nitrogen, 0.008; ammonia, 0.000; total combined nitrogen, 0.025; hardness, 0.95; chlorine, 0.67. The water, which was sampled on May 15th, was light-brown in colour, and contained very little suspended matter.

THE PROPOSED OBSERVATORY ON BEN NEVIS.

ARRANGEMENTS have been completed by Mr. Wragge for carrying on the work of the station this summer during his absence. Good progress has been made in obtaining the £5,000 required for building and equipping the proposed new building on the summit of the mountain. A meeting was recently held at Greenock in furtherance of the project, and very gratifying promises of support were received. In connection with this subject, it may be pointed out that of the fund of £10,000 granted *per annum* by Government for meteorological purposes, only £100 reaches Scotland, which certainly seems a meagre share to apportion to that country.

SCHOLARSHIPS IN EDINBURGH UNIVERSITY.

THREE of the Vans Dunlop Schlarships (which are each of the value of £100, and are tenable for three years) have been awarded after competitive examination in Edinburgh University. One is to Mr. George L. Galland, M.A., B.Sc., after examination in natural history (including geology) and botany; one to Mr. F. H. Simmons, after examination in anatomy, physiology, materia medica, and pathology; and one (which has been resigned by its previous holder) to Mr. M. S. Altounian.

FIFESHIRE MEDICAL ASSOCIATION.

THE Fifeshire Medical Association held its first business meeting on Saturday, May 12th, in Kirkcaldy. Dr. Lumgair, President of the Association, occupied the chair, and there were present members of the profession from all the districts in Fifeshire. The president gave a short opening address, and pointed out the objects of the Society; he then exhibited a case of mercurialism. A paper was read by Mr. Bell, of Dunfermline, on tracheotomy, which was afterwards fully discussed. It was agreed to petition against the clause in the Universities Scotland Bill, which menaced the Faculties in St. Andrew's University. There are now fifty-two members enrolled in the Association.

SUICIDES OF LUNATICS.

RECENTLY two cases of suicide by lunatics have occurred in Scotland: one in Edinburgh a fortnight ago, when a gentleman in charge of a private attendant rushed on to the roadway, and put his head below the wheel of an advancing cart, which crushed it before the cart could be stopped or the lunatic pulled aside. The second case was that of a female, who escaped from the lunatic asylum at Lenzie, made her way to the North British Railway, walked along the line for some distance, and when a train from Glasgow approached, she lay down in the four-feet way, with her head over one of the rails. An attempt was made to stop the train, but failed, and the head of the unfortunate woman was severed from her body.

DEATH OF WILLIAM CHAMBERS, LL.D.

THE death of William Chambers, LL.D., Edinburgh, at the advanced age of 83, may well be observed in the columns of the JOURNAL, although he was not in any way a member of the profession, but on account of the remarkable aid he gave to sanitary science in Edinburgh, and the influence his success in that matter exercised elsewhere. During his term of office as Lord Provost were inaugurated those improvements in the most densely over-populated parts of the old town in Edinburgh, which have resulted in the destruction of overcrowded unventilated houses, which were a curse on themselves and a menace to their surroundings during epidemics, and in the erection in their stead of suitable houses and broad convenient thoroughfares. The work is not yet complete, but already an earnest of its far reaching benefit has been felt in the greatly diminished death-rate of Edinburgh. To his services to society as the disseminator of wholesome literature, it would be out of place to refer here.

MEDICAL APPOINTMENTS.

AT the monthly meeting of St. Cuthbert's Parochial Board, Edinburgh, held last Friday, an appointment was made to the office of medical officer for the first district of the parish. Four candidates were submitted to the Medical Committee; these were voted upon, with the result that an outsider, proposed by the chairman, Mr. James Graham, M.A., M.B. and C.M., resident at 2, Hope Park Terrace, received the majority of votes and the appointment. Dr. Macphee, of Tighnabruaich, has been appointed medical officer for the parishes of Strachur, Strathlaclan, and district. Mr. Milne Chapman, M.B., has been appointed assistant-gyncologist to the Edinburgh Provident Dispensary.

THE MURCHISON MEMORIAL SCHOLARSHIP.

THIS year, the examination for the Murchison Memorial Scholarship was held in Edinburgh, and several candidates competed for the prize. The examination was written and oral, and embraced (*a*) the examination of patients, with reports and commentaries on their cases; (*b*) questions on treatment and pathology; (*c*) examination of specimens. The examination was held on Tuesday, April 17th, and two subsequent days; this week the result is announced, and the Scholarship has been awarded to Mr. G. Cecil Dickson, M.B., and C.M., of Edinburgh University. Mr. Dickson graduated in 1882 with second-class honours, and during the winter session acted as house-physician to Professor Douglas Maclagan, this appointment also having been gained by competitive examination.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending May 19th show that the death-rate in the eight principal towns during the week was 26.9 per thousand of estimated population. This rate is 0.8 above that for the previous week of the present year, and 4.7 above that for the corresponding week of last year. The lowest mortality was recorded in Aberdeen, viz., 15.7 per thousand; and the highest in Glasgow, viz., 35.0 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 6.3 per thousand, or 1.4 above the rate for the previous week. Measles continue to be the most fatal miasmatic disease, the mortality therefrom being greatest in Glasgow. There were 111 deaths registered from acute diseases of the chest, which was 10 less than in the previous week. The mean temperature was 51.1°, being 8.0° above that of the week immediately preceding, and 1.1° above that of the corresponding week of last year.

THE BURGH POLICE AND HEALTH (SCOTLAND) BILL.

THE text of this new measure has now been made public; and, of the different parts into which it is divided, one, consisting of 97 clauses, is devoted to sanitary provisions. Under the head of the mitigation and prevention of disease, provision is made for notifying to the authorities cases of persons suffering from infectious diseases

Such notice is to be given by the occupier of the house, and also by the medical practitioner attending the patient suffering from such infectious disease. A fee of 2s. 6d. is to be paid to the medical practitioner for giving such notice. Both occupier and medical practitioner are held responsible for furnishing notice to the authorities, under a penalty of 40s. in each case. This clause is similar to the one in the recently promoted Glasgow Town Council Bill. Speaking generally, the Bill seems to be very comprehensive in its scope, and, if carried, ought to have the effect of securing an uniformity of police and sanitary administration all over Scotland. The more effectually to attain this, the Bill provides that, on its becoming law, all local Police Acts are to be repealed, "in so far as inconsistent with, or relating to, matters provided for or dealt with by the Bill."

UNIVERSITY OF ABERDEEN.

THE Registrar of Aberdeen University has issued his returns of the number of matriculated medical students during the present summer session. There is a very substantial increase in the number of medical students, there being fifty more this summer, as compared with last summer. When one takes into consideration the late matriculations, it appears that the matriculation-roll is greater by at least sixty students. This gratifying increase of past years is more than maintained. No doubt this is due to the ever-increasing facilities which are afforded to students for doing practical work. In fact, the Aberdeen School is in the foremost rank as regards the opportunities it offers to students for acquiring knowledge of special departments of medical study. Every practical class is well attended; and, in addition to practical zoology, botany, and physiology, a great impetus has been given to practical work by the formation of classes of practical pathology and operative surgery. All the special classes, which have just been commenced—viz., practical instruction in the diseases of the larynx and of the skin, and in insanity and public health—are well attended.

THE GLASGOW ROYAL INFIRMARY.

THE medical staff of this hospital have at last broken the silence they have long kept, and in the form of a memorandum have made public their views on the matters recently under dispute, together with a statement of the position they have all along maintained. The document is temperate in its tone and firm in its language, and shows very clearly, that the staff have a proper sense of their position and of the deference that should be shown to their opinion in matters medical. We are quite sure that their present action will bear good fruit in the future, and that no further attempt will be made by the lay members of committee to formulate rules and regulations for their guidance in the management and treatment of the patients under their charge. Now that both sides of the controversy have been made public, we have no hesitation in saying that the medical staff had no other alternative than to take up the attitude they did; and they acted wisely in preserving silence, as a body, while the points in dispute were under consideration.

HEALTH OF GLASGOW.

DR. RUSSELL'S report for the fortnight ending May 12th shows a death-rate of 31 per 1,000 living, the number of deaths registered being 611. An examination of the figures shows that the high rate of mortality is absolutely confined to the population below five years of age, and arises from measles, whooping-cough, and scarlet fever. The first of these three diseases had been very fatal, the average age of the fatal cases being twenty-three months. The disease was uniformly prevalent over the whole of the north side of the river, with great intensity, only 7 of the 65 deaths occurring on the south side of the river. The deaths from whooping-cough numbered 28, and the average age of the fatal cases was 20½ months. Measles and whooping-cough had added 4.7 to the death-rate. No further cases of small-pox have occurred. There were 425 cases of measles registered, as well as 72 of scarlet fever, 50 of whooping-cough, and 17 of diphtheria, of which 68 were removed to hospital, and the rest supervised at home. Compared with the previous fortnight, there had been a larger number of cases of fever, viz., 31 of enteric, 4 of typhus, and 1 undefined.

IRELAND.

THE Guardians of the Gort Union have reduced the salary attached to the medical officer of the union to £90, contrary to the wishes of the Local Government Board.

LOUGHREA UNION.

DR. JOHN BURKE, J.P., was removed from the registrarship of the Bullane district by the Registrar-General, and the guardians were requested to appoint another registrar. Three candidates applied for the post, but the board selected the recent registrar.

CORONERSHIP FOR THE COUNTY LIMERICK.

AN election for a coroner for the western portion of this county took place last week. There were two candidates, Dr. J. Ambrose and Dr. McCarthy, the former being successful by a majority of fifty-two votes.

THE ADELAIDE HOSPITAL.

THE annual prizes, founded by the late Dr. Hudson, for students of this hospital, were publicly awarded last week. The "Hudson Scholarship," consisting of a gold medal and £30, was awarded to Mr. J. H. Scott; and the "Hudson Prize," consisting of a silver medal and £10, to Mr. Francis Drury.

VACCINATION.

ACCORDING to the returns of vaccination received for the first quarter of the year, there were 19,885 persons successfully vaccinated; in 3,374 cases the operation was postponed, and 110 children were stated to be unsusceptible to the operation. The deaths of 2,057 unvaccinated children under three months old were registered during the quarter, making a total of 25,426 children, with regard to whom particulars as to vaccination were obtained.

ZYMOTIC DISEASES IN PROVINCIAL TOWN DISTRICTS.

DURING the March quarter, three deaths were registered from small-pox in Belfast, and one in Lisburn, but none in any of the other districts. Measles caused 55 deaths, 18 of which took place in Belfast, 15 in Armagh, and 11 in Lurgan: while of 117 deaths from scarlet fever, 101 occurred in Belfast. Seventy-six fatal cases of fever were recorded—viz., typhus, 39; enteric fever, 26; and simple continued fever 11. The deaths from whooping-cough amounted to 105, of which number 82 took place in Belfast; diphtheria 5, and diarrhœa and dysentery 95.

THE IRISH MEDICAL ASSOCIATION.

THE forty-fourth annual general meeting of the Association will be held at the Royal College of Surgeons in Ireland, on Monday next, at twelve o'clock. As usual, the report of the Council for the past year, and a statement of the financial condition of the Association, will be presented; the officers for the ensuing year will be elected by ballot, and resolutions concerning the interests of the profession will be considered at the meeting. The annual breakfast will take place at nine o'clock at the Shelbourne Hotel, and the annual dinner at seven o'clock in the evening, at the Royal College of Surgeons. We understand that Dr. A. H. Jacob, who has worked hard in the interests of the Association for many years, will be nominated as its president for the ensuing year. Dr. Jacob richly deserves this compliment from the Association.

THE REPORT OF LORD MORLEY'S COMMITTEE: ANALYSIS OF THE REPORT AND EVIDENCE.

I.

THE report of the proceedings of the Committee appointed to inquire into hospital management during the late war, has at length been presented to both Houses of Parliament. It forms a very bulky Blue-book, containing close upon 800 pages printed in double columns. At the beginning comes the report of the Committee, to which are appended the dissents expressed by the military members on the one hand, and by Sir William Mac Cormac on the other. The whole subject of military medical organisation, both in peace and time of war, has been elaborately worked out.

The Report commences by giving details of the present organisation; and it then recites the medical history of the campaign, detailing the elaborate equipment and arrangement for the field, which were made before the expedition started, the hospital staff which accompanied the expedition, which, for the English force alone, numbered 163 medical officers, 835 officers and men of the Army Hospital Corps, and 30 nursing sisters. A detailed account is also given of the hospital accommodation provided, which, exclusive of the troopships and transports, and the permanent hospitals at Malta and Cyprus, numbered 2,900 beds. Maps are given to illustrate the movements of the troops, the places where field hospitals were established, and the numbers of their equipments. An account is given of the destination and work done by each of the movable and stationary field hospitals. The arrangements made for each of the engagements which took place, are given in full, more especially those made for the battle of Tel-el-Kebir, which all unite in considering as very complete and most successfully carried out.

After this exhaustive preliminary review, the Committee proceed to make remarks on the evidence offered to them. The witnesses are classified into officers and men who were patients in Egyptian hospitals, or were conveyed home in the hospital ships or transports. The officers of the army included H.R.H. the Duke of Cambridge, H.R.H. the Duke of Connaught, and Lord Wolseley commanding in chief; the chief of the staff, and the general commanding divisions, or brigadiers; twenty-two medical officers were also examined, as well as six officers of the Army Hospital Corps, two nursing sisters, six newspaper correspondents, a civilian surgeon, who accompanied the troops, and six naval officers. By far the greater number of these witnesses gave direct evidence from their personal experience. It will be seen from the length and comprehensive nature of this list, that the committee sought for evidence from all possible sources; and that their inquiry was exhaustive, may be inferred from the circumstance that 4,089 questions were put and replied to. The appendix, too, contains most valuable matter in relation to every point connected with the expedition, and is itself worthy of very careful consideration.

The committee appear to deal first with the Army Hospital Corps. There are throughout the evidence very many complaints of the conduct of these men; but, on the other hand, many military and medical officers speak in the warmest terms of their devotion to the sick and their efforts to do for them all that lay within their power. As a body they are probably both undereducated for their position, and underpaid; and the committee, recognising the unsatisfactory condition of the corps, the want of sufficient training for the nursing of the sick, the absence in the time of peace of becoming acquainted with the organisation and working of hospitals in the field, recommend a largely increased amount and improved quality of training, more especially in nursing and cooking, and a higher rate of pay. In criticising the complaints which have been made, the committee point out that they were chiefly confined to the Ismailia Palace, between August 22nd, when it was first opened as a hospital, and the beginning of September. Seven officers and eighteen men, admitted before September 1st, criticised the administration of the hospital; one officer and twenty-eight men, admitted afterwards, complained of the carelessness and inefficiency of the hospital officers. In other respects, with one or two exceptions, they expressed themselves as well satisfied with the manner in which they were treated. It is a matter of much surprise that the complaints urged with so much emphasis by Lord Wolseley against this hospital, which he pronounced to be so badly managed as to be a discredit to the Army, and that the patients in it were exceedingly uncomfortable, should not apparently have been mentioned by him at all during the time. The evidence of the medical officers, more especially of those in direct charge of the hospital during the whole time, make it quite clear that no complaint as to its management was ever made to them by the General commanding in chief; and it is equally clear from their evidence that the patients made no complaint; and lastly the medical officers assert that there was no cause of complaint; and that, so far as they know while in Egypt, none was ever made. Paragraph 116 disposes of the alleged hardship from absence of bedsteads, and the succeeding paragraphs deal with the scandalous allegations that operations were performed without chloroform; that the same medicine was administered indiscriminately to one patient after another; and that the Life Guards were sent on board the *Calabar* without the smallest supply of drugs, plasters, or other medical requisites. On inquiry, no grounds appear to exist for any of these statements. It appears, contrary to the many assertions made (paragraph 124), that there was an abundant supply of fresh meat, biscuits, and medical comforts, in Ismailia, from the time of landing. Frozen meat was supplied on the 23rd August, and after that date there was an abundant supply of fresh meat, either frozen or from live stock. In fact, so abundant was the supply, that large quantities of meat were buried, as it was impossible to consume it. The meat was very tough, which is inevitable in a hot climate, where it cannot be kept more than twenty-four hours. The evidence teemed with complaints based upon these unavoidable circumstances; the officers' remonstrances unavoidably being the loudest. The other cause of food-complaint was the bread. Lord Wolseley has appealed to the public sympathy by saying "it was unfit for human food"; that the medical officers gave their patients stale bread when better was to be had, while no military officer would have tolerated such bread being given—assertions which lead up to the conclusion that military control, which Lord Wolesley considers a very desirable thing, should be introduced into military hospitals. The facts are, that not only the sick in hospital, but the troops throughout the country, were supplied with this indifferent bread, which was unpalatable, but not absolutely bad, in consequence of the flour turning sour, on the voyage out, from improper packing on board ship. Lord Wolseley observed this bad bread in the hospital, he states, on August 26th; the commissary-general first baked bread on the 27th. The Committee find some difficulty in accounting for the numerous complaints of deficient food at Ismailia, many patients having alleged that they had been left for many hours without any nourishment whatever. The majority of these cases seem undoubtedly covered by the fact that fluid food, milk and beef-tea, was administered, which soldiers do not consider to be food at all. The patients came, in fact, starving from the front, in many instances, for the transport of provisions, in sufficient quantity for them, was with difficulty carried on. It is never the custom, however, in any hospital, to put patients on full diet the moment of their arrival; and, no doubt, much of the fault-finding which has arisen, may be traced to the enforcement, at Ismailia, of this very proper regulation. Any deficiency in the administration of nourishment must have been quite exceptional, for every elaborate arrangement seems to have been made for the supply of beef-tea and milk in the entrance hall of the hospital. So far as we can at present judge, the conditions of the war would not have permitted the establishment of a full dieted hospital at Ismailia; and the existence of a field hospital there, which Lord Wolseley considers an anomaly, did not really cause any difficulty in procuring a diet for the patient in such form as the medical officers desired to administer it.

Lord Wolseley again uses the strongest language with regard to the Citadel Hospital at Cairo. He says there was nothing to prevent it from being fully equipped like a London hospital in two or three days after the arrival of the troops. All we can say is, we wish Lord Wolseley had himself undertaken to do it. To create, in a filthy building of very large extent, a perfect hospital of three hundred beds in two or three days, with complete lack of labour from without, without assistance from the other branches of the service —the Engineers and the Ordnance Departments—would have taxed even Lord Wolseley's administrative abilities. On this point, however, we are able to quote from a letter from the medical officer in charge of the hospital from its commencement; a gentleman who perhaps possesses more practical experience of war, and of the treatment of sick and wounded in field-hospitals, than any other officer in Her Majesty's Service.

He gives his unqualified opinion that the Citadel Hospital, as far as it depended on the Medical Department, was excellently organised; and, considering the very great pressure that was put upon it by the very rapid influx of sick, and also the rapid evacuation which had to take place, it never at any moment failed to meet the requirements put, upon it but, on the contrary, steadily progressed towards

a more perfect condition of things to the end. The greatest difficulty he experienced was the failure of the commissariat to supply. At one time there was no commissariat officer at the citadel, and the officer there had no weights, scales, knives, or choppers, or measures in the commissariat, and in addition the supplies were delivered irregularly. This, as can be easily imagined, caused delay, and threw much additional work on the hospital staff. The equipment was also that of two field-hospitals, and no bedclothes or equipment of a distinct hospital had arrived when he was there. The fact did not appear to be recognised that, when the regimental system existed, the colonel and quartermaster of regiments made the necessary arrangements for supply and transport in the field, but that now, the departments being separated entirely, no arrangements had been made to make it self-acting, which it must if efficiency were expected.

He adds that neither in any hospital in the towns along the Loire and the villages round, at Baume le Roland, or at the base hospital at Chastre, or in any other that he visited in France, except the French hospital at Versailles—which was, however, not a field-hospital—did he see the sick and wounded better cared for or taken care of in any respect.

The following is a list of the daily admissions of sick into the Citadel Hospital, Cairo, for six days:—

Dates.	Total Admissions.	Ophthalmic.
September 18.....	111	20
„ 19.....	83	24
„ 20.....	108	24
„ 21.....	234	63
„ 22.....	129	38
„ 22.....	98	44
	763	213

We have already pointed out, and Sir William Mac Cormac has very properly dwelt upon it, that there is no inconvenience whatever to patients lying on a palliasse upon a clean floor in place of a bed. Lord Wolseley found great fault with this; but it is worthy of remark that, on the very day that he spoke in such strong language of the absence of bedsteads at the Cairo hospital, of the three hundred persons in the building, two hundred and seventy were occupying bedsteads, and only thirty—presumably the less severe among the cases—were on the floor. A dreadful picture, too, is drawn of men lying on the ground, with their features undistinguishable, and their faces black from myriads upon myriads of flies resting upon them. The medical officers are, unfortunately, possessed of a conviction to the contrary: that the flies were but of little trouble, that the thorough draughts throughout the building prevented them from aggregating; and they failed to see these swarms that are described by Lord Wolseley; and the best criterion of the value of the mosquito-curtains, the lack of which Lord Wolseley deplores, is, that the medical officers never used them at all themselves, and that the patients repudiated them. In India, we believe, they are never employed; and the Surgeon-General mentions that, on the very occasion when Lord Wolseley made his complaint of their absence, as many cases as he thought right were protected in this way. We must allow the impartial critic to decide whose opinion on this point is of the greater value. The men in the Cairo hospital were suffering from want of sufficient change of linen. We should like to know, however, if it is any part of the duty of the hospital service to carry the soldiers' linen about with them, and if it was not from deficiency in the arrangements of the military authorities that the soldiers were allowed to reach Cairo without possessing a change of clothing. In all other respects, the condition of this hospital was such as to satisfy the Surgeon-General that nothing was wanting for the efficient treatment of the sick. It is worthy of note, in respect to this hospital of which Lord Wolseley complained in the strongest terms, that not a single complaint from any patient under treatment there has ever been formulated. The Committee referred to the arrangements at Tel-el-Kebir for the removal and treatment of the wounded (paragraph 134). They are universally admitted, they say, "to have been well conceived and efficiently carried into effect." "We doubt," the Committee says, "whether on any previous occasion the wounded were so quickly collected from the field of battle, so well treated in the field hospitals, or removed to the rear with so little suffering." A number of wounded men belonging to different corps engaged, were questioned, and it was found "that they, almost without exception, had been attended to half an hour or an hour after they had been wounded." Comment upon arrangements so exceptional and so admirable is superfluous. In paragraph 135, the Committee express their conviction "that the system on which the medical services are organised in the field, though possibly requiring modifications in detail, is sound in principle."

MEDICAL ACT AMENDMENT BILL.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

In consequence of the change made in the Medical Act Amendment Bill in its passage through the House of Lords, whereby the representation of the College on the proposed Medical Board for Ireland was changed from three to two representatives, the College has petitioned the House of Commons that it may not be placed in a position inferior to any of the other medical authorities constituting said Medical Board, thereby lowering the status of the Fellows, Members, and Licentiates of the College. Already a large number of similar petitions from Licentiates of the College, in England as well as in Ireland, have been presented.

THE APOTHECARIES' HALL IN IRELAND.

A MEETING of this Corporation was held in its board-room last week, "to protest against the injustice that had been done to their body by removing them from the Medical Act Amendment Bill." The Governor of the Hall, Mr. Collins, presided, and most of the directors were present. Dr. Lyons, M.P., also attended the meeting. Mr. Collins stated that, of the 2,450 medical men who were practising in Ireland, far the greater number were acting as general practitioners, compounding and prescribing as well as dispensing medicine under Poor-Law and Government Boards. If the Bill were passed in its present form, the status of their Licentiates would be lowered. But what they principally laid stress on, was the effect the omission would have on the future of the general practitioner. The Bill was essentially one to provide general practitioners for the United Kingdom, and therefore it was of the greatest importance that the Licentiates under it should be properly educated and suitably examined as regarded the pharmaceutical portion of their duties, as well as the medical and surgical. It was for the advantage of the public as well as of the profession that that should be so. The Apothecaries' Hall was clearly the body that should be represented on the Medical Board for that purpose; and, if they should be represented, there would be no deficiency in the education. The following resolutions were unanimously agreed to:—"That this meeting, having considered the Medical Act Amendment Bill at present before Parliament, are filled with consternation by the discovery that the claim of their branch of the profession is entirely ignored by the Bill, and that this act of injustice has been committed, notwithstanding that their claim had been duly recognised in the first copy of the Bill introduced into the House of Lords." —"That, in enacting a State qualification for general medical practice, it is of the utmost importance that the persons obtaining such qualification shall possess the requisite knowledge and skill, and that their competency shall be adequately proved and certified by a perfectly constituted board of examiners."

THE SCOTTISH CORPORATIONS AND THE MEDICAL ACT AMENDMENT BILL.

AT a meeting of the Edinburgh Town Council, held on Tuesday last week, a deputation was introduced, consisting of Dr. G. W. Balfour, President of the Royal College of Physicians, Dr. Haldane, Vice-President of the same body and member of the Medical Council, Dr. Littlejohn, formerly a President of the Royal College of Surgeons of Edinburgh, and Drs. Brakenridge, James, Craig, and Stevenson Macadam, the latter four as representatives of the Extramural Teachers in the Edinburgh School of Medicine. The deputation was introduced by Councillor J. A. Russell, M.B., etc., and desired to address the Town Council on the subject of the Medical Act Amendment Bill, and the effect it would have on the Corporation and extramural school in Edinburgh, if passed in its present condition. Dr. Balfour directed attention to the constitution of the proposed Medical Boards, and specially to what he considered the undue preponderance given to the representatives of the Scottish Universities over the representatives of the Corporations, they being as eight to three. He considered that with a Board so constituted, and enjoying the large powers with which it was to be endowed, the result would be a monopoly, and would consign the whole power of licensing lecturers and examining candidates into the hands of the Universities. He pointed out how a monopoly had existed before, and had been broken down with much benefit to all concerned, by the [illegible]

mission granted to students to attend a certain number of extramural lectures. Dr. Haldane directed attention to the legislative change of twenty years ago, and pointed out that the Royal Commission then gave effect to the opinion of the Town Council, that one third of the classes required for graduation might be attended outside the University; that the Senators of the University had opposed such a change as likely to be injurious to the University; but that, notwithstanding such an opinion, the change had been made, and the number of students of medicine in the University now actually was 1,732, or more than all the other faculties combined. He considered this demonstrated the remarkable efficiency of the medical school, and he considered it was largely due to the open teaching of the extramural schools. He also spoke at some length on the importance of the practical teaching of students. Dr. Littlejohn, in the absence of the President of the College of Surgeons, expressed his concurrence with the views of the preceding speakers. Dr. Stevenson Macadam urged the Town Council to endeavour to secure a proper representation for the extramural school in Edinburgh on the Medical Board. In this school were thirty-eight lecturers: these lecturers would, as at present the Bill stood, have no direct representative. They had many disadvantages already, such as having to provide their own teaching appliances and lecture rooms. They would not be at all afraid for their future if anything like a due representation were given to the Universities and themselves. Dr. Balfour thanked the Town Council for their courtesy, and the matter was remitted to the Lord Provost's committee, with power to petition if they decided to do so.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M. on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, Mount Circus Street, Nottingham.

CAMBRIDGE AND HUNTINGDON AND SOUTH MIDLAND BRANCHES.—*Preliminary Notice.*—A combined meeting of the South Midland and the Cambridge and Huntingdon Branches will be held at Bedford on June 29th. Members of the former Branch, who are desirous of reading papers or showing specimens, are requested to communicate with G. F. KIRBY SMITH, Honorary Secretary South Midland Branch.—Northampton.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital on Thursday, June 14th, at twelve o'clock.—ALEXANDER DEMPSEY, Honorary Secretary.—Clifton Street, Belfast.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held at the Medical Institute on Thursday, June 28th, at 3.30 P.M. An address will be given by the President, Dr. Balthazar Foster. The annual dinner will be held at the Grand Hotel, at 6 P.M. Dinner tickets, exclusive of wine, five shillings each. Members have the privilege of introducing a friend to the dinner, whether a member of the medical profession or not.—EDWIN RICKARDS, ALFRED H. CARTER, Honorary Secretaries.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting will be held at the Memorial Hall, Albert Square, Manchester, on Wednesday, June 13th, at 2.30 P.M. The Council will meet at 1.30 P.M. The following communications have been promised. Dr. Lloyd Roberts: An Ovarian Cyst. Mr. T. Jones: A Patient with Spontaneous Fracture of Right Femur occurring Twice. Dr. Walter: Case of Nephrectomy. Mr. J. Brown of Bacup will read a paper on the proposed Medical Benefit Society. Early intimation of any other communications is requested. Dinner at Queen's Hotel, at 6 P.M.—A. DAVIDSON, Honorary Secretary, 2, Gambier Terrace, Liverpool.—May 29th, 1883.

SOUTH-WESTERN BRANCH,—Mr. J. Harper, President; Mr. C. Bulteel, President-elect. The annual meeting will be held on Tuesday, June 26th, at the Royal Albert Hospital, Devonport. The chair will be taken at 3 P.M. The dinner will be at the Duke of Cornwall Hotel, Plymouth, at 6 P.M. The President-elect invites members and their friends to lunch at his residence, 84, Durnford Street, Stonehouse, from 12 to 2 o'clock. A special notice of the meeting, with rules, etc., of the Branch, will be sent to each member by the Secretary, who will be glad to receive notice of proposed papers and communications.—S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

DORSET AND WEST HANTS BRANCH.

THE first meeting of this Branch was held at the Leatman Hospital, Sherborne, on Wednesday, the 23rd instant, W. H. Williams, M.D., President, in the chair.

Officers.—The following officers were elected. *Council:* J. P. Aldridge, M.D., Dorchester; W. G. Bacot, M.D., Blandford; G. W. Daniell, Blandford; W. S. Falls, M.D., Bournemouth; W. D. Husband, Esq., Bournemouth; E. P. Philpots, M.D., Bournemouth; R. P. Simpson, Esq., Weymouth. *Honorary Secretaries and Treasurers:* W. G. Vawdrey Lush, M.D., Weymouth; C. H. Watts Parkinson, Esq., Wimborne. *Representative of the Branch on the Committee of Council:* W. G. V. Lush, M.D. *Representatives of the Branch on the General Council:* S. S. Dyer, M.D., Ringwood; J. C. Leach, M.D., Sturminster Newton; J. R. Thomson, M.D., Bournemouth.

New Members.—The following gentlemen were elected. Richard Bangay, M.D., Lyme Regis; Christopher Childs, M.B., Weymouth; Samuel Sumner Dyer, M.D., Ringwood; Henry Knight Hitchcock, M.D., Bournemouth; Charles James Marsh, Esq., Yeovil; and Henry Robert Sherrard, Esq., Shaftesbury.

Next Meeting.—It was resolved that the next meeting should be held at Wareham in October.

An address was given by the President On Some of the Relations of the Modern Medical Practitioners.

Patients were shown by Mr. E. Scallon, Growth of Hair-like Processes on the Tongue. Dr. Williams, Lymphadenoma.

Specimen.—Dr. Leach showed a specimen of Paget's Disease of the Nipple.

Dinner.—The members and friends subsequently dined together at the Digby Hotel; the chair being occupied by the President.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of the above District took place on May 17th, at the Sussex Hotel, Tunbridge Wells; Dr. RANKING presided.

Papers.—The following papers were read.

1. Mr. Abbott: On Collective Investigation and Note-taking.
2. Mr. Vise: A case of Locomotor Ataxy, with Arthropathy. (Patient shown).
3. Dr. Ranking showed a man suffering from well-marked Leucoderma.

The Next Meeting will be held at Hayward's Heath in September.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE eighty-seventh meeting (annual) of the above District was held at the Kent and Canterbury Hospital, on Thursday, May 24th, 1883, at 3 P.M.; Mr. BOWES, of Herne Bay, in the chair.

Exhibits.—Messrs. Krohne and Sesemann, of London, exhibited some of the latest inventions in surgical instruments.

Next Meeting.—It was arranged to hold a conjoint meeting with the West Kent District in September; also to meet at Ashford in March 1884.

Collective Investigation Committee.—It was resolved: "That this meeting desires to express the opinion, that the expenses incurred by the Collective Investigation Committee of the Association should be supplemented by voluntary contributions of the Branches from the surplus of the funds at their disposal."

It was suggested that meetings of this Subcommittee should be held half an hour before the ordinary meetings of the District.

Communications.—The following communications were made.

1. Dr. Gogarty showed a well-marked case of Paralysis of the Right Serratus Magnus Muscle, in an otherwise healthy girl aged 17.

2. Dr. Gogarty also showed a case of Hysterical Hemiplegia, in a farm labourer aged 26, who had been under observation since first attacked twelve months previously. There were anæsthesia and analgesia to the mesial line; the face and neck were not affected; there was no wasting of the muscles, and electrical contractility was perfect.

3. Mr. Dring showed a metal Pessary, which had been retained three years, unknown to the woman, till retention of urine caused its removal.

4. Mr. Wacher showed a young man who had had many attacks of Acute Rheumatism, and presented a cutaneous nodule in the scalp on the vertex, freely movable and not tender.

5. Dr. Gogarty read a paper on Acute Rheumatism, introducing Card No. III of the Collective Investigation Committee.

CORRESPONDENCE.

THE MEDICAL ACT AMENDMENT BILL 1883: SOME SUGGESTIONS AND REASONS FOR IMPROVING THE SAME.

SIR,—The subject of medical reform at the present moment being of vital importance, it behoves every member of the profession to use his best influence in improving and perfecting the Bill while it is passing through the Houses of Parliament; and this forms the basis of my plea for thus seeking to call attention to some apparently defective clauses in the Bill as issued from the House of Lords. I shall therefore briefly place my remarks under two heads—one as suggestions, the other as reasons; and should these in any way assist in elaborating a more perfect and satisfactory Bill, I shall feel amply rewarded for the trouble taken in connection therewith, as well as grateful to those who may act upon them.

Suggestion 1. Whenever the words medicine and surgery occur, midwifery, or branches of medicine, surgery, or midwifery, should follow.

Reason 1. To guard against unlawfully practising in any specialty or branch of the healing art. (See Clause 4.)

Suggestion 2. Quasi-charitable and wholly charitable institutions should not be allowed to employ practitioners who are not fully qualified and registered.

Reason 2. All of Her Majesty's subjects require to be protected against the frequently injurious results of unqualified medical attendance, and the guise of public or private charity should form no exception to this. (See Clause 8.)

Suggestion 3. A single examining board for the United Kingdom would be less open to variety or prejudice, and have a better influence upon both examiners and candidates. This single board might be formed of, say, twenty examiners—*i.e.*, of one representative (though I see no objection to two representatives beyond the extra expense) from each of the universities, colleges, and halls; and these twenty (or forty) representatives or examiners should hold examinations alternately in London, Edinburgh, and Dublin as required, and all successful candidates should receive the same licence or certificate for registration, being that of licentiate in medicine, surgery, and midwifery.

Reason 3. Candidates would probably be better prepared and more deliberately tested by mixed examiners from the United Kingdom than simply from their own part of the United Kingdom; while the position of candidates applying for appointments after registration would be less open to local or provincial prejudice. (See Clause 9.)

Suggestion 4. If, however, a triple examining board—*i.e.*, one for each division of the United Kingdom—should be found to be essential to the general agreement of all the existing examining bodies, and so far it would appear to be so—the following would be a fair representation of existing interests. Twelve members each for the English, Irish, and Scotch boards—*i.e.*, the Universities of Oxford, Cambridge, London, Durham, and Victoria, one each; the Royal College of Physicians of London, and the Royal College of Surgeons of England, three each; and the Worshipful Society of Apothecaries, one. This equals the English board. The University of Dublin (Trinity College), two; the Royal University in Ireland, the King and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland, three each; and the Apothecaries' Hall in Ireland, one. This equals the Irish board. The Universities of Edinburgh, Glasgow, and Aberdeen, two each; and the University of St. Andrews, one; the Royal Colleges of Physicians and Surgeons of Edinburgh, two each; and the Faculty of Physicians and Surgeons, one. This equals the Scotch board. And I would here emphatically add that, whether one or three examining boards be legalised, the general practitioners should be fully represented thereon.

Reason 4. This single (or triple) examining board would equitably represent the influence and interest of all existing examining bodies, while, by thus excluding none, it could not do an injustice to any. (See Clause 9.)

Suggestion 5. After passing the single or triple examining board, I would encourage, or even compel, affiliation to some one or more of the universities, colleges, or halls.

Reason 5. This will satisfy the existing examining bodies as well as exert a beneficial influence upon candidates, both before and after examination and affiliation; while such affiliation might reasonably form the qualification for registering a "higher title," thus stimulating ambition to the acquirement of greater professional and scientific knowledge; but the time allowed for affiliation should be amply sufficient for the candidate to obtain the particular "higher title" he or she might select. (See Clause 9.)

Suggestion 6. The new Medical Council to be constituted of only twelve members, represented as follows: The twenty existing examining bodies to return six members; the universities, one; and the colleges and halls, one, in England; the universities, one; and the colleges and Faculty, one, in Scotland; the universities, one; and the Colleges and Hall, one, in Ireland; the Crown, three, one for each division of the United Kingdom; and the practitioners, three, one for each division of the United Kingdom.

Reason 6. A smaller Medical Council would be less expensive, do more work, and give greater satisfaction to the profession, provided its constitution be sound and representation equitable. (See Clause 14.)

Suggestion 7. Colonial and foreign practitioners might reasonably be compelled to pass the final State board examination, and also to complete any portion of their previous professional examinations, if such should be considered by the Medical Council or board of examiners to have been insufficient.

Reason 7. Most Continental countries require British qualified practitioners to pass a professional examination previous to being allowed to practise therein, *e.g.*, France, Belgium, Holland, Germany, Austria, Italy, Spain, Switzerland, etc., while many of the American medical curricula and examinations are known to be ridiculously short and incomplete; and, on the other side, it may be said that some few of the Continental medical curricula and examinations are even longer and more searching than our own. I do not, however, see much objection to the principle of reciprocity, provided it be carried out upon correct principles of equity as regards privileges, curricula, and examinations. (See Clauses 22, 23, 24.)

Suggestion 8. The penalty for illegally practising should be increased, so as not to exceed, say, fifty pounds.

Reason 8. Persons who have been successfully prosecuted for practising unlawfully, have readily and easily paid a penalty "not exceeding twenty pounds," and have continued to violate the law, examples of which could be readily adduced, if required. Protecting the new penal clause, by making it illegal to practise for gain, fee, or any other form of payment, should be an essential provision since the mere prohibition of certain titles has been found to be a but useless, for, by qualifying any of these titles by an adjective, a noun or the words "not registered," the law is evaded, and successful prosecution becomes doubtful, or even frustrated. It would be easy to give examples of this evasion; most large towns and cities

could produce evidence of such. I trust the House of Commons will especially fortify this part of the Bill, and that equally to women as to men. (See Part IV, Clause 28.)

Suggestion 9. Some distinctive title for licentiates and graduates in midwifery or obstetrics should be inserted after those of "physician, surgeon," etc.; and for this purpose the title "accoucheur" or "obstetrician" would be appropriate, the former having been already in use for the past half century; while the Royal College of Surgeons of England, and the two Royal Colleges of Physicians and Surgeons in Ireland, have each long conferred a registrable licence in midwifery; and the two Universities in Ireland now confer a degree or diploma in obstetrics, though it is not, as yet, accepted for registration.

Reason 9. A protected title for licentiates or graduates in midwifery, such as I have just suggested, has long been felt to be a want in the profession; while many registered licentiates in midwifery have hitherto abstained from using any distinctive title, because unqualified persons have sometimes styled themselves "accoucheur," although more frequently they have used the compound title of "surgeon-accoucheur." (See Part IV, Clause 28.)

Suggestion 10. The saving clause in favour of midwives would be much better omitted; but if the Bill cannot be allowed to pass without such saving clause, then let it be restricted in favour of those midwives only who have already, or may subsequently, become only certificated, and the regulations for educating, examining, and licensing midwives be placed under the control of the Medical Council; and any person using the title of "midwife," or practising as such for gain, without first being duly licensed, should be liable to prosecution and a penalty (of say) not exceeding ten pounds.

Reason 10.—I consider that in the interests of humanity, the State, and the medical profession, the lives of poor women and infants, would be much safer in the hands of registered medical practitioners; and, as women are now being freely admitted to qualify in medicine, surgery, and midwifery—equally with men, for all essential purposes—I see much sounder reason in recommending and encouraging this, than for now seeking to legalise the practising of some fourteen thousand midwives, most of whom have undergone neither study nor examination for the responsible duties they profess and are permitted, at present, to undertake. To me it has often seemed very like a paradox, that, because Nature frequently performs the parturitive process safely, and unaided by science or art, our British laws should allow two valuable lives to be consigned, on many such occasions, to the care of persons so often found wanting in even the most rudimentary principles of midwifery; while it is fully recognised by the medical profession, that whenever parturition is found to be abnormal, prompt medical and surgical knowledge becomes a *sine quâ non* in the successful application of obstetric art. Doubtless a very considerable number of valuable lines are annually lost through the ignorance of unqualified midwives; and such laxity of the law is discreditable to any civilised nation, involves a great responsibility, and ought not to be tolerated by a Christian country like that of Great Britain and Ireland. (See Part iv, Clause 28.)

Suggestion 11.—The saving part of Clause 28, in favour of dentists, would be much more satisfactory to the medical profession, as well as less misleading to the public, if the word "surgeon" were eliminated from its compound with "dentist."

Reason 11.—Dentists pure and proper would lose nothing, but rather gain something, by ceasing to use the compound title of "Surgeon-Dentist," since the simple title of "Dentist," in the case of those registered without a dental diploma, and the title of "Dental-Surgeon," or Licentiate in Dental Surgery (L.D.S.) in the case of those who have such diploma, is ample and most appropriate; while no person who desires to be recognised as an honourable member of the dental profession can really be desirous of misleading the public into the idea that he, or she, is also a surgeon, unless such actually be the case. (See Part xlvii, Clause 28.)

Suggestion 12.—After the words "Chemist and Druggist" in Clause 67, the additional words "but that such 'lawful occupation or business,' shall not include prescribing, diagnosing, or treating diseases or injuries, whether for gain or otherwise," should follow.

Reason 12.—A very general impression—and one that I have seen in the journals of the trade—exists amongst chemists and druggists that they have a right, legal or moral, to engage in the treatment of diseases or injuries whenever so disposed and solicited, so long as they make a charge only for the remedies supplied; and I have little hesitation in saying that many lives are annually lost through such tampering with disease and injury; cases frequently coming under the care of the physician or surgeon when it is found either to be too late to save the life of the patient, or else it involves much additional suffering before convalescence can be restored. Nevertheless, I am inclined to believe that there are many chemists to be found in the trade, who are desirous of raising it to the rank of a profession, and who, doubtless, do look upon "counter-prescribing" and otherwise dabbling with the treatment of disease, as being *infra dignitatem*, and involving too much responsibility—and all honour to such chemists, for they will assuredly have their reward in a more honourable sphere of usefulness. (See Clause 67.)

Suggestion 13.—After the words "duly licensed apothecaries," the words "in Ireland" should be omitted, and the words "within the United Kingdom or Her Majesty's dominions," substituted.

Reason 13.—A grade of educated and registered practitioners, such as apothecaries in England and Ireland are, is a growing want among a very large class of Her Majesty's subjects—practitioners who are fully educated and licensed to compound and sell medicines, as well as to treat diseases (not of a strictly surgical nature), and who will supply and do the same upon a small scale of charges, and suited largely to the wants of the artisan classes; and if this were encouraged, we should soon hear of fewer complaints against the frequently bad results of chemists' and druggists' prescribing; while the great working classes would soon find which was most to their own interests, or, in other words, which yielded the best value for their hardly-earned money. (See Clause 67.)

Suggestion 14.—Clause 69, as amended at Lord Cranbrook's suggestion, allowing a continued existence of the titles already in use, should have the words "registered either under the provisions of the Medical Act, 1858, or of this Act," or the words "registered medical practitioner," in lieu of the word "person."

Reason 14.—Suggestion 14 would prevent the possibility of unqualified persons continuing to evasively use their present misleading titles. The words "any person" are just sufficiently vague and indefinite to allow of, and even encourage, almost every form and example of unqualified practice; while it is undoubtedly putting a stumbling-block in the way of counsel and judge, who will have to interpret and apply the Act, and this not so much according to its spirit, but rather according to its literal meaning or possible application. (See Clause 69, as amended.)

Suggestion 15.—All practitioners who may first become qualified and registered, either under the Act of 1868 or this Act, and who may, subsequently to such registration, obtain a colonial or foreign degree, after a course of study and an examination approved by the Medical Council, should have such foreign or colonial degree or diploma inserted in the *Medical Register*, as an additional qualification, but not necessarily with the right of conferring other privileges than those of enjoying the use of a professional or scientific title.

Reason 15.—Suggestion 15 would satisfy the wishes of those registered practitioners who have subsequently obtained foreign or colonial degrees for the purpose of entitling them to use the prefix "Dr." or the affix "M.D.", and who, for various reasons—such as want of time, money, or inability to put in the necessary residence—have been precluded from graduating at any of our own universities. (See Clause 69, amended.)

Suggestion 16.—The seventeen Acts to be repealed (headings given in the third schedule) should be published, either *in extenso* or in their abstracts, in the leading medical journals, and that immediately.

Reason 16.—The profession, as a body, do not fully understand the meaning and extent of these seventeen Acts; while a feeling is prevalent among some members of the profession, that at least three of the present licensing bodies might well be deleted in the new Medical Bill; and I allude to the Apothecaries' Societies of London and Dublin, and to the Faculty of Physicians and Surgeons of Glasgow; though, for my own part, I fail to see the wisdom or justice of such apparent ingratitude, especially when it can be shown that such bodies have performed long, useful, and honoured service, not only in examining and licensing practitioners, but also in protecting the public and supporting the State. (See Clause 74.)—I am, etc.,

Clifton, Bristol. JOHN BROOM, M.D., etc.

*** This very able communication contains much that is worthy of the most careful consideration, and some of the suggestions may find their proper place, in the shape of amendments, Government Bill gets into Committee.

HIS GRACE the Duke of Westminster has contributed £100 to the fund for completing the buildings of the London Temperance Hospital, in Hampstead Road

THE PROPOSED MEDICAL PROVIDENT SOCIETY.

SIR,—I venture to think that the scale of contributions suggested by Dr. Hardwicke, in the JOURNAL of May 26th, is unnecessarily high. Further, his scheme travels beyond the requirements of the proposed Sick Benefit Society, by making provision for the death of its members. The latter contingency is easily, and perhaps more effectually, met by life-assurance. What is wanted is to provide against disablement arising from sickness or old age; and it would be desirable (I think) to limit the operation of the Society to the attainment of this object.

I would propose a scheme something like the following. The members should be divided into three classes. A member insuring under Class I should pay a yearly premium of £2, for which he would be entitled to receive £1 a week for 26 weeks during total disablement; 10s. a week for the next 26 weeks; and afterwards, if the disablement continues, he should be placed on a permanent sickness allowance of 7s. a week. A member insuring under Class II should pay double the above premium, or £4 a year, and receive double the above allowance; and a member insuring under Class III should receive three times the above allowance, or £3 a week, by paying three times the above premium, or £6 a year. Each member, on joining, would decide for himself under which class he would insure. Taking the Hearts of Oak and the Rational Sick and Burial Association as a guide, I calculate that the above premiums would more than secure the corresponding benefits. Probably most men would insure under Class III, in which case they would secure a weekly allowance (£3) which would just about cover the expense of a *locum tenens* during their temporary disablement. This is really all that is absolutely required, for it would be undesirable to offer any inducement to members to place themselves on the funds of the Society. As before stated, the contingency of death is fully met by insuring in any respectable life-assurance office, such, for example, as the London Life Association. By this means, each member may make what provision he thinks suitable for his widow and children.

Not wishing to occupy your space by going into details, which at present would be premature, I venture to suggest the above scheme to the consideration of those who are interested in the formation of a Sick Benefit Society.—I am, sir, yours, etc., T. G. VAWDREY.

10, Oakland Terrace, Handsworth, May 26th, 1883.

SIR,—After having very carefully considered the proposed medical provident question, and consulted several people well versed in such matters, I cannot help thinking that no good will come from any movement of the sort, unless the initiative be taken by the British Medical Association. Private enterprise in such a direction will inevitably prove disastrous, but much good might result from the united action of our Association. Mr. W. Hardwicke's scheme seems to me to be somewhat fanciful, and has been apparently constructed from the prospectuses of various friendly societies and insurance companies. The detail contained is certainly premature and unnecessary in the present stage of the proceedings. Time enough to enter into that when it has been decided who shall be prime movers. I hope, sir, the Association will take the matter up, and will not leave it to any private company to provide such a very necessary boon for the unfortunates of our profession.—I am, sir, yours truly,

M.R.C.P., M.R.C.S.

SIR,—I beg to enclose 10s. 6d., being my contribution towards preliminary expenses of the Benevolent Fund, or rather, Provident Fund, about to be formed.

I have read with considerable surprise, in the JOURNAL of May 19th, a letter by Mr. B. H. Dale, but on referring to the number for April 14th, I found Dr. Thurstan's letter mentioned by Mr. Dale, and I must say surprise considerably diminished as other feelings took its place on reading that letter. I am compelled to admit that there are in the profession black sheep such as Dr. Thurstan describes; and if they can deliberately cheat their professional brethren in one way, why not in another? When the details for working the Provident Society are being arranged, every care will have to be taken to prevent impostors from receiving benefit out of funds provided by honest and provident members. Strict limits should be placed on applicants for benefit from the Society, and diseases or degrees of severity should be classified, which would entitle, or otherwise, the sufferers from them to obtain aid. The question as to the nature of the help provided by the Society should also be fully discussed; and, for my part, I think it would be wise, and also quite sufficient, to limit it to the payment of a *locum tenens*, who, as Mr. Dale says, should report the case, but whose travelling expenses should only be paid by the sick member, if his illness were not considered sufficiently severe to justify the *locum tenens* in remaining. The gentleman acting under the Society as *locum tenens* should, in each case, be so placed as to be independent of any call on his services; he should have a fixed annual salary, and receive nothing beyond that.

I regret extremely that there should be any necessity to make restrictions, and take precautions against imposition; it goes against the grain to imagine that such things are necessary in our profession. Would it be possible to banish from amongst us all deceit by implicitly trusting to the honour of tempted members, and causing them to receive strength to resist from the sense of shame which surely cannot have entirely left them?—I am, sir, yours truly,

M. R. J. BEHRENDT.

Burringham, May 19th, 1883.

PRELIMINARY EXPENSES FUND.

THE following additional sums have been received:—

Dr. W. Withers Moore, Brighton, 10s. 6d.; Mr. E. J. Adkins, Hastings, 10s. 6d.; Mr. C. Eaton Baker, Tenterden Ashton, 10s. 6d.; Mr. C. W. Belfield, Bristol, 10s. 6d.; and Mr. J. Bain Sincock (second donation), Bridgwater, 10s. 6d.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Manchester Dwellings and Death-Rate.—Health of Manchester and Salford.—Day Nurseries Association.—Open Spaces.

AT a meeting of the Manchester and Salford Sanitary Association held on May 30th at the Memorial Hall, Dr. Samelson read a most interesting paper on this subject. His statistics and information were based on official evidence, and he demonstrated that there are, more or less, spread over the older parts of this city, a great number of dwelling-houses, from condition and situation, adverse to the health of the inhabitants; that a large number of the dwellings more recently provided for the industrial classes in our midst, are constructed without proper regard to the first requirements of a healthy house; that the death-rate of this city holds the position of one of the most unhealthy among the towns of England; that, owing to the efforts of the Health Committee during the last fifteen years, the prevalence of zymotic diseases has abated to such a degree, as no longer to constitute the chief danger to the public health; that the unsatisfactory condition of dwellings, new and old, must be regarded as one of the foremost causes of ill-health; that, consequently, immediate effect should be given to the suggestion of the Medical Officer of Health as embodied in his various reports; that it behoves the Corporation no longer to postpone the often prayed for amplification and consolidation of the building by-laws for Manchester, and finally that the discordant and shifting notations relative to the mortality of Manchester demand the adoption by the Health Department of a consistent and comprehensive course of dealing with a record of such vital concern to the community.

During the week ending May 26th, Mr. Leigh, the Officer of Health for Manchester, reports 291 births and 173 deaths. The birth-rate was equal to 44.3 per 1,000, and the death-rate 27.1, against 31.3 and 26.0 respectively in the corresponding week last year. The death-rate was highest (28) in Hulme, and lowest (16.2) in Central district. Forty cases of infectious diseases have been reported from public and private sources. Dr. Tatham of Salford reports 164 births and 98 deaths. The borough death-rate, which, in the preceding seven weeks of the current quarter, had averaged 21.3 per 1,000, suddenly rose to 26.9 last week, the rate varying from 14.3 in Broughton to 40.6 in Greengate. The 98 deaths include 3 from measles and one each from diphtheria, whooping-cough, and fever. Twenty-two deaths were referred to acute lung-disease and 16 to consumption. It is to these two diseases that the excess in the death-rate is mainly to be attributed. Nineteen fresh cases of infectious diseases have been reported during the week—viz., one of small-pox, 14 of scarlet fever, 2 of diphtheria, and 2 of enteric fever.

We are pleased to find, from the first annual report of the Day Nurseries Association, that "its success has fulfilled reasonable expectations. In the Ancoats Day Nursery, in Butler Street, there were 234 children admitted during the year, and 2,497 of total attendances. The ages of the children varied from two months to ten years. The whole of the children came from the immediate neighbourhood of the great factory district; and it is satisfactory to be assured that the

parents appreciate the benefits of the nursery. An excellent dietary has been prepared by the energetic honorary secretary, Dr. Samuelson, assisted by the medical members of the Sanitary Association. To prove the economical management of the nursery, we quote the following extract from the report: "From a comparison of the receipts and the household expenses, it will be seen that, with the present charge of *fourpence* a-day per child, the former may come nearly, if not entirely, to cover the latter." The Ordsal Nursery, Ordsal Hall, generously granted for a term of years by R. Haworth, Esq., has not proved successful so far, owing probably to its being too far removed from the factories where women are employed.

The efforts of our respected townsman, Mr. Herbert Phillips, to secure open spaces in some of our neighbouring sylvan retreats, demand the heartiest thanks of the medical profession, and all the support they can give to him, both in public and private circles.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DEVONSHIRE HOSPITAL.

THE annual meeting of the subscribers of the Devonshire Hospital and Buxton Bath Charity was held at the hospital on May 5th, Dr. Robertson in the chair. The report of the Committee of Management for the year ending December 31st, and the accounts for the year, were submitted. The Chairman delivered an address, in which he spoke of the successful work of the hospital during the year from May 1st, 1882, to April 30th, 1883. During this time, 1,919 in-patients had been admitted; 1,662 discharged as improved, 95 were no better when discharged, 4 sent away on account of drunkenness, 3 discharged at their own request, 2 died, and 153 remained on the books on April 30th. This, he contended, was a great result, when it was remembered that a very large majority of the cases were of rheumatic character, and many of them chronic and of long standing, which had had all the skilled help of the medical attendants at their several homes, but without the salutary and medicinal influence of the Buxton mineral water, and the mountain air of Buxton, influenced in its character by the secondary limestone and millstone grit formations, which surrounded Buxton on all sides over a wide range of country.

The tables of Dr. Lorimer and Mr. Craig show that there were 1,430 cases of rheumatism proper, of which 875 were males, and 555 females.

The first class consists of patients who were helplessly crippled, in whom locomotion was impossible, and in whom the structures of the joints were partially or completely damaged or disabled. This class contained 86 cases; of these, 16 were discharged as no better, 63 were discharged as improved, and 7 were signally benefited. The amount of disablement in all these cases is reported as having been excessive, and the result as highly satisfactory; the more so, as it appears that seven of these aggravated cases, or one-tenth of those benefited, are reported as having been, on their admission, absolutely incapable of performing any movements whatever, from the crippling effects of rheumatism, and as having been discharged practically well. The second class comprised the cases of joint-disablement, but not so severe as to prevent locomotion. This class contained 480 cases, and of these, 470 were discharged as much improved, and 10 as having derived no benefit. In these ten cases, the disease is reported as having been of long standing. In the third class, which contained 715 cases, there was much less structural deformity, or any such was absent; joint-pain being a prominent symptom; 695 of these cases received various degrees of benefit; many having been completely restored to health, and having remained so after their return to their occupations. Twenty of these cases were discharged as no better, but these were complicated with serious or advancing organic disease of the heart, which placed them beyond the pale of cure. The fourth class contained 159 cases; of these, 151 were improved, and 8 were discharged as no better, but these cases were complicated with the changes incident to decaying nature, the group comprehending elderly subjects. There were 99 cases of rheumatoid arthritis, 10 males, 89 females; and 96 were discharged as improved, and 3 derived no benefit. There were 131 cases of sciatica, 108 males, 23 females; and of these, 28 were discharged well, 78 much improved, 21 somewhat relieved, and 4 as no better. There were 37 cases of gout, 36 males, 1 female; of these, 9 were complicated with the poisonous effects of lead. Of the 37 cases, 16 were discharged much improved, and 21 received varying lesser degrees of relief.

The most recent announcement is the receipt of a legacy of £450, under the will of Mrs. Barnes of Ashbourne.

THE BROADMOOR CRIMINAL LUNATIC ASYLUM.

WE see with satisfaction, from the recently published report of the Broadmoor Criminal Lunatic Asylum, that Dr. Orange, the able medical superintendent of that institution, has at last completely recovered from the effects of the determined attack made upon him on the 6th of June last, and has been able to resume his highly responsible duties. The report which he presents is singularly clear and exhaustive, and affords very full information respecting the medical, economical, and general management of this curious establishment, in which upwards of 500 criminal lunatics, including 220 murderers, are assembled together. Regarding the cases of homicide, Dr. Orange makes some important practical remarks. "It will be seen," he says, "that no less than fifteen of the men and six of the women who were admitted in 1881, had taken life; and the first question that naturally arises in the mind is, whether, out of so large a number, it would not have been possible to take measures beforehand, in some of the cases at least, to avert some portion of this serious loss of life. The majority of these twenty-one persons who had committed homicide had given indications of being mentally deranged, and of being, in consequence, dangerous persons to remain at large; and yet, either because of mistaken kindness, or through disinclination to run the risk of incurring the inconveniences which sometimes attend the adoption of the statutory means for placing persons in asylums, matters were allowed to run their course, and innocent lives were thus sacrificed. Another point of interest lies in determining the degree or extent to which these homicidal acts were the result of inebriety. But interesting as this point undoubtedly is, it is one that is by no means easy of accurate settlement, and, in any investigation into this matter, it is necessary not to confound sequence with effect. That intemperance plays an important part in the production of insanity, either in the persons themselves who give way to this vice, or in their descendants, there can be no room whatever to doubt; but that it does not account for every case of insanity is equally clear.

Considering first the cases of the six women included in the list of homicides, it appears that there is no evidence of inebriety on the part of any of them; but that, on the other hand, causes which appeared to be adequate, and which were of an entirely different character, were found to have existed. With respect, however, to the fifteen men, there was a clear history of intemperance in the case of five; but it must be added, in the cases of four out of this number, there existed also insanity arising from other causes, such as hereditary predisposition, cranial injuries, or harassing and exhausting circumstances. One instance, therefore, only remains out of the fifteen men in which apparently the homicidal act was to be ascribed to a mental condition arising from inebriety, and from that alone. But with respect to the four cases in which inebriety existed in combination with previous insanity, of different degrees of severity, resulting from other causes, it might be asked whether the homicidal acts would have been committed if the perpetrators of them, although more or less insane even when sober, had not added the delirium of intoxication to the previously existing state of things? Whether this question could, or could not, be answered with a decided negative, it may, at any rate, be safely affirmed that whenever anyone, whose conduct has already given ground for suspecting the existence of mental derangement, begins to drink to excess, the danger to the community is thereby most certainly increased, and, therefore, all the greater promptitude should be used in placing such an one under restraint, without waiting to give him the opportunity of being arraigned on the charge of murder.

The principle of respect for the liberty of the subject is a good one, but it is capable of being pushed too far; and it would certainly appear that this is done when it is carried to the point of non-interference with insane persons who have also become intemperate.

DONATIONS.—Mr. Henry Williams, J.P., of Cross Hill, has given £500 to the fund for building a new wing to the Blackburn and East Lancashire Infirmary.—The Hospital for Incurables, Dublin, has received £500 under the will of Mr. James McOwen, of Cloughran.—Her Majesty the Queen has given £50, additional, and H.R.H. the Duke of Albany, £25, to the National Hospital for Consumption at Ventnor.—The Corporation of the City of London have given fifty guineas, and the Goldsmiths' Company £25, additional, to the Dental Hospital of London.—Mr. Richard Benyon has given one hundred guineas to the Metropolitan Convalescent Institution.—"A Mother" has given £50 to the North Eastern Hospital for Children.

MILITARY AND NAVAL MEDICAL SERVICES.

ROUTINE IN ARMY MEDICAL ADMINISTRATION.

SIR,—I have carefully perused the report (as far as published) of the Committee on the Army Hospital Medical Service, and your comments upon it, which are just and well timed. Allow me, as an old medical officer, who has done duty as a militia surgeon, with charge of military hospitals for thirty years, and gone through the routine required in the management of army hospitals, to express my opinion (which I do most strongly) that it is the absurd regulations and the amount of red tape that brings discredit on the Army Medical Department, and causes, at times, grievous miscarriages in the working of the system, and hampering the hands of medical officers. To cast the blame upon hard-working, zealous officers is most unjust and undeserved. One advantage, however, may be derived from the Parliamentary report and inquiry, viz., that public opinion will insist upon the commissariat department being reformed, and much more discretionary power given to medical officers in charge of hospitals, especially in time of war. Just to illustrate the absurdity of the system, I may name an amusing case that occurred to myself whilst in charge of troops. I had occasion to send a requisition for a mustard-pot and frying-pan (one not being allowed), and a dust-shovel, for the use of the cook. A month after the requisition was sent, a railway-van drives up to the hospital with those valuable articles from the Tower, in London; the carriage alone would cost more than the things could have been bought for on the spot; and extra medicines and requisite drugs cannot be procured except by special requisition through the medical department in London. I could enumerate cases without end where delay, annoyance to oneself, and inconvenience to the sick, have been the consequence of such unbusinesslike routine. I repeat, it is the regulations of the service, and not the officers themselves acting on their regulations, that should be held responsible.

—I am, sir, your obedient servant, J. INGHAM IKIN,
Surgeon-Major, and late Surgeon 4th West York Militia.

Leeds, May 28th, 1883.

SURGEONS WITH MOUNTED TROOPS IN INDIA.

SIR,—Allow me to draw attention to the position of surgeons when marching with mounted troops in India. The commanding officer is not compelled to detail a troop horse for the surgeon's use, as is the case at home; so a surgeon has either to walk or provide himself with one for the proper discharge of his duties. It is impossible for a pedestrian to keep pace with a horse for long marches in a tropical country—a fact well known to the authorities, but carefully ignored. The medical officer is supposed to be at all times in the immediate rear of the troops, so as to render assistance without delay in case of accident or sudden illness, such as sunstroke, etc. His non-attendance would subject him to grave censure, if not to court-martial; so, in order to protect himself, he has to keep a horse, and in this way to hold the unique position of being the only officer in the service who has to provide a horse for public use at his own expense. This is one of the many curtailments which have taken place since the introduction of the station hospital system, as the Indian Government seem to have selected the Army Medical Department as the special victim of their economical ideas. This is especially hard on the surgeons who have entered the service under the Warrant of 1879, in which there is no information given of the fact that, when serving in India, they will draw less pay than before its publication.—Your obedient servant, SURGEON, A.M.D.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES AT NOTTINGHAM.

EVERY successive event in the history of the compulsory notification of infectious diseases, points to the urgent necessity of the question being considered in a calm and judicious spirit by a Select Committee of the House of Commons, with a view to one uniform system of legislation for the entire kingdom. But the reference to such a committee must be of the widest possible character; for whatever provisions may be ultimately agreed upon should be founded on evidence gained from all parties likely to be interested by the extended law. The Select Committee on Police and Sanitary Legislation—appointed on March 13th, 1882, "to consider and report on the proposals in private Bills to create powers relating to sanitation and police, which deviated from, or were in extension of, or repugnant to the general law"—confined themselves to the examination of eight medical witnesses, all known beforehand to be favourable to placing compulsion on medical men, of whom five were actual medical officers of health, one a late medical officer of health, and at the time of being examined a member of a health-committee, conspicuous for his public advocacy of compulsory notification in the town where he resided, while another occupied a similar position in a town for which compulsory powers were being sought; and they actually refused to hear evidence from those who represented the other side of the question. That any conclusions, founded on so partial an inquiry, can be satisfactory to the general body of medical practitioners, is not to be expected; and, if the Committee's functions are to be continued, their reference should be so extended as to admit of general practitioners, employers of labour, shopkeepers, and all others, whose interests are likely to be affected, being heard before they again issue a report, whose principles are likely to be quoted by many as settling the question, simply because of the apparently authoritative source from whence they emanate. Above all things, the actual results in saving life in towns that have had the largest experience of compulsion, as compared with those attained by other towns which have depended on general sanitary agencies only, must be most carefully considered.

The latest incident in the development of compulsory notification, and one which conspicuously illustrates all the worst evils that spring from private Bill legislation, is a discussion in the Nottingham Town Council, terminating in the adoption of a report of the Health Committee, in which the advisability of continuing and extending powers contained in the Improvement Act of 1878, but first put into operation in February 1882, was affirmed. Among these evils, the most deplorable are a division of the local profession into two hostile camps—one in harmony with, and the other opposed to, the sanitary authority's recommendations; the publication of letters by medical men in the general press, in which expressions and imputations are used on both sides which, it is not too much to say, must be regarded with regret by all who are jealous of the reputation of the profession, and of its legitimate influence with the public; and, lastly, the initiation of a controversy among medical officers of health themselves—some of whom deprecate, as rash and ill-judged, isolated attempts, such as these, to legislate in opposition to the convictions of a very large proportion (probably of a very large majority) of the entire body of medical practitioners; and one at least of whom publishes a hostile, and apparently not ill-founded, criticism, of the report of the particular medical officer of health on which the recommendations of the Nottingham Health Committee are founded. What has occurred in Nottingham has occurred, with slight variations, in Bolton, in Leicester, in Liverpool, in Glasgow, and in many another town, where attempts have been made by means of private Bills, that do not admit of free Parliamentary discussion, to create a new offence for medical practitioners, the proof of the committal of which is to rest with a few other medical men, who are not unfrequently their professional rivals.

It will not be amiss, perhaps, briefly to recapitulate the history of the Nottingham Act, and of certain events which arose out of it, as it is impossible, in ignorance of that Act, adequately to understand the attitude of the majority of the profession of the town on this question. On June 17th, 1878, an Act was passed which, as its title sets forth, was to enable "the Mayor, Aldermen, and Burgesses of the Borough of Nottingham to construct additional gasworks, to make a new road, and for other purposes." Immediately on the Act being obtained, the Town Council empowered the Health Committee to carry out such of its provisions as related to infectious diseases, none of which were specifically mentioned or even remotely alluded to in the title, but which were included under the general but very indefinite heading of "other purposes;" and accordingly the necessary notices and forms were forthwith prepared by the medical officer of health. But, in the words of the Town Clerk, in a letter published in the BRITISH MEDICAL JOURNAL of December 25th, 1880, "as soon as the public of Nottingham became fully aware of the coercive character of the clauses in the Act, it was apparent that any attempt to put them in force would lead to open rebellion, and would give rise to a state of public feeling with which it would be impossible for the Health Committee successfully to contend. The medical officer of health himself reported that a number of the largest practitioners in the town would refuse to comply with its provisions, and he suggested to the Council that it would be prudent to defer the putting in force of these clauses until a better state of public feeling should arise." The diseases scheduled for notification were small-pox, cholera, typhus, typhoid, scarlet, and relapsing fevers, and diphtheria. The Act remained in abeyance however, until February 1882, when, in view of a threatened outbreak of small-pox, the medical officer of health advised the Health Committee to obtain the sanction of the Council to put into oper

tion their powers for enforcing notification for that disease. It does not appear that the attitude of the medical profession was altered, as, from a memorial submitted, they objected to the onus of compulsion being imposed upon them, "until the difficulties associated with such notification have received full consideration in Parliament, and such duty is sanctioned by being the law of the land;" while at the same time they expressed themselves as "satisfied of the importance of the notification of infectious diseases." What is very remarkable is that, in urging the adoption of the Health Committee's recommendation, the Chairman of that Committee said that "they did not require any number of compulsory measures, and, in point of fact, they had scarcely been required to use compulsion at all....In the fifteen small-pox centres of the town, they had been fortunate enough to have the disease completely stamped out by the exertions of Dr. Seaton and the kind co-operation of the professional gentlemen who had had cases. By persuasion, they had got the people in these neighbourhoods to be vaccinated, and over one hundred people were vaccinated in a few days....They had really no occasion to apply for any particular compulsory powers; but there were some eight or nine cases which had been treated by other professional gentlemen, who had not given information in any shape or form....Under these circumstances, they wanted the authority of the Council to obtain the information they required."

The result of the discussion was, that the powers were granted for twelve months—the Chairman remarking, however, that he did not think they would be required for half that time—and that scarlet fever as well as small-pox was to be reported.

The twelve months having recently expired, and notification having been enforced during the whole of that period, instead of only half of it, as was thought likely by the Chairman, a proposition was again submitted to the Council to continue the powers, and to add to the two diseases previously notified typhus and typhoid fevers. Again the adoption of this recommendation was preceded by a meeting of the medical profession, at which, by nineteen votes to eighteen, the following resolution was agreed to, viz.—"That the Town Council be requested to suspend the enforcement of the compulsory clauses relating to the notification of infectious diseases until Parliament has settled the question." It would be difficult, perhaps, to summarise the debate in the Council so as to do full justice to the views of the opposite parties. Briefly, however, the reason adduced by those who desired a continuance and extension of the powers was that notification had "enabled them probably to stamp out an epidemic of a very virulent disease in, perhaps, the shortest time that ever was known." This was advanced by the Chairman, who the year previously, before compulsion existed, had stated that "in the fifteen small-pox centres of the town, they had been fortunate enough to have the disease completely stamped out by the exertions of Dr. Seaton, and the kind cooperation of the professional gentlemen who had had cases;" that the object of notification was to enable the authority to disinfect, and take other preventive measures; that the Nottingham system of disinfection was characterised in a Local Government Board report as a perfect model;" that compulsory notification did not imply compulsory removal, but that where they had been compelled to remove patients to hospital, "the latter had expressed their sincere gratitude;" that, "in some instances, where there had been a certain amount of hardship, the Committee had made slight compensation;" that they had only had one complaint during the year, and that on investigating it he, the Chairman, had found it to be groundless; that "there could not be two opinions on the merits of the system of notification;" that 372 persons had been removed to hospital and well cared for; that 2,000 persons had been revaccinated; that whereas, in the small-pox epidemic of 1872, 349 persons died out of a population of 88,000, in 1882, only 57 died out of one of 3,000; that 11,000 articles and 1,465 rooms infected with scarlatinal poison had been disinfected; that 550 cases of the latter disease had been notified to the School-Board authorities; that 48,605 tub-closets had been collected; that "at one time there was great opposition to notifying cases of death, but that that had disappeared now, and so, in time, the present objections would vanish; that the wish of the Health Committee was that their officials should not go to houses in order to "play fantastic tricks," as "ministering angels sent by a liberal Corporation"; that all was preferable to imperial government, "because corporate bodies know better than Parliament the special requirements of different districts"; "that the Contagious Diseases Act was carried in the House of Commons by an assembly not more numerous than they had in that hall at that moment, and yet surely they should be as competent to do for Nottingham what was necessary, as those thirty or forty people in the House of Commons were for the whole country;" "that it was not right because in a poor man's house there was an infectious disease, that that disease should be carried through the town simply because the medical officer of health or inspector was not allowed to go into that house;" that unless the power of compelling the doctors to notify were granted, the hospitals would be of no use to them; that other towns, such as Bolton, had notification, and that it worked well in them; that "it was not a question for the medical men; that they were entirely outside the question;" that, "with regard to diseases, they scarcely ever agreed as to the mode of curing them"; that the medical officer of health would "have the good sense to try to work harmoniously with the other members of the medical profession in the town; that the medical opposition seemed to be diminishing, and that the Act had been openly discussed, after full advertisement of all its details, some of the clauses having been modified at the request of a conference of medical men in the town.

On the other side, and in proof that there *were* two opinions on the merits of the system, it was objected that, if "notification pure and simple" were required, without "legal powers to enter a person's house, to direct any measures of sanitation, or to remove compulsorily," it would do no good; that if compulsory removal were insisted on it would beget dangerous opposition; that it was wrong for officials to interfere between a medical man and his patient without the medical man's consent; that what had got rid of small-pox from among them was extensive vaccination and revaccination, which had nothing to do with compulsory notification; that, if the system of notification were so beneficial, it ought to be applied to the country generally by imperial legislation; that removal, though not compulsory in a direct sense, might be made compulsory indirectly, through a system of terrorism exercised by the officials over the people; that to work the plan with efficiency they must have the cordial co-operation of the medical profession; but that "the medical men of the town were almost equally divided" on the subject: that other large towns without notification had progressed quite as fast as Nottingham had with it; that in other places the medical officers of health had secured the hearty co-operation of medical practitioners without compulsion; that the diminution in epidemic diseases had not been in consequence of notification, but from other causes; that the death-rate of Nottingham had not diminished, but was from 21 to 23 per 1,000, as it was years ago; that "their own Town Clerk had said that he did not think the compulsory notification should be upon the medical man but on the householder;" that the chances of recovery were diminished by removal to hospital; that the Act was obtained under cover of a title which gave no presumption of its powers, or, in other words by a "trick"; that though there was plenty of assertion there was no proof of any specific case in which the notification of one case had tended to prevent the spread of small-pox; and that the statistical returns from Bolton and Warrington, instead of being favourable, were unfavourable to notification.

The Council adopted the recommendation by 35 to 7. We do not attempt to criticise these arguments, or to show their relevancy or otherwise to the question under discussion. It is by other methods than that of debates in Town Councils that this all-important matter must be finally settled; and the sooner these methods are initiated, the better will it be for the profession and the country.

IGNORANCE OF SMALL-POX: INDIFFERENCE TO VACCINATION.

In a letter to the *Standard*, "An Octogenarian" expresses the desire that those who doubt the utility of vaccination, could become acquainted with the state of matters as they were in his distant youth. "I think," he writes, "I may safely say, that for every person I now meet with seamed or pitted face, I then met a hundred, many grievously disfigured, and not a few blind." Even that was an improvement on what had been the case at an earlier period, and he had heard his mother say, he continues, "that in her early days, marks of small-pox were so prevalent, that it was common to distinguish one free from them as a smoothed-faced person." In the present day, thanks to the vaccination laws, small-pox has become little more than a name to the bulk of the population; and there can, we think, be no doubt that the indifference too often exhibited on the subject of vaccination, as well as a considerable amount of the actual opposition to that measure, is owing to ignorance of the true character of small-pox. Small-pox, in its natural condition, is a disease so terrible and so loathsome, that were vaccination attended with twice the risk with which it is credited by antivaccinationists, and possessed of only one half the efficiency it undoubtedly possesses, it would still be an inestimable boon to the human race. As it is, the vaccination enactments have been attended with so great success, and at so small a cost, that it would seem impossible to believe that the legislature should permit any check to the diffusion of that measure. Such a result can only occur through the indifference of the majority; but we trust that Parliament will be so impressed with the importance of the question, that it will not permit a blatant minority to obtain a snatch-vote which would involve such disastrous consequences to the public health.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

NEW FOREST RURAL DISTRICT.—A fairly low death-rate is reported for this district, the total deaths (222) representing an annual rate of 16.8 per 1,000. Zymotic diseases were fatal in 12 cases; and, in referring to this mortality, Mr. Jenkins rightly advocates the importance of early notification of disease and of the provision of isolation accommodation. There was an outbreak of typhoid fever, which was due undoubtedly to the polluted water-supply used by the patients. Of the total deaths, 32 were those of infants under one year, while 57 were those of persons over 70. During the year, several cases of lead-poisoning came under notice; and the health-officer cautions the inhabitants against the general use of leaden pipes, the water apparently containing a large amount of chlorides and nitrates. Mr. Jenkins refers to the insufficient cottage accommodation, and comments in severe terms on the apathy of the sanitary authority displayed in this and in other directions. There seems some need of building by-laws. "At present," the health-officer says, "there are no by-laws whatever; in consequence of which, your officers are quite powerless, and your authority only 'the shadow of a name'."

NEWTON ABBOT, WOLBOROUGH, AND DAWLISH.—Of the ten deaths registered from zymotic diseases in the Newton Abbot Rural District, one-half were from enteric or typhoid fevers. In referring to this mortality, Mr. Leonard Armstrong observes that he has been accustomed of late years to the frequent occurrence of scattered and isolated cases of enteric fever, or of an undefined fever, having very similar characters; and he appears to favour the theory of the spontaneous origin of that disease. In some cases which came under his notice during 1881, Mr. Armstrong failed, after careful investigation, to discover any adequate cause for their origin, and there was no apparent channel by which disease-germs from an antecedent case could have been imported. He remarks: "If the conclusions of Professor Pasteur with regard to disease-germs, like those of *Bacillus anthracis*, may lie dormant in infected matters in earth or air for months and years—and yet be capable of recovering their active vitality so soon as the requisite conditions are supplied—it becomes evident that the difficulty of tracing them must frequently be insurmountable." This theory of the long dormant vitality of disease-germs may, the health-officer thinks, account for certain obscure and intermittent outbreaks of diphtheria which have occurred at Chudleigh Knighton. "Unless this theory is adopted, the conclusion is again forced upon the mind, that, under some peculiar and as yet unknown conditions, enteric fever may be developed *de novo* in some susceptible persons." The occurrence of so many separate and limited outcrops of scarlet fever of late almost leads Mr. Armstrong to the same conclusion as regards scarlatina. With the exception of these remarks, the mortality-statistics call for little remark. The Newton Abbot Rural District has the lowest death-rate, that of 14.0 per 1,000; Wolborough coming next with 14.5; and Dawlish last with 17.8. In this latter district, there were 4 deaths registered from the principal zymotics, against 9 in Wolborough, and 10 in Newton Abbot.

WINCHESTER.—Mr. Langdon submits a carefully prepared report on the health and sanitary condition of this city during 1881. The various outbreaks of zymotic disease are thoughtfully discussed, and a short account is given of the measures adopted for preventing their extension, the report concluding with a brief *résumé* of the sanitary operations carried out during the year. The account of the two outbreaks of small-pox is especially interesting. The first of these took place at the barracks among the Hants militia during the annual training. Three men were infected by the disease, and afterwards one child; the cases were isolated in a building near the hospital, and all recovered. The usual precautions of disinfection and fumigation were resorted to, and the disease did not spread in the city. One man, however, who had occupied the same room as one of the cases, and who had left apparently well on the disbanding of the regiment, developed the disease after he reached his home in another part of the country. It has happened several times before that the city has been thus endangered during the militia training; and upon inquiry, Mr. Langdon ascertained that the recruits were not subjected to revaccination, as is the case in the regular army. Having regard to the importance of the subject, Mr. Langdon most properly brought the matter before the notice of the Local Government Board. It is satisfactory to learn that in future the militia recruits, on joining the head-quarters of a regimental district for preliminary drill, will be vaccinated. The second outbreak occurred at some industrial schools, where the infection was believed to have been imported from London. The patients were carefully isolated in a cottage close by, and all the boys in the schools over twelve years of age were revaccinated. The disease, fortunately, did not spread; and it is noteworthy that, although revaccination was publicly recommended in all parts of the district, not a single person acted on the suggestion. As to zymotic diseases, Mr. Langdon has little of interest to report. During the earlier part of the year, measles were somewhat prevalent at the barracks, where there were sixty-one cases. Of these, forty-one were children who had recently returned from a warm climate, under five years of age, nine of whom died. Ophthalmia was very prevalent in most of the parish schools, but Mr. Langdon was unable to ascertain in which of them it originated. The total deaths registered during the year amounted to 320, giving a death-rate of 17.9 per 1,000. The city still remains without any provision for isolating cases of an infectious nature, the absence of which was severely felt during the year. Efforts, however, have been made for securing this important provision, and a suitable piece of land has been secured. The sanitary condition of the city calls for little comment. Systematic inspections appear to have been made; and the health-officer remarks that, while many people still require to be urged to adopt the best sanitary measures, there is a great improvement in their appreciation by the inhabitants generally.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, May 25th.

Medical Act Amendment Bill.—The Medical Act (1858) Amendment Bill was read a third time and passed.

HOUSE OF COMMONS.—Monday, May 28th.

The Indian Medical Service.—Mr. LEAMY asked the Under-Secretary of State for India whether his attention had been called to the grave cause for dissatisfaction given to the junior members of the Indian Medical Service by the enormous percentage of them at present on "unemployed pay;" whether the "unemployed pay" of a surgeon in the Indian Medical Service"—namely, 286.10 rupees per month—was not the lowest scale of pay awarded to any commissioned or covenanted officer in the Indian service; and whether the Government intended to take any, and, if so, what steps, to remove this grievance, and to fulfil the terms of the printed conditions upon which men had been induced to enter the service.—Mr. CROSS: The attention of the Secretary of State has been called to the exceptionally large number of junior medical officers in India drawing what is called unemployed pay. This is due partly to the unusually small number of medical officers at present absent from India on furlough, partly to the large number of young officers admitted to the service consequent on the Afghan war, and partly to the recent reduction of twenty-two native regiments, with the consequent reduction of the medical staff attached to regiments. The unemployed pay of a surgeon in the Indian Medical Service is not the lowest awarded to any covenanted or commissioned officer in the Indian service. An unemployed lieutenant would draw 25[illegible] rupees a month; while an unemployed surgeon, if under five years' service, would draw 286 rupees, or, if over five years' service, 30[illegible] rupees a month. The present difficulty is being met by a large decrease in the number of appointments, there having been eighteen for last year and thirteen for this, as compared with thirty-nine and forty-nine for the two preceding years. The published condition under which officers accept employment in the Indian Medical Service are accurately fulfilled.

Tuesday, May 29th.

The Army Medical Commission.—Dr. CAMERON asked the Secretary of State for War, whether Lord Wolseley was correctly stated in *The Times* of May 19th, to have given evidence before the Army Medical Commission, to the effect that all the "flour sent out from England for the purpose of making bread for the Egyptian Army was unfit to make bread with"; "that the Commissariat never supplied any good bread during the whole campaign"; and "that the bread supplied by the Commissariat to the hospital at Ismailia was unfit for human food"; and whether the late Commissary-General's headquarters was correct in his statement, in a letter in *The Times* of the 23rd of May, that his department had absolutely nothing to do with the purchase of the flour sent out, and was not consulted respecting it; and, if so, what official was responsible for the purchase of the flour in question.—The Marquis of HARTINGTON: The complete report and evidence has been distributed. The hon. me-

ber will find this subject fully discussed in the report, and when he has had the opportunity of comparing the statements quoted in the question with those in explanation, he will be able to judge whether it is necessary to put further questions upon it. With regard to the second part of the question, the Commissary-General at headquarters is an officer charged with the *personnel* and discipline of the Commissariat Department. Supplies of provisions are made on the responsibility of the Director of Supplies, a full memorandum by whom will be found in the report.

Thursday, May 31st.

Vaccination.—Mr. P. A. TAYLOR asked the President of the Local Government Board whether it was the fact, as stated by Mr. Dunlop, Medical Officer of St. Pancras Workhouse, at an inquest held last week, that the practice of revaccinating women in the first days after their confinement (even on the day of confinement itself, if that should happen on the usual weekly vaccination day) is under the sanction or by order of the Local Government Board.—Sir C. DILKE: I have not yet received the depositions taken in this case, and I have written to the coroner for them. With regard to Dr. Dunlop, I do not know whether he did not make the statement alleged. The Board have, neither in the past nor present, ordered nor suggested the revaccination of women in the first days after their confinement. My hon. friend the member for Stockport has a more detailed question on this subject upon the paper, which I think he will consent to postpone until I have had an opportunity of reading the depositions.—Mr. HOPWOOD accordingly postponed his question.

MEDICO-LEGAL NOTES AND QUERIES.

CORONERS AND THEIR FUNCTIONS.

IR,—A policeman comes to me, and shows a telegram that he has received from the coroner, asking him to "reply by telegram as to supposed cause of death" of a man who has been found dead on the footpath in a field. Am I justified in refusing to give the information to the policeman? Has the coroner the power to find fault with the policeman for not being able to answer his question by telegram as to supposed cause of death? Is it not illegal, or at least not the custom, for a coroner to appoint the foreman of a jury?—I am, sir, yours truly,

A MEMBER.

*** 1. The policeman in question was probably acting as coroner's officer, and in this capacity it is his duty to make all inquiries concerning a death to which his attention has been called, and he would naturally seek some information from the medical man who last saw the deceased alive, or immediately after death. Although the medical man is not compelled by law to answer any questions that may be put to him, except in court, yet it is the usual custom to afford the officer such information as will enable him to report fully to the coroner, in order that he (the coroner) may judge as to the necessity of an inquest and *post mortem* examination. 2. It is the duty of the jurors before they are sworn to appoint one of their number to act as foreman.

CORONERS' LAWS ON DEATHS OF NEW-BORN CHILDREN.

R,—May I ask a reply to the following, through the medium of the JOURNAL? Was the coroner of the district justified in refusing to hold an inquest under the following circumstances, without further inquiry?

On Sunday morning last I was sent for to see a female represented to be a Mrs. Pratt. On arrival at the house, I was informed that the day before she had been suffering from fits, to which she had been subject during the last seven years; that she had retired to bed between 10 and 11 P.M., and that nothing more was seen or heard of her until between 7 and 8 A.M. About this time, a sister who was sleeping in the house, a small one, entered her room and found her in bed, and, standing by the side of the washstand, the chamber-vessel containing the body and afterbirth of a child, which I was assured had not been disturbed. Upon examination, I discovered the contents of the chamber-vessel to be the body of a fully developed healthy female child, partially surrounded with a piece of newspaper, with the placenta attached, and a quantity of water. Asking the patient how it was she had not called for assistance, there being several people in the house, she replied she remembered nothing about it. In conclusion, I may state her own mother, who was all the time present in the house, assured me that her daughter, who is aged 19, had never previously been confined, and is unmarried. Frothy mucus was exuding from the child's mouth and nostrils at the time I saw it.—I am, Sir, yours faithfully,

R. H. C. HUNTER, M.R.C.S.

1, Home Road, Battersea, 24th April, 1883.

*** There is nothing to compel the coroner to hold an inquest, since it is not known whether the child was born alive. Write to the Home Secretary.

TESTIMONIAL.—Mr. Henry Dayman, F.R.C.S., the President of the Southampton Medical Society, has received from the members of that body an agreeable recognition of their esteem and appreciation of his long and valued services, having been recently presented with a clock of classic design, together with a silver tankard of artistic design. Dr. Osborn took the chair, and there was a large attendance of members.

OBITUARY.

JAMES FITZJAMES FRASER WEST, F.R.C.S., Birmingham.

WE greatly regret to record the death of Mr. J. F. F. West, which occurred at his residence in Edgbaston, Birmingham, on May 24th. Born in London in August 1833, Mr. West received his professional education at St. Thomas's Hospital, where he was dresser to the late Mr. South, and where he took high honours in anatomy at the first M.B. examination of the University of London. He left behind him such a reputation at his school, that at a later period of his life it became probable he would be chosen as one of the honorary staff of the new St. Thomas's Hospital. He took the diplomas of M.R.C.S. and L.S.A. in 1854, and was admitted by examination to the Fellowship of the Royal College of Surgeons in 1867. Shortly after becoming qualified to practice, he was appointed house-surgeon to the Queen's Hospital, Birmingham, which, with the Queen's College, then formed an independent medical school. He was elected, in the year 1857, upon resignation of his house-surgeoncy, one of the honorary surgeons of the Queen's Hospital. This appointment he held for twenty-six years, being for the last few years of his life the senior surgeon of the institution. Mr. West was also consulting surgeon to the Birmingham Dental Hospital, in which institution and in its clinical school he took a warm interest. Some years ago, he was president of the Midland Medical Society. He frequently took part in the scientific work of the flourishing local Branch of the Association. He long held office in the Council of his Branch, and he was also chairman of the active pathological and clinical section, to the practical work of which society he was a constant contributor.

For some months before his death, Mr. West had been in failing health, which rest from work and a trip to Italy did not suffice to remedy. For the last few weeks of his life he was confined to his house with irregular articular rheumatism, which was complicated by evidences of cardiac failure, renal inadequacy, and pulmonary embarrassment. During the last few days general dropsy supervened, and the end came quietly at last from œdema of the lungs. He was attended with unremitting care by his old partner in private practice, Mr. W. S. Mann, and by his hospital colleagues, Dr. Sawyer and Mr. Jordan Lloyd, with whom Sir William Jenner saw him in consultation.

As a writer, Mr. West has made many valuable contributions to practical surgery, amongst which we may mention the following papers: "On Excision of the Wrist-joint," "Contributions to the Surgical History of Syphilis," "On Wounds of the Heart." Shortly after the Franco-German war he published an able translation of Langenbeck's famous monograph on gun-shot wounds of the hip-joint, a task which he executed much to the satisfaction of the eminent German surgeon. Outside the immediate range of professional topics, Mr. West exhibited marked literary tastes and sympathies, especially in regard to dramatic and particularly Shakesperian criticism. He was a leading member of the Birmingham Shakespeare Dramatic Club; and, in the year of his presidency of it, he contributed a very interesting paper, which showed considerable research and was afterwards published, on *Shakespeare from a Surgeon's Point of View.*

Mr. West was fond of making periodical journeys on the continent, in which he regularly visited the hospitals and medical schools of the great capitals, bringing back with him copious notes, of which his clinical class and his colleagues freely received the benefit. As a clinical teacher and hospital surgeon, he was sound, methodical, and practical. In spite of a certain characteristic abruptness of style, he was deservedly popular with his pupils and his friends, owing to his kind-heartedness and manliness of character. He was loyal to his colleagues, and zealous in his devotion to practical surgery. In recent years he adopted many of the details of Listerian methods, but he ever leant towards the traditional lines of the older school of surgery, which he had seen so ably represented in his student days at St. Thomas's.

PHYLLOXERA.—A cultivator of the Ardèche, named Marcel, whose vineyards were invaded by phylloxera, has tried experiments in grafting shoots on different plants. He has succeeded in engrafting them on the common bramble. Two brambles thus grafted with French vines have been sent by M. Henzé, Inspector-General of Agriculture, to the gardens of Versailles, to continue the experiment.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 24th, 1883.

Dodson, Arthur Edward, Downs Park Road, Clapton.
Parke, John Latimer, Tideswell, near Sheffield.
Spiller, Frederic Winstanley, Belgrave Road, Birmingham.

The following gentleman also on the same day passed the Primary Professional Examination.

Harris, Charles Joshua Joseph, Charing Cross Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—Assistant-Surgeon. Applications by June 9th.

CHELSEA HOSPITAL FOR WOMEN.—Four Assistant Physicians, a Pathologist, and an Administrator of Anæsthetics. Applications by June 6th.

CHELSEA HOSPITAL FOR WOMEN.—Resident Medical Officer for the new hospital. Salary £60 per annum. Applications by June 6th.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. £100 per annum. Applications by June 15th.

CITY AND COUNTY LUNATIC ASYLUM, Stapleton, near Bristol.—Assistant Medical Officer. Salary, £150 per annum. Applications, addressed to the "Chairman of the Committee of Visitors," by June 7th.

COUNTY DONEGAL INFIRMARY.—Surgeon. Salary, £100 per annum, in addition to the Grand Jury Presentment. Election on the 19th instant.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental House-Surgeon. Salary, £40 per annum. Applications by June 11th.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 3rd.

GLASGOW ROYAL INFIRMARY.—Teacher of Chemistry. Applications by June 15th.

GLASGOW ROYAL INFIRMARY.—Teacher of Physiology. Applications by June 15th.

PADDINGTON PROVIDENT DISPENSARY, 104, Star Street, Edgware Road. Resident Dispenser. Salary, £105 per annum. Applications to the Honorary Secretary, the Rev. G. F. Prescott, 76, Cambridge Terrace, Hyde Park, by June 4th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, St. Marylebone Road, W.—Resident Medical Officer. Salary, £60 per annum. Applications by June 9th.

QUEEN'S HOSPITAL, Birmingham.—Resident Physician. Salary, £50 per annum. Applications by June 20th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by July 4th.

RURAL SANITARY AUTHORITY OF THE ISLE OF WIGHT.—Medical Officer of Health. Salary, £300 per annum. Applications by June 6th.

ST. BARTHOLOMEW'S HOSPITAL.—Two Casualty Physicians. Applications by June 8th.

ST. GEORGE'S HOSPITAL.—Assistant Physician. Applications by June 7th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary £200 per annum. Applications by July 14th.

TISBURY UNION.—Medical Officer. Salary, £60 per annum. Applications by the 14th June.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—House-Surgeon, Junior House-Physician, and Resident Obstetric Assistant. Applications by June 12th.

WILTON UNION.—Medical Officer and Public Vaccinator. Salary, £100 per annum. Applications by the 2nd June.

MEDICAL APPOINTMENTS.

ANSTED, H. L., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer to the Madras Railway Company in Madras.

BARNES, Frederic J. J., M.R.C.P., F.R.C.S., appointed Assistant Medical Officer to Fisherton House Asylum, Salisbury.

CATER, J. Rundle, M.R.C.S., appointed Resident Obstetric Officer in St. Mary's Hospital *vice* E. Archer Wood, M.R.C.S.Eng.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

LYONS.—On April 29th, 1883, at Sanawar, Punjab, the wife of Surgeon-Major R. T. Lyons, M.D., of a daughter.

MARRIAGES.

KNOWLING-FOX.—May 24th, at the parish church, Wellington, Somerset, by the Rev. Prebendary Knowling, M.A., vicar, Ernest M. Knowling, B.A., M.B. Cantab., M.R.C.S.E., of 5, Texden Terrace, Tenby, to Helen Emily Hankey, youngest daughter of the late George Smith Fox, Esq., Wellington.

MORLEY-HAWKINS.—On May 23rd, at Above Bar Congregational Church, Southampton, by the Rev. H. H. Carlisle, LL.B., Thomas Simmons Morley, M.D.Lond., of Barton-upon-Humber, son of John Morley, M.R.C.S., L.S.A., to Jessie, second daughter of the late Edward Bishop Hawkins, of 10, Blechynden Terrace, Southampton.

DEATH.

MCCREERY.—At the Fort, Allahabad, on the 16th ultimo, James McCreery, Surgeon-Major Army Medical Department, eldest son of James McCreery, Fermoy, Co. Cork.

HEALTH OF FOREIGN CITIES.—It appears, from statistics published in the Registrar-General's weekly return for May 19th, that the death-rate was recently equal to 30.0 in Bombay, where the 466 deaths included 49 from small-pox and 103 from "fevers." According to the most recent weekly returns, the annual death-rate per 1000 persons estimated to be living in twenty of the largest European cities averaged 31.7, and was no less than 10.4 above the mean rate during last week in the twenty-eight great English towns. The death-rate in St. Petersburg was 41.9, and showed an increase from the high rates in previous weeks; the 747 deaths included 38 fatal cases of diphtheria and 13 of small-pox. In three other northern cities — Copenhagen, Stockholm, and Christiania — the mean death-rate was equal to 27.2, and ranged from 15.8 in Christiania to 33.6 in Copenhagen; whooping-cough caused 5 deaths in Copenhagen and 4 in Stockholm. In Brussels, the death-rate was equal to 31.5, and 10 of the 243 deaths were fatal cases of small-pox. The usual return from Paris does not appear to have come to hand. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague — the mean death-rate was 26.3; and the rate which was 24.8 both in Amsterdam and the Hague, was so high as 30.5 in Rotterdam, where 11 of the 95 deaths resulted from small-pox. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 33.4; the rates in these cities ranged from 25.9 and 30.4 in Berlin and Dresden to 39.5 in Buda-Pesth and 43.5 in Prague. Measles caused 17 deaths in Berlin and 16 in Prague; typhus and typhoid fever 10 in Buda-Pesth; and diphtheria 7 in Dresden and 9 in Munich. The death-rate averaged 32.4 in three of the largest Italian cities, and was equal to 27.1 in Venice, 31.0 in Turin, and 35.8 in Rome. Measles caused 9 and typhoid fever 6 deaths in Rome; and 5 fatal cases of diphtheria were reported in Turin. The 126 deaths in Lisbon were equal to a rate of 32.9, and included 3 fatal cases of small-pox. In three large American cities, the mean death-rate did not exceed 21.9, while the highest rate was 22.0 in Baltimore. Small-pox caused 5 deaths in Philadelphia, and 4 in Baltimore; 8 deaths were referred to typhoid fever in Philadelphia, and scarlet fever was somewhat fatally prevalent in Brooklyn and Baltimore.—The statistics for the week ending May 26th show that the annual death-rate in the three principal Indian cities averaged 31.4 per 1000; the rate was equal to 29.6 in Bombay, 30.2 in Calcutta, and 34.4 in Madras. A large proportion of the deaths in each of these cities was referred to "fevers." cholera caused 61 deaths in Calcutta, and small-pox 46 and 24 deaths respectively in Bombay and Madras. According to the most recent weekly returns, the average annual death-rate in twenty-one European cities was equal to 30.4 per 1000 of their aggregate population; this showed more than the usual marked excess upon the average rate in twenty-eight of the largest English towns, which during last week did not exceed 21.3. The rate in St. Petersburg was slightly below that recorded in the preceding week. In three other northern cities — Copenhagen, Stockholm, and Christiania — the death-rate did not average more than 23.2, the highest rate being 25.1 in Stockholm, where 5 of the 84 deaths resulted from diphtheria. The death-rate in Paris was equal to 28.0, and showed an increase upon the rate which prevailed in the previous week. The deaths in Brussels were equal to a rate of 22.6 per 1000, and included 6 fatal cases of small-pox. The rate in Geneva was so high as 41.7; of the 56 deaths registered during the week, no fewer than 13 were referred to measles. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague — the death-rate averaged 25.0 per 1000, and ranged from 23.2 in the Hague to 26.3 in Rotterdam, where 11 fatal cases of small-pox were recorded. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 32.5 per 1000, and ranged from 24.2 and 27.3 in Trieste and Berlin to 35.5 in Vienna and 47.5 in Prague. Measles caused 34 and diphtheria 39 deaths in Berlin, scarlet fever 6 in Hamburg, and measles 11 deaths in Prague. In Rome the death-rate was equal to per 1,000; 6 deaths were referred to typhoid and 7 to malarial fever during the week. The rate of mortality in Lisbon was equal to per 1000, showing a slight decline from the high rate in the preceding week; 4 deaths from small-pox were recorded. Among the principal American cities, the death-rate was equal to 22.5 per in Philadelphia, and to 19.5 in Baltimore; diphtheria caused deaths in Philadelphia, and 6 deaths were referred to small-pox Baltimore, and 5 in Philadelphia.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Mr. Walter Coffin, F.L.S.: On a Pressure Escape Quieter for Nitrous Oxide. The adjourned discussion, opened by Mr. Sewell in February, on the Theory of Dental Caries.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Elder, Dr. Graily Hewitt, Dr. Pottes, and others. Dr. Herman: A Case of Acute Gangrene of the Vulva in an Adult. Dr. Champneys: The Obstetrics of the Kyphotic Pelvis.—Epidemiological Society of London, 8 P.M. To receive the Report of the Council for the Session 1882-83. To elect Office-bearers for the ensuing Session. Sir William R. E. Smart, K.C.B., M.D.: The History of Fever in the Royal Navy.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Discussion on Eye-Symptoms in Diseases of the Spinal Cord, introduced by Dr. Gowers. Communications or remarks are promised by the following gentlemen: Dr. Hughlings Jackson, Mr. Hutchinson, Dr. Walter Edmunds (Case of Sudden Failure of Sight in Locomotor Ataxy), Mr. Marcus Gunn, Mr. Lawford (Cases of Optic Atrophy in General Paralysis of the Insane, with Microscopical Sections), Dr. Bevan Lewis (Observations on the Pupil in Spinal Disease), and Dr. Sharkey (Cases of Optic Atrophy in Disseminated Sclerosis). Living specimens at 8 o'clock.—The Parkes Museum of Hygiene, 8 P.M. Dr. J. C. Steele: The Management of the Sick-room. (The lecture will be illustrated by models.)

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

REGRESSIVE PARALYSIS.

SIR,—Allow me to express my thanks for the very kindly notice of the Italian translation of my little work *On Regressive Paralysis* which appears in your issue of May 12th. In the course of your remarks, you state that you "do not feel quite sure that the character of regressiveness is of a sufficiently essential nature to deserve its being used as a specific distinction in the nomenclature," and that "granting the acute inflammatory nature of the poliomyelitic process, its regression is common to it, and to most inflammations which, after subsidence, allow the functions of the organs attacked to return in a more or less complete degree. Logically, also, the term regressive paralysis ought to include many peripheral paralyses, such as that of the facial nerve from cold or other causes." I desire to call to mind, sir, in this connection, the fact that I have in a note expressly excepted these temporary paralyses from peripheral impressions, and those cerebral forms where the tendency from the first is towards recovery of function, and to point out the essential distinction that, in these cases, the recovery is continuous, symmetrical, a reflex, as it were, *en masse*. While the regressive paralysis differs from all these, and every other form, in the fact that, though there is always more or less recession from the number of muscles rendered powerless by the first onset of paralysis, yet it is step by step, irregular and unsymmetrical, picking out a muscle here and there, while others remain permanently paralysed.

This phenomenon is, I believe, unique, and only to be found in this form of paralysis, and experience every day more and more convinces me that it is of necessity entailed by the very nature of the primary cause itself. For though Schulze may be right in the supposition that the vessels are the starting point of the sclerotic change in the cord itself, and that this morbid process spreads thence to the cells and columns, yet the paralysis exists before there is sclerosis, and this is daily more strongly forced upon my own mind—the conviction that, preceding all these, is a peripheral irritation, be it of sudden variations of temperature, of functional disturbance of organs, or of the condition of the circulating fluids, which acts upon the particular cell with which each different fibre is connected, and that thus it is a manifestation not only peculiar to this paralysis, but an essential characteristic, and, therefore, most worthy to form its designation.

For these reasons it was that I chose a name which expresses not a mere reflux, but—as its etymological derivation shows—a receding by steps, irregular, unsymmetrical, with spaces between, which approaches as nearly as any word can to the expression of the character, which I venture to think distinctive, unique, peculiar to this form of morbid action, and essential to its nature. With a renewed expression of my thanks, I am, sir, yours very truly,

Archer's Lodge, Harpurhey, Manchester, May 14th, 1883. W. H. BARLOW.

*** The difference between the clinical phenomena of regression in a case of peripheral paralysis and in a case of poliomyelitic disease lies, we apprehend, in the anatomo-physiological conditions underlying the two processes. In the first, it occurs *en masse* because the morbid changes have affected the whole of the paths of innervation more or less evenly; in the second, it often occurs seriatim because the inflammatory disturbance has spread unequally over a number of motor centres The peculiar mode of regression in some cases of acute poliomyelitis does not therefore, from our standpoint, indicate a peculiar mode or morbid action, but an accidental distribution of a simple inflammatory process. The existence of the physiological mechanisms referred to in this note has been brought into light by the researches of Remark, Erb, Ferrier, and others (see *Brain*, vol. iv, pp. 217, 303).

THE BRUSSELS DEGREE.

SIR,—In your issue of to-day's date, I notice a reply to "L.R.C.P.Lond.," stating that an M.D. of Brussels has no legal right to call himself "Doctor" in England. When giving this opinion, you were perhaps unaware that in the course of a trial for libel in the Queen's Bench in the year 1874, one of the charges against the defendant, who was a solicitor, being that he had publicly stated that the plaintiff—an M.D.Brussels—was not a Doctor of Medicine the late Lord Chief Baron Kelly, in his summing up, said that the plaintiff was fully entitled, in virtue of his foreign degree, to call himself "Doctor," and to put M.D. after his name on his door-plate or visiting cards. It appears to me that this ruling from the Bench, unless and until set aside by some higher legal authority, does give the holders of the Brussels degree, and probably others also if obtained after examination, the right you seem disposed to deny them. I should be glad if you would give a further opinion on the subject.—I am, sir, yours faithfully,

F. ERNEST POCOCK, M.D.
Honorary Secretary Brussels Medical Graduates' Association.

*** In saying that an M.D. of Brussels had no legal right to call himself doctor in England, we meant that there was no special legislation which authorised him to do so. At the same time, there is nothing to prevent him from using the title.

Unqualified Assistants.

SIR,—Apropos of your article of the 5th instant, as one who has had some experience of the system, having (before my eyes were opened as to the dishonesty and the enormity of it) both been myself an unqualified assistant and an employer of them, I venture to offer you my opinion.

My personal experience was limited to a fortnight, after which time I threw "the situation" up in disgust, owing to the menial duties I was asked to perform; but during this short time I was sent to visit, asked to see and prescribe for patients at the surgery, and actually sent miles into the country alone, to attend a woman in labour. At the time, I can confidently assert, I had never attended a midwifery lecture, studied a work on obstetrics, or seen a woman in labour. This could not have occurred had I been qualified. Fortunately for the woman, the case was over before I arrived, as I was sent on foot.

I have employed both so-called experienced, that is aged unqualified assistants, and also mere boys. I found the former the worse of the two; they had assurance without knowledge, whereas the juveniles usually ran to me in any difficulty. The old stagers usually borrowed money which they forgot to repay, and somehow my surgical instruments, and other trifles got lost under their care.

If, as you say, freshly licensed men are in want of familiarity with the routine of general practice, so are unqualified men when they first commence their career as assistants, and they, in addition, lack the only test of competence, viz., that of examination, which the qualified men possess.

It is quite a different thing, in my opinion, to allow students to prescribe for out-patients under the supervision of some member of the hospital staff, and with the extra check of having a qualified apothecary to dispense their prescriptions, and to allow a general practitioner to employ an unqualified assistant either for his own profit, or because he fears the superior knowledge of many of our juniors who keep pace with the times, to dub him doctor, and to pass him on his club, parish, and other ignorant patients as a doctor, all practitioners being doctors alike to some, with no check whatsoever on him, either in the management of a difficult labour case, for which he loses his percentage if he send for his employer. In his prescribing, as he dispenses his own medicines, or in his treatment of surgical cases, as they are often left to his own management.

I think the sooner unqualified practice, in all forms, is made illegal, the better for the dignity, profit, and honour of the profession, as well as for the welfare of the public. There are plenty of junior men available who begin with some knowledge, as proved by their having qualified, whereas the unqualified only qualify themselves; and I think the first step should be, that the medical papers should cease to insert their advertisements; and secondly that the profession should support only those agents who cater for qualified men alone.

The Local Government Board refuse unqualified service, though it is pressed upon them every day, and winked at by them. The examination for the Army Medical Service is a strict one; unqualified lawyers and solicitors are not admitted to practice, nor bogus parsons to preach. Yet the lives of Her Majesty's subjects may be placed at the mercy of any ignorant quack, to suit the convenience of any general practitioner who is dishonest enough to pass him on his clients as

"THE DOCTOR."

SIR,—I perused your leading article on unqualified assistants, in a recent impression of the JOURNAL, with much interest. While reading the discussion of the Council upon the subject, it occurred to me that most of its members were either not sufficiently informed of the circumstances in which general practitioners are often placed, or that they must be impressed with the idea that the general practitioner can command the same fees as they do themselves, and obtain a corresponding amount of income with the same amount of physical work; and further, that they must be unthinking, they being able, in virtue of the higher scale of fees, to amass a large yearly income without the aid of unqualified assistants, and that the general practitioner is to be content with a fraction of the well-earned pay, together with a multiple of the physical toil.

You have generalised the subject thoroughly, but I wish to mention an instance, and ask your opinion concerning it.

An unqualified assistant is kept by a medical man to attend to a portion of his district, which is a mining one, and an out of the way place; one which can not keep a qualified assistant—nay, even board and lodge him—and the principal would be utterly unable to attend the place often enough personally; consequently the unqualified assistant must take the whole charge of a great number of patients—including midwifery.

If the resolution be a just one, therefore it is morally wrong to allow an unqualified assistant any longer to undertake the responsibilities which he might be quite capable of. In the face of this, is the principal to be frightened of the law, and do away with his unqualified assistant, and leave the residents of the district upon their own resources, with their rustic knowledge of domestic medicine or what might be worse. Would not this lead to justifiable quackery?

There ought to be, certainly, some way of dealing with the exceptional few who usurp professional usages and, it seems, are the means of bringing on this unjust restriction upon the upright and well-meaning members of the profession, as well as depriving the poor people, especially, of a large portion of medical and surgical aid which they might require, and which the total number of qualified men on the register can not possibly afford the time or opportunity to render, except mostly through unqualified representatives.

I have had too many opportunities of comparing the efficiency of even very young unqualified assistants (especially those who have served an apprenticeship under a general practitioner), with the deplorable incapacity of the newly qualified in the routine of practice.

This is only a limb of the subject, and it would be well if general practitioners would now at once ventilate the grievances which this most unjust enactment will entail upon them should the resolution referred to become law.

A. G. P.

Diplomas and Degrees.

SIR,—Mr. Price, in the JOURNAL of April 21st, says: "The L.R.C.P. is merely a licence to practice medicine, *the same as the L.S.A.*" (The italics are my own.) The licence from a college of physicians to practice medicine makes the possessor a "physician," whilst the licence to dispense medicines from an apothecaries' hall, makes the possessor an apothecary. A physician, as described in Ogilvie's Dictionary, is "a person skilled in the art of healing; one whose profession is to prescribe remedies for diseases." An apothecary is described as "one who practises pharmacy; one who prepares drugs for medicinal uses, and keeps them for sale. In the middle ages, an apothecary was the keeper of any shop or warehouse." An apothecary dispenses (or, ought to do) the prescriptions written by the physician. Mr. Price may assert that an apothecary is examined in medicine, etc., and so he may be, and the more subjects he is examined in, the better apothecary will he make—but that does not make him any more a physician, any more than does the examination in surgery of a physician make him a surgeon, or the examination in medicine of a surgeon make him a physician. Mr. Price has no one to blame but himself if he, after passing a fair examination in medical subjects, found himself an apothecary; for the College of Physicians was open to him if he had chosen to avail himself of their diploma. I think it is quite time that the Apothecaries' Hall settled down again into its proper place, and that is—to dispense physicians' prescriptions, the State making it penal for druggists or physicians to do so. Also, it is quite time that the College of Physicians caused the possessors of their diplomas to take their proper place, and lay down a proper tariff of fees, such as is laid down for lawyers. For instance, a minimum fee for consultation might be five shillings, or seven and sixpence and the patient might claim to be seen twice for it. If this had been done, and the present chartered Colleges properly utilised, there would have been no need of a Medical Bill to provide yet another examining body, as if we had not sufficient number already. The Universities ought to be the examining bodies for all candidates for admission to the professions of physicians and surgeons in arts, but without residence; and ought to grant the degrees of M.D. and C.M. to successful candidates for the diplomas of both Colleges. It is a mistake for the Universities to take upon themselves to examine in the subjects required for the M.D. and C.M., in which they cannot educate, they having comparatively no accommodation for such education (neither subjects for dissection nor patients in hospital in any number). Degrees ought to be granted upon presentation of the diplomas sent up by the Colleges of Physicians and Surgeons. Both these Colleges would then be affiliated to the Universities, and become, as it were, part of them. If this plan of making use of existing material had been adopted, British medical men would be at once to meet their foreign brethren, who are all M.Ds., on equal terms.—I am, sir,

M.R.C.P., etc.

Village Postmen and the Conveyance of Medicines.

SIR,—It must, I should think, have caused some measure of dismay to many country practitioners besides myself to learn, from Mr. Fawcett's recent letter that, after August 1st, it will not be allowable for letter-carriers in country districts to undertake the conveyance of any parcels except those passing through the post, and parcels of newspapers. It cannot be that this is the only neighbourhood where the inhabitants, distributed over an area of many square miles, have been dependent on these useful officers for the conveyance of, practically, all medicine, except in cases of sudden urgency; and it needs little reflection to see what a grievous tax it will impose on these unfortunate folks if every penny (the regular charge per parcel hitherto made by the postmen) is to be converted into a minimum of threepence, prepaid.

The distribution of medicine differs from that of other commodities in the most important respect, that the necessity for it cannot be foreseen or provided for. Country people can lay in on market-days, or send for to village or town by the regular carriers, such articles as cover the ordinary wants of life, but the need for any particular remedy can be determined only at each visit of the attendant, and the patient cannot wait for it till next market-day.

It is very good of our Postmaster-General to be so considerate of the intellectual wants of our "village politician," when possessed of *mens sana in corpore sano;* but I suspect that, when ill, the politician would be more grateful for an exemption facilitating the receipt of remedies, than ever he was, while well, for similar indulgence bearing on the "latest news." Suppose, for instance, that the village politician happens to be a labourer, with a wife and young family, who is resident four or five miles from the surgery. How will it be possible for him, under the proposed restrictions, his wages being stopped, to procure his medicines, especially if he is in no club. Or consider again, the hardship, when not the village politician himself, but his wife is laid aside, and he is compelled, time after time, either to forego great part of his day's wage, and earn instead the grumbles of his employer, or to add to his day's work the toil of covering eight or ten weary miles. Put the matter thus before the village politician, and how would his vote go—for free news or free physic?

But the saddest and strongest consideration I would urge is the pitiful addition this new restriction will make to the troubles of the sick poor or those who simply cannot pay this increased tax on the carriage of medicine. Look at the case of the pauper, who must send, it may be, eight or ten miles (no exaggeration in districts near this) for every fresh consignment of relief cine. I ask, How is it to be done? If not a question of practical policy this is a question of common humanity.

In short, I regard this proposal as bearing so disastrously on the sick of all grades in a country community, that I would urge my brethren, as those to whom it is given to have the most intimate acquaintance with the gravity and importance of this apparently little matter, if they agree with me, to speak out at once, so loudly and unanimously, that our very efficient but master-General, who is always, I believe, open to instruction, may be constrained to extend to physic the exemption he promises to news. One's estimate of the avoidable suffering and avoidable toil that the new regulation would entail on those least able to bear any addition to the troubles and burdens of their lot, will grow the greater the more closely the subject is looked into; and this conviction it is that has driven me to bring the matter at length under your notice, and that of country practitioners generally.

THOS. M. W

I remain, sir, yours truly,

Hovingham, York, May 23rd, 1883.

White Substances in the Throat.

SIR,—I shall be glad if, through the medium of your paper, you will furnish me with information respecting the following. A friend of mine has been telling me that he occasionally finds small white substances in his throat, on each side of the larynx. These he removes by means of a long pin, and finds to have an unpleasant odour. They also impart a rough-looking appearance to the throat. I should be glad to know the cause, and also the means of stopping them.—I am, etc.,

*** Our correspondent's description does not seem sufficient to enable us to form an opinion; and, in any case, we would advise his friend to consult a medical man.

Fund for Dr. Brown.

Mr. Frederick Wallace has received the following subscriptions, which he has forwarded to the Rev. E. E. Crake, Clifton House, Eastbourne, Honorary Secretary to the Fund.

	£	s.	d.
N. Davies-Colley, Esq.	3	3	0
Dr. Adams, Croydon	2	2	0
A mite	1	1	0
Dr. Colebrooke	0	10	6
Dr. Fairlie Clarke	0	10	6

Proposed Medical Benefit Society.

Mr. H. W. Furnivall (Exeter) and Mr. A. de Winter Baker (Dawlish) are desirous of having their names withdrawn from the list of adherents to the proposed Medical Benefit Society.

Training of Nurses.

Oxon had better put himself in communication with the matron of one or other of the general hospitals in London or in the provinces, as at nearly all the leading hospitals facilities are afforded for the training of ladies to become nurses. The Royal Southern Hospital, Liverpool, or the Manchester Hospital, would probably suit Oxon best.

The Index Medicus.

Sir,—You were in error in stating in the Journal of 19th instant that this College, amongst others, did not subscribe to *Index Medicus*, as we receive it regularly through Messrs. Fannin and Co., booksellers to the College.—Yours, etc.

G. F. Blake.

Royal College of Surgeons in Ireland, Dublin, May 21st, 1883.

*** We are glad to receive Mr. Blake's correction. The name of the College of Surgeons of Ireland was not in a list before us of institutions which took in the *Index Medicus*.

A Member asks if there is any institution in London where massage is scientifically and efficiently carried out.

The Government Medical Bill.

Sir,—Under this heading, "A Member B. M. A.," writes to the Journal, suggesting that we have the letters "L.D." after our names, instead of the time honored titles of M.D., and the various college ones. Are we to become a pack of grocers or butchers? Why should not the latter write L.B.—licensed butcher? If no way be opened for becoming M.D., by "easing down" the arts course for those already qualified, then I say, let the titles remain as they are. The word, or title, "Dr." is now so common, that I, and the most properly-minded of our profession, far prefer the title Mr., unless having the M.D. degree; and in my mind there is nothing so snobbish, or of such bad form, as this word, or prefix, "Dr.," without an M.D. degree-affixation. As for the "licensed doctor," "licensed tailor," etc., etc.; good heavens! we are falling low enough now-a-days, but let us not come to this, at least in our day.—Yours truly,

L.R.C.P.Edin., R.N.

Professional (?) Advertising.

Mr. Frederick Keene of Aylesbury thinks it consistent with his duty to his profession to parade, in the *Bucks Herald*, his qualifications as Licentiate of the College of Physicians of London, Member of the College of Surgeons, and Licentiate of the Apothecaries' Society, and to announce that he gives consultations, free, from nine to eleven o'clock daily. Such a case is by common consent considered unprofessional. The two royal colleges whose titles are thus made use of have certainly a duty to perform in such matters. They should, we think, officially call the attention of offenders to any open breach of propriety; and, if the offence were continued or repeated, publish their condemnation of it. Unless they show that they have the courage of their opinions in matters of this kind, their diplomas may not be very ardently sought after when once they have ceased to confer a title to registration.

Errata.—At page 1,000 of the Journal for May 26th, the eighth paragraph of Mr. Ernest Bower's "Case of Sympathetic Ophthalmitis setting in Seventeen Days after Excision of the other Eye," should read: "After enucleation, the eye was cut open and examined; but, *with the exception of the wound in the lens, iris, and cornea*, it presented a particularly healthy appearance, there being no exudation of lymph, nor any hæmorrhage into the vitreous body." In "Medical Appointments," page 1,048, F.R.C.P. was, by mistake, appended to Mr. Juler's name, in place of F.R.C.S., and the appointment is Junior Ophthalmic Surgeon to St. Mary's Hospital.—In the Journal of May 26th, page 1001, column 2, lines 19 and 20, *for* "in modo dicto," (in the manner mentioned), *read* "in modo dictu" (in the manner to be mentioned).

Preparation for Matriculation at the University of London.

Sir,—"H. L." will find the tutor he asks for in my friend Dr. B. Thiel, Gotha, Germany. I shall be happy to give "H. L." any details, or he can write direct.—I am etc.,

H. Fly Smith, M.B.Oxon., M.R.C.S.

1, Maitland Park Road, Haverstock Hill, N.W.

Varix and Varicocele at the Greenwich Hospital School.

Sir,—I wish to draw attention to the prevalence of varix and varicocele at the Greenwich School, as shown in the report of causes of rejection of boys for the navy, published in the Journal for the 19th May. Varix being a disease of adult life, we may assume that most of the cases were varicocele. All the boys were examined, and passed as free from disease at thirteen years of age. Out of 864 boys, 43, or 5 per cent., were rejected for this; or, out of the 70 per cent. rejections, 7 per cent. were due to this disease. On looking closer at the report, we find that the disease is very unevenly distributed in the school. In certain classes, numbering 630, only 3 per cent. were affected, while, in the classes numbering 234, mentioned below, 10.25 per cent. were affected. Amongst the bricklayers, kitchen boys, and hair-pickers, the proportion affected was 12.5 per cent.; mat-makers, 11 per cent.; select classes, pupil teachers, and knitters, 10 per cent.; and painters and sail-makers, 8.3 per cent. These figures require no comment, but I think the profession might expect the authorities to institute an inquiry into the cause of this disease.—I am, etc.,

R. W. Watson, M.R.C.S

The British Medical Benevolent Fund.

The treasurer of the British Medical Benevolent Fund begs to acknowledge with most sincere thanks a second donation of £100 from the Honourable James George Blaney, M.D., of Melbourne.

A Sea-side Convalescent Home for Ladies.

Sir,—I observe an inquiry from Mr. Bevington, in last Saturday's issue of our Journal, as to where a convalescent lady can be admitted to a sea-side institution, and boarded, etc., for a sum of about £1 per week. I beg to forward a report by this post of an institution at Scarborough, which is perfectly cosmopolitan, and is open to receive ladies of limited means, subject to the approval of the committee, for 15s. per week. Our honorary lady-superintendent is Miss Mackarness, a sister of the Bishop of Oxford, and of the late lamented Bishop of Argyle and the Isles; and she will, on application, forward all the necessary forms for the admission of a patient.—Yours faithfully,

R. Barrington Cooke.

Scarborough, May 30th, 1883.

Medical Service of Cyprus.

Sir,—In answer to "M.B., M.A.", in your issue of May 12th, I have to state that all the medical officers employed by the Government of Cyprus are fully qualified in accordance with the requirements of the Ottoman Code, this being the law under which Cyprus is administered. At the present time, the medical officers at Kyrenia and Famagusta are Syrians, and hold their diplomas from the Medical College at Beyrout. Those at Papho and Limassol are Greeks, and the acting medical officer at Larnaca is a Cypriote. These three gentlemen hold the degree of M.D. from the University of Athens.—I am, etc.,

Whitehall, May 12th, 1883. Fred. W. Barry.

The Pathology of Diabetes.

Sir,—In your leading article on May 12th, on the Chemical Pathology of Diabetes, the glycosuria is attributed, on Dr. Pavy's authority, to the retention in the portal blood, owing to some imperfection in the previous circulation, of an excess of oxygen.

But is it not the case, that glycosuria has been, in some degree at least, advantageously treated and corrected by the administration of permanganate of potash and of peroxide of hydrogen—whose effect must be to increase still further the oxygen in the blood?

I have not the means of referring at present to the recorded testimony of this. But, in the *Medical Digest*, there appear more quotations in support of the use of these substances in diabetes, than against them. Would not this militate against Dr. Pavy's theory?

I have no pretension to consider myself a pathological chemist, but am only a common inquirer, and yours faithfully,

May 12th, 1883. R. Lindsay.

Benzole in Whooping-Cough.

Sir,—Some months ago, I saw in the Journal, I believe, a short account of the beneficial effects of benzole in the treatment of whooping-cough. I shall esteem it a great favour, by your directing me to it, or by giving insertion to this, in the hope that some one of the numerous readers of the Journal will kindly afford the information desired, and state how the remedy is used, etc.—Yours faithfully,

Pertussis.

Vaccination.

Sir,—Referring to the remarks of "A Public Vaccinator of Over Thirty Years' Standing," in your issue of the 5th instant, he complains of not receiving an extra grant of the Local Government Board. He states he scarified the three children each in three places, and successfully. Is it his usual practice to make three marks only? If so, we fear he will long be like ourselves—disappointed. The last time the Local Government Board inspector visited us, he required acreage, which in future we intend giving, and then hope to be among the lucky ones. Four marks, we believe, are the least the inspectors like to see.—Yours truly,

May 10th, 1883. Partners.

Surgeon.—The rules and regulations of the Convict Service comprise those applicable to all the departments; and, to obtain general information, application to their respective heads would be necessary. We presume, however, that "Surgeon" refers to the medical department. He should apply to the Medical Director H.M. Prisons, Home Office, Whitehall, Westminster.

Sulphate of Aniline in Chorea

Sir,—I will feel very much obliged if you, or any of your contributors, can—through the pages of the Journal—tell me anything of the use and dose of sulphate of aniline in the treatment of chorea. Several years ago I prescribed it for a patient—a boy—the subject of well-marked chorea; as, however, the patient was not again brought under my notice, I had no opportunity of studying its effects. Some time after the boy had the powders, his mother told me he was better, and I heard no more of him.

I have, at present, under my care a case of well-marked chorea, which has proved very obstinate; most of the usual remedies have been tried, some with only temporary good effect, others without producing any apparent benefit. I should like, therefore, to give the sulphate of aniline another trial, but before doing so I wish to know something more of the experience of others, regarding its effects and the doses given.—I am, sir, your obedient servant,

B. J

The Wavy Breath-Sound of Phthisis.

Sir,—In the number of the Journal for May 9th, is a report of some remarks of mine on Dr. McVail's paper on the cause of the wavy breathing of incipient phthisis, read at the Worcester meeting last August. Owing to the short time at his disposal, the author was unable to give a complete account of his theory, such as now appears in your columns; but on reading it I see that Dr. McVail's views differ from that contained in the work on *Pulmonary Consumption*, by my father and myself, and contain, as far as I know some original observations.—Yours faithfully,

London, May 14th, 1883. Charles Theodore Williams, M.D.

Hypodermic use of Ergotin.

Sir,—I shall feel exceedingly obliged if you, or any of your correspondents, will give me their experience in the use of ergotin, subcutaneously injected, in cases of hæmoptysis, uterine fibroids, etc. How often, and in what doses are the injections used? Do the injections, when used repeatedly, cause much local disturbance? I also have some difficulty in measuring exactly an injection of two minims or so in my syringe, although the piston is graduated. What method would you consider best for measuring the exact dose?—Yours faithfully,

Enquirer.

Tricycles.

SIR,—As the weather is now suitable for tricycling, a word to those members of the profession who meditate purchasing a tricycle may not be amiss, based on my experience, which is worth communicating.

Last September, I bought from the St. George's Foundry Company, Pope Street, Birmingham, one of their "Rapid" tricycles. It is a double-speeded machine, enabling one to ascend even steep hills with tolerable ease and at a fair speed. When speeded for ordinary roads, it travels at the rate of a little over four yards for each revolution of the crank-shaft; and, when geared for hill-climbing, at the rate of three yards for each such revolution. In going down inclines, it is thrown out of gear, the feet resting on the pedals, and the pace readily controlled by the brake. It is very strongly built; in proof of which, I have had it out on all sorts of roads since September, and it works easier, and is better now, than when new.

I can honestly recommend this make of tricycles as serviceable, reliable, and economical, the price ranging from £13 10s. upwards. In this hilly town, I can, with its aid, visit nearly as many patients in a given time as I formerly did with that of a good horse. But, more than all, in spite of the continuously wet weather we have of late experienced, my general health has improved greatly by this exercise. For five years before I had it, I suffered almost constantly from arthritic rheumatism and sciatica. Since I have used it, both these enemies have disappeared. For night-work, it is invaluable.—I am, sir, yours faithfully,

E. T. BURTON.

14, Spring Hill, Birmingham, April 30th, 1883.

E. BRYAN is recommended to apply to Mr. E. Darke, secretary of the Association for the Supply of Pure Vaccine-Lymph, 3, Hemming's Row, St. Martin's Lane, W.C.

Sleeplessness.

SIR,—I should be greatly obliged by any of your readers suggesting to me a remedy, not therapeutic, for sleeplessness in a young lady, otherwise perfectly healthy. I may mention that all the ordinary popular means, counting, etc., have failed.—I am, sir, faithfully yours,

HARRY E. DIXEY.

Great Malvern, May 22nd, 1883.

The Treatment of Croup.

SIR,—I was greatly in hopes that the letter on the above subject from "Anxiety" in the JOURNAL of the 5th May would have elicited more replies. For sixteen years I practised in a low, damp, and marshy district, through which coursed a large river; and, while there, I saw a good number of cases of croup, and I am sorry to say that, to the best of my recollection, every case of true membranous croup was fatal. I cannot help thinking from what Mr. Fahie says in the JOURNAL of the 12th, of the success which has attended his treatment, that some of his cases were simply cases of catarrhal croup, which, I have found, have invariably recovered.

Doubtless climate has much to do with causing such fatality as "Anxiety" and I have seen. I have treated these cases very nearly as Mr. Fahie suggests, and have done almost everything that could be suggested, and that, too, often from the very commencement of the attack. Tracheotomy I should regard as useless, unless the little patient could be properly attended to within the walls of a hospital. Like "Anxiety," I should be extremely glad to be enlightened.—I am, sir, yours,

WALTER G. WALFORD, M.D.

49, Finchley New Road, N.W.

Axillary Hyperhidrosis on Exposure.

M. AUBERT publishes, in the *Annales de Dermatologie*, some curious facts with reference to this subject. When a patient is examined standing and undressed, perspiration appears under the armpits, and in a third of the cases so abundantly as to run down. M. Desnier, a dermatologist, frequently points out this peculiarity to his pupils. M. Aubert, in seeking the reason of this hyperhidrosis, has ascertained that the temperature of the patient under such conditions is always increased some tenths of a degree. When the arm was raised above the head, consequently preventing contact between the axillary surfaces, the increase was less, and in some there was not any. M. Aubert explains the phenomenon by supposing that the axillary glands, on exposure to cold, behave like the kidneys. Muller's researches demonstrate that cold compresses applied to the integument of a dog have the effect of considerably increasing urinary secretion. Perhaps agitation consequent on examination under certain conditions may, in a measure, cause this increased secretion. M. Aubert has ascertained, by a series of researches, that, when patients are examined in bed, and not exposed, an examination or slight operation does not produce increased axillary secretion.

Licences and Degrees.

SIR,—The assumption of the prefix "Dr." by some of our Associates, mainly Scotch and Irish, who are merely licentiates of a College of Physicians, is an anomaly which I am surprised the Association has not formally discountenanced within its own ranks; but your footnote to the letter of "Verax," in the JOURNAL of March 31st, seems to have hit the blot. Quoting your words, "It is a mere matter of good taste, etc., that is to say, no penalty is incurred, and no law is broken."

There are many other acts of impropriety for which there are neither pains nor penalties, yet what do we think of those persons in the profession who commit them?

To assume a prefix to which you are not entitled may be a fitting device to catch the public eye by way of advertisement, but, as members of a learned and honourable calling, let us set our faces against this unseemly assumption of a title by these licentiates.

I do not know what our respected founder, the late Sir Charles Hastings, would have thought if he knew the extent to which we have neglected our ethics. Let the respective Branches of the Association see to the rectification of this abnormality, unless a majority are adverse to the opinion expressed by

HONESTAS.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Sawyer, Birmingham; Mr. J. H. Kisby, London; Mr. Henry Dayman, Millbrook, Southampton; Mr. Nelson Hardy, London; Mr. John Ringwood, Kells, co. Meath; Dr. H. Fly Smith, London; Dr. John Shaw, London; Mr. J. Fraser Henry, Bury St. Edmunds; Dr. John Beddoe, Clifton; Mr. T. Rowing Fendick, London; Dr. Willoughby, London; Mr. C. F. Bullmore, Helston; Mr. Ernest D. Bowes, Gloucester; Mr. W. D. James, Sheffield; Dr. Sutherland, London; Mr. C. W. Belfield, Bristol; Dr. E. Malins, Birmingham; Dr. J. A. Austin, Tongue, Sutherland; Dr. Dudfield, London; Our Aberdeen Correspondent; Mr. J. M. Brown, Wansford; Mr. Frederick Fraser, London; Dr. J. W. Langmore, London; Dr. J. M. Ryan, Colchester; Mr. E. J. Adkins, Hastings; Mr. Henry Juler, London; Mr. C. G. Wheelhouse, Leeds; Dr. J. D. Cronin, London; Mr. J. Glover, Dorrington; Dr. B. G. Morison, London; Dr. Manson Fraser, London; Mr. C. E. Lay, Peasenhall; Mr. G. A. Raverty, Bootle, Liverpool; Mr. D. S. Moon, Dundee; Mr. S. Mackee, Bradford; Dr. Sidney Coupland, London; Dr. L. P. Yandell, Louisville, U.S.A.; Mr. George R. Fraser, Wark, Northumberland; Dr. Pollard, Liverpool; Mr. Timothy Holmes, London; Dr. A. M. Anderson, Dundee; Mr. G. R. Mansell, Hastings; Dr. Steele, London; Dr. Fairlie Clarke, Southborough; Mr. A. Leech, Rotherham; Mr. M. G. Biggs, London; Dr. V. Burq, Paris; Mrs. E. C. Coster, New York; Mr. F. G. Vawdrey, Handsworth; The Secretary of the Smoke Abatement Institution; Mr. R. W. Watson, Brigg; Mr. Reginald Harrison, Liverpool; Mr. W. Donovan, Whitwick; Dr. Galabin, London; Dr. McCalman, Oporto; Dr. W. W. Hardwicke, Rotherham; Mr. W. M. Renton, Consett; The Honorary Secretaries of the Odontological Society; Mr. de Watteville, London; Mr. William Hartigan, Hong Kong; Mr. H. R. Ladell, London; Dr. J. Farquhar, Harrogate; Mr. Arthur London; Dr. E. Paget Thurstan, Tunbridge Wells; Mr. H. K. Lewis, London; Dr. Partridge, Stroud; Mr. Charles Firth, Gravesend; Mr. T. Laffan, Cashel; Mr. T. Whitehead Reid, Canterbury; Dr. Woakes, London; Dr. J. M. Finny, Dublin; Dr. A. Emrys-Jones, Manchester; Dr. R. W. Barnes, Amritsar; A Constant Subscriber; Mr. Shirley Deakin, Allahabad; Mr. E. Stanmore Bishop, Manchester; Mr. William Dale, Lynn; Justitia; Dr. Elizabeth Blackwell, Hastings; Mr. H. W. H. Dale, Birmingham; Dr. T. F. Chavasse, Birmingham; Miss Barrett, London; Mr. E. J. Powell, London; Mr. R. W. Savage, London; Mr. F. C. Mears, Tynemouth; Mr. S. B. Hazell, Bury St. Edmunds; Mr. L. Thelwall, Stilton; Dr. Strange, Worcester; Mr. Morison, London; Mr. J. J. F. Barnes, Salisbury; Dr. A. Samelson, Manchester; Our Dublin Correspondent; Mr. J. Moore, London; Dr. L. Buckell, Chichester; Mr. James Startin, London; Mr. T. M. Stone, London; Dr. E. C. Craster, Middlesborough; Mr. P. H. Watson, Edinburgh; Mr. F. W. Fletcher, London; Dr. Styrap, Shrewsbury; Dr. C. E. Glascott, Manchester; Dr. Imlach, Liverpool; Dr. W. Alexander, Halifax; Dr. F. E. Pocock, London; Mr. E. T. Thompson, Wolston, Warwick; B. C. R.; Mr. W. Stokes, Dublin, etc. Mr. J. Bain Sinoock, Bridgwater; Mr. Thomas Wilmot, Bradford; Mr. John Flack, London; Mr. W. E. Stanley, Wellow, Bath; Dr. David Cullen, Cheltenham; Mr. B. D. Taplin, Market Rasen; Dr. G. H. Daly, Chippenham; Dr. A. B. Munro, Bradford; Mr. Reginald Harrison, Liverpool;

BOOKS, ETC., RECEIVED.

The Ethics of Diet a Catena of Authorities Deprecatory of the Practice of Flesh Eating. By Howard Williams, M.A. London: F. Pitman: John Heywood. Manchester: John Heywood. 1883.

Mechanical Exercise a Means of Cure; Being a Description of the Zander Institute, London: Its History, Appliances, Scope and Object. Edited by the Medical Officer to the Institution. London: J. and A. Churchill. 1883.

What To Do in Cases of Poisoning. By William Murrell, M.D. H. K. Lewis 136, Gower Street, W.C.

The Student's Manual of Venereal Diseases; Being a Concise Description of those Affections, and of their Treatment. By Berkeley Hill and Arthur Cooper Third Edition. London: J. and A. Churchill. 1883.

Transactions of the National Association for the Promotion of Social Science Nottingham Meeting, 1882. London: Longmans, Green, and Co. 1883.

The Botanical Atlas. By D. M'Alpine, F.C.S. Edinburgh: W. and A. Johnston. 1883.

Lectures on Cataract; Its Causes, Varieties, and Treatment: Being Six Lectures delivered at the Westminster Hospital. By George Cowell, F.R.C.S. With Illustrations. London: Macmillan and Co. 1883.

Transactions of the Epidemiological Society of London. New Series, Vol. Session 1881-82. London: David Bogue. 1883.

The Student's Guide to Surgical Diagnosis. By Christopher Heath, F.R.C. Second Edition. London: J. and A. Churchill. 1883.

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CLINICAL LECTURE
ON
PELIOSIS RHEUMATICA,

Delivered at the University of Glasgow.

BY McCALL ANDERSON, M.D.,
Professor of Clinical Medicine in the University.*

GENTLEMEN,—The affection to which the term Peliosis rheumatica has been given by Schönlein, and which is also named Purpura rheumatica, is generally met with in young persons, or, at all events, before the age of thirty years, and in those who have apparently been previously in good health. The first symptom usually complained of is a painful affection of the joints, especially of the ankles and knees, accompanied at times with more or less swelling and redness, and generally with slight fever. Within a few days, numerous livid or blackish spots, the result of extravasation of blood into the corium, make their appearance upon the skin—most frequently upon the extremities, especially the legs and near the joints affected; these vary in size and shape, but generally they are rounded, and from the size of a pin-head (stigmata) to that of a splitpea (petechiæ), although occasionally they are much larger, and may assume irregular shapes (ecchymoses). When the cutaneous manifestations are fully developed, the joint-affection and feverishness usually subside; and then the spots pass through the same stages as in the case of a black eye, with which most of us are familiar, either in our own persons or in that of our friends—so that, within a week or two, all the symptoms have disappeared. The disease is, however, too often kept up owing to the development of successive crops of hæmorrhagic spots, each crop being accompanied by a recurrence of the fever and joint-affection. The new crop may appear before the old one has faded away, or there may be a variable interval of complete immunity between each paroxysm, so that the whole duration of the disease may be from weeks to months, or even years. Thus we had in Ward V, a couple of years ago, a servant girl fifteen years of age, who had had it more or less for eight years this is, however, exceptional.

Now, let us compare these symptoms with those present in the case of the girl who lies in Bed VI of Ward IV. She is six years of age, and was admitted on April 24th. About fifteen months ago, this little girl's mother noticed a rash, which came out at night and disappeared in the morning, on the calves of the legs at first, but gradually extending to the thighs and arms as well, and which she likened to that of measles or scarlet fever. Three months after this, she observed that, when it faded in the morning, it left bluish-black blotches behind, which disappeared more slowly. For the last six months, swelling and pain in her ankles, knees, wrists, and fingers have preceded each fresh crop of eruption.

For rsome time she has been subject to an eczematous eruption at the back of the head, accompanied by slight enlargement of the neighbouring glands at the back of the neck. Shortly before the appearance of the blotches above referred to, her mother noticed that she lost her colour and became very much thinner; and at times, for a day or two, she seems to have been bilious and yellow, and to have complained of pain in her belly. With these exceptions, however, she has always been a very healthy child.

Since her admission into the infirmary, she has exhibited several crops of eruption, each preceded by some pain and swelling in the ankles and knees, and by slight fever; and the spots which you now see are situated mainly upon the lower extremities, particularly below the knees. The skin of the affected parts is quite smooth, as you perceive, there being no elevation; and there is no itching or disagreeable sensation of any sort, so that the child could not tell that there was anything wrong if she did not see the skin. The spots are at present violet in tint, are mostly rounded, and from the size of a pin-head to that of a splitpea; but there are a few larger blotches, as large as the thumb-nail, of irregular outline; they do not fade in the least on pressure. You will have no difficulty in recognising the fact that these spots are not due to inflammation, but to hæmorrhage into the substance of the skin, because (1) they are not the least elevated; (2) they are unaccompanied by pain, heat, or itching; (3) they do not disappear on pressure; and (4) they are not followed by desquamation. They might, however, be mistaken for flea-bites; but in that case the eruption would be principally observed where the underclothing is thrown into folds, and closely embraces the body; and punctiform spots of *uniform* size, the result of extravasated blood from the bite of the parasite, would be observed, and which, in the early stage, are surrounded by bright red areolæ disappearing on pressure. We fail, too, to discover the parasite, or its fæces which appear on the linen, etc., in the shape of minute dark-brown specks.

That the case is not one of scorbutus (scurvy) is apparent from the following considerations. (1) The diet previous to admission appears to have been good, and she has certainly not improved under the hospital diet; (2) the gums are healthy, and not in the least degree spongy; (3) there is an absence of that peculiar dirty pallor of the countenance observed in cases of scurvy; and (4) of those painful hard swellings at the flexures of the joints (especially the ham and elbow, and beneath the periosteum of the tibiæ) which are common in that disease; and (5) the symptoms came on suddenly in a child in apparently fair health, and not slowly and insidiously after a varying period of debility.

You will probably, then, agree with me in thinking that the symptoms observed in our little patient correspond with those which I mentioned at the outset, and that her case is one of peliosis rheumatica.

This disease is sometimes complicated with the development of bullæ (blebs), which is not surprising, as the same state of system favouring the occurrence of extravasation of blood should likewise be favourable to the accumulation beneath the skin of the serum of the blood (purpurapemphigoides). The following case illustrates this complication. Martha B. M., aged 24, came for advice on January 13th, 1869, on account of an affection of the lower extremities, of three months' duration. At that time, round red spots, for the most part the size of a fourpenny-piece, made their appearance; the next day, they assumed a bluish tint; and, on the third, disappeared, leaving yellowish stains. On the fourth day, a fresh crop was observed, which ran the same course, and was succeeded by successive outbreaks up to the time of her coming to me. When these symptoms first appeared, they were accompanied by great swelling of the ankles, with severe aching pain in them. At the same time, a large bulla, about the size of a halfpenny, formed on the outer side of the right ankle. About a fortnight previous to my seeing her, a similar bulla was detected on the inside of the same leg. On examination, the remains of this bulla were still apparent; and numerous purpuric spots, varying in size from a pea to a sixpence, and of a reddish, livid, or yellowish tint, were scattered over both lower extremities. The veins were not varicose. She seemed in pretty good health; her gums were healthy; she had always had plenty of food of good quality, and had never before suffered from rheumatism. The treatment consisted of ten drops of turpentine on sugar three times a day, with occasional doses of castor-oil, which had an immediate effect upon the disease; but it was two months before all tendency to the development of purpuric spots had disappeared; and for some time she was troubled with an ulcer, which formed in the site of the last bulla, as the result of injudicious local applications.

It sometimes happens that the extravasations of blood are preceded by the development of little solid elevations, or papules (purpura papulosa), and this seems to correspond with the eruption described by Willan under the name of lichen lividus. The following case illustrates this variety, as well as its complication with bullæ and œdema. On December 9th, 1868, I was requested to see, with Dr. S. I. Moore, a stout healthy-looking gentleman, who "had never had a day's illness in his life," but who was interested in, and probably excited by, the municipal elections which at that time were pending. For several weeks he complained of pains, or rather, perhaps, of weakness in his joints, especially those of the lower extremities; but his illness, which was accompanied by febrile symptoms, set in decidedly only a few days before I saw him. His tongue was moist and not much coated; his appetite fair; his bowels had been freely opened by medicine, and his urine, which previously had been scanty and loaded with lithates, was clear, and of fair amount, under the influence of acetate of potash and colchicum. His pulse was 120, and rather feeble, but its rapidity was out of proportion to the extent of the fever. The lower extremities were markedly œdematous. There was swelling around some of the joints, and a feeling of stiffness rather than of pain in them, which was attributed to the swelling. Three morbid elements were observed on the skin, viz., purpurous spots, a papular eruption, and

*Reported by J. Lindsay Steven, M.B., Assistant to the Professor.

bullæ. The first varied in size from mere points to ecchymoses the size of the palm, and, for the most part, round. The greater number of the small ones constituted apparently the second stage of the papular eruption; and on the back, where the latter were most abundant, the transition from papules to purpurous spots was observed, that is to say, papules whose elevation was subsiding, and whose redness only partially disappeared on pressure. Most, if not all of the large ecchymoses, occupied the seats of previous bullæ, which varied in size from a splitpea to a goose's egg, and which, when at their height, were fully distended with clear serum. The black purpuric patches covered by the flaccid envelopes of the bullæ after the serum had escaped, looked very like patches of skin which had mortified. The bullæ were most abundant on the legs and buttocks; and the cutaneous manifestations had no special tendency, such as is often observed, to implicate the skin around the joints. The acetate of potash was continued, and purgative doses of castor-oil and turpentine recommended, along with light, nourishing fluid food. This patient made a good recovery.

There is considerable doubt as to the nature of this interesting affection. The fact that each outbreak is apt to be preceded by joint-affection has led to the belief that it is a manifestation of the rheumatic diathesis; hence the names by which it is known; although it might be argued that the painful affection of the joints in purpura rheumatica is similar to the aches and pains often experienced at the onset of some of the specific fevers. There can be no doubt, however, that, just as in the case of rheumatism, the disease is apt to be associated with derangement of the digestive organs, and with nervous debility.

In our treatment of it, therefore, we must pay great attention to the general health, and especially to the state of the digestive organs, rectifying, by means of careful dieting and medicine, any derangement which may be present. When this has been done, and the affection persists, we may try a course of turpentine, in doses of ten to thirty minims on sugar three times a day, or of liquid extract of ergot (in doses of half a drachm every four hours), on the principle of contracting the small blood-vessels of the skin. In very chronic cases, arsenic may be administered, either internally or by subcutaneous injection. From this, it will be seen that we do not agree with Hebra, who wrote: "We have no means either of shortening its course, or of preventing the possibility of its ending in death.....And, since the pains experienced demand some treatment, even before a diagnosis can be made, there is no doubt that, in every case, something will be prescribed by the physician, and as little that the subsidence of the pains which follow will be regarded as the effect of the prescription."*

* On Diseases of the Skin, by Ferdinand Hebra, M.D., *Sydenham Society's Transactions*, 1868, vol. ii, p. 423.

LONDON ÆDILES.—On Wednesday, May 23rd, Dr. Norman Chevers delivered an address at 9, Conduit Street, on the objects of the Sanitary Assurance Association, which he entitled the "London Ædiles." Mr. George Aitchison, A.R.A., occupied the chair. Dr. Chevers compared the sanitary condition of ancient Rome and modern London, and referred to his experience in Calcutta; and he urged that the sanitary condition of London was such, that no householder should be satisfied without the assurance of some competent authority that his dwelling, whether a palace or a cottage, was free from drain-contaminations. He expressed an opinion that consumption was hereditary, principally because successive generations neglected to remedy the sanitary defects from which their forefathers suffered. The lecturer was most impressive in his delivery, and illustrated his discourse by interesting diagrams. A discussion followed, in which Sir Joseph Fayrer, F.R.S., Mr. H. Rutherfurd, Mr. Cave Thomas, F.S.S., Mr. Mark H. Judge, and others took part; and a desire was unanimously expressed in favour of the lecture being redelivered to a popular audience at Exeter Hall, or other capacious building. A hearty vote of thanks was accorded to Dr. Chevers.

SANITARY INSTITUTE OF GREAT BRITAIN.—At the annual general meeting, held at 9, Conduit Street, on Monday, May 7th, Professor de Chaumont, M.D., F.R.S., in the chair, a report was presented by the Council on the progress of the Institute, and on the work achieved at the congress and exhibition held at Newcastle in the autumn of 1882. The chairman gave an address, and the officers for the ensuing year were elected, the President being his Grace the Duke of Northumberland, P.C., and the trustees, Sir John Lubbock, Bart., D.C.L., F.R.S., Thomas Salt, M.P., and Dr. B. W. Richardson, F.R.S.

AN ADDRESS

ON THE

ORIGIN AND DEVELOPMENT OF THE SCIENCE OF HYGIENE:

BEING THE INAUGURAL LECTURE AT THE PARKES MUSEUM.*

BY F. S. B. FRANÇOIS DE CHAUMONT, M.D., F.R.S.,
Professor of Hygiene in the Army Medical School, Netley.

To trace the history of the search of the human race after health would be almost tantamount to writing the history of the race itself. An inquiry into early wanderings and gropings after health would be doubtfully useful, even if it were likely to be interesting, for it would bear to the hygiene of the present day something of the same relation that the visions of the astrologer bear to the astronomy of Newton. A careful examination of the position which hygiene now holds will, I think, justify us in alleging that it has made such advances as may fairly entitle it to take its place among the progressive, if not absolutely exact sciences. Its literature has been said with truth to be amongst the oldest in the world. It has been proposed to place upon these walls the names of the illustrious dead who were pioneers and founders of our science. We cannot doubt that, in order of chronology, the first name to be honoured is that of Moses, as the author of the most complete and detailed system of hygiene in ancient times. We may be pretty well sure that the code of Moses was the outcome of the wisdom and experience of long past ages. Be that as it may, however, we cannot but admire the excellent precepts laid down for the cleansing and purifying of house and camp, for the security of pure water, for choice of good and wholesome food, for the isolation of the sick and the unclean, and for the destruction of refuse. It would not be too much to say, that a fairly strict adherence to the Mosaic law would have preserved mankind from many of the disastrous plagues which have afflicted it. During the Middle Ages, the Jews enjoyed a remarkable immunity from outbreaks of epidemic disease—an immunity which still distinguishes them in our own time. So little, however, was the real cause of their healthiness appreciated by our predecessors in the bad mediæval times, that it was held an irrefragable proof of their demoniac machinations.

As might be expected, it is to the Father of Medicine, the great Hippocrates, that we owe the most of what we have left of Greek hygienic literature, although we must admit that even in Homer there are traces of hygienic knowledge, and that there the disinfecting powers of cleansing fires of sulphur are fully recognised. Another name that deserves remembrance is that of Xenophon, whose triumphant retreat was not less a hygienic than a military triumph. Nor ought we to omit the name of Herodicus the first to introduce gymnastics on scientific principles, not only as a curative, but also as a preventive measure. The myth which makes Health, or Hygieia, the daughter of Asklepios (whom we call Æsculapius), no doubt arose from an instinctive perception of the value of medical science in preserving health. The famous line of Homer, which is thus rendered by Pope,

> "A wise physician, skilled our wounds to heal,
> Is more than armies to the common weal,"

shows the estimation in which the military surgeons of those days were held. Would that modern commanders had an equally just and appreciative estimation of the services of the best-abused but most beneficent of professions!

The general life of the Greeks was eminently hygienic, being mostly out-door and under favourable conditions, persons even of high position taking part, not only in active occupations, but in labours that might be even considered menial by the unthinking. The honourable place that athletic games held is a point of resemblance between the Greeks and our countrymen that ought not to be lost sight of; the splendour of Greek literature, art, and knowledge is a sufficient answer to those who are afraid lest athletics should develop the muscles of our youth to the detriment of their brains.

* The lecture has been slightly condensed.

Among the Romans, the care bestowed upon the provision of pure water—with which is connected the celebrated name of Frontinus, as "Curator Aquarum"—and their elaborate system of drainage, prove that they had correct ideas on some of the fundamental questions of hygiene. The more recent discoveries in the Campagna have still further shown that they were fully aware of the conditions which alone could make that now pestilential region habitable, as a system of subsoil-drainage has been revealed, that is a reproach to the ignorance and supineness of modern times. Another direction in which the Romans showed great knowledge of the principles of hygiene, was in the management of troops on the march and during war. The rules for encampments given by Vegetius are excellent; and, to the great care shown for every detail of sanitation, must be attributed the comparatively small loss which the armies of the Romans appear to have maintained. In taking a cursory retrospect of the old world in its medical aspects, I should be inclined to say that, on the whole, its medicine was as much preventive as curative. The motto of the time might have been "Venienti occurrite morbo." There was a dread and impatience of disease—so much so, that men were known to commit suicide out of fear of it; and the sentiment of pity for the weak and the oppressed appears to have been absent. Hence, perhaps, the curious fact, that we have no record of public hospitals for the sick poor during the classical periods, the earliest being as late as the reign of Justinian.

From the time of the decline and fall of the Western Empire, the progress of hygiene appears to have been arrested, and we pass into a dark and dirty period when fanaticism usurped the place of religion, and dirt became the odour of sanctity. The picture of the thousand years which elapsed between the downfall of Rome and the final capture of Constantinople, as drawn by Michelet in his *Sorcière*, is one of the most striking as well as disgusting that can be conceived. "Pas de bain," he says, "pendant mille ans!" Can we wonder at the plagues which devastated Europe? Is it astonishing that the Black Death cut off two-thirds of its inhabitants? It is humiliating to think, from the accounts of Erasmus and other visitors, that our country remained long pre-eminent in Europe for dirt and disease. One can easily imagine how different the case of Europe might have been, could the hygienic knowledge collected during and before the classic period have been carefully put together, formulated, and acted upon. When a fresh interest began to be excited, and men began slowly to perceive that the elixir of life was a vain imagining, their minds turned more to actual observation. The older writers had already written much on diet, and even Hippocrates had pointed out the close relation between food and work: various treatises on food and regimen were written later, of which the two that might claim notice are, the one entitled *Tables of Health*, and written, it is said, by two Jewish physicians at the request of Charlemagne; it is quaintly illustrated throughout by woodcuts of much spirit, representing every article and operation in the book which it was possible to illustrate. But the most celebrated mediæval work on the subject is undoubtedly the renowned *Regimen Sanitatis Salerni*, the code of the famous University of Salerno, which is believed to have been compiled by John of Milan in 1099. Haller enumerates twenty editions; and it was translated into various languages, among others, into English by Paynell (1579-1609), and by Dr. Holland: it was also the subject of numerous and voluminous commentaries. Some of it is no doubt fantastic, but much of it is sound sense; some of the precepts might well fit many towns of the present day:—

> "Lucidus ac mundus sit ritè habitabilis aër;
> Infectus neque sit, nec olens fœtore cloacæ;"

which we may render in this way:

> "Dwell in air both clear and pure,
> Free from taint or smell of sewer."

I do not know, however, if our friends of the Blue Ribbon persuasion would quite approve of the next precept which I take the liberty of rendering thus:

> "If over night your drink has hit you,
> Take a hair of the dog that bit you!"

One of the first really practical writers on the subject of hygiene was the well-known Ludovico Cornaro, a noble Venetian, who, after a youth of intemperance and excess, reformed his ways, and kept so strict a watch over his diet and habits, that he prolonged his life to the age of a hundred years, dying in April 1566. Various writers followed Cornaro—few of them of much note except the famous Jerome Cardan, one of the most learned of the physicians of the *Renaissance*, but somewhat whimsical in his hygienic views. Of the other masters of the period, I will only refer to Thomas Philologus, of Ravenna, on account of his strong protest against intramural interment, thus anticipating by some three centuries, the happily fruitful labours of our distinguished countryman, Edwin Chadwick. The next writer of eminence was the celebrated Sanctorius, a Professor of Padua. He wrote a work on health, entitled *Medicina Statica;* and he also began the era of exact observation by his experiments with the weighing chair, by which he endeavoured to shew the weight of the insensible perspiration. The aphorisms in his book are couched in quaint and even fantastic language; but many of them are sound when stripped of the vagueness and mannerism of the time.

The writers, from the time of Sanctorius down to the end of the seventeenth century, call for little attention; the remarkable physical discoveries of the close of that century and throughout the whole of the next, paved the way for more exact observation in medicine; accordingly, we have the observations of Boerhaave and Haller, and a host of other names of distinction, all representatives of progressive medicine, either directly or indirectly connected with the advance of hygiene.

It is a little difficult, in a necessarily restricted lecture, to convey any exact idea of the way in which modern hygiene became formulated into so much of a science as it can at present lay claim to be; but I will attempt to make a brief sketch of its more salient points. In the eighteenth century several important questions were inquired into, and to a large extent solved, of which the chief were: the Influence of Air as a Factor in the Spread of Disease; the True Cause and Prevention of Scurvy; and the Prophylaxis of Small-pox. The introduction of inoculation was a most important step—it was the first step on the road which led, at the close of the century, to vaccination, one of the most signal triumphs of preventive medicine. The inquiry into the causes of scurvy was another step in advance, of the most signal importance. No one in the present day can form any idea of the ravages that terrible disease produced. All long voyages were imperilled by it, whilst the very existence of England depended upon her fleet, which had frequently to return to port absolutely crippled with scurvy, in some cases, as many as ten thousand men being landed from the channel fleet helpless.

Although so far back as the seventeenth century the efficacy of fruits and fresh vegetables as preventives had been surmised, if not actually noted, it is really to the renowned Captain Cook that the credit is mainly due of having established this important fact. It took many years, however, to impress this fact sufficiently upon the authorities, and it was not until 1796 that the medical officers of the navy (among whom was the renowned Sir Gilbert Blane) obtained the regulation ordering lime-juice to be supplied to our seamen. The effect was magical; scurvy lost its terrors; and it may be that the supremacy of England at sea during the Napoleonic wars, was in part owing to the improved condition of her seamen.

The recognition of foul air as a factor in disease was certainly begun in the last century. The great disaster of the Black Hole of Calcutta, and the terrible effects of the jail fever investigated by Howard and others, pointed to foul air as a main factor in the propagation of disease and death. It was reserved for the later researches of Neil Arnott and other hygienic observers of the present century, to prove that foul air is the main cause of the still more general and fatal class of destructive lung-diseases, which, in this and in other lands, cuts off so many of the brightest and the best. Another important discovery of the last century, was the determination of the cause of lead-colic by Sir George Baker. This opened up the large field of metallic poisoning, which has received so much elucidation, and proved of such importance in reference to the water-supply of large communities.

In the present century, we have to point to the establishment of the fact of the water-carriage of disease, with which the name of Snow is honourably associated; the differentiation of continued fevers by Stewart and Jenner, and their connection with the poison of infected excreta by the labours of Budd and other eminent men. To these, we must add the elaborate investigations into the modes of propagation of cholera, dysentery, and other tropical diseases, and the means by which scarlet fever and diphtheria are carried from place to place by various channels of communication. No inquiry can assume a scientific form unless it have a numerical basis to work upon. This we find in the collection of statistics, a beginning of which was made a long time ago in the Bills of Mortality kept in this country. We know how imperfect these were, but still beginnings were made, until at last the Government Statistical Department was formed, and that remarkable series of reports begun, which will immortalise the name of William Farr. From that time, the future of hygiene was assured, for there was some

sound ground to work on; and, if we add to that the reports on the health of towns, published by the commission of which the present Duke of Buccleugh was president, we shall have stated some of the most important foundations of modern sanitary science. The establishment of the General Board of Health, under Mr. Chadwick, was one of the valuable outcomes of this remarkable movement. Although the original Board of Health was brought to an end in 1854, yet its work has been continued and expanded under Mr. Simon, his colleagues and successors.

We have a long roll of names connected with the public services which must ever be remembered with honour; in the Navy we have such names as Lind, Blane, and Burnett; and in the Army Pringle, one of the most philosophical physicians who ever lived, Brocklesby, Fergusson, McGrigor, and a host of others. The labours of the late Sir Alexander Tulloch, Deputy Inspector-General Marshall, and Surgeon-General Balfour, in collecting and arranging the army statistics, were of the highest value; and it is not too much to say that the publication of the first Army Medical Statistical Report marked an epoch in hygiene, especially in that part that deals with climatology. The Army Medical Statistics are continued now yearly, but it is a matter of regret that they have been allowed to be published in so abstract and undetailed a shape, as to deprive them of much of their utility. But perhaps the most remarkable contribution the army has made to sanitation has been by the evidence given to the Royal Commission of 1857, which met after the Crimean War, to investigate the causes of the sickness and mortality of our troops. The paramount influence of foul air in the production of lung-disease was proved to demonstration, and the art of ventilation was placed on a secure foundation. The Barrack and Hospital Committee, of which Dr. Sutherland and Captain Douglas Galton were the active members, laid down a series of regulations for the construction of barracks and hospitals, which have been followed with the utmost benefit both at home and abroad. Following this came the Indian Commission, which did for that vast dependency what the Home Commission had done for the rest of the empire.

To recognise an evil, and its cause, is half way to curing it; and, after the lapse of a quarter of a century, we can point to such an improvement as might at one time have been looked upon as chimerical. The death-rate of the army at home is only two-fifths of what it was before the Crimean War; the death-rate in India is only one-third, and the death-rate in the West Indies barely one-tenth. In civil life, it has recently been shown that the improvements of later times have resulted in a diminution of 2 per 1,000 in the general death-rate; and, with the knowledge we now have of the causes of disease, we may be sure that a general death-rate of not more than 15 per 1,000 may be confidently looked for.

I might extend this lecture by reference to the various theories of propagation of disease, but time would not permit it, even if it were otherwise desirable. I may, however, say that no one theory yet promulgated completely satisfies the requirements of the case, and that there may be some basis of truth, even in the more conflicting views. It is quite clear that it is only by a knowledge of the causes of disease that hygiene can be advanced, and that it can never be in any way perfected without a complete system of etiology. And we are at present in this position, that practical hygiene has, to some extent, outstripped the knowledge of causes of disease. We look, therefore, anxiously towards the pathological investigations of the time, and we deeply deplore the well meaning but misguided zeal which is at present placing such grave obstacles in the way of the only means by which true science can advance, namely, direct experiment.

Although there are many names to whom I might refer as good workers in hygiene, abroad as well as at home, there is one which we cannot omit in a lecture like this, more especially as it is the first delivered in this museum, which has been founded to his memory.

Edmund Alexander Parkes did more than any other one man in this, or any age, to make hygiene a positive fact, a practical science based upon, not only philosophical conceptions, but actual experiment. Starting in life as an army medical officer, he was able to produce during his short service in India and Burmah, works upon Dysentery and Cholera, which will always be of the greatest value. Retiring into civil life, he became eminent as a physician and teacher, and in 1855 he undertook the organisation of the hospital at Renkioi in the Dardanelles, which was a perfect model of successful hygienic administration. Struggling with distressing and dangerous disease, he continued to lead a life of intellectual activity, not often accomplished by the most robust; and, when in 1860 the Army Medical School was established by Lord Herbert of Lea, Sir James Clark had no hesitation in advising that Dr. Parkes should be secured, if possible, as the Professor of Hygiene. How excellent the foresight of that eminent physician was, we all know, for Dr. Parkes was not only the first Professor of the science in this country in point of time, but also the first in every sense of the word. The publication of his well known *Manual of Practical Hygiene* gave us for the first time a work on the subject, which was not merely a string of opinions and surmises, but at every point brought opinion to the test of figures and experiment, where it was possible, and thus laid the foundation for a real science in the future. Similarly with his teaching he pressed upon the Government to establish practical laboratories for his pupils, where they could do for themselves as much of the experimental work as time and opportunity allowed; and he impressed upon those who studied under him, the necessity of testing everything by actual investigation, and bringing all statements to the proof of figures before accepting them as true. There was never probably a man of calmer and more judicial mind, a man more rigidly critical of his own work, or more kindly disposed to allow every credit to the work of others. Having known him personally for many years, during thirteen of which I was his assistant and colleague, I can bear confident testimony to the exceeding beauty of his character, in which "sweetness and light" were never more truly displayed, and to the scrupulous accuracy and care with which every investigation of his was carried out. The science of hygiene could have no purer and better founder, and its votaries no brighter and more spotless example.

CLINICAL REMARKS

ON

PRIMARY OR IMMEDIATE LIGATURE OF THE FEMORAL ARTERY IN POPLITEAL ANEURYSM, AND ON THE DIVISION OF THE ARTERY BETWEEN TWO LIGATURES.

By T. HOLMES, M.A., F.R.C.S.Eng.,
Surgeon to St. George's Hospital.

THREE cases of popliteal aneurysm have been treated at St. George's Hospital within the last few months by the Hunterian operation without any previous trial of compression. As this is a somewhat unusual circumstance at the present time, I have thought it might probably interest the readers of the JOURNAL to have the subject of ligature of the femoral artery brought under their notice, especially at the present time, when the old plan of dividing the artery between two ligatures is being reintroduced by Mr. Walsham and other surgeons at St. Bartholomew's Hospital.

After seeing something of popliteal aneurysm, and studying the literature of the subject, and the practice of other surgeons, with a certain amount of industry, I have come to a very confident opinion that the safest plan of treatment for all large, all rapidly growing, and all thin-walled popliteal aneurysms is to tie the femoral artery at once, that is, after a few days' confinement to bed; and that the safest way of tying it is that which interferes the least with the natural connections of the artery. I believe, further, that the safest material for the ligature is either the ox-aorta ligature of Mr. Barwell or the kangaroo-tendon ligature which was introduced at St. George's Hospital by our then assistant-surgeon Mr. Stirling, and which was brought under the notice of the Royal Medical and Chirurgical Society by Mr. T. Smith and Mr. Girdlestone of Melbourne (*Med.-Chir. Trans.*, vol. lxv, p. 71). On this latter point, however, our experience is as yet insufficient.

I will illustrate the three points above-mentioned by a short account of one of the above cases (the only one which was under my personal care), and by a very brief reference to the other two, which were treated by Mr. Haward and Mr. Dent.

My patient was thirty-three years of age. He was a married man, and there was, as far as I know, no history of syphilis, though there seems reason to think that he had been given to drinking. He first noticed something wrong about a month before his admission, when he was getting off a horse, and felt "something snap" behind his right knee. It did not seem very clear how soon afterwards he was conscious of the existence of a tumour and pulsation; but it soon became very painful. Still he continued at his work (that of a coachman) up to the day of his admission. When he presented himself at the hospital, on April 23rd, there was a very large

aneurysm, filling up the whole popliteal space, and consisting of several lobes. The main portion of the tumour, opposite the flexure of the joint, felt more hard and tense than the rest, and was separated by a distinct sulcus from another portion, which extended upwards and outwards, where the wall seemed much thinner. There was also another part projecting on the inner side. The *bruit* was loudest opposite the joint. Pressure on the artery did not much diminish the size of the tumour. The man was grey-haired, and seemed much above his alleged age. He was restless and very nervous. He was kept in bed for a few days, with the effect of at first much diminishing the pain of which he complained in the leg and in the tumour; but the latter was obviously increasing in size, and the pain soon began again to trouble him.

On consultation with my colleagues, it was agreed that the best course would be to tie the femoral artery at once; and the operation was fixed for April 26th; but the patient's resolution failed him, and he begged that it might be postponed till the 28th, on which day he consented to its performance. In the interval, the increase of the tumour was very decided. The artery was tied at the usual place with a stout kangaroo-tendon, tied in a double knot. The wound was washed out with carbolic lotion, completely united, and dressed with carbolic gauze. Immediately on the ligature of the artery, the tumour collapsed to about half its size, and the temperature of the limb fell perceptibly. This diminution of temperature persisted for two or three days; but otherwise there was no symptom to record. The wound united throughout by first intention. Sixteen days after the operation, it was noted that the tumour was nearly, if not entirely, solid, about one-third its former size, and the man was to be allowed to get up for a short time, but not to walk. He has since gone on perfectly well, and will soon leave the hospital.

The other two cases in which the femoral was tied without previous pressure may be thus summarised. One was a man, aged 57, under Mr. Haward's care in July last with disease of the lungs, in whom, after a slight and very trivial trial of genuflexion, the artery was tied, as it was not thought desirable to submit him to any prolonged or irritating treatment. The substance used for the ligature was chromic catgut. In this case, the wound healed almost, if not entirely, by first intention, and the aneurysm was entirely cured. The man died twenty-four days after the ligature, from the rupture of a vessel in the brain. Mr. Haward will, I believe, publish an account of the dissection. It will be enough here to say that everything about the aneurysm and the ligature had been completely successful. The ligature was intact, surrounding the external coat of the artery; the lower coats were cut through. The artery was occluded with clot in the usual manner. The aneurysm was filled with laminated clot. The other was one of the rare cases of popliteal aneurysm in the female. The woman was fifty-nine years old, under Mr. Dent's care. The aneurysm was very large, and extended up beyond the popliteal space. The artery was tied with a kangaroo-tendon on October 5th. The wound united by first intention, and all went well, except that the tumour remained large and without consolidation for an unusually long period. Ultimately, however, this entirely subsided; and when she was last seen, there was hardly any trace of the enormous aneurysm to be felt.

These three cases, then, may all be classed as successful; for the death of Mr. Haward's patient had no connection whatever with the operation, and the latter had completely succeeded in its object of curing the aneurysm.

REMARKS.—Much is said in the present day about "progress" in everything, and not least in surgery; everything is constantly changing, and it seems almost to need an apology if a surgeon treats his patient as Sir A. Cooper, or even as Syme, would have treated him. There is no wonder, then, that the treatment of aneurysm by the ligature has become much restricted. We no longer look on pressure in the treatment of popliteal aneurysm with the disfavour with which Syme regarded it. In fact, in one or other of its many forms, it is indisputably the routine treatment; yet, like all other "routine" treatments, it is liable to do mischief if it be not used with discrimination; and this seems to me specially the case with the two forms of pressure which are the most uncertain in their effects, and the least easy to regulate—I mean genuflexion and the use of Esmarch's bandage. But even the less dangerous methods of pressure, by the finger or by instruments, not uncommonly do considerable harm, even when they are borne perfectly well by the patient. I have never ventured on the application of Esmarch's bandage to a large, rapidly growing, thin-walled tumour; nor do I think that a prudent surgeon would advise the treatment; while, as I have been successful in the treatment of such cases of small aneurysm as I have had under my care, by methods with which I am more familiar, and in which I have more confidence, I have no personal experience of the method, nor have I heard that any of my colleagues have used it. I published in the *Clinical Transactions*, vol. ix, the account of a case in which I should certainly have used Esmarch's bandage had I then been acquainted with the treatment. And even with those methods of pressure to which I allude, I have, I think, seen more harm than good from a too long persistence in their use. If they do not succeed quickly, I believe it is better, on the whole, to give them up, and resort to ligature; though I am aware that success has often been obtained by the protracted use of pressure, still I have seen many cases in which, after a good deal of suffering, the patient has been left in a worse general condition to bear the ligature, and with no improvement in the local conditions, and even one or two in which the aneurysm has ruptured, and a case which might have been easily dealt with by primary ligature has become complicated and very dangerous. Hence, while fully recognising the value of all the forms of pressure, of which, indeed, my own experience has been sufficiently favourable, I do not think it wise to insist on their employment unless some considerable improvement has been obtained in a week. And in persons who are irritable from alcohol, or are unusually susceptible of pain, the use of pressure requires still more consideration.

That the success of the cutting operation has much increased of late years, I think there can be no doubt (see *System of Surgery*, 3rd ed., vol. iii, p. 139), though there may be some difference of opinion as to the main cause of that success. That "antisepticism" is the chief reason I am firmly convinced, if we use the word in its broadest sense, to include all modern improvements in surgery whereby the rapid union of the wound is favoured; but it seems also reasonable and consistent with experience to hold that another cause is the very slight exposure and separation of the artery which is now the common practice with most surgeons.

And this leads me, in the second place, to notice the proposal lately emanating from Mr. Walsham to revive the old method of dividing the artery between two ligatures. There appears to be an ancestral proclivity to this method at St. Bartholomew's, for it seems to have been constantly adopted in former days by Mr. Ramsden.* But is there really any advantage in it to compensate its obvious drawbacks? The latter are plain enough: that it involves a much freer dissection and exposure of the artery, separating it for the distance of about half to three-quarters of an inch from its connections and from the accompanying vein. The assumed advantage is that, by taking off the tension of the elastic artery, secondary hæmorrhage will be made less probable;† but for my own part, I venture to question the theory. There can be no question that two ligatures are substituted for one. If those ligatures are made of silk, both have to separate, and either, I submit, may bleed. To say that this never happens except from the slipping of a ligature when an artery is tied after a wound, is, in the first place, to make rather a hazardous assertion; and, in the next place, the cases are not strictly analogous, for wounded arteries are presumably more healthy than those which are aneurysmal. Secondary hæmorrhage after ligature for aneurysm is a very rare event, at least, it has proved so in my experience of the practice of St. George's Hospital. I will set aside two cases in which secondary hæmorrhage occurred after the use of the silver ligature, and which obviously depended on the fact that the ligature had been drawn too tight.

The difficulty of regulating the tension of this ligature is a strong objection to it, and has led to its disuse with us, though I had one very successful case of ligature of the femoral with silver for popliteal aneurysm. Excluding, then, these two cases, I can find but one instance of secondary hæmorrhage in our, the *St. George's Hospital, Reports*, among more than twenty operations on large arteries in all parts of the body, and with various forms of ligature, and none at all, I think, in which animal ligatures have been employed; for, in the case in question, though the material employed is not stated, I am nearly certain that it was silk. I know, of course, that secondary hæmorrhage has occurred with catgut ligatures, but, if I am not mistaken, the cause has usually, if not always, been the melting,

* Ramsden's *Practical Observations* contains a history of four cases of ligature of main arteries—the subclavian (the original case), the common femoral, and the superficial femoral twice; and in all the last three he divided the artery between two ligatures. All three cases succeeded. It would be interesting, were it possible, to know why his colleagues did not adopt or continue the practice. In tying the common femoral, Ramsden says that he placed his two ligatures an inch asunder. In the superficial femorals, a shorter tract of artery was obliterated.

† See Mr. Walsham's article in the BRITISH MEDICAL JOURNAL for April 7th, 1883

breaking, or untying, of the catgut;* and it is difficult to see how we render this catastrophe less probable by using two ligatures instead of one. As far as our present experience of the simple (*i.e.*, unmanufactured) animal ligatures has yet gone, no secondary hæmorrhage has attended their use. I mean by "unmanufactured," those in which the animal substance, whether it be ox-aorta or tendon, is not previously putrefied. But surely the use of such ligatures as ox-aorta or kangaroo-tendon is safer on an undivided artery than on its two ends after division; nor is it easy to see how so large and slippery a ligature can be safely applied to a divided artery without denuding a large part of the vessel, and thus handling and contusing the artery and the parts around much more than is done if the sheath be only opened to the extent required to admit the aneurysm-needle. I quite agree with all that Mr. Walsham says about the importance of opening the sheath to as small an extent as possible; but it seems to me an odd corollary from this proposition that the most successful plan is likely to be one in which the sheath is "freely opened," and at least half an inch of the artery exposed to view, and separated from all its connections (see BRITISH MEDICAL JOURNAL, May 12th, 1883, p. 906). There is no reason that I can see for saying that, in the ordinary method, if only the surgeon take care to make as small an opening in the sheath as is necessary to admit the needle, any part whatever of the artery is permanently separated from its vascular supply. That "its blood-supply has been more or less interfered with," as Mr. Walsham says, is no doubt true; but that interference is very transitory, and there is no reason at all for saying that it is ever the cause of secondary hæmorrhage. If it were, the bleeding ought to come on much earlier than it usually does, and should be of a very different character, since the whole tube of the artery would become necrosed.† If the artery be securely tied with a material which will keep its hold on the vessel until the seat of ligature is buried in a mass of new fibroid material, secondary hæmorrhage, if not impossible, is at least very improbable. We seem on the eve of arriving at something like certainty in the attainment of that end; and I confess it is to me disappointing to find that, at our chief hospital, this advance in the surgery of the arterial system is so little appreciated, that we are advised to return to the ideas of "the elder Bell and the Arabian physicians." My objection, however, to Mr. Walsham's proposal is not the sentimental one that it is reactionary, an objection which he would justly deride; but the practical one, that it inflicts unnecessary damage on the artery, that its efficacy as a safeguard against secondary hæmorrhage is very dubious, whilst it seems more likely to delay the healing of the wound, and expose the patient to greater risks of phlebitis and gangrene.

Of course, these opinions are only put forward as opinions. We have far too little experience as yet of the animal ligatures to dogmatise on the subject. Clearly, the experience of secondary hæmorrhage, and of renewal of pulsation after the use of the catgut ligature, is not in point, and it is the fact that Mr. Walsham uses that experience only which makes his paper to my mind unsatisfactory. Carbolised gut was, in the opinion of most surgeons, a great improvement on the silk ligature, but the natural tissues (such as tendon) are a great improvement on catgut; and I would plead for a full experience of their action in the simple use of the ligature, before going back on the complicated and antiquated method which Mr. Walsham employs, and which I strongly suspect has not been as successful in the hands of the colleagues and successors of Ramsden, at an earlier date in the history of St. Bartholomew's, as it was in the eight cases treated by Mr. Walsham and Mr. T. Smith. At least, it seems odd, if division of the artery is a great security against secondary hæmorrhage, that it should have passed out of use when secondary hæmorrhage was so much more common, in order to be reintroduced when that accident is seldom met with.

Our experience at St. George's of the tendon-ligature has certainly been small as yet, but it has been eminently satisfactory. I know of no cases as yet beside the two mentioned in this paper—Mr. Pollock's, reported by Mr. Dent (*Medico-Chirurgical Transactions*, vol. lxiv), of double distal ligature of the subclavian and carotid; and one under Mr. Pick's care, of ligature of the femoral after the failure of pressure. In all these cases, the ligature acted well, and the wound healed kindly. It would be absurd to found any general conclusion on so small a number of cases, but our present experience would certainly lead to a continued use of this form of ligature; and, even if we had to confine ourselves to the carbolised or chromicised catgut, I have seen no reason for modifying our method of applying the ligature.

* Mr. Callender's case, referred to by Mr. Walsham, may, perhaps, be an exception (see his article in the number for April 7th), but I have tried in vain to find any account of it in the *St. Bartholomew's Hospital Reports*, and Mr. Walsham hardly gives sufficient details to enable us to judge; he merely says that the knot was intact; but this does not show that the rest of the ligature was so, and we know that, in some cases, the catgut ligature has softened prematurely, and the force of the circulation has ruptured the weakened vessel. I see no reason why this should not happen after the division of the artery as well as bef r it.

† See Mr. Bartleet's case, quoted by Mr. Walsham.

ABSTRACT OF LECTURES ON PHYSIOLOGICAL DISCOVERY.

Delivered at the Royal Institution of Great Britain.

BY JOHN G. McKENDRICK, M.D., LL.D., F.R.S.E., F.R.C.P.E.,
Professor of Physiology in the University of Glasgow, and Fullerian Professor of Physiology, Royal Institution.

TENTH AND LAST LECTURE.—THE NERVOUS SYSTEM: THE HIGHER CENTRES AND THE BRAIN.

THE first portion of the lecture related the investigations by which the paths of sensory and motor impressions were traced in the spinal cord. Sir Charles Bell, in 1811, first conceived the idea that the posterior columns are sensory and the anterior motor. This naturally followed his views regarding the functions of the spinal nerves; but, in a less definite form, a similar view was promulgated by Boerhaave (1668-1738). At a later period, in 1835, Bell modified this opinion, and stated that the lateral columns of the cord must convey sensory impressions, because these may be traced to the cerebrum, and also because they receive the posterior roots. These views were strongly supported by Longet, about 1840; but they were opposed by various physiologists, and, in particular, by R. B. Todd, who pointed out various anatomical difficulties. The lecturer then described generally the mode of solving the problem by making sections of the cord, wholly or partially, at certain levels, as practised by Magendie, Stilling, Schiff, and others; and, in particular, and with special success, by Brown-Séquard (first in 1849). He showed how the latter physiologist arrived at the conclusion that sensory impressions were not conveyed by the posterior columns, but by nerve-fibres passing through the grey matter, and that further there was a decussation in the cord of these sensory fibres. Similarly, Brown-Séquard was able to trace the course of the motor fibres. Such important results could not have been obtained by any other method, and the whole research is a striking example of the value of the experimental mode of investigation.

He then referred to the histological researches of Jacob Lockhart Clarke, who, in 1851, first described his beautiful method of preparing, for microscopical purposes, thin transparent sections of the spinal cord. Thus, histological inquiry aided experimental investigation, more especially as regards the distribution of the sensory fibres of the posterior roots.

As an example of another method of investigating the distribution of nerve-fibres in nerves, and in nerve-centres, the lecturer again described the method of Augustus Waller. By this method it was shown that in the anastomosis between the sympathetic and pneumogastric nerves, fibres are given by the sympathetic to the pneumogastric, and not by the pneumogastric to the sympathetic. Again, it was shown that the chorda tympani was really a branch of the facial, coming into communication with the lingual nerve. Waller's method has also been successfully applied to the investigation of pathological phenomena in the human being, by tracing the path of degenerated nerve-fibres, as has been done by Türck and Charcot.

The functions of the brain and cerebral ganglia have been investigated along various lines of inquiry.

1. There are the data supplied by investigating its structure and relations in the human body. The lecturer alluded to several important steps in this department. Galen dissected the brain chiefly with the view of demonstrating the position of the ventricles, to which he attached great importance. The notion of many of the older anatomists, as of Varolius (born 1543), Sylvius (1478-1555), and Willis (1622-1675), was that the brain was an addition to the spinal cord. It was a great step to dissect the brain from below upwards and thus to trace its relations to the spinal cord and nerves, as was first done by Varolius. The lecturer again referred to the important observations of Willis, who may be regarded as the founder of the comparative anatomy of the brain. Malpighi thought the

matter on the surface was a secreting structure, and he also observed its existence in the interior of the brain. Soemmering (1755-1830), gave a classification of cranial nerves, and also pointed out that the brain of man was greater in relation to the cord and nerves than in any other animal. Reil, about 1796, first hardened the brain before dissection by immersing it first in alcohol, and afterwards in a solution of an alkali. Thus, the grey matter became much darker than the white. Gall and Spurzheim published their first investigations in 1809. They dissected the brain from below upwards, and showed the importance of studying its development in fœtal life, and throughout the animal kingdom. Apart from the method of cranioscopy, too much a field for charlatanism and quackery, the researches of the founders of phrenology did a good deal in advancing the anatomy and physiology of the nervous system.

2. The lecturer described the general conclusions arrived at by comparative anatomy, and specially referred to the works of Wenzel (1811), Cuvier (1820), Leuret (1839), and Foville (1844), all of whom figured the brains of many species of animals, with special reference to their physiological significance.

3. He next referred to the evidence obtained by a study of the development of the brain, a path of inquiry first opened up by Tiedemann in 1816, showing that the part of the brain first developed is that connected with the reception of sensory impressions. The arrangements for voluntary movement and for mental operations of a higher kind are superadded. Further, the functions of these primary parts, seen in the development of an individual, or throughout the vertebrate kingdom, are identical.

4. Clinical and pathological inquiry support the general conclusion that the grey matter of the cerebral hemispheres is concerned in mental phenomena. The lecturer showed that this view was not always held, and that, so long as physicians believed various forms of insanity to be mental, and not due to pathological conditions, vicious systems of practice were indulged in, and a superstitious view of insanity was encouraged. He specially referred to the labours of Foville and Pinel Grandchamps in founding a rational pathology of insanity.

5. The functions of the brain have also been investigated by direct experiment. Haller and Zinn (1749) removed portions of the brain, and submitted areas of the surface to pressure, but without any good results. About 1810, Rolando removed the cerebral hemispheres of various kinds of animals, and observed that they remained motionless and unconscious for hours. This method of experiment was followed with much greater minuteness of detail and of observation by Flourens in 1822. His researches were classical, and, although they have been frequently repeated by Magendie, Matteucci, Longet, Schiff, Dalton, and others, no facts of importance have been added to those described by Flourens.

After showing the objections to this method of experiment, the lecturer briefly described the results arrived at by the method of direct stimulation of the cortex, as followed by Hitzig and Fritsch (1870), and by Ferrier (1873). He described the method of experiment, and pointed out some of the difficulties met with in interpreting the facts. He also indicated that, whether the theoretical explanation may be correct or not, the facts had already been of service to physicians in their diagnosis of some cerebral affections.

Dr. McKendrick then gave a short account of Laycock's theory of the reflex action of the cerebrum, first announced in 1844. This conception, more familiar to most readers as idiomotor action, a name given to it by Carpenter, undoubtedly explains some of the phenomena of somnambulism and of the mesmeric state. Dr. Laycock did more than most men of his time in working out, on a scientific basis, the relation of body and mind. The lecturer ventured to think that the time would come when Laycock would be regarded as a profound thinker, who saw deeply below the surface, and recognised the complex nature and genetic relations of every element in the physical structure of man as bearing on his mental condition.

Probably, the most recent advance in nervous physiology has been the discovery of inhibitory actions, dating from 1845, when the brothers Weber found that on irritating the vagi, the heart might be retarded or even stopped, in a state of relaxation. The molecular mechanism, by which inhibition is produced, is unknown at present; we have simply to accept the fact that irritation of certain nerves may temporarily suspend, or entirely arrest the action of certain nerve-centres. This principle has been applied by Brown-Séquard with great success, to the explanation of some phenomena following irritation experimentally produced. Thus, he has urged that some of the phenomena caused by destruction of, or injury to, a portion of the nervous system, may produce effects due to inhibition of another part of the nervous system, and not simply to interference with the special function of the part destroyed or injured. Further, Brown-Séquard believes he has ascertained the existence of another property of the nervous system, by which irritation of sensory nerves causes an exaltation instead of a diminution of nervous power in various nerve-centres. This kind of action he has termed dynamogenic. Thus, the application of chloroform to the skin of animals, breathing by special contrivances, air from an adjoining room, may cause increased action of various muscles and nerves, as, for example, the action of the phrenic nerve, and half of the diaphragm. Again, the irritation caused by section of the sciatic nerve, may immediately and quickly increase the excitability of the phrenic nerve on the same side. He further states, that not only may the nervous excitability be increased, but there is also an increase of muscular irritability. These observations of Brown-Séquard are of great importance, and lead physiologists into a new field of inquiry.

The lecturer concluded the course by referring to the complex problems presented to the physiologist, and the methods by which he attempted to solve them. In particular, he showed that the molecular operations in living tissues, which are now the special subject of inquiry, need, for their observation and explanation, the most refined methods of physical and chemical research. He contrasted the methods of mediæval with those of modern physiology, and showed that, although the former had certainly done much, we could not have reached our present knowledge without the appliances now found in every physiological laboratory. Lastly, he showed some of the practical applications of physiological knowledge to the medical and surgical arts. Every medical man knows that most of the facts detailed in this course of lectures form the groundwork of his practice. If we could erase them from human experience by one stroke, the scientific basis of the medical profession would be gone.

The lecturer thus concluded. I trust that these lectures have not produced the impression that we have reached anything like finality in physiological work. My object has been to trace, step by step, the evolution of opinion, and the gradual accumulation of facts regarding the chief functions of the body. We have seen that many men, in successive centuries, have contributed their quota of information, and that almost of no discovery can it be said that it was made by one man. Such is the history of all scientific truth. The science of the present time is the outcome of the science of the past. Yet, whilst this is so, each period had its characteristic modes of thought and of investigation. We have now reached a period of inquiry into what our forefathers would have termed minute and unimportant phenomena. The practice now is to investigate minute details of structure, and to ascertain what they mean, either as traces of ancestral conditions, or as arrangements of use to the being possessing them. Again, all movements are faithfully recorded as to time, rhythm, and extent, and as they may be affected by vascular and nervous influences. Lastly, the most refined methods of physical and chemical investigation are applied as far as possible, to vital phenomena. Possibly there may be at present too much experimental detail, and too little thinking and generalisation, a condition that may be accounted for by the want of repose so characteristic of our time; but we may be sure that history will repeat itself, and men will arise whose function it will be to collect and correlate the facts now so diligently gathered, and from them deduce new principles, explaining much that is at present obscure. Meanwhile, physiologists, under considerable difficulties and discouragements, are accumulating facts. But the public must not imagine that every new physiological truth necessarily adds to the resources of practical medicine and surgery. It may do so, sooner or later, but discovery should not be prosecuted merely from this selfish motive. Scientific truth is a coy damsel, who will not be wooed successfully by those in quest of the fortune she may bring. She insists that every genuine investigation must be prosecuted for its own sake. This is the spirit in which all scientific achievements have been won.

Mosquitoes in London.—It is stated that, during the warm weather of the past week, a number of persons in the north of London have been bitten by mosquitoes. Women and children have especially suffered, some having been almost blinded through the swellings caused by the bites of these foreign insects. It is said that large numbers of mosquitoes were brought over from America among the corn, and that they have been frequently seen to fly up when the grain is being transferred for grinding to a large steam flour-mill in the vicinity.

ON CYSTOTOMY, BY A MODIFIED LATERAL METHOD IN CERTAIN CASES OF ENLARGED PROSTATE.

By REGINALD HARRISON, F.R.C.S.,
Surgeon to the Liverpool Royal Infirmary.

WITHIN recent years, I have had cases where it has been found expedient to make an opening into the bladder from the perinæum, in preference to other measures, the usual means of relieving obstructed micturition, or the consequences arising therefrom, having failed or proving insufficient.

I may premise by stating that, apart from those cases of obstruction complicated with circumurethral abscess, no such proceeding has been undertaken on the sole ground that catheterism was impossible, though some difficulty connected with the performance of the operation has, with other circumstances, usually been present.

The selection of a method for opening the bladder should have reference only to the object to be attained, or the contingencies that may arise. If, for instance, we desire merely to introduce the finger into it, as a preliminary to extracting a small stone, the median operation answers perfectly; whilst, if a larger stone, or an unknown quantity of anything, has to be dealt with, the lateral incision will, as a rule, be preferable.

It has been advanced by those who favour the median incision, which is practically an urethrotomy, that it is both simple and safe; its admitted disadvantage lies in the comparatively small space it provides for manipulating and extracting; whilst, on the other hand, the lateral incision, though affording more room, is considered to be attended with an increased risk and a greater degree of difficulty, so far as its performance is concerned. The median operation need not necessarily involve anything more than the opening of the membranous urethra. The completed lateral operation further includes the division of structures constituting the neck of the bladder; and it is to this part of the proceeding that any increased risk or difficulty is to be attached.

A little reflection shows that it is possible to closely assimilate the lateral with the median operation, that is to say, to dispense with the incision, not to the staff, but along the staff, should it be found, on exploration with the finger, that the additional room which the latter part provides is unnecessary for the object in view. It need hardly be said that this modification of the lateral method, where it is found, on digital exploration, to be feasible, frees the operator from executing the only portion of the operation to which any increased risk is attached; whilst, on the other hand, he has the consciousness that, should it turn out to be necessary, he can, by the completion of the deep incision along the staff, avail himself of all the advantages which are conceded by surgeons to the lateral method of opening the bladder.

In the following case, effect was given to these considerations, as I had it in view that it would be possible not only to afford a temporary relief by draining the bladder from the perinæum; but, further, I might find it feasible, as I have done before, to remove the whole, or a portion of the obstructing prostate, in the form of a pendulous lobe or of an adenoma, which could be enucleated with the finger.

M. L., aged 63, was admitted into the Royal Infirmary on February 16th, 1883. For nearly three years, he had been suffering from frequent micturition, caused by an enlarging prostate. For the last month, the irritability had so much increased, that he found it difficult sometimes to hold his urine for more than ten minutes. The straining and forcing to micturate had induced a considerable prolapse of the rectum. Catheterism had to be frequently employed.

On his admission into the infirmary, the patient was in a feeble condition from want of continuous sleep, by reason of the state of his bladder. His tongue was brown and furred, and there was the usual urinous smell about him. The urine was offensive, and largely charged with blood, which escaped more or less continuously from the urethra, and was excessively increased every time the catheter had to be used. The usual means for dealing with this condition were resorted to, but with no benefit.

On February 24th, I had the patient brought into the operating theatre, and in the course of some clinical remarks, pointed out to the class the absolute necessity for adopting other means than those usually employed in less urgent cases of this kind. The cystitis and hæmorrhage, which were directly connected with the prostatic enlargement, were both likely speedily to occasion a fatal termination.

Recognising the necessity, at this period of the case, of placing the bladder at rest, and rendering the use of the catheter unnecessary, I expressed my intention of making an opening into the bladder by the lateral method, as already described. The patient being placed under ether, and in the lithotomy position, I introduced a small grooved staff into the bladder, and made a limited incision down upon it laterally, opening the urethra in the membranous portion. The staff being necessarily a small one, I was enabled to pass my right index finger into the bladder without removing it. On doing so, I found that, though the prostate was not very large, the orifice of the bladder was obstructed by one of those nipple-like enlargements of the third lobe, which are sometimes more effectual in rendering micturition difficult and catheterism uncertain, than more general hypertrophies.

Finding that I could obtain my object and free the neck of the bladder without attempting to remove or enucleate any portion of the gland, I did not carry my incision into the bladder along the groove of the staff, but introduced on my forefinger (having now removed the staff), a straight, narrow, probe-pointed bistoury, by which I divided what seemed to me to be the obstructing portion of the prostate. I then found that my finger entered the bladder easily, whereas previously it was with the sensation that a source of obstruction existed, which was quite capable of rendering catheterism difficult. I should add that, on again using my knife for the purpose of slightly enlarging the superficial incision to avoid bagging, the rectum, which had been accustomed to prolapse very much, suddenly filled the wound, and came into contact with my knife; a small puncture of the bowel was the result. I ought to have avoided this, but, curiously enough, I am disposed to think, as I shall presently mention, it proved a not unimportant feature in the case.

A lithotomy-tube was introduced, to which a rubber tubing was attached for draining and keeping the patient dry. The operation was followed by a rapid cessation of the hæmorrhage and a decline of the cystitis. On the third day after, it was reported, "Patient in good condition; sleeps and eats well; pulse 80; temperature has never exceeded 100° Fahr." On March 15th, the report states, "Wound looks healthy; appears to be closing up; passes his urine mainly through it; some by the urethra". At times, a little fæces made its way into the wound, escaping through the perinæum. The amount was so small as not to occasion any inconvenience, whilst it proved to be an obstacle to the speedy closure of the incision into the bladder. Within eight weeks from the time of the operation, the patient was able to leave the infirmary.

On June 1st, he returned for the purpose of getting some advice for dyspepsia, when I took the opportunity of examining him. In the perinæum, there was still a slight fistulous opening remaining at the lower angle of the wound, through which urine sometimes passed in drops during micturition. The patient could now hold his urine for several hours; the urine was normal. On examining the prostate from the rectum, some slight enlargement could be felt. A full-sized catheter was easily introduced into the bladder, without any hitch or obstruction, in the prostatic urethra, or at the neck of the bladder, being experienced.

I do not think there can be any doubt that the operation not only saved the life of the patient, but has considerably added to his comfort. Though the use of the catheter has been abandoned, I have advised its occasional employment, in accordance with the views I have advanced relating to the early treatment of prostatic hypertrophy.

I am indebted to my dresser, Mr. O'Brien, for the notes of this case, and to my house-surgeons, Messrs. Bateson and Lowe, for their careful management of the patient during their respective periods of office.

THE SALE OF PATENT MEDICINES.—The local excise officers have summoned two chemists at Manchester for evading the duty on patent medicines by selling such articles without the proper Government stamps thereon. One of the defendants was fined 40s. and costs in three cases, and the other a like sum in one case, and ordered to pay the costs in a second.

PORRO'S OPERATION.—On March 28th, Professor Porro performed his "utero-ovarian Cæsarean operation" successfully in a primipara with rachitic deformity of the pelvis and the whole skeleton. She was near the full term of gestation. The child is living, and healthy and well-formed. The progress of the case has been very satisfactory. The highest temperature recorded was 38° Cen (100.4° Fahr.), and this was in relation to painful distension of the breasts with milk.

SOME CASES OF LAMENESS FROM ABNORMAL CONDITIONS OF THE FEET, CHIEFLY FROM CONTRACTIONS OF THE MUSCLES AND FASCIÆ.

By NOBLE SMITH, F.R.C.S.Ed.,
Surgeon to the All Saints Children's Hospital, and Surgeon to the Orthopædic Department of the Farringdon Dispensary.

I MEET with many cases in which lameness is the predominant symptom, but the exact nature of that lameness is seldom recognised by the patient, and in some instances is not very easy of diagnosis.

Slight shortening of the muscles of the tendo Achillis is not uncommon, the result being necessarily a lessening of the range of flexion of the foot. The normal degree of flexion has been stated to vary from 15° to 20° from a right angle; but, in the observations which I have made upon healthy individuals, I have found it to vary between 18° to 22° in adults.

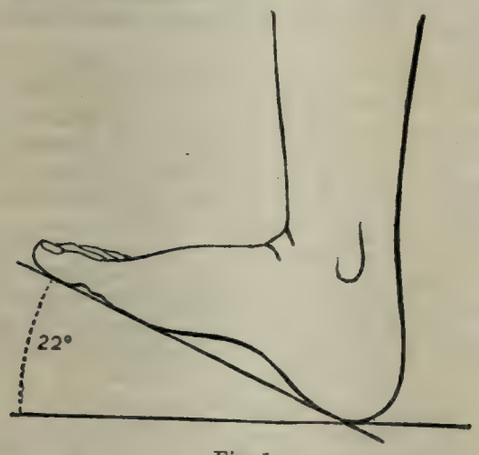


Fig. 1.

In children, the normal extent of flexion is much greater, the oot being capable of approaching much nearer to the leg. When he foot is flexed, the outer side of the anterior part is raised more han the inner side of the foot, and the toes are turned slightly outards. This normal degree of flexion may be lessened, and the eficiency not be recognised; the individual may be unable to flex he foot beyond a right angle with the leg, and may not know the cause f his difficulty or pain in locomotion. I have even met with cases which talipes equinus has been much more strongly marked, and et no abnormality of the foot been thought to exist.

CASE I.—In October 1881, I saw Miss G., aged 14, who had suffered om lameness for several years. As she did not complain of any pain, ot much notice was taken of her awkwardness in locomotion ntil during the few months before I was called in. I was told by he parents that they thought the hip-joint was affected, and they ished me to examine it. I found that the hip-joint was perfectly ealthy; that the left leg below the knee was so much smaller in all spects than the right, that the heel was two inches from the round. There was contraction of the muscles of the tendo Achillis, that the foot assumed the appearance of Fig. 2, and could not be xed beyond that position.



Fig. 2.



Fig. 3.

CASE II.—A. B., aged 5, was brought to me because she was lame, and "walked as if there was something wrong with the hip-joint." I found the hip-joint perfectly healthy; but the right leg was an inch and a half shorter than the left, and the gastrocnemii were contracted, so that the foot could not be flexed more than shown in Fig. 3.

I need hardly remark that these cases required no peculiarity in treatment. It consisted in tenotomy, extension of the contraction, and a correction of the inequality in length of the legs by a raised sole to the boot of the short leg. In these cases, the original cause of the deformity being frequently infantile paralysis, the contraction results from the flexors retaining their power while the extensors are paralysed, so that the former muscles act without opposition, and the effect is more quickly produced by the efforts of the child to lengthen the short leg by bringing the front part of the foot to the ground. As the affected foot in these cases is often smaller than the sound one, the extra thickness of the sole which has to be used in cases of slight shortening may be partly or completely hidden from sight by including it within the upper leather, both boots being made of similar size externally.

In estimating the amount of abnormal contraction in these cases, I may remind the reader that it is necessary to take care that the leg is fully extended upon the thigh; otherwise the origin of the heads of the gastrocnemii will be approximated towards the heel, and will allow a greater amount of flexion of the foot.

That mistakes can be made even by careful parents in such cases as those recorded above, shows how easily slighter contractions may pass unnoticed, and the irregularities of walking, or the various obscure pains which result, be attributed to causes which have no existence, or be supposed to be dependent upon no morbid condition whatever, but perhaps upon the natural processes of growth alone.

I have met with many instances of very slight contraction; and it is because these cases are not marked by such definite symptoms as are commonly set forth in books, and because their treatment may be conducted in a different manner from that which is necessary in the more severe contractions, that I have thought the record of a few cases illustrative of such conditions might possibly be of interest to some of the readers of this JOURNAL. When the muscles of the tendo Achillis are contracted, even to a slight extent, tenotomy is usually considered absolutely necessary, unless the contraction be recent; and the cases I am about to describe were probably recent in their origin.

CASE III.—M. B., aged 36, consulted me in August 1881 for pain in both feet, which prevented him from walking with comfort. He was obliged, he said, to give up walking, and resort to driving, whenever he wanted to go further than a few hundred yards. This pain he attributed to a sinking of the arches of the feet. I had seen him about a year before in reference to his flat feet, and had had some sole-plates made for him, which supported the arch of each foot. He had derived very great benefit from this treatment, but lately, the more severe pain which he now complained of had set in, and he thought that his old affection was again troubling him.

Upon examination, I found that the arches of his feet were much less depressed than formerly, but that there now existed slight contraction of the muscles of the calf, and the feet could not be flexed beyond right angles with the legs. To this condition, I attributed the pain. Hot-water fomentations, liniments, and subsequently forced flexion, were prescribed, and the patient soon got relief from the contraction and the pain. Other somewhat similar cases have succumbed to the same treatment.

In estimating the degree of contraction of the muscles of the tendo Achillis, one must always examine carefully the condition of the plantar fascia, for contraction of this fascia will apparently lessen the degree of flexion of the ankle-joint. In fact, often the plantar fascia alone is contracted; and, without careful examination, the slight deformity or pain, or difficulty of locomotion, may be wrongly attributed to contraction of the muscles of the calf. The nature of the contraction of the arch of the foot, in which the plantar fascia is found to be tense and resistant, seems to me to be worthy of careful consideration.

The pathology of contraction of fascia in various parts of the body is at present not thoroughly understood. Long repose in a shortened position, and irritation from pressure, friction, contusion, or wound have been thought to be the exciting, or perhaps the primary, causes of these contractions. Gout and rheumatism are considered common causes. Contraction of the palmar fascia, producing Dupuytren's contraction, has attracted much attention. In these cases there is, as the reader knows, a considerable thickening of the fascia, which becomes hard, and often nodular; and this con-

traction of the palmar fascia is very peculiar in this latter respect. There seems to be in most cases, if not in all, a constitutional cause for Dupuytren's contraction; and gout or rheumatism, or a similar condition, is supposed to give rise to the contraction and thickening. This subject has been so often discussed, that the readers of this JOURNAL must be thoroughly familiar with the various reasons for and against the theory of a gouty or rheumatic origin. There seems to be no doubt as to the constitutional character of the affection in many cases, and especially in those in which, in addition to the Dupuytren's contraction, there also exists contraction and induration of the plantar fascia. But other cases seem to differ from these, and to depend upon local causes.

In the feet, one often meets with tense bands of fascia, the arch of the foot being more or less high than natural. This condition of the plantar fascia seems to me peculiar, and to demand for its explanation an inquiry into the anatomy and functions of this structure, and its relationship with the formation and maintenance of the arch of the foot.

It has been stated by an able anatomist that the arch of the foot is maintained not only by the many ligaments which connect the bones individually to one another, but also, and materially, by the plantar fascia. The ligaments probably act in this way in so far as they limit extreme tension, although extreme tension of the sole of the foot is not often required; but I doubt whether the plantar fascia has much influence in maintaining alterations which take place in the arch of the foot. Alterations which take place in the arch of the foot in the various movements indicate the elasticity and contractile power of muscles rather than of ligaments.

Mr. Hancock (*On the Operative Surgery of the Foot and Ankle-joint*, 1883) remarks that, when the weight of the body leans upon the plantar arch, the ligaments can have "no influence over the preservation of the arch." He also offers very good reasons why we should discard the theory that the plantar fascia possesses in itself sufficient contractile power and elasticity to allow it to yield sufficiently "to deaden or counteract shock, and subsequently to resume the requisite amount of solidity and rigidity to enable it to maintain the integrity of the arch." The influence of this fascia is passive; it "does not pass straight across from point to point," but forms a curve. I may further refer to the fact that the inner part of this fascia, where the arch is highest, is decidedly thinner than the outer part, where there is no arch; whereas we should expect the opposite to be the case if the office of the fascia were to maintain the form of the arch. There can be little if any doubt, that the muscles of the sole of the foot, and especially the three superficial muscles, the flexor brevis, the abductor pollicis, and the abductor minimi digiti, assisted by the tibial muscles, are the active agents in modifying and preserving the arch of the foot; and I am inclined to think that in some, at least, of the cases in which we find tense bands of plantar fascia, this condition is the result rather of abnormal contractions of the muscular fibres, which are attached to this fascia, than of contractions of the fascia itself.

The following case is, I think, in favour of such a view, because, if the contraction had existed in the fascia itself, the treatment which I prescribed would hardly have cured the case so soon—even if it could have succeeded at all.

CASE IV.—Miss W., aged 17, sent to me by Mr. W. J. Butler, of Holland Road, Kensington, in October 1881, complained of difficulty and pain in walking, which she attributed to a sprain which had occurred three years before, because the symptoms had developed from that time. The pain and weakness were felt, especially under the metatarsal bone of the great toe, passing up the posterior region of the leg, along the course of the tibialis posticus muscle. The fore-part of the foot could not be flexed beyond a right angle with the leg, and this condition seemed to depend upon contraction in the arch of the foot. The plantar fascia was tense, and the toes were contracted slightly in a flexed position. The boots worn were very short, and did not allow full expansion of the foot. I ordered properly made boots, and prescribed emollient liniments, and in a few weeks the contractions, the pain and the difficulty of walking had entirely disappeared. I had thought that operative measures would have been necessary in this case, but I decided to try first the effect of more simple treatment.

In the majority of cases, however, no treatment except subcutaneous section of the tense bands of fascia and subsequent stretching will do any good. The result of such treatment is very satisfactory; the operation is simple, and generally almost bloodless.

[*To be continued.*]

PROGRESSIVE PERNICIOUS ANÆMIA: A CASE, WITH REMARKS.*

BY ARTHUR RANSOME, M.D., and P. H. MULES, M.D., Manchester.

WE have brought before you this evening a record of a typical example of progressive pernicious anæmia, in which the treatment by transfusion, though not original, was followed by certain physiological and pathological conditions which, we think, will prove of interest to the Society.

The drawings of the retina, taken at the bedside, are faithful representations of that form of retinal apoplexy usually associated with this disease.

M. M., aged 39, a shoemaker, and teetotaler for nineteen years, enjoyed excellent health until two years before his death; he then began to feel weak and ill, and became unfit for his duties as a volunteer. A trip to the seaside temporarily restored him; but, ten months before his death, his old symptoms of debility returned, associated with others of a distressing nature, to which he eventually succumbed.

His condition when we first saw him, ten days before his death, was as follows. He had then been confined to bed for eighteen days. His aspect was that of a man bloodless to a degree rarely seen, the prevailing tint being a pale lemon colour. There were no spots on the skin suggestive of purpura, nor were the gums spongy. The inner surface of the eyelids was white, whilst the ocular conjunctiva was pale saffron.

He complained of radiating angina-like pains over the chest, their starting-point being always referred to the stomach. The appetite was bad, but he took milk freely. His mind was clear, and speech good. He read No. 4 Jäger with both eyes. His hearing was slow and progressively defective. Systolic basic murmurs were heard, always well marked, but varying in intensity. The pulse was rapid, irritable, and weak. The body-temperature was not ascertained, but was probably subfebrile. The urine was of specific gravity 1012 to 1018, faintly albuminous; it contained no casts. The spleen and remaining viscera were apparently healthy. The blood was very watery-looking. Tested with Dr. Gowers' hæmocytometer, it showed, on the average, only eight corpuscles per micrometer square, instead of fifty (in other words, 750,000, instead of 5,000,000 per cubic millimètre. The red corpuscles varied greatly in size from about one-third the normal to somewhat larger than usual. Many of them were singularly distorted, pear-shaped, and crenated. Some of the smaller-sized corpuscles were noticed to be spherica in form; and it is possible they may have been the microcytes, sup posed, though erroneously, by Quincke and Eichhorst, to be patho gnomonic of idiopathic anæmia. The colourless corpuscles were no appreciably in excess. The hæmoglobin, estimated by Dr. Gowers hæmoglobinometer, showed only 16 per cent. of colour. Ophthalmo scopically, the retina showed numerous flame-shaped hæmorrhage radiating from the disc. There were also a few white spots, prc bably leucocytic masses, at its outer margin. Both discs were hazy moderate swelling being apparent in them. The vision in both eye was the same, and it appears marvellous how little effect this for midable affection had upon the sight. In the retinæ was notice not only great tortuosity, but a flattening of the veins, due to aton rather than to passive distension. The retinæ remained in th condition, with but slight modification, until death.

Treatment.—The treatment hitherto had been iron and nutritio diet; but the patient's condition having steadily become worse, an the examination of the blood giving us accurate data, transfusio was thought to be justifiable. Dr. Walter kindly placed his servic at our disposal, and, five days before the patient's death, inject three and a half ounces of defibrinated human blood into the media basilic vein. The immediate effect of this transfusion was alarmi collapse, with tumultuous action of the heart, and occasional sin ing of the pulse until it was imperceptible. This condition w combated by free stimulation and dry heat. The mental faculti were much obscured; by the evening (nine hours after transfusio the pulse was full, bounding, and perfectly steady, like that of man in health, but his mental powers seemed more obscure Twenty-four hours after the transfusion, a hæmorrhage of two three ounces escaped from the bowel. His mind at once cleare he asked for food, and expressed himself as being more comfortab than he had been for weeks.

* Read before the Manchester Medica Society.

A very careful examination of the heart now failed to detect the slightest trace of an anæmic murmur. This favourable condition continued until the fourth day, when he had a hæmorrhage from the kidney (the second one). His corpuscles were again estimated, and found to be increased from 16 per cent. to 44 per cent. He died the same night.

Necropsy, twelve hours after death.—We are indebted to Dr. Young for his kindness in making a careful and exhaustive *post mortem* examination. His report was as follows. The body was well-developed, but considerably emaciated; everywhere the integument was jaundiced; the conjunctivæ were also faintly bile-stained. An anæmic appearance was universal. Internal examination showed generally an anæmic condition of the organs, most of which presented a paler but yellower colour than normal, whilst they were also of softer consistency. The muscles were pale and flabby; this was most marked in the walls of the heart, which, beyond dilatation of its cavities, appeared in other respects fairly normal. Its various cavities (but especially the right) contained dark fluid blood, which showed no tendency to coagulation, whilst it possessed a faint acid reaction. Each lung showed slight hypostatic congestion, and was somewhat œdematous, the fluid being yellowish in colour. The smaller bronchial tubes were surrounded by a slightly increased amount of peribronchitic tissue. The pericardiac and pleural sacs contained a little clear yellowish fluid, but otherwise were normal. The mucous membrane of the small intestines was thickened and granular. The liver was enlarged and fatty; the kidneys slightly granular. All the other organs were healthy. Sections of the sternum and ribs showed the cancellous tissue filled with deep red coloured marrow, which in appearance closely resembled splenic pulp. Microscopic examination showed the characters of embryonic medulla, nucleated red blood-corpuscles, large granular cells, leucocytes of various forms, and giant-cells. Microscopic examination of the different organs revealed only the fatty degenerative changes indicated by the naked-eye appearances. In the case of the kidneys, there was also some increase of interstitial connective tissue.

REMARKS.—We should like to call your attention to the following points in this case, which we think are specially deserving of notice. First, the extreme retinal extravasation was suggestive of advanced pernicious anæmia. Faint hæmorrhages do occur, but very rarely, in chronic anæmia. Of fifty cases examined by Dr. Saundby and Mr. Eales of Birmingham, only one showed a small hæmorrhage; five showed some neuro-retinitic changes; the remainder were free from any retinal lesions. Dr. Gowers, who has examined cases of chronic anæmia with the same object, observes that the pallor of the fundus may be very marked in chlorosis; but, where the corpuscular richness has been reduced even so low as 26 per cent., hæmorrhages are extremely rare. This observation is of special interest when contrasted with the cases of pernicious anæmia mentioned later, where, with less destruction of corpuscles, hæmorrhages did appear.

With tolerable certainty, retinal hæmorrhages occur in purpura hæmorrhagica, at least when very advanced. In leukhæmia, the tendency to hæmorrhage of the retina is extremely strong; but the effusions of blood are in this disease equatorial, and associated with small leukhæmic tumours, which appear as spots in the choroid.

The tendency to hæmorrhage may, indeed, be considered as even stronger in leukhæmia than in pernicious anæmia. Dr. Gowers reports cases where they have occurred with the blood containing 30 per cent. of red corpuscles. But, in the advanced stages of pernicious anæmia, such hæmorrhages as are shown in the drawing probably always occur. At least, they have always been found when sought for. The observations of Horner and Quincke on forty-four cases of the kind may well assure us that these hæmorrhages are constant in their appearance.

In a paper by Dr. Stephen Mackenzie (vol. i, *Ophth. Trans.*) will also be found a record of two cases, which show clearly that, at that period of this disease, hæmorrhages occur. The following is a brief abstract. His first patient, a youth, aged 18, had been under daily observation for three weeks before the hæmorrhages appeared, his corpuscular richness on admission being 51 per cent.; and the interest centres in the fact that it was not until the percentage dropped to 32 that the hæmorrhages appeared. They increased with each decrease of the percentage till, at 13 per cent., the patient died. Daily charts of the hæmorrhagic infiltration accompany his paper.

In the same paper is another equally suggestive case, in a man aged 59. The corpuscular richness was estimated two days after the first hæmorrhage; it was then 27 per cent. The two days would probably have made the difference between it and the previous case, so that, taking these two of widely differing ages as fairly representative, we may assume that retinal hæmorrhages commence when the corpuscles have dropped to 32 per cent., or thereabouts.

The next point to be noted is, the inability of the patient to tolerate healthy blood. This was shown by his alarming condition after the transfusion, and the apparent relief given by the hæmorrhage from the bowel. But we may fairly place against these circumstances the complete removal of the anæmic murmurs, and the increase of corpuscular richness of the blood after the operation.

It may be a question whether the case was not too far advanced to admit of cure by any method of treatment. Quinquaud remarks that those cases are invariably fatal in which the amount of hæmoglobin is diminished below one-fifth the normal; and in this case it was only one-sixth.

According to Dr. Coupland (Gulstonian Lectures on Anæmia, 1881), the operation of transfusion was performed in twenty out of the 110 cases to which he refers. And the six recoveries, one of which was not permanent, all occurred in Quincke's practice. Dr. Coupland thinks that "his success in these cases, may be attributed to his having resorted to transfusion at a less advanced stage of the disease than is usually the case." His first cases were invariably fatal, and in his commentary upon these, he pointed out "The inutility of deferring transfusion until the heart is already advanced in degeneration, and restoration is well-nigh hopeless."

We are quite unable to explain the remarkable increase of the corpuscles from 16 to 44 per cent. after transfusion. We, therefore, have recorded the fact without attempting to explain it. Something of the same kind has also been noted before. Thus, Dr. Broadbent (in Tanner's *Practice of Medicine*, seventh edition, p. 18) mentions a case of anæmia in which transfusion was employed four times in a fortnight, eight ounces of healthy blood being injected each time. "At first the man seemed to rally, but at a later period he was observed to exhibit symptoms of pulmonary and cerebral congestion. He died a few hours after the fourth operation. No morbid alterations of any importance were found on making the *post mortem* examination, only the organs were pale, flabby, anæmic. It was remarked that the blood, which at first was quite watery and poor, had grown much thicker under the process of transfusion." The writer remarks: "The question naturally arises whether the injection of healthy blood can sufficiently excite the blood-forming organs to such a normal action, as to keep up the supply of nutritive material."

The case is also interesting in one or two of its negative aspects. Thus its origin could not be attributed to poor diet, to malaria, to hardship, to hæmorrhage, or to nervous shock. There was no marked diminution in the size of the aorta, such as sometimes occurs in chlorosis; nor any notable sign of an increase of iron in the liver or other organs, unless the general yellow colour of these viscera could be ascribed to this cause.

With regard to the question of the distinction of so-called pernicious anæmia from chlorosis on the one hand, and from ordinary chronic anæmia on the other, we are unable to offer any decisive opinion. The only points of distinction from these complaints in the case before us seem to have been its progressive character, and the occurrence and nature of the retinal hæmorrhages. We, therefore, simply record the case, in the hope that at some future time it may assist in determining the question.

PALATABLE DRUGS FOR CHILDREN.

BY FREDERICK CHURCHILL, M.D., F.R.C.S.,
Surgeon to, and Member of the Drug Committee, Victoria Hospital for Children.

WE owe it, probably, much to the persistency with which practitioners of the sterner sort have impressed their rhubarb and black draughts upon rebellious children, in defiance of the protestations of nurses and mothers, that "the tasteless globule" has found such favour with the weaker sex. I could tell of several cases where the children have been entrusted to the care of a homœopath, while the parents luxuriate under the usual heroic treatment of the orthodox practitioner. We must not forget to swim with the tide. Children of this enlightened age are far more pampered and spoilt than those of the previous generation. Mothers seem unable to control their feelings; or, it may be, that, with a smattering of physic-lore, they find that there is no longer any necessity to cling to the once inevitable and nauseous potion. We must say a word, too, for the children. None of us like compulsion. It must not be forgotten that there is

often more harm done to a child's nervous system, by cramming the draught down its throat, than all the good the nauseous drug was supposed to effect. Children will often take days to recover their equilibrium after a protracted encounter with the medicine-glass in the nursery, under the stern discipline of a would-be conscientious nurse. Judging from the varied susceptibilities and dispositions of the children under my care, some of them having very resolute wills, others possessing—I cannot say endowed with—mothers of a pronounced æsthetic temperament, to whom everything is a bore, except a novel to read and a sofa to lie upon, it becomes most important to formulate a line of treatment that will satisfy such requirements.

This class of children are generally ruled by a domineering old woman they call "nurse", displaying a maximum of "tall talk," with a minimum of what she delights to call "common sense" (and very common, indeed, it proves to be). The medical man must cultivate a habit of attacking such a stronghold of prejudice and conceit by a series of carefully planned flank movements, in such a way that the nursery magnate may be drawn, against her own convictions, into a pliable frame of mind, sufficient to enable the medical man's physic and regimen to stand a chance of being attended to.

To attempt to invade the sanctum of a nursery where the lady-paramount is cajoled into the idea that "nurse is a treasure", and prefers rather to foster the notion, than to care to have her eyes opened to the actual state of reigning ignorance, requires all the practical art of the medical man gradually to overcome and remedy.

Undoubtedly the ailments under which children for the most part suffer, belong to the preventable class. They are due sometimes to overfeeding; very often to neglect, especially of the calls of nature; and very much to general bad management. With this view, it may be well to presume that the best and most approved mode of treatment for habitual torpidity of the bowels is not medicine, but an enema of soap and water, with occasionally a little castor or olive oil added to the injection. If this do not succeed, and the child's appetite begins to fail, it is an indication for administering medicine by the mouth.

Fortunately, the art of the apothecary comes in to our aid, and we are now enabled to give the most nauseous of drugs—castor-oil—absolutely free from taste and smell, while it retains the full aperient properties of ordinary castor-oil. Messrs. Allen and Hanburys themselves advise that it should be shaken up with three or four times its bulk of hot milk. The viscidity of the oil is thus avoided, and the emulsion produced is scarcely distinguishable from warm rich milk.

If it be desirable to administer an aperient that will act more directly on the liver, and to avoid the unpleasant effects which often arise after taking "oil," the compound rhubarb pill will be found a serviceable aperient. Of course, some new method for its administration will be desired, which I shall now detail. Either an ordinary five-grain pill may be cut up, and a portion of it broken in small pieces may be buried in a chocolate-cream, which the youngest child will take with avidity; or for children of, say five years and upwards, I have given one-half and one-fourth of a grain of this pill, thinly coated. Half-a-dozen or so may be taken, like "hundreds and thousands," and washed down with milk or water.

The medicated fruit lozenges are very useful, *e.g.*, tamar indien and laxora lozenges. Podophyllin is probably one of the active ingredients in these lozenges. Only a small portion of a lozenge must be given to a child. The objection found with these is that they sometimes "gripe" the little patient. Next to these, perhaps, in efficiency and palatability is the compound liquorice powder, containing senna powder. About a teaspoonful stirred up with warm milk may be taken at bedtime, and a little chloric ether added (about ten to twenty drops). Very few children will object to take fluid magnesia or the calcined magnesia, especially if flavoured with the syrup of mulberry or orange.

I have succeeded in masking the taste of many powders by the addition of powdered "rose" lozenges. I very seldom prescribe Gregory's powder, on account of its nauseous character and bulk. I prefer to combine the rhubarb with bicarbonate of soda about five grains of each. This makes a much more miscible and manageable powder. Given in jam, honey or golden syrup, the taste is altogether covered.

Children will sometimes take the "baume de vie," or decoction of aloes, without objecting much. A little of this rubbed into the stomach of infants will suffice sometimes to procure an action of the bowels. The extract of liquorice may be added to the decoction until the bitter taste is sufficiently masked. Children have not really such an aversion to it, for I have known them to lick off the aloes from their fingers when put on to prevent them from sucking them. Powdered aloes, about half a teaspoonful, may be given mixed with brown sugar. The electuary of senna is taken without difficulty by some children, also the syrup of senna and the infusion with prunes. The effervescing purgative lemonade is a very agreeable drink, as also half a seidlitz-powder flavoured with lemon-juice.

Turning now to febrifuge mixtures, there is not much need of flavouring to mask the flavour of these. Sweet nitre, acetate of ammonia, spirits of chloroform, are all pleasant drugs to take. The nitrate and chlorate of potash are rather saltish, but the sal prunelle and Wyeth's compressed tablets will be taken by the bigger children without much protest. The syrups of orange, lemon, and mulberry, will come in as agreeable and cooling adjuncts. Cough-mixtures can generally be made very pleasant by the addition of syrup of squills of tolu, etc.

As regards tonics, some considerable skill will be necessary efficiently to cover the bitter flavour. Children will take the saccharated carbonate of iron very well, and also steel wine; but if we attempt to give the bitter infusions, there is sure to be rebellion in the nursery. Quinine—one of the most valuable medicines for children—can be given without difficulty, either in the form of pill or, which I prefer, dissolved in syrup of orange, without the addition of any water. This effectually covers the flavour. Quinine wine is useful for the elder children.

Chemical food is, of course, taken with relish, and if recently made is a serviceable tonic; but the phosphates, from their insolubility, throw down very much. The compound solution of the hypophosphites, in ten-minim doses, and the hypophosphite wine, forms a perfect substitute for Parrish's food. Besides having iron in a form which is easily absorbed, the hypophosphite of magnesia serves as an useful antacid and stomachic in this combination.

With a view of putting into practical form these few suggestions, and to systematise the irregular but constant attempts of mothers to keep a little dispensary of their own, I have instructed Messrs. Savory and Moore to fit up a nursery medicine-chest, with a companion guide, to assist mothers, especially those residing in the colonies and far away from medical aid, to treat their own children in such emergencies.

EXCISION OF AN ENORMOUS TUMOUR (PROBABLY OSTEO-FIBROMA) GROWING FROM THE BASE OF THE SKULL, PRESSING ON AND PARTIALLY ABSORBING THE RIGHT SUPERIOR MAXILLA, AND NECESSITATING THE REMOVAL OF THAT BONE

By WILLIAM STOKES, F.R.C.S.I.,
Professor of Surgery, Royal College of Surgeons of Ireland.

Early in October of last year, J. T., aged 47, a farmer by occupation, was admitted into the Richmond Surgical Hospital, under my care, having been recommended to me by my friend Dr. G. Plunket O'Farrell. The patient was suffering from the existence of a large tumour intimately connected with the left superior maxilla. It extended chiefly into the mouth, filling to a great extent that cavity resting on the tongue, and almost extending across to the right tonsil. This rendered both mastication and deglutition most difficult. Externally, there was, on the left side of the face, rather a fulness or tumefaction than any distinct tumour. Two points of apparent fluctuation on the surface of the tumour inside the mouth were observed, one to the left of the incisor teeth, and the other about the centre of the tumour. The patient first noticed the growth about eighteen months previously to his admission into Richmond Hospital; but, judging from the connections which I subsequently found, the tumour had probably existed for a much longer period. The patient did not suffer any pain; there were no ulcerations on its mucous surface, and, externally, the integuments presented a perfectly healthy appearance. His general health was unaffected. As the tumour was making a serious advance into the cavity of the mouth, to a great extent filling it up, I determined, strengthened by the coinciding views of my colleagues, to remove the growth; and, on October 30th, the operation was performed. The incisors being extracted, an incision was carried from the inner angle of the eye along the side of the nose, then horizontally to the septum, and finally through the lip vertically downwards (Fergusson's incision). The flap was then dissected backwards. I then found on making slight pressure on the anterior surface of the tumour that the bone yielded, giving the sensation of parchment. I then dissected the nasal tissues towards the right side opening into the nasal fossa. The two superior maxillary bones were then separat

by a powerful curved toothed forceps. From the inner angle of the eye an incision was carried horizontally outwards towards the malar eminence, and, on dissecting the flap further back towards that point, I was enabled better to estimate the extent of the tumour. With the forceps, I then separated the nasal processes of the superior maxillary from the nasal bone, and carried on the division of the bone horizontally outwards below the infraorbital ridge, being anxious to preserve that portion of the bone. The separation of the maxilla from the malar bone was now effected, and I was then made fully aware of the extensive amount of absorption of bone which had been caused by the tumour. On lifting up the portion of bone separated by the forceps, and passing my finger upwards and backwards, I found the floor of the orbit had been invaded, and the tumour attached mainly to the cranial base, mostly to the body of the sphenoid. Below, it had become attached to the left half arch of the palate, which was removed with the tumour. Externally, the growth extended to a point behind the malar eminence. The extensive attachments of the tumour superiorly, inferiorly, and laterally, made its removal a matter of extreme difficulty. Great hæmorrhage attended the operation, which was checked mainly by the free application of the actual cautery. At first, this failed to arrest it, and I then endeavoured to apply ligatures to the bleeding points; but, owing to the great depth at which they were, this was found impossible. I then applied the actual cautery a second time, and, fortunately, with success. Before closing the wound, I placed a plug deep into it when the bleeding occurred, and then brought the flaps together with numerous points of carbolised catgut sutures, except at the divided portion of the lip, which were approximated with hare-lip pins and a figure-of-eight suture.

The patient's recovery was uninterrupted, immediate union taking place throughout the entire extent of the facial wound. The deformity resulting from the operation was surprisingly little.

Mr. Abraham, the talented Curator of the Museum of the Royal College of Surgeons in Ireland, kindly examined the tumour with his accustomed care; and the note with which he furnished me in reference to its pathology will doubtless be read with much interest.

"The sections of the growth examined are made up of lobules of epithelial tissue, separated by septa of young fibrous tissue, of which the larger sometimes contained newly formed trabeculæ of bone. The epithelial cells have large well-defined spherical or oval nuclei, and their cell-substance is more or less granular. In shape, they are occasionally columnar, but more often polygonal, or with an indistinct boundary. They are situated in one or more layers around alveolar spaces, which are generally occupied by a mass of amorphous material. In some parts, the spaces are elongated and parallel, giving the tissue the appearance of a collection of tubular glands."

The points of special clinical interest in this remarkable case were: the exceptionally great size of the tumour; its extensive attachments to the sphenoid, palate, malar, and superior maxillary bones; the alarming hæmorrhage that attended its removal; the rapidity and completeness of the patient's convalescence; and, lastly, the difficulty of arriving at a definite conclusion as regards its pathology. The probabilities of the recurrence of the growth are, I should say, great; but I have not been able to ascertain if there be any evidence of its return as yet.

OCULAR HEADACHE.

By CHARLES HIGGENS, F.R.C.S.Eng.,
Ophthalmic Assistant-Surgeon to Guy's Hospital; Lecturer on Ophthalmology, Guy's Hospital Medical School.

HEADACHE due to irregular or excessive action of the internal or external muscles of the eyeball is familiar enough to ophthalmic surgeons; but in spite of the frequency with which it has been alluded to by writers on ophthalmic subjects, the profession at large does not seem to recognise the connection between pain in the head and abnormality in the eyes.

Perhaps the most common form of "Ocular Headache" is that which occurs in connection with myopia of rather high degree, in which the farthest point of distinct vision is so near the eyes, that very great strain of the internal recti muscles is required to keep the visual lines converged upon the point at which ordinary print or small objects can be clearly seen.

The case reported by Mr. Carter, I think, in the *Lancet*, about four years ago, and so often quoted since as to have become famous, is a remarkable instance of headache occurring in myopia, and dependent on overstrain of healthy internal recti muscles. Other cases dependent on the internal recti occur in emmetropia or slight hypermetropia, but in these the muscles are actually weakened, not overstrained by prolonged convergence to too near a point. In the *Guy's Hospital Reports* for 1875, I called attention to these cases in a short paper on "A Form of Muscular Asthenopia."

The remaining cases of "Ocular Headache" are accounted for by astigmatism—simple myopic of low degree having to answer for many cases—and rather high degrees of hypermetropia. In these, the headache is due to irregular or excessive action of the internal muscles of the eyeball.

Dr. Brailey has called attention to the subject in a paper on "Astigmatism considered in relation to Headache and certain Morbid conditions of the Eye" (*Guy's Hospital Reports*, 1878). The following two cases are good instances of the disease under consideration.

CASE I.— J. K., aged 27, a solicitor, for two months had had difficulty in reading, pain in the head, and general feeling of uneasiness. He had been treated for biliousness, and had taken remedies for headache without relief. He had almost determined to give up business, believing he had some form of brain-disease. He was advised, before deciding, to consult an oculist. I saw him on June 11th, 1880, and found vision and accommodation normal; convergence was good up to one foot, but imperfect nearer; diplopia occurred after exclusion of either eye. There was manifest hypermetropia = $\frac{1}{36}$. I ordered glasses convex 36, decentrated inwards, to be used for reading and all near work. On July 7th all the unpleasant symptoms had disappeared. I heard of J. K. some months later. He was at his business, and had no difficulty in reading or writing for any length of time.

CASE II.—Mrs. M. J., aged 39, suffered from headache since childhood; she had used glasses for distance for years. She had always noticed that her headache was worse after reading or working. The glasses she was using were — 14 spherical. I found under atropine myopia $\frac{1}{24}$, with myopic astigmatism $\frac{1}{18}$ in both eyes. Glasses — 18 cylindrical for reading and working, — 18 cylindrical — 24 sph. for seeing at a distance were ordered. Two months later, the headache had greatly diminished, and reading or near work caused no discomfort.

NITRITE OF AMYL IN URÆMIC ASTHMA.

By SOLOMON C. SMITH, M.D.,
Surgeon to the Halifax Infirmary.

WITHIN the last month, two writers in the JOURNAL have testified to the usefulness of nitrite of amyl in allaying the paroxysms of uræmic asthma. There is no doubt about its efficacy; but it is too potent a remedy to be used without great care. Its very power is its danger; for it often gives such relief, even in desperate conditions, that a feeling of false security is apt to be engendered, the gravity of the case being put in the background by the comfortable feeling that relief can always be obtained; and thus, instead of the asthma being accepted as a most urgent warning of danger, the facility of getting relief is taken as a permission to throw aside restraint.

Of this, Dr. Sheen's case (BRITISH MEDICAL JOURNAL, April 28th) is a good example. The patient got relief by means of the amyl; then refused further treatment, and died.

Considerable latitude has been allowed in the use of the term asthma, it being often applied to conditions which resemble it in one thing only, that is, in the difficulty of breathing. True asthmatic paroxysms do, however, occur as a result of renal disease, but they form only one species of uræmic dyspnœa. It has seemed to me that, putting on one side cases of pleuritic and pericardial effusion, the attacks of dyspnœa which occur in the course of disease of the kidney may be roughly divided into four groups, in only one of which is nitrite of amyl of much service.

1. True asthma, spasmodic, passing entirely away between the attacks, unaccompanied by signs of cardiac weakness, often produced by errors of diet, and indistinguishable from ordinary spasmodic asthma, except for the discovery between the paroxysms of symptoms of chronic kidney-disease.

2. Exceedingly rapid breathing, with sensations of breathlessness, but without any obstruction to the respiration, without wheezing, and without apparent effort. This, in a minor degree, is one of the ordinary early symptoms of kidney-disease, but is sometimes so aggravated as to seem to stand out by itself as a disease apart. Neither of these conditions has appeared to me to be at all markedly under the control of nitrite of amyl.

3. Cardiac dyspnœa, due to the failure of the heart; a sign that degeneration of the cardiac muscle is taking place, and that hypertrophy is no longer truly compensatory, an urgent warning that the mode of life must be altered, so as to bring the demands upon the heart within its lessened power. The attack generally occurs in the night. There are orthopnœa, a sense of suffocation, and a feeling of being in danger of death, unless something can be moved from the chest; the hands are cold and clammy; the face bathed in perspiration; the heart's action is laboured and irregular, but the arteries are almost pulseless; the muscles of deep respiration act forcibly, and air freely enters the lungs; but this gives no relief to the miserable sense of apnœa, which goes on sometimes for several hours, until, towards morning, a little frothy expectoration occurs, often tinged with blood, and the breathing gradually becomes less difficult. At this time, patches of fine mucous *râles* can be heard in the lungs, which persist for perhaps twenty-four or thirty-six hours, during which period the breathing remains somewhat hurried, but after then the patient often appears fairly well. When these paroxysms occur at comparatively long intervals, they generally seem to be brought on by cold, or fatigue, or indigestion, and are usually regarded as asthmatic; but sometimes they are repeated so frequently, that the patient is never quite free, and then they become what is in fact a mode of death. In either case, it is most essential that their meaning should be recognised as pointing to the heart.

These are the cases in which nitrite of amyl most distinctly shews its power. During its inhalation, the pulse fills out; the limbs become warm; the breathing is relieved; and the misery passes away; but it is most important that the rapidity with which ease is obtained should not be taken as proving the neurotic origin of the attack. The case is not one of asthma, but of failing heart; hypertrophy has done what it can; and is no longer able to overcome spasm of the arterioles; the patient has come to the end of his tether, and now must be content to draw in. An isolated attack of this form of uræmic dyspnœa sometimes gives a warning far ahead, and makes it possible to adopt in good time such a course of treatment as enables life to be prolonged often for a very considerable period—a broken life, no doubt, and one lived out upon a lower platform, but still better than the alternative. If, on the other hand, the warning be neglected, and the treatment be limited to the use of such doses of amyl or nitroglycerine as suffice to keep down the attacks, the quantity of the drug required rapidly increases, and it is soon found no longer to produce the desired effect.

The true place of nitrite of amyl in these cases is not as a treatment in itself, but as a means of giving quick relief to the distressing symptom. When this has been done, then a course of treatment for the disease must be arranged. This should generally include a life free from worry and excitement; careful protection from cold; the use of such baths and frictions as are found to keep the skin in good order; sufficient daily exercise to ensure good digestion; a diet regulated according to the digestive power, and the requirements of the body; the use of aperients, especially when bad weather prevents exercise; the steady employment of small doses of iron and digitalis, interrupted as may be found necessary for the treatment of those catarrhs and indigestions which are the chief breaks in the monotonous progress of these cases; and then, if from some exposure to cold, or mental excitement, or error of diet, attacks of dyspnœa should recur, nitrite of amyl will again be of use as before, as a means of getting relief from the urgent distress.

4. Bronchitis, congestion of the lungs, and pulmonary apoplexy, give rise to great difficulty of breathing, which sometimes comes on so suddenly as to look like an asthmatic attack; but there are generally ample physical signs to distinguish it from other forms of dyspnœa. Although these conditions are often associated with dilatation of the heart, the block is too organic to leave much room for the action of nitrite of amyl.

Of the four groups, then, into which cases of uræmic dyspnœa may be arranged, in one only is nitrite of amyl of much service. In that class, however, its beneficial action is most striking, and it stands almost alone in the rapidity with which it gives relief to the breathing. It must, however, be used with both caution and intelligence; otherwise, instead of giving an opportunity for useful treatment, it may only mask the progress of the disease, and while easing painful symptoms, merely lead the patient on to euthanasia.

THE Local Government Board have, on the application of the Beckenham Local Board and Urban Sanitary Authority, declared Section 90 of the Public Health Act, empowering the making of by-laws as to houses let in lodgings, to be in force within the said district.

OBSTETRIC MEMORANDA.

A CASE OF MONSTROSITY.

I WAS called to attend Mrs. E. in her fourth confinement, on May 9th, 1883. On my arrival I found the water had come away about twenty minutes before, and projecting from the os externum was a fleshy mass so unlike any usual presenting part of the fœtus to the touch, I was quite at a loss what to make of it. However, another pain coming on solved the riddle at once, the feet and leg or legs being expelled; and in a short time the shoulders and head followed. The child was alive, and continued so for eight hours. The mother made a good recovery. I send a rough sketch of the



child, which was the only thing the parents would allow. From the head downwards to about midway between the sternum and the umbilicus it was in every respect well formed, and to outward appearance perfectly natural. From about that point the following particulars were noticed. There were no projections at the usual site of the crests of the ilia. The abdominal cavity was small, and seemed to be almost destitute of contents. The genito-urinary organs were represented by a small round aperture surrounded by a slightly elevated fleshy ridge (represented by the lower dot in the figure). The limbs were enclosed in one continuous fold of integument, although the bones could be felt quite separate underneath; and in front there was a slight depression marking where the division ought to have been between the limbs. There was no separation of the buttocks; in fact, there was very little of the usual projections at this point, and there was no anal orifice. The feet were joined together at the heel and partially so at the centre of the foot, but the toes were well formed, in the usual number, and free. I would have liked a *post mortem* examination, but the parents objected. The mother said she had only gone eight months. There was no history of a fall or fright, except a bad dream about the fourth month.

G. A. RAVERTY, L.R.C.P.Ed., Liverpool.

ALBUMINURIC RETINITIS OF PREGNANCY.

MRS. E., aged 22, was referred to me by Dr. Temple on June 1st, 1881, with the statement that the urine contained a large amount of albumen. The patient stated that her sight had been failing for about a month. She said she could see the sides of an object, but not the centre; and complained of flashes of light in the dark. She had frontal headache, sometimes severely. She had no pain in the eyes. There was a great deal of nausea and vomiting. She was in the fourth month of her first pregnancy. With the right eye, she saw fingers at five feet, and read 16 Jäger; with the left, she saw fingers at three feet, and read 20 Jäger. With the ophthalmoscope, I observed, in the right eye, a well marked stellate arrangement of deposits about the yellow spot, with numerous patches scattered about the retina. The optic disc was somewhat swollen and indistinct in its outline. The appearances in the left eye were very similar, with the addition of numerous small hæmorrhages in the lower half of the fundus.

Dr. Temple informs me that, shortly after this, she was seized with convulsions, and had a miscarriage. She made a good recovery; and, when I saw her again on August 4th, the swelling of the optic disc had greatly diminished, the scattered patches were less marked, but stellate patches in the region of the macula were about the same as when first seen. In the right eye, two veins apparently contained thrombi. The vision was, with the right eye, $\frac{20}{30}$, 16 Jäger; with the left eye, $\frac{20}{50}$, 16 Jäger. She could manage to write a letter. From Dr. Temple, I learn that she regained good vision, but did not myself see her again. In a few months, the unfortunate woman became pregnant again, although warned of the danger; convulsions supervened, and in one of them she died.

REMARKS.—It would be of considerable interest to learn in what proportion, and in what class of cases of albuminuria of pregnancy, retinitis occurs. That it does not necessarily occur, I know, having attended, some years ago, two cases in which there was no complaint of trouble of vision. One case, a woman of about thirty years, in her fourth pregnancy, made a good recovery. The other had uræmic convulsions, and died. I did not use the ophthalmoscope, but relied upon the patient's statements, the cases having occurred in my pre-ophthalmoscopic days.

G. S. RYERSON, M.D., L.R.C.S.Ed., Lecturer on the Eye, Ear, and Throat, in Trinity Medical School, Toronto, Canada.

CLINICAL MEMORANDA.

VERTIGO.

IT is only lately that my attention has been drawn to Dr. Alexander's criticism of my paper on Vertigo. I hasten to reply to it as follows.

The whole contention of my argument is, that it is to dilator changes in the vertebral arteries, causing congestion of the labyrinth, that the phenomenon of vertigo originating in distant organs, that is, reflexly, is produced; and that the organ of equilibration, by virtue of its capacity to notify these dilator changes by such a prominent symptom as giddiness, subserves a sentinel-like function, to warn us of the state of the blood-supply of the brain as a whole. Notwithstanding this, Dr. Alexander proceeds to inform us that, after ligaturing the vertebrals in many epileptics, no vertigo occurred; adding, "if vertigo have any connection with the vertebral arteries, it ought to have been present after the ligature." That is to say, because vertigo did not follow the complete cutting off of the blood-stream from the organ of equilibration in his operations, it could not result from an excessive increase in the blood supplied to it, in my cases. Surely this is a *non sequitur*.

Again, he says, "no mental hebetude has followed the ligature in any case such as occurs after the vertebral inefficiency of Dr. Woakes." But what comparison can be instituted between the two conditions, viz., the sudden cutting off of the blood-supply by ligature, which leaves the lumen of the vessels intact, and able to be reoccupied so soon as the collateral circulation is established; and that gradual progressive deterioration of the vessel-walls referred to the "long persistence of their dilatation, and the consequent inability sufficiently to nourish the organs to which these altered vessels are distributed?"

Dr. Alexander concludes by saying: "The vertebral arteries have now emerged from obscurity, and are not so safe vessels for theorising upon as they once were." Are we to infer from this statement that the emergence from obscurity has happened since Dr. Alexander's operations? These have the great value of vivisection experiments; but experiment is void unless the deft hand of the operator be supplemented by a mind trained to interpret its meaning. Can this latter qualification be predicated of a critic who argues that similar phenomena should attend anæmia as are witnessed under conditions which imply congestion, and that the consequences of chronic starvation of an organ should correspond with the sudden cutting off of its circulation?

EDWARD WOAKES, M.D., LONDON.

THERAPEUTIC MEMORANDA.

CANNABIS INDICA.

THIS is a most excellent nervine tonic, very valuable in cases of hæmorrhage and after confinement, where there is loss of rest, and in all cases of nervous insomnia in women. The proper dose is five minims of the tincture three or four times a day. I have never observed any disagreeable effects from it in the above doses.

J. D. CRONIN, M.D., Kensington.

PATHOLOGICAL MEMORANDA.

ON A CASE OF HERMAPHRODITISM.

A CASE of doubtful sex lately came under my observation, and may be of interest. It occurred in a plump, healthy child, four months and a half old, which had been registered as a girl, in accordance with the instructions of the medical man who attended the mother during her confinement. The parents, having some suspicions on the matter, asked me to examine the child. The external organs presented the following appearances. The scrotum was slit in the middle line from before backwards. When the halves, which quite corresponded with one another in size and position, lay together at rest, the scrotum appeared almost normal with a deep median furrow, its size from before backwards being one inch and a half, and from side to side one inch and three quarters. When the halves were pulled apart, the floor of the fissure was found to be covered with a red, vascular, smooth membrane, resembling mucous membrane. This ended anteriorily in an imperfect penis, which was little more than the glans, on the under surface of which was a groove, representing the urethra, and terminating in a short canal passing backwards. I was unable to pass a probe more than about a quarter of an inch into this canal, which only admitted a very fine probe; but the mother stated positively that the urine always came through this opening. The rudimentary penis was three quarters of an inch long when stretched upwards, and two-thirds of its dorsal surface were covered with a hood of skin, representing the prepuce, one inch long when stretched, and half an inch long when not stretched. The under or urethral third of the circumference of the penis lay exposed. From the anterior border of the anus to the posterior border of the scrotum measured three-quarters of an inch, and from the posterior border of the scrotum to the tip of the penis, when stretched, was three inches, giving a space between the halves of the scrotum of one inch and a half. In each half of the scrotum a small, somewhat soft, testicle could be felt, and the cord could be traced up on each side through the wide external inguinal ring into the inguinal canal for some distance. An examination by the rectum failed to reveal anything which could be recognised as a prostate, but the bladder was easily distinguished without any intervening organs.

In short, it was a case of spurious hermaphroditism in the male from hypospadic fissure of the urethra and perinæum. The halves of the scrotum resembled enlarged labia majora, and the partially unsheathed, imperfectly developed penis, without corpus spongiosum, resembled a large clitoris. The absence of nymphæ, and of an opening corresponding with the vagina, along with the presence of the descended testicles, should have prevented mistake. The occurrence of ovaries in the labia majora is excessively rare.

C. FRED. POLLOCK, M.D., Glasgow.

TOXICOLOGICAL MEMORANDA.

CASE OF POISONING BY LABURNUM.

ON May 25th, at 2 P.M., I was called to see a little boy, aged 4 years, who had eaten some flowers, and was very ill. On arrival, the mother informed me that he had been playing with some children, and had swallowed some laburnum flowers, the quantity and the time at which they were taken being unknown. He had come in and stated that he was unable to walk, had become cold and seemed drowsy, and had been slightly sick. He was lying quietly in the bed with dilated pupils, which contracted under the stimulus of a bright light, but, on its withdrawal, again dilated. He was very pale (usually, he has a fair amount of colour); the surface was cold, and some vomited matter over the bed, in which could be seen particles of laburnum. He was also very drowsy; pulse 104, and small; the temperature was taken, 95°; how much below I cannot say, as I had nothing but a registering thermometer. My second visit (about thirty minutes later) found him in much the same condition. There had been more copious vomit, and seemed to contain a large amount of vegetable matter. He was still very drowsy. Pulse 130; temperature about the same. A third visit an hour later showed temperature of 93.6°; this condition persisted until about 5.30 P.M., vomiting, to a slight extent, taking place once, and the patient sleeping well. Then he seemed to recover; and, on visiting him about this hour, the pupils were almost normal, the temperature rising to the normal. He seemed quite recovered. The amount of poison taken and the time before it acted are both uncertain. The symptoms in this case point to a distinctly depressional action;

there were no symptoms of irritation whatever. The early vomiting probably got rid of all the poison. The treatment was simply by giving an emetic and then stimulants. The temperature was taken in the mouth.

M. G BIGGS.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

LEEDS GENERAL INFIRMARY.

CASES OF FRACTURE OF THE PATELLA TREATED BY SUTURE.

[Reported by E. WARD, M.A., House-Surgeon.]

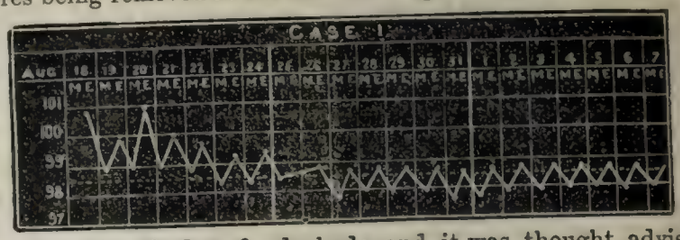
THE following cases were treated in the Leeds General Infirmary during a period of ten months. Occurring within a limited time, such a series is obviously of more value than would be the publication of isolated cases.

In the meagreness of published statistics, they may be of some practical value, by affording an additional illustration of the satisfactory results obtainable by the adoption of the Listerian method. Salicylic silk was used for all the dressings, and it completely justified the reliance upon it as a convenient, comfortable, and safe antiseptic material. One of its peculiar advantages was well shown in Case V, where, owing to the permanence of its antiseptic properties, the dressings were left undisturbed for twenty-two days with perfect safety.

CASE I. *Simple Fracture of Patella.*—Thomas R., a powerful healthy man, aged 29, an itinerant umbrella-mender, was admitted under the care of Mr. Wheelhouse on the 7th July, 1881, with a simple fracture of the left patella, caused by a fall downstairs ten weeks before. He had been treated in two hospitals for periods of five and three weeks respectively; the details of the treatment not being attainable, except that, at the first, the leg was bandaged to a splint, and at the second a plaster-of-Paris case was applied over the knee-joint, with which he could with difficulty drag himself lamely about. This was kept on up to a few days before his admission. During these few days the joint became much swollen, and extremely painful every time he attempted to walk, and he had several times fallen rather heavily. On admission, there was an obvious transverse fracture of the left patella, a little below the centre. There was considerable effusion into the joint, and the fragments were separated about one and a half inches, both being freely movable. Walking was very difficult, as he had to drag the leg slowly and carefully after him, in order to avoid bending the knee, which always immediately gave way when even slightly flexed. The limb was placed upon a back-splint, the knee carefully bandaged, and evaporating lotions applied; but, as absolutely no improvement took place during the following month, it was decided to attempt to procure union of the fracture by direct operative interference.

On August 18th, with full antiseptic precautions, Mr. Wheelhouse proceeded to expose the patella by dissecting upwards a large flap. Upon opening the joint, each fragment was found to be covered with a considerable quantity of soft plastic material, but there was absolutely no union between them. This granulation-tissue was removed, and the fractured surfaces were refreshed. Each fragment was then drilled obliquely in three places, by means of an ordinary Archimedean drill. The drill tracks were about three quarters of an inch laterally apart, and passed from the anterior surface, three quarters of an inch from the edge of the fragment, to the face of the fracture close to the articular cartilage, thus avoiding the cavity of the joint. Strong double silver wires were passed through, and an attempt made to draw the fragments into apposition by means of traction on these sutures; but this was found to be impracticable, apparently owing to some permanent structural shortening of the quadriceps extensor, whose tendon was consequently freely divided. The two halves of the patella were brought within half an inch of each other by powerful traction with Malgaigne's hooks. The sutures were then tightened and cut short, and the hooks removed. The wound was closed with wire sutures, and a drainage-tube was placed across the joint beneath the lower fragment. Antiseptic dressings were applied, and the limb was fixed in Dr. P. Heron Watson's plaster-of-Paris apparatus for excision of the knee, with an anterior suspension rod.

There was no pain nor subjective disturbance of any kind afterwards. The temperature rose to 101° on the first and third evenings, to 100° on the second and fourth, probably from tension, and never afterwards betrayed any unsteadiness. The wound remained quite aseptic, and healed entirely by first intention, except the two small tracks where the drainage-tubes emerged. It was dressed on the fourth, ninth, and twenty-third days, the drainage-tube and sutures being removed at the first dressing.



As the patient had no fixed abode, and it was thought advisable not to lose sight of him early, he was kept in hospital until October 28th. At this time he could walk well, and flex the knee to a right angle, extension being powerful and complete. Three weeks afterwards he came up for examination, and stated that he had walked ten miles a day without fatigue or distress of any kind. He was also seen nearly four months later, when he was pursuing his usual work, involving almost continuous and heavy walking, which he was able to do with perfect ease and comfort.

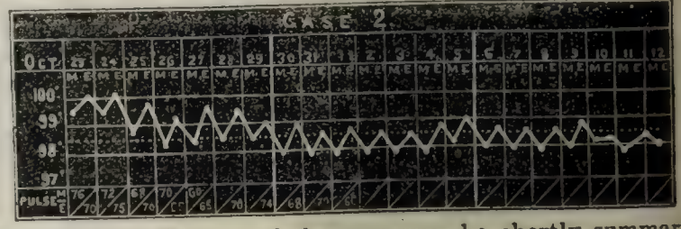
CASE II. *Compound Fracture of the Patella.*—Margaret M., an unmarried healthy Irishwoman, aged 24, was admitted, under the care of Mr. Wheelhouse, shortly before midnight on October 23rd, 1881, and discharged well on December 3rd, 1881. Four hours before admission she had jumped out of a window in the course of a drunken quarrel, and fallen on the stone pavement twelve feet below, alighting on the right knee. She was very drunk when admitted, though it was afterwards ascertained that she was not a woman of regularly intemperate habits.

On examination, the right knee-joint was found to be freely laid open by an almost straight and fairly clean wound about three inches in length, passing transversely across the front of the knee a little below the middle of the patella, which was fractured at this point, the fragments being about half an inch apart. With the exception of one small splinter from the upper fragment, there was no communication. The joint was filled with blood. There were no other injuries.

Mr. Wheelhouse saw the patient very shortly afterwards, and decided to treat the wound after Professor Lister's method. At 1 A.M., five hours after the receipt of the injury, the wound was extended for about an inch at each end, the capsule of the joint being freely divided, in order to expose the cavity more fully and easily.

The contained coagulum was then removed, and the joint syringed out with a 5 per cent. solution of carbolic acid, the edges of the wound and the surrounding integument being carefully purified. The knee was then fully flexed, and the joint subjected to a prolonged irrigation with a slightly weaker solution. The fragments were then drilled obliquely in two places, in the manner before described. Strong double silver wires were used, and the two halves of the patella were easily drawn into firm and accurate apposition, the sutures being cut short. The superficial wound was closed with silver sutures, and no drainage was employed, either for this wound or for the joint. The whole of the operation was conducted under the carbolic spray, and complete antiseptics were adopted in the dressing.

The limb was fixed in extension upon an ordinary back-splint, reaching to the fold of the nates.



The subsequent history of the case may be shortly summarised There was never the slightest pain or discomfort in the joint at an time. On the fourth day, the dressing was changed, the joint looking perhaps, a little fuller than its fellow, but there was no trace of in flammatory change, and the wound was quite aseptic. The dee dressing was slightly stained with the first oozing. The dressin was renewed on the tenth day, and all the superficial sutures wer

removed. The wound was uncovered again on the nineteenth day, and found to be quite healed. The dressing was discontinued.

The highest temperature observed was 100°, and, perhaps, the general condition during this time is best illustrated by the appended temperature chart.

On the twenty-fifth day, she was allowed to get up, and, on the thirty-fourth, the splint was removed. After this time, she was allowed to walk freely about, and was discharged exactly six weeks from the date of admission.

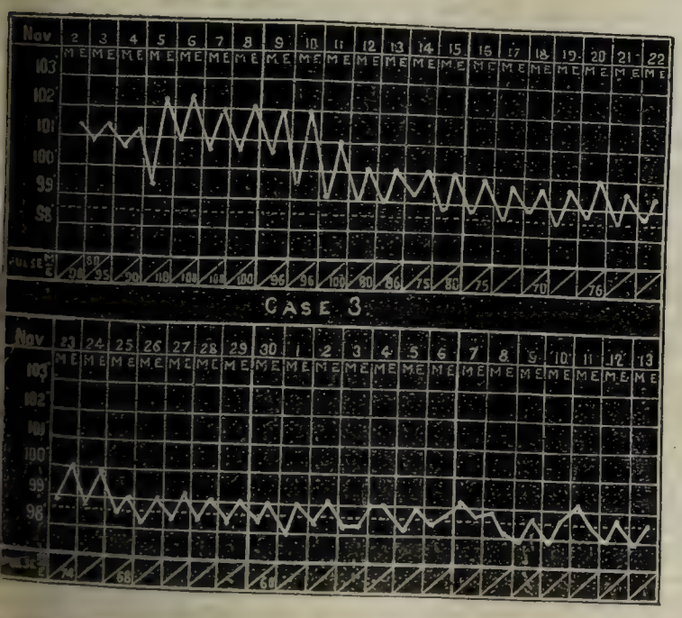
Three days afterwards, she walked up to the out-patient room, a distance of three-fourths of a mile; and a month afterwards, when the case was shown at a meeting of the Leeds and West Riding Medical and Chirurgical Society, she could flex the knee beyond a right angle, and stated that it was practically as sound and as strong as the other. She was also seen in the following July, having remained perfectly well, the patella being apparently in one firm solid piece.

CASE III. *Compound Fracture of Patella.*—Robert L., aged 17, a labourer, was admitted under Mr. Jessop's care on November 2nd, 1881, and discharged well on January 14th, 1882. About 3.30 A.M. the day of admission, he slipped off a plank in the dark, and fell into a quarry, alighting on a steel rail with his right knee, which was bent at the time. He was entirely unable to rise, and lay for some time in the mud before help arrived. He was then placed in an open shed, and allowed to remain for several hours before being brought to the hospital, where he was not seen by Mr. Jessop until 2 P.M., nearly eleven hours after the accident; the wound being all this time filled with sand and mud. He was suffering severely from the shock and exhaustion of the injury and prolonged exposure.

He was found to have sustained a compound, slightly comminuted transverse fracture of the patella, the fragments being separated about half an inch. There was a severely contused wound about two and a half inches in length across the front of the knee, a considerable quantity of mud and grit being ground into the edges. The joint was distended with blood and dirt.

The patient was placed under ether, and the edges of the wound and the surrounding skin were purified as carefully as possible with 1 in 20 carbolic lotion. Under strict antiseptic precautions, the wound was extended about three-quarters of an inch outwards, and coagula were removed with the finger. The knee was then flexed, and the joint irrigated for nearly an hour with tepid carbolic lotion. An incision was made upon the projecting point of a director at the most dependent part of each side of the joint, and drainage-tubes were passed through. Each fragment was drilled obliquely with a small ordinary gimlet, avoiding the articular cartilage; and, a piece of strong silver wire having been passed along the tracks, the fragments were tied firmly together. Only one suture was used, and the ends were left of sufficient length to project from the external wound, which was brought together with wire sutures, dressed antiseptically, and the limb placed in extension upon a back-splint.

During the first nine days there was considerable disturbance, both local and general, the temperature-curve remaining constantly between 101° and 102°.



The wound was dressed on the third day. The joint was very red, tender, and swollen. The discharge was distinctly purulent, but apparently sweet. The edges of the wound were suppurating freely.

It was dressed again on the fourth day. The condition was much the same.

After the sixth day, daily dressings were applied until the twenty-third day, after which the dressings were changed every fifth or sixth day, there being twenty-six dressings in all.

On the eighth day, the discharge, which was at this time copious, had a distinctly sour smell, but there was no putrefactive odour, either then or at any time afterwards. From this date he steadily improved. On the tenth day, the temperature fell to 100° at night, and remained so till the twenty-fourth day, when it fell to normal, and never afterwards rose. On the seventeenth, day the discharge was free from smell, and much reduced in quantity. After the tenth day, the patient, a boy of remarkably phlegmatic temperament, expressed himself as feeling perfectly well.

On December 8th, thirty-six days from the date of injury, Mr. Jessop removed the wire suture from the bone.

December 19th. The wound was quite healed. The dressings were discontinued.

December 25th. He was allowed to get up.

January 2nd, 1882. The splint was removed, and joint found to be fixed; but, on flexing it with a little force, the adhesions were felt to give way. Passive motion was practised daily, and on January 14th he was discharged well.

February 8th. He showed himself. He had walked on the limb since his discharge, and could flex the knee to a right angle. This patient was seen in July following. At that time the patella remained firmly consolidated, the movements of the joint were absolutely perfect. There was no trace of limp, and he stated that it was quite as sound as the other.

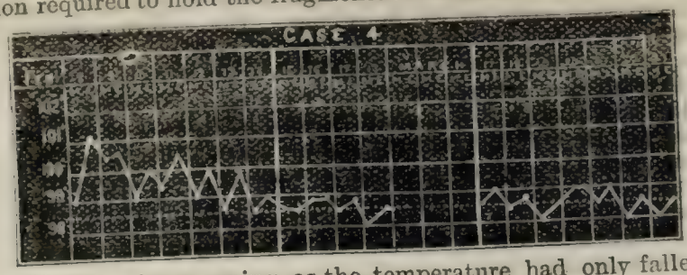
CASE IV. *Simple Fracture of Patella.*—James G., aged 22, a bargeman, was admitted under the care of Mr. Teale on January 30th, 1882, and discharged on April 29th, 1882. He gave the following account of his accident. Seven weeks before his admission, he was thrown violently from his horse, and alighted with the right knee fully flexed against the paved edge of the canal embankment. With a little assistance, he was able to walk home, a distance of about 200 yards. The joint was much swollen, but he had very little pain. He was seen by a medical man, who instructed him to lie in bed, although he did not apparently diagnose the nature of the injury at that time. The patient, however, got up on the following day, and had been able to walk more or less every day since his accident, but with a dragging, awkward, helpless gait, and only by taking thought for every step. Twice, when off his guard, he had fallen heavily.

On admission, the joint was much enlarged, the natural outlines being entirely lost. Examination revealed a transverse fracture of the patella, below the junction of the middle and lower thirds, the fragments being obviously of very unequal size. The enlargement of the joint was apparently mainly due to fluid, with some indefinite thickening about the fractured surfaces. Two fingers could be placed in the gap, and there was no attempt at union of any kind. There was no pain nor tenderness. He could walk slowly and clumsily with care, but after very slight flexion he entirely lost the power of extension, and immediately fell.

February 8th. At 10 A.M., Mr. Teale laid open the knee-joint by a transverse incision, about four inches in length, midway between the fragments, which were found to be embedded in considerable masses of soft fibrous substance; this, however, did not completely fill the space between them, and they were consequently quite unconnected by any bond of reparative material. This soft plastic material was removed, and after the fragments had been more fully exposed by a little dissection, a thin slice of bone was sawn off each. The upper fragment was then drilled obliquely in three places in the usual manner. The lower was so small that it was found necessary to pass the sutures through the ligamentum patellæ into the cavity of the joint. It required considerable force, applied by means of Malgaigne's hooks, to bring the pieces into close apposition, but this was eventually satisfactorily accomplished. The sutures were then tightened, and left of a sufficient length for convenient removal. The incisions in the lateral aponeuroses were brought together with three catgut sutures on each side, and a short drainage-tube was passed into the joint on each side through the extremity of the incision. The superficial wound was closed with silver and catgut sutures. The whole of the operation was done with full antiseptic precautions, and an ordinary back-splint was applied.

At 7 o'clock in the evening, the temperature had risen to 101°, and

he had considerable pain, both being probably due to the great tension required to hold the fragments in contact.



On the following morning, as the temperature had only fallen to 100.5°, and there was still considerable pain, the dressing was changed. Everything was looking perfectly quiet and quite aseptic.

The pain gradually decreased, and had quite disappeared on the 12th, when the wound was again dressed for the purpose of removing the drainage-tubes and the superficial wire sutures.

February 16th. The dressing was renewed. The wound was quite healed, except a tiny button of granulation at the point of emergence of the outer drainage-tube. The knots of the catgut sutures came away on the dressing.

February 24th. The wound was dressed. The above-mentioned point was still unhealed.

The dressings were changed again on March 7th and March 17th; on the latter occasion, the deep sutures being removed. The fragments were apparently firmly and closely united. The patella was freely movable on the femur.

March 24th. The dressings were discontinued.

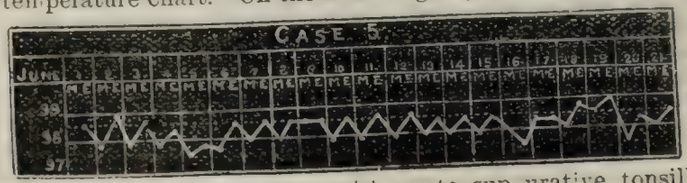
As the patient had no fixed abode, and it was doubtful whether, under other circumstances, his further progress could be watched, he was kept in hospital until April 29th, when the only disability remaining was a slight impairment of the power of complete flexion, and some feeling of weakness and stiffness after walking for a considerable time. He has not since been heard of.

CASE V., *Simple Fracture of Patella.*—Thomas W., aged 33, a groom, was admitted under the care of Mr. Jessop, on May 13th, 1882, suffering from a recent simple fracture of the patella. He stated that two hours before admission he was exercising a horse, which slipped and fell against the kerbstone, against the edge of which his knee was driven with the whole weight of the animal. He found, on being assisted up, that he was quite unable to walk, and had acute pain in the joint, which was much bruised and swollen. On admission, the left knee was found to be severely contused, the joint distended with fluid, and there was an evident transverse fracture of the patella, a little below the centre, the fragments being about three-fourths of an inch apart, and apparently not comminuted. The limb was extended upon a back-splint, and evaporating lotions applied.

June 1st. The swelling of the soft parts and the effusion into the joint had much decreased; and as everything seemed perfectly quiet, Mr. Jessop decided to operate. The fragments were at this time very freely movable, and quite half an inch apart. The joint was laid open by a central longitudinal incision, and a small quantity of firm partly decolorised coagulum removed from the fractured surfaces. The pieces were then secured in the usual manner, being brought into good apposition. Only one suture was used, and the ends were brought through the external wound, which was closed with silver sutures, no drainage being provided.

June 3rd. He had had no pain nor discomfort of any kind. The wound was dressed, and the superficial sutures were removed. The dressing was absolutely unstained. There was no effusion into the joint. Highest temperature 98.8°. From this date the wound was left undisturbed until June 27th (twenty-four days), when the dressing was opened out in order to remove the deep suture.

July 7th. The dressing was opened out and discontinued. The wound was quite healed. The general condition is indicated by the temperature chart. On the following day he took cold and was



kept in hospital until July 28th, with acute suppurative tonsillitis. During the latter part of this time he was walking about without any support. He was quite free from pain, and was rapidly acquiring free movement of the knee-joint.

August 18th. He presented himself, after three weeks' absence, at a convalescent hospital. He could flex the knee beyond a right angle, and had walked twelve miles in one piece without pain or fatigue. The patella was apparently one firm solid mass of bone, and the line of fracture quite indistinguishable.

The patient was again seen early in October, when he could touch the buttock with his heel, and extension was as powerful as on the opposite side. He said, "It is now quite as good a leg as the other, in every way."

REMARKS.—The straight vertical incision down the centre of the patella appears to be the simplest and best in uncomplicated cases, where only one suture is required. But the results in Cases II and III, where there was a transverse incision already provided by the accident, were so good in every way, that its adoption in Case IV followed almost as a matter of course. Here, also, room was required laterally, in order to get a sufficient number of sutures to overcome the great tension, and hold down the upper fragment.

It will be observed that, in Cases I and II, the sutures were cut short, and left permanently *in situ*. In both cases, the wounds healed over them by first intention; and, when the patients were seen several months afterwards, they had not been the source of the least irritation.

In the later cases, the sutures were removed when tolerably firm union was found to be established. In Cases II and V, the wounds were closed without any provision for drainage; and these cases, in their immediate aftercourse, were the most satisfactory of all, there being no pain nor disturbance at any time, either local or general. This method, in cases of operation for recent simple fracture, appears theoretically to be a most reasonable one, and it certainly answered admirably.

In simple fractures, where the skin can be thoroughly purified, and where the aseptic conditions of the operation can be practically ensured, it is clear that the condition of the joint after operation is very little different from that of a simple contusion; and it is not an unreasonable assumption that any slight effusion or hæmorrhage will clear up after the manner of a simply contused joint. At any rate, in these instances, the results amply justified our expectations; for, at the first dressing of Case II, the compound fracture, it was thought that the knee looked slightly fuller than its fellow, but fluctuation could not be detected; and in Case V, there was no sign of fluid in the joint at any time.

Case III possesses features of singular interest. The knee-joint had sustained a hideous wound, which for nearly twelve hours had been filled with presumably septic material. The outlook of conservative measures appeared so unpromising, that the resolution to adopt them was, no doubt, in part due to the satisfactory condition of the previous case of compound fracture, which was then ten days old, and practically well.

In spite of careful and prolonged attempts at purification, it became evident that the germs of some form of fermentation had not been excluded. The external wound suppurated freely, and although there was never much discharge from the drainage-tube which passed into the cavity of the joint, it was of a distinctly purulent character. As the discharges from the external wound and from the joint mingled in the dressing, any fermentative change affecting one must have been shared by the other.

The local and general disturbance during the first nine days caused grave anxiety, and when, on the eighth day, the pus acquired a distinctly sour odour, serious doubts were entertained as to the justifiableness of pursuing the line of treatment any longer. But as there was a perceptible change for the better in the patient's general condition at this time, and there was no absolutely putrefactive odour about the discharge, it was decided to persevere with daily dressings, with prolonged antiseptic irrigation of the wound.

From this time, he improved rapidly; in two days, he expressed himself as feeling quite well; in ten days, the pus was quite free from odour, and the wound subsequently pursued a typical aseptic course.

Unfortunately, no microscopic examination of the pus was ever made; but, judging from the general aspect of the case, it appears probable that there was never anything more than a micrococcic infection of the wound; but, even in this case, the absolutely perfect restoration of the functions of the joint was hardly less surprising than satisfactory.

AMONG the donations to the London Hospital resulting from the proceedings at the Mansion House on the 13th ultimo, is the munificent one of £5,000 from the Worshipful Company of Goldsmiths

ST. BARTHOLOMEW'S HOSPITAL.

OPERATIONS ON PHTHISICAL PATIENTS: WITH REMARKS ON OPERATIONS PERFORMED DURING THE PYREXIA OF PHTHISIS.

By Howard Marsh, F.R.C.S.

Case I.—*Disease of the Knee-joint following a Blow: Suppuration: Advanced Phthisis: Amputation: Recovery.*—Charles H., aged 30, was sent up from the country on December 5th, 1882. Two years before, he had been kicked on the head of the tibia by a horse. After this injury, the knee had remained stiff, and occasionally painful; but he had worked on the limb till six months before his admission, when the disease became acute, and suppuration followed. When he came into the hospital, the knee-joint was evidently extensively diseased, and an abscess had burst over the head of the tibia. Matter had also burrowed widely among the muscles of the thigh. There were frequent jumpings and startings of the limb whenever he tried to sleep; he was much wasted. The pulse was 95, and feeble. The temperature ranged between 100° and 102.5°; while, two days later, it was 104.8°, and the pulse rose to 132. He was sweating profusely, and taking very little food. Dr. Duckworth found that he had advanced phthisis, with a cavity in the apex of the right lung.

Amputation of the thigh, in the middle third, was performed on December 20th. Two abscess-cavities, one on the inner, and one on the outer, aspect of the limb, were exposed, and were found to extend half way up the femur. The membrane lining them was scraped away, and their interior was sponged with a solution of chloride of zinc, thirty grains to the ounce. Improvement immediately followed. The temperature and pulse subsided; he slept and ate well; and, in two or three days, was evidently gaining flesh. During the first week, there was considerable discharge, and a tendency to separation of the edges of the flaps. But granulation subsequently advanced rapidly, and the wound was nearly closed on January 20th. Temperature was normal after January 15th. On January 5th—the sixteenth day after the operation—there was secondary hæmorrhage from the stump, to the amount of about six ounces. This ceased spontaneously before Mr. Fletcher, the house-surgeon, arrived. The stump was firmly bandaged for the next ten days, and there was no recurrence of bleeding. When he was discharged on February 6th, he was gaining flesh and strength, and his cough was much less marked than when he was admitted.

Case II.—*Disease of the Wrist-Joint: Suppuration: Phthisis: and Hæmoptysis: Amputation: Recovery.*—A. M., aged 29, a warehouseman, was admitted in May 1882. The left wrist-joint, diseased for two years, was now the seat of great swelling, and a large abscess. The patient had had repeated attacks of hæmoptysis, though none in the preceding two months, he now had frequent cough and a good deal of expectoration, was losing flesh, and sweating at night; his temperature was often 102° Fahr. After amputation of the wrist-joint had been performed he gained flesh, and the chest-symptoms considerably subsided. He left the hospital with his wound soundly healed, in three weeks. This patient had free hæmoptysis for twenty-four hours after the operation; depending, no doubt, on the irritation of the lungs by ether, which was used as an anæsthetic. In all cases in which phthisis is suspected, Mr. Mills (the Administrator of Anæsthetics at St. Bartholomew's Hospital) informs me he now declines to give ether, and makes use of chloroform. A. M., though still suffering from chronic phthisis, is at the present time following his employment, and the disease appears to be making no advance.

Case III.—*Disease of the Ankle-Joint, of Long Duration: Profuse Suppuration: Rapidly Advancing Phthisis: Syme's Amputation: Great Improvement in Health: Death Twelve Months Later.*—R. D., aged 18, was brought for consultation two or three years ago. He was very wasted, sallow, and feeble, and had profuse expectoration and copious perspirations. Examination of the chest showed that he had advanced phthisis. The left ankle-joint was freely suppurating, and presented several sinuses. The lad was suffering so much pain in the joint, and complained so bitterly of the distress it caused him, that it was agreed that it was justifiable, notwithstanding the condition of his chest, to remove the foot. Mr. Marsh, therefore, performed Syme's amputation. The result was a striking one. The wound rapidly healed, and was closed within a month; the boy, relieved of the local suffering, now had good nights, all his urgent symptoms considerably subsided, and he gained flesh and colour. For several months, he enjoyed fair health, and was able to be about in the open air. But in the cold weather his phthisis became fatally active, and he died about a year after the operation.

Case IV. *Disease of the Tarsus: Suppuration: Phthisis: Pirogoff's Amputation: Marked Improvement of the General Health.*—Anne W., aged 20, was admitted on February 22nd, 1883. The notes stated that in December, 1882, the patient felt pain and swelling of her left instep. The swelling was opened and poulticed. When admitted there were two sinuses which led into the internal cuneiform bone, and there was much surrounding swelling. She complained of severe pain in the foot, extending up the leg. She got very little sleep; appetite was very poor; and she was losing flesh, and looked pale and distressed. A few days later she had frequent cough and pain in her right side; the pulse was 130. The examination of her chest on March 5th showed extensive tubercular deposit beginning to soften in both apices. As the disease was steadily increasing in the tarsus, and causing constant and severe pain, and as her temperature varied from 99° to 102°, Mr. Marsh performed Pirogoff's amputation on March 17th. From this time she improved in general strength, and her appetite returned. Healing of the stump progressed favourably; but on April 16th it was found that pus was burrowing in the sheath of the tibialis anticus. This was let out by incisions. Convalescence now went on without further check, and she was discharged on May 10th. The wound was then soundly healed; her temperature was normal. She had gained flesh, had a good appetite, and was sleeping well. She still had cough, and was frequently pale, with a flush on each cheek. The lung-mischief showed no sign of increase.

Remarks.—I have related these cases in order to allude to an important matter, in respect to which practice is, I think, sometimes at fault. It is held, by no means as universally as it formerly was, but still by many surgeons, that it is inadmissible to operate on a patient who has advancing phthisis; and the standing instance used to illustrate this rule is anal fistula. The objection to interference rests on two well-known grounds: first, that the wound will not heal; and secondly, that, as the fistula acts, by the discharge attending it, as a kind of counter-irritation, or, as some have called it, a safety-valve, it is dangerous to cure it. The safety-valve formula, though certainly a little vague, is a very deterrent one. We all know what the probable effect of closing a safety-valve will be. And this doctrine, having been accepted in respect to fistula, has been extended to such cases, for example, as diseases of the joints, in respect to which it is still held in some quarters, first, that an operation is very likely to be attended with local failure; and, secondly, that the removal of the diseased joint will have the effect of accelerating the mischief in the lung. As to operations for fistula in phthisical persons, the first objection is no doubt generally, or at least frequently, valid. If fistulæ are laid open in acutely phthisical patients, they will often either never heal or they will heal very slowly. But, on the other hand, there are not a few instances in which, even though a patient is phthisical, he may be cured of his fistula by operation; and probably every patient who can be thus cured will be the better for it. That is to say, the safety-valve doctrine is erroneous. I believe clinical experience shows this to be the case; and physicians may be inferred to hold this view, for counter-irritation, setons, and similar means, are very seldom used in the treatment of phthisis. The reason for curing a fistula, whenever this can be done, seems obvious enough. A fistula is not only a source of much annoyance, or even of pain, but also, from time to time, if not constantly, of high temperature; and it is agreed on all sides that a feverish condition, however it arises, has a decided effect in the promotion, or even, under certain circumstances, in the development, of phthisis. There is so much in this, that, even though an operation will not lead to the complete closure of a fistula, it may be sometimes highly advisable to perform it for the sake of laying open passages in which discharge accumulates and become decomposed, or from which, failing a ready escape, it tends to burrow in new directions. Fistulous tracts, thus freely laid open, may be attended with much less pain and local trouble, as well as with less fever, than before. Thus, although there must be considerable reservation in respect to operations for fistula in phthisical persons, the rule against their performance must not be made by any means absolute. On this subject, Mr. Allingham has a valuable chapter in his work on the *Surgery of the Rectum* (p. 56 *et seq.*).

When, however, the arguments that apply to the case of fistula are extended to such an operation as amputation, we take a course that may lead us to an erroneous conclusion, and we are in danger of withholding treatment which is capable of rendering patients a great service. In the first place, the objection—that the wound will not heal—frequently valid in fistula, is without foundation in all but a very few of the cases in which it would be reasonable to amputate, for instance, for disease of the tarsus or knee joint.

Were a patient in the last stage of phthisis, no one would be likely to advise amputation. But I believe the cases I have given may be taken as typical illustrations of the fact that, even when phthisis is advanced and active, an amputation-wound will heal as quickly as one, for example, that results from a secondary amputation for compound fracture. Secondly, the effect of removing a local disease, which is not only causing the patient constant suffering, but which raises the temperature to 102° or 104°, as in the case related above, is to produce a speedy and very marked decline of fever, and with this a rapid improvement in health. Perspiration ceases, appetite returns, the patient gains health and strength, and the chest-mischief becomes quiet. I have met with no evidence that removal of a local disease produces an increase of lung-mischief.

The difference in the repair of the wound in the two cases of fistula and amputation is a question that involves some still debated points in the pathology of tuberculous disease. The contention of many observers at the present day would be that a fistula *in ano* in a tuberculous person is itself lined with genuine tubercle; while even those who speak of scrofula as differing from, although allied to, tubercle, would hold that a fistula is, in fact, a scrofulous sinus, such as might result from the formation of a scrofulous abscess in the groin or in the neck. But whatever view is taken of the pathological condition present in fistula in those who have phthisis, there is this great difference between the operation for fistula and that for the removal of a diseased joint: the one deals with parts already the seat of chronic and unhealthy ulceration, while the other involves structures in which no process of disease has shown itself.

A further reason for reverting to the question of operating for the relief or removal of local disease in phthisical persons is that an amputation may now be fairly spoken of as a much less considerable proceeding than it formerly was.*

In conclusion, I will only repeat that a too implicit acceptance of the doctrine that operations should not be performed on phthisical persons, may lead us to withhold interference which is frequently not only free from danger, but likely to be attended with the happiest results.

* In his *Clinical Lectures and Essays* (2nd ed., 1875, p. 35), Sir James Paget, after stating his opinion that phthisis is not likely to be made worse by the cure of a local disease, ascribes the danger of an operation to the fever, pain, and disturbance with which it is attended. This objection has certainly been reduced by the improvements lately introduced in the treatment of wounds.

PRESENTATION TO MR. T. M. STONE.—Recently, a testimonial was presented to Mr. T. M. Stone, for many years clerk to the Royal College of Surgeons of England, in recognition of the regard and esteem felt for him as an old friend of the college of fifty years' standing. Mr. Stone, being confined to his bed by illness, was unable to attend at the College, as was originally intended, Accordingly, a deputation of subscribers, consisting of Sir T. Spencer Wells, President of the College; Mr. A. E. Durham, late Chairman of the Board of Examiners; Mr. G. A. Ibbetson, Mr. Francis Mason, Dr. J. H. Paul, and Mr. Shuter, the Honorary Secretary of the Testimonial Committee, visited him at his residence, in Wimbledon, on Tuesday. Letters were received from Sir Erasmus Wilson, Mr. Anderson Critchett, Dr. G. P. Rugg, and other gentlemen, regretting their inability to attend. Sir T. Spencer Wells, in an appropriate speech, presented the testimonial, which consisted of a purse of money, with an album containing an illuminated address and the names and addresses of the subscribers. The album, which is an elegant work of art, records that, "This illuminated address, together with a purse of money, subscribed from Fellows and Members of the Royal College of Surgeons of England, was presented by Sir Thomas Spencer Wells, Bart., President of the Royal College of Surgeons of England, to Thomas Madden Stone, Esq., on his retirement from official connection with the College, as a token of friendship and esteem, and as an acknowledgment of the intelligence, courtesy, and zeal with which he had served the College and its alumni for a period of fifty years." It is signed by T. Spencer Wells, President of the College; Erasmus Wilson, Treasurer of the Testimonial Fund; G. Anderson Critchett, Chairman of the Executive Committee; Luther Holden, and James Shuter, Honorary Secretaries; and by 312 subscribers, including several foreign friends of Mr. Stone, among these being Baron Gustavus von Düben, Professor Santesson, Retzius (and his wife); Darling, of New York; Dr. Ayres, of Hong Kong; Cawley, of Adelaide, etc.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JUNE 1ST, 1883.

ANDREW CLARK, M.D. F.R.C.P., President, in the Chair.

Lepra Tuberculosa.—The report of the Committee appointed to inquire into the presence or absence of bacilli in this case, exhibited by Dr. W. J. Tyson (Folkestone) on April 27th, and reported at page 866 of the BRITISH MEDICAL JOURNAL for May 5th, 1883, was read. The Committee consisted of Drs. Southey, Thin, and Dyce Duckworth; they had examined specimens of skin of the patient sent to them by Dr. Tyson, had stained them with indigo-violet and fuchsin, and had found bacilli in plenty.

A Case of Large Sebaceous or Dermoid Cyst in the Tongue, Removed by Operation, with Cure.—Mr. BARKER read notes of this case. The patient was a woman, aged 28, who had first noticed pain and difficulty in swallowing seven years before. Soon afterwards, a swelling was noticed exactly under the tongue in the middle line, and directly behind the symphysis menti. This had been increasing ever since. On admission into University College Hospital, it pushed the mucous membrane forwards and upwards, so as to make an interval between the jaw and the root of the tongue of quite an inch broad. It also projected beneath the chin for about an inch and a quarter. The skin over it here was perfectly normal, and in no way attached to the tumour. The whole tongue was thrust much upwards, and its dorsum rested against the hard palate. The tumour was painless, and fluctuated over its whole surface; there was no trace of inflammation anywhere about it. On puncture with a grooved needle, typical sebaceous matter was obtained. On August 12th, 1882, Mr. Barker removed the tumour by a straight incision in the middle line under the chin. The tough cyst was reached above the mylo-hyoid muscle, and lay here, partially separating the genio-hyoidei. It was easily separated from its bed, which lay almost entirely between the genio-hyo-glossi muscles, and reached quite up to the dorsum of the tongue, only covered by the tough mucous membrane of the latter. Blunt instruments and scissors were used, and hardly a trace of blood was lost, no vessels requiring to be secured, except one tiny twig, which was pinched. The wound having been well cleansed with carbolic solution, the skin was brought together with four silver sutures, and the large cavity drained with a tube. The whole thing healed in a few days without any suppuration or reaction, and the patient left the hospital on the sixth day after the operation. The cyst (shown) being removed entire, was found very tough and firm-walled. It measured three inches by one inch and a half, and was somewhat uniform. Its contents were like porridge, with a faint, sour smell, and, under the microscope, were seen to be typical sebaceous material. Its wall was fibrous, lined by a thin, glistening membrane, leaving no doubt as to its nature. Mr. Barker then alluded to the rarity of these tumours of the tongue, and, in illustrating this fact, stated that, after careful search, he had only been able to collect sixteen recorded cases, exclusive of his own two. From an examination of these, it appeared that these cysts might occupy three distinct situations in relation to the tongue: 1, between the genio-hyo-glossi muscles in the middle line; 2, they might be unilateral—that is, lie between the mylo-hyoid muscle and genio-hyo-glossus of one side; and 3, they might be bilateral, lying above the mylo-hyoid and below the genio-hyo-glossi of both sides. Their contents varied also very much, as also the age of the patients among whom they were met, although they appeared to be, in a sense, congenital. The various modes of treatment were then alluded to, but of all, Mr. Barker gave the preference to complete enucleation, without opening the sac, as the easiest and safest operation. This might either be done from the mouth, or by a median incision, as in the last of the author's two cases. The scar left by the last method was very trifling, as seen in the patient exhibited, and the ease and safety of the operation were thus greatly increased where larger cysts had to be removed.

Stretching the Facial Nerve for Tic Convulsif.—Mr. R. J. GODLEE read a paper on cases in which this operation had been adopted. The first case was the conclusion of one reported in vol. xiv of the *Transactions* of the Clinical Society, p. 44, by Dr. W. Allen Sturge and Mr. Godlee, that of a lady, aged 72, in whom the operation had been performed for right-sided tic. The result had been almost complete relief for nine months, when the spasm recommenced as the result of a sudden and severe nervous shock, and gradually regained all its former intensity. The patient remained in tolerably good health, but still suffered from some neuralgic pain in the face,

principally in the right supra-orbital nerve, and at the top of the head, on the left side, at the seat of an old injury. She was unwilling to undergo any further operation. The next case was that of a man, aged 36, who had suffered from bilateral tic for some years without assignable cause. There was no syphilis, and no source of reflex irritation, except some old carious stumps of teeth. It was made worse by exposure to cold, and bright light and excitement. He had slight supra-orbital neuralgia on the left side. He was kept under observation for some months, and improved while perfect rest was maintained, but relapsed when allowed to go about. The left supra-orbital nerve was first divided subcutaneously without good effect; and subsequently the left, and afterwards the right, facials were stretched by the same method as in the former case. In both instances the twitching recommenced after three months, as the paralysis disappeared, and returned as severely as before the operations. Arguments were adduced in favour of the mischief being situated in the region of the medulla oblongata, and references were made to as many reported cases as the author could discover. It was shown that, though all of these had been reported at first as examples of success, in all (except in one reported by Mr. Southam of Manchester, which remained quite well after two years) more or less return of the twitching had occurred. Some, however, according to reports carried up to the present time, remained to some extent improved. The total number of cases in the table amounted to thirteen. It was then urged that, if Mr. Southam's case did not exist, we should have to consider this chapter of surgical therapeutics closed, but that, while that remained well, there was still a certain amount of hope that the operation might be sometimes successful. It was lastly pointed out that the stretching of a small nerve on a hook acted differently from the stretching of a large nerve with the finger. In the latter class of cases, the effect was probably either a loosening of the nerve from its sheath, or some influence on the nervous centre; in the former it caused a solution of continuity of the nerve, but with a certainty of union. The *modus operandi* was, therefore, probably not a profound effect upon the centre, as had been supposed, but merely the breaking of a bad habit, which must be taken for what it was worth.—Mr. HERBERT PAGE thought the operation had been much oftener done than Mr. Godlee had found it recorded; possibly surgeons had not published their failures. Still, the history of the operation could scarcely be considered as closed until many more cases were published. Mr. Pye had stretched the left facial nerve some months ago, and for four or six months the patient had been much relieved. The pain had recently returned as the result of a fright or nervous shock. He (Mr. Page) had stretched the nerve to give relief for almost extreme facial paralysis which had lasted for two years. Total paralysis resulted at once after the operation; in a few weeks the patient returned to the point reached before the operation, and since then (eighteen months ago) had slightly improved from the condition that had obtained before the operation. As a result of the stretching of nerve-trunks, effects had been produced in remote parts of the spinal cord.—The PRESIDENT thought the contribution most valuable. In a case of the kind operated upon by Mr. Hutchinson two years ago, the patient had received most marked benefit.

Spondylitis Deformans.—Mr. H. H. CLUTTON read notes of this case. The patient, who had been exhibited at a previous meeting, was 30 years of age, and the subject of a very severe form of ankylosis of the spinal column. In the family history, there was nothing to indicate hereditary taint. In his previous history, there was strong evidence of rheumatism affecting the joints. When 9 years old, he was confined to bed for rheumatism, which, with several intermissions, lasted for six months. It began in the metatarso-phalangeal joint of the right big toe. It then attacked the right knee, and finally the right hip. The latter joint had, he said, remained stiff ever since. Six years ago he had a painful foot, which his medical man called rheumatic gout. He had never had any venereal disease of any kind; and beyond the attacks above described, had always had good health. Three years ago he first felt pain and stiffness in his neck, but it had caused him little inconvenience till the last six months. He could give no account of his back or chest, and was not aware that they were fixed and immovable. For the last three months his left shoulder had been stiff and painful, and he still occasionally suffered from rheumatic pains in the right hip. His present condition was one of almost complete ankylosis of the spinal column. He stood with the left leg advanced in front of the right, with the knees bent, and in a stooping posture. His spine presented one large dorsal curve, with the convexity backwards. The head was craned forwards, and the chest sunken and depressed. The movements of the head were very much impaired, although not as yet completely destroyed. He could not turn his head at all to the right, and only slightly to the left, the nose moving about one and a-half inches from the median line. The lateral movements ordinarily obtainable in the cervical region were entirely absent. In raising and depressing the head, the chin only moved three inches. There was no movement whatever in the lower cervical vertebræ. This was very apparent on trying to make the patient bring his chin towards the sternum. On bending the whole body forwards, it was seen that the spinal column was quite rigid; there was no separation between the spinous process, or increase of curve. With the knees extended, the tips of the index-fingers just touched the patella, and this movement appeared to be effected by the hip-joints. The respiratory movements were entirely abdominal. On the deepest inspiration there might be some slight expansion, but there was no elevation of the ribs. His height was now 5 feet 2 inches in his boots, and he was quite sure that some years ago he was 5 feet 5½ inches, when measured in his boots against the wall. As to other osteo-arthritic changes, the patient had several creaking joints and distinct "lip-growths" in both shoulders and big-toe joints. He had also distinct limitation of movement in the left shoulder. The right great trochanter was larger than the left, and tender on pressure. All the other joints, except those named, seemed perfectly healthy. Such an extensive and severe form of ankylosis of the spine, with or without osteo-arthritic changes elsewhere in the body, was a rare condition in a man 30 years of age, and it was on this account Mr. Clutton brought him before the Society. A similar case was shown at this Society by Dr. Allen Sturge, and was recorded in the Clinical Society's *Transactions*, vol. xii.

Spondylitis Deformans and Osteitis Deformans.—Dr. LEDIARD contributed notes of this case. The patient was a miner, aged 58, from Cumberland, who had suffered from repeated attacks of pain in the spine, and rheumatic affection of the joints, and of late years stiffness of the spine and head, so that the body was bent forwards in a stooping posture. The spine was absolutely ankylosed, except for slight movement in the neck, and the head was firmly fixed to the spine. Several joints presented chronic rheumatoid arthritic changes; there was no movement of the chest-walls, respiration being entirely diaphragmatic. The femora were curved forwards and outwards, and the shafts, somewhat massive, suggesting the disease known as osteitis deformans in possibly an early stage. The skull and clavicle were, however, unaltered.—Dr. DUCKWORTH said it was a remarkable fact that, considering the great number of joints affected in ordinary rheumatoid arthritis, the spinal column was so rarely implicated. Mr. Hutchinson had said that the starting-point in many of these causes, he thought, was gonorrhœa; the spinal affection, at any rate, seemed to be more common after that than after any other malady. It occurred in both sexes, and in young people. No class of cases was more hopeless of cure than these.—Mr. CLUTTON said that the patient in his case denied that he had ever had gonorrhœal disease.

Two Cases of Epithelioma Occurring on Old Cicatrices; Removed.—MR. GEORGE LAWSON related the history of these cases. In the first case, the patient, a pale anæmic woman, aged 38, had lost, in childhood, the sight of both eyes, except the bare perception of light, from an ulcerative inflammation, probably diphtheritic, and which had caused complete adhesion of the upper and lower eyelids of each eye to the globe. The patient was admitted into the Middlesex Hospital in May 1881, and the growth first commenced in the previous September. It sprang from the cicatricial tissue which united the left lower eyelid to the globe, and steadily increased until it obtained the dimensions shown in the drawing, the whole front of the eye being occupied by it. Mr. Lawson removed the growth and the eye. Two years had now elapsed since the operation was performed, and there had been no recurrence. In the second case, the patient, a strongly-built man, aged 30, was admitted into the Middlesex Hospital in March 1881, with an epithelioma of the left thigh, which occupied the greater part of a large cicatrix. Twenty years previously his left thigh was crushed by a heavy cart passing over it, which caused great laceration of the skin and muscles. He was seven months in the Aylesbury Hospital, and when he was discharged there was still an unhealed superficial wound of about the size of a small saucer. He then went to work as a farm labourer, but the wound never healed. Two years and a half before his admission into the Middlesex Hospital, the wound took on a new action. It began to spread rapidly, the granulations became large and fungoid, and it occasionally bled. On admission, there was found an epitheliomatous ulcer measuring seven and a half inches by eight inches. Mr. Lawson amputated the thigh just below the

trochanters, and although two years had elapsed, there had been no recurrence of the disease. Mr. Lawson remarked that the cicatrices, which seemed specially prone to epithelioma, were the tight cicatrices such as were caused by a great destruction of skin, and those cicatrices upon which there was a constant tension. Both the cases, he said, tended to show that if epithelioma could be completely excised before it had affected the lymphatic glands, it was the form of cancer which was the most amenable to treatment; whilst experience had taught that after the lymphatic glands were invaded, epithelioma was the most formidable and irremediable of all cancers.—Mr. GODLEE asked if the epithelioma in the last case had arisen in the centre or at the margin of the scar. In a case treated by himself, it grew first at the centre of the scar.—Mr. LAWSON said that it sprang up all over the scar, except that there was a margin all around.—Mr. HAWARD described the case of a burn which, after twelve years, was not quite healed. It occupied two-thirds of the leg, and had remained in the same condition for twelve years; then it began to fungate and be painful. Skin-grafting was tried, but without effect; and the leg was then amputated. There was no history of cancer in the family for several generations back. At the end of about seven or eight years after the operation, the patient remained perfectly well. Long unhealed sores were apt to take on a cancerous growth; and, if they were soon removed, the cancer did not return. For this cause, it might even be advisable to remove long unhealed sores, so as to prevent cancer becoming engrafted on the unhealed surface.—Mr. BARKER said that the fact that long continued local irritation had to do with the development of cancer, was well exemplified in cancer of the tongue. In Mr. Lawson's case, the cancer began at the centre of the wound; so, in the tongue, sores of the tongue from smoking might last for years, and then cancer become engrafted thereon.—Mr. GOULD said that a patient had a scar of the thigh for thirty years, when cancer attacked its margin. Another person received shots in his tibia, which were not removed; and, after eleven years, epithelioma began around the sinuses, running from these shots to the surface. As pointed out by Mr. Moore, the way in which rodent ulcer began in old scars of the face showed that it was in that respect very similar to epithelioma.—The PRESIDENT asked if Mr. Lawson found cancer start from syphilitic sores of the tongue. How did irritation produce epithelial cancer? What was the best mode of operating for its removal?—Mr. LAWSON thought that syphilis of the tongue was liable to be the source of cancer, because it was a source of irritation. As, in cancer of the tongue and lip, irritation was produced by keeping iron nails in the mouth, so old pipes, if kept constantly in the mouth, were a source of irritation. One point of his case went to show that epithelioma of such scars, if treated early, was quite amenable to treatment; whereas, if treatment were deferred, the cases became altogether unmanageable. He did not know how irritation caused epithelioma.

Nodes from Congenital Syphilis.—Dr. RADCLIFFE CROCKER read the notes of the case. The patient, a girl, aged 12 years, had been shown at a previous meeting. She had enteric fever five months before she came under notice, and during convalescence, two nodes appeared on the forehead, one on each side of the median line; there was another tumour in the right orbit, softer than the nodes, and movable. There was no corroborative evidence about the girl, except the two upper central incisors, both of which were notched, and one was slightly pegged. No history of infantile syphilis could be obtained, and the mother and the other children were apparently quite healthy; but eventually it was ascertained that the patient was a child by a previous husband, who died soon after their marriage, had lived a dissipated life, and was never well, but resented inquiries into the cause of his ill-health. The patient was put under iodide of potassium, and, when last seen, the softer tumour had quite gone, and both the nodes were softer and much smaller, and the improvement in the general health of the patient was very striking. Dr. Crocker remarked that the case corroborated Sir James Paget's observation that typhoid fever often aided as the discoverer of constitutional taint, and also Mr. Hutchinson's observations on the value of the notched and pegged incisor teeth as evidence of congenital syphilis.

Infantile Hemiplegia, with Unusual Reflex Phenomena. — Dr. FREDERICK TAYLOR described this case. The patient was a child, aged 5, who was taken with convulsions at twelve months old. This lasted two hours, and was followed by weakness of all the extremities. In a few days the right arm began to move, and the right leg, but the left limbs remained paralysed. Gradually rigidity developed, and with it the curious reflex irritability to be described. The child was fat and well, commonly semirecumbent, with both legs semiflexed and rigid, the left arm flexed at all joints and rigid. This arm was scarcely used, but the right freely and well. Both legs could be moved, but not completely flexed or extended. The right was less rigid than the left. The child could not sit up in bed, nor stand upright, nor walk. The left arm and leg were nearly two inches shorter than the right arm and leg respectively. On making a sudden noise near the patient, the left arm was quickly thrown out at right angles to the body; the elbow, wrist, and fingers were extended; the face assumed a puzzled expression; and the legs underwent moderate extension. The condition of spasm remained for about thirty seconds, then slowly relaxed. The same reflex contractions were brought about by shocks affecting the surface of the body, a blow on his crib, a tap on the head. Vision appeared to be good, but he had disseminated choroiditis in very small patches in both eyes. He was lively, fairly intelligent, and could talk. He passed fæces and urine involuntarily. But for the choroiditis, there was no conclusive evidence of congenital syphilis. He had been four months treated with iodide of potassium and mercury, but showed no material improvement. Dr. Taylor thought the case was allied to those of infantile hemiplegia, with spastic or choreic phenomena occurring afterwards. Though not strictly unilateral, the disease on the left side was obviously of cerebral origin, and that on the right side must be explained by a second lesion, or more likely by a single lesion crossing the middle line. The mode of origin suggested obstruction of a vessel, with syphilis as a possible antecedent. Its early occurrence and the deficient growth of the left limbs rendered it probable that asymmetry of the brain also co-existed.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 4TH, 1883.

E. H. VINEN, M.D., President, in the Chair.

The German Medical Association.—Dr. THUDICHUM, who had attended the recent German Medical Congress at Wiesbaden, stated that that body had met with a view of advancing medicine to the level of the natural sciences. The question of the extermination of infectious disease was fully discussed, but no new theory of particular value was advanced. Naturally, in a city where, in the chemical laboratory, thirty professors confined their attention to theoretical chemistry, great attention was paid to the action of medicine on the human system; but it was acknowledged that the chemistry of the body was badly understood, and that definite results from the action of medicinal agents could not be looked for at present. A clinical professor from Berlin gave an interesting account of the result in forty cases of the treatment of tuberculosis with corrosive bichloride of mercury by means of the syringe; but although benefit was said to have been derived by some of the patients, he regarded phthisis as being left where it was. In some of the German hospitals, he found that tubercular disease of the lungs was being treated surgically. A rib was excised, and, with every antiseptic precaution, the diseased portion removed. Patients so treated had recovered in some cases. He hoped to continue his remarks at a future meeting.

Practice of the Bone-setter.—Mr. BRUCE CLARKE read a paper on this subject. After briefly alluding to the variety of cases that found their way to the bone-setter, and derived benefit from his treatment, he alluded to the pathology of stiff joints, and showed from observations of several cases which he had been able to examine after removal of the limb, that adhesions were usually found outside joints and sheaths of tendons, and were due to contraction of the connective tissue of the limb. Adhesions were rarely found inside the sheaths or joints; when they were, the disease was much more serious, and rarely yielded to treatment. In cases of old stiff joints, the skin, and probably the subcutaneous tissues, became weakened and atrophied by disease, and were so rendered more liable to injury; in proof of which, he cited several examples of tearing and laceration of the skin, without the employment of undue violence. The usual history of the class of cases that came under the hands of the bone-setter was this. The patient met with an injury resulting in a dislocation or fracture, or, perhaps, only a severe bruise or sprain. He readily recovered up to a certain point, but when all inflammation had subsided there remained a stiffness, accompanied by pain on movement. In other cases, there were periodical attacks of synovitis. The treatment, in all such cases, was active movement, with or without chloroform, which was usually accompanied by a click or crack, ascribed by the bonesetter to the replacement of bone, but which was due to the freeing of the connective tissue bands. In slight cases, one violent flexion might ef

the trouble of months; in severe cases, the treatment would be measured by months rather than minutes. The pathology of such cases was as well marked as that of irites, where there was the advantage of seeing the adhesions not only form, but rupture and disappear. He expressed his obligation to Mr. Wharton Hood's lecture, which had induced him to study this subject. The difficulty with these cases was the selection of time for rupture and for rest. Signs of inflammation were their guide in that matter. Rest should be relegated to its proper position in surgery, and should not be kept up when it increased instead of abating the patient's troubles.—Mr. KEETLEY said that undoubtedly the bone-setter frequently earned great credit by the manipulations which broke down adhesions outside a joint, and at the same time removed the cause of inflammation; for in these cases there was no contraction of membrane; where there was an osseous fibrous band, the case was of strumous origin; it was due to the presence of organisms. In such cases the joints became altered, and there was great danger from the rough usage of the bonesetter. In the treatment of such joints he had put on ice for several days, with great advantage, and had repeatedly put them straight. When once convalescent, a joint rarely again became strumous. There was much bewilderment with regard to the value of rest, which was only a negative factor. It was the natural tendency of a colony of germs to die as the joint became healthy.—Dr. ALDERSON related the case of a knee which became enlarged fourteen days after confinement, but without pain. He called in Mr. Hewett, who ordered rest, the knee to be rubbed with salad oil. He also used Scott's dressing. Subsequently, at Brighton, a seaweed poultice was used. The treatment was successful. He had also known an enlarged ankle which was cured by the use of lotion and embrocation, proving that there was no fracture.—Dr. ALLDEN OWLES had seen several cases confirmatory of the opinions advanced in the paper. One was a shoulder, the manipulation of which caused agony to the patient, but in which motion was regained. Another, regarded at first as a strumous joint, was eventually cured by somewhat violent manipulation.—Dr. VINEN referred to the case of an officer of the 60th Regiment, who sustained a compound fracture below the knee, whilst playing at football, in India. The bones were set by some naval surgeons who were watching the game; but, in consequence of the leg being deformed, the adhesions were broken and the limb was re-set. The ankle then remained fixed, and the patient's health suffered. However, Mr. Erichsen was called in. He broke the adhesion, and the patient recovered so thoroughly that he was enabled to rejoin his battalion in the Transvaal.—Mr. BRUCE CLARKE, in reply, pointed out the necessity of distinguishing chronic cases, as such were usually made worse by movement.

ACADEMY OF MEDICINE IN IRELAND: OBSTETRICAL SECTION

FRIDAY, MARCH 30TH, 1883.

J. DENHAM, M.D., President, in the Chair

The Third Stage of Labour.—Dr. R. HENRY read a paper on the importance of the third stage of labour. He commenced by pointing out the various risks, immediate and remote, to which the improper performance of the third stage of labour exposed a woman. These risks would be minimised by a suitable conduction of this most important period of labour. To arrive at any just conclusion on this subject, it was necessary, in the first place, to study Nature's methods in effecting the separation and delivery of the placenta and membranes—by the conjoint action of tonic and clonic contractions moulding the placenta, as had been described by Dr. Matthews Duncan, or in the different way described by Schultze. In the author's experience, both these methods had been observed, a lateral attachment of the placenta being Duncan's, while a fundal or nearly fundal one would give Schultze's. The former was the more common method. Dr. Henry quoted Denman, Smellie, Collins, and others, on the question of manual interference in the third stage. In 1786, Dr. Joseph Clarke had advised the practice of "pursuing with a hand on the abdomen the fundus uteri in its contractions, until the fœtus be entirely expelled, and afterwards continuing for some time this pressure, to keep the uterus, if possible, in a contracted state." This practice had been largely adopted in Dublin. Dr. Henry adhered to it, believing that, in modern practice, undue haste to press off the placenta was constantly exhibited. He kept his hand over the uterus during delivery and subsequently, but forbore pressing or actively supporting the uterus until it had itself commenced to contract clonically. Assistance should only be given with the clonic contractions. A safe and permanent contraction, following the expulsion of the secondaries, might, in this way, be usually secured in from ten to twenty minutes. The chief error at present consisted in mistaking constant irritation for support of the uterus.—The PRESIDENT said the paper raised several questions of deep interest, viz., as to the time at which the placenta should be removed; as to the danger on the one hand of being too precipitate, and on the other of leaving in the placenta too long; as to how far hæmorrhage was sometimes induced by a too speedy removal, and at other times by leaving the placenta too long in the uterus; and also as to the danger of leaving in portions of the membranes.—Dr HARLEY objected altogether to premature pressure over the fundus of the uterus for the purpose of pressing off the placenta. He also objected to exercising pressure on the cord at any period.—Dr. W. J. SMYLY stated that, in the Strasbourg Hospital, where the patients were, as a rule, left to nature during the third stage of labour, it had been observed that the placenta was most frequently expelled in the manner described by Schultze. He believed that Credé's method of exciting the uterus to contraction had been confounded with the hasty expulsion of the placenta. Credé himself never advocated the immediate expression of the placenta, but rather the immediate excitation of the uterus by irritation and friction through the abdominal walls, and then, usually with the third or fourth contraction, the expression of the after-birth. The immediate expression of the placenta was very liable to be followed by the retention of the membranes and *post partum* hæmorrhage.—Dr. MACAN said that, since the time of Hippocrates, there had been ebbs and flows of opinion as to whether expulsion of the placenta should be left entirely to nature, or should be immediately effected by the accoucheur, either by passing the hand into the uterus, as the older authorities recommended, or by the more modern treatment of expression. Hence he thought that a happy mean between these two methods was probably the best way; for, if the uterus was well contracted, there need be no fear of hæmorrhage, and therefore no cause for hurry; while, if the uterus was relaxed with hæmorrhage, the removal of the placenta tended certainly to increase the hæmorrhage by removing all pressure from the mouths of the uterine sinuses, unless the means used to remove it at the same time caused the uterus to contract. The great advantage claimed at the present day by the adherents of the plan of leaving the whole process to nature was, that a much larger proportion of the decidua came away with the placenta than when the placenta was immediately removed. When two such authorities as Dr. Matthews Duncan and Professor Schultze differed as to the mechanism of the separation and expulsion of the placenta, it was pretty certain that there was more than one way, and that both their views were probably right. If they adopted the expression plan, which might, he thought, be called "the Dublin method," they should be careful not to allow the placenta to be suddenly expelled on to the bed; for a sudden strain was thus put on the membranes, and a portion might readily be torn off and left behind in the uterus. This had been looked upon as a very serious accident. But Dr. Macan was inclined to think that the mere presence of a portion of the membranes in the uterus, for some days after delivery, could not be looked on as dangerous, unless air had been allowed to enter and set up decomposition. He also thought that it was very often during the efforts made to remove a piece of retained membrane that the air was caused to enter the uterus. He had often seen a piece of the membrane expelled some days after delivery, without being accompanied with the slightest fœtor, or giving rise to the least fever. Indeed, it seemed to him probable that, in hospital practice at least, the danger from retention of a portion of the membrane was less than the danger of infection from the hands of the operator in his efforts to remove it. He always waited a quarter of an hour before attempting to press off the placenta, and considered that light friction over the fundus, with the tips of the fingers, was a much more powerful method of inducing contraction than merely holding the fundus in the hands.—Dr. NEVILLE having also spoken, Dr. R. HENRY briefly replied.

SURGICAL SECTION.

FRIDAY, MAY 20TH, 1883.

J. K. BARTON, M.D., President, in the Chair.

Spontaneous Dislocation of Hip.—Mr. KENDAL FRANKS read a communication on spontaneous dislocation of the hip, illustrated by two cases which he had himself observed. Malgaigne, he said, had divided pathological luxations into two classes; first, simple luxations, in which, excepting alterations produced by the effect of time, the articular surfaces had not been attacked by the disease;

nd, secondly, complicated luxations, in which the articular surfaces vere essentially altered. To the former of these, Volkmann had applied the term "distensions-luxationen," and to this form alone Mr. Franks alluded under the head of spontaneous dislocation. In reviewing the causes of these dislocations, a relaxed and distended tate of the ligaments must be recognised as a condition which was nvariably present. Hence the causes operated primarily in bringing about such a condition. These were (1) traction, (2) pressure, (3) paralysis, (4) muscular contractions, (5) essential causes (Malgaigne), (6) hydrarthrosis, pyarthrosis, etc. The first case recorded was an example of that form to which Malgaigne had given the name of essential relaxation, because absolutely nothing was known of its nature. In this form, a joint "lost its solidity," and dislocation resulted, without the pre-existence of any mechanical distension, without inflammation, and most frequently without pain. A child, aged 5, was admitted into the Adelaide Hospital in January last. She had been confined to bed since the summer of 1882, suffering from acute disease of the left hip-joint. The acetabulum had chiefly suffered, and the head of the femur had probably passed partially through it, and in that position ankylosis had taken place. An abscess which had formed burst into the vagina, and healed up. The limb remained permanently fixed in a semiflexed position, abducted and rotated outwards. The child had been chiefly lying on this side, the right leg flexed, adducted, and rotated inwards, so that the knee lay behind the knee of the diseased limb. In August last, as she was being turned in bed by the nurse, a remarkable protuberance was seen behind the right anterior superior spine of the ilium. The child was questioned about it, but could not give any account how it occurred. It gave rise to no pain. This protuberance was caused by the great trochanter, the head of the right femur having slipped out of its socket, and being easily felt on the dorsum of the ilium. No alteration in the parts had since taken place. The second case illustrated a dislocation of the hip, taking place during an attack of acute rheumatism. A girl, aged 15, was admitted into the Adelaide Hospital on October 10th last, suffering from necrosis of the left tibia. She presented a well marked dislocation of the right femur on to the dorsum of the ilium, the limb being shortened to the extent of three inches and seven-eighths. In May 1879, she had an attack of acute rheumatism, from which she completely recovered. In the following February (that is, two years ago), she was attacked again with the same disease, which kept her in bed for ten weeks. The right hip-joint and the right shoulder were the parts chiefly affected. To alleviate the pain, pillows were placed under the hip and knees. When she tried to get out of bed after the disease had subsided, she found the right limb considerably shortened, so that she could only reach the ground with the ball of the foot. The right hip was deformed, and she now presented all the characteristic signs of a well marked dislocation. The head and neck of the bone could be easily identified in their new position, and felt quite smooth and healthy. Casts of these two cases were exhibited.—Dr. HENRY KENNEDY called attention to a remarkable case, of an athlete who, two years ago, exhibited himself before the Pathological Society, dislocating at will his hip and several other joints. The muscles were exceedingly well developed and powerful, as in ordinary health.—Mr. STOKES instanced another remarkable case formerly under his care in the Richmond Hospital, in which a fall was apparently the exciting cause. The patient fell downstairs, sustaining a very severe injury, but he did not apply for advice till a fortnight had elapsed, when it was found he had sustained a dislocation on the dorsum of the ilium, which was with very little difficulty reduced by manipulation. Next day, to Mr. Stokes's surprise, dislocation again occurred, and was reduced; but luxation recurred three or four days in succession. He suggested, in explanation, that the fracture of the rim of the acetabulum had taken place originally, and a portion of the bone was driven away from its normal situation at the time when the luxation recurred.—Mr. BENNETT thought that too much importance was attached to the term "spontaneous." All pathological dislocations were spontaneous. A more important division would be as to whether the dislocations were complete or incomplete. The term "spontaneous" was a mistake for want of observation. Patients suffering from febrile phenomena sometimes were discovered, at the end of an illness, to have a dislocation, complete or incomplete, and to which the febrile symptoms were referable, instead of being general. In the deformity in question, he would not be surprised if the bones were still intact, but altered in shape.—Mr. WHEELER remarked that Professor Dittel, quoted by Mr. Franks, had stated that, without relaxation of the ligaments, spontaneous dislocation occurred; for instance, dislocation of the hip following recovery of dislocation of the knee-joint; but whether complete or partial dislocation, it was not stated.—Mr. FRANKS replied, concurring in Mr. Stokes's explanation of the case he had cited. In reference to Mr. Bennett's criticism of nomenclature, he confessed he had difficulty in choosing a title for his paper. Perhaps it would have been better had he described the dislocations as simple spontaneous dislocations, to distinguish them from disease of the articular surface. He agreed, however, with Malgaigne that the best line of distinction to draw was between dislocations due to simple relaxation of the ligaments without any disease of the ends of the bone, and cases in which there was caries or some other disease on the head of the bone. Dislocations that occurred from distension of the ligaments formed a distinct group.

Spinal Injury and Muscular Atrophy.—Dr. R. MCDONNELL brought before the Section notes of three cases of injury of the spine, followed by progressive muscular atrophy. In all three cases, there was little, if any, loss of sensibility. The patient was sensitive to tactile and thermic impressions. The wasting of the muscle was rapid, and set in early after the injuries. The character and appearance, as well as the marked degree in which individual muscles were attacked, showed, in the author's opinion, that muscular atrophy in these cases depended upon the same causes which produce individual muscular atrophy in infantile paralysis and paralysis of the Duchenne-Aran type—viz., myelitis affecting the large motor nerve-cells in the anterior cornua of the spinal cord.—The PRESIDENT inquired what were the conditions present in the case that recovered.—Dr. SWAN, referring to the same case, asked the author if he believed that there was regeneration of the cells in the anterior horns.—Mr. BENNETT assumed that the object in bringing forward the cases was to establish the spinal origin, as distinguished from that attributed by Roberts and Cruveilhier—*i. e.*, localising the origin of the disease to pathological change in the spinal cord. That muscles were the prime organs in fault, could be supported by a number of cases. Those of traumatic origin went to establish that the lesion was primarily of the spinal cord. Fifteen years ago, a man was under the care of Dr. Fleming in the Richmond Hospital, presenting phenomena exactly the same as in the photograph handed round, and the cause of the lesion was a blow of a steamer's hawser. Having made the *post mortem* examination himself, he could say the lesions of the spinal cord were sufficiently overt and distinct to be recognised.—Mr. WHEELER mentioned a well-known case that was in the City of Dublin Hospital, under the care of Professor Purser, suffering from Cruveilhier's palsy. The patient was a tall gaunt man, who used to stand at Baggot Street Bridge, and had been driver of the Wicklow coach. His upper extremities were only held to his trunk by the levator anguli scapulæ muscles, so that the posterior superior angles of his scapulæ were pulled up close to his ears. He stood with his body thrown forwards to prevent his abdominal viscera from falling forwards, as all the abdominal muscles had disappeared. The palsy apparently originated from injury. He fell, and hurt the back of his neck and spine. From the cast shown by Dr. McDonnell, it seemed that the flexor brevis abductor and opponens pollicis muscles were very much wasted. He asked, Could Dr. McDonnell assign any reason why the flexor ulnaris muscle and other muscles were not wasted in the same proportion? and, if he had made observations in similar cases of the condition of the nerves down the forearm, whether their motor fibres were altered? With regard to Dr. McDonnell's second case, it appeared to him (Mr. Wheeler) that the trophic cells were not engaged, but only the connective tissue elements; and, when it returned to its normal condition, the temporary influence it exercised on the cells ceased.—Dr. MCDONNELL, answering Mr. Wheeler, first as to how the particular muscles atrophied, said, in all of those that belonged to the group of whichhe was speaking, it commenced in the spinal cord. If a group of those cells disappeared, it might be laid down as certain, that the muscle corresponding with that group of cells would also disappear, and the nerves leading to that would wither away. In those cases which he had examined, the nerve-fibres in the roots were found to be atrophied. The question was naturally asked, "Might it not begin in the muscle?" or, as Cruveilhier put it, in the nerve-root, or in the trophic cells? Years ago, he had himself asked Lockhart Clarke if he had had opportunity of examining cases in which, long after amputations, those cells had not been called into use; and whether, for want of use, they had become atrophied. It appeared that, in fifty or sixty cases which he had examined in Greenwich Hospital, the cells in the spinal cord were found to be right. Evidence had been accumulated to show that the disease really began in the nerve-cells and spinal cord. As to the pathology of the successful case, he did not see how it could, clinically speaking, be distinguished from the others, the patient

presenting exactly the same appearance; but he was inclined to regard all inflammatory action attended with atrophy as a matter of degree.

REVIEWS AND NOTICES.

A System of Surgery, Theoretical and Practical. In Treatises by various Authors. Edited by T. Holmes, M.A.Cantab., Surgeon to St. George's Hospital; Memb. Corres. de la Société de Chirurgie de Paris; and J. W. Hulke, F.R.S., Surgeon to the Middlesex Hospital and to the Royal London Ophthalmic Hospital. Third edition, in three volumes: with Illustrations. London: Longmans, Green and Co. 1883.

[First Notice.]

At length, after some years of expectation, the medical public can enjoy the advantage of a new edition of the best known systematic collection of essays on surgery that is written in the English language. In any case, a new issue of Holmes's *System* would be welcome; in any case also must we be doomed to disappointment if we expect a complete and systematic renovation of every section of so great a work. Elder writers are able to add more clinical observations and less pathology to former contributions, whilst younger men, who undertake to write entirely new papers, or to reconstruct the articles of deceased or retired contributors, are sure to introduce new ideas, new forms of expression, and new terms, which even an editor cannot be expected to transplant into all the other papers for the sake of uniformity. It does not, therefore, surprise us to find that this new issue contains certain defects, including many that the most uncharitable critic must recognise as unavoidable.

We miss the five familiar brown, bulky, almost cubical, tomes, for they are now replaced by three taller and thinner volumes, each bearing a strong resemblance in form and type to a copy of Gray's *Anatomy*. This alteration is convenient and economical, the two objects for which it has avowedly been made. The woodcuts differ little in quality from those in the last edition; if changed in any respect, they are perhaps finer in execution. The full-page engravings include Mr. Treves's drawings of microscopic sections of strumous glands, very favourable samples of contemporaneous pathological art. The coloured plates representing syphilitic sores, are not quite so carefully tinted as before. If crude coloration never seen in disease cannot be avoided by the artist, all such coloured engravings should be omitted; for, under no circumstances ornamental, they, if unlike nature, fail to be instructive.

The section on Inflammation, written by Mr. Simon, has been revised by the senior editor, who admits that he has made "very few modifications," newer views being mostly relegated to the articles on pyæmia, etc. The second paper, on the Pathology of Inflammation, is perhaps the most valuable of the entire series.

It is much to be desired that all the contributors to works of this class should revise their articles after the pattern set by Professor Burdon Sanderson. A quotation from his introduction will explain the spirit in which he has undertaken his work. "In my treatment of certain parts of the subject, particularly those which relate to the etiology of inflammation, I have been partly guided by my own researches made between 1870 and 1876. As regards the rest, I have endeavoured to verify most of the observations and experiments to which I have referred. I have done so, however, not so much in the hope of adding to them or correcting them, as for the purpose of making myself conversant with the methods and results. It is proper to state here that the article has been entirely rewritten. The reader who takes the trouble to compare it with its predecessor will find that, although the doctrine taught as to the origin and nature of inflammation is the same, the whole of the experimental basis on which it is founded is new. Since 1870, every result of any importance relating to the subject has been submitted to experimental criticism, by which means our knowledge of it has been rendered more complete and precise." Such are the principles upon which the revision of a scientific paper should be written. The experiments of Hueter, Chauveau, Kocher, Ogston, Wagner, and others, are suitably condensed, and the paper concludes with an useful list of works and pamphlets on the process and the etiology of inflammation, published between 1871 and the end of 1881. Whilst the scientific aspect of the germ-theory is well expounded, we regret to say that the clinical bearings of the same question have not been allowed the importance they deserve. In other words, there is no special section on antiseptic dressings. In the article on Inflammation, the editor interpolates two pages and a half of observations on Listerian principles, written in a very critical spirit, the criticism being, of course, chiefly adverse to strict antiseptic doctrines. Turning to the chapter on Wounds, revised by Mr. Croft, the original being written by Sir James Paget, we seek for full details of antiseptic dressings, only to find four pages of pure abstract, most ably written, we admit, and introduced, we are informed, with the consent of Mr. Lister, but hardly complete or solid enough for a *System of Surgery*. We do not find a word about the spray-producer, nor any of the numerous contrivances found convenient in antiseptic operating; and we are referred to the works of Mr. Lister "for further details;" but, in a great text-book, we look for more details and less reference. Under "Excisions of Bones and Joints," antiseptic surgery is once again made the subject of depreciating criticism; but the views of the senior editor, author of the article, are already well known. The observations regarding antiseptics in ovariotomy are peculiarly insufficient, and not even referred to in the Index. In the article on Fractures alone can we find anything, on this subject, directly supervised by Mr. Lister himself.

This digression, with regard to antiseptic questions, we have deemed necessary, as it comes within the scope of the subjects treated in the first two articles of the *System*. Abscess, Sinus and Fistula, Gangrene, Ulcers, Erysipelas, and other sections, have been revised, re-edited, or re-written, by some of the ablest and best known younger members of metropolitan hospitals, as well as by the editors. The views of Mr. Treves on Scrofula, and of Mr. Butlin on Tumours, must be tolerably well known to the profession, and their competency to re-write the articles on those diseases is indisputably proved by the excellence of the essays in question. The chapter on Abscess bears the terminal signature of Mr. W. H. Cripps after that of its original author, the late Mr. Holmes Coote; whilst in the Index, and "List of Authors in the Present Edition," its revision is wrongly, as we are informed, attributed to Mr. Butlin. The article on Gangrene, entirely rewritten by Mr. Cripps, is very complete, as befits a monograph in a work of this kind. The descriptions of the more special forms of gangrene are highly satisfactory, but more might have been said about frost-bite. It would be vain to attempt to review in detail the sections devoted to fractures, dislocations, local injuries, and gunshot-wounds; but such a task would hardly, under any circumstances, be imperative, as the original articles, already well known, are mostly contributed by high authorities, and, in this edition, have been revised, where revision was found necessary, by equally competent surgeons.

The Sanitary Contrasts of the British and French Armies during the Crimean War. By Surgeon-General Longmore, C.B., Q.H.S., F.R.C.S., Professor of Military Surgery in the Army Medical School.

The main facts embodied in this instructive essay were given two sessions ago, in an introductory lecture in the Army Medical School, and are now presented to the profession and the public in a more extended form.

Some may think the sanitary aspects of the Crimean war have been presented in every point of view—that the subject has been thoroughly threshed out, and that the sad and impressive lessons of that war have been so taken to heart, that no more need be said about them. It will be seen by those who will take the trouble to read the interesting pamphlet before us, that this important subject is still capable of profitable study by statesmen charged with the administration of military affairs, by soldiers, and by military medical officers, and, we venture to add, by historians who record campaigns and discuss the merits of those who conduct them.

Professor Longmore tells us at the outset that the particular point he has in view is the relative sanitary conditions of the allied French and British armies at corresponding dates, when they were acting side by side in the military operations before Sebastopol. The author also plainly indicates that another "point" he has kept in view is the vindication of his late friend Dr. Chenu, Médecin-Principal of the French Army, from the one-sided and unjust strictures of Mr. Kinglake on Dr. Chenu's *Medical and Surgical History of the French Army during the Crimean War*. Attentive readers of Mr. Kinglake's history, which, after dragging its slow length along for nearly a quarter of a century, is still incomplete, know very well that the main object of the historian throughout has been to minimise to the utmost the disasters of the war, and to rehabilitate the damaged reputations of the aristocratic commanders and their incompetent staff, who, on that conspicuous stage, proved

themselves ignorant of the simplest elements of field organisation and administration, and who has no stronger term in his wordy history to apply to the terrible catastrophe of the memorable first winter in the Crimea, than the euphemism of "Winter Troubles."

As Mr. Longmore points out, Mr. Kinglake tries his best to prove that the condition of the French army during the first winter was as bad, from a health point of view, as that of the British army; and the reason he falls foul of Chenu and calls him a "distracted compiler" is explained by the fact that Chenu's statistics too plainly show the reverse was the truth. Our author thus states the case, which he subsequently establishes by facts and figures that admit of no dispute.

"The situation of the French and British armies during the siege of Sebastopol was so similar in respect to soil and locality, the climatic influences to which they were exposed, and the nature of the work in which they were engaged, were so thoroughly alike, that practically the two armies might almost be regarded as parts of one and the same force. Although, however, the allied forces were thus similarly situated—and, indeed, formed but one continuous extended line of troops before Sebastopol during the siege—there was no similarity between them in respect to their conditions of health while they were thus acting in concert. It may be said, in general terms, that the British part of the allied force before Sebastopol was remarkably unhealthy during the first part of the siege, and as remarkably healthy during the second period of the siege; while a precisely opposite state of things existed in the French part of the force, which was in a generally good condition of health during the first period, but in an extremely unhealthy condition during the second period."

We must refer our readers to Professor Longmore's clear exposition of the causes that brought about the remarkable contrast just stated; but, remembering that nearly a quarter of a century has elapsed since the Crimean war, that hundreds of our professional brethren, now advanced in the active business of life, were then in long-clothes, we may mention that the occupation lasted from part of September 1854 to June 1856, nearly two years. Mr. Longmore divides the time into two terms, viz., from September 1854 to June 1855, and from July 1855 to June 1856. The total number of deaths that occurred among the non-commissioned officers and men of the British forces throughout the whole campaign, from the time the army went to the East, in April 1854, to the time it quitted the Crimea, in June 1856, was 18,058. This includes those who died in action and from wounds and injuries, amounting to only 1,761; deducting these, there remain 16,297 deaths from disease. Of this number, 15,013 occurred after the Army made its move to the Crimea in September 1854; and, of these deaths, 13,150 took place between September 1854 and June 1855, both months included; while, during the remainder of the stay in the Crimea, between July 1855 and June 1856, the deaths from disease only amounted to 1,863—a fact that is twice as significant, if we bear in mind the fact that the strength of the force during the second period was about two-fifths greater than during the first. Is it possible to put the difference between all that we understand by sanitation and no sanitation in a more striking light than it is put by the above eloquent figures? For the contrast between the condition of the two armies, we must refer our readers, as we have said, to this most instructive publication, which we regard as a most valuable contribution to military medicine.

Is Consumption Contagious, and can it be Transmitted by Means of Food? By Herbert C. Clapp, A.M., M.D., Professor of the History and Methodology of Medicine and Lecturer on Auscultation and Percussion in the Boston University School of Medicine, etc. Second edition. Boston: Otis, Clapp and Sons.

"A disbelief in the contagion of consumption is highly favourable to the spread of that disease (if it can really be propagated in that mode), inasmuch as in private practice and both civil and military hospitals no measures of prevention are employed." This pregnant sentence is the first that meets the eye in opening Dr. Clapp's valuable contribution to the discussion of the important question of the communicability of consumption—a question which the results of recent research press upon the thoughtful consideration of physicians in all parts of the world, and one which, it is to be hoped, will be met generally in a more philosophical spirit than has been manifested towards it in certain quarters.

Dr. Clapp commences by giving a full and valuable "historical and descriptive" account of the subject, in which may be found a summary of nearly all that is known concerning the "contagion" of consumption. Whoever reads this chapter, with care and candour, will be compelled to admit that the evidence collected in favour of the communicability of phthisis, under certain conditions, is very strong. A remark by Dr. Bowditch, quoted in this chapter, is apt and well timed; "May not the fact of the hitherto great prevalence of the opinion of the non-contagiousness of this disease among English and American practitioners, and our strong belief in the hereditary character of it, have led us all to ignore what may, after all, prove a potent cause, and which we shall recognise on more close inspection?" Besides the opinion of so eminent and careful an observer as Dr. Bowditch, we have also here the testimony of such distinguished and experienced practitioners as Professor J. M. Da Costa, who writes, "I have met with a number of instances which seemed to prove the contagiousness of phthisis. I am a believer in this." Dr. J. Solis Cohen also states, "I am strongly impressed with the opinion that phthisis can be contracted, that is to say, is communicable (rather than contagious, in its strict sense) from frequent continuous contact with the phthisical." Professor Da Costa reports several cases in support of his opinion. Dr. Holden alludes to the "obdurate prejudices of the profession" manifested formerly against the opinion that erysipelas was contagious, and regards this as a parallel instance to the one now under discussion.

Dr. Clapp's fourth chapter contains a long series of illustrative cases put on record by a great number of different observers; we select one for quotation because of its directness and brevity, and because it bears a striking resemblance to some of those recorded by Dr. Hermann Weber. It is reported by Dr. L. MacDowell. "I knew a man who had all the external appearances of a tubercular diathesis, who married a healthy girl of eighteen. In three years (after the birth of her second child) she died of tuberculosis. He married again, in a year and a half, an exceedingly robust woman of a family without taint. In less than two years, she died of unmistakable pulmonary consumption. The third time he married a healthy woman. He himself died in one year after his third marriage, of consumption, and his widow followed him, in six months, with the same disease."

For much other interesting matter bearing on the question of the communicability of phthisis we must refer our readers to the book itself, and we will conclude this notice by citing Dr. Clapp's practical conclusions, which we commend to the attention of all practitioners. "1. No person, particularly if young, should be allowed to sleep in the same bed, or even in the same room, with a consumptive. 2. No person should be allowed to remain for too long a time in too close or too constant attendance on a consumptive. 3. Ventilation as perfect as possible should be secured." We would add to these two others. 1. The expectoration of phthisical patients should be carefully disinfected. 2. Those phthisical patients who are in the habit of mixing freely with other persons should wear one of those antiseptic respirators which are now to be obtained for a few pence.

NOTES ON BOOKS.

The Essentials of Bandaging. By Berkeley Hill, M.B., F.R.C.S. Fifth edition. Revised and enlarged. London: Smith, Elder, and Co.—We congratulate the author of this deservedly popular manual on the appearance of its fifth edition. Although most of the subjects of which it treats are purely practical, it is impossible for a dresser to learn every essential of bandaging and minor surgery during the short time devoted to the duties of his appointment, and a clever or carefully trained manipulator, accustomed to apply bandages after one method, can readily follow printed directions concerning other ways of arranging rollers and strapping. The same may be said of minor surgery; and the truth cannot be hidden that, to the majority of students, the matter contained in a work of this type will prove of far greater service to them in practice than the minute details of major operations which make up the greater part of larger "systems" and text-books. Indeed, it is to be regretted that examiners do not devote more time to testing candidates in bandaging and the application of splints. We are glad to find that Howard's method of artificial respiration, omitted in a new edition of a much larger treatise on surgery, is described in Mr. Hill's work, and that the passages on anæsthetics, one of the most important features of this manual, have been carefully revised by Mr. Bailey. A description of laryngoscopy has been contributed by Dr. Vivian Poore; and some paragraphs on the use of the ophthalmoscope have been written, for this edition, by Mr. John Tweedy. These subjects

are wisely kept to narrow limits. It is questionable whether young practitioners should be encouraged to test defective accommodation, and to recommend spectacles on the strength of the most meagre information on lenses suitable to correct myopia or hypermetropia. The strongest convex lens, "speaking generally," is recommended for hypermetropia, without one word being said about belladonna and the detection of the latent form of that condition. Some more suitable additions have been made with regard to new splints and similar contrivances.

M'ALPINE'S *Practical Lessons in Elementary Physiology and Physiological Anatomy for Schools and Science Classes* (Baillière, Tindall, and Cox, London).—This useful book, containing twelve plates, with practical directions and explanatory text, illustrates the anatomy and physiology of the rabbit in large coloured plates, and aims at teaching elementary physiology and physiological anatomy in the best possible way—viz., by encouraging practical dissection and the study of nature itself. A large plate is added, showing the general structure of the human body and its principal parts, with the object of comparing and contrasting them with the rabbit. The work is well done, and the kind of study which it encourages is peculiarly deserving of support. It will lead the young student straight to nature, and teach him to use his eyes, hands, and understanding, instead of getting technical information off by rote, and committing it to memory. The one kind of knowledge is vital and full of growth, and the other dead and nearly useless.

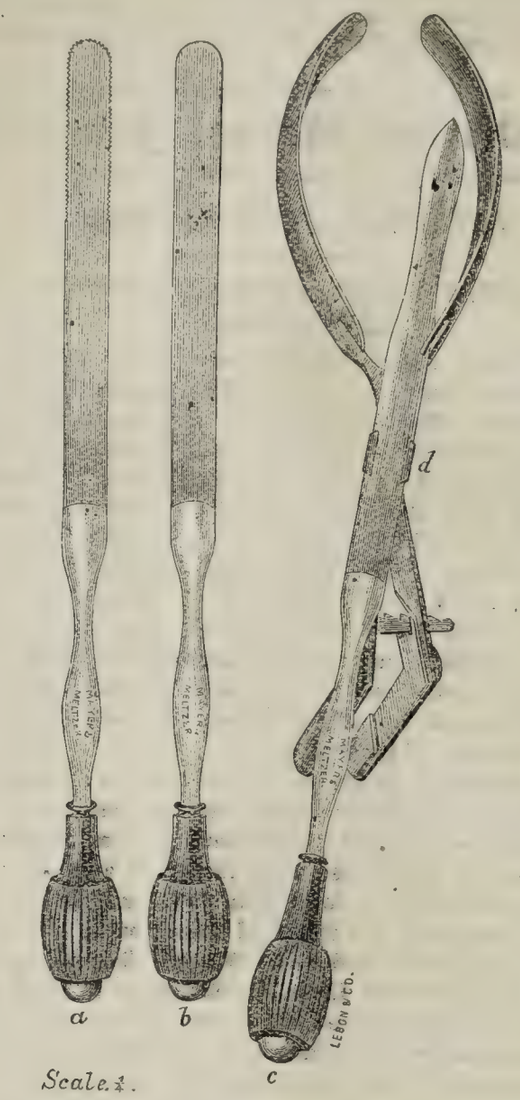
A Manual of Nursing. By CHARLES J. CULLINGWORTH, M.D., Physician to St. Mary's Hospital, Manchester. London: J. and A. Churchill.—This is among the best little handbooks on nursing we have seen. It contains, within small compass, all that a tolerably efficient nurse may be expected to know, and is a safe guide to that practical knowledge which is only to be gained at the bedside under the eye of a competent instructor. The manual deals alike with medical and surgical nursing, digressing but little into theory or into numerous subjects more or less allied with nursing, but which most people consider ought to fall more exclusively within the province of the medical man. Among other necessary information, there is a chapter devoted to the antiseptic treatment of wounds, from the nurse's point of view, which comprises a minute account of the materials used and their mode of action, and which cannot fail to prove useful to the beginner. The important subject of disinfection, together with the nursing of infectious diseases, are treated at some, but not too great length, and the more recent views with regard to contagion, are explained in a simple and suggestive manner. Possibly, in our anxiety to guard others from infection, we are liable to overlook the claims of the nurse, who is manifestly more exposed to the risk. Small-pox may in most, if not in all cases, be avoided by suitable precautions, but in such a disease as diphtheria, specially during and after the operation of tracheotomy, the oro-nasal and disinfecting inhaling-respirator, suggested by Dr. Burney Yeo, must prove an effective protection when worn, either to the medical man or the nurse. In dressing foul wounds the same inexpensive apparatus will be found most serviceable, and its use will probably afford more time to the nurse to complete what is otherwise an offensive task. Among the appliances for the application of cold to the surface, we also fail to see any mention of Leiter's pliable metal tubes, which, when properly manipulated, are infinitely preferable to the ice-bags in common use. These, however, are minor matters, and in no way detract from the character of the manual, which we can confidently recommend for the guidance of amateur or of professional nurses.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A POLYPOTOME AND FORCEPS-SAW.

By H. MACNAUGHTON JONES, M.D., F.R.C.S.I. and Edin.,
Examiner in Obstetrics, Royal University of Ireland.

LATELY I exhibited a large polypus at the Obstetric Section of the Academy of Medicine in Ireland, removed from the uterus, and in which considerable difficulty was experienced in its removal from the vagina in a nulliparous female. I then referred to the want of some instrument (which would combine the purpose of forceps and cutting knife) for the safe removal of these large growths without the necessity of incising the perinæum, or the risk of lacerating it. I have not used the polypotome of Dr. Aveling. The application of the écraseur to divide the tumour into segments is tedious, and at times difficult. I have, with the aid of Messrs. Mayer and Meltzer, devised the instrument shown in the accompanying drawing. This



Scale, one fourth; entire weight of instrument, fourteen and a half ounces.

is drawn to a scale of one fourth. It consists of a straight forceps, lightly made with slender blades, yet sufficiently strong to compress the tumour; there is a groove cut in the lower fourth of these blades, and they are so shaped inside, that the edge of the movable knife or saw glides easily along the blade. They lock readily on a revolving pivot (*d*), and the same lock carries a short sheath, through which the knife passes. The handle of the forceps is at right angles to the shank, and each half is connected by a rack and pinion bar. Three cutting blades accompany the forceps, one (*c*) shaped somewhat like a dagger, so as to readily pierce any tumour, and cut from the centre outwards; a second (*b*) broad and flat, with a rounded edge; the third (*a*) a saw. These are made of the finest tempered steel. The tumour can thus be grasped and cut through the centre, the blades either turned round in the vagina, the knife being withdrawn, or the forceps may be applied in a different direction, and the mass cut in four or more pieces. These segments may be separately withdrawn. I have not seen Dr. Van Huevel's forceps saw, but I conceive that this instrument of mine may be made to answer useful purpose in certain cases in section of the skull in embryotomy. The blades protect the parts completely. I have to thank Miss Alice Boole for the accurate sketch of the instrument.

141, Harley Street, W.

MR. J. KNOWSLEY THORNTON has been elected an Honorary Fellow of the American Gynecological Society.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 9th, 1883.

THE FORTHCOMING ANNUAL MEETING IN LIVERPOOL.

THE British Medical Association has now entered upon its second half century of existence, and its fifty-first annual meeting is to be held in Liverpool. The coincidence is very opportune. It may fairly be anticipated that the successful jubilee meeting of last year will be equalled, if not excelled. The experience of past annual meetings shows that, the larger the city or town in which the meeting is to be held is, the larger is the meeting. The reasons for this are obvious. The three main physical requirements for a meeting, on a great scale, of an Association of such large proportions as the British Medical, are: (1) facilities of access; (2) ample hotel and other accommodation; and (3) local attractions. All these three can be most generally found in the larger cities and towns, and will be found, as we shall see, in ample abundance in the city of Liverpool.

Although Liverpool is geographically situated in a corner, it may be considered as very centrally situated for the purposes of a meeting, at which may be expected representatives from all parts of the three kingdoms. It possesses every facility of approach by land and water. The metropolis is now within five hours' railway journey, and associates may have the choice of three routes; the older and shorter one by the London and North-Western Railway, another by the Midland and Cheshire Lines, which passes through the picturesque county of Derbyshire; the third by the Great Western, which brings passengers to Birkenhead, and enables them to reach Liverpool by one of its chief attractions, the river Mersey. Again, Edinburgh and Glasgow are within seven hours' railway journey, Dublin within eight hours by mail-boat and train. Thus associates residing in the three capitals are within five, seven, and eight hours' journey respectively of Liverpool. Again, five hours' travel brings Liverpool within reach of the most distant northern towns of England, while three hours' journey enables visitors from Leeds and other Yorkshire towns, from Birmingham and its neighbourhood, and from most parts of North Wales, to reach Liverpool. For those to whom a sea-voyage is an attraction and no penalty, Liverpool possesses unusual advantages; Dublin, Cork, Belfast, Glasgow, Bristol, and Plymouth, all being within a pleasant sail, and having regular communication with Liverpool by excellent passenger-steamers. A very large gathering may also be expected of associates living within easy distance of Liverpool, who can enjoy all the pleasures of the meeting, with the advantage of being able to return home each evening. Manchester, Preston, Chester, Southport, Warrington, and many other towns too numerous to mention, are within an hour's journey; and each contains a fair proportion of associates among its medical faculty. For more distant visitors from America and the Continent, Liverpool has most direct and first-class steam communication. In short, there is no place which possesses a combination of better facilities of access for such a meeting. It will be the third which has been held in Liverpool. The first was in 1839, the seventh annual meeting of the Provincial Medical and Surgical Association, under the presidency of the late Dr. Thomas Jeffreys; the second was in 1859, just twenty-four years ago, when the late Dr. Vose was president. Both meetings were in every way most successful.

The accommodation which Liverpool possesses for visitors is in proportion to its facilities of approach. There are a number of first-class hotels, each with accommodation for a large number of guests. As is well known, Liverpool is a great thoroughfare for America, and other visitors who find it a convenient resting-place for one or more days, and it is for them that ample hotel accommodation has been found requisite. For those who prefer this or private lodgings, nothing more is required than a reasonable notice beforehand. But a very large proportion of associates will find not only every hospitality, but a warm welcome also from their Liverpool brethren, and will no doubt gladly avail themselves of it. The members of the profession in Liverpool and its suburbs number nearly 400, of whom a considerable proportion are associates, and there is every reason to believe that the coming meeting will considerably strengthen the Lancashire and Cheshire Branch, both in numbers and influence.

The local attractions of Liverpool are numerous, and such as to satisfy both visitors who come for work, and those who come for recreation. To the former the various hospitals, several of which are of recent construction, with all the modern sanitary improvements, will well repay a visit. Then there is the newly created University College, with its Medical Faculty; or, as will be more familiar to former students, the Liverpool Royal Infirmary School of Medicine, though old pupils will have some difficulty in identifying the present enlarged structure, and its admirable arrangements, with the school as it was twenty-five years ago. Even metropolitan professors may pick up at least a wrinkle or two here. There is also the Medical Institution, with its excellent library, and numerous engravings of deceased physicians and surgeons, both metropolitan and local. The Brown Museum and the Picton Reading Room will also afford much interest to those who wish to see what is freely provided for the intellectual cultivation of the public in Liverpool. In addition to all these, there will be the usual routine of general and sectional meetings; and it will be observed, probably with much satisfaction, that the addresses have been reduced, there being only two in addition to the President's. To those who come for a holiday, Liverpool affords every opportunity for agreeable recreation. There is its noble river Mersey, with its numerous ferries, where the visitor may enjoy a sail of from five minutes to one hour. There will probably be opportunities afforded of seeing the works of the Mersey Tunnel, which has already made considerable progress on each side of the river, and the completion of which is now only considered a question of time. There are the magnificent docks with vessels of all nations, from all parts of the world, the various warehouses, and the numerous public buildings and offices, which latter, being mostly modern structures, offer a striking contrast to the dingy counting-house of the past generation. The visitor who comes to Liverpool for the first time will find its landing-stage a promenade, where he may spend hours in pleasant contemplation, probably mixed with amazement. The sight of the river on the Cheshire side on a fine day, the splendid vessels always lying in the river, either just arrived from, or on the point of proceeding to, the numerous ports with which Liverpool has communication, the numerous emigrants and other passengers, the general stir and bustle of one of the largest, if not the largest, seaport in the world, all go to form a picture which will not readily be forgotten.

Passing from these general attractions to those provided specially for the benefit of members attending the meeting, we have already noticed the public buildings of Liverpool; and visitors will have the privilege of seeing the chief and finest of these to the best advantage. The Liverpool College, where all the general and sectional

meetings are to be held, is most admirably adapted for the purpose. The local committee will be enabled, in its large theatre, formerly the chief concert hall of Liverpool, to accommodate with every comfort the members at general meetings, however largely attended. There will also be found under the same roof numerous rooms, sufficient for all the sectional meetings, reception and reading-rooms, and a museum on a scale not attempted before. For the *soirée* of the President and Local Committee, on the evening of the second day of the meeting (Wednesday, August 1st), the use of three large public buildings has been kindly granted by the Mayor and City Council. These three buildings, the Brown Museum, Picton Reading-Room, and Walker Art Gallery, are side by side, and the two latter are very recently built. Although the buildings in which former *soirées* nave been held may have age and other advantages, the annual *soirée* of 1883 will be in many ways a most magnificent sight. On the following evening, the annual banquet will take place in the Philharmonic Hall, a building capable of holding considerably more than the largest number of guests and associates present at any previous annual dinner, and having the most perfect acoustic properties. In it the guests and members will dine under the most favourable auspices, one great attraction being the probable presence of many "Lancashire witches" in the "boxes" above, to whom it may also be probably an attraction to witness what has been happily termed "doctors' commons." On the next and final evening of the meeting (Friday, August 3rd) the visitors and their ladies are to be the guests of the Mayor of Liverpool (Mr. William Radcliffe), who is most kindly giving a reception at the Town Hall. The magnificent suite of rooms in this building are admitted to be among the finest in the kingdom, and are never seen to better advantage than when lighted up for evening entertainments. Saturday, August 4th, will be devoted to excursions. There is no deficiency of most attractive places within easy distance of Liverpool, and the only difficulty which the Excursion Committee have had, has been that of selection. The arrangements are not yet complete, but it is certain that there will be excursions to (1) Chester and Eaton Hall, the latter by the kind permission of the Duke of Westminster; (2) Llandudno and Conway; (3) Southport. There will also be an excursion on the river in the forenoon, at the invitation of Mr. Bickersteth. All these will be found, weather permitting, most attractive and enjoyable excursions, forming an agreeable conclusion to the week's work.

In conclusion, one more advantage possessed by Liverpool as a meeting place may be noticed. Many associates make the annual meeting the commencement of an autumnal holiday; and, for reasons already indicated, Liverpool is a most favourable starting point. Its northerly situation places a Highland tour within a few hours' reach by sea or rail. The Isle of Man is within five hours' direct rail, while visitors can have the option of proceeding by Barrow, and of seeing the far-famed Furness Abbey on the way. Tours to Ireland and Wales can be most advantageously commenced here; while those meditating a longer holiday and more extensive flight, will find an *embarras de richesse* in the numerous steamers leaving Liverpool for America, the Mediterranean, Bordeaux, Lisbon, etc. In short, from beginning to end, there are all the elements for a most successful meeting in Liverpool; and it is confidently expected that the members of the Association, far and wide, will show their appreciation of the efforts being made in their behalf by the Local Committee, by attending in large numbers, and by their presence enhancing the success of the fifty-first annual meeting of the British Medical Association.

ON THE INFLUENCE OF THE NERVOUS SYSTEM IN THE PRODUCTION OF DISEASE OF THE BLOOD-VESSELS.

WITHIN recent years, physiological experiments have greatly advanced our knowledge regarding the influence of the nervous system on the calibre of the blood-vessels, and therefore on the blood-streams, while experiment and clinical observation combined have established the influence of the nervous system on the nutrition of the tissues. Although we are acquainted with the fact, that division or stimulation of certain nerves produces hyperæmia of certain organs, yet we know very little indeed regarding the part played by the nervous system in the production of structural alterations in the walls of the blood-vessels.

Although aneurysms of arteries are extremely common, nevertheless, we know almost nothing as to how aneurysms are produced. We may surmise that they are more frequent in persons of an atheromatous diathesis than in other conditions; but, as yet, neither clinical observation nor experiment has done much to extend our knowledge of the causes which produce disease of the vascular tunics.

As a contribution to the problem of the relation of the nervous system to the production of vascular disease, we may refer to a recent article by S. Levascheff, of St. Petersburg, published in Virchow's *Archiv*. This research was undertaken at the instigation of Professor Botkin, who constantly endeavours to submit his clinical observations to the test of physiological experiment. Whenever he meets with clinical facts which seem inexplicable by the known facts of physiology and pathology, Dr. Botkin has uniformly submitted these observations to the touchstone of experiment.

As the result of the careful clinical observation of a number of cases of aneurysm, Dr. Botkin came to the conclusion that in these cases certain parts of the nervous system had become diseased, and that the diseased condition of the arterial wall which led to the production of the aneurysms, was a secondary result. With a view to ascertain whether injury to nerve-trunks affects the structure of the vascular tissues, Levascheff undertook the following investigation.

The sciatic nerve of a dog was exposed close to its exit from the pelvis; and, in order to keep up irritation of the nerve-fibres, a thread, soaked with a dilute acid (sulphuric) or saline solution, was drawn through the nerve. In this way, a continual stimulation was kept up; and, whenever the effect was about to pass off, a new thread was drawn through a part of the nerve on the peripheral side of the former injury. This process was repeated for months. For comparison, the sciatic nerve on the opposite side was exposed in a similar manner, but no thread was placed in it. This method was adopted, as simple section of the nerve produced sensory and motor paralysis, which interfered with the result. After a certain time, the blood-vessels became dilated and pulsated strongly, and there was a rise of temperature. The dilatation of the blood-vessels seemed to be due chiefly to the stimulation of the vaso-dilatator nerve-fibres, and not to paralysis of the vaso-motor fibres. Subsequently to these hyperæmic changes, the sensibility of the limb underwent a marked change. After two to three days, the dog raised its leg, kept it in a semi-flexed position, and carefully prevented it from coming into contact with anything. Touching or handling the limb even gently gave rise to pain, and the increased sensibility was chiefly in the area supplied by the anterior crural nerve; while, in the region supplied by the sciatic nerve, the sensibility was normal or diminished. This hyperæsthesia occurred in all the successful experiments, *i.e.*, in those where the nerve was strongly stimulated, but where there were no signs of paralysis. The hyperæmia increased until the second to the fourth day, and afterwards remained nearly constant for three to four or five months.

After this irritation of the nerve-trunk had been kept up for many months, the dogs were killed, and the blood-vessels examined microscopically. In sections of blood-vessels, where the nerve-trunks have been stimulated for a comparatively short time, there are marked structural alterations in the tunica adventitia. Numerous new blood-vessels—vasa vasorum—have been developed. These vessels are greatly dilated, and filled with blood-corpuscles. In some cases they penetrate into the middle coat, so as to push its

ayers asunder. Thus, openings are formed in the middle, and it may e also in the inner coat. The number and size of these newly ormed vessels vary in different parts and in different layers of the ame blood-vessels. In later stages, the vessels in the media become urrounded with fibrillar connective tissue, which contains a greater r less number of cellular elements. Thus, greater and greater tructural defects occur in the middle coat; the muscular fibres dis- appear here and there; and the substitution of connective tissue for nuscular tissue proceeds from without inwards, but not necessarily n an uniform manner. Gradually bundles of muscular fibres come to be surrounded with connective tissue, and the muscular fibres finally disappear. One might not inaptly compare the process to a kind of cirrhosis of the middle arterial coat. In the final stage, almost all the muscular tissue disappears, and its place is taken by connective tissue, which at first contains numerous cells and blood-vessels, but these also gradually disappear. The inner membrane of the vessel ultimately becomes affected, and appears to be united with the adventitia, while the folds of the elastic lamina may disappear. The first structural changes were observed in from six to eight months, while the highest degree of degeneration occurred after eighteen months or two years. The blood-vessels of the opposite limb were quite normal after these periods.

These results are most important, as being the first definite experimental proof of the influence of the nervous system on the structure of the blood-vessels. They seem to be due to stimulation of the vaso-dilatator nerve-fibres, causing dilatation of the blood-vessels, and also of the vasa vasorum, which latter seem to be the starting point of the subsequent changes which occur in the arterial walls. When the stimulation is continued, new vasa vasorum are formed, which penetrate the middle coat and become surrounded with cellular elements, which ultimately form connective tissue. This, in its turn, displaces the muscular fibres, until the inner coat is reached, and thus the nutrition of this coat suffers.

These experiments show how the various processes which lead up to the formation of an aneurysm take place. The production of the aneurysmal dilatation itself will largely depend upon the pressure to which the vascular tissues are subjected by the blood-pressure from within; and this, in its turn, depends upon the well known nervous factors. Not only were these structural alterations observed, but here and there in the course of the vessels there were dilatations comparable to aneurysms. These experiments afford a solid basis for future observers, and clearly prove that marked structural changes occur in blood-vessels, as in certain other tissues, after injury to the nervous system; and they go to show that some aneurysms at least—perhaps those of the cerebral vessels—are really nervous in their origin.

EXAMINATIONS, PRESENT AND FUTURE.

It is highly advisable that the early attention of the profession should be turned towards the methods of conducting professional examinations. Should the Medical Act Amendment Bill become law, the minimum examination will, or ought to, be carried on after an improved system, for none of the methods now in force are free from numerous imperfections. As examiners are men, differing greatly among themselves in opinions, in temper, and in other important respects, it is not to be wondered at that they differ in their method of examining candidates. All proposals to make examiners act as machines are based on a profound ignorance of human nature. The method, however good, of the best intentioned examiner may be bad in the eyes of everyone else. A remedy is to be found in the president, but he is generally a gentleman who dislikes to interfere directly with a colleague, so that in many examining institutions his duties, whilst a candidate is in course of examination, are confined to the interpolation of a few easy questions that may lessen the anxiety of a timid student, or may test his knowledge more thoroughly. A very indulgent examiner introduces an evil that must ever be deprecated; his manner of discharging his duties is unfair to all colleagues who may desire to make their examination a thorough test of proficiency. Such an examiner is apt to defeat the objects of examination. Another class of examiners includes those who are great authorities in the subjects in which they examine, who have had long experience in medical education, yet are totally incompetent to test a candidate's real knowledge of the elements of anatomy, physiology, or the higher branches of medical science. Accustomed for years to warn their pupils that the examiners may ask any question on any subject, they try to teach "everything about everything," for such a term is used in the local dialect of schools of anatomy. Hence, when made examiners, they set to work under the idea that questions, in order to be good tests, must necessarily be severe, and should be asked for the purpose of detecting the candidate's knowledge of collateral rather than of essential matters. Hence comes the not very rare spectacle of a candidate spending ten minutes with one examiner, in the discussion of the mechanism of sphygmographs, hæmodynamometers, and similar contrivances. The examiner, in this case, fails to distinguish between a course of six months' instruction at a hospital, and ten minutes' test in the examination-room Again, personal offensiveness on the part of examiners is not unknown, though nearly always unintentional. This matter leads us from the examiner to the student, for it is the latter who not only is the sufferer when an examiner is really rough in his manner, but who is apt to take a violent prejudice against an examiner who acts with the highest consideration for his candidates. Once more, however, we have been discussing questions depending upon the laws of human nature, beyond the control of legislation. A court of appeal for candidates would be neither practicable nor advisable. Yet, although medical legislation chiefly aims at the benefit of the public through the supply of sufficiently educated practitioners, the claims of candidates must be considered.

It remains to be considered how some of the evils to which we have referred may be counteracted. To control the management of an examination, whilst actually in course, there may be simply a president; or graduates and qualified medical men may be admitted; or the examination may be entirely public, as at some universities; or visitors may be appointed by some central authority. The first plan, whereby a president superintends, whilst, as a part of the same system, the examiners act to a certain extent as a check on each other, is already in general use in more or less modified forms. It is necessary, but insufficient, for presidents object to interfere; and, when examiners work in pairs, the one who is exacting often thinks it right that his colleague should examine as mildly, or as inefficiently, as he chooses; whilst the latter reciprocates the sentiment, and leaves to his companion the trouble of pressing a candidate hard. The presence of visitors, admitted on the score that they hold the degree or diploma for which the examinations are instituted, is an useful arrangement; but such visitors are often members of the teaching staff of some particular school, imbued with all its prejudices, and only solicitous for the welfare of their own pupils. The question of an entirely public examination has been discussed, from time to time, by many examining and teaching bodies; but such a system is intolerable to many students, who dread anything likely to increase their constant tendency to nervousness. The best manner of controlling examinations appears to be a thoroughly efficient course of visitations by visitors appointed by the central authority. Under the present system, the visits are too few and far between; indeed, it is questionable whether one or two visitors should not be habitually present in the examination-hall.

The amount of time devoted to each candidate for the purpose of oral examination, is most important; certainly the time allowed by some of the most popular examining bodies is far too short; but, where a very large number of candidates are expected, certain administrative questions have to be taken into consideration, and

under this head comes the unavoidable limitation of time to be spent in examining each candidate. In other words, there is no remedy for this necessary evil. Finally, it is earnestly to be hoped that, under the new system, the compulsory examinations will not be made so hard. However strictly regulations may be enforced, charlatans will ever manage to evade them, and to shelter and enrich themselves for a time under public popularity; and this evil is certain to be increased by too great exaction on the part of examiners, to check which an effective system of visitations is particularly necessary.

THE COLLECTIVE INVESTIGATION MOVEMENT.

THE Collective Investigation Committee of the British Medical Association has now been nearly a year at work, and it is intending very soon to publish in its *Record*, an advertisement of which accompanies this number, the first results of its work. It has attempted what was before thought impossible. It has tried to give the great body of general practitioners all through the country a share in the scientific investigation of disease. A life passed in the continuous toil of general practice has been, till now, considered, with few, though very notable, exceptions, a life useless for discovery. Two things were wanting, without which science can never advance: time and numbers. How can a man who starts on his rounds at ten in the morning, and works uninterruptedly until ten at night, find, in the ceaseless round of practice, the leisurely reflection on which alone theory can be founded? Or how can the most careful and thoughtful among us do much with a disease of which he, perhaps, sees but half a dozen cases in the twelvemonth? The Committee have set themselves to conquer these obstacles. Believing most firmly in the value—the untold value—of private observation, and knowing how many are anxious to note what they have seen, and daily see, they have sought, by affording new facilities, to help the one, and by combination to strengthen the other. In five minutes a case of the greatest weight can be recorded, which would before have been wasted for lack of time. In a month more material can be collected than goes to form many a valuable book. What general practitioners feel on the matter can, we are glad to say, be judged by the hearty response which has been given to the challenge. We venture to think that a mass of evidence has been collected such as has seldom, if ever, been before put together. It has been shown, once for all, that the plan will work. Of its future we form the strongest hopes. It is far too early yet to say "thus much it can do and no more," however high the limit set. The system is in its infancy—it has hardly found its legs; and we must remember, and we heartily beg our readers to recollect, that it is not a single effort which is wanted, it is a habit which is to be formed. Year by year, month by month, week by week, cases occur to everyone which give the most valuable insight into all the mysteries of disease; and year by year and month by month such a mass of testimony, if they will, can be brought together by this means as the world has never seen before. A hospital has been carefully tabulated, a district well registered, but never before were the diseases of a whole nation written down in the chronicles of medicine.

OLD PRESCRIPTIONS.

One of the strongest inducements to medical practitioners to disclose to their patients the medicines they prescribe, and a circumstance which, in many instances, practically leaves them no choice but to adopt this course, is found in the consideration that with druggists in this country there is no limit to the number of times they continue to dispense a prescription without reference to its writer. We never hear of druggists, and we rarely hear of patients, referring to prescribers for authority as to the dispensing, or advice as to the renewed or continued use, of old prescriptions. These things are better ordered in some other countries; in Germany, for example, we understand there is a law forbidding the continued preparation by pharmacists of a prescription ordering an active medicine without the repeated authorisation of the prescriber. With us there is not only no such restriction whatever, and a complete absence of any understanding on the subject, but universal custom runs in an entirely opposite direction. When once a prescription has passed from the hands of the original writer, it is regarded as the exclusive property of the person to whom it is given, and it is often held as a kind of heirloom, to be handed down to his successors. The document is not regarded as an official and special order from a doctor to a druggist for particular remedies, prescribed upon, and only in reference to, a particular occasion and circumstances. It is not looked upon as a record of directions which cease to have validity when the conditions which called them forth have passed away. A doctor's prescription is too often held, by both patient and druggist, as a kind of recipe which has been extracted from the medical profession, and which thenceforth has become the permanent property of the patient, so that the continued dispensing and the continued consumption of the remedies it indicates become questions which are to be left to the exclusive discretion of the dispenser and his customer. When the paper of the original prescription is at last worn out and falls to pieces, the dispenser obligingly furnishes a new copy, and is prepared to repeat the process indefinitely. It is not unusual for energetic patients to furnish broadcast to their friends copies of a prescription from which they themselves have derived benefit, under the common and frequent assumption that the disorders of their neighbours are similar to their own. With the druggist the matter is practically only a trade question, and he is not likely at present to decline to dispense any prescription which is handed to him, no matter how ancient its date, or whether the writer is known to him or not, provided it does not indicate any very obviously dangerous ingredients. In the interests of the public, some restrictions ought to be placed on this traffic. It is clear that the practices we point out tend to bring the art of medicine into disrepute, to deprive qualified practitioners of a large and due measure of reward, to encourage chronic medicine-taking and valetudinarianism, to practically hand over the care of a large number of sick persons to unskilled management, to do injury to many by the continued misapplication of active medicines, and to favour the loss of valuable time in the efficient control of disease. If intelligent pharmacists realised these evils we cannot doubt that they would aid in their remedy. Perhaps some authoritative declaration on the subject from the Royal Colleges might be of service.

THE Harveian Oration, at the Royal College of Physicians, will be delivered by Dr. Habershon, on Wednesday, June 27th, at four o'clock.

THE Duchess of Albany will open the new building of the Chelsea Hospital for Women on July 10th. The hospital will be considerably enlarged, and will contain sixty-five beds.

PETITIONS have been presented to the House of Commons by Sir Massey Lopes, from justices of the division of South Roborough and from East Stonehouse, against any alteration of the Contagious Diseases Act.

THE President of the Royal College of Surgeons, and Lady Wells, have issued cards of invitation to a *conversazione* at the College, at 9 p.m., on Wednesday, June 20th.

THE President and Fellows of the Royal College of Physicians have issued cards for a *conversazione* at the College, on Wednesday evening, July 4th, at nine o'clock.

THE Duke of Westminster has intimated to the Council of the National Smoke Abatement Institution his intention to contribute £500 to the Smoke Abatement Fund opened a few days since.

THE out-patient department of Middlesex Hospital is about to be remodelled and reconstructed, it having long been inadequate to the wants of the large number of patients who attend the hospital. A temporary structure has been erected for use during the building of the new departments.

IT is understood that when the new buildings of the Medical Society of London are finished, which may be expected at a very early date, his Royal Highness the Prince of Wales will honour the Society by being present at the *conversazione* which will be given on the occasion of the opening.

WITH a view to encourage the study of veterinary science, the Lieutenant-Governor of Bengal has resolved to offer two prizes, one of £50, and the other of £20, for competition by holders of agricultural scholarships from Bengal studying in the Royal Agricultural College, Cirencester.

SCARLET fever, we hear, has broken out in the married soldiers' quarters at Dover Castle. In order to prevent the further spread of the disease, the soldiers and their families are to be quartered under canvas near Fort Burgoyne.

THE vote of £10,000 for new laboratories for physiological research at Oxford, for Professor Burdon Sanderson, was energetically opposed in the Senate, partly on the ground that vivisection would be practised, and partly on account of the expense being beyond the existing resources of the University. It was carried by a narrow majority.

DR. KARL FRIEDRICH VON HEUSINGER, formerly Clinical Professor in the University of Marburg, died on May 6th, at the age of 91. He was appointed to the office in 1829, and held it nearly forty years. He was previously (1821) Professor of Physiology and Comparative Anatomy in Jena, and (1824) Director of the Physiological Institute in Würzburg. He was the author of an encyclopædic work on *Natural History and Therapeutics*, and of important contributions to comparative pathology and medical geography.

A MILITARY HEALTH-STATION IN CYPRUS.

IT has, we have been informed, been decided to use Mount Troados, in Cyprus, as a health-station for the troops serving in Egypt. This station, which is distant only thirty hours by sea from Alexandria, presents many advantages to invalids, and is specially suited to the wives and families of officers, its nearness to Egypt representing a great saving of time and expense. The health of the troops at present is excellent. General Stephenson has been occupied in an inspection of all the barracks, and is highly satisfied with the result.

VIVISECTION.

A PARLIAMENTARY return was issued this week showing the number of experiments performed on living animals in 1882. Fifty-two persons held licences to experiment, but sixteen did not use their licences. Four hundred and six experiments were performed, of which 118 were carried out under the restrictions of the licence alone, and 288 under certificates with special restrictions. The animals made use of were chiefly frogs.

A FACT FOR ANTIVACCINATORS.

IN reporting on the occurrence of small-pox in Bradford, Mr. Butterfield mentions a case which should have especial interest for antivaccinators. Out of a numerous family, the solitary one to take the disease was the only member who was unvaccinated, and he had it in so severe a form as to lose his life. All the other members of the family were revaccinated, and the disease did not spread. It is worthy of note that no precautions, except vaccination, would have availed to prevent infection in this case; for the carrier of the disease was not, at the time nor afterwards, himself a victim.

CRYSTALLINE ELATERIN.

AT a meeting of the New York Academy of Medicine, on April 19th, Dr. Caspar Griswold read a note upon crystalline elaterin, which, he said, had been found, after considerable experience, to be a thoroughly reliable article, and of uniform excellence, while most of the other preparations of elaterium (which was well known to be really one of the most efficient of hydragogue cathartics) were so unsatisfactory and variable in their action, that the profession had to a great extent given up the use of the drug.

ROYAL COLLEGE OF SURGEONS.

THREE vacancies are this year announced in the Council of the Royal College of Surgeons; two of them, we believe, are absolute; for the third, Mr. Cooper Forster will offer himself for re-election. For the two vacant seats, numerous candidates are spoken of: among provincial Fellows, Mr. Reginald Harrison will come forward, and Mr. Oliver Pemberton is also mentioned; among metropolitan Fellows, Sir William Mac Cormac, who has during the last few years rendered, and is at this moment rendering, great public service to his profession; Mr. Brudenell Carter, and Mr. Macnamara. The Fellows will rarely have had before them so many candidates, with serious claims, in excess of the number of vacant seats.

THE CLINICAL SOCIETY.

THE last meeting of this Society, for the present session, took place on Friday last, and is fully reported in this day's BRITISH MEDICAL JOURNAL. It was an additional meeting, and was held in order that several papers in the hands of the secretaries might not remain unread until next session. The attendance was not large, however, and the experiment of the extra meeting was not too successful. Some of the papers were of great merit, and deserved fuller discussion than they obtained. In dismissing the meeting, the President remarked that the cases read and discussed during the session had been good, to which opinion disinterested critics will give a willing assent; and that they had been, he considered, useful to the profession at large, as well as interesting to the members of the Society themselves.

OPERATIONS OF EXPEDIENCY.

A SOMEWHAT unusual question, says the *Boston Medical Journal*, has arisen as the result of a shooting affair in Washington. Shots were fired both by a man and woman, each having a pistol of different calibre. Balls have been found in the walls of the room of size corresponding to the bore of each of the pistols. One bullet took effect in the body of the victim, and it is uncertain from which of the weapons it was fired. The man who was shot declines to have the bullet removed, as the surgeons decide that that operation is not at present necessary for his life. The prosecuting officer suggest that the court order the extraction of the missile to determine who was the assailant. The supposed location of the ball is not reported. To the ordinary classification of operations into those of necessity, expediency, etc., we shall now have to add another category, those in aid of public justice.

HOSPITAL PROVISION FOR THE PORT OF LONDON.

FRESH arrangements are shortly to be made by the Port of London Sanitary Authority for the provision of hospital accommodation in place of the ship *Rhin*, which is to be returned to the Admiralty,

whom it was lent to the Corporation. The new hospital is to be built at an estimated cost of £4,022, on a plot of land near Gravesend, which has a river-frontage of 100 feet. This change has been the outcome of an inquiry made by a special committee of the Authority into the proposal of the Admiralty to redock the *Rhin*, the cost of which was found to be so serious, that, looking to the defective arrangement of the vessel for its purpose, the committee recommended her return, and sought for accommodation in another direction. At the suggestion of Dr. Thorne Thorne, of the Local Government Board, and of Dr. Collingridge, the Port medical officer, the idea of procuring another floating hospital was dismissed in favour of the erection of one on shore.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

PROFESSOR JONATHAN HUTCHINSON'S six lectures on Certain Diseased Conditions of the Tongue, with especial reference to their meanings and symptoms, will be delivered in the theatre of the College, on Wednesdays, Fridays, and Mondays, at 4 P.M., commencing on Wednesday, June 13th. The following are the subjects of the lectures:—Lecture I., June 13th, Definitions and General Statements; Lecture II., June 15th, States of the Tongue in Association with various Acute Diseases; Lecture III., June 18th, Conditions which may occur in association with Syphilis; Lecture IV., June 20th, States of the Tongue in association with various forms of Chronic Disease; Lecture V., June 22nd, On certain conditions occurring in early life, or sometimes congenital; Lecture VI., June 25th, Conditions introductory to Malignant Disease and those which denote it.

THE HOME HOSPITALS ASSOCIATION.

WE gather from the report of the Home Hospitals Association presented at the fifth annual meeting on May 30th, that the hospital established in Fitzroy Square has been so successful that the necessity for enlarging the accommodation had been forced upon the management by the large number of applications for admission. The hospital occupies two old houses, which have been put into perfect sanitary order by Mr. Ernest Turner, and is a striking proof of the advantages conferred by a scrupulous attention to the now well established principles of sanitary science, with regard especially to drainage and ventilation. Mr. John Wood, of King's College, stated at the meeting, that the results of surgical operations there were most satisfactory, and paid a high compliment to the excellence of the nursing arrangements, which are under the direction of Mrs. Blewitt. The Association appears to be in a flourishing condition financially, and to fulfil a manifest public want.

DANGER-SIGNALS ON RAILWAYS.

The official inquiry into the circumstances of the Pullman car disaster, which occurred on the 29th of October last, and in which a number of our profession met his death by burning, brought into force the questionable rule which Midland engine-drivers were required to obey—namely, that, when the passenger cord-communication is used, they were only to stop the train at once if they observed any unusual oscillation or other occurrence of serious portent. At the inquiry in question, Colonel Yolland expressed the opinion that, if the train had been stopped as soon as the alarm-whistle was sounded, it is highly probable that Dr. Arthur's life would have been saved." After this authoritative statement, it was impossible that the obnoxious rule could be maintained. It is obvious that many serious accidents may happen within a moving train, justifying and necessitating an immediate stoppage, and yet affording no warning for the driver to "observe." It is assuring to find that the Midland Railway Company has amended its old and dangerous rule, and issued instructions to the effect that, when an engine-driver hears the alarm-whistle on his engine sound, he shall bring his train to a stand with as little delay as possible; and that, when a guard hears his alarm-bell ring, he must stop the train as soon as possible, by using all the brake-power at his disposal, and by calling the attention of the driver. It now rests with the travelling public to support these improved rules by refraining from using the passengers' cord-communication, excepting in cases of real emergency.

MEDICAL AFFAIRS IN EGYPT.

WE learn, with great pleasure, from recent letters, that the serious difficulty which had arisen in connection with the working of the Sanitary Board of Cairo, in consequence of the scandalous job involved in the appointment of an entirely unqualified native as public analyst and member of the Board, has been satisfactorily ended by the withdrawal of that person. Dr. Grant Bey and his army medical colleague, have now returned to the Board, at which they had very properly declined to sit while the attempt was made to force upon them an unqualified colleague. Dr. Grant and his colleague have acted in this matter with a conscientious sense of public duty and professional propriety, and are to be congratulated on their dignified conduct. The resignation of the person appointed has been followed by that of Ismail Pasha Ayoub, Minister of the Interior, who appointed him, which has also been accepted by the Khedive. The business of the Board may now be expected to go on satisfactorily. But the "capitulations" seriously interfere with good government in Egypt, whether municipal or national.

PILGRIMS' FOOD AND CHOLERA.

IN connection with the recent prevalence of cholera in Madras, the following facts concerning the fasting arrangements of the pilgrims may be of interest. These people depend almost entirely for their meals upon the temple "Prasadum", which, from a sanitary point of view, is far from satisfactory. One-third of this meal is composed of sand and grit, and remnants of obnoxious insects. The prasadum is also composed of unboiled, or half-boiled, rice, not cleared of bran, gravel, or grit, and the cakes are made of the same sort of material, in addition to old, rancid, and rotten glue. The cakes are kept for some days before they are consumed. It is obligatory on the part of every pilgrim to eat a portion of this sacred prasadum, on account of its being an offering to the Deity; and it is sacrilege on the part of anyone even to examine it; while it is blasphemy to say that it is bad. The very few who attempt to cook their food only get articles such as to cause diarrhœa, even among the strongest. The water used by the majority of the pilgrims is from a tank which has been used by the pilgrims for years for washing, bathing, drinking, and other purposes. An examination of several samples of the holy food was made by the Deputy-Commissioner, Surgeon-Major Price, M.D. Some he described as disgusting in the extreme; others were better, but all are utterly unfit for human food, and likely to produce sickness if used as such. Some of the samples might make good food for cattle; but he can hardly credit that human beings could be found to masticate and digest it.

THE NEW INVASION OF PARIS.

THE number of foreigners resident in Paris is in very remarkably high proportion to its indigenous inhabitants. According to the census of 1881, the residents of Paris, who were actually born in the city, formed only 322 per thousand of its inhabitants; the residue was composed of persons born in other parts of France and its colonies, and of foreigners. No other capital in the world, it seems, contains so many foreigners, the Belgians being in the majority, there being no fewer than 45,281 of this nationality settled in Paris; then come 31,190 Germans; 21,577 Italians; 20,810 Swiss; English to the amount of 10,789; 9,250 Dutch; only 5,927 Americans, who doubtless are chiefly of the pleasure-seeking class; 5,786 Russians; 4,982 Austrians; and 3,616 Spaniards. The number of Germans settled in Paris has increased notably since 1876, and the Italian

population has also nearly doubled itself since the same epoch. The total number of foreigners has likewise shown a great tendency to increase since 1876; at that time it only amounted to 119,349, which had increased in 1881 to 164,038; this augmentation of 44,689 constituting nearly a fifth part of the total increase of the population of Paris. It is not stated whether intermarriages are frequent between the true Parisians and their varied guests; if so, considerable modifications of the type are likely to ensue in the near future.

BREAKFAST BEVERAGES.

EACH of our commoner breakfast beverages, namely, tea, coffee, and cocoa, presents sundry relative advantages and disadvantages, which have been well established by scientific experiments and general experience, and which are qualities that sometimes assume a special importance in certain conditions of health, habit, occupation, climate, and disease. Warm infusion of tea has been proved to have a marked stimulant and restorative action upon the brain and nervous system, and this effect is not followed by any secondary depression. It further increases the action of the skin, and raises the number of the pulse, while it has but little effect upon urination, excepting simply as a watery diuretic. It tends to lessen the action of the bowels. Dr. Parkes found that tea is most useful as an article of diet for soldiers. The hot infusion is a patent protective against extremes both of heat and of cold; and Sir Ranald Martin proved it to be particularly valuable in great fatigue, especially in hot climates. Coffee, like tea, when used as an article of diet, especially affects the nervous system. It is a brain- and nerve-stimulant; in very large doses it produces tremors. It increases the action of the skin, and it appears to have a special power in augmenting the urinary water. It increases both the force and frequency of the pulse. Unlike tea, it tends to increase the action of the bowels. Coffee has been proved to be an important article in a soldier's dietary, as a stimulant and restorative. Like tea, it acts as a nerve-excitant, without producing subsequent depression. It is serviceable against excessive variations of cold and heat, and its efficacy in these respects has been established in antarctic expeditions, as well as in India and other hot climates. Dr. Parkes pointed out that coffee has a special recommendation in its protective influence against malaria. While admitting that the evidence on this point was not strong, he held it to be sufficient to authorise the large use of coffee in malarious districts. Coffee should be used as an infusion. If coffee be boiled, its delicate aroma is dissipated. The theobromin of cocoa is, chemically, identical with the thein of tea, and the caffein of coffee. While tea and coffee are comparatively valueless as true foods, cocoa, by reason of the large quantity of fatty and albuminoid substances it contains, is very nourishing, and is of high dietetic value as a tissue-forming food. Compared with tea and coffee, it is a food rather than a stimulant, being akin to milk in its composition and place in the diet-scale. It is useful to sustain the weakly, and to support the strong in great exertion, as a readily assimilable and general form of nourishment.

ANOTHER EPIDEMIC OF TYPHOID FEVER FROM INFECTED MILK.

THE rapidly accumulating record of typhoid epidemics, due to infected milk, has received another exemplification in the Mid-Warwickshire Sanitary District. Dr. George Wilson, the health-officer, in reporting the outbreak, states that the customers supplied by the dealer from whom the infected milk was obtained were, fortunately, not numerous; and it was fortunate also that the early cases were reported. It was found, on inquiry, that the infected households obtained their milk from a dealer in a neighbouring village, who purchased his milk from an adjoining farm. The dealer himself had contracted the disease, and subsequently died of it, but the case was not reported; and, at the date of Dr. Wilson's visit, the son was also suffering from it. There was no case of illness at the farm from which the milk was purchased, and the well-water was free from pollution; but, at the milk-dealer's house, the well-water was found to be highly polluted, and this water was used to wash the cans, if not to dilute the milk. The pump-handle was removed, and the milk-supply stopped. Altogether, there were twelve cases, one of which proved fatal; but the further spread of the disease was at once checked. This outbreak is instructive, as Dr. Wilson observes, in showing the necessity of strict supervision of dairies; and it also illustrates the insufficiency of the Public Health Water Act to insure and protect a wholesome supply of water in districts which are not provided with urban by-laws; for, in this instance, the house was a new one. The well-water was found and certified to be good before the house was occupied; but, as the Rural Sanitary Authority had no control over the building or the drainage, a cess-pool was constructed in close proximity to the well, and leakage from this led eventually to pollution of the well-water. This contaminated water was, no doubt, the cause of the milk-dealer's illness in the first instance; for the disease being once originated on the premises, the well-water became specifically polluted with typhoid poison.

JEAN MISTRAL.

FROM time to time, sensational paragraphs have appeared in the newspapers referring to the alleged improper incarceration of Jean Mistral in an asylum in France. It was asserted that, while travelling for his father, a woolstapler at St. Rémy, he journeyed, in 1837 through Poland, and there fell in love with Wilhelmine Dombrowska, a poor girl, and was married to her. The father, disapproving of the match, refused to render them any assistance, and the couple, with great difficulty, travelled to St. Rémy, having procured an old cart and horse. They must have presented a picturesque spectacle —Wilhelmine picking up coppers sufficient to provide a lodging and scant food on the road, and Jean driving the wearied steed. News had reached the father from Tarascon that they were returning home, and he ordered his son to be seized, on the ground that he was mad. He was shortly placed in an asylum at Pont St. Côme, and there he has remained. What became of his wife does not appear to be known, but she is said to have gone back to Poland, protesting that her husband was sane, and was only locked up on account of the objectionable marriage. The father is now dead. A relative, M. Fournier, has for many years been trying to obtain Mistral's release, and has recently brought an action, before the Civi Tribunal at Tarascon, against the latter's nephew, who is the guar dian of his person and property, which amounts to £16,000. A few days ago, judgment was given against M. Fournier, who has had t pay ten thousand francs and costs. What Jean Mistral's state o mind may have been when he was first placed in an asylum, we hav no evidence upon which to form a judgment, but we know, on th best authority, that from time to time he has been officially visite during the last ten years, and that he was, and is, unquestionab insane.

PRIZE OF THE GROCERS' COMPANY.

A CRUX in sanitary research has undoubtedly been suggested as t first subject for the quadrennial discovery prize of £1,000 offer for competition by the Company of Grocers. The subject announc is the following:

"To discover a method by which the vaccine contagium may cultivated apart from the animal body, in some medium or me not otherwise zymotic; the method to be such that the contagi may by means of it be multiplied to an indefinite extent in s cessive generations, and that the product, after any number of s generations, shall (so far as can within the time be tested) p itself of identical potency with standard vaccine lymph."

The prize is open to universal competition, British and fore Competitors for the prize must submit their respective treatise or before the 31st of December 1886; and the award will be m not later than May 1887. In relation to this prize, as in relatio other parts of the Company's scheme in aid of sanitary science

Court acts with the advice of a Scientific Committee, which at present consists of the following members: Messrs. John Simon, F.R.S.; John Tyndall, F.R.S.; John Burdon Sanderson, M.D., F.R.S.; and George Buchanan, M.D., F.R.S. Evidently, the cultivation of the figurate vaccine particle or contagium virus by the Pasteurian method is one of the great desiderata of public medicine, and will confer the greatest imaginable benefit in facilitating the practice of vaccination against small-pox, and removing the most plausible objections to compulsion urged by the deplorable fanatics who exert their utmost energy to neutralise the benefits of Jenner's immortal discovery. If the contagium could be cultivated in fluids, or by Koch's method, so that it could be absolutely separated from the lymph in which it is first taken from the vesicle, and from the possible admixture of other corpuscular elements in the lymph derived from the blood, it is obvious that many of the objections expressed on the occurrence of vaccination would no longer have even a plausible basis. The advisers of the Grocers' Company have, as might have been expected from their great scientific eminence, and cognisance of the public relations and political connections of sanitation, selected a subject than which few more intimately concern the welfare of the people.

DALRYMPLE HOME FOR INEBRIATES.

THE "Habitual Drunkard's Act (1879)" was enacted to enable habitual drunkards to surrender their liberty for a period not exceeding twelve months, so that they might be placed under conditions most favourable for their cure. From various causes, and not only the reluctance of a man or woman to go before two magistrates and declare him, or herself, an habitual drunkard, the Act has, up to the present time, not received a full trial. The "Dalrymple Home for Inebriates Association" has recently taken steps to obtain possession of a suitable house and grounds in Hertfordshire; and on Thursday, May 31st, a meeting was held at the Mansion House, under the presidency of the Lord Mayor, in order to bring the objects and needs of the Association before the public. The objects were stated in the following resolution, which was moved by Dr. Farquharson, M.P., and seconded by Dr. Alfred Carpenter, J.P.: "That the diseased state of many inebriates calls for their residence in some institution where they may be placed under curative treatment; where the surroundings will be favourable to cure; and where there will be no temptation from the presence of intoxicating liquor." The needs of the Association are money, about £3,000 to make up the £5,000 required for the Home; and, if we may judge by the scanty attendance at the meeting at the Mansion House, a little more interest and enthusiasm among the friends of temperance. Dr. Cameron, M.P. for Glasgow, said that experience in America showed that the majority of habitual drunkards there were willing to put themselves under control. In this country the experiment has hardly been fairly tried, inasmuch as the few establishments which are licensed under the Act, the fees are, it was said, so high that only the richer classes could pay them. We gathered that in the Dalrymple Home it is proposed to make a charge of about a guinea or twenty-five shillings a week, thus bringing the advantages of the Act within the reach of a large class. The scheme appears worthy of support for many reasons, especially because the Habitual Drunkard's Act expires in 1890, and it is therefore most desirable that an extended experiment should be made under its provisions. An appeal is made for donations, which will be received by the Honorary Secretary, Dr. Norman Kerr, 42, Grove Road, Regent's Park, N.W.

THE CONTAGIOUS DISEASES ACTS.

A LARGE and influential deputation from Chatham, accompanied by Members from Portsmouth, Plymouth, and Devonport, recently waited upon the Home Secretary, to urge upon the Government the advisability of continuing at the naval and military towns the metropolitan police charged with the duty of carrying out the Contagious Diseases Acts. The deputation characterised the condition of the towns before the passing of the Acts as deplorable, and expressed their conviction that that state of things would follow the withdrawal of the powers of the Acts. Regret was expressed that the Government had done away with compulsory examination, as nothing short of that would tend to check disease. Sir William Harcourt, in reply, said he fully recognised the favour with which the Acts were regarded in the towns where they were in operation. The Government, however, could not force the House of Commons; and, as the Acts had been condemned by that body (for the vote on the subject could not be regarded in any other light), the Government had felt themselves bound to give effect to that decision by suspending the operation of the Acts. The Government had endeavoured to inflict as little inconvenience and injury as possible upon the communities concerned; and, with that in view, they had not entirely withdrawn the assistance that the metropolitan police were able to afford. The real question was, what could be done for these communities, short of continuing compulsory examination, to which the decision of the House was solely directed, and up to that point the Government would be glad to receive any practical suggestions. Much good had been done to the females when in hospital, and many had been reclaimed, having since become respectable members of society; and it was said that, by the decision of the House of Commons, these advantages would be lost, as the authorities would have no power to take women to the hospital compulsorily, or to retain them. He asked whether the benefits thus derived would not be preserved if power were given to compulsorily retain in hospital, until their health were re-established, all those who came there voluntarily. He thought the preservation of order in the streets was in the hands of the local authorities, whose officers ought to deal with all cases of insult or disorderly conduct which came under their notice. In conclusion, he expressed his willingness to hear any practical suggestions which might be made. Several members of the deputation expressed their belief that compulsory examination was the only remedy which would meet the case. Having thanked the right honourable gentleman, the deputation withdrew.

THE SANITARY CONDITION OF CYPRUS.

WE have been favoured with a copy of the second annual report by the Sanitary Commissioner with the Government of Cyprus, for the year 1881. This very interesting report was drawn up by Dr. Barry, who, having resigned his position as Sanitary Commissioner of Cyprus, is now employed in the Local Government Board. When Cyprus was first occupied by British troops, it had a bad reputation as an unhealthy climate. No doubt, the health of the troops was bad, but many causes conspired to bring this about. The season was exceptionally unhealthy, the troops were located in bad situations, and, as party spirit ran high on the question of the occupation of the island, a good deal of political capital was made out of the reports that were sent home by those who disliked the place, and the hardships and inconveniences to which they were subjected in an island long neglected under a ruinous Turkish administration. We have recently seen something of the same spirit in the pitiful complaints sent home from Egypt at the beginning of the late war, and repeated without shame before the Committee that inquired into the hospital administration during that war. We consider this report to be a model of its kind. The matter is well arranged, the facts clearly and briefly stated, and the statistics on which most of the facts rest are given in well constructed tables. Looking through the reports from the various towns and districts, we find the same story throughout. The prevailing diseases appear to be ague, ophthalmia, rheumatic affections, syphilis, and diseases of the respiratory organs. In some districts, malarial fevers were noted as increased by an exceptionally heavy rainfall. In Cyprus, as elsewhere

whenever the subsoil is waterlogged, these malarial fevers are sure to prevail, particularly when vegetable decomposition is aided by high temperature. Professor Maclean, as well as many other writers on tropical and sub-tropical diseases, has much insisted on the fact that where malarial fevers prevail on arid soils, water, in a larger proportion of cases, is generally found pent up at some distance from the surface. More than one writer, very notably Dr. Moore of the Bombay Service, and, speaking generally, a good observer of natural phenomenon and the etiology of tropical disease, has given a somewhat rude and very emphatic denial to this statement. Dr. Heidenstam, the medical officer of the Larnaca district, in explanation of the prevalence of malaria in his district, makes the following observations. "It will be found, however, that the land in the low plains, where you meet with dry, arid soil, almost completely devoid of vegetables, has, existing a few feet below the surface, swamps of water, lying between beds of sandy and argillaceous formation largely impregnated with organic vegetable matter, which, favoured by a hot climate and a humid atmosphere, greatly saturated with aqueous vapours, easily evaporate through the dry and porous soil when parched with the summer heat." It is pleasing to see that the local government is alive to the immense importance of sanitation, and that, judging from the report before us, the recommendations of the Sanitary Commissioner meet with attention. There is, at page 72 of this report, an admirable memorandum giving suggestions for the sanitary improvement of the municipal towns in Cyprus, which is based on a similar document drawn up by the Sanitary Commissioner with the Government of India. If the directions given in this memorandum are only followed, it is certain that an immense improvement in the health of the community must follow. Already, in response to the measures taken, chiefly in the direction of improved dwellings and food, the health of Larnaca, Dr. Barry thinks, fairly represents that of the island generally. The health of the community is considerably above the average of that of England, and the mortality-rate is fully 10 per 1,000 below that of Malta. Evidently Cyprus, under British rule, has a good future before it.

SUMMER DIARRHŒA.

In view of the recent continued warm weather and the approach of the season which is usually the hottest in the year, the subject of summer diarrhœa claims attention. In infants especially, it is a matter of much interest and importance alike to the sanitarian and to the practitioner, because it is a special variety distinguished from the same disease in adults by its etiology, and on the recognition of this fact success in treatment depends. As regards causation there is no question as to two points: 1. Its association with a milk diet; 2. Its occurrence almost invariably in hot summer weather. Though the breast-milk will sometimes produce diarrhœa, it is by far more common to find this occurring in a severe form when cow's milk of one kind or another is used. The question why precisely it is so, invites further study. According to some, we must regard the excess of casein over the proportion found in human milk as the source of evil. Other authorities blame the addition of an undue proportion of sugar. Recently again, the germ theory has taken hold of this disease, which is regarded as the outcome of lactic fermentation in the intestine. The characters of the stools, acid, and containing undigested milk full of bacteria, bear on this view. The existence of this condition does not negative the influence of the chemical peculiarities or modifications of milk already mentioned for these by delaying its digestion or by providing suitable pabulum (sugar) promote the action of bacteria. Not one of these possible causes therefore is to be ignored. There are circumstances in such cases, however, which suggest a septic origin. Their occurrence in summer as said, is one of these, and their greater frequency in the close, ill-ventilated, and often carelessly managed homes of the poor is another. It is here that we find the disease in its greatest severity. It is not unusual to find in such homes that there is but one source of nourishment, a solitary feeding bottle in use, and that is sour, and perhaps has been so for days or weeks. The etiology of the disease is then not far to seek. The characters of infantile summer diarrhœa are familiar to all practitioners and have been described by various authors; the only point we would now notice in this connection is its liability to be simulated or complicated at certain ages by the watery evacuations due to dental irritation. This distinction is important, for it bears materially on treatment. On this point we may say that the numerous expedients which therapeutic ingenuity has suggested at various times, form a fair gauge of the perplexities of medical men in such cases. These perplexities, it is now generally admitted, have arisen from an imperfect comprehension of the relation between the physiology of infant digestion and diet. Accordingly, we now hear less of strong astringent remedies and more of prepared foods. It is not necessary that we should classify or compare these at present, and medical opinion everywhere will support us in condemning, as unsuitable for young infants, those of purely farinaceous character untreated by any agent having the effect of ptyalin. While we do not deny that amyloid foods which have been so treated may reasonably be given as nourishment, and have often been so used successfully, we may be allowed to ask why amyloid materials capable of transformation into fat should be preferred to fat already existing in the form of milk. This, probably, they never are when the breast milk is obtainable. It is the greater difficulty of digestion, and the uncertain composition in towns, of cows' milk, when used as a substitute, which has given an impetus to the practice of artificial feeding. But these are surely avoidable evils. Dilution, with an equal or rather greater, quantity of pure water, is usually found a sufficient remedy for the former without the elimination of caseous or other ingredients, and care in the selection of a dairy should render the composition uniform. It seems to us a questionable and usually unnecessary proceeding to abandon the use of *bonâ fide* milk for almost any kind in favour of artificial preparations. But let the milk, if used, be carefully kept in a cool place, and obtained fresh as often as possible in a day; and, above all, let cleanliness be a first consideration in regard to all bottles so used in its administration. Medicinal agents, which aim at promoting digestion of milk and these we may regard as the most important, are perhaps equally useful, whatever be the fault assumed to exist in the milk. The speedy result of milk-indigestion in the alimentary canal may be fermentation. The acid stools, aphtha, etc., point to this. The obvious remedy is the addition of an alkali, preferably one with antiseptic properties, and of such there is no lack in the *Pharmacopœia*. But we are apt to forget that every infant liver contains in the bile a fluid well adapted to the necessities of the case; and we have known a repeated moderate excretion of bile by means of a cholagogue cut short this form of diarrhœa, as it is known to arrest attacks of dysentery. This subject is now receiving much consideration at the hands of officers of health. It behoves medical men, especially in towns, to give attention to the whole history of the complaint and its management; and, as far as possible, to exclude from their minds in doing so, all bias in favour of one theory or another. The true solution of the difficulty will probably be found to reconcile apparently conflicting views. We offer our own observations without reserve, since we do not desire so much to promulge a doctrine as to invite a critical examination of this subject, and opinions formed upon it.

SCOTLAND.

The disease among horses called "pink-eye," which was some months ago prevalent in Glasgow and its neighbourhood, has

ade its appearance in Aberdeen, and has not only attacked a large mber of animals, but has been of a very fatal nature, several aths having taken place.

ZOOLOGICAL EXCURSION AT ABERDEEN.

E members of the class of Natural History had their first ex- sion on Friday last, under the guidance of Professor Nicholson. er one hundred men turned out to the excursion. The place ited was the shore along the coast south of Aberdeen. At low er a large number of forms of animal life were collected by the husiastic young naturalists. Altogether the excursion was both oyable and profitable, and we trust other similar excursions will low.

THE CHARLES MURCHISON SCHOLARSHIP IN CLINICAL MEDICINE.

second examination for this scholarship was held in Edinburgh the 17th and 18th of April, the first examination having been l in London last year. Twelve candidates entered their names the competition, and the examination was conducted by Dr. rge Balfour, President of the Royal College of Physicians of nburgh; and Professors Maclagan and Greenfield. The scholar- was gained by George Cecil Dickson, M.B., C.M., Edinburgh. next in order of merit was John Bland Sutton, M.R.C.S.Eng., L.R.C.P.Lond., and several of the candidates displayed much t.

REGISTRAR-GENERAL'S RETURNS.

returns of the Registrar-General for the week ending May 26th that the death-rate was 28.5 per thousand of estimated lation. This rate is 5.9 above that for the corresponding week st year, and 1.6 above that for the previous week of the pre- year. The lowest mortality was recorded in Leith, viz., 19.2 housand; and the highest in Dundee, viz., 36.6 per thousand. mortality from the seven most familiar zymotic diseases was e rate of 5.2 per thousand, or 1.1 below the rate for the ous week. Measles and whooping-cough were the most fatal natic diseases, the mortality from these being greatest in Glas- There were 149 deaths from acute diseases of the chest, 38 more than in the previous week. The mean temperature 54.0°, being 2.9° above that of the week immediately preced- nd 0.9° above that of the corresponding week of last year.

THE SANITARY INSTITUTE OF GREAT BRITAIN.

ongress of the Sanitary Institute of Great Britain is this year t in Glasgow, and the meetings will extend from the 25th to th September inclusive. In connection with it, there will be ary exhibition in Burnbank Drill Hall. At a public meeting Glasgow last week, and presided over by the Lord Provost, posed arrangements for the Congress were submitted. The nts of the various sections will be: for Sanitary and Pre- Science, Professor W. T. Gairdner; for Engineering and ecture, Professor Smith; and for Chemistry, Meteorology, and y, Dr. R. A. Smith. The sum required for expenses was esti- at from £1,200 to £1,500, and of this £470 has already been bed. In addition to the actual work of the Congress, there a public dinner and other hospitalities to the members.

CHAIR OF MEDICAL JURISPRUDENCE IN ABERDEEN.

tion to the names of candidates for the Chair of Medical idence at Aberdeen University, whom we announced last uite a plethora of applicants have come forward. Dr. ge has finally decided to apply, and there are two other local tes—viz., Dr. Urquhart, and Dr. R. J. Garden, one of the s to the Infirmary. Dr. Matthew Hay, assistant to the Professor of Materia Medica in the University of Edinburgh, has also signified his intention of being a candidate. The training which Dr. Hay received in Germany, under Hoppe-Seyler, Schmiedeberg, and Recklinghausen, and the fruit of that training, as evidenced by his able papers on the "Action of Saline Cathartics," stamp him as a man who would ably discharge the duties of the Chair. The successful experience in teaching acquired by him, in conducting the classes of practical materia medica in Edinburgh, affords proof of his teaching. A students' testimonial is being signed in favour of Dr. Angus Fraser; and it is said that a similar one has been promoted in favour of Dr. Garden. It is not likely that the University Court will meet before July, so that the appointment will not be made until the end of the summer session at the earliest.

MEASLES IN GLASGOW.

No less than eighty-six deaths from measles have occurred in Glasgow during the last fortnight, and in his report on the subject, Dr. Russell speaks strongly on the little care that is taken by parents and guardians of many children suffering from that disease. While no epidemic disease is capable of so enormously adding to the death-rate as measles, there was no disease of which so little care was taken, or regarding which so little sympathy was felt by parents in any efforts which might be made to advise or enforce reasonable respect for the interests of their neighbours. Their mortality from measles, bad as it was, gave but a warning of what that disease might do.

TYPHOID FEVER AT SANQUHAR.

THE medical officer of health at Sanquhar, having reported to the local authority the occurrence of three cases of fever in one family, which consisted of nine persons, and whose dwelling consisted of only one room, which measured eighteen feet by fourteen feet, and was only six feet six inches in height, appointed a committee to do whatever might be necessary to isolate the patients, and also to prevent the spread of the disease. The report very properly characterised the circumstances of the case as urgent; in fact, so much disease in so badly constructed and overcrowded a room might well entitle it to be called a den of fever.

IRELAND.

THREE deaths from small-pox were registered last week in Belfast.

NORTH CHARITABLE INFIRMARY, CORK.

THIS institution is in debt to the amount of £700, and the trustees have issued an appeal to the citizens to liquidate this liability. During the past year nearly 30,000 patients received treatment at the extern department, and upwards of 1,000 cases were admitted into the wards of the hospital. These facts show the strong claims the institution has on the public for support.

THE LATE DR. HAYDEN.

THE President and Fellows of the King and Queen's College of Physicians in Ireland, have accepted, with much gratification, a marble bust of this eminent Fellow, at one time Vice-President of the College, which has been presented to it by the Committee formed to establish a memorial of the distinguished author of the *Diseases of the Heart and the Aorta*. The bust is an admirable likeness, and is placed on a handsome pedestal of Galway marble.

SMALL-POX IN DUBLIN.

A SHIP arrived in Dublin last week having on board a case of small-pox. On hearing of the matter, Dr. Byrne, one of the medical offi-

cers of the South Dublin Union, at once visited the ship, accompanied by the medical officer of health for Dublin, Professor Cameron, and had the patient removed to the port hospital-ship. No communication was allowed between the ship on which the case occurred and the shore, and the ship itself was disinfected. Upon Professor Cameron's recommendation, the Guardians decided to appoint a temporary medical officer to take charge of the case on board the hospital-ship at a salary of one guinea a day. This is, we believe, the first case of infectious disease that has been taken on board the hospital-ship, which a short time ago the Guardians were complaining of having to pay for, and wanted to get rid of.

FEVER IN IRISH DISTRICTS.

A GOOD many cases of typhus fever have appeared recently in Kilkenny No. 1 District, and the registrar reports that the disease is still on the increase. An outbreak of fever has taken place at Ballykennelly, and the National School has been closed in consequence of the prevalence of the disease. A school near Castlemartyr, a few miles distant, has also been closed, as the teacher and several of the pupils were suffering from the disease. In consequence of the prevalence of fever and scarlatina at Athlone, the Land Commissioners have transferred their sittings to Roscommon. There are, it is stated, a good many cases of both diseases in the military barracks and the soldiers are not permitted to mix with the civilians. The fever is of a typhoid character, due probably to some impurity in the water supply.

HEALTH OF CORK.

DURING the four weeks ending May 19th, the total number of registered deaths amounted to 167, including 43 dying in the workhouse; while 173 births took place. The annual death-rate per 1,000 inhabitants during this period gives a total ratio of mortality of 27.0; but, deducting those dying in the workhouse, which is outside the borough, the urban death-rate will then stand at 20.1: from infectious diseases, 0.1; an infant mortality of 2.0; and a birth-rate of 28.0. These figures go to show that no material change has taken place in the urban death-rate when compared with the corresponding period last year; there has, however, been a decrease in the number of cases of fever as compared with last year.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

A SPECIAL meeting of the Council of this College was held last Saturday for the election of a Professor of the Practice of Medicine in the School of the College, in the place of Dr. James Little, who resigned the chair last March. There were only two candidates, Dr. Arthur Wynne Foot and Dr. John William Moore, both physicians to the same hospital—the Meath—and both lecturers on Medicine in other medical schools. The seven electors, having been chosen by ballot, proceeded to the election of the Professor by the same process, and Dr. Foot was declared elected. By his appointment, the Ledwich School of Medicine looses the services of one of its ablest lecturers. The annual meeting of the Fellows of the College was held subsequently. A resolution was proposed by Dr. Thornley Stoker, altering the mode of election of professors and examiners. The method heretofore, under the charter, was that seven members of the Council were drawn by lot, and to these was entrusted the election. The change proposed by Dr. Thornley Stoker, whose motion was carried, is that the entire Council shall elect by open voting. A motion was moved by Professor Jacob, that the College should cease to recognise night lectures. A lengthened discussion ensued, and the motion was, on a division, negatived by a large majority. The meeting was then adjourned to Monday. A resolution, proposed by Mr. Thomson, that, in the year 1887, the President then elected should hold office for two years, instead of one, as at present, was carried by a bare majority. Subsequently, the election of the officers of the College for the ensuing year was proceeded with. Mr. William I. Wheeler, of the City of Dublin Hospital, was elected President, and Mr. Edward H. Bennett, Professor of Surgery in the University of Dublin, and of Sir Patrick Dun's Hospital, was elected Vice-President. The only change in the Council was the replacement of Mr. Elliott by Mr. Charles Cameron, Professor of Chemistry in the College School, and Superintendent Medical Officer of Health for Dublin. The following gentlemen accordingly now constitute the Council: William Colles, Richard G. H. Butcher, Rawdon Macnamara, George H. Porter, James H. Wharton, Edward D. Mapother, Archibald H. Jacob, Edward Hamilton, Philip C. Smyly, Robert M'Donnell, George H. Kidd, John Denham, J. Kellock Barton, Samuel Chaplin, T. Jolliffe Tufnell, Anthony H. Corley, W. Thornley Stoker, William Stoker, and Charles H. Cameron, Esquires. The names are arranged in order of Fellowship seniority. One hundred and twenty-two Fellows voted at the election.

THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE forty-first annual meeting of the Society was held at the Royal College of Surgeons on Monday last. The annual report was read by Dr. J. W. Moore, one of the honorary secretaries. It stated that the financial condition of the Society remains fairly satisfactory. During the past year, the fund in the treasurer's hands amounted to £2,053 0s. 7d.; of this, £469 19s. 3d. has been added to the funded property of the Society, in accordance with the wish of the donors. The sum of £1,156 has been distributed, leaving a balance of £285 in the treasurer's hands, to meet the necessary working expenses. Of the sum distributed, £185 was to medical men, £856 to widows, and £125 to orphans. One hundred and twelve applications for relief have been received during the past year. Of these, eight were from medical men, of whom five were new; ninety-one from the widows of medical men, of whom eleven were new; and thirteen from orphans, of whom four were new. Substantial additions to the funded property of the Society have been made during the past year by several bequests and donations. Mr. Hans Irvine bequeathed £100; Dr. Colvin of Newry bequeathed £200 Dr. John M'Munn of Sligo bequeathed the reversion of £200 to this Society; Dr. William Geary of Limerick left £100 to this fund; and finally, Dr. John Wilkinson of Limerick left £1,000. Dr. Robert M'Donnell of Dublin has given a donation of £25; Dr. Boxwell of Wexford a donation of £21; and Surgeon-Major Roe, A.M.D., of Allahabad, a donation of £10 10s.—all to be added to the funded property of the Society, in accordance with the wish of the donors. Several other donations were also made. The adoption of the report was moved by the President of the King and Queen's College of Physicians in Ireland, who alluded to the very limited support the Society received from the profession at large, especially in some parts of Ireland. The following resolution was proposed by Mr. E. Hamilton: "That the committtee feel it their duty to urge strongly upon the profession that even a moderate annual contribution to this fund would enable them to assist more adequately our necessitous brethren and their families, upon whom the disturbed state of the country has imposed much additional privation and embarrassment." He said that it was sad to think that only one-sixth of the practising members were subscribers to the fund. The burden fell upon that small proportion, which all the rest thought too onerous to be borne by themselves. He trusted that, in future, increased exertions would be made to enlist the assistance of the profession. We are glad to see that, when the bequest of Dr. Wilkinson is added to the funded capital of the Society, it will amount to a sum of close upon £20,000.

RAILWAY ACCIDENTS.—A Blue-book has just been issued giving returns of accidents and casualties as reported to the Board of Trade by the several railway companies in the United Kingdom during 1882. From this it appears that the total number killed during the year was 1,121, as against 1,096 in 1881; and injured 4,601, as against 4,571 in 1881. The passengers killed were 127, and injured 1,739, as against 108 killed and 1,860 injured in the previous year.

FIFTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

To be held in Liverpool, July 31st, August 1st, 2nd, and 3rd, 1883.

THE MEDICAL HISTORY OF LIVERPOOL.

By FREDERICK WALTER LOWNDES, M.R.C.S.Eng.,
Surgeon to the Liverpool Lock Hospital.

EARLY HISTORY AND NAME.—LIVERPOOL IN THE FOURTEENTH CENTURY. — LIVERPOOL IN THE SEVENTEENTH CENTURY. — *Dr. Sylvester Richmond.* — *Dr. Fabius.* — LIVERPOOL IN THE EIGHTEENTH CENTURY.—*The Old Infirmary.—Matthew Dobson. —Dr. Houlston.—Dr. James Currie.—J. L. Park and Alanson.—Henry Park.—The General Dispensary.—Moss's Familiar Medical Survey of Liverpool.—The Ladies' Charity.*—LIVERPOOL IN THE NINETEENTH CENTURY.—*Celebrated Trial for Poisoning.—The Royal Infirmary.—Dispensaries.—Northern Hospital.—Lock Hospital.—School of Medicine.—Medical Institution.—Meetings of the British Medical Association in Liverpool.—Old Southern and New Royal Southern Hospitals.—Lying-in Hospital.—Infirmary for Children.—Medical Journals Published in Liverpool.—Stanley Hospital.—Eye and Ear Infirmary.—Various Medical Institutions. —Hospital Sunday and Saturday.—Conclusion.*

As Liverpool is to be honoured this year by a visit from the British Medical Association, it has been thought desirable that its medical history should appear beforehand, for the information of visitors; and I have been requested to write it. I should have been altogether deterred from so formidable a task, but for the fortunate circumstance that the ground is not untrodden, one medical history of Liverpool having been already written, which covers the ground up to within thirty years ago. Besides this, I have had other abundant materials kindly placed at my disposal by different friends; while, as a native of this city, and student at its medical school, I am consequently familiar with its more recent medical history.

EARLY HISTORY AND NAME.—Before passing on to matters of more immediate medical interest, it will be desirable to give some account of the earlier history of Liverpool itself. Few, if any, cities or towns have grown with such extraordinary rapidity within so short a period; and a perusal of this will explain much that may appear singular in its medical history. It is only within the last three years that Liverpool has become a city, prior to which its inhabitants delighted in calling it "the good old town of Liverpool." Although this has been much ridiculed, Liverpool being generally regarded as a very modern town, its pretensions to antiquity are greater than is generally believed. Passing over earlier details, which are doubtful or of minor importance, and coming to such historical facts as are beyond dispute, we learn that Liverpool received its first charter, constituting it a borough, from King John in 1207. The following are the exact terms of the charter in the original, supplying the contractions.

"*Carta Regis Johannis.* *Rex omnibus qui burgagia apud villam de Liverpul habere voluerint, etc. Sciatis quod concessimus omnibus qui burgagia apud Liverpul ceperint quod habeant omnes libertates et liberas consuetudines in villâ de Liverpul quas aliquis liber burgemotus super mare habet in terrâ nostrâ. Et nos vobis mandamus quod secure et in pace nostrâ illuc veniatis ad burgagia nostra recipienda et hospitanda. Et in hujus rei testimonium has literas nostras patentes vobis trasmittimus Teste Simon de Pateshill, apud Winton, xxviii die Aug., anno regni nostri nono."

The burgages mentioned in the charter were tenements or dwellings, which must have been constructed by the King's order before the charter was granted. Now, it will be observed that, in this charter, the name is, with a very slight alteration, the same as it is now. The second part of the name is derived obviously from the "Pool" which the river Mersey formed at this spot, and which, till within a comparatively recent period, flowed into the town for some distance. Much controversy has been raised, however, as to the origin of the first part of the name, popular tradition having assigned it to a bird, the "liver," otherwise called "cormorant," or "shoveller duck," which was supposed to frequent the Pool. This tradition derived apparent confirmation from the original seal of Liverpool, which bears a bird with elevated wings, a sprig in its beak, and a scroll below. On the extreme right are the symbolic crescent and star. On the scroll are the letters IOPIS, a supposed contraction for Johannis. Literary antiquarians give to this so-called "liver" a much more ancient origin, it being intended to represent the symbolic eagle of St. John the Evangelist. As we have seen, the first charter of our borough was granted by King John, and in the punning or "canting" heraldry of the time there was a threefold allusion to the fact, St. John being naturally adopted as the patron saint. There were the eagle of the Evangelist, the crescent and star of the Baptist; and as if to make assurance trebly sure, the letters signifying the contraction for Johannis. It is a very singular fact that, in the original seal, the name of the borough was spelt "Liverpol." It has been tortured into no fewer than forty different variations, among which are Liferpole, Litherpoole, Lyrpole, Lyverpoole, but it has ultimately settled down into that which is given in King John's charter, with the exception of the double "o" for the "u." The tradition of the "liver" being thus completely exploded, it only remains to note that, of the many conjectures and etymologies which have been hazarded as to the real origin of the first part of the name, none has been found which meets with general acceptance. Such is the conclusion of Sir James Picton, Liverpool's most recent historian, whose interesting work will well repay perusal.*

LIVERPOOL IN THE FOURTEENTH CENTURY.—In the year 1360 Liverpool was visited by the pestilence known by the names of the "black plague," "black death," "Sudor Anglicanus," or "sweating sickness," which had appeared in London in 1348, committing frightful ravages. The number of deaths in Liverpool was so great, that burial in the parish churchyard of Walton, which was more than two miles distant, became impracticable, and a licence was obtained in 1361 from the Bishop of Lichfield and Coventry (in which diocese Liverpool then was), for the interment of the dead in the ground surrounding the chapel of Our Lady and St. Nicholas. This licence, and another authorising the dedication of the chapel and cemetery adjoining, which are preserved in the ecclesiastical register of Lichfield, prove conclusively that the old parish church of St. Nicholas, though rebuilt and altered entirely out of its original form, has existed for upwards of five centuries. And although the visitor, with a taste for antiquities, will find no very remarkable specimens in the city itself, he will find in the "Calder Stones," situated three and a half miles from the Liverpool Exchange, and in the neighbouring churches of Childwall, Sefton, and Hayton, much both to interest and instruct him.

LIVERPOOL IN THE SEVENTEENTH CENTURY.—While doing justice to the ancient history of Liverpool, it must be frankly admitted

* *Memorials of Liverpool*, by Sir J. A. Picton, vol. i, page 10.

* *Op. cit.*, vol. i, pages 16 and 17. The following passage is quoted from Baines's *History of Liverpool*. "Most of the attempts hitherto made to explain the meaning of the first part of the word Liverpool, have been very unsuccessful. I shall not add to the number of conjectures, but point out the one which appears to me to be the most probable amongst those already made. A difficulty arises from the fact that it is scarcely possible to tell whether the original name of the township was Liverpool, Litherpool, or Lithepool, and whether the name was spelt in all those ways indifferently. When Camden visited Liverpool, in the reign of Queen Elizabeth, he found the name written and pronounced Litherpoole; but he says that the original name, in the time of the Saxons, was Liferpole. That would have been as nearly as possible the present time's (*i.e.*, previous to King John), for the Saxons used the letter *f* where we use the *v*. But there is not the slightest evidence as to the manner in which the name of Liverpool was written at that time. The most ancient deed now in existence in which the name occurs, is one of the reign of Richard the First, about the year 1190. . . . In that the word is written Liverpol, modernised into Liverpool, which confirms in some degree the spelling of Camden. The same modes of spelling (or contractions, which are equivalent to it) occur in King John's charter to the town of Liverpool, granted in the year 1207; in the second charter granted by Henry the Third, in the year 1229, and in most of the deeds of that age. There are exceptions, however. The most remarkable of these is found in that ancient and curious record of the royal rights, entitled *Testa de Neville*, in which the word is written Litherpol. (*Testa de Neville* 371). That part of *Testa de Neville* which relates to Lancashire, must have been drawn up in the reign of King John, for we find mention made in it 'of the Earl of Morton, who now is King,' which description can apply to no other than King John. The name is written Lithepole in the sheriff's accounts, in the reign of Edward the First, the grandson of King John. These modes of spelling are therefore of nearly equal antiquity, so far as we have the means of judging from original documents. I am inclined to think that the Lider and Lita of *Domesday Book*; the Liver of the reign of Richard the First, the Lither of *Testa de Neville*, and the Lithe of the sheriff's accounts, are all originally the same word, and that they are derived, as has been suggested, from the old Gothic word Lide, or Lithe, the sea; or from some of the words formed from it, as Lid and Liter, a ship; Lithe, a fleet of ships; Lithesman, a seaman. We find this word as a part of several names around the coast, as in Lytham at the mouth of the Ribble; Litherland and Liverpool, at the mouth of the Mersey; Lidford, in Devonshire; Lithermore, or Livermore, in Suffolk; and probably Leith, in the estuary of the Forth. The old Scandinavian name Forth, has entirely superseded the classical name Bodotria in the Frith of Forth; and it has been clearly shown by Dr. Jamieson, Sir Francis Palgrave, and other writers, that Scandinavian names, as well as Scandinavian words, abound in the north of England and in Scotland. It is at least a curious coincidence that the river Liffey, which flows into the bay of Dublin, is called the river Lith, in six or seven official documents published in the reign of King John."

that it remained a very poor obscure fishing village until the close of the 16th century. Its earliest parochial register commences in 1661, and it did not attain to the dignity of a separate parish until 1699, having, until then, been a chapelry in the parish of Walton. We read in Macaulay's History that "in the days of Charles II Liverpool was described as a rising town which had recently made great advances, and which maintained a profitable intercourse with Ireland and with the sugar colonies. The customs had multiplied eight fold within sixteen years, and amounted to what was then considered as the immense sum of £15,000 annually. But the population can hardly have exceeded 4,000; the shipping was about 1,400 tons, less than the tonnage of a single modern Indiaman of the first class; and the whole number of seamen belonging to the port cannot be estimated at more than 200."

Dr. Sylvester Richmond is mentioned by Smithers as a surgeon living here between 1623 and 1692. He gave £100 towards the endowment of some almshouses, which were built on what was known as Shaw's Brow, and were afterwards removed to make way for the old infirmary.

Dr. Fabius, a Dutchman, lived in Everton, and probably practised as a physician there about the year 1700. Beyond the fact that he aided in the foundation of one of the earliest Nonconformist chapels, sometimes called "Fabius Chapel," nothing is known of him.

LIVERPOOL IN THE EIGHTEENTH CENTURY.—A very striking proof of the growth of this city from comparative obscurity, is to be found in the fact that it was not until 1745 that the first medical charity was commenced, the necessity for hospital accommodation having only just begun to be felt. An "Infirmary for the Sick and Hurt" was designed. The history of our hospitals and other medical institutions becomes now a convenient medical history, and may therefore be adopted.

The Old Infirmary.—The erection of this took place under very romantic circumstances. The Corporation made a grant of what was then a large field on the outskirts of the little town for a term of 999 years, and in 1745 the foundations were laid. Hardly had the work begun, when the minds of the inhabitants were turned from the good work to arms. Tidings arrived that Prince Charles Edward had landed, and advanced as far as Preston; hence it was not until the end of 1748 that the building was complete, and two upper wards were furnished with thirty beds. On March 25th, 1749, the building was opened. Engravings of it are preserved, and one is now to be seen in the Lock Hospital. It presented a handsome front of brick and stone, and was calculated for the accommodation of 200 patients; its cost was £2,648. The passer-by had his attention strongly drawn to the building and its objects by the following lines which were placed over the gateway.

"Oh ye whose hours exempt from sorrow flow,
Behold the seat of pain, disease, and woe;
Think, while your hands th' entreated alms extend,
That what to us ye give, to God ye lend."

The original medical staff consisted of three physicians and three surgeons—Drs. Green, Kennion, and Robinson; Messrs. Bromfield, Ambrose, and Pickering; but none of them have left any writings of moment. From the circumstances of there being no assistant physicians nor surgeons, and from the formation of the General Dispensary in 1778 (to be further alluded to presently), it would appear that, from its earliest history, the practice of the Infirmary was limited to in-patients, an exception to the general rule. Most modern hospitals have sprung from a dispensary, while those of earlier date have both in and out-patients. It is still a peculiarity of Liverpool that its three largest hospitals—the Royal Infirmary, the Northern, and the Royal Southern Hospitals, have no regular out-patients' departments, the only out-patients being those suffering from minor accidents, or former patients who have been discharged and made out-patients. In 1752, an addition was made to the Infirmary by the erection of wings, which were used as an hospital for sailors; the cost was £1,500. These buildings all remained until 1826, when they were taken down, and the site is now covered by the stately pile known as St. George's Hall, in which it was hoped that the coming annual meeting of the British Medical Association would be held. The coincidence, however, of the summer assizes with the time of meeting, and the requirements of the Assize Courts (which, with the accessories of sheriff's court, grand jury room, etc., comprise the principal parts of the hall) prevented this.

Among the earlier physicians to the Infirmary may be mentioned the following.

Matthew Dobson, author of a *Medical Commentary on Fixed Air*, as also of numerous contributions in *Medical Observations and Inquiries*, and in the *Philosophical Transactions*. Writing on diabetes, he thus summarised the plan of treatment. "That the obvious indications of cure are to strengthen the digestive power, to promote due sanguification, and establish perfect assimilation through the whole economy." He held office from 1770 to 1780, when failing health compelled him to retire to Bath, where he died in 1784.

Dr. Houlston, elected in 1774, deserves notice as one of the first who in England attempted to diffuse a popular knowledge of the means of restoring life apparently lost by drowning or hanging. The year of his election was the year of the formation of the Royal Humane Society, and in the previous year Dr. Houlston published in the papers of September 24th some plain directions for recovery of those apparently drowned. He refers to the success which had attended similar societies in Holland, Germany, and other countries; and after giving, in prose, full directions for attempting resuscitation, winds up with the following quaint poetical combination of medical advice and Christian duties:

"Tobacco glyster, breathe and bleed,
Keep warm and rub till you succeed,
And spare no pains for what you do;
May one day be repaid to you."

In 1775 a receiving house was opened on the north side of the old dock, to which or to the Infirmary cases were to be taken, the physicians and surgeons of the Infirmary promising to attend to them at either place. Those bringing cases were to be rewarded with a guinea if the patient were restored to life, half a guinea if not. The first seven cases were all unsuccessful, but in the eighth Dr. Kenyon and Messrs. Shortcliffe and Lyon succeeded in restoring a drunken cowkeeper who had fallen into a dock and been taken out apparently dead. The next five cases were all successful, and the reports up to 1782, embracing a period of seven years, show an aggregate of thirty saved from drowning; eight recovered in part, but dying soon afterwards; four killed by the fall; thirty-one who showed no sign of life. Dr. Houlston also wrote on the prevention of death from excessive drunkenness, and on the treatment of hydrophobia.

Dr. James Currie, best known to the literary world by his *Life of Burns*, and his edition of Burns's works, became physician in 1786. He took a leading part in the establishment of the Lunatic Asylum in connection with the Infirmary. He also, although it was at the risk of much of his professional interest, strongly advocated the cause of negro emancipation. At that time Liverpool had the unenviable notoriety of being the great slave mart of the United Kingdom, and there existed at the Infirmary an examining board for the purpose of licensing surgeons for slave-ships—African surgeons as they were called. For, as the law then stood, no ship could clear for Africa without a surgeon, and no surgeon could go without producing to the Collector of Customs a certificate of examination from "Surgeons' Hall," from the College of Physicians, from the Royal College of Surgeons of Edinburgh, or from the medical staff of some public or county hospital. The meetings of the medical board for these examinations took place on the first Tuesday of every month; and from August 15th, 1759, until May 1st, 1807, at which date the slave trade ceased by law, 634 candidates presented themselves. Of these not quite 500 were fortunate enough to pass. It appears, however, that many sent back from the Infirmary were enabled to pass another examining board within their reach and more easily satisfied, much to the annoyance of the Infirmary board, and too probably also much to the detriment of the unfortunate crews with which they sailed.*

The establishment of the first fever hospital was due to the exertions of Dr. Currie, supported by his medical brethren. He believed that if the fever patients, whose mortality was frightful at that time, could be removed from the foul dens in which they lived, where, as now, fever readily finds its victims, and attains its greatest virulence, into the comparatively pure air and cleanly wards of an hospital, the sick themselves would be more likely to recover, and the fever would be far less likely to spread. The suggestion met with approval, but it took five years' contest before the fears of the timid and the prejudices of the bigoted could be overcome; and in 1801, at a crowded annual vestry meeting, Dr. Currie had the satisfaction of carrying unanimously a resolution which proposed the immediate execution of his plan. He was also instrumental in

* In *Williamson's Advertiser* (a local paper) of September 12th, 1766, the following advertisement appeared. "To be sold at the Exchange Coffee House, Water Street this day, the 12th instant, September, at one o'clock precisely, eleven negroes. Imported per the *Angola*."

ducing the mortality among the French prisoners, and in inaugurating sanitary improvements in Liverpool. His various labours shortened his life. Before his death, which occurred at the early age of forty-nine, he dictated to his son an account of his political life and opinions, in which he says: "I am sick and exhausted. I hope to close my eyes in peace with the living generation, and with hope in the expected union with the friends whom I venerate and love beyond the grave." He died on August 31st, 1805.

Among the earlier surgeons to the old Infirmary were *James Ryon Park* and *Alanson*. The second of these is well known as having been the first to devise and perform excision of the knee-joints, which he did in this same infirmary. The last named gentleman is also well-known for the improvements in the mode of amputation first suggested and adopted by him in this infirmary, which thus witnessed what may be called a revolution in surgical practice. As both these surgeons will probably be alluded to by others more competent and in their proper section, it would be alike unfair and improper for me to dwell further upon their surgical improvements.

But the life of *Henry Park*, as a general practitioner and citizen, contains so much that is both interesting and instructive, that I may venture to give some details.* He may be considered, indeed, as having been born a surgeon. His birth took place in 1744, his father being a surgeon in good practice in Liverpool, who died suddenly before his son Henry had completed his first year. The latter was, after receiving a good education, placed, at the early age of 14, under Mr. Bromfield, surgeon to the Infirmary, his uncle by marriage. This apprenticeship lasted three years, and was used most diligently, much being left to the pupils at that time. When only 17 years of age, he was left in medical charge of 600 French prisoners, without any supervision. He thus acquired a facility in their language, which he retained to the last. After this he went to London and served a second three years' apprenticeship in the house of Mr. Percival Pott, surgeon to St. Bartholomew's Hospital, completing his professional education with a season at the Hôtel-Dieu of Rouen, under the teaching of M. Le Cat. Returning to Liverpool, he was appointed surgeon to the Infirmary, when only 23 years of age, which office he held for thirty-one years. From his 45th till his 75th year, his life was one of most severe toil, mental and bodily, sweetened by success. His practice of midwifery extended over a period of half-a-century, and he commenced a record of it in 1769, which was continued until the close of 1830. In this, which he quaintly termed his "Book of Genesis," he noted, with his own hand, particulars of 4,000 deliveries.† It will interest modern obstetricians to learn that out of this number, in seven cases only were instruments used, the forceps four times, the crotchet three times. He also encouraged vaccination, by performing it gratuitously twice every week at his own house, at a time of life when most men seek to curtail rather than increase their work, especially gratuitous work. Mr. Park married when 32 years of age, and ten years later suffered the severe bereavement of the loss of his wife. The remainder of his life was a total disregard of self, and a devotion to the happiness of others. The following obituary notice which appeared in a local paper, the *Liverpool Courier*, February 1, 1831, is from the pen of Dr. Rutter, the founder of the Medical Institution.—"On Friday, the 28th ultimo, the remains of the late Henry Park, Esq., were interred in the Cemetery of the Mount. They were accompanied to the grave by a considerable number of medical gentlemen, who voluntarily paid this tribute of respect to his memory. Mr. Park was unquestionably one of the first surgeons of his time. His understanding was clear, acute, sagacious, penetrating; his judgment sound, his medical knowledge and experience very extensive, and his opinions and decisions always valuable. He early acquired a high reputation for talent and sagacity, and he sustained it, undiminished to his last hour, through a life unusually protracted (87 years). Yet for that reputation he was indebted solely to his own merit, for he courted no popularity, he paid no homage to rank or greatness, he employed no indirect means to advance his own interests. In his intercourse with his professional brethren, he was always kind and friendly; and, present or absent, they could at all times repose with the most perfect confidence in the integrity of his conduct. The death of such a man is a great public loss; but his example remains, and it will be respected and followed by all who know and feel that the only road to distinction and esteem is that of strict moral rectitude. The writer of this was in his early days a pupil of the late Mr. Park; he has known the deceased now for nearly half a century, and he feels a melancholy pleasure in offering this sincere and unsolicited testimony to the superiority of his character." On his grave is a plain flat stone, with the inscription, "The Burial Place of Henry Park, and of his Children and Grandchildren." I cannot help regretting that there is nothing in this city to perpetuate the memory of so worthy a member of our profession, who did so much in his day to advance the science and practice of surgery. I trust that this omission may be repaired, and that the name of Henry Park may be still perpetuated in a Park scholarship, exhibition, or prize, in connection with the medical faculty of the Liverpool University College.*

The General Dispensary, since then expanded into the Liverpool Dispensaries, North, South, and East, was founded in 1778, being thus the second oldest medical charity. Its medical staff consisted of three physicians, three surgeons, and an apothecary; and conspicuous among the original staff was Dr. Brandreth, who long held a distinguished position in Liverpool both professionally and socially; Dr. Jonathan Binns, one of the original members of the Society for the Suppression of the Slave Trade; Mr. Alanson, already alluded to; and Mr. Gerard.

In 1783, small-pox raged in Liverpool; and, in consequence of its ravages, it was resolved, in the month of March, that a general inoculation of the inhabitants should take place. The following medical men were formed into an inoculation society for that purpose: Drs. Houlston, Brandreth, Binns, Worthington, Camplin, Currie, and Lyon; Messrs. Alanson, Blundell, Buddicum, R. and J. Gerard, Goldie, Hughes, Moss, Park, Renwick, Shortcliffe, and Tetlow.

In 1784, a *Familiar Medical Survey of Liverpool*, addressed to the inhabitants at large, was published by Mr. W. Moss, surgeon. The object of this quaint little work is shown in the following list of its contents published on the title-page: "Observations on the Situation of the Town, the Qualities and Influences of the Air, the Employment and Manner of Living of the Inhabitants, the Water, and the Natural and Occasional Circumstances whereby the Health of the Inhabitants is liable to be particularly affected; with an Account of the Diseases most peculiar to the Town, and the Rules to be observed for their Prevention and Cure; including Observations on the Cure of Consumption; the whole rendered perfectly Plain and Familiar." Though it can hardly be said to be of much professional value, it gives us an excellent idea of Liverpool as it was then just a century ago. Its population was then about 41,000, and the town consisted of a mere fragment of what it is now, its then northern, southern, and eastern boundaries having long ago been extended by nearly two miles in each direction, its western boundary being then, as now, the river Mersey. The author tells us "that diseases more or less accompanied with symptoms of putrescency always occur and become epidemic in the autumn in Liverpool," and that the tendency does not disappear until frost has set in. He thinks the air healthy, but too cold for those subject to coughs, asthmas, and other affections of the breast, and lungs; while, in addition to the natural purity of the air, "the aromatic effluvia of tar and pitch," and the smoke from the burning of damaged tobacco, increases its salubrity. The streets, he tells us, are "narrow, and, of course, dirty," the houses in general too small, and the rooms too low. The water-supply, obtained from the wells on the east side of the town, is lauded as unexceptionable in all respects, except the awkward mode of its being conveyed (in carts) to the inhabitants The only endemic diseases mentioned are "affections of the breast, and rheumatism," and a kind of "infantile asthma." The following passages are very significant of the practice of those days. "There is a remedy, however, which, as being of much importance, and too frequently avoided and declined, I shall take the liberty to recommend, and that is, blood-letting, in the early state of colds with coughs." "There is, perhaps, no part of the kingdom, whether

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r a full account, see *Transactions of the Provincial Medical and Surgical ation*, Vol. VII., pages 459 to 484.

s is preserved in the Liverpool Medical Institution in the safe with mportant documents, and an inspection of it can only be made in the ce of the honorary secretary, or some other member deputed by him.

* The *Edinburgh Review*, October, 1872, in an article on surgical science, has the following:—"In the latter portion of the last century, when a vigorous flash of originality seemed to light up the annals of surgery, Park, of the Liverpool Hospital, may be said to have accomplished the first act of conservative surgery. His patient, a sailor, to whom the loss of a foot and leg would have been tantamount to the loss of his means of getting bread, determined him to make the experiment of simply excising the diseased part, the knee-joint, and retaining the foot and leg. This he did so successfully that, to use his own words, the patient several years after the operation, "made several voyages to sea, in which he was able to go aloft with considerable agility, and to perform all the duties of a seaman, that he was twice shipwrecked, and suffered hardship without feeling any further complaint in that limb." This was a crucial test of success, that should have stamped the operation as one of the greatest surgical triumphs of the time; but, like so many other great strides taken in that age of extreme vivification, it was in advance of its fellows, and was destined to be arrested for the better part of another half century."

town or country, where blood-letting is more required in febrile and in other complaints than in Liverpool; very few where it is so requisite, as is discovered by its comparative effects, and the dense, sizy, inflammatory state of the blood drawn. In the complaint under consideration, its effects are frequently so sudden and obvious as to discover the most immediate and effectual relief. As I make these declarations from experience, I do it with greater confidence." Among the epidemics mentioned are: a very fatal influenza in 1775, a malignant fever in 1781, a slighter visitation of influenza in the spring of 1782, and the quartan ague of the autumn of the same year. From the following passage, it would appear that sea-bathing could hardly have been so universal a practice as now. "Bathing in the sea is here so general in the summer and autumnal months, that strangers from the inland parts are much entertained and surprised with the universality of the practice, and, at the first impression, are almost led to consider the inhabitants as a species of amphibious animals." In conclusion, the author condemns the tolling of funeral and passing bells as "a real disturbance to the sick, nervous, and hyperchondriack" (*sic*). He also condemns the continuance of burials in the old churchyard, which had been used more or less as a burial-place since 1371; and it is a melancholy instance of the slowness with which even the most obviously necessary reforms are adopted, that burials still continued in this same churchyard until it was closed in 1854, just seventy years after, by an Order in Council.

The Ladies' Charity was founded in 1796, its object being to supply poor married women with competent assistance, and some additional comforts, in their confinements. In ordinary cases, each patient was attended by one of the six midwives attached to the charity. The town was then divided into six districts, each in charge of a midwife; there were also four assistant midwives to attend in the absence of the latter from sickness or other cause. Four surgeons were attached to the charity, each of whom had the charge of the whole of one district and half of the adjacent one, their duties being to attend when requested by any of the midwives or assistant midwives. This charity has done a very useful work, not only as a maternity, but as a means of affording practical instruction in obstetrics to many practitioners, past and present. In most of the districts, a student could soon obtain his "twenty cases," or as many more as he wished to attend. Among past surgeons, I may mention one well-remembered associate, the late Dr. A. B. Steele, who held the office for upwards of twenty years. For many years before and after the passing of the Poor-law, there was a vaccination station in connection with this charity, which continued until 1870.

Liverpool in the Nineteenth Century.—The first census returns taken in 1801 give the population of Liverpool as 77,653, exclusive of about 6,000 seamen belonging to the port, but absent on voyages. In 1811, it had increased to 94,376, with from 6,000 to 7,000 seamen. From this period, the town rose rapidly, both in extent and in population.

In 1808, there occurred in Liverpool a *cause célèbre* in the annals of modern poisoning mentioned in most works on Forensic Medicine, and possessing many features of interest. It created intense excitement at the time, from the social position of the prisoner and deceased, the extraordinary nature of the surrounding circumstances, and the medical evidence for the defence. The prisoner, Mr. Charles Angus, a merchant, was charged with the murder by poison of Miss Margaret Burns, a young lady who resided with him as his governess and housekeeper. She died under very suspicious circumstances on the 25th March, and on the 27th a *post mortem* examination was made by order of the coroner. It will suffice for me to notice the chief points of medical interest in the case, as a full report of the trial was published, and copies are still to be seen in medical and other libraries. While there is much to admire in the evidence of the medical witnesses for the prosecution, Drs. Gerard, Bostock, and Mr. Hay, there are some grave defects. For instance, the abdomen only was examined, the chest and head not being even opened. What would be thought now of such an examination in a case of suspected poisoning? Let us imagine a medical witness in such a case being compelled to admit that he could tell nothing respecting the appearance of the brain, heart, or lungs, because he had never examined them! The examination appears, indeed, to have been almost limited to the stomach and uterus. The former disclosed a perforation, with soft and ragged edges; its contents were extravasated into the peritoneal cavity. There was also slight peritonitis and inflammation of the duodenum. The uterus presented every appearance of having recently expelled a fœtus; its size was that of a bullock's heart, and the mark of the placental attachment was distinctly visible. On searching the house, no trace of a child could be found, though some bloody clothes were, as well as two bottles, one containing oil of savin, and another marked "poison-water." The latter was found by Dr. Bostock to be a saturated solution of arsenic and corrosive sublimate, though he did not feel complete certainty as to the tests for the latter. He could detect no metallic poison in the fluids from the peritoneal cavity, from the intestines, nor from the stomach. It will interest, and perhaps amuse, modern analysts to learn that, in experimenting on dogs, Dr. Bostock was unable to detect the poison, even after four grains of corrosive sublimate had been given. Some time afterwards, he published a paper on the effect of albumen in preventing the characteristic reaction of the protomuriate of tin upon the sublimate, and ascribed to this the failure of the tests in Miss Burns's case. At the trial, which took place at Lancaster (Liverpool not attaining to the dignity of an assize town until 1835), Dr. Carson, a rising physician who had graduated at Edinburgh nine years previously, appeared as medical witness for the defence. He accounted for the perforation of the stomach by the somewhat extraordinary theory, that any fluid, containing salt and having its temperature sustained by the renewal of the vital warmth of the body, might dissolve the surfaces with which it came into contact. The state of the uterus he attributed to the probable recent expulsion of a mass of hydatids. The prisoner spoke in his own defence. At that time, prisoner's counsel were not permitted to address the jury, but they might call and examine witnesses on his behalf. On the other hand, the counsel for the Crown had no right of reply. These circumstances were very favourable to the prisoner in this case. The trial lasted from 8 A.M. on Friday, September 2nd, until about half-past three on Saturday morning, when the jury found their verdict. The judge (Justice Chambre) summed up favourably to the prisoner, and he was acquitted but the feeling against him in Liverpool was so strong, that he lef it soon after the trial. After the trial, the uterus and appendage were shown on September 14th to Drs. Brandreth and Lyon and t Mr. Park, where the ovaries were for the first time properly ex amined, and a true corpus luteum was found in one. Mr. Hay sub sequently proceeded to London, where he showed the uterus to som eminent obstetricians and surgeons, including Denman, Haughto Clarke, Cline, Astley Cooper, and Abernethy; all of whom expresse an opinion that an advanced condition of pregnancy had recentl existed. A good deal of feeling was expressed against Dr. Carso who had certainly not acted fairly to his professional brethren, th having shown him the stomach and uterus and given him eve information. He apparently concurred with them, but in fact co cealed his views, and succeeded in springing upon them a line defence for which they were wholly unprepared. The defence, short, was ingenious, but not ingenuous.

In 1820, two institutions for the treatment of diseases of the e were established in Liverpool—the Ophthalmic Infirmary and t Institution for Curing Diseases of the Eye. The former still exi as the Eye and Ear Infirmary, and I shall have occasion to refer it again.

The Royal Infirmary was completed and opened in October 18 with 226 beds. The site of the old Infirmary being required by Corporation for town improvements, the site on which the pres Infirmary stands was granted in exchange, together with the site the building which was formerly the Lunatic Asylum, but is n the Liverpool University College, the site of the Lock Hospital, a an annual donation of one hundred guineas. The foundation-st was laid on July 27th, 1821, and the building completed at an e pense of £27,800. The following is Sir James Picton's descrip of the building: "We are now opposite the façade of the I Infirmary, a structure of considerable pretence, with its rece octostyle Ionic portico.....The classical Greek here reigns in its dry severity. Every feature is hard and stiff, if not forbidd The epithet which would, in the smallest compass, expres general effect is the word 'squareness;' for everything, from square attic windows to the square plinths of the column rectangular. The building, from its magnitude and isolation, i posing; but, although the terms 'grand,' 'magnificent,' and 's did,' have been lavishly applied to it in guide-book descrip there are few persons who, comparing this costly building wit plain and unpretending predecessor, would not award the pal picturesque effect to the latter." The present building has b altered and added to, that its original appearance has long been The awkwardness of its two principal staircases is often rema and the explanation is that, in the original plan, the stairs we gotten altogether, and had to be put where they now are. Thornton Wards, models of what hospital wards ought to be

erected in 1863, and there could hardly be a greater contrast than between them and the older wards.* After nearly sixty years of very useful work, the present building has been found to be quite unsuitable for the reception of patients, in accordance with modern sanitary views, and a new infirmary is to be built. It is confidently expected that, in addition to the present site, a considerable additional space closely adjacent, may also be secured. This, together with the sum of £100,000 (more than four-fifths of which has already been raised), will enable the Committee and trustees to erect an infirmary in every way worthy of the city and the age. Among prominent physicians and surgeons, now deceased, I may mention the names of Drs. Formby, Dickinson, Vose, and Inman; Messrs. Dawson, Halton, Robert Bickersteth, and Long.

The North Dispensary was erected in 1829, and the *South Dispensary* established soon afterwards, in a large house adapted for the purpose; the *Eastern Dispensary* followed in 1839, being subsequently removed to its present situation. These three medical charities have each a large honorary and resident medical staff, affording relief to upwards of 60,000 persons annually. They have always been well supported and inexpensively worked.

The Northern Hospital was established in 1833. Prior to this, attempts were made to fit up two wards, at the North Dispensary, for patients suffering from severe accidents, who could not be treated as out-patients, and whom it was not desirable to convey, under such circumstances, so great a distance as it was from the northern part of the town to the Infirmary. At first, a large house was taken and fitted up with 28 beds, which were increased to 50 three years afterwards, by taking the adjoining houses; but this number being soon found to be quite inadequate, the present hospital was erected in 1845, at a cost of £10,000. It has been considerably enlarged and improved since then, and now contains 147 beds. It is worthy of note that the members of the first medical staff were elected for a term of years, varying from twelve to fourteen; this term of office was subsequently increased to fifteen, and it is now twenty-one years. The first physicians were Drs. Sellar, Squires, and Reynolds; the surgeons, Messrs. Gill, Banner, and Wainwright. The hospital receives a very large number of accidents from the docks, the Lancashire and Yorkshire Railway, and other centres of labour. Having been erected nearly forty years ago, its construction is not in accordance with modern ideas of hospital construction, and, as a building, it bears evidence of having been constructed rather for external show than for internal convenience. But there is every probability that it will also be rebuilt, either partly or entirely, under circumstances calculated to increase most considerably its usefulness, and to enable the medical staff to continue their work with increased comfort to themselves and advantage to their patients.

The Lock Hospital was erected in 1834. We have seen that the old Infirmary comprised a seamen's hospital, and it is only too probable that venereal disease prevailed amongst them. The late Mr. Minshull, a professional veteran, who died recently at a very ripe age, and who well remembered the old Infirmary, informed me that venereal cases were treated in it. In the present Infirmary, wards were set apart in it when it was first opened, both for male and for female venereal patients, twenty-five beds being provided for each sex. Ten years afterwards, additional wards were much required for medical and surgical cases; and it was decided to place the patients suffering from venereal diseases in a separate building in an adjoining street. It was to be a part of the Infirmary, and under the management of its committee, but with its own surgical and resident staff. Such was the origin of the Liverpool Lock Hospital. It has two wards, containing twenty-five beds for each sex, which are kept pretty well filled, especially the male beds, and syphilis in all its forms may be seen here. I may here remark that this and the Manchester Lock Hospital (the latter for females only) are the only two hospitals of the kind in the whole of the north of England.

The School of Medicine was organised during the autumn of 1834. The first lecturers were Dr. Formby and Mr. Gill on Anatomy, Dr. Reynolds on Chemistry, Dr. Philp on Materia Medica, Dr. Formby on Medicine, Mr. Dawson on Surgery, Dr. Malins and Mr. Batty on Midwifery, Dr. Philp and Dr. Malins on Medical Jurisprudence. Mr. Bryce was subsequently appointed Lecturer on Botany, and Mr. Slater and Mr. Long Demonstrators of Anatomy. As the lectures were delivered in the Royal Institution, a portion of which was set apart for the purpose, this medical school was first denominated "The Liverpool Royal Institution School of Medicine and Surgery." In 1845, the school was transferred to its present site in a building erected specially for the purpose, on land belonging to the Royal Infirmary, and directly opposite to its patients' entrance. The students were thus enabled to attend both their lectures and hospital practice most conveniently; and the Royal Infirmary School of Medicine, as it now became, has, ever since then, been a very successful one, affording a sound medical education to several generations of students, many of whom have lived to acquire considerable distinction both here and elsewhere, and to shed lustre on their "Alma Mater." Now that it has become the Medical Faculty of the Liverpool University College, and viewing the many advantages which will accrue from the rebuilding of the Infirmary, there is every prospect of its career of usefulness being in every way strengthened and extended.

The Medical Institution was opened in 1837. It was formed by the fusion of the Medical Society (which had existed for many previous years) with the Medical Library. The land on which it stands was given most liberally by the Corporation, on a lease of seventy-five years rent free, in addition to a donation of £1,000 towards the building. The remainder of the requisite amount was furnished by the local members of the profession and their friends. The first president, the late Dr Rutter, deserves mention as having contributed largely to the success of the undertaking by most liberal donations of money and books. He delivered the opening address on May 31st, 1837. Since then, the meetings have been continued on every alternate Thursday from October till the end of April in each year. The library has been considerably increased, and receives constant additions from donors, as well as from the funds of the institution.

Meetings of the British Medical Association in Liverpool.—In 1839, the Provincial Medical and Surgical Association held its seventh annual meeting in Liverpool, under the presidency of the late Dr. Thomas Jeffreys. The meetings took place in the Medical Institution, and were well attended, the business occupying the whole of Wednesday and Thursday, the 24th and 25th of July. It is almost needless to add that there are few, if any, now living who were present at that meeting, though many were till very recently.

In 1859, the British Medical Association met for the second time in Liverpool, it being the twenty-seventh annual meeting. The meetings were held in the Medical Institution; and though the number of associates was not large, the meeting is well remembered as a most successful one. The number of local associates subsequently increased very much, showing the value of these meetings to the parent Association, as well as to local Branches. But there could hardly be a greater contrast than that between the past second and the coming third meeting in Liverpool. The Association has since multiplied nearly fourfold. The Medical Institution, which then sufficed for all the meetings, would now not be sufficient for more than two or three sections; then a hotel sufficed for the annual dinner, now one of our largest halls will be required for the banquet, and will most probably be fully utilised; then one building was large enough for the *soirée*, now three large buildings have been secured, and will, in all probability, be well filled with associates, ladies, and other guests. Such associates as were present here in 1859, and purpose coming, will be startled with the contrast, showing, as it will, both the increase in the Association and the marvellous changes which have taken place in Liverpool.

The Old Southern and New Royal Southern Hospitals.—In 1841, the population had reached 223,000, showing an increase of 57,782 in ten years. The necessity for increased hospital treatment in the southern extension of the town having been much felt, the Southern Hospital was commenced in 1841, and completed in 1842, the building being capable of accommodating one hundred in-patients. The first physician was Dr. Grindrod; the surgeons, Messrs. Churton, Minshull, and Petrie. After thirty years of very useful work, the hospital was found to be too small for the demands made upon it; and, a suitable site having been obtained within a convenient distance, the present hospital was erected, and opened in 1872 by the Duke of Connaught, then Prince Arthur. It thus became the Royal Southern Hospital, and has room for two hundred in-patients. There are now three physicians, as well as three surgeons, and there are private wards for paying patients. The hospital receives a large number of accidents from the numerous docks, etc., near, and foreign seamen of every country. It contains almost every modern improvement, and is well worthy of a visit.

The Lying-in Hospital was established in 1841, its object being to afford relief to poor women in whose cases special difficulties were expected to occur. Among the rules of the Ladies' Charity, there was one which excluded all women who had not two children

* A school for nurses was also built on land adjoining, and has done a very useful work. In it, nurses and probationers have the combined advantages of a home, with close proximity to their work. Night-nurses, when relieved from duty, are also able to have more perfect quiet than they could in the Infirmary itself.

iving; hence primiparæ were totally deprived of the benefits of the charity; and this rule, which was intended to discourage improvidence, was not without its hardships. The hospital was at first, and for twenty years afterwards, established in a large house, and a special ward for uterine cases was added in 1855. There was also a large outdoor department for the treatment of diseases peculiar to women. A school for the training of nurses was also established here. In 1862, a new hospital was completed and opened; and in 1869 the Ladies' Charity and Lying-in Hospital were amalgamated. Recently, however, owing to differences between the committee and the subscribers, the charities have become again separated. Premises have been secured for a hospital for women, and it is intended to erect a maternity hospital for the reception of obstetric cases only. The buildings of the Lying-in Hospital have been sold to the committee of another charity to be presently noticed.

The Infirmary for Children was commenced as a dispensary in 1851, and, five years later, a house was taken and fitted up for the reception of in-patients. In 1869, the present new and handsome buildings were erected; the infirmary has now between seventy and eighty beds, and is one of the most popular of all the local medical charities. It does excellent work in affording a training-school for nurses, as well as medical and surgical treatment to a very large number of in- and out-patients annually. There is a separate building in which any in-patients found to be suffering from infectious diseases may immediately be isolated from the rest while remaining under treatment.

Medical Journals Published in Liverpool.—In 1833, the *Liverpool Medical Gazette* and the *Liverpool Medical Archives*, edited by Dr. Hunter Lane, were published in Liverpool; and subsequently the *Liverpool Medical Journal* in 1834. None of these, however, continued more than a year. The *Liverpool Medico-Chirurgical Journal* was published for the first time in 1858, and comprises for that year two volumes of most interesting matter. Among these are two papers by the late Mr. F. D. Fletcher, entitled, "A Sketch of the Medical History of Liverpool." I am largely indebted to this for many of the preceding facts and details, and I regret that want of space has compelled me to omit from it much that was very interesting. This journal did not live much longer than its predecessors, and for many years Liverpool was without any medical periodical. About fifteen years ago, the *Liverpool Medical and Surgical Reports* were published annually, becoming subsequently the *Liverpool and Manchester Medical and Surgical Reports*. Recently, the *Liverpool Medico-Chirurgical Journal* has been revived, with its former motto, "Non quo sed quomodo;" and it is to be sincerely hoped that it may have a long existence. When single hospitals, such as Guy's, St. Thomas's, and St. Bartholomew's, furnish sufficient material for a large volume yearly of most interesting matter, it follows surely that a city such as this, with all the medical and surgical resources we have noticed, should provide at least a half-yearly, if not, indeed, a monthly report.

The Stanley Hospital was established in 1867. The town had now extended so far northwards, that the Northern Hospital had really become a central one, while the population amounted to close upon half a million. The hospital, being thus a recent erection, is in all respects well adapted for its purpose, and has most of the modern improvements. It stands well, being situated in a rapidly increasing neighbourhood, near several lines of railway and other centres of industry, from which it receives many accidents; it has also a large out-patients' department. The number of beds is forty-five; but, this being now quite insufficient, funds have been raised for enlarging the hospital by erecting new wings, and this will, it is believed, soon be effected.

Eye and Ear Infirmary.—This important charity has been already alluded to. For many years past the old Infirmary (which was a large house taken and adapted for its purpose forty years ago) was found to be quite inadequate to the enormous demands made upon it. The present building was completed and opened last year (1882), and being our most recently built hospital, is well worthy of a visit, both on account of its sanitary arrangements and its special adaptation for ophthalmic cases. There is room for 44 in-patients, and of these upwards of 500 were admitted last year, while the out-patients numbered more than 8,000. This infirmary relieves in and out-patients from all parts of the county, and from more distant places.

The limited space at my disposal prevents me from giving any lengthened description of the *Hospital for Fever and Infectious Diseases*, *St. Paul's Eye and Ear Infirmary*, the *Hospital for Cancer and Skin-Diseases*, the *Hospital for Consumption and Diseases of the Chest*, the *St. George's Hospital for Diseases of the Skin*, and *the Seamen's Self-Supporting Dispensary for Venereal Diseases*. But I must not omit to mention the respective *Parish Infirmaries of Liverpool—West Derby*, and *Toxteth*. The first named possesses excellent wards, a visiting as well as resident medical staff, and a most admirable nursing department. It has also in connection with it a large fever hospital, The Toxteth Workhouse is most favourably situated in what is still a pleasant suburb, and the views from its infirmary windows are as pleasing as any patients could wish to have.

Hospital Sunday and Saturday were first observed in 1871, and the result has been for some years past an annual average amount of £10,000 for the medical charities. Speaking comparatively, the result of this means of augmenting the funds of the latter has been more successful here than in any other locality.

The census of 1881 showed the population of this city to be 552,425; and so rapid is the increase, that there has been a considerable addition to this in the last two years. It will show the extraordinary rise of Liverpool, and serve as a hasty recapitulation of its foregoing history, if I state here that, incredible though it appears, the first high road out of Liverpool was constructed only 123 years ago. Previously to its construction, Liverpool could only be approached by bridle-roads through a forest; and such were the dangers, that many preferred to come by way of Chester and across the river.

In conclusion, I must ask local and other readers of the JOURNAL to pardon the many imperfections of this paper. It has been written amidst many interruptions, in leisure moments snatched from a very busy life. In a locality so thoroughly devoted to commerce as Liverpool has always been, it must have been with considerable difficulty that our forefathers of the profession succeeded in establishing the School of Medicine, the Medical Institution, and the other means by which the status of the profession has been maintained. Great credit, therefore, is due to those who have so laboured and passed to that grave where "there is no work, nor device, nor knowledge, nor wisdom." There are two important lessons which, as it seems to me, other rapidly rising towns may learn from the medical history of Liverpool. One is, to build general hospitals or infirmaries in such a manner, that their subsequent enlargement may be easy and convenient, avoiding the expense and annoyance of rebuilding. The other is, to have special wards in general hospitals for uterine, ophthalmic, venereal, and other cases, and for children, thus saving the enormous expenditure consequent upon the multiplication of special hospitals. I hope that many associates will be induced to visit Liverpool, and attend the coming meeting. One of her greatest sons and philanthropists, William Roscoe, thus poetically described his native town when only twenty years of age; and though he wrote 110 years ago, it is remarkable how true the description is at the present day.

"How numerous now her thronging buildings rise,
What varied objects strike the wondering eyes!
Where rise yon masts her crowded navies ride,
And the broad rampire checks the beating tide;
Along the beach her spacious streets extend,
Her areas open, and her spires ascend.

Far to the right, where Mersey duteous pours
To the broad main his tributary stores;
Tinged with the radiance of the golden beam,
Sparkle the quivering waves; and midst the gleam,
In different hues as sweeps the changeful ray,
Pacific fleets their guiltless pomp display.

Fair to the sight they spread the floating sail,
Catch the light breeze, and skim before the gale;
Till loosening gradual on the stretching view,
Obscure they mingle in the distant blue;
Where in soft tints the sky with ocean blends,
And on the weakened sight the long, long prospect ends."

SICK CHILDREN'S HOSPITAL, EDINBURGH.—During the month of May, 943 patients were treated in the out-door or dispensary department of the Royal Edinburgh Hospital for Sick Children, while 45 new cases were admitted as in-door patients. The total number treated in the hospital during the month was 77, of whom 32 were continued from the previous month. Twenty-seven vaccinations were effected. An analysis of the new patients treated during the month shows that 299 were from Edinburgh, 107 from Leith, and 24 from country districts. It would be well if this hospital were more fully taken advantage of by students, as the managers and the staff place every facility in the way of making the institution of value educationally; and there is access to it from the Royal Infirmary grounds.

BRITISH MEDICAL ASSOCIATION: THE FORTHCOMING ANNUAL MEETING AT LIVERPOOL.

WE understand that the arrangements for the annual meeting of the Association at Liverpool are in a forward state of preparation. It is expected that the attendance of members will be unusually large, and the business to be transacted will be of exceptional importance and interest.

Much of the scientific work in the sections has already been arranged. In the Section of Medicine, three subjects of discussion have been fixed on—first on Aphasia, to be introduced by Professor Gairdner of Glasgow; (2) on the Causes and Results of Abnormal Tension in the Arteries, by Dr. Broadbent; and (3) on the Nature of Purpura, by Dr. Stephen Mackenzie. In the Surgical Section, a discussion will be arranged on the Surgical Diseases of the Kidney, and operations for their relief; and already many papers on other important subjects have been promised. In the Section of Ophthalmic Surgery, the principal discussion will be on the testing of Colour-sense and Acuteness of Vision, especially among sailors. This discussion will probably be opened by Dr. Brailey, of Guy's Hospital. Besides this, the relation between diseases of the genital organs and those of the eye will be brought under notice.

In the Obstetrical Section, there will be papers, and probably a general discussion on operative treatment for total or partial Removal of the Uterus, in which Drs. Schroeder, Keith, Wallace, and others will take part; and possibly another general discussion on Puerperal Fever may be arranged, introduced by Dr. Atthill, of Dublin, or some other leading authority.

The Pathological Section, and that on Diseases of Children, will, it is expected, be of very great interest this year. In the Pathological Section, no fewer than four subjects of discussion have been arranged. Dr. Dreschfeld, of Owen's College, will introduce a discussion on Micro-organisms in Disease; Dr. Lauder Brunton, on the Pathology of Dropsy; Mr. C. J. Symonds, on Chronic Inflammations of Bones; and Mr. F. T. Paul, on primary growths of the urinary tracts. Cirrhosis and other allied conditions of the liver will be brought forward, should time allow. In Diseases of Children, the following subjects have been selected for discussion:—1. Rheumatism and its Allies in Children, introduced by Dr. Barlow; 2. Etiology and Pathology of Summer Diarrhœa, by Dr. Ballard; and 3. Acute Epiphysal Necrosis and its consequences, by Mr. Morrant Baker. The President, Dr. S. J. Gee, of London, will read a paper on some kinds of Albuminous and Purulent Urine in Children.

In the Section of Public Medicine, Captain Douglas Galton, who is an invited guest of the Association, will discuss the subject of Hospital Construction (one of peculiar interest to Liverpool at present, seeing a new Royal Infirmary is about to be built); and a general discussion on the etiology of Diphtheria is likely to arise, papers on this subject having been promised by Drs. Alfred Carpenter, Alford, and others. The sanitary condition of the mercantile marine service will also be a most suitable subject for discussion at Liverpool, and a paper from Mr. Stocker on this has been promised.

In the Section of Psychology, in addition to the usual papers, the following special subjects have been selected for discussion: 1. The Employment of the Insane, introduced by Dr. Yellowlees; 2. Bone-degeneration in the Insane, by Dr. Wigglesworth; 3. Cerebral Localisation in relation to Psychological Medicine, by Mr. Bevan Lewis; 4. General Paralysis (if time permit), by Dr. Mickle.

It is very desirable that anyone who intends to read papers at any of the Sections should communicate at once the title of his paper to the secretary of that Section.

The museum will be placed in a large gallery at the top of the building. Besides the usual exhibition of drugs, instruments, etc., there will be a special display of ambulances. A large collection of pathological drawings and specimens in rooms adjoining the Section of Pathology.

The Liverpool meeting begins somewhat earlier than usual. On Tuesday, July 31st, at 10.30 A.M., the proceedings will be opened by a religious service in the Pro-Cathedral, when a sermon will be preached by the Bishop of Liverpool; after which the meeting of Council will take place, and the first general meeting of the Association, at which important business will be discussed. In the evening, Dr. A. Waters of Liverpool, the President-elect, will deliver the opening address. The usual business, both of the general meetings and of Sections, will continue during Wednesday, Thursday, and Friday (August 1st, 2nd, 3rd), and Saturday will be devoted to excursions to places of interest in the neighbourhood.

On Wednesday evening, a grand *soirée* will be given by the local committee in the Art Gallery and Museum of Natural History, this magnificent suite of buildings having been placed at their disposal by the Corporation of Liverpool. Besides the pictures and other objects of art which are permanently in these galleries, other interesting material will be specially exhibited on the occasion, among which Mr. Shadford Walker's collection of illuminated manuscripts holds a chief place. The arrangements for this exhibition, which will be one of the greatest attractions of the week, are not, however, completed.

On Thursday evening, the annual dinner of the Association will be held. As upwards of 500 are expected to dine, the Philharmonic Hall has been engaged, and many of the local magnates of the city and county have been invited to the banquet.

On Friday evening, the Mayor of Liverpool most hospitably invites the members of the Association to a *conversazione* at the Town Hall.

On Saturday (August 4th), excursions will be made to various places of interest in the neighbourhood. The ancient city of Chester, distant only about sixteen miles from Liverpool, will be visited, and those who select that excursion will have the opportunity, through the courtesy of the Duke of Westminster, of visiting Eaton Hall. Another excursion will be by sea (or land) to Llandudno and Conway, and a third to Southport, and possibly Blackpool. Others have been suggested, but not as yet arranged. Last, but not least, through the generosity of Mr. Bickersteth, a local excursion will be arranged on the morning of Saturday to visit by steamboat all the places of interest on the river Mersey, above and below Liverpool. This will be specially convenient for those who are obliged to return home early on Saturday afternoon.

There are very many places and objects of general interest in Liverpool and its neighbourhood, which may entertain visitors at their intervals of leisure during the week. Besides the three principal infirmaries of the city, the workhouse hospital, the Childrens' Infirmary, and the Eye and Ear Infirmary, are also worth a visit. The Art Gallery and the Museum of Natural History are the finest of their kind in this country out of London. The local committee have made arrangements to enable visitors to see the various arrangements connected with the shipping and docks—arrangements which are unrivalled in the world. The Cunard and other steamship companies have all undertaken to give every facility to the members to visit their great steamships. It is probable that, during the week of the meeting, the *Alaska*, of the Guion Line, the "Greyhound of the Atlantic," will be in the river. The Mersey Tunnel, too, which is in process of construction under the river, may be visited. Probably the most interesting local exhibition will be the glass-works at St. Helen's, where the processes of casting and polishing plate-glass, as well as glass-blowing, will be seen on the largest scale.

Among the distinguished foreign guests who have accepted the invitation to be present, are Professor Snellen of Utrecht, Binz of Bonn, Loven of Stockholm, and others.

THE REPORT OF LORD MORLEY'S COMMITTEE: ANALYSIS OF THE REPORT AND EVIDENCE.

II.

(*Concluded from p.* 1088.)

CONCLUSIVE evidence has been given that the field-panniers issued to some of the regiments (those dispatched from the Mediterranean) could, with advantage, on future occasions be supplied to all. In this way, the regimental surgeons will be able to deal more satisfactorily with mild and unimportant illnesses, and maintain more easily the efficiency of the battalion and its fighting strength during the campaign. The allegations made by many witnesses, even of high authority, that many men were sent to the rear and out of the country who should have been returned to the fighting ranks, cannot be seriously maintained under the circumstances of the Egyptian campaign, which was so speedily terminated that the invalids and convalescents ceased to be required at the front; and, on medical grounds, it was "most desirable to remove the sick, even those not seriously affected, from the influences of an unhealthy climate from which the majority of them were suffering" (paragraph 137). The statement that "there was a deficiency of medicines and medical comforts at the front, refers exclusively to the first week of the campaign. At that time, there was the greatest difficulty in providing the troops in advance with food, or even ammunition; and it would not, therefore, be a matter of surprise if the medical provisions fell short of the requirements. But even at that time, the deficiency

does not appear, from the evidence, to have been felt to a serious extent." Reports were made, which have not been confirmed in the course of this investigation; in many cases, "the witnesses were misled from want of knowledge of the arrangements made." A want of castor-oil and carbolic-oil has been frequently spoken of. Even as to these articles, the evidence is conflicting. Surgeon-Major Perry distinctly denies the accuracy of a newspaper statement, that there was no castor-oil, and but a small supply of diarrhœa medicine in the Guards' camp; and he adds, that "he can only recall one single case where anybody suffered from want of medicines." If castor-oil, however, were wanting, "no blame could be attached to the medical officers, for that medicine is not included among those which are provided for troops at the front. It is considered too bulky for this purpose, and more portable, and, we are informed, no less efficacious, medicines are supplied in lieu of it. For the same reason, carbolic oil is not, as a rule, carried ready mixed, but carbolic acid is supplied, with which preparations can be made for antiseptic dressings" (paragraph 138).

The Household Cavalry marched from Ismailia on the night after their disembarcation without any medical equipment beyond a single field companion. Sir D. Drury Lowe states that a field-hospital, had there been one available, "could not possibly have kept pace with his cavalry." Military necessity ordered the advance which was made, "with the full knowledge that the troops would be considerably ahead of their transport." (Paragraph 139.) At Kassassin, when the railway was in fair working order, abundance of medicines, surgical appliances, and medical comforts were to be had. In paragraph 146 the Committee direct attention to the statistics furnished by the Surgeon-General, which give "the results of the treatment of the sick and wounded in all the hospitals in Egypt from July 17th, when the first battalions landed at Alexandria, to October 9th, the date upon which the force ceased to be considered an army in the field." During that period the average strength, excluding the Royal Marines, but including the Europeans of the Indian Contingent, was 13,013 officers and men; the number of admissions to hospitals were 7,590, viz., 378 wounded in action, 7,212 suffering from diseases or injuries; the number of deaths was 172, 74 died of disease, five from accident, and of the remaining 93, 82 were killed in action, and 11 died of their wounds. The admission-rate per 1,000 was 582.3, and the death-rate 13.21. The number invalided to Malta or England was 2,321. "Thus," says the report, "up to October 9th less than 3 per cent. of the wounded men admitted to hospital died; of the remaining 7,212, 74 died of disease." There continued under treatment in the hospitals in Egypt on the above date 1,444, the death-rate for the whole service was therefore 24.39 per 1,000 *per annum*. Of the officers, 10 were killed in action, 52 were wounded, of whom two died, and 48 were invalided to England before October 9th. We most heartily agree with the Committee when they say (in paragraph 147) that "these figures speak for themselves of the skill and care with which the medical officers must have performed their professional duties in Egypt. Much credit is also due to the medical officers for the absence of pyæmia and other diseases incidental to hospitals in war."

In paragraph 148 we find the only note of disapprobation on the medical service of the war throughout the whole Committee's Report. "There were, however, many signs throughout the hospital services in Egypt that the work was carried on under a strain, which at first was at high tension, but which gradually diminished, and would, doubtless, eventually have disappeared had the campaign continued. The nursing, feeding, and hospital administration generally, left much to be desired, more especially at Ismailia and Cairo. The defects were, in our opinion, due in part to the want of energetic supervision during the first few days, when the hospitals at Ismailia and Cairo were being established, and when the difficulties (more or less inseparable from active warfare, but aggravated on the occasion in question) were at their height, the fulfilment of the regulations having been in some measure taken for granted; in part to faulty administration; and in part to causes connected with the present system, which have been indicated in the foregoing paragraphs, and for which it is our duty to suggest remedies."

From this paragraph Sir William Mac Cormac dissented, and has given weighty reasons for his dissent. Whatever else may have been wanting, we certainly consider that energy and an intense desire to do the best was nowhere wanting on the part of the medical officers. They contend that no one ever suffered during the continuance of this campaign from any want of medical attention, or from any deficiency in medical treatment; they confidently affirm that, at all points along the line, ample provision was made for the care and successful treatment of the sick and wounded. The medical results we have just quoted are the strongest possible testimony to the truth of these assertions. Further, they assert, in the plainest language, that no complaints were made by the sick or wounded at the time, nor by the higher military officers, who have thought fit to table grave charges subsequently; and that, so far as they can be considered professionally competent judges, there were no reasonable grounds for the complaints which have been subsequently made, and for which the reasons were certainly not visible to the eyes of the medical officers at the time.

In paragraph 151, the arrangements on board the *Carthage* are said to have been of the most elaborate description, and appear to have given the greatest satisfaction. As regards dieting of officers, they do not consider there were any grounds for complaint. The *Courland*, a much smaller ship, intended to act as a tender to the *Carthage*, appears occasionally to have been overcrowded, and the Committee considers a better ship might have been selected to take serious cases for the long voyage to England. "A few years ago, she would have been considered a fine ship; but, compared with the larger class of transports of the present day, she was ot so well suited for making a long voyage with invalids."

The *Malabar* has accommodation for about 1,500 troops in health; 201 invalids were embarked on September 7th at Ismailia. Of these a large number were convalescents, and 56 men were landed at Malta. The sanitary conditions were good; two men who went on board very ill died; the recovery of the wounded was remarkable. Some convalescents were quite well on arriving in England; and of the 98 cases admitted to Netley Hospital, only 23 remained on November 9th. Medical comforts and saloon stores of all kinds were shipped in abundance. The complaints of the invalids on the *Malabar* have been more numerous than in the case of any other ship. These complaints are of two kinds, and have been fully inquired into: the first was as to the want of cleanliness of bedding; the second as to food and attendance.

The complaint that there were vermin on board is unquestioned; but the complaint is not general. The men were brought on board, in many instances, in the clothes in which they were carried to the hospital off the field of battle; and, as they had no change of underclothing, it must be regarded as an inevitable result of campaigning in a country like Egypt, where parasites are universally prevalent. Steps were taken to have the men's shirts washed, and the bedding changed; but the Committee were of opinion that a proper supply should have been taken on board at Malta, when the absence of kits and underclothing became known. (Par. 154.) The complaints of the food were general: "the same rations were issued as for men in health, excepting that fresh meat was given instead of salt. Extras and medical comforts were issued to those who, in the opinion of the medical officers, required them." "We have examined," says the Report, "in addition to some of the complainants, the captain and paymaster of the ship, the surgeon-major in charge, and a naval officer who was a passenger, a chaplain, and an officer of Marines. Their evidence tends to show that no complaints were known to have been made during the voyage." The case of the other transports is then considered by the Committee; but the complaints in regard to them do not appear to have any serious import.

The third part of the Committee's Report consists of "Recommendations."

The Committee point out the difference in the organisation of civil and military hospitals; and recommend that the officer at the head hospital should have "undivided control over it, and be exclusively responsible for its management. The proposition to appoint military governors was carefully considered, as it is advocated by many distinguished officers; but the Committee have advised that such divided authority "would inevitably produce friction and inconvenience; that the relative duties of the medical and military authorities could scarcely be defined so as to obviate all chances of collision; that undivided control is essential, and that the control should be vested in the medical officers." They point out that the inspection of hospitals by military officers should be more regular and systematic; that "it is the duty of a general commanding a district, and of the senior officer commanding troops, to satisfy himself that proper arrangements are made for the treatment of the sick, and, wherever hospitals are established, to cause them to be systematically visited and their condition reported on." "At present, the responsibilities of the military officers in this respect appear to be insufficiently realised, and their inspection of the hospitals appears to be performed in too perfunctory a manner." Paragraph 173 advises that medical officers should retain such power to deal with petty offences as they are now entitled to under the Queen's Regulations, but that

all crimes for which imprisonment is the legitimate punishment should be relegated to the nearest competent military authority. In Paragraph 175, the medical officers are urged to secure for the patients in hospital that order, regularity, and quietness, so essential to the comfort of the sick, by personally satisfying themselves, through frequent and unexpected visits to the wards, that the ward-masters and orderlies are carrying out, with zeal and intelligence, their instructions for the nursing, diet, and general management of the sick. The closest supervision is demanded from medical officers in charge of wards, and the importance of the senior medical officer in charge of the general management of the hospital exercising his control with judgment and discretion, while at the same time he uses all his powers to secure to the utmost all that may be hoped for in the management and treatment of the sick is insisted upon. To accomplish these ends, it is recommended that the medical officer in charge should always be provided with a residence near the hospital, and that, in the larger hospitals, a resident surgeon should be appointed, who should be responsible to the medical officer in charge for the efficient working of the details—a recommendation which we regard as of great practical importance.

An extension of the employment of nursing sisters is strongly advocated in the report, all hospitals with more than one hundred persons, and where there is employment for at least three nursing sisters, should enjoy this great advantage. Female nurses cannot, of course. be employed exclusively, as in civil hospitals, and it is considered essential that their social position "should be sufficiently high to prevent their ever associating on terms of equality with the orderlies." Their influence should be due to their higher position, and the respect gained by their superior knowledge. It is advised that they should act as the superintendents of wards, assist in the training of the hospital orderlies, and report to the medical officers on their progress and merit. They should not take upon themselves the actual bedside attendance on the sick, to the exclusion of the orderlies, for in that case the orderlies, who should invariably undergo a course of training under the nursing sisters, would lose the opportunities of learning, under the sisters, the duties which they will have to perform unassisted, both in the field and in the smaller station hospitals."

In the next division of the report, the disadvantages of the regimental system are impartially recorded. The Committee, however, decide that the inconvenience, now justly complained of, can be remedied without departing from the present system; and that the fault has been rather in the way in which the system has been worked than in the system itself." They also express their opinion that the medical service of the Household Troops should be assimilated to that of the army at large. "The present arrangement is injurious to individual officers, and to the general service. To the officers, because it excludes them from the experience gained in foreign service, and consequently from advancement to the higher grades of their department; to the service generally, because the monopoly of London appointments by the medical officers of the Guards excludes the officers of the medical department generally from all chance of serving there, and thus gaining access to the medical schools and hospitals of the metropolis." The Committee regard this point as of great importance. The evidence, too, has proved conclusively how inadvisable it is that the Household Troops and the rest of the army should be worked under different, and to some extent independent systems. They think it "highly desirable that as many army surgeons as possible should, at some period of their career, have opportunities of visiting large civil hospitals, where the cases are of a far more serious and varied nature than those which usually come before them, and thus of keeping themselves informed of the progress of medical and surgical science.

The necessity of keeping some portion of war equipment of all descriptions in constant use during peace, so that all ranks of the medical department should be afforded an opportunity of becoming familiar with the equipment and handling of its various parts, is strongly insisted on. A certain number of field-hospitals should be established and used in time of peace, so that the officers and men might become thoroughly habituated to work together when field-hospitals are organised for active service.

In discussing the organisation in time of war, the Committee points out that general officers "have not fully realised the necessity of personal supervision over hospitals. The same responsibility appears to us," they say, "to rest upon general officers under the present, as under the regimental system." "It is the duty of all general officers to ascertain that the arrangements for the sick under their command, so far as circumstances permit, are adequate for the circumstances likely to be required. They should be equally responsible that the troops are provided with medical assistance, as they are responsible that they are supplied with food and ammunition." (Paragraph 187.)

It is pointed out that the present organisation of the bearer-company is too large. It is proposed to reduce it one-half, and a similar change is recommended for the field-hospitals. All hospital equipment is recommended to be packed in such cases, as may be carried on mule-back, avoiding the necessity of the present cumbersome waggons, which are perfectly useless on such a campaign as that of Egypt. On the vexed question of transport, as an inseparable part of a movable field-hospital, which some have urged should be placed under the entire charge and control of the medical officer, and that a field-hospital should be placed on the same footing as a battery of artillery, under its captain, the Committee recommend no change in the present regulations. "The cases are not similar. The men and officers of the artillery are trained to the care of horses, and, when not moving, do much useful work of a general nature. This a hospital could not do. The medical officers and their men are at all times fully occupied, and it would be inconsistent with their professional training to withdraw them from their legitimate duties when their transport was required elsewhere." It is considered that "it would be a mistake to lock up so much transport, and make it unavailable for the general purposes of the Army."

The Regulations divide hospitals into two classes; "dieted," in which the supplies are drawn in bulk by the hospital authorities, and issued to the patients according to a diet-scale; and the "non-dieted," where the daily ration of a healthy soldier is drawn for each patient. In all hospitals, extras and medical comforts are supplied in addition to rations; and in non-dieted hospitals, in lieu of rations, if necessary. Whether a hospital should be technically termed "dieted" or "non-dieted", is, the Committee thinks, "purely a matter of convenience," to be decided by the local authorities according to the circumstances of each case; and they have no suggestions to make on this point, except that they would "strongly dwell upon the responsibility of the medical officer in charge for procuring supplies of the best possible quality from any available source." Base-hospitals, both as regards their position and equipment, are usually arranged at home, according to the circumstances of the war; "and, where the operations have been conducted from a maritime base, ships have been equipped as base-hospitals. The arrangements on board ship are as nearly perfect as possible; and, with respect to the land-hospitals, the only suggestion they have to offer is, that a separate establishment should be set apart for the reception and care of sick and wounded officers." The regulations are silent on this point. The report adds: "We also think it very desirable that the medical authorities should have power to hire good cooks to superintend the cooking in all important base-hospitals."

The Committee here draw attention to the advantages which some test before promotion would afford. They regret the abandonment of the system of examination introduced after the Crimean war, and point out that the medical is the only department in the whole army in which examinations are not held. They advise that "facilities should be given for special courses of study in civil or military hospitals in London or in foreign capitals;" that "the proposed examinations should be conducted by independent examiners, and should include, in addition to the strictly professional subjects connected with medicine and surgery, both theoretical and practical, all matters relating to army hospital administration." The anomalous position of a department without subordinates, and a corps without officers, is pointed out. (Par. 211.) "Such absence of discipline as has been commented upon in the Egyptian and other campaigns is apparently in some measure due to the unsatisfactory relations of the Army Medical Department to the Army Hospital Corps. The Committee recommends, after hearing conflicting testimony, that "the corps should be merged" in the department, and like other corps in the service receive the honour of being constituted a Royal Corps, and that its officers and men should wear the same uniform.

The remainder of the Report deals with the organisation, and removes the great anomaly which gives higher pay to cooks and stewards than to nurses. The nursing section will henceforth be, at least, as well paid as these other less strictly professional portions of the corps, the powers of discipline are defined and facilities given for removing men unfitted by character or taste for becoming good hospital nurses.

The last paragraph in the Report, the chief portions of which we

have now reviewed, recommends the acceptance of voluntary aid in time of war. This principle has been already adopted in respect to nursing sisters, a certain number of whom went out to Africa and to Egypt, but all other efforts have previously been declined by the authorities on the ground that there was no necessity for such help. The Committee, however, did not find any good reason why Her Majesty's forces in the field should not receive the benefit of a voluntary aid like that furnished to every continental army by the Red Cross Societies. This might not only be of use in itself, but the rivalry produced by the presence of such a voluntarily organised hospital, both in the medical and nursing departments, would create a spirit of healthy emulation between the military and the civil element, which could scarcely fail to produce beneficial results. Such aid would, of course, be under absolute military control, and the inconvenience and difficulty attending desultory and amateur assistance, such as would certainly arise in any prolonged campaign, would be avoided.

The three military members of the Committee, Major-General Hawley, Sir R. Loyd-Lindsay, and Sir Redvers Buller, dissent from paragraph 148. They contend that the administration was not "thoroughly efficient, that while the medical officers acted throughout with great zeal and devotion, there were signs of want of experience and practice in the administrative work, both of stationary and field hospitals, and an absence of thorough mastery over the details of the work." They admit the removal of the wounded at Tel-el-Kebir was well carried out, but the nursing and feeding, and the hospital administration generally, left much to be desired." Major-General Hawley and Sir R. Loyd-Lindsay attach a paragraph advocating a return to a modified regimental system. Then follow the remarks of Sir William Mac Cormac, in which he expresses his dissent to paragraph 148. What he says goes very far to refute the allegations of Lord Wolseley. In respect to the defects, both at Ismailia and Cairo, we can hardly see how testimony thus coming from a perfectly independent member of the Committee, and one possessing special qualifications for judging the case, can be considered as otherwise than a very weighty testimony in favour of the conduct of the medical officers. For each statement made by Sir William Mac Cormac, he gives chapter and verse in the report itself. He points out how strangely contradictory is the evidence of Surgeon-General Adye, the Chief of the Staff, to that of the General-Commanding. He dwells strongly on the great difficulties which the medical officers had to encounter, and the efficient manner in which they contended against those difficulties; and above and beyond all, the remarkable nature of the results obtained, must be taken into consideration. They surely largely justify the contention of the medical officers, that in no single instance did any man suffer from want of medical cure, medical treatment, or medicines; that, at every point, ample provision was made for the treatment of the sick and wounded; that no complaints were made by the patients at the time; that no cause of complaint appreciable to the medical officers existed.

The Surgeon-General's weighty and important testimony must be placed side by side with that of Lord Wolseley's, to which it gives the completest contradiction, and we cannot doubt on which side the profession at large will place its faith. After doing, however, their best, the medical officers have been assailed with unmeasured blame. No allowance is made for shortcomings arising from causes which they could in no respect control, and we agree with Sir William Mac Cormac when he says—and this concerns the public as much as the profession—"that the medical service of the army must cease, under such circumstances, to possess the attractions which it has hitherto held out to the younger members of our profession." We cannot refrain from quoting one instance of which we have heard. No statement has been more persistently reiterated than that there was a want of chloroform, not only at the front, but at the hospitals at the base; that operation after operation was performed without it, and the sufferings of our poor soldiers, therefore, increased a hundredfold. On the night march to Tel-el-Kebir, in the midst of the death-like silence necessary for the safety of all concerned, a drunken soldier commenced to yell. It is stated that he appropriated more than his own share of the spirit ration issued to the troops before they started. His comrades on each side seized him, dashed him to the ground, stuffed sand into his mouth—almost strangled him. Their own safety was at stake. What happened? Surgeon-Major J. E. Shaw came up, saw what was being done; stuck his thumbs between the man's jaws, and thus formed a gag; cleared the sand out of his mouth, which being kept open, he could no longer shout; placed a handkerchief saturated with chloroform on his face; and in a few moments the man was quietly sleeping, and was carried harmless to the rear. Yet we are told that chloroform was wanting. We are told that the medical officers wanted in initiative, and we are expected to blame them for their good work.

THE REPORT OF LORD MORLEY'S COMMITTEE.

MR. ERNEST HART has taken steps, as Chairman of the Parliamentary Bills Committee, to procure an efficient representation in the course of the forthcoming debates in Parliament, to obtain an effective statement of the case of the Army Medical Officers of the Egyptian Expedition by influential Members of Parliament. It is thus anticipated that Mr. Gibson, Sir Lyon Playfair, Lord Randolph Churchill, and other members, in addition to the medical members of the House of Commons, will call attention to the peculiarities and inconsistencies of some of the hostile evidence given, and will make such an analysis of the proved facts of the case, as will go far to remedy the injustice which has been done by the premature publication of portions of the report, and the biassed remarks which have been made on the subject. With this view, copies of the recent numbers of the BRITISH MEDICAL JOURNAL have been placed in their hands, with information which will serve to put the matter in its true light. For this purpose, the statements prepared by Sir W. Mac Cormac have been of very great service.

In order to raise the whole question of the medical service during the Egyptian campaign, it will be proposed on Vote 4 of the Army Estimates to reduce the vote. On Monday next, Mr. Gibson will ask Lord Hartington whether, having regard to the grave charges and insinuations freely brought in evidence before Lord Morley's Committee and in the press against medical officers engaged in the late Egyptian War, he will take care that the vote in the Army Estimates relating to the medical service of the Army, is taken at a time when those interested in vindicating the conduct of those officers who will have ample opportunities of doing so. The noble Lord will be asked, "Can he now name the day on which that vote will be taken, and will adequate notice be given of the days selected for taking the vote?"

On the motion for the Annuity Bills, Lord R. Churchill intends to call attention to the evidence given by Lord Wolseley on the working of the medical department during the recent expedition to Egypt.

MEDICAL PROVIDENCE: THE PROPOSED MEDICAL BENEFIT SOCIETY.

MEMORANDUM EXPLANATORY OF THE LOOSE SHEET OF QUERIES INSERTED IN THE BRITISH MEDICAL JOURNAL OF THIS DATE.

1. IT is evident, from the voluminous correspondence in the BRITISH MEDICAL JOURNAL, that the first point to be decided is the ground to be covered by the proposed Society. It is absolutely necessary that this should be fixed before any outlay is made by applying to an actuary to make tables. The variety of suggestions, as to what the Society should attempt, include *(a)* allowance in case of sickness, *(b)* superannuation in old age, *(c)* pension to widows, and *(d)* ordinary insurance of sums payable at death. It appears undesirable that, at any rate at first, any attempt should be made to undertake either to pension widows, or ordinary insurance business, as plenty of societies exist for these branches of insurance; and an attempt to combine them, with either sick-pay or superannuation would over-complicate the tables, and considerably increase the cost of their construction.

2. Presuming, therefore, that the scheme of the Society were to be confined to sick-pay allowance and superannuation over sixty-five years of age, the preliminary information that should be ascertained before any expense for tables is incurred must include the probable number of members that could be counted upon to become subscribers to start the Society, and also some facts showing the probable amount of sickness to which the members would be liable. As regards numbers of members, it may be assumed that less than two thousand subscribers, unless strengthened by a trust or guarantee fund, would be too small a basis for a propitious commencement. Without some special information as to the liability to serious illness in the profession, it would be impossible to construct useful tables applicable to the object in view.

3. Information on these two points we now seek to obtain by the form of queries addressed in our issue to-day to the members of the profession, half of which circular should be returned with the least possible delay. Each member is thus asked whether the project of a Medical Benefit Society for granting sick-pay and superannuation allowances after 65 years of age, would meet with his approval and support, if started as proposed. Then, with regard to the probable amount of claims on the funds of the Society for sick-pay, each is further asked (with the object of supplying information necessary for starting the Society on a safe basis) to state date of birth, and, as approximately as possible, the number of days incapacitated from attending to professional duties during 1882, and showing as many previous years as might be possible. Those questions, if answered by, say three thousand members of the profession, would afford an excellent basis for estimaing the probable claims for sick-pay.

It is highly important to obtain this information as a preliminary basis for whatever action may be further taken. It is desired to lay this information in a digested form before the meeting, which it is proposed to summon for consideration of the whole matter, at the ensuing Annual General Meeting of the Association in Liverpool. Members who feel any interest in the matter, and there are probably few who do not feel some interest in it—for others' sake, if not for their own—will render a great service *by promptly filling in* the blanks in the circular and returning it without delay to the office.

MEDICAL ACT AMENDMENT BILL.

THE SOCIETY OF APOTHECARIES.

A DEPUTATION from the Society of Apothecaries last week waited upon Mr. Mundella at the Privy Council Office, for the purpose of urging that that body should be represented on the new Medical Board. It was represented by Mr. Saner (Master of the Society), Mr. Statham (former Master), Dr. Randall (Chairman of the Court of Examiners), and Mr. Upton (Clerk of the Society), that the Bill, as originally framed, allowed for the representation of the Apothecaries' Society on the Divisional Board; but the Society had been struck out on the third reading of the Bill in the House of Lords. Mr. Mundella, in reply, said that the fact of the Apothecaries' Society being in the number of representative bodies that would form the Medical Council, showed that the Government were in favour of the Apothecaries' Society being included. However, in its passage through the Lords, Lord Salisbury moved to omit the name of the Society, and if the Government had not accepted this, the Bill would have been thrown out. That arrangement was not binding on the House of Commons. He should consult his colleagues on the matter, and see what could be done. The Government were anxious to do justice to those who had done good service in the past, and to take care that the medical education of the future should be worthy of the country.

THE METROPOLITAN COUNTIES BRANCH.

ON Friday, June 1st, a deputation from the Council of the Metropolitan Counties Branch of the British Medical Association waited on Mr. Mundella, to suggest certain alterations in the Medical Acts Amendment Bill. Dr. Farquharson introduced the deputation, which consisted of Dr. Bridgwater (President of the Branch), Dr. Hare (President-elect), and Dr. Henry and Dr. Grigg (Honorary Secretaries). They informed Mr. Mundella that, while the Bill was generally approved, there were some points to which they wished to draw attention. In the first place, they desired that women should be precluded from holding seats on the medical boards; and also that medical schools should not be compelled, as a condition of recognition, to admit female students. They also suggested that the penal clauses of the Bill should be made more stringent, so as to prohibit unregistered persons, not only from using medical titles, but from practising for gain. They also objected to the power given in Clause 34 to examining authorities to grant their diplomas without further examination to persons who had passed the final examination under the Act. They recommended also that the annual audit of accounts should be compulsory, and that it should be made by professional accountants; and that a portion of the funds should be applied to the endowment of lectures. In reply, Mr. Mundella said he believed the introduction of any limitation of the status of women in the Bill would be fatal to the adoption of the measure by the House of Commons, and he certainly could not approve of the principle the deputation urged. The exclusion of women from the medical boards was in the hands of the profession. With regard to the second point, he said that was a question for the schools themselves, and not one in which the department or Parliament could well interfere. With respect to the penal clause, he said that the Bill merely prohibited the assumption of medical titles, leaving the law as it stood. It would not be possible to prevent persons from going to herbalists or other unqualified practitioners. Respecting the thirty-fourth clause, he said that the Bill provided an examination, which must be passed before anyone could be put on the *Register;* and it could not take cognisance of any action of the universities and corporations in the subsequent granting of diplomas. In conclusion, Mr. Mundella thanked the deputation for their suggestions. He knew that the British Medical Association had given to this Bill a very hearty support. He hoped the requisite time would be obtained for passing the Bill in the present session. He would deplore the prospect of putting it off to another session. He believed it to be a great measure, and that it would give satisfaction to the whole profession. He was obliged for the suggestions, and would give them careful consideration. The deputation, having thanked Mr. Mundella, then withdrew.

MEDICAL UNION SOCIETY.

A DEPUTATION of students from the Medical Union Society waited upon Mr. Mundella on June 1st, to ask that, when they had passed their final examination, they should be allowed to call themselves medical practitioners, and that this title should be uniform. Dr. Farquharson introduced the deputation, and Mr. Wade stated their reasons for asking for the interview.—Mr. Mundella, in reply, said he thought they were entitled to call themselves medical practitioners, and that nothing could prevent them from using that title. It was, however, a matter to which he must give further consideration. He would take counsel with the Lord President, and he should be very happy if, in the end, the Bill should come out of Parliament in a shape that would be acceptable to the Medical Union Society. What they had said should receive his best attention. The deputation thanked Mr. Mundella, and withdrew.

UNIVERSITY OF CAMBRIDGE.

A DEPUTATION from the University of Cambridge waited upon Mr. Mundella, on June 1st. It was composed of the Rev. Dr. Phear, Professor Liveing, Mr. Trotter, and Professor Paget.—The Rev. Dr. Phear stated that their first objection was to the composition of the medical board for England, in which the relative representation of the English Universities would be diminished. As to the medical schools and the schemes for the prescribed course of medical education, they thought that clause 19 would hamper them.—Mr. Mundella thought the last paragraph in that clause gave abundant elasticity.—Professor Paget said that not many years ago the Medical Council made regulations in regard to the preliminary examination of students of medicine which were of such a nature that no examination of the University of Cambridge would have satisfied the conditions. They objected to entire power, as that contemplated by clause 19, being given to a body of sixteen members.—Mr. Mundella said he would take note of their apprehensions on this point, and bring them under the consideration of the Lord President. As to the medical board, and the desire that there should be no further alterations in the reduction of the representation of the Universities, he did not anticipate any further alteration in that direction, and he thought that there was every guarantee for an excellent board and an excellent council. It was quite impossible to exact rigid uniformity. All that they could do was to see that the teaching was sufficient. He promised to carefully consider what had been put before him. The deputation then withdrew.

MEDICAL HERBALISTS.

A DEPUTATION, from the Medical Herbalists of Great Britain, had an interview with Mr. Mundella this week. The deputation desired to have it made clear in the Bill that they would be allowed to practise as medical botanists and medical herbalists without fear of any prosecution, provided they did not falsely assume medical titles. Mr. Mundella informed them that this Bill in that respect re-enacted the existing law, and that they would not be prosecuted under it so long as they called themselves medical botanists or medical herbalists, and did not take improper titles, in the sale of the articles in which they dealt. What the government provided for in the Bill was, that the future medical practitioners in England should be better educated, and that they should have a threefold qualification in medicine, surgery, and midwifery, before they could be put upon the *Register.*

THE MILITIA SURGEONS.

THE case of the militia surgeons, which Sir Eardley Wilmot, Bart., has, at the request of the Chairman of the Parliamentary Bills Committee, undertaken to bring once more under parliamentary notice, will, it is expected, be brought forward by that gentleman in the House to-night (Friday) in Supply. Efforts may be expected, however, to keep members away from the House, and for other purposes, to count out the House. It is therefore very desirable that those who are anxious to secure a discussion should endeavour to secure a full attendance of members.

SHIP-SURGEONS.

IT is proposed to arrange a deputation to the President of the Board of Trade, on the subject of the present position of ship-surgeons, as set forth in the recent memorial from the Parliamentary Bills Committee of the British Medical Association. Gentlemen interested in the subject, or willing to take part in forming the deputation, and to assist in procuring Parliamentary support for it, are requested to address communications to Dr. Irwin, at the office of the British Medical Association, 161A, Strand.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED DURING MAY 1883.

ACUTE PNEUMONIA (87).

T. Aikman, M.D., Guernsey (3); R. L. Batterbury, M.D., Berkhampstead (1); W. Bernard, Esq., Londonderry (1); J. Booth, M.D., Aberdeen (1); J. Mackenzie Booth, M.B., Aberdeen (3); J. Bridger, Esq., Cottenham (1); S. H. Burton, M.B., Norwich (1); C. P. Coombs, M.D., Castle Cary (2); S. W. Coombs, Esq., Worcester (5); G. W. Crowe, M.D., Worcester (1); A. S. Currie, M.D., Lydney, Gloucester (2); D. A. Davis, M.B., Swansea (1); T. V. de Denne, Esq., Cradley Heath (1); C. E. Douglas, M.D., Cupar Fife (2); F. H. Drake, Esq., Leeds (1); G. M. Edmond, M.D., Stonehaven, N.B. (1); J. J. Faulkner, M.B., Manchester (1); F. C. Fisher, Esq., King's Langley (2); S. W. Fisher, M.D., Brighton (1); E. L. Fox, M.D., Clifton (3); W. Frew, M.B., Galston (1); G. A. Gibson, M.D., Edinburgh (1); P. F. Graham, M.D., Limerick (1); G. Hunter, M.D., Linlithgow, N.B. (1); J. G. D. Kerr, M.B., Bath (1); H. R. Ker, Esq., Halesowen (4); H. Kershaw, Esq., Leeds (2); R. Kirk, M.D., Battigate, N.B. (1); W. Lamb, M.D., Lewisham (1); Alex. Macdonald, M.D., Kirkoswald, N.B. (1); J. M. H. Martin, M.D., Blackburn (2); W. H. Mason, Esq., Leeds (1); T. H. Moorhead, Esq., Cootehill (1); A. D. L. Napier, M.D., Abbeylands (1); J. Neil, M.D., Portsmouth (1); C. V. Newstead, Esq., Leeds (1); R. P. Oglesby, Esq., Leeds (2); T. J. Ollerhead, Esq., Minehead (1); C. A. Owens, M.D., Long Stretton (1); L. Phillips, Esq., Hove (1); T. F. Raven, Esq., Broadstairs (2); A. H. Robinson, M.D., Hull (1); Tom Robinson, M.D., Guilford Street, W.C. (4); A. W. M. Robson, Esq., Leeds (3); T. R. Ronaldson, M.B., Edinburgh (3); W. Russell, M.B., Carlisle (1); W. Sneddon, M.D., Beith (1); H. S. Stone, M.B., Reigate (3); A. Sutherland, M.B., Invergordon, N.B. (1); H. G. Terry, Esq., Bath (1); A. W. Tomkins, M.D., Leamington (1); E. T. Tylecote, M.D., Stafford (1); W. E. W. Vaughan, Esq., Crewe (1); C. C. Walter, Esq., Dover (1); W. E. Williams, Esq., Abertillery, (1); J. O. Wilson, M.D., Huntley, N.B. (1); J. K. Wynne, M.D., Eccleshill (1).

CHOREA (33).

W. Bernard, Esq., Derry (3); J. Mackenzie Booth, M.B., Aberdeen (1); D'Arcy B. Carter, Esq., Wakefield (1); A. S. Currie, M.D., Lydney, Gloucester (2); T. V. de Denne, Esq., Cradley Heath (1); C. E. Douglas, M.D., Cupar, N.B. (1); G. M. Edmond, M.D., Stonehaven, N.B. (1); C. Elliott, M.D., Bristol (4); A. Gibbs, Esq., Bristol (1); J. G. Hall, M.D., Aberdeen (1); George Hunter, M.D., Linlithgow (1); James Hunter, M.B., Queensferry (1); R. Kirk, M.D., Battigate, N.B. (2); W. Vawdrey Lush, M.D., Weymouth (2); F. Macnab, Esq., Hull (1); J. McNee, M.D., Inverness (2); H. Masser, Esq., Longford, near Coventry (1); R. P. Oglesby, Esq., Leeds (1); L. Phillips, Esq., Hove, Brighton (1); N. Porrett, Esq., Huddersfield (1); T. Robinson, M.D., Guilford Street, W.C. (1); R. Shingleton Smith, M.D., Clifton (1); A. Sutherland, M.B., Invergordon, N.B. (1); T. W. Thursfield, M.D., Leamington (1).

ACUTE RHEUMATISM (37).

W. H. Axford, M.B., Southsea (1); J. Mackenzie Booth, M.B., Aberdeen (1); M. Campbell, M.D., Liverpool (1); W. M. Clark, Esq., Clifton (1); A. S. Currie, M.D., Lydney, Gloucester (2); T. V. de Denne, Esq., Cradley Heath (1); J. Dobson, Esq., Leeds (1); N. C. Dobson, Esq., Clifton (1); C. E. Douglas, M.D., Cupar (1); G. A. Gibson, M.D., Edinburgh (1); J. L. Green, M.B., Salisbury (1); F. J. Joynes, Esq., Dursley (1); J. G. D. Kerr, M.B., Bath (2); R. Kirk, M.D., Battigate, N.B. (1); W. Lamb, M.D., Lewisham (1); W. E. Lowe, M.D., Burton-on-Trent (1); W. J. Mackie, Esq., Bedford (1); J. McNee, M.D., Inverness (3); W. A. Michie, M.B., Aberdeen (1); H. Masser, Esq., Longford, near Coventry (1); W. W. Millard, M.B., Dunbar, N.B. (1); R. P. Oglesby, Esq., Leeds (1); L. Phillips, Esq., Hove (1); A. W. M. Robson, Esq., Leeds (2); A. H. Robinson, M.D., Hull (1); T. Robinson, M.D., Guilford Street, W.C. (1); C. H. Robinson, Esq., Dublin (1); T. R. Ronaldson, M.B., Edinburgh (1); B. Shirley, Esq., Leeds (1); W. Sneddon, M.D., Beith, N.B. (1); W. White, M.D., Manchester (1); W. E. Williams, Esq., Abertillery, Monmouthshire (1).

DIPHTHERIA (44).

E. G. Barnes, M.D., Eye (3 s.); F. Barrow, Esq., Rothbury (8 c., 6 s.); C. F. Cuthbert, Esq., Wendlesham (2 c.); N. C. Dobson, Esq., Clifton (1 c.); E. Drummond, M.D., Rome (1 c.); G. F. Duffey, M.D., Dublin (1 c., 1 s.); W. Frew, M.D., Galston, N.B. (1 c., 1 s.); J. Thoresby Jones, Esq., Paddington (1 c., 1 s.); W. Vawdrey Lush, M.D., Weymouth (1 c.); A. R. Manby, Esq., East Rudham (3 c., 3 s.); H. Masser, Esq., Longford, near Coventry (1 c.); A. D. Leith Napier, M.D., Dunbar (1 c., 1 s.); T. Robinson, M.D., Guilford Street (1 c.); A. W. M. Robson, Esq., Leeds (4 c.); J. Howell Thomas, Esq., Wellingborough (1 c., 1 s.).

SYPHILIS (5).

W. H. Brown, Esq., Leeds (2 acquired); J. G. D. Kerr, M.B., Bath (1 acquired); J. R. Morison, M.D., Hartlepool (2 acquired).

Total number of cards received this month, 206.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883:

ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary*.

November 9th, 1882.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M. on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

CAMBRIDGE AND HUNTINGDON AND SOUTH MIDLAND BRANCHES.—*Preliminary Notice.*—A combined meeting of the South Midland and the Cambridge and Huntingdon Branches will be held at Bedford on June 29th. Members of the former Branch, who are desirous of reading papers or showing specimens, are requested to communicate with BUSHELL ANNINGSON, Cambridge, and G. F. KIRBY SMITH, Northampton, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital on Thursday, June 14th, at twelve o'clock.—ALEXANDER DEMPSEY, Honorary Secretary.—Clifton Street Belfast.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Keswick on Friday, July 6th, 1883. Members intending to read papers or show specimens are requested to communicate with RODERICK MACLAREN Honorary Secretary *pro tem.*, or J. SMITH, M.D., Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held at the Medical Institute on Thursday, June 28th, at 3.30 P.M. An address will be given by the President, Dr. Balthazar Foster. The annual dinner will be held at the Grand Hotel, at 6 P.M. Dinner tickets, exclusive of wine, five shillings each. Members have the privilege of introducing a friend to the dinner, whether a member of the medical profession or not.—EDWIN RICKARDS, ALFRED H. CARTER, Honorary Secretaries.

SOUTH-WESTERN BRANCH.—Mr. J. Harper, President; Mr. C. Bulteel, President-elect. The annual meeting will be held on Tuesday, June 26th, at the Royal Albert Hospital, Devonport. The chair will be taken at 2.15 P.M. The dinner will be at the Duke of Cornwall Hotel, Plymouth, at 6 P.M. The President-elect invites members and their friends to lunch at his residence, 84, Durnford Street, Stonehouse, from 12 to 2 o'clock. A special notice of the meeting, with rules, etc., of the Branch, will be sent to each member by the Secretary, who will be glad to receive notice of proposed papers and communications.—S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

NORTH WALES BRANCH.—The thirty-fourth annual meeting will be held at the Lion Hotel, Bala, on Tuesday, July 3rd, at 11.30 (for 12 noon), under the presidency of Mr. Roger Hughes of Bala. Besides the contributions already notified, Dr. Lloyd Roberts of Manchester is expected to read a paper. Titles of other communications should be given to the Honorary Secretary, not later than Tuesday morning, the 12th instant.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh, June 6th, 1883.

LANCASHIRE AND CHESHIRE BRANCH.—The forty-seventh annual meeting of this Branch will be held at the Memorial Hall, Albert Square, Manchester, on Wednesday, June 13th, 1883, at 2.30 P.M. (The Council meets at 1.30 P.M.) Order of Business: President's Address; Report of Council; election of new Council and office-bearers; election of General Secretary. Miscellaneous Business: Dr. Leech will draw attention to the proposed changes in the government of the Association. Medical and Surgical Communications.—Dr. Lloyd Roberts: Two Dermoid Cysts of the Ovary. Dr. Ransome: Charts showing influence of Iodoform on weight of Phthisical Patients. Mr. Thos. Jones: Patient who on two occasions has suffered Spontaneous Fracture of Femur. Dr. Walter: Case of Nephrectomy. Mr. E. G. Bishop: 1. A New Clamp for Enterectomy; 2. A Plan for Treating Traumatic Synovitis of the Metatarso-Phalangeal Joint of the Hallux. Dr. J. Brown: The proposed Medical Benefit Society. Mr. Musson: Excision of the Great Toe-nail. Luncheon will be provided by the President, Dr. Borchardt, at the place of meeting. Dinner at the Queen's Hotel, at 6 P.M. Tickets, 10s. 6d., exclusive of wine.—A. DAVIDSON, Honorary Secretary, 2, Gambier Terrace, Liverpool.—June 1st, 1883.

SOUTH-EASTERN BRANCH.—The thirty-ninth annual meeting of this Branch will be held at the Town Hall, Hastings, on Wednesday, June 13th, at 1 o'clock precisely. The President-elect kindly provides luncheon at the Town Hall, from 12 to 2 P.M. After the meeting, members are invited to join either of the following excursions: 1. To Battle Abbey, by the kind permission of the Duke of Cleveland (Mr. T. H. Cole will act as guide to this party); 2. To Fairlight Church and Glen; 3. A sail for two hours on the Channel, or to visit (*a*) Hankey Loan Collection of Old Masters at the Observer building, Claremont (by kind permission of the Mayor); (*b*) the Pier, or the Castle on the West Hill, both free to members on giving their names to the doorkeepers; (*c*) the Herefordshire Convalescent Home, and the Convalescent Home for Sick Children, situated close together at the west end of the town. Dinner will be served at the Queen's Hotel at 5 P.M. Tickets (not including wine), 7s. 6d. each. Members are requested to send the dinner-notice to C. B. Gabb, Esq., 3, Castle Place, Hastings, not later than June 11th. Members desirous of making communications to the meeting will oblige by informing the Secretary on or before June 11th.—CHARLES PARSONS, M.D., Honorary Secretary.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session was held at the Grand Pump Room Hotel, Bath, on Thursday evening, May 24th; J. K. SPENDER, M.D., President, in the chair. There were also present thirty-four members and one visitor.

New Members.—The following gentlemen were elected:—G. W. Isaac, M.B., C.M., Clifton; G. F. P. Pizey, M.R.C.S.Eng., Clevedon.

Collective Investigation of Disease.—Dr. MAHOMED (secretary to the committee) gave an address on "The Collective Investigation of Disease." Drs. E. L. Fox, D. Kerr, and Messrs. Dobson and Harrison spoke on the subject. A vote of thanks was unanimously accorded to Dr. Mahomed for his address.

Discussion.—Dr. E. FIELD opened a Discussion on Pneumonia, which was continued by Drs. Brabazon, Spender, Markham Skerritt, Shingleton Smith, and Elliott, and Messrs. Waugh, Mason, and Pritchard, and Surgeon-General O'Leary.

WORCESTERSHIRE AND HEREFORDSHIRE AND GLOUCESTERSHIRE BRANCHES.

A JOINT meeting of the above Branches was held, under the presidency of Dr. STRANGE, at the Worcester Infirmary, on Tuesday, May 29th, at 3 P.M. Thirty-six members were present.

Communications.—The following papers were read.

1. Dr. Strange, President of the Association, gave a short address on "The duties and privileges of the Branches."

2. Dr. Currie read a paper on Faith Cures and Modern Miracles in their Medico-Psychological Aspect.

3. Mr. Lawson Tait on Ruptured Pyosalpinx resulting in Acute Peritonitis, successfully treated by abdominal section in five cases.

4. Dr. Wilson on Bleeding from the Trachea simulating Acute Pulmonary Hæmorrhage.

5. Mr. Miles A. Wood gave details of Some Cases of Diphtheritic growth on Wounds.

6. Dr. Strange: A Case of Aneurysm; patient shown.

7. Mr. W. Smith Batten: A Case of Dislocation of the Spine (with specimen).

8. Dr. Crowe: A Specimen of Uterine Fibroid removed by *ecraseur*.

9. Mr. Vevers: A Testicle which he had removed, weighing nine and a half ounces.

The Dinner was at the Star Hotel, and twenty-six members sat down.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

THE Fifty-first Annual Meeting of the British Medical Association will be held at Liverpool, on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1883.

President: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

President-elect: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, and Professor of Medicine in University College, Liverpool.

An Address in Surgery will be delivered by REGINALD HARRISON, F.R.C.S., Surgeon to the Royal Infirmary, Liverpool.

An Address in Pathology will be delivered by C. CREIGHTON, M.D., formerly Demonstrator of Anatomy, University of Cambridge.

The business of the Annual Meeting will be conducted in ten sections.

SECTION A. MEDICINE.—*President:* John Cameron, M.D. *Vice-Presidents:* Thomas R. Glynn, M.D.; Frederick T. Roberts, M.D. *Secretaries:* Richard Caton, M.D., 18A, Abercromby Square, Liverpool; Byrom Bramwell, M.D., 23, Drumsheugh Gardens, Edinburgh.

SECTION B. SURGERY.—*President:* Edward R. Bickersteth, F.R.C.S. *Vice-Presidents:* W. Hargreaves Manifold, M.R.C.S.; W. Mitchell Banks, F.R.C.S. *Secretaries:* Rushton Parker, M.B., F.R.C.S., 61, Rodney Street, Liverpool; Edmund Owen, M.B., F.R.C.S., 49, Seymour Street, Portman Square, W.

SECTION C. OBSTETRIC MEDICINE.—*President:* W. M. Graily Hewitt, M.D. *Vice-Presidents:* John Wallace, M.D.; David Lloyd Roberts, M.D. *Secretaries:* John E. Burton, L.R.C.P., 64, Rodney Street, Liverpool; W. C. Grigg, M.D., 6, Curzon Street, Mayfair, W.

SECTION D. PUBLIC MEDICINE.—*President:* T. P. Teale, M.B., F.R.C.S. *Vice-Presidents:* William Carter, M.D.; W. Honner Fitz-Patrick, M.D. *Secretaries:* F. Pollard, M.D., 52, Rodney Street, Liverpool; George Goldie, M.D., 123, Hyde Park Road, Leeds.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* Professor E. A. Schäfer, F.R.S. *Vice-Presidents:* William Stirling, M.D.; Richard Norris, M.D. *Secretaries:* James Barr, M.D., 1, St. Domingo Grove, Everton, Liverpool; A. W. Mayo Robson, F.R.C.S., Hillary Place, Leeds.

SECTION F. PATHOLOGY.—*President:* T. H. Green, M.D. *Vice-Presidents:* E. H. Dickinson, M.D.; Joseph Coats, M.D. *Secretaries:* Frank Thos. Paul, F.R.C.S., 44, Rodney Street, Liverpool; James F. Goodhart, M.D., 27, Weymouth Street, W.

SECTION G. PSYCHOLOGY.—*President:* T. L. Rogers, M.D. *Vice-Presidents:* G. H. Savage, M.D.; D. Yellowlees, M.D. *Secretaries:* G. E. Shuttleworth, M.D., Royal Albert Asylum, Lancaster; W. Julius Mickle, M.D., Grove Hall Asylum, Bow, E.

SECTION H. OPHTHALMOLOGY.—*President:* T. Shadford Walker, M.R.C.S. *Vice-Presidents:* E. Nettleship, F.R.C.S.; C. E. Fitzgerald, M.D. *Secretaries:* E. A. Browne, M.R.C.S., 86, Bedford Street, Liverpool; C. E. Glascott, M.D., 23, St. John Street, Manchester.

SECTION I. DISEASES OF CHILDREN.—*President:* Samuel Jones Gee, M.D. *Vice-Presidents:* M. G. B. Oxley, M.D.; T. R. Jessop, F.R.C.S. *Secretaries:* H. G. Rawdon, M.D., 42, Rodney Street, Liverpool; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION J. OTOLOGY.—*President:* G. P. Field, M.R.C.S. *Vice-Presidents:* Edward Woakes, M.D.; C. Warden, M.D. *Secretaries:* Thos. Barr, M.D., 10, Albany Place, Sauchiehall Street, Glasgow; R. Williams, L.R.C.P., 82, Rodney Street, Liverpool.

Honorary Local Secretary: Alexander Davidson, M.D., 2, Gambier Terrace, Liverpool.

Honorary Treasurer: W. Mitchell Banks, F.R.C.S., 28, Rodney Street, Liverpool.

TUESDAY, JULY 31ST, 1883.

10.30 A.M.—Church Service at Pro-Cathedral. Sermon by Bishop of Liverpool.
12.0.—Meeting of Committee of Council.
12.30 P.M.—Meeting of the Council, 1882-3.
3 P.M.—First General Meeting: Report of Council and other business. Adjourn at 5 P.M.
8.15 P.M.—Adjourned General Meeting: President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 1ST, 1883.

9.30 A.M.—Meeting of Council, 1883-84.
11 A.M.—Second General Meeting. Address in Surgery.
1.30 to 5 P.M.—Sectional Meetings.
9 P.M.—*Soirée* in the suite of rooms forming the Arts Gallery, the Picton Reading Room, and the Free Library, by the President and Local Committee. To this, ladies will be invited.

THURSDAY, AUGUST 2ND, 1883.

9 A.M.—Meeting of Committee of Council.
10 A.M.—Third General Meeting. Sectional Meetings. Adjourn at 1 P.M.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner in the Philharmonic Hall.

FRIDAY, AUGUST 3RD, 1883.

10 A.M.—Fourth General Meeting. Address in Pathology. Sectional Meetings.
2 P.M.—Concluding General Meeting.
9 P.M.—*Soirée* by the Mayor of Liverpool, at the Town Hall. To this, ladies will be invited.

SATURDAY, AUGUST 4TH, 1883.

Excursions.

ANNUAL MUSEUM.

The museum will be in the same building as the reception-room, the general meetings, and the sectional meetings. In fact, all the business of the annual meeting will be carried on in one building, viz., the College, Shaw Street, Liverpool. The room which is specially devoted to museum purposes is a gallery, 300 feet in length, in the upper storey, lighted from the roof. On the same floor are several additional rooms, so that the accommodation for exhibiting drugs and instruments is ample. On the second floor, adjoining the room where the Pathological Section meets, are two class-rooms, one of which will be used for the exhibition of pathological drawings and specimens, the latter for microscopes. A large hall on the ground-floor has been set apart for sanitary appliances, among which it is expected there will be a good exhibition of ambulances.

The museum will comprise: 1. Latest inventions on medical and surgical instruments, and appliances of all kinds, including No. 4. 2. New chemicals and apparatus; new drugs and their preparations; and new articles of diet for invalids. 3. Drawings, diagrams, or models, or apparatus connected with sanitary appliances. 4. Microscopes, thermometers, and other instruments of investigation. 5. Pathological specimens, etc.

Communications to be sent to Dr. Davidson, the General Secretary, 2, Gambier Terrace, Liverpool, or to the following: drugs, Dr. T. Bushby, 32, Clarence Street; surgical instruments, Dr. Alexander, 102, Bedford Street; Rushton Parker, Esq., 61, Rodney Street; sanitary appliances, Dr. Imlach, 16, Canning Street; pathological specimens and drawings, F. T. Paul, Esq., 44, Rodney Street. General Museum Secretary, Dr. Whitford, 37, Shaw Street.

Notice to Exhibitors.—Applications to be made as soon as possible, mentioning the space required. Each object to be accompanied by a written description or reference, and it is important that these descriptions should be sent as early as possible, viz., not later than July 20th. All parcels to be delivered on or after July 23rd, and not later than July 28th, and to be removed within three days after August 3rd; they must be addressed: The Curator of Annual Museum, British Medical Association, the College, Shaw Street, Liverpool. All expenses of carriage and all risk to be borne by the exhibitors. A card bearing the name and address of the exhibitor to be inclosed in each package, ready to be fixed to the outside.

MR. NELSON HARDY hereby gives notice that he will move the following amendments to the proposed new by-laws, viz.:

ELECTION OF MEMBERS.

Paragraph 1. That the latter clause shall read as follows. "Provided that the power of such Council or Branch Council shall only extend to the election of male persons not practising homœopathy, nor advertising."

SUBSCRIPTION.

Paragraph 1. In second line, after the word "membership," insert "including the right to vote for representatives in the Executive Council."

OFFICERS.

Paragraph 1. Latter clause to read, "Each retiring President shall be eligible for election, by the Association in annual meeting assembled, as a Vice-President for three years, provided that he continue to be a member of the Association.

Paragraphs 3 and 4. Insert "for three years" after "Vice-President of the Association," and omit "for life."

COUNCIL.

Paragraph 1. After the word "Branches," insert "also of members representing those members of the Association who are not connected with Branches.

Omit paragraph (*d*).

Add to paragraph (*f*), "This provision to take effect from and after the annual meeting of 1884."

JOURNAL AND FINANCE COMMITTEE.

In all three paragraphs, and in the heading of this section, to omit the words "Journal and" wherever they occur together; and, in the second line of the first paragraph, to substitute "eight" for "fifteen." In first line, substitute "1884" for "1883." To add the following: "Journal Committee. At each annual meeting, a Journal Committee, consisting of seven members, shall be appointed by the Association, who shall meet not less frequently than six times a year, and shall exercise a general supervision over the working of the JOURNAL. Three members shall form a quorum."

In the addition to the by-laws proposed by the President of the Association, paragraph 2, after the word "Ireland," insert, "and members of the Association not connected with Branches."

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Sections in which it is to be read, not later than July 25th.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay to the secretaries of the respective Sections.

FRANCIS FOWKE, *General Secretary.*

London, June 7th, 1883.

CORRESPONDENCE.

FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATIONS.

SIR,—A few years since, a well-intentioned effort was made by some medical men in the Midlands holding appointments to friendly societies, to procure an increase of the scanty remuneration for which they undertook to supply the members of such societies with medical attendance and medicines, and lists were published in a contemporary of clubs giving their doctors five shillings and upwards per annum. Whether as the direct consequence of this movement or not I am unable to say, but certainly subsequent to it in point of time, a counter-movement has taken place in many parts of the country among these societies, leading them to combine together, and offer their own terms to secure the entire services of medical men for themselves and families. This plan has, of course, its advantages and disadvantages. On the one hand, it enables the working classes to provide medical assistance for their families at a rate well within their means. On the other hand, the remuneration offered is usually insufficient to attract any but very young practitioners, and even for them is not found to counterbalance, for any length of time, the disagreeables inseparable from their position. It can hardly be denied, however, that the experiment was worth trying; and so long as the parties to it are satisfied, no one else, it seems to me, has any just cause for complaint. To talk of the societies being "mean" and "shabby," and of there being no charity in such a system, is simply childish. It would be as reasonable to complain that there is no charity in a mutual insurance society, or any other modern form of co-operation.

I regret, therefore, to see that an attempt is being made at Plymouth, on the part of the resident practitioners there, to "Boycott" the two gentlemen who have recently been appointed surgeons to one of these local medical aid associations. In a letter which you published in January 1881, a former occupant of a similar post bears witness that the resident medical men in the town in which he was placed received him with every kindness; and adds that had it not been so, his position would have been unbearable; and I can well believe it.

I cannot think that the Plymouth practitioners seriously intend to refuse to consult with members of their own profession who have broken no professional rule, and sinned against no ethical code in accepting appointments to the Friendly Societies' Alliance. Least of all can I suppose that they would seek to justify such a course by the reasons which are urged on their behalf in "M.D.'s" letter in the *Western Daily Mercury*. Almost the only objection taken to the working of the Alliance by "M.D." is that children are admitted

as members for two shillings a year; and that as the medical officers are paid rather more than half the receipts, they undertake to treat the diseases of childhood at the rate of one farthing a week. Now, I am very far from saying that this is a suitable rate of remuneration; but, curiously enough, it is the exact sum fixed upon by the Charity Organisation Society in its Model Rules for Provident Dispensaries; and "M.D." states, in his letter, that medical men have pledged themselves to advocate the claims of such public provident dispensaries as are conducted on sound equitable principles.

Would "M.D." refuse to meet in consultation all the provident dispensary doctors or parish doctors whose services are valued at so inadequate a sum, and who yet persist in thinking that half a loaf is better than no bread? Or would he refuse to recognise or fraternise with any medical man who "allows his services to be farmed out at a profit" by any hospital or dispensary which receives payment from its patients? If so, I am of opinion that he would considerably restrict the circle of his professional friends in any large town.

Neither do I think that the fact of a large balance remaining to the Alliance after payment of all expenses, is a valid reason for refusing to consult professionally with its medical officers in a case of life or death. Rather, I should have imagined it might be urged as the strongest reason why, in all doubtful cases, the subscribers should have the benefit of the highest available skill. All well-managed friendly societies keep a small balance to the right side of their medical accounts, and the question of more or less is purely one for the members to determine, and with which outsiders have really nothing to do. I can see nothing in "M.D.'s" letter which would justify the Plymouth practitioners in acting so unprofessionally towards the medical officers of the Alliance, or so unfeelingly towards its sick members, as to deny them the assistance and advice for which they are ready and willing to pay. The mere announcement of their intention to act so, has already led one of the local papers to cast doubts upon the humanity of the medical practitioners, upon the strength of their nerves, and upon their possession of much common sense, and to declare that they have been unnecessarily frightened by the spectre of co-operation. I trust it is not too late for them to take steps to show that in dealing with this difficult subject their conduct has been and will be wholly uninfluenced by considerations of self-interest, or of anything even approaching to trades-unionism.—I am, etc., GENERAL PRACTITIONER.

PROPOSED MEETING OF VOLUNTEER SURGEONS AT LIVERPOOL.

SIR.—I beg to suggest, through your JOURNAL, that meetings of medical men holding Volunteer medical commissions might be held at the yearly gatherings of the Association. Papers might be read on any question of organisation, or on subjects referring to ambulance work. An annual dinner or breakfast of the same officers might be held also. Thus, at Liverpool, a committee of the local Volunteer surgeons might receive communications from Volunteer surgeons who propose attending the meeting, and might organise a dinner by subscriptions from all Volunteer officers coming to the gathering. In this way, *esprit de corps* would be developed; and the Volunteer surgeons, now little heard of, might come to the front.—Yours faithfully, GEORGE J. H. EVATT, Surgeon-Major A.M.D.
Woolwich, June 1883.

MEDICAL PROVIDENT SOCIETY.

PRELIMINARY EXPENSES FUND.

THE following additional sums have been received:—Mr. Arthur Goodwin, Hanley, 10s. 6d.; Dr. J. R. Stedman, Guildford, 10s. 6d.; and Dr. Walter, Manchester, 10s. 6d.

MILITARY AND NAVAL MEDICAL SERVICES.

IRISH STUDENTS AT THE ARMY MEDICAL EXAMINATION.—I am sorry to have to trouble you with another letter on this subject; nor would I do so, were it not for the letter of Surgeon-Major Hamilton which appeared in your issue of May 26th. I would like to preface my remarks by stating that I wrote my first letter under the above heading in answer to Dr. Hamilton's, which appeared under the same; and in no part of it did I complain of injustice being done to Irishmen because they were Irishmen; but that I tried to show was, that the examination, as a competitive one, was not per *se* strictly fair. In that letter also, I paid a tribute to the high characters of the examiners, which Dr. Hamilton appears not to have seen.

Mr. Gibson's question in the House seems to have annoyed Dr. Hamilton very much. Now, Mr. Gibson was simply doing his duty in bringing under notice of Parliament the complaints which he heard. I never did state, as Dr. Hamilton says I did, "that, because of Mr. Gibson's question, Irishmen were allowed to be more successful at the last examination." I did say, "it was a curious coincidence."

Dr. Aitken, it appears, distinctly told Dr. Hamilton, "the marks were awarded for the system of case-taking." He as distinctly told the candidates "to pay particular attention to the examination of the urine, diagnosis, and treatment."

The irritability of examiners came to my notice in such a way, as to lead me to suggest, in my previous letter, that the examination ought to be conducted entirely on paper.

Dr. Hamilton objects to my using the expression "large proportion" as applied to the "five or six" successful Irishmen at the last examination. Now, I think, looking at the population of Ireland, as compared with the united populations of England, Scotland, and Wales, it does not need a "double magnifying microscope of extra power" to see that it is a very large proportion. As a matter of fact, there were *seven* successful Irishmen, but "five or six" suits Dr. Hamilton's purpose just as well; yet this is what he calls an "absurd datum and an unjust accusation levelled at the examiners!"

Dr. Hamilton is not correct in stating that I "reasserted that the Director-General selects candidates." How could I reassert what I never asserted? What I did say was, "it was *very generally supposed* that the Director-General selects the most suitable men from those who qualify." I then quoted some questions asked at the physical examination, which certainly lent a complexion to this supposition. The questions to which I allude are not conversational, as Dr. Hamilton states, but are asked from a printed form, and a note is made on the form according as your answer is affirmative or negative, even to the length of time you acted as house-surgeon, and whether it was in the capacity of *locum tenens* or otherwise (which was the special question to which I alluded in my previous letter). Yet Dr. Hamilton says "the basness of these insinuations is only equalled by their untruth."—Yours, etc.,

A NON-SUCCESSFUL COMPETITOR.

P.S.—I was glad to see my former letter corroborated by your correspondent "B. G." in your issue of May 19th.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

REPORT OF THE MUSEUMS AND LECTURE-ROOMS SYNDICATE.—The seventeenth annual report of the Museums and Lecture-rooms Syndicate has been published. Appended to the report are voluminous reports from the various professors and lecturers, and from the Superintendent of the Museum of Zoology and Comparative Anatomy. The Syndicate, in the first place, express their deep sense of the loss which the University and the scientific world have sustained by the death of Professor Balfour. In their report of May 10th, 1876, the Syndicate drew the attention of members of the Senate to the class of students in Animal Morphology which Mr. Balfour had begun to conduct in the Michaelmas Term of the preceding year. From that time until his death, he was engaged without intermission in promoting that science by lectures, practical instruction, and original research. The Syndicate are glad to learn that the school which he succeeded in establishing shows no sign of impaired vitality. The new Morphological Laboratory, the erection of which was allowed in May last, has proved thoroughly satisfactory; and Mr. Sedgwick's report shows that, through his exertions and those of the demonstrators appointed to assist him, the numbers of the classes have been maintained. The Syndicate take this opportunity of thanking the Senate for their liberality in granting the necessary funds. Further, they have to thank Professor Balfour's family for their generosity in presenting his scientific instruments and library to the University for the use of the Morphological Laboratory. They rejoice to think that this gift will not only be a constant help to students in their work, but will serve in future years as a memorial of the devotion, the scientific power, and the liberality with which Professor Balfour originated the study of animal morphology in Cambridge.

The Superintendent of the Museum of Zoology and Comparative Anatomy, in his report, says: "A number of preparations of organs have been made, chiefly from material obtained from the Zoological Society's Gardens. For this, in former years, I used to thank my friend, Mr. W. A. Forbes, B.A., Fellow of St. John's College, Prosector to the Society. Now, I regret to say, the news of his untimely death in January last, while engaged in a scientific exhibition on the Niger, has just reached England. By this sad event, not only have those who knew him lost a sincere and generous friend, but science has been deprived of a student who had already done much good work, and given promise of rare distinction in the future. In this part of the museum I wish to draw attention to the beautiful dissections which, as the list of additions shows, have been prepared by Dr. Hans Gadow. He has also made several very useful preparations, for lectures and demonstrations, by injecting organs with the fluid invented by Wickersheim, of the Anatomical Museum, Berlin. By this means they can be preserved in a dry state, without losing their elasticity and colour, and can be inflated at pleasure so as to exhibit their natural size."

Among other additions to the various departments, at the Morpho-

logical Laboratory, the most noticeable addition is a new automatic microtome, which surpasses, in simplicity, accuracy, and speed, all previous instruments of the same kind. This instrument is due to the ingenuity and technical skill of Mr. W. H. Caldwell, B.A., of Gonville and Caius College.

UNIVERSITY OF OXFORD.

THE ROLLESTON MEMORIAL FUND.—The sum of £1,200 has been offered to the University by the subscribers to the Rolleston Memorial Fund under the following conditions.

1. That the fund be expended in the institution of a prize, to be awarded every two years; and that the prize be given for original research in any subject comprised under the following heads: Animal and Vegetable Morphology, Physiology and Pathology, and Anthropology, to be selected by the candidates themselves:

2. That the period during which this prize may be obtained by a candidate be limited to ten years after the date of matriculation; and that, with a view to render the prize as widely associated with Professor Rolleston's name as possible, it be open to the members of the Universities of Oxford and Cambridge.

It will be proposed in Convocation, on June 12th, to accept the offer under the aforesaid conditions.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE EAST RIDING LUNATIC ASYLUM.

DR. M. D. MACLEOD, the new medical superintendent, presents a succinct and lucid report on the East Riding Pauper Lunatic Asylum for the year 1882. The only point calling for special notice is the sanitary arrangements of the establishment. In February 1882 the whole system of drainage suddenly broke down, and on an examination being made, many and grave defects in that system were discovered. The sewers were very inaccessible, and were placed in and under the buildings. Closets were situated where their presence could only be a source of danger, and the lavatories and baths discharged their waste directly into the sewers, with only the interruption of an imperfect water-trap. The workmanship of the drains was also found to be bad in many places. Pipes were fitted loosely into each other, without clay or cement in the joints (and this inside the buildings); some of the ends of the drain-tiles barely touched the sockets of the next tiles, into which they ought to have been fitted. Pipes from baths and lavatories were pushed into drains, and a few handfuls of mortar roughly plastered round them. The main sewer was in many places laid ten feet deep, in stiff clay, which had to be dug through, the diggers often standing in two feet of water and liquid sewage. That such a state of matters existed at the East Riding Asylum is certainly extraordinary, and calculated to suggest some unpleasant reflections. The asylum is entirely a modern building, having been opened for the reception of patients only at the end of 1871. It was erected at large cost to the ratepayers, and was supposed to contain every modern improvement, and the plans of all the buildings were submitted to the Commissioners in Lunacy, who have an eminent consulting architect at their elbow, to inform and guide them. How comes it then that the asylum was allowed to be constructed with the grave and radical defects described by Dr. Macleod, which must have kept the lives of the inmates in constant jeopardy, and may have had fatal consequences, for anything we know to the contrary? How comes it that these defects have remained undiscovered for so long a period, and have only been unearthed now by the new medical superintendent? Some explanation is, we think, due to the ratepayers of the East Riding from the Commissioners in Lunacy, the architect, the clerk of the works, the contractors, and the Committee of Visitors, who were all, in different degrees, responsible for the construction of this hospital in such a manner that it would expose to no unnecessary risks the health and lives of the afflicted beings who were to be its inmates, and who are, of course, incapable of looking after their own interests. We have before insisted that one of the Commissioners in Lunacy should be a skilled sanitarian, with a training similar to that which would be regarded as necessary for a medical inspector under the Local Government Board, and these revelations at Beverley give force to our argument. They also suggest this expedient, that every new lunatic asylum, or addition to an old one, should be minutely inspected by the Commissioners before it is handed over by the builders, and should be certified by them as in all respects in a fit state for the reception of lunatics, before any patients are permitted to be received into it. A railway has to be examined, tested, and certified before passengers are allowed to travel by it, and in view of the iniquities and carelessness of builders and artizans, and even of public authorities sometimes, it seems desirable that lunatic asylums should be similarly treated before they are brought into practical operation.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

WARRINGTON.

WE read with equal surprise and regret of the astounding proceedings of the rural sanitary authority of Warrington at their last meeting, reported in the local paper. At a small meeting of the committee, without any notice having been given, a resolution was suddenly moved, advertising the office of medical officer of health as vacant; and Mr. Gornall, the existing medical officer, well known for his ability, activity, and efficiency, was called in, and informed that it was not the intention of the board to reappoint him. The appointment was originally, it appears, at the rate of £200 a year. Mr. Gornall retired from private practice to enable him to discharge his duties as medical officer of health, and he has done so with remarkable benefit to the locality with which he is connected. The salary has been gradually reduced to £60 *per annum*, and he is now dismissed without any assigned cause. It is, indeed, explained to him that he may, if he choose, reapply for the appointment; but it is obvious that, in any such reapplication, he would be at great disadvantage; and that he has been treated with arbitrary hardship and discourtesy, which are, so far as we know, without precedent, and in which we cannot think that the public-spirited members of the board will concur. There is still room for repentance; and we trust that those members of the small committee who were led to take part in these most singular and unjustifiable proceedings will, in the course of the next week, reconsider the position they have assumed.

Mr. Gornall will certainly have the public sympathy of the profession under the circumstances of extreme hardship and injustice to which we have referred. The parts of the rural sanitary district for which Mr. Gornall holds the appointment of public health-officer are those parts most requiring sanitary improvement, and immediately adjoining the urban district; consequently, the interests of both authorities are in common; and it is greatly to be regretted if they are to be dissevered by this hasty action of the rural sanitary authority.

PUBLIC VACCINATION.

SIR,—I forward the enclosed letter to the Local Government Board, for publication. I think it would interest those of your readers who are public vaccinators.—I remain, yours faithfully, H. MEYMOTT.

Ludlow, May 11th, 1883.

(*Copy.*) *To the Local Government Board.*

Gentlemen,—I beg leave to report the result of my having endeavoured, during the quarter recently concluded, to carry out the rigid and minatory injunctions I received from you on the 29th of November last, relative to vaccination in this district. It is this, that several poor persons have subjected themselves to a heavy and oppressive fine for not bringing their children for inspection at the appointed time and place, whilst nine or ten children whose mothers were desirous of having them vaccinated, and who might have been vaccinated under most favourable circumstances, have been deferred, some for three, and some for six months, and thus the object of the Vaccination Act has, *pro tanto*, been defeated. This might have been avoided and the design of the Act promoted, had I been allowed to visit the cottages and slightly extend the time allotted for vaccination. When I exptained this in reply to the charges brought against me by Dr. Parsons for visiting cottages, extending the time allotted, and otherwise promoting the object of the Act, you threatened me with dismissal if I did not strictly comply with your injunctions.

At the risk of again incurring your displeasure, I venture to state that a rigid compliance with the strict letter of your injunctions, particularly where an attempt is made to carry out, in sparsely populated districts, rules that are only appropriate where the population is more concentrated, will lead to endless confusion, and greatly increase the popular objection to compulsory vaccination, which might be allayed by a judicious method of carrying out the provisions of the Vaccination Act, varying according to circumstances.—I am, gentlemen, your obedient servant, HENRY MEYMOTT, Public Vaccinator for the Ludlow District of the Ludlow Union.—Ludlow, May 10th, 1883.

CORONERS' INQUESTS.

SIR,—Will you kindly give your opinion on the following case, especially as to whether the coroner acted legally in not holding an inquest? J. B., aged 2 had been ill for some years. For the last twelve months, he had not been attended by any medical man, but had been under the care of a druggist, who prescribed for him up to the time of his death. On the day previous to h

death, he was out of doors as usual; and in the evening, about 8 o'clock, had let a friend out of his house and closed the door, and was then apparently in his usual health. About four hours afterwards, his father came home, and found him on the floor by the bedside in a fit, as he supposed, and immediately sent for me. When I arrived, I found J. B. insensible and dying. The pupil of the right eye was dilated considerably, the left pupil slightly contracted. There was extravasation of blood in the conjunctiva of the lower half of the right eye. He had stertorous breathing, and was foaming at the mouth. There was no smell of alcohol. The skin was pallid; the teeth clenched; the left arm slightly rigid, and the right one flaccid; and fæces and urine had passed involuntarily. He died at 3 A.M. The medical man who had previously attended him, although he had not seen him for more than a year, gave the coroner some kind of certificate, and no inquest was held.—Yours truly,

M.R.C.S.

*** The coroner has large discretionary powers; and whilst it is enacted by statute, De Officio Coronatoris, 4 Ed. I, st. 2, "that he shall inquire of all sudden deaths," it is laid down by Sir John Jervis, who is a great authority on coroners' law, that "the dying suddenly" is not "to be understood of a fever, apoplexy, or other visitation of God." Doubtless the information received by the coroner from the deceased person's late medical attendant was satisfactory, as was also the report of the officer, and led to the decision that an inquest was unnecessary. The symptoms detailed in the case mentioned are very suggestive of apoplexy; but if "M.R.C.S." had intimated to the coroner that he suspected that the death arose from other than natural causes, an inquest would certainly have been held.

CERTIFICATION OF PAUPER LUNATICS.

SIR,—I received lately an order from a justice of the peace to visit a non-pauper lunatic. I (1) visited her at her house; (2) reported in writing on her condition; (3) gave evidence before two justices of the peace; (4) signed a certificate of lunacy.

Will you kindly inform me to what fees I am entitled for doing this, and from whom recoverable and by what authority?—Yours truly,

J. M. B.

*** On several occasions, we have pointed out to correspondents who have written to us the law on the subject; and it is to be regretted that gentlemen engaged in private practice should fail to post themselves up in matters so much appertaining to their interests. In the case before us, our correspondent should have secured from the justice ordering his attendance an authority in writing to visit and report on the case; and, at the time of his attendance before the two justices, should have applied for his fee, which must necessarily vary according to the distanc to be travelled, the status of the lunatic, and the time occupied, upon all of which points our correspondent leaves us in absolute ignorance. He will, however, be probably wiser on the next occasion.

DUTIES OF HEALTH OFFICER.

SIR,—The duties of a medical officer of health are laid down very distinctly by the Local Government Board, but I would ask if such an officer is called upon to report and do work for the Board out of their district. For instance, a sanitary authority is trying to annex a portion of another district, and in order to support the case before the Government official inquiry, they call upon their medical officer to report to them the sanitary state of that portion they desire to annex, and also get him to analyse the water for this purpose. The Board for which I act are willing to pay their officer, but owing to a decision recently given, it would appear that according to "Glen" (Section 193) "Liability of officers," boards paying officers or officers applying for extra remuneration, are acting illegally and liable to a penalty. Surely an officer doing work for his board out of their own district cannot be expected to do so without extra pay, as all through Section 4, duties of medical officers, "the district" is mentioned, implying the one for which he was appointed.—Yours faithfully,

F. P.

*** There can be no doubt about this case. The work required is not contemplated in the health officer's contract with the local authority, and he is clearly entitled to be paid for it.

MEDICO-LEGAL NOTES AND QUERIES.

DEATH FROM EXPLOSION.

SIR,—Will you kindly inform me as to whether I did wrong in giving the subjoined certificate to the friends of the English gentleman who was killed here on the 21st ultimo under the following circumstances? A fire broke out in a house in the city, which Mr. —— was assisting to put out, when suddenly an explosion occurred, causing his death and that of a fireman, and wounding many others. The deceased gentleman was taken to the British Seamen's Hospital, and to enable the friends to remove the body to the English mortuary, I certified the fact of death as follows:

"I certify that I have examined the body of Mr. ——, and found life to be extinct.—R. G. McCalman, M.D., C.M., May 21st, 1883."

At the same time I gave it as my opinion that death had resulted from concussion of the brain, or shock to the nervous centres. Next day, a gentleman, a personal friend of mine, told me that I ought to have specified the cause of death, and that I was to do so in future, as he could give such a certificate as I gave. I maintained that I was right in giving such a certificate according to the practice in England, that presupposes a coroner's order or inquiry before giving a certificate of death in such a case as I have stated. On the spur of the moment I was not prepared to become coroner myself, or "do at Rome as the Romans do." I had very little doubt in my own mind after what I heard, that the deceased met his death from an explosion, but wished for a full inquiry and further corroborative evidence. The features of the dead man were hardly identifiable; indeed, there was no one who could judicially or absolutely identify them in my presence; the face and hands were of a cyanotic hue, the former calm and peaceful, the pupils were dilated, and blood was seen on the face and head, probably having come from the nose, as no wounds could be discovered on the uncovered parts of the body. The body was cool, the arms flaccid, and there was no rigor mortis. The appearances were such as to leave little doubt in my mind that death had resulted from paralysis of the nerve-centres, the result of some explosive. Upon such a cursory examination, however, I was not prepared to specify the cause of death without further inquiry or further orders. I received no orders, and did what I thought to be right. Was I right?—Yours faithfully,

Oporto. R. G. McCALMAN.

*** If this death had occurred in England, it should undoubtedly have been the subject of an inquest. Under the circumstances, we consider that our correspondent was undoubtedly right in refusing to certify to the cause of death, although his qualified certificate is free from objection.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, June 4th.

Junior Medical Officers in India.—Mr. LEAMY asked the Under Secretary of State for India whether, in view of the exceptionally large number of junior medical officers in India who were drawing unemployed pay, it was the intention of the India Office to throw open five additional appointments to competition in August next.—Mr. CROSS: Notwithstanding the present exceptional state of affairs, it has been decided, for two reasons, not to put an entire stop to the admission of officers to the Indian medical service: 1. To ensure hereafter an equable succession of officers to the higher posts; 2. Because to do so would inflict hardship on the large number of students who have been reading with this service in view. The number of appointments has been reduced this year to the lowest point compatible with these objects. The average number of appointments for the last five years has been thirty-three; this year it has been reduced to ten.

Tuesday, June 5th.

Vaccination Prosecutions.—Mr. P. A. TAYLOR asked the President of the Local Government Board whether he was aware that Mr. C. J. Neale was, on the 24th ultimo, fined, by the Bristol magistrates, £6 and costs for the non-vaccination of six of his children, he having previously paid about £90 in fines and costs for the same children; and whether he would issue a circular similar to that addressed by the Local Government Board to the guardians of Evesham in 1875, in deprecation of repeated prosecution.—Sir C. DILKE said that he was not in a position to state the exact amount of the fines which had been inflicted in this case, but he believed they were of considerable amount. The Local Government Board were now considering whether they would send to the Bristol guardians a circular similar to that sent in 1875 to the Evesham guardians in deprecation of these repeated prosecutions.

Thursday, June 7th.

THE MEDICAL ACT AMENDMENT BILL.

Mr. GLADSTONE, in reply to a question put by Lord R. Churchill stated that the Government regarded the Medical Act Amendment Bill as a most important measure; and they should, without prejudicing the Corrupt Practices Bill, or the Ballot Act Continuance Bill, provide for its second reading as soon as possible. He would take care that notice should be given, however, before it was taken.

The Army Medical Department and the War in Egypt.—Dr. CAMERON asked the Secretary of State for War whether it was true that, in the original medical arrangements for the Egyptian campaign, the establishment of a base hospital at Cyprus was proposed by the heads of the Army Medical Department, and agreed to by the military authorities: whether the military authorities afterwards decided that Cyprus should not be used for hospital purposes till the month of October: whose duty it was to inform the Director-General of the Army Medical Department or principal medical officer in Egypt of this change in the medical arrangements: if he could state the date at which the alteration was decided on: and the date at which the heads of the Army Medical Department, at home or in Egypt, were informed of it and instructed to make other arrangements for their base hospital.—Sir A. HAYTER, in reply, said, as for the first question, his answer was, Yes, an original arrangement of that kind was contemplated; and to the remaining four questions, he would best answer by reading an extract from the report of the inquiry which had been laid on the table, and which was to the effect that it was proposed to place the Hospital at Troados

or Mount Olympus, but owing to the near approach of the hot season, when the troops would have to move down to the lower ground, it was decided not to establish it there. This decision was arrived at on August 4th by Sir Garnet Wolseley, and with the concurrence of the medical officers on his staff. The Director-General of the Army Medical Department, and the principal medical officer in Egypt, and Sir John Adye, chief of the staff, were made aware of the decision arrived at on August 4th. As the expedition had started, it was for the General-Commanding (Sir Garnet Wolseley) to make any changes in the hospital arrangements which the circumstances of the campaign rendered desirable.—Lord R. CHURCHILL asked when the Surgeon-General was made aware of the change that was to take place. — Sir A. HAYTER repeated that it was on August 4th.—Sir H. WOLFF asked whether the change took place in consequence of instructions from the War Office, or was it due to the action of Sir Garnet Wolseley.—Sir A. HAYTER required notice of the question, and said that it could not possibly be answered in that House. It was a confidential matter.

Workmen's Dwellings and Urban Improvements.—Mr. Broadhurst has secured the first place in the evening sitting, on July 4th, for a resolution proposing to make municipal bodies responsible for providing a sufficient choice of suitable dwellings for persons or families displaced by demolitions in connection with borough improvements, and also to give civil corporations the same power as railway companies and school boards, to purchase land compulsorily for this purpose.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations for the Fellowship of the College on the 24th ultimo, and, when eligible, will be admitted to the final examination, viz.:

Messrs. H. Secker Walker, J. H. Ernest Brock, and J. Walker Carr, students of University College; G. Lees Wells, Bernard Castle, and Herbert Fox, of St. Bartholomew's Hospital; R. M. Henry Randell, and J. George Harsant, of Guy's Hospital; H. Marmaduke Page, and W. Charles Bull, B.A. Cantab., of St. George's Hospital; and C. Harry East, of King's College.

Four candidates were rejected.

The following passed on the 25th ultimo, viz.:

Messrs. C. Joseph Heath, G. Palmerston Newbolt, J. Edward Williams, and P. R. William Santi, of St. Bartholomew's Hospital; W. Kelynack Dale, and R. Chambers Priestley, of King's College; and E. Herbert Thane, of University College.

Seven candidates were rejected.

At the recent half-yearly primary examinations for the Fellowship of the Royal College of Surgeons, there were eighty-six candidates, forty-three of whom, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for six months. At the corresponding period last year, there were 76, of which number forty-two were rejected. At the pass examination, there were eighteen candidates, against seventeen last year. The names of the successful candidates cannot be published until submitted by the Court of Examiners to the Council, at its next meeting, for confirmation.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 31st, 1883.

Bentlif, Philip Barnett, Winchester Street, Salisbury.
Brenton, William Hore, John Street, Plymouth.
Morgan, George, Salop Street, Market Drayton.
Ogle, Arthur Wesley, Sevenoaks.
Sumner, William John, Holme Lane, Hillsbro', Sheffield.
Wise, Walter, Duke Street, Manchester Square.

The following gentlemen also on the same day passed their Primary Professional Examination.

Barnett, Frank Septimus, St. Bartholomew's Hospital.
Clapp, William Murray McQueen, University College.
Cooper, John Wilford, Charing Cross Hospital.
Draper, James William, University College.
Hall, William George, London Hospital.
Jackson, William Edward Gillson, Westminster Hospital.
Richards, Edward, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

BOARD OF MANAGEMENT OF THE NORTH SURREY SCHOOL DISTRICT. Anerley, S.E.—Medical Officer. Salary, £200 per annum. Applications to Mr. H. J. Chaldecott, 68, North End Croydon, by June 9th.

CARLISLE DISPENSARY FEVER HOSPITAL. — Senior House-Surgeon. Salary, £130 per annum. Applications to Mr. John Ostell, 14, Bank Street, Carlisle, by June 16th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—Assistant-Surgeon. Applications by June 9th.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. £100 per annum. Applications by June 15th.

COUNTY DONEGAL INFIRMARY.—Surgeon. Salary, £100 per annum, in addition to the Grand Jury Presentment. Election on the 19th instant.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental House-Surgeon. Salary, £40 per annum. Applications by June 11th.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £120 per annum. Applications to Mr. T. E. Drake, Solicitor, Exeter, by June 18th.

DINGLE UNION, Dingle Workhouse and Dispensary.—Apothecary or Pharmaceutical Chemist. Salary, £60 per annum. Election on June 14th.

DOWNHAM UNION.—District Medical Officer. Salary, £46 per annum. Applications by June 20th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 15th.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E. —Registrar and Chloroformist. Salary £30 per annum, with an additional £20 if the post is held for twelve months. Applications by June 25th.

GLASGOW ROYAL INFIRMARY.—Teacher of Chemistry. Applications by June 15th.

GLASGOW ROYAL INFIRMARY.—Teacher of Physiology. Applications by June 15th.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Salary, £150 per annum. Applications by June 30th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, St. Marylebone Road, W.—Resident Medical Officer. Salary, £60 per annum. Applications by June 9th.

QUEEN'S HOSPITAL, Birmingham.—Resident Physician. Salary, £50 per annum. Applications by June 20th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by July 4th.

ST. THOMAS'S HOSPITAL.—Secretary. Salary, £200 per annum. Applications to the Dean by June 16th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £200 per annum. Applications by July 14th.

TISBURY UNION.—Medical Officer. Salary, £60 per annum. Applications by the 14th June.

WESTERN DISPENSARY, Rochester Row, Westminster.—Consulting Accoucheur. Applications by June 30th.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—House-Surgeon, Junior House-Physician, and Resident Obstetric Assistant. Applications by June 12th.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Chair of Anatomy. Applications by June 16th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician (who will also be required to act as Chloroformist, Pathologist, and Medical Registrar). Salary, £100 per annum. Applications to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

ASLETT, G. S., M.R.C.S., appointed House-Surgeon and Secretary to the Town and District Hospital, Newark-upon-Trent, *vice* W. Beevor, M.B., resigned.

BARNES, J. E. S., L.K.Q.C.P.I., appointed Medical Officer to the Rathdrum Union, *vice* J. Vane, L.R.C.S.I.

BATTERBURY, R. L., M.D.Lond., appointed Honorary Surgeon to the West Herts Infirmary, *vice* W. H. Hobson, M.R.C.S., resigned.

BLAIR, R., M.D., appointed Medical Superintendent of the Lunatic Farm Asylum to the Barony Parish of Glasgow, *vice* J. Rutherford, M.B., resigned.

DONELLAN, P., L.M.K.Q.C.P.I., appointed Medical Officer to the Wexford Union, *vice* J. Crean, L.R.C.S.I., resigned.

HARTRIDGE, G., F.R.C.S., appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* A. Leahy, F.R.C.S., resigned.

HERBERT, S., minor qualification, appointed Non-Resident Dispenser to the General Infirmary at Gloucester and the Gloucestershire Eye Infirmary.

HUET, F. A., L.D.S., appointed Honorary Dentist to the Northern Counties Hospital for Incurables, Manchester.

JAMIESON, C., M.B., appointed Medical Officer to the Parochial Board and Parish of Kirkmichael, *vice* A. Cameron, M.B., resigned.

KNIGHT, E., L.R.C.S.Ed., appointed House-Surgeon to the Western General Dispensary, Marylebone Road, *vice* R. O'Brien, M.B., resigned.

LAW, E., M.D., appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden Square, W.

SHORE, T. W., M.R.C.S., appointed House-Surgeon and Secretary to the Chichester Infirmary, *vice* J. W. Hodgson, M.B., resigned.

THOMPSON, W. C., appointed Resident Medical Officer to the Spalding Union (Pinchbeck District) *vice* J. K. Brigham, M.D., resigned.

TWINING, A. H., M.R.C.S., appointed Medical Officer of Health to the Kingsbridge Union.

VINRACE, E. D., M.R.C.S., appointed Resident Assistant Medical Officer to the Children's Hospital, Birmingham, *vice* J. A. Powell, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcements.

BIRTH.

WOODMAN-DOWDING.—On the 4th instant, at Barking Road, E., the wife of A. W Woodman-Dowding, M.D., of a son.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. —Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M. —Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., ; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, h. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. h., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, u., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, ., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., ., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, ., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. , 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 5; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 ., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; in, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, ., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. , 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Clinical Society of London, 8.30 P.M. Dr. George Thin: On the Bacillus of Leprosy. Dr. T. Colcott Fox: On Urticaria Pigmentosa. Sir Henry Thompson: On Twelve Cases of Tumour of the Bladder, and the Operation for the Removal of the Growth. Dr. F. Warner will give a demonstration of a Method of obtaining Graphic Records of the Movements of the Fingers, etc., and for Enumerating such Movements. Dr. Barlow will show a case of "Osteitis Deformans."

TUESDAY.—Royal Microscopical Society, 8 P.M. Professor F. Jeffrey Bell, M.A.: Note on the Spicules of *Cucumaria calcigera*, *C. Hyndmanni*, and of two Allied Forms. Mr. Conrad Beek: On Some New *Cladoceræ* of the English Lakes. Herr J. Flogel: On Cutting Sections of Diatoms.—The Parkes Museum of Hygiene, 5 P.M. Professor T. Hayter Lewis, F.S.A.: The Employment of Artistic Materials in the Architecture of Houses and Hospitals. The lecture will be illustrated by objects in the Museum.

FRIDAY.—The Parkes Museum of Hygiene, 8 P.M. Professor W. H. Corfield, M.D.: Common Defects in the Sanitary Arrangements of Houses, and their Remedies.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE MEDICAL MAN'S CERTIFICATE OR THE REGISTRAR'S.

SIR,—Amid the general turmoil as to the Medical Act Amendment Bill, a few words may well be given to a point which seems to be passing unregarded by our profession. Probably it does not come within the direct purview of the Bill, but it has always seemed to me an injustice to the general practitioner, that his certificate of death must be given free, while the registrar's certificate, being directly and necessarily taken from the former, is paid for by the persons demanding it. Why should the doctor's original power of certifying not be allowed to give another certificate for friendly society or insurance company, when it is from that very power the registrar derives his occasion to charge for the copy certificate he supplied? There may be some recondite reason for this anomaly; certainly, it does appear an injustice on the face of it. A short declaratory clause in the present Bill would remedy the evil, by overriding any declaration in the Friendly Societies' Acts, or elsewhere. A few words from you, sir, by way of note, might clear up what really does seem to be a curiously gratuitous injustice to the profession.—I am, sir, your obedient servant,

F. H.

A HOME REQUIRED.—Can any of your numerous readers recommend a home for a paralytic patient (softening of the brain), whose friends would be prepared to pay something towards the expense? Any information will be thankfully received by

C. R.

TRIAL BY ORDEAL.

SIR,—A gentleman, who some years ago acted as surgeon to several friendly societies in the county of Durham, related to me the following anecdote, which occurred between him and one of his uncouth constituents.

A member of an Oddfellows' lodge came one evening for advice at the usual hour of consultation. The symptoms were duly detailed, and the surgeon prescribed a mixture which contained two grains of tartrate of antimony in eight ounces of water. The patient on arriving home took a dose of his medicine, but was annoyed to find that it had so little taste, and that moreover it presented no solid material to be shaken up. On submitting the bottle to his wife, she also, on tasting, pronounced it to be "nowt but wetter." He then took counsel with some of his brethren, who were not very favourably disposed towards the doctor, and, yielding to their advice, entered a complaint to the lodge. In due time, the doctor received from the secretary a notice to attend and answer brother Jones's charge, to the effect that he had been supplied with water instead of medicine. In reply to this notice, the surgeon asked the secretary to intimate to the aggrieved brother that it would be necessary to have the medicine produced in Court, in order that he might have a fair chance of rebutting the charge. When the night arrived there was a goodly attendance of members, and the lodge having been formally opened, Jones was asked to stand forth and prefer his charge against the doctor, which he did, alleging that the bottle produced was given to him for medicine, and contained nothing but water. After he had finished his statement, the surgeon proclaimed to the meeting that if Jones was sincere in his belief that there was nothing but water in the bottle, he could have no objection to drinking the contents at one draught. The chairman and brethren thought this a reasonable proposition, and put it to Jones accordingly. Jones was evidently not quite prepared for this crucial test of his belief, but could see no way out of it. After a little hesitation he consented. The contents of the eight-ounce mixture were transferred to a tumbler, and he quaffed them off. The doctor then intimated to the chairman that he might proceed with any other business, until the medicine had time to take effect. After the lapse of about half an hour, Jones began to exhibit signs of internal disturbance, and a basin was brought in for his convenience. It soon became manifest to the brethren that there must have been something more than water in the mixture. The doctor submitted that he had effectually upset both Jones and his allegation, and quitted the lodge in triumph.—I am, etc.,

G. F. H.

ERRATUM.—In the JOURNAL of May 26th, page 1051, column 1, after Mr. W. Donovan's signature, *for* "F.R.C.P.Lond.", *read* "L.R.C.P.Ed."

THE FUTURE MEDICAL REGISTER AND PROFESSIONAL TITLES.

SIR,—In your JOURNAL of April 28th, page 822, appear these words: "The title of Member of the Royal College of Surgeons will be registered." Will you inform me if, by obtaining that licence alone, men can be registered without passing the examination of one of the three divisional boards? Secondly, will you say if it will be considered illegal for men to use the title of "Surgeon" who have passed the examination of one of the divisional boards only, and not become Members of the Royal College of Surgeons? Thirdly, will you inform me in what way the new Act will affect students who are now passing through their studies? It is greatly to be desired that the "curriculum" for such students should not be altered, otherwise it must seriously interfere with their studies.—Yours obediently,

A MEMBER.

*** 1. Yes. 2. No. 3. This will depend upon the date fixed for bringing the Act into operation and the status of the student.

Prescriptions.

Sir,—The letter of "A. B. C." illustrates the fact that the method of writing a prescription properly is ill understood by many junior members of the profession, who, unless they give better attention to this elementary accomplishment, must be prepared to submit uncomplainingly to the indignity of being corrected by the dispensing chemist. May I venture, however, to differ from your editorial rectification in one particular?

The old-fashioned way of finishing many prescriptions with "aquæ ad quælibet," appears to me preferable to the innovation of "aquam ad" habitually recommended in the British Medical Journal. The simple rule taught to me in the now distant days of my apprenticeship was this: Write all the ingredients, including water or other excipients, in the genitive, and the quantities (weights and measures) in the accusative case. This I take to be quite correct; the "aquæ ad" being no doubt elliptical, but not therefore to be condemned as erroneous. The precise meaning to be conveyed is "take a sufficiency of water to complete the measure of so many ounces, or to fill up, say, a six-ounce or eight-ounce bottle." To render this literally, it would be necessary to write in extenso: "Aquæ quantum satis ad implendas (vel metiendas) uncias sex," but to save time the convenient curtailment has been adopted of "aquæ ad ℥ij."

Dr. Paris, in the "Illustrative Formulæ" in his well known *Pharmacologia*, avoids the apparent grammatical anomaly by invariably stating the exact quantity of water or other excipient required to eke out the measure, and thus anticipates all possible objection to "aquæ;" but this practice is inconvenient, and necessitates a tiresome calculation.

Our prescriptions were no doubt originally modelled after those of the ancients, and still retain a likeness to their prototypes. Celsus puts the excipient in the genitive or ablative according to the construction of the sentence, *e.g.*: "Mellis quantum satis sit ad ea cogenda"—"quæ aquâ pluviatili excipientur"—"excipientur vino vetere," etc.

Here is one of his formulæ: "Galbani P. 11; myrrhæ cummelle; fellis taurini, singulorum P. 11; vini quantum satis est ad myrrham diluendam."

The following is a formula taken from Galen, from one of the books *De Compositione Medicamentorum*: "Pinguis hædi uncias sex; euphorbii unciam unam; aceti quantum satis est."

The formulæ of to-day are written very much after the style of these ancestral types; our prescriptions retaining traces of lost structure in their syntactical anomalies. I passed my medical noviciate in one of our English university towns, whose M.D.'s were generally reputed to be good Latin scholars, but although the prescriptions of Regius professors and others frequently came under my notice, I never remember to have seen them write "aquam ad," but always "aquæ ad." Why depart then from the usage, which is not intrinsically incorrect, gives uniformity to the details of the prescription, and has the sanction of old established custom to recommend it?—Yours, etc., R. B. S.

*** We have much pleasure in publishing our correspondent's communication, for he puts the case ably and well. There can, however, be no disagreement between us, for he confirms our statements in every particular. The old fashioned form is "℞ aquæ ad ℥j," whilst modern prescribers write, "℞ aqam ad ℥j," a mode of expression now almost universally adopted.

The Title of "Doctor."

Sir,—In your paper of May 21st, a writer signing himself "M.R.C.P.Edin." speaks of the hardship of himself and others similarly placed not being able to style themselves "Dr." The examination for any foreign M.D., such as Brussels, Jena, Giessen, Heidelberg, is much superior to that for the M.R.C.P.Edin. I must also point out to him that nearly all the gentlemen who hold this diploma have got it by purchase; the College have only very recently instituted an examination, and even that is not a searching ordeal. The M.R.C.P.London is a searching and thorough examination; but here the College forbid their members to assume a title they have no claim to. Foreign graduates have spent time over extra study; and that they have such men in their ranks as Drs. West, Duncan, Little, Murrell, etc., is a sufficient guarantee that the test they have gone through is *bonâ fide*.—Yours,

M.D.Brussels.

G. M. T. (Worcester) asks for information as to a hospital for incurables, that would take a young man, aged 29, at present suffering from locomotor ataxy. He is almost a stranger, having no friends in or near London, and his case is said by the medical men at the infirmary to be incurable.

Escapes from Hydrophobia.

Sir,—In Dr. Bristowe's paper on Hydrophobia, which appears in the British Medical Journal for April 21st, he relates one or two instances of marvellous escapes from rabid dogs, and which recalls to mind what occurred some few years ago in the person of a servant of mine. A favourite pointer I possessed at the time developed symptoms of undoubted rabies (there were several instances of the disease at the time), as confirmed by a "vet" who practised extensively, and was considered a very high authority on the subject of dogs and their diseases. The peculiar half howl half bark for a couple of nights (before the occurrence I am about to relate), and which, once heard, can never be forgotten, and one of the characteristic features in the disease, coupled with an excitable, restless, nervous manner, and which is also said to be almost an unerring symptom in rabies, looking at some object which seemed to have suddenly attracted the animal, when there was really no reason to look surprised—for instance, at a door or wall within an enclosed yard—left me in no doubt but that the dog had contracted rabies. About thirty hours after the above-mentioned symptoms showed themselves, partial paralysis of the lower jaw followed, though he was capable of biting and swallowing pieces of basket, leather, etc. Having shut the pointer in a coach-house, waiting for the "vet's" opinion, a servant, an Irish girl, who was passionately fond of all the dogs, went out, not knowing my opinion respecting the animal (as I was inclined to keep the matter dark, owing to the fact that there were several ladies in the house, and that one had a poodle which was well shaken and bitten by the rabid dog, besides a Gordon setter); and, seeing the dog's drooping jaw and attempt to swallow, actually put her hand into the dog's mouth, imagining that "a bone was in its throat;" and, strange to say, that the dog's affection, even in his sufferings, remained until he received his quietus from the gun he loved so well.

Neither of the dogs bitten, from the fact of having long hair, showed any symptoms of the affection; and one, now ten years after the occurrence, is still alive.—Yours truly,

E. T. T.

Unqualified Assistants.

Sir,—After perusal of the resolution adopted by the Medical Council at their sitting on April 21st, in reference to the employment of unqualified medical assistants, I gather that, should this resolution be embodied in the new Medical Act, no practitioner will be allowed, under penalty of incurring the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner, to employ any unqualified medical man as an assistant, irrespective of his medical training and general education, unless as a trained pupil, whatever that may mean. That legislation upon this subject is requisite, no one will deny; but the sweeping decision come to by the Medical Council will be as much a surprise to the qualified members of the profession as to the unqualified assistant. The Council seems to have adopted the resolution without considering the hardship that such a measure, if passed, would inflict upon the general practitioner. Let us see what this resolution really means. It means that a medical man engaged in general practice, and connected with works where accidents are constantly occurring, cannot go upon his usual rounds, or attend even a case of midwifery, without leaving a qualified man behind him to meet any sudden call, which, in ninety-nine cases out of a hundred, might be safely left in the hands of his unqualified assistant, at least till his return. Furthermore, no tooth can be extracted, no finger or wound dressed, or hæmorrhage stayed, no medicine prescribed, no assistance, in fact, rendered in any case, unless by the principal himself or a qualified substitute, or the so-called trained pupil. It must be borne in mind that the medical man engaged in the above class of practice, is often so poorly paid that he cannot afford to employ a qualified man; and even if he could, the localities are so little attractive, that it would be impossible to retain his services for any length of time, or to avoid the inconvenience of constant changes. I myself have employed both qualified and unqualified assistants for the last fifteen years, and must say that the latter have always given both myself and my patients by far the greater satisfaction; for I have found that newly qualified men have had little or no knowledge of ordinary practice and surgery work, and have had no idea of accommodating themselves to the habits of the people. The Council, in their deliberations, seem to have looked upon all unqualified assistants as being upon the same level. This is far from being the case; and, in my opinion, had they been more fully advised, they would not have come to the decision they adopted in the resolution.

In order to illustrate my meaning, I would divide unqualified assistants into the following classes: 1. Those who have neither passed the preliminary examination nor studied in any medical school. This division, I believe, embraces a large percentage of the unqualified assistants. 2. Those who have passed the preliminary examination, but have only completed a portion of their curriculum, such as second and third year students, seeking to gain both experience and means to enable them to complete their curriculum in order to qualify. 3. Those who have not only passed their preliminary examination, but have also completed their curriculum, and are only waiting time and opportunity to qualify. With the first of these I have no sympathy. They are literally unqualified, and are nothing more nor less than dispensers without any medical knowledge whatever. With the two latter classes, however, I have great sympathy. They are generally hard-working men, battling upon pushing their way against all difficulties to an honourable position in the profession. These are the very men the profession ought to encourage, and are by far the most useful assistants the general practitioner can employ; and yet these are the very men the Council are seeking to disqualify as assistants from acting under the superintendence of a legally qualified man.

I have not touched upon the unqualified man being placed in charge of a branch at a distance from his principal, or practising under cover of a qualified man, as the injustice of such conduct has been long recognised; and should be treated accordingly.

I shall be much surprised if the general body of practitioners do not raise their voice in protest against the decision come to by the Council on this subject; and I shall be glad to co-operate with others in seeking to redress what, in my humble opinion, would be a wrong inflicted both on the general practitioner and the unqualified assistants comprised in classes 2 and 3.—I am, etc.,

D. Durham, Medical Practitioner.

Lachrymal or Lacrymal.

A Third Year's Student.—There is authority for spelling the word in either way. The more correct form, however, is lacryma; the word being derived from the same root as the Greek δάκρυμα, which is spelled with κ (*k* or hard *c*) and not with χ (*ch*). Other examples of the representation of the *d* sound by *l* in Latin are to be found; for instance, Ulysses for Ὀδυσσεύς.

The Library of the College of Surgeons.

Sir,—I think many of your readers will join with me in protesting against the unnecessary frequency with which the library of the Royal College of Surgeons is closed, every time an examination happens to be on hand. In the ordinary way, the doors are never opened until eleven o'clock in the morning, an unusually late hour, which causes those who are in the habit of resorting to it great inconvenience and loss of time. I regret to see this splendid temple of science, where the spirit of Hunter once reigned, so largely given up to the trade in diplomas; as if this were the sole aim and object of modern science worthy of encouragement. Such a desecration would be impossible but for the exorbitant fees paid to the examiners, not much less than the modest sum of £6,000 a year. What a brave time they are having at the fountain-head of the golden stream, in the pleasant valleys of El Dorado!

Sincerely yours,

W. Roger Williams.

Liquor Bismuthi.

Sir,—Your correspondent, A. N. C., suggests a method for the preparation of Liquor Bismuthi et Ammoniæ Citratis, which, although possessing many advantages over the ridiculous process of the *British Pharmacopœia*, is inferior to the formulá of American origin, and now made official in the *United States Pharmacopœia*. The process is briefly this. Subnitrate of bismuth is boiled with a solution of citric acid. A basic citrate of bismuth is thus obtained, quite insoluble in water, which after being drained on a filter, and washed free from nitric acid, may be dissolved in solution of ammonia, and diluted to any required strength. The advantages of this process are obvious. It is extremely simple, there is absolutely no waste, and the product obtained is exceptionally pure.

Fred. W. Fletcher,
North London Chemical Works, Holloway, N.

Royal College of Surgeons of England.

The following were the questions in Anatomy and Physiology submitted to the eighty-six candidates at the half-yearly examination for the Fellowship of the College, at the written examination on May 18th, when they were required to answer not less than three out of the four questions on each subject. *Physiology:* 1. How is carbon-dioxide eliminated from the body? What is the average daily quantity excreted? Explain how this may be affected by variations in temperature, quality of food, and amount of work performed. 2. Describe the capillary lymphatics, and the methods by which they can be demonstrated. How is the lymph-current maintained in man and other vertebrates? 3. Describe the structure of the canal of the cochlea. Explain how differences of sound are perceived. 4. Describe the sequence of events in the contraction of the heart's cavities. Give the average duration of the different parts of the rhythm. How may both these points be demonstrated? State the exact relation borne by the heart's sounds to the various phases of its action. — *Anatomy:* 1. The anterior wall of the abdomen having been removed, describe the dissection required to expose the lumbar arteries and their abdominal branches. 2. The body being placed on its back, and the head turned to one side, describe the dissection required to expose the interval between the upper border of the superior constrictor of the pharynx and the base of the skull (sinus of Morgagni). 3. Describe the various inflections of the peritonæum, and trace their formation from early fœtal life to their complete development. 4. Explain the general plan of construction of the human skull. Give the typical component parts of each bone as displayed in the course of development and represented as permanent bones in the skulls of lower animals, and point out the features in man's skull which are essentially human.

The following questions in Pathology, Therapeutics, and Surgery, were submitted to the candidates at the recent final examination for the Fellowship of the College. 1. What are the conditions favourable to the healing of wounds, and what are the various methods by which these are promoted? 2. State what you understand by the term asthenopia; mention the disorders of which it is commonly symptomatic; indicate how its principal forms may be clinically distinguished, and give their treatment. 3. What is meant by the tension of a part? Illustrate its causes and effects by examples, and describe its treatment. 4. Give the diagnostic symptoms of aneurysm of the innominate, common carotid, and vertebral arteries respectively, from other pulsating tumours that may occur at the root of the neck; and point out the treatment appropriate under various circumstances.

Moore Fund.

The Rev. F. R. Miller begs to acknowledge with thanks the following additional contributions:

	£	s.	d.
F. Smith, Esq.	3	3	0
J. P. B.	0	10	0
Beta	2	2	0
Poor Apothecary	0	5	0
Charles Young, Esq.	0	10	0
Dr. Holden	0	5	0
F. C. Beatty, Esq.	0	10	0
Dr. Coombes	0	10	0
H. Harvey, Esq.	0	10	0
J. Watts, Esq.	1	0	0
Anon., Sunderland	0	10	0

"Enquirens" asks whether any work is published containing an account of the various civil medical appointments, giving salaries, etc., in the gift of the Secretary of State for the Colonies, and of the Secretary of State for India; and if so, where it can be obtained. "Enquirens" is particularly anxious to learn whether there be any good sanitary appointments in India or other Colonies open to civilian medical men.

The Brussels Degree.

QUIRER asks if a graduate in medicine of the University of Brussels is entitled, as such, to wear a gown and hood; and, if so, how is such a hood distinguished?

A. B.—The two answers are in no way contradictory.

Hypodermic Use of Ergotin.

,—In reply to "Enquirer," I would offer the following suggestions. An queous solution of ergotin is best, causing the least local pain and irritation. am in the habit of using the liquor secalis cornuti of Messrs. Curtis and Co. f Baker Street; strength, one grain in each drop; and I give 5 to 20 minims or a dose. There need be no difficulty in measuring such doses with an ordiary hypodermic syringe, as a drop more or less does not matter. For continued use, 5 to 10 minims every other day is sufficient. In violent hæmorhages, after labour or otherwise, I give 20 minims, and repeat it if necessary half an hour. I have seen local irritation follow these injections, and ould impress the necessity of cleanliness of the syringe, and of avoiding e superficial veins. It is advisable to thrust the needle deeply through the t and cellular tissue, selecting a part not pressed on, if the patient lie on her side. The results are sometimes disappointing, but there is a good al of useless ergot in the market.

Intra-uterine fibroids are best removed; extra-uterine are not much affected ergot; but those of the mural variety are decidedly benefited by this drug, ough hypodermic treatment should not be depended on alone.—Yours ly,

Percy Boulton, M.D., M.R.C.P.Lond.

Seymour Street, W.

ONSTANT SUBSCRIBER.—We have laboured long and earnestly, and with inasing effect, to secure a minimum double qualification as the sole patent practice, but nothing of the kind can be made retrospective. Many of the st eminent and successful practitioners for the last half-century have been the position described. We must look to the future, and not seek to ime retrospective disabilities.

Treatment of Bilharzia Hæmatobia.

—In answer to the inquiry of H. N. as to the treatment of bilharzia hæmaia, I write to inform him that I now have a case of that disease under my e, which has made very marked improvement under the following treatnt:—Quinine, five grains every morning; one minim of creosote in pill three es daily; and iron at meal time. The latter, as I have before noticed, is eficial, while the two former drugs are possibly disagreeable to the paraon account of their antiseptic properties. The patient, who has suffered n the disease for six years, is now free from fever and passes no blood, nor e I recently found ova.—Yours sincerely,

L. K. Hatch.

ombay, April 10th, 1883.

Private Dispensaries.

Sir,—I have observed, with interest, a discussion in the British Medical Journal as to the professional or unprofessional character of private provident dispensaries. I agree with you, and I believe with the majority of medical men, that they are not professional, but it is clear that this is not the universal medical opinion.

One of your correspondents, who upholds the system, uses perhaps the strongest argument in its favour when he says that in this way the working class receive good advice and medicine at a low rate, if the practice be conscientious, which is, of course, a necessary condition to serious discussion of the subject.

Another, of somewhat similar opinion, by describing it as a "small fee" method of practice, seeks to find an excuse for a system which he does not approve when displayed in all its usual candour of solicitation, but would countenance, if this were restrained, within the limits necessary for adequate local publicity. But this is only watering the poison, to drink it after all in the aggregate. The distinction which he draws is more apparent than real. The principle objected to is intact so long as any means are used to profess that here is one who, above his brethren, by use and wont, "considers the poor."

With regard to the first argument, it is clear that in many other ways, besides the one in question, the poor man may receive good advice and medicine. The general practitioner, outside of private dispensary practice, is quite as competent as and not more rapacious than he who engages in it, and I certainly think that as a rule he is unwilling to coerce the pocket of his patient by unreasonable fees. It is a common thing for him to accept whatever fee his patient can pay, however small; and, despite the prevalence of county-court prosecutions, it is not this type of practitioner so much as the other, more apt in commercial methods, that is found to be a suitor.

Should the case of poor patients require a more elaborate course of treatment, it is not to private dispensaries, but to hospitals, that they should go.

The "small-fee," I would repeat, is not so truly the characteristic feature of the debated system as the dispensary, labelled or not, but recognised in its neighbourhood, and owned, or shared in ownership, by a medical man. It exists mainly because of its value as a means of drawing custom, as a means of introduction into a neighbourhood; and who shall say that, being once opened, none but the poor avail themselves of its lowly rated treatment? The principle, I do not deny, is shrewd and correct in regard to mere personal profit; it is, I hold, a more than doubtful one in medicine; and it tends to selfish disunion among medical men, an evil above others to be striven against. It is a principle whose operation tells severely against any young medical man in a poor neighbourhood, whose conscience will not suffer him to adopt it, and who prefers a little pinching in his means to greater ease with injury to professional feeling.

I do not put forward these arguments out of mere hostility to the private dispensary system, but quite as much with the desire that those who now defend it, may see in them some reason to adopt a less ostentatious method of practice, and to try whether the ordinary methods of general practice are not sufficient to yield them a fair remuneration for their services. In so doing they would find, I believe, that any temporary loss incurred would be fully compensated ere long by the reasonable profits and the honourable social standing which belong to a purely professional life.—I am, faithfully yours,

General Practitioner.

Novel Mode of Vaccination.

A correspondent of an evening contemporary relates a curious case of vaccination which had come under his observation. He found on the arm of a child a typical vaccine vesicle, where only one puncture seemed to have been made, but according to the mother, the child had never been vaccinated. On further inquiry, however, it appeared that the child had slept with another child who had recently been vaccinated, and the mother had one morning noticed what seemed to be a flea-bite, which afterwards gradually developed the character described. "The conclusion was obvious. The child's arm had been punctured by a flea, and the part so punctured came into contact with the matter escaping from the vaccinated arm."

Justitia.—We do not think the proposition permissible.

Left-Handedness Among the Ancient Hebrews.

A curious question has lately been raised, as to whether the ancient Hebrews were a left-handed people. Dr. Erlenmeyer has just given an interesting and learned lecture to prove that they were. Most of the Aryan peoples, as we know, write from the left to the right of a sheet of paper, and their books are so printed as to be read in this direction. Most of the Semitic people, on the contrary, write from the right to the left of the paper. Hitherto this very emphatic difference has been simply represented to be a mere characteristic of habit, kept up by the reverence for tradition, which is deeply rooted in the Semitic mind. It has never occurred to anyone, so far as we know, that the direction taken by the hand of a Semitic scribe in writing was due to a physiological cause—namely, to the fact that his left hand was his better hand, and was much more ready and "dexterous" than the hand which we Aryans call the dexter. Dr. Erlenmeyer insists that the writers of the Old Testament, and probably the early Talmudists after them, naturally wrote with their left hands, and would have found it difficult, if not impossible, to write with the other hand. Hence it was only natural that the manuscript should travel along a line which started from the right and ended on the left. Dr. Erlenmeyer says that this hypothesis is not a mere happy thought of his own, but that he has found striking confirmation of the theory in the Talmud. For instance, he cites a passage which insists that certain special prayers and inscriptions are always to be written with the right hand, and not with the left. The execution of this exceptional prescription was a work of time, patience, and difficulty, and it is implied that the process of writing with the right hand was a departure from the ordinary, easy, and natural way of writing. The learned doctor also cites passages from the Hebrew of the Old Testament, in which a particular stress seems to him to be laid upon the "left-handedness" of the old Hebrews.

Vaccination.

Sir,—Referring to the letter of "Partners," allow me to remark that it cannot be acreage alone which secures the much coveted Government grant. I happen to be amongst the lucky ones this year, and in most of the cases shown to the inspector there were but two marks, three being the outside number made by me upon any arm, and that quite the exception. I enclose my card, and remain, sir, yours truly,

Omega.

The Medical Act Amendment Bill.

SIR,—Whilst taking exception generally to the leader in your issue of to-day, there is one complaint I have to make against it, which for the moment (according to my mind) stands out prominently from among the rest, and that is, the want of fairness which is shown by the quoting of only a part of a sentence contained in a circular letter now being issued by the "Medical Alliance" Society to the profession, and then commenting upon it, as though the comments were upon the completed sentence. Is this honest or fair? The writer of this article at the part of which I am now complaining, says that it has been asserted, that the Bill "compels medical students after passing other portals, to pass a final examination by a State Board," thus keeping from the students the information conveyed in the remainder of the sentence, which states that "after passing the said examination they will not be entitled in virtue of such examination to take or use any medical title whatever. The sentence in the Circular runs thus: "The Bill compels medical students after passing other portals to pass a final examination by a State Board, in return for all of which, as now 'amended' it gives them no medical title whatever." The sentence was written for the purpose of drawing the attention of students to it. A time will come most assuredly, when the profession will learn to their cost, how they have been deceived by those in whom they have placed trust, and from whom they have received the most fervent promises of help and watchfulness over their interests. There is just one point more to which I would refer, and that is to inquire how is it that if the Bill is what it has been represented to the profession to be, by the Reform Committee, whole pages of proposed amendments have appeared in the JOURNAL, which if adopted, would so alter the principles and details of the Bill as not only to render it a new and different, but a wholly antagonistic Bill to the Bill now in the House of Commons.—I am, sir, faithfully yours,

CHAS. CHAPLE, M.D., St. Andrew's, M.R.C.P.Ed.,
June 2nd, 1883. Member of the British Medical Association.

*** The question of the title of the future licentiates of the Medical Council will no doubt be further discussed. The Association supports the Bill, because it embodies two cardinal points for which the Association has always contended: 1. The increase of the power and the modification of the constitution of the General Medical Council; and 2. The establishment of a conjoint examining board in each division of the kingdom as the portal to the *Medical Register*. In the publication of correspondence bearing on medical reform, publicity is given to the suggestions made for amendments in the Medical Bill. That the Bill will be subjected to amendments when passing through Committee in the House of Commons, is inevitable, and it was therefore right that proposed amendments should be laid before the profession.

WYE.—The Bill can be ordered from Hansard's, through your bookseller. The text and amendments have appeared in the JOURNAL.

Sycosis.

SIR,—In answer to "Monreale," in reference to his case of sycosis, I have always found epilation the most effective, sure, and speedy remedy.—I remain, yours truly,

E. E. CRASTER.
59, Grange Road, Middlesbrough, May 27th, 1883.

White Substances in the Throat.

SIR,—With reference to the letter of "Beta," I would say that I have frequently found the white substances of which he speaks in the throats of patients. They are in the form of white pellets, consisting of sebaceous matter with a peculiar foul smell, most akin to that of the matter which collects in the cavity of a decayed tooth. They lie in the meshed depressions upon the tonsils, and appear to me to be of the nature of secretion from those glands. If they be abundant or troublesome, relief may be given by astringent applications.—I am, sir, yours truly,

OMEGA.

Orchitis following Parotiditis.

SIR,—I was recently called to see a married policeman, aged 26, who was suffering from double parotiditis, accompanied by a considerable amount of constitutional disturbance. The mischief had commenced after exposure to very severe weather three days before. Upon seeing him next day, he drew my attention to the fact that he also had orchitis. I charged him with having had a gonorrhœa. This he stoutly denied; but upon my next visit he voluntarily acknowledged he had had intercourse with a strange female six weeks before, but still denied having had any urethral discharge. There was not the slightest evidence of the existence of any discharge, and upon the decline of the orchitis, there was not the least return of the accustomed discharge, although careful and frequent examination was made to make sure upon this point.

At this time an epidemic of parotiditis was prevalent amongst children, and I have every reason to think that, in this case, the orchitis was a concomitant of the parotiditis, and not a consequence of gonorrhœal contagion.

J. FIELDER HOWARD, M.R.C.S.E., etc.
Sandycroft, Shaw.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. J. Farquhar, Harrogate; Mr. B. F. Stevens, London; Messrs. Atkinson and Philipson, Newcastle-on-Tyne; Dr. G. F. Dean, Dublin; Dr. Barnardo, London; Dr. T. Orme Dudfield, London; Dr. Barry, London; Mr. H. Cripps Lawrence, London; Mr. Arthur Goodwin, Hanley; Dr. Ll. Thomas, London; Dr. Roger McNeill, Colonsay; Silicated Carbon Filter Company, London; Mr. G. Hopkins, London; Dr. Laidlow, Tranmere; Mr. John Ostell, Carlisle; Dr. G. E. Shuttleworth, Lancaster; Verax; Mr. David Collingwood, London; Dr. J. G. Wedgwood, London; Mr. A. Roberts, Blaenau-Festiniog; Dr. McKendrick, Glasgow; Mr. John Spear, London; Mr. H. R. Hatherley, Nottingham; Mr. J. G. Byrne, Preston; Mr. Laurence Humphry, Cambridge; Mr. R. G. Price, Treorchy; Dr. Turle, Finchley; Dr. Haughton, Dublin; Mr. S. Butler, Stafford; Dr. Styrap, Shrewsbury; Mr. T. M. Kendall, London; Dr Maurice G. Evans, Cardiff; Mr. J. Moore, London; Mr. R. Hammersley Heenan, Manchester; Dr. Neale, London; Wye; Dr. W. Walter, Manchester; Mr. Thomas Partridge, Stroud; Dr. Sawyer, Birmingham; Dr. Bonney, London; Dr. Strange, Worcester; Mr. S. W. North, York; Mr. N. C. Collier, Fulham; Sir William Mac Cormac, London; Service; Mr. J. S. Brazier, Aberdeen; Mr. Shirley F. Murphy, London; Mr. J. G. Douglas Kerr, Bath; Mr. G. F. Henry, Bury St. Edmunds; Dr. E. Holland, London; Mr. F. A. Hallsworth, Atherstone; Mr. R. J. H. Scott, Bath; Our Aberdeen Correspondent; Mr. Arthur Kempe, Exeter; Mr. R. B. Sellers, Rochdale; Dr. Percy Boulton, London; Dr. Willoughby, London; Mr. W. H. Goode, Sydney; Mr. Bennett May, Birmingham; Mr. J. H. Gornall, Warrington; Mr. J. Christal, Coote's Hill, Cavan; Dr. Illingsworth, Clifton-le-Moors; Mr. John Liddle, London; Dr. Althaus, London; Dr. Aitken, Rome; Mr. W. W. Reeves, Royal Microscopical Society; Sir Charles Trevelyan, London; Dr. Turle, London; Mr. G. R. Turner, London; Dr. W. H. Tayler, Anerley; Dr. C. Glasier, Bolton; Mrs. Harland, Colwich Vicarage; Dr. William Dale, King's Lynn; Mr. Kenneth Millican, Kineton; Dr. R. Carter, Bath; Dr. Crichton Browne, London; Mr. J. F. Little, Ben-Rhydding; Mr. Henry Parson, Guildford; Mr. C. A. Ridal, Sheffield; Dr. R. A. Batterbury, Berkhampstead; Mr. John S. Wills, Chard; Mr. F. St. George Mivart, London; Mr. E. Lund, Manchester; Mr. F. A. Southam, Manchester; Mr. B. G. Morison, London; Dr. Parsons, Dover; Right Hon. Sir Lyon Playfair, London; Mr. George Terry, Mells, Frome; Mr. J. Fletcher, London; Dr. W. A. Elliston, Ipswich; Dr. R. R. Griffiths, Cardiff; Mr. J. Moore, London; Mr. George Eastes, London; Our Belfast Correspondent; Mr. E. Gibson, London; Dr. J. A. Wilson, Govan; Mr. H. J. Hardwicke, Sheffield; The Dean of the University of Edinburgh; Dr. Selby Norton, Biddenden; Mr. A. M. Walker, Putney; Dr. H. Campbell Pope, London; Mrs. Eliza Hughes, Streatham; Mr. W. H. Lloyd, Birmingham Mr. W. Buck, London; Dr. J. R. Stedman, Guildford; Mr. G. R. Jesse, Macclesfield; Sir H. Drummond Wolff, M.P., London; Dr. Waters, Chester; Mr. W. de Rosaris, Lahore; Dr. Styrap, Shrewsbury; Mr. Nelson Hardy, London; Mr. W. Gardiner, Crystal Palace; The Secretary of the Royal College of Physicians; Dr. B. H. Paul, London; Ajax; Mr. Joseph Hadley, London; Dr. Fairlie Clarke, Tunbridge Wells; Dr. John Broom, Clifton; Dr. R. Carter, Bath; Dr. P. M. Braidwood, Birkenhead; Mr. St. Vincent Mercier, London; Dr. Beevor, Berlin; Mr. John Holm, London; Dr. T. Gelston Atkins, Cork; Mr. F. H. Moger, Bath; Mr. H. Robinson, Preston; Dr. W. M. Kelly, Taunton; Mr. Rushton Parker, Liverpool, etc.

BOOKS, ETC., RECEIVED.

The Principles and Practice of Medical Jurisprudence. By the late Alfred Swaine Taylor, M.D., F.R.S. Third Edition. Edited by Thomas Stevenson, M.D.Lond. Vols. I and II. London: J. and A. Churchill. 1883.

A System of Surgery, Theoretical and Practical; in Treatises by Various Authors. Edited by T. Holmes, M.A.Cantab., and J. W. Hulke, F.R.S. Third Edition. in Three Volumes. Longmans, Green, and Co. 1883.

Food and Home Cookery; Comprising the Cookery Scheme of the Leeds School-Board. New Edition. By Catherine M. Buckton. London: Longmans, Green, and Co. 1883.

Parkes's Manual of Practical Hygiene. Sixth Edition. Edited by Professor de Chaumont. Churchill and Co. 1883.

A Manual of Pathology. By Joseph Coats, M.D. With Three Hundred and Thirty-Nine Illustrations. London: Longmans, Green, and Co. 1883.

Alcoholic Inebriety from a Medical Standpoint; With Cases from Clinical Records. By Joseph Parish, M.D. Philadelphia: P. Blakiston, Son, and Co. 1883.

Principles of Health in Childhood, Manhood, and Old Age. By Louis King, M.R.C.S. London: Hamilton, Adams, and Co. Bath: William Lewis and Son. 1883.

Observations on Lithotomy, Lithotrity, and the Early Detection of Stone in the Bladder, With a Description of a New Method of Tapping the Bladder. By Reginald Harrison, F.R.C.S. London: J. and A. Churchill. 1883.

The Sanitary Contrasts of the British and French Armies During the Crimean War. By Surgeon-General T. Longmore, C.B., Q.H.S., F.R.C.S. London: Charles Griffin and Company. 1883.

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AN ADDRESS
ON
THE PRIVILEGES AND DUTIES OF BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.*

By WILLIAM STRANGE, M.D.,
President of the Worcestershire and Herefordshire Branch; and President of the British Medical Association.

GENTLEMEN,—The press of business in preparing for the great meeting of our Association in this city, in August last, prevented me from giving the usual presidential address on the occasion of the last annual meeting of the Worcestershire and Herefordshire Branch. I regret that omission the less, because it gives me what I hope will be considered a legitimate opportunity of removing it, whilst welcoming to Worcester the members of a neighbouring Branch for the first time in our existence. Such joint meetings are not unknown between other and older Branches, and I have heard that they have generally given great satisfaction, as subserving a twofold object—viz., the bringing together for social intercourse the largest number of medical men which any given district is able to provide, and the securing a larger, and therefore perhaps a more intelligent audience, for whatever of scientific interest those who attend the meetings may be able to offer. I will take the liberty of drawing your attention, for a few minutes, to what is now passing before our eyes in the conduct and management of the parent Association; and then of pointing out to you the bearing which these events must, or should have, upon the privileges, and duties, and welfare of the Branches.

Early in the history of our Association, Branches began to be formed in various centres, in consequence of the difficulty experienced in those days, compared with these, of medical men getting to a distance without loss of much valuable time. I trace the rise and progress of Branches: 1, to the inherent vitality and value of the parent Association; and 2, to the exigencies of medical practice, which make it more difficult for a medical man to leave home for a day or two than for a member of any other of the professions. And now, we find Branches in the more populous centres so large, that their members almost equal in number those composing the whole Association for many years after its foundation. In fact, these larger Branches such as the Metropolitan Counties, the Lancashire and Cheshire, the South-Eastern, and the Birmingham and Midland Counties—are almost associations in themselves; so well organised are they, so well attended, and divided (where necessary) into sub-Branches or districts. I wish you to bear in mind this fact, as it has an important bearing upon my argument as to the privileges and duties of the Branches.

The smaller Branches are scattered up and down those parts of the United Kingdom which are less thickly populated than are the districts within the area of larger Branches. These have more the character of units, whilst the others are agglomerations of units. They are more homogeneous, perhaps, as lacking the variety of composition which is to be found in the larger centres of medical activity. They must, almost of necessity, also be unable to produce the same amount of work as the larger Branches can, in consequence of a more restricted field of observation. Hence the instinct which of late has sprung up, urging these smaller centres to unite their forces, either by direct amalgamation, or else by occasional united meetings, such as the one I have the pleasure of addressing to-day.

All this is, of course, very trite, and almost self-evident; and I should not be justified in troubling you with it, were it not for a most important movement which is now going on, affecting the welfare, perhaps the very existence, of some Branches, and bearing vitally upon the good government and future welfare of the parent Association itself.

Now, notwithstanding this varying character of the Branches, distant as to place, differing in the character of their leaders—professors at medical schools, teachers at our larger hospitals, leading consulting physicians and surgeons, or busy general practitioners in town or village—there is one bond of unity amongst them all, and that is, they are all animated by the same spirit, they have all the same object in view, and the one end to be attained is placed before the eyes of each and every one. The motto of our parent Association is such a *multum in parvo*, has such an unity, and yet is so expansive, that it serves at once as a bond of union between parent tree and branch, and between the largest and most important, and the smallest and weakest of the Branches.

This unity of aim and singleness of purpose it is to which we must look to keep the now almost unwieldly mass of our Association from falling to pieces by its own weight. Were it not for this, we might reasonably fear that some great storm of feeling, some hurricane of dissension, might arise and rend branch after branch away from the parent trunk, leaving the now goodly tree a melancholy spectacle to its friends, and an object of derision to its enemies. We know how the rending away of a principal branch exposes the parent tree to injury, and how insecure it makes the attachment of others. Hence the desirability of a bond of union, a chain of support, which one branch can afford to another. And, indeed, in the multiplicity of branches, there is safety for the parent tree. If the whole kingdom were divided into a smaller number of districts, say five or six, for Branch purposes, there would be danger, because the falling away of even one of these would leave a damaging wound in the trunk, such as might endanger its survival. But the feeling of strength in the larger Branches, the result of their powerful organisation, has now naturally given rise to a desire to make that strength felt in the counsels of the parent Association. The large amount of intelligence embraced by an extended area will not any longer be content with the same amount of consideration and power as that hitherto possessed by the very smallest of the Branches. Consequently, there has arisen in some of the larger Branches a feeling of soreness, of injustice done to their rights, by the governing body of the Association. These feelings, after surging for a time below the surface, found voice, as you are aware, at our meeting here in August last. A distinct demand was made for representation in the governing body in direct proportion to numbers, and the Committee of Council was directed to devise a scheme which should embody that principle. The outcome of it all is what you will read in the JOURNAL, viz., that the adoption of that principle will be recommended to the members of the Association assembled at Liverpool next August. The starting point of representation will be that each Branch, however small, will retain its present autonomy by having one representative in the governing body. The larger Branches, if the recommendation of Council should be adopted, will have one additional representative for every 200 members they contain. These very simple elements will compose the foundation of the new executive power. The officers and vice-presidents will, I think rightly, retain the seats they have always had in the Executive Council. You will observe, then, that the Branches are now to assume the chief governing power of the Association. It is right that they should do so, since they are, and I trust will always remain, the strength of the Association. Other members we have, unattached, distant in the colonies or in India, scattered over the world in the army, the navy, or in civil practice. My own private opinion is that these should also share in the government of the Association, and justice seems to require it; but it is difficult to secure direct representation for them. As I have given notice of a motion in relation to this matter, I will not further remark upon it now.

These then, gentlemen, are henceforth to be the privileges of the Branches of the Association. The larger Branches will have their complete organisation and representation; their readiness of mutual access; their populous areas from which to draw material for the advancement of science; their power to sustain individual effort; and their power, also, to compel their members to adhere to the fundamental principles of the Association. The smaller Branches will have the support of an occasional intercourse with the larger; their numbers will probably be more intimately acquainted with each other than can be the case in the larger Branches; and, consequently, if the additions they may be able to make to the sum of medical knowledge should be smaller, the other great object of our Association—viz., mutual friendly, helpful intercourse will be more easily carried out.

I turn now to the duties which, in my judgment, the possession of these privileges entails upon the Branches.

The first and most obvious duty, I take it, which a Branch owes to the parent Association, is loyalty. That Association was, for many years after its establishment, poor, weak, and more than once in danger of disruption. It is now rich, prosperous, and powerful. Disruption could only now be brought about through overweening

*Delivered at a joint meeting of the Gloucestershire and Worcestershire and Herefordshire Branches.

vanity and self-seeking on the part of some of the larger Branches. The danger of disunion, however, will now be removed, or reduced to a minimum, by the proposed new constitution of the governing body. Each Branch will be able to make its voice heard and its grievances attended to, because its representatives in the Council will have no excuse for not attending to their duties. If your honorary secretary is unable to absent himself from his practice four days in the year, you can and ought to elect another member in his place who may be able to do so; and the payment of such representative's travelling expenses by the parent Association now proposed will materially expedite his journey to and from London.

The next duty which the Branches owe to the Association is to further to the utmost of their ability those movements in the interest of science, which it is now more and more disposed to institute and to foster. I need only cite the last great effort in this direction—viz., the collective investigation of disease, so happily and so ably initiated by my predecessor and friend, Professor Humphry of Cambridge. Our Association is now, as I have just said, both rich and powerful. By the use which it shall make of those great moral forces will it be judged both by the profession throughout the world, and by the educated public at home. As time goes on, and the vista of medical research opens up wider and farther upon our mental vision, fresh subjects will present themselves for investigation, fresh difficulties to be overcome, fresh honour, let us hope, to be won. Do not leave all this work to the parent Association. Every Branch may easily make some contribution to the general stock; for it must be unfortunate indeed if, within its area, there be not some inquiring minds, some men with leisure and ability to add to our stock of observed knowledge, or to work out vexed questions by the powers of strict induction.

The Branches, moreover, owe a *moral* obedience to the parent Association. The decision of the majority must be more likely to be for the general good than the desire of the minority; and no great Association composed of units of equal privileges and equal aims, as ours is, can afford to dispense with the moderating power of the general body.

Lastly, let me call your attention for one moment to the duties which the Branches owe to themselves and to their members reciprocally. Every Branch should endeavour to absorb into itself every member of the profession residing within its area, who is not excluded by moral considerations. It is clearly the duty of the honorary secretary of the Branch to look up every new comer, and to remove the scruples of those who hitherto have stood aloof from joining it. Nearly one-third of all the members of the Association are still unattached to any Branch. It is true that a great many of these—army and navy men, and residents in foreign countries—are unable to join any Branch with effect; but there are still numbers close to our doors who do not take the trouble to join a Branch. These should be told that they owe it to the Association to strengthen the Branch to which they are neighbours. As the Branches have a *moral right* to the knowledge which their individual members can afford to lay before them, so has the Association also a right to that of unattached members, which is now almost in every case lost to the general good.

The duty of members to the Branch to which they belong I take to be, to attend the meetings as frequently as they possibly can, and communicate everything worth relating to the Branch. Let it be remembered that there is nothing now known even in the very fountains of medical knowledge—the metropolis and the great medical schools—which cannot be learned by us in the provinces within a very short time from its publication. There are men in every Branch quite capable of assimilating such knowledge, and throwing it before a meeting for comparison with the experience and the thought of every member present. Thus, and thus chiefly, can knowledge be diffused.

One more important point. The greatest care ought to be taken to make sure that each man, before he is admitted to the privileges of a Branch member, is a fit and proper person to associate with gentlemen. Every year our mutual intercourse is becoming more intimate; we are becoming better known to each other; and we are often enabled by it to appreciate the good qualities of those upon whom in our ignorance, we may have been led to look upon with some suspicion or distrust. It is absolutely necessary that those who disregard the moral laws of our Association should be eliminated from our society. This is not to be easily done. The greater necessity is there that care be taken that *unclubable* men be not admitted into our assemblies, which are clubs in everything but the name.

Hospitality is the great bond of friendship; let us foster it to the utmost of our power. But, to do so, black sheep must be sent to the limbo of vulgar self-assertion, of false pretence, of dishonesty, or of gross immorality. Let us begin the new era, the second half-century of our existence, with a determination to be gentlemen first, and scientists or politicians afterwards; and so with hopeful boldness we may exclaim, *Floreat sempiterne Medicorum Britannicorum Societas!*

AN ADDRESS
ON
THE MEDICAL ACT AMENDMENT BILL.*

By W. M. CROWFOOT, M.B., Beccles,
Ex-President of the East Anglian Branch.

[After thanking the members of the Branch for the courtesy shown him during his year of office, and the honorary secretaries for their assistance and advice, Dr. Crowfoot proceeded to comment on the Medical Act Amendment Bill. He said:]

After perusing the original Bill as given in the Journal for the 24th March last, the amendments which were introduced into it during its passage through the House of Lords, and the comments of the medical press upon it, I think it cannot be doubted but that the Government have made an honest attempt to grapple with the difficulties of the question, and to provide the profession with a complete and efficient code. They have adopted the suggestions of the Royal Commission, and also to a great extent those of the Reform Committee of this Association, in framing the Bill; and there seems to be a general agreement on all sides that the main principles of the measure are good, though, in the opinion of many, there are certain points which require alteration. Under these circumstances I think it is the bounden duty of all the Branches of this Association to give the Bill their careful consideration, to support it so far as they conscientiously can do so, and to use their influence to get such amendments introduced as may be required in order to render it as efficient as possible.

The main features of this Bill seem to me to be: 1. The establishment of a single comprehensive minimum examination as a sole requirement for obtaining a licence to practise medicine: 2. The introduction into the Medical Council of members elected directly by the profession throughout the country; 3. The penal clauses.

The establishment of an uniform minimum examination will do away with the anomaly, which at present exists, of numerous examining bodies, not one of which tests the knowledge of the student in all the three branches of medical science which the general practitioner requires to know. The framing of rules for medical education, and the actual conduct of the final examination, is entrusted to medical boards, of which there are to be three, one for each division of the kingdom; but, according to the amendments introduced in this part of the Act, it would seem that the duty of conducting all examinations previous to the final one is to remain with the existing examining bodies. The Medical Boards are to act under the supervision of the Medical Council. The Medical Board for England is to consist of sixteen members, viz., eight for the Universities of Oxford, Cambridge, London, Durham, and the new Victoria University of Manchester, and eight for the Royal Colleges of Physicians and Surgeons. The principal objections to this part of the Bill come, as might be supposed, from the medical corporations and the Medical Council. With respect to this last body, however much we may respect the individual members composing it, yet I do not think that as a body it has conferred such benefits on the profession at large, or so far fulfilled the anticipations which were formed on its establishment, as to render its extinction, at least in its present form, a matter for regret. With regard to the Colleges, however, the feeling in the profession will, I think, be somewhat different. They have undoubtedly in times past done very much for medical education. Had the been passed in its original form, this Act must, I think, have tended very considerably to reduce the importance of these bodies; and, as at present amended, I fear its effect must be to lessen their influence, and probably their funds. To meet their objections, an additional member on the Medical Board has been given to each of the Colleges, so that they now have as many representatives as all the

* Delivered at a combined meeting of the East Anglian and Cambridge and Huntingdon Branches.

Universities put together; and the minimum examination established by the Act is not to confer any title, but simply a right to practise. A still more important modification has been proposed by the Medical Reform Committee of this Association. It is to this effect: "That no man be entitled to have his name entered on the *Medical Register*, as a registered medical practitioner, unless, in addition to the licence of the General Medical Council, he shall be attached subsequently to one of the universities or medical corporations, and be authorised to register the title as acquired." This is a point which I hope will be well discussed at the present meeting. For my own part, I much doubt the utility of this proposed amendment. If the student has proved that he possesses a competent knowledge of medicine, surgery, and midwifery, why lay any further burden upon him by compelling him to affiliate himself with one of the medical corporations or universities? The Lord President refused to accept an amendment of this character; but the lower grade conferred by the colleges, as for instance the membership in the case of the College of Surgeons, may still be registered, and will of course confer a title on the recipient; and the higher grade, the Fellowship, will doubtless still be sought for by those who intend to devote themselves especially to the practice of surgery. It has been urged that the effect of this part of the Act will be to lower the general standard of medical education, and to deter men from taking the higher degrees. I cannot, however, myself think that this will be its effect. The examination established by the Medical Council will at least insure the possession, by those who have passed it, of as much knowledge as was required for the membership of the College of Surgeons, in surgery, and for the licence of the College of Physicians or Apothecaries' Company, in medicine and midwifery; and there will be just as much inducement to take the higher degrees conferred by the colleges and universities as before. As far as the general public is concerned, all medical degrees are of the same value, and it matters not to them whether a man be the holder of a bogus degree, or a graduate of the University of Oxford, Cambridge, or London. In the eyes of the profession, of course, it is very different, and it seems to me that there will be just as much desire amongst young medical men to gain the respect of their professional brethren by taking a high degree as heretofore. The Act provides for the registration of all such degrees as may be approved of by the Medical Council. Other objections which have been raised to this part of the Bill are, that it does not sufficiently clearly define the course of study to be pursued by the student, and distinguish between the preliminary scientific and the strictly practical part of his education; but it seems to me to be wiser to leave these matters to be settled hereafter, and modified from time to time by some authority constituted by the Act, than to attempt to define them too rigidly by the Act itself. Whether this authority should be the medical boards, whom the Government Bill have invested with this power, or the General Medical Council, is a point which seems to me to be doubtful.

There are two provisions in the Bill which seem to me to be decidedly objectionable. The first is, that the Medical Boards should have power to acquire and hold lands, as by such action the number of corporate bodies, of which there are already too many in the profession, would be increased; and the second is that some of the members of the Medical Boards may be laymen. Now, as the duties of these Boards are entirely connected with medical education, I think it would be better that they should be composed entirely of medical men.

On the second great feature of the Bill, viz., the introduction into the Medical Council of representatives elected directly by the profession, I need say but little. It has met with general approval on all sides, and has long been earnestly contended for by the Medical Reform Committee of this Association. The new Medical Council to consist of eighteen members, six to be nominated by the Crown, four to be elected by the Medical Board for England, two by that for Scotland, and two by that for Ireland, and four direct representatives, two for England, one for Scotland, and one for Ireland. It is hoped that thus constituted the Medical Council will be less under the influence of the corporations, will be less representative of vested interests, and more able and free to act for the general good of the profession.

Lastly, as regards the penal clauses of the Bill, I think that these will generally commend themselves to the profession. An important amendment has been introduced into this section at the instance of the Reform Committee of the Association; and, as it now stands, if any person, whether a registered medical practitioner or not, who practises for gain, or professes to practise, or publishes his name as practising medicine or surgery, or receives any payment for practising medicine or surgery, takes or uses a medical title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding £20." The number of persons authorised to conduct these prosecutions has also been increased. It is to be hoped that these provisions may lead to the extinction of some of the numerous quacks who now prey on the public. It has also been proposed to introduce a clause preventing unqualified assistants from conducting branch practices under the protection of qualified men; but this proposal has not, I believe, been adopted, though it seems to me desirable that such should be the case before the Act becomes law.

It will be observed that two of the old corporations—viz., the English and the Irish Apothecaries' Companies—are extinguished. A more important matter is, that the original proposal in the Bill to impose an annual tax on all registered practitioners has in the amended Bill been omitted. The profession is thus saved from an unnecessary and unfair tax.

I have thus briefly touched upon a few of what seemed to me to be the more important points in the Government Medical Bill. I doubt not that many others will be brought out in the course of the discussion which we hope shortly to have on this measure; but I trust that what I have said may enable some here present, who may not have studied the Bill very closely, to form some opinion on the advantages or disadvantages to the profession likely to ensue, should it become law in its present form.

ABSTRACT OF LECTURES

ON THE

METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

BY W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE VIII.

GENERAL GROWTH OF THE EMBRYO TADPOLE OF THE FROG.

THE first external indication of the embryo frog is the pyriform medullary plate. The chief feature in it is the axial groove, which soon becomes prominent, and ends behind at the blastopore, the lips of which are continuous with the two medullary folds. As the sides bend upwards to form the medullary canal, the embryo elongates and assumes a somewhat oval form. At this time the cranial flexure can be seen, and the blastopore soon becomes shut off from the exterior. The embryo now elongates, and the mesoblast becomes segmented. Somites are first found in the neck, and are added successively behind in the unsegmented posterior region of the embryo. The hind end of the embryo grows out in a rounded prominence, which rapidly elongates and becomes a well marked tail, entirely formed by the elongation of the postanal section of the body. The whole body has a well marked dorsal flexure, the ventral surface being convex. At this stage the cranial flexure has become very marked, and the mid-brain forms the anterior termination of the long axis of the body, and at each side is an optic vesicle. The rudiments of the hyoid mandibular and first branchial arches project as folds at the side of the head, but at this stage the visceral clefts are not open. Rudiments of the proctodæum and stomodæum have appeared, but neither of them communicate with the mesenteron. Below the hyoid arch is a peculiar disc on each side. These are embryonic suctorial organs, formed of plates of thickened epiblast. At a later period they meet one another in the middle line, but separate again and finally atrophy. They are absent in Pipa and Dactylethra, but present in most of the batrachians; they are probably remnants of the same primitive organs as the suctorial discs of Lepidosteus. The embryo grows in length, while the tail becomes bent round to the side, owing to the want of space in the egg. At the front of the head the olfactory pits become distinct; the stomodæum deepens, though still ending blindly, and three fresh branchial arches are formed. There are thus six arches, namely the mandibular, hyal, and four branchial arches. Between these pouches of the mesenteron push their way to the surface. Of these there are five, there being no pouch behind the last branchial arch. The first of these afterwards forms the hyomandibular cleft, the second the hyobranchial, and the third, fourth, and fifth, the branchial clefts. Though the pouches of the throat meet the external skin, an external opening is not established till after the

larua is hatched. Before this occurs, small processes, each of which is the rudiment of an external gill, grow, in most forms, from the outer side of the first and second branchial arches. A similar rudiment is found before or after hatching on the third arch, but none is present on the fourth. These external gills soon elongate, and form branched ciliated processes floating freely in the medium round the embryo. They differ essentially from the gills of Elasmobranchs in being covered with epiblast. The period of hatching varies in different larvæ, but in most cases, when it occurs, the mouth has not yet become perforated. The larva, or tadpole, is at first enclosed in the detritus of the gelatinous egg coverings. The tail very soon becomes a powerful swimming organ, by the development of a dorsal and ventral fin. Before the larva begins to feed, growth is doubtless carried on at the expense of the yolk, which at this time is enclosed in the mesenteron. The mouth and anal perforations soon make their appearance, and the animal is then able to feed. The gill-slits also become perforated, but the hyomandibular diverticulum, in most species, never actually opens externally, and in all cases very soon becomes closed.

Shortly after hatching, an opercular fold of skin grows out from the hyoid arch on each side, which gradually covers over the posterior branchial arches and the external gills. It fuses with the skin at the upper part of the gill-arches, and also with that of the pericardial wall below them, but is free in the middle, and so assists in forming what is called the branchial cavity, in which the gills are placed. Each branchial cavity at first opens by a somewhat wide pore behind, and in Dactylethra both branchial apertures are preserved. In the larva of some forms, as Bombinator, the original openings of the two branchial chambers meet together in the ventral line, and form a single branchial opening. In most other forms, as in Bufo, Rana, etc., the two branchial chambers become united by a transverse canal, and the opening of the right sac then disappears, while that of the left remains as the single unsymmetrical spiracle. In breathing, the water is taken in at the mouth, and passes through the branchial cavities, from which it is carried out by the spiracle.

Immediately after the formation of branchial cavities, the original external gills atrophy, but in their place fresh gills, usually called internal gills, appear on the outer side of the middle region of the four branchial arches. There is a single row of these on the first and fourth branchial arches, and two rows on the second and third. In addition to these gills, branched processes appear on the hypoblastic walls of the three branchial clefts. These processes seem to be homologous with the gills of the lamprey. In Dactylethra, no other gills but these are found.

The mouth acquires a transversely oval form even before the tadpole begins to feed, and becomes armed with provisional structures in the form of a horny beak and teeth, which are in use during larval life. As the animal acquires its full development, the suctorial organs behind the mouth atrophy gradually. The alimentary canal, which is at first short, rapidly elongates and fills up the large body-cavity with its numerous coils. In the meantime, the lungs develop as outgrowths from the œsophagus.

RUPTURE OF BLADDER.

By J. B. HAMILTON, M.D., Surgeon-Major,
Station Hospital, Portobello, Dublin.

Driver M., Royal Horse Artillery, was brought to hospital on the morning of May 4th, with the following history.

He had been in the habit of drinking pretty freely (though not actually an intemperate man) large quantities of porter. He had for some time previously been quartered in a room on the ground-floor, and had been seen frequently to get out of the window during the night, dropping about three feet to the ground, to visit the urinal. A few days previously to the above date, he had been removed to a room in barracks on the first-floor, the window-sill of which was about twenty feet from the ground.

On the evening of May 3rd, the man had been drinking in the canteen; and, according to his own admission, must have consumed about a gallon of porter, between the hours of 6 and 9.30 P.M. He went to bed about 10 P.M.; and, a little after 1 A.M. on the 4th, another man in the room heard the window being opened, and, looking up, saw driver M. sitting on the window-sill, with his legs outside; before he could save him, he slipped off, in a sitting attitude, and fell twenty feet on the pavement below.

The man was carried to hospital, and, on admission, was found to have no external injuries. He was put to bed, and, between that time and 10 A.M., he passed a considerable quantity of urine in bed under him, the sheets and mattress being wet.

At 10 A.M., I found him in the following condition. He was drowsy, evidently from the effects of drink; tongue dry. He complained of pain in the lower portion of the abdomen, and was unable to pass urine. I drew off with a No. 8 catheter about eight ounces of urine, mixed with rather bright blood. In the evening, his condition was much the same, and I again drew off about ten ounces of bloody urine.

Next day, he still complained of pain in the abdomen; and there was much tympanites, with constipation and sickness of stomach. The urine was again drawn off; the first few ounces being clear, the last portion tinged with dark blood. Fomentations were applied to the abdomen, and he was given ice to suck, and milk and soda-water in small quantities.

On the 6th (the third day), the urine was clear, a few dark clots coming just at the last. About ten ounces were drawn off morning and evening. He complained of "colicky pain" in the abdomen, but could bear pressure and percussion everywhere. The temperature was normal, the pulse fair, 120, the tongue moist; in fact, there were no urgent symptoms. Fomentations were kept to the abdomen and enemata were given with the long tube, bringing away much flatus and a small quantity of dark fæces. A grain of calomel with a quarter of a grain of opium was given every fourth hour. He had ice, milk, etc.

He continued in this condition till the evening of the 8th, and I last saw him alive at 6 P.M. that day. His condition was then apparently improved. He had passed urine twice naturally; his tongue was moist and clean; his temperature had fallen to 97°. The distension of the abdomen was less. He had no motion from the bowels. The catheter was not introduced on this occasion, as it was not considered necessary; but, as his pulse was rather weak, he was given a small quantity of brandy at intervals.

At 5 A.M. on the 9th (five days and four hours after the fall), he suddenly grew faint, and died before I could be sent for.

A coroner's inquest was held on May 11th, and the following is the result of the *post mortem* examination, made fifty-six hours after death. The body was well nourished. Rigor mortis was complete. There was some *post mortem* lividity. No external injury could be detected, excepting a slight abrasion on the forehead. On opening the abdomen, a large quantity of dark-coloured fluid escaped, evidently urine, estimated at sixty ounces. The peritoneum was perfectly normal; not a sign of peritonitis could be detected anywhere. The intestines were distended with air. The diaphragm was intact. The liver, spleen, kidneys, stomach, and intestines were all perfectly healthy. The bladder was found contracted in the pelvis, about the size of a hen's egg; and, on examination, there was found a rent in the anterior and upper portion, admitting the finger into the cavity.

The bladder was carefully removed, and the rent examined. It was found to be fully an inch and three-quarters in length, transverse, and had torn all the coats, permitting the contents to escape into the peritoneal cavity.

Remarks.—The points worthy of notice seem to be—1, the length of time (over five days) the man lived after the injury; 2, the total absence of peritonitis; 3, the presence of sixty ounces of urine in the abdomen, though eight to ten ounces were drawn off morning and evening.

I can only imagine that the patient in falling alighted on his buttocks, and, the bladder being distended, ruptured from the shock, a species of *contre coup*; and that a considerable quantity of urine must have then escaped; the rent being kept partly closed by the distended intestines, there was only a partial leakage subsequently. The hæmorrhage from the torn bladder accounts for the bloody urine and the subsequent clots. The tympanites and irritability of stomach may be partly attributed to the injury, and also to the fact that the man had eaten little or nothing for several days before admission, he having confessed to having swallowed little else than porter during the time.

The Contagious Diseases Acts.—At a full chapter of the Guild of St. Luke, held recently, a paper strongly advocating the repeal of the Contagious Diseases Acts was read; but, after an interesting discussion, the following resolution was carried unanimously, "That this meeting of the Guild of Saint Luke is strongly in favour of the continuance, amendment, and extension of the Contagious Diseases Act."

SUGGESTIONS FOR THE TREATMENT OF SPECIAL CASES OF EMPYEMA BY THORACENTESIS AND THE SIMULTANEOUS INJECTION OF PURIFIED AIR.

By ROBERT WILLIAM PARKER, M.R.C.S.Eng.
Surgeon to the East London Hospital for Children.

On September 7th, 1877, a little girl, S. A. Y., aged three and three-quarter years, was admitted into the East London Hospital for Children, under the care of my colleague, Dr. H. Donkin, with obvious signs of a large pleuritic effusion in the left chest, following an attack of scarlatinal nephritis; the heart was beating to the right of the right nipple. She was aspirated with a Potain's aspirator, but only three and a half ounces of pus (which was quite sweet) could be withdrawn. The needle was introduced a little below the angle of the scapula. There was but little alteration in the physical signs. During the next few days she lay on her left side, and had much distress in her breathing. A tracing taken with the cyrtometer at this time showed an increase in the size of the chest, and in its shape also, which approached to that of a circle. I again attempted aspiration on September 13th, and failed to get out more than a few drops of pus, although the aspirator-needle measured quite one-eighth of an inch in size, and was pervious and clear. The chest was punctured in two or three places, but without success. After a consultation with Dr. Donkin, it was decided to incise the chest-wall, back and front, and to pass completely through the cavity a suitable drainage-tube. This was accomplished under chloroform, and with full Listerian precautions. As soon as the chest was incised, the pus gushed out. Between forty and fifty ounces were evacuated; it was quite sweet and uniform in appearance. In order to satisfy myself that it was thin enough to pass through the cannula which had been used, I drew up from the waterproof drawsheet, in which the pus had collected, several ounces into the aspirator without making any alteration in the apparatus whatever.



After the abscess-cavity had emptied itself completely, the gauze dressings were applied. On the following day (September 14th) the dressings were removed; they were soaked through, so great had been the discharge. For nearly three weeks this discharge continued to be very copious, but remained free from smell. On October 9th, however, the antiseptic dressings were discontinued, as the pus began to smell. This was the first occasion on which any unpleasant odour had been observed, although the temperature for some days past had been rising and variable; it was now 101° Fahr. Under these circumstances, the empyema-cavity was washed out, first with warm water and then with a warm solution of quinine (5 grains to the fluid ounce). On October 21st, the quinine washings were discontinued, for the discharge had diminished considerably in quantity, and all unpleasant smell had passed away. The empyema-cavity was slowly contracting. The anterior opening was therefore allowed to close. On October 24th there was an exacerbation of symptoms, and on the 29th, fearing that a reaccumulation of pus might be taking place, the posterior opening, which was also becoming smaller, was dilated, and a larger drainage-tube put in. This was followed by an escape of pus, after which a steady improvement set in.

On December 2nd, there was another exacerbation of symptoms, but nothing could be discovered to account for it. Three or four days later, small-pox, which was epidemic in East London at that period, developed itself, and the child was sent to the Small-pox Hospital. The disease ran a mild course, and did not exercise any unfavourable influence on the empyema, nor, on the other hand, did it seem to be influenced by it. She was examined by Dr. Donkin in February of the following year, and found to be well in every respect. The chest had recovered itself, and scarcely showed any traces of the empyema.

In the case I have just related, it is of course obvious that, for some reason or other, the walls of this empyema-cavity could not collapse, and thus there was no expulsive force to drive out the fluid when the aspirator was employed. For, as is well known, it is not by a *vis a fronte*, which attracts or draws out the fluid, that an empyema-cavity is emptied, but by a *vis a tergo*, which drives the fluid in front of it.

This force is the pressure of the atmosphere, acting either on the condensed lung and causing it to re-expand, or on the diaphragm, causing it to ascend, or on the thoracic wall, causing it to fall in. One of these events taking place, the fluid is displaced; but it is probably by a combination of all three, rather than by any one alone, that we are enabled to "tap" an empyema. To judge from recorded cases, the extreme condition just described is very unusual; nevertheless, as the result of frequent observation, I am inclined to believe that a little of the difficulty constantly exists; it being, for obvious reasons, less frequent in children than in adults. It will also be within the experience of many surgeons that occasionally the aspirator-needle seems to move about freely, as if in a cavity, after the withdrawal of the fluid, although, theoretically, no such cavity ought to exist. Under these circumstances, we are driven to surmise that only a very partial falling-in of the walls of the abscess-cavity has occurred, and that but a very partial emptying of its contents has, therefore, been obtained.

The case related at the commencement of this paper is unquestionably an extreme one. I only find one other quite parallel with it. This is recorded by Dr. Bouchut of Paris in the *Gazette des Hôpitaux*, May 15th, 1877, No. 55, under the title, "Pleurésie Purulente: Adhérence du Poumon sur le Rachis: Impossibilité de retirer le Pus par un Appareil Aspirateur." The physical signs indicated a large effusion. It was aspirated, but only 130 grammes (about 4 ounces) of fluid were withdrawn; then the flow ceased, although the tube was quite patent. In some remarks on the case, Dr. Bouchut said, "these cases are almost incurable; it would be necessary to inflate the lung through a Chaussier's tube, in order to get out the fluid. I was about to do so, when the child got diphtheria, of which it died."

I apprehend that all surgeons will have observed cases in which some difficulty has been experienced in evacuating from the chest as much fluid as the physical signs had led them to expect was present. *Post mortem* examination also occasionally reveals the presence of a considerable amount of fluid, in cases where death has occurred within too short a period of the last performance of thoracentesis to warrant the supposition that it had all been secreted since the operation; the only alternative is that the abscess-cavity had not been emptied at the time of the operation. Impressed with these considerations, it has for some time appeared to me that our recognised methods of thor-

acentesis—short of free incision—are, mechanically speaking, imperfect.

It is impossible to actually reproduce the conditions which obtain in empyema; but for the purposes of this paper the following simple scheme may be used. It illustrates, I venture to think, the first case recorded. Fill a glass bottle close up to the neck with fluid, put in a well-fitting cork, then attempt to aspirate the fluid in the usual way. It will be seen that the fluid cannot be withdrawn. Next fill this bottle to within an inch of the top, cork as before, and repeat the experiment. This time a small quantity of fluid can be withdrawn. This occurs because the air is more dense in the bottle with the fluid than that in the aspirator-bottle, in which a partial vacuum has been made. When the density of the air becomes equalised in the two, the fluid ceases to flow.

The suggestion I have to make is that air should be injected into the pleural cavity in sufficient quantity to expel all the fluid. To obviate the danger of septic germs, I would propose that the air, previously to its introduction, should be filtered, warmed, and carbolised.

The accompanying figure (p. 1167) represents the apparatus I have devised. It consists of a Wolff's bottle with two necks; into one of these necks is fitted a perforated India-rubber cork, provided with a long-stemmed glass funnel, tightly filled with carbolised cotton wool. The other neck is fitted with a similar cork, provided with a short glass tube (bent to a convenient angle) which communicates with the proximal extremity of a Higginson's elastic syringe. To the distal extremity of this syringe a fine hollow needle is attached. Just before use, the bottle is filled with a warm 5 per cent. solution of carbolic acid, one half of which is to remain in the bottle, while the other half is passed through the elastic bottle and tubes to thoroughly purify them, and drive out the contained air. When the elastic bottle is worked by the hand, it can only find itself with air, which has passed, first, through the carbolised wool in the glass funnel, and, next, through the carbolic solution remaining in the bottle, which moistens and warms it. The air is thus rendered perfectly pure.

Its mode of use is as follows. The ordinary aspirator-needle is introduced into the *lower* part of the abscess-cavity, and as much fluid is withdrawn as can be, without causing distress; the moment that the outflow ceases, or if the patient begins to cough or feel distressed, then—provided always the physical signs indicate that the cavity is not emptied—introduce the fine needle connected with the Wolff's bottle into the *upper* part of the cavity, and pump in a little air.

The amount of air to be injected will, of course, vary with the case; but, at the completion of the operation, it would seem desirable that the air within the pleural cavity should be less dense than the external air; in this way the lung is placed under conditions favourable to its re-expansion. As the air is slowly absorbed, these conditions continue during the progress of cure.

Moreover, if the suggested method be a good one, the presence of air in the pleural cavity after the withdrawal of the effusion, by supporting the vessels, ought to lessen the tendency to reaccumulation of the fluid, which, on the other hand, the presence of a diminished pressure decidedly favours. It should also do away with that dragging sensation which is not unfrequently complained of at the close of an ordinary thoracentesis.

I wish especially to emphasise that my plan is adapted chiefly for those cases in which the difficulty of removing the fluid depends on rigidity of the walls of the empyema-cavity. This, of course, is most likely to occur in adults with long standing disease. Finally, the condition may obtain in children. I consider the case quoted at the commencement of the paper as a typical one of the kind. Here a cure was ultimately obtained by a double opening; but I would suggest, when simple aspiration does not suffice, that this proposed method be tried before free incision, which is a somewhat severe measure, is adopted. I have to thank Dr. Symes Thompson for allowing me to try this plan on one of his patients in the Brompton Hospital. The case was fully reported in the *Medical Times and Gazette*, May 22nd, 1880. The chief points are as follow. A single woman, aged 23 years, inheriting phthisis, was admitted in February under Dr. S. Thompson's care. Her chest was expanded and motionless on the left side, and in its semi-diameter one inch larger than the right. The heart's impulse was distinct in the third and fourth spaces on the right of the sternum. On February 24th, she was aspirated, and sixty-six ounces of sero-purulent fluid were removed. The fluid, however, gradually reaccumulated. On April 16th, she was again aspirated, according to the preceding plan. The chest was emptied; there was no cough or irritation. When she left the hospital a month later, there was some dulness at the extreme base, and it was feared that reaccumulation would take place. This, however, did not occur to any appreciable extent. The patient quite recovered.

The amount of injected air can, of course, be measured, and its pressure gauged by a manometer, as shown in the drawing; but such additions to an instrument of this kind would complicate it without adding much to its practical utility.

I do not in the least imagine that this method will simplify all cases of difficult thoracentesis. To illustrate this, I may refer very briefly to a case, in which the difficulty of withdrawing the pus did not depend on rigid chest-walls. A child, aged 1 year and 8 months, was admitted under the care of my friend and colleague Dr. Eustace Smith, with the physical signs of a large left effusion; an exploratory puncture revealed the presence of pus. On attempting to aspirate, not more than half an ounce of pus could be obtained; the needle, however, seemed to move freely in what appeared to be a large cavity. On the following day another attempt was made; and again failing, I injected some purified air; but this did not materially help. Three-and-a-half ounces of pus were withdrawn after considerable difficulty, and several renewed attempts. Not feeling satisfied with the result, I decided to incise the chest-wall and put in a drainage-tube. But, for a while, even now, the pus did not flow freely, so a finger was introduced. This detected the presence of large flakes of membraniform lymph, which had to be removed with the dressing forceps. A considerable quantity of pus was then expelled, containing smaller flakes of lymph, besides pultaceous material. Listerian precautions were observed, and the case did well. This is the first occasion on which I have found actual membrane in the pus; but pultaceous material is not uncommon. It is difficult to guess the origin of the membrane; but it would seem possible that the cavity was subdivided into loculi by well organised lymph, and that these partitions were broken down by the aspirator-needle, as it was moved about.

Difficulties once occurred to me in tapping a serous effusion; they were only partially overcome after air had been injected. The fluid, some ten or twelve fluid ounces, after its withdrawal quickly coagulated into a solid mass. The injected air was rapidly absorbed; its presence in no way interfered with the progress of the case. Simple as thoracentesis appears, there are few operations in which the result is more uncertain. One can never predicate what amount of fluid will be withdrawn, nor what unexpected difficulties may not present themselves. I feel sure that those who have had a large experience of these cases will bear me out in this statement.

These cases are mentioned to show that there may be other causes than rigid chest-walls to interfere with the withdrawal of fluid. I should feel it necessary to apologise for mentioning them, were it not that I would anticipate criticisms and possible objections to the plan of treatment I am now describing. The cases in which this plan has been adopted, are at present too few to allow one to discuss its merits from a clinical standpoint; on the other hand, they are sufficient to shew that the method is not fraught with any danger to the patient; while the many almost intractable cases met with in practice but too clearly indicate that our present methods of treatment are by no means perfect or sufficient.

The mechanical principle on which the suggestion is based, is one, it seems to me, which can be discussed irrespectively of cases; for we constantly apply it in everyday life in transferring fluids from one vessel to another.

SOME CASES OF LAMENESS FROM ABNORMAL CONDITIONS OF THE FEET, CHIEFLY FROM CONTRACTIONS OF THE MUSCLES AND FASCIÆ.

By E. NOBLE SMITH, F.R.C.S.Ed.,

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(Continued from page 1112.)

CASE V.—Miss H., aged 19, was brought to me through the recommendation of Mr. Malcolm Morris. She had suffered for many years from pain in the feet and difficulty of walking; symptoms which were gradually increasing. There was a contracted band of the plantar fascia of the left foot, as well as some contraction of the gastrocnemius. Here there was a constitutional tendency to contraction. Several members of the family had contracted fingers, and the

patient's sister had convergent squint of one eye. I divided the band of fascia, and the pain and constant discomfort soon subsided.

Symptoms similar to those to which I have referred may depend upon contraction of other muscles of the foot, such as the peronei or the tibials; but I will pass over these to consider a very common, but often very painful and troublesome affection of the great toe. I refer to the bending or contraction of that toe outwards from the middle line of the body. This is a very common deformity; and whether it be caused entirely by wrongly shaped boots, or as some think, by constitutional predisposition, there can be no doubt that the malposition of the toe is often brought about, and is always maintained and increased, by the form in which the



Fig. 4.



Fig. 5.



Fig. 6.



Fig. 6A.

modern fashionable boot is made. The pointed toe of the boot has been accused of causing the evils referred to; and, for the purpose of allowing the feet to preserve or regain their normal shape, broad-toed boots are often recommended. Such ungainliness of shape is neither necessary nor desirable, because the toes of the majority of adults in this country slope from the great toe, making the foot naturally pointed, and there can be no advantage in having an empty space in the boot at the outer side of the smaller toes. Fig. 4 shows that an useless space is left by the broad-toed boot, and that, if it be made at all narrower than in the figure, the great toe must be pressed outwards.

The most important qualification of a good boot is that it should allow the phalanges of the great toe to occupy a position in a straight line with the metatarsal bone.

Fig. 5 shows the bones of the normal foot seen from above, and Fig. 6 shows the bones of a deformed foot, the great toe turned outwards.



Fig. 7.

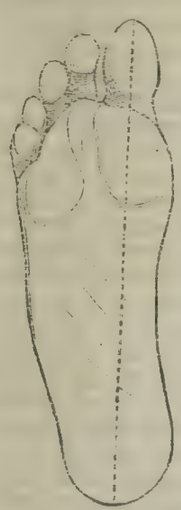


Fig. 8.

When the great toe is turned out, away from the middle line of e body, the ligaments are stretched, the metatarso-phalangeal int is irritated by unequal pressure, and is very likely to become flamed; bunion is frequently produced; the tendons are thrown out of gear, so that they drag upon and irritate their sheaths in the neighbourhood of the joint; and the use of the toe as a lever in locomotion is materially lessened, or is entirely destroyed. The surgeon is frequently called upon to treat the various effects of this distortion; and, unless boots are first made which will allow room for the great toe to be placed in its proper position, treatment will certainly fail to give the patient permanent relief from his trouble. The anatomist Meyer has not considered this subject too trivial to receive careful attention. He states that, in a normal foot, the great toe lies in such a position that its axis, when carried backwards, passes through the centre of the heel. He shows these two figures as examples of (Fig. 7) an almost sound foot and (Fig. 8) the well-preserved foot of a child about two years old. He urges that the sole of the boot ought to be made in the shape of Fig. 9, in which

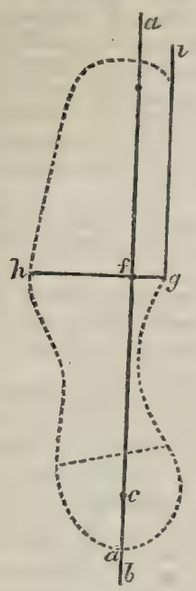


Fig. 9.



Fig. 10.

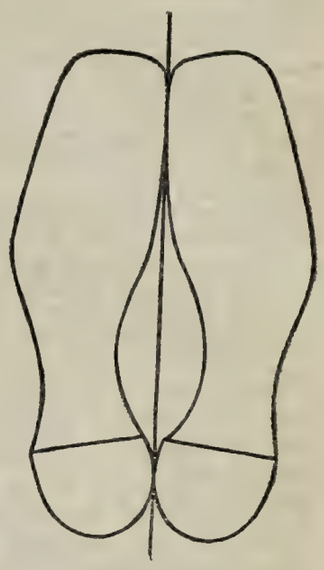


Fig. 11.

the line *a b* represents the dotted lines in Figs. 7 and 8. But it may be observed that he thus does not allow any space for the natural enlargement of the metarso-phalangeal joint of the great toe; and, if the above outline be placed upon the figure of a sound foot, (Fig. 10.) which I depict as even narrower than that given by Meyer, it will allow either too little space for the joint referred to, or give too much space upon the inner side of the great toe. Moreover, the breadth of the proposed sole of the boot is much narrower than that of the natural foot. Meyer's outline for the soles of a pair of boots is given thus, Fig. 11.



Fig. 12.

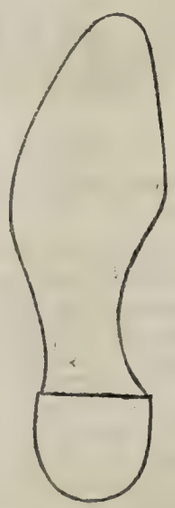


Fig. 13.



Fig. 14.

I think I have already proved that such a form is incorrect. The point which I wish to urge, as the most important one, is that the axis of the phalanges of the great toe should be kept in a straight line with the metatarsal bone. Fig. 12 shows the sole of a normal foot. A line, A B, drawn, touching the outer edge of the great toe and the outer edge of the joint, falls far to the inner side of the heel,

showing that the side of the boot ought not to be made perfectly straight, as in Meyer's pattern, and as in many modern so-called hygienic boots. I would allow full room for the toe, and yet obtain a more elegant and comfortable boot than is produced by Meyer's pattern; and both elegance and comfort are worth consideration.

Fig. 13 represents the shape of a sole which allows room for the foot to occupy a natural position, presuming that a sufficient space is provided by the upper leathers.

Fig. 14 shows the application of this form of sole. If the toes should happen to be more square, of course the boot must be modified to accord with them. A full half inch of space should be allowed in length beyond the end of the great toe.

The heels should not be more than three-quarters of an inch in height, and should be broad enough to give a firm basis of support.

High heels allow the weight of the body to press the feet too forward in the boot; the anterior part of the foot is widened, power is lost; the muscles of the calf being partially thrown out of use, the calf atrophies, locomotion becomes constrained, and there is a tendency for the tendon of the tibialis posticus muscle to slip forward out of its groove, for the foot to turn sideways, and for the ankle-joint to be sprained.

The boots having been provided, treatment can be commenced. If the great toe joint be inflamed, it must be treated upon general principles until acute pain has subsided. The toes can then be brought to their natural position by means of attaching them by strips of plaster or tape to a thin sole-plate, or a metal splint can be fixed along the inner edge of the foot and toe. The other toes may also require treatment, and the sole-plate is then very useful.

The toes are often contracted in the form called "hammer-toes," and, for their relief, bands of fascia may have to be divided. Hammer-toes may occur without any other deformity of the feet being present, and the second toe is that usually affected. I will give one case as an example. Mr. A. P. (surgeon) had been afflicted with this deformity of the second toe on each foot all his life. Lately, the contraction had increased, and the consequent lameness induced the patient to try to obtain relief. He had attempted to operate upon himself, but had failed to alter the position of the toes. Both toes were firmly contracted in a flexed position, in the manner shown in Fig. 15.



Fig. 15.

The deformity was probably congenital. The bands of fascia were intimately connected with the skin, and with the tissues close to the joint.

In the first place, I ordered a pair of boots for him which allowed full room for the toes. I then divided carefully the most prominent bands of fascia. I operated three times on each toe, at intervals of a few days, stretching out the toes gradually. I then obtained a half sole-plate, with slits opposite the sides of the displaced digits. The toes were then pressed into a proper position by means of pieces of tape, which were fastened below by means of plaster; each plate was attached, also, to the instep. The patient was able to go about his ordinary occupation during the whole of the treatment, and the this result was perfectly satisfactory. I should scarcely have thought this case worth reporting, but that I find that many medical men doubt the success of operations for this deformity.

The subject of lameness arising from obscure abnormal conditions of the feet is a very large one, and in this paper I have only recorded a few cases which seem to me interesting from their suggestiveness. It is from these comparatively slight troubles that patients often find greater difficulty in obtaining relief than from more definite affections; and, if I succeed in drawing attention to such "lesser evils," the purpose of my paper will be served.

THE VICTORIA HOSPITAL, CAIRO.

By HERBERT SIEVEKING, M.R.C.S.Eng.

THE above title (chosen by the Khedive) is that by which the first European hospital in Cairo, founded by the unwearied efforts of Viscountess Strangford, is in future to be known. The Egyptian Government has decided to give a grant for one year of £2,000, to be continued if the not very onerous conditions accompanying it be satisfactorily fulfilled. The chief of these are, that an average monthly minimum of in- and out-patients be treated; that a certain number of Arab students be allowed to attend at the hospital; and that all accounts be open to the inspection of the Government.

As the grant of £2,000 will not be sufficient alone, the hospital will contribute to its own maintenance by patients' fees. Single rooms will be reserved for first-class patients—*i. e.*, those able to pay all their expenses. Other in-patients will be charged at the rate of five and two francs daily, a fair proportion of beds being reserved for the poor. The out-patients—*i. e.*, all those able to afford it—will be charged one piastre (2½d.) a visit.

Several fresh wards have lately been added by making windows in the "hareem" part of the house, and the building can now accommodate comfortably seventy patients. The committee, composed of the first English residents (who, I am glad to say, have already rendered great assistance), with Sir Edward Malet as their President, held its first meeting on January 8th; and, if any proof were necessary of the need for such an institution as Lady Strangford's work supplies, it might be found in the general good wishes and valuable help which have come from all quarters, English and native.

The sick leaves, at the present moment, of the persons in Government employment reach an incredible number of years; Europeans, in case of sickness, have to be sent to Alexandria to the Deaconesses' hospital, and the natives can only be got to enter the Arab hospital here in the company of a policeman. I have paid many visits to the latter establishment, and I must say I cannot wonder at their aversion. I saw lately an operation for elephantiasis. It lasted exactly one hour, and must have been very painful, as the skin-incisions were large. No chloroform was given, the woman being held down by students crowding on all sides; towards the end, one of the surgeons suggested an anæsthetic, which excited intense scorn in the operator, who proceeded to push in the needle, with points like pin-heads, now and then resting himself the better to maintain an animated discussion as to the lady's subsequent matrimonial prospects. We have one man at present in the hospital, whose thigh was removed at the upper third in the same way. There are certain wards set apart for sick prisoners; small boys charged with slight offences are mixed up with murderous and accomplished criminals, but all are alike in the matter of iron anklets and chains, which have to be worn even in bed, no matter how sick or juvenile the sufferer may be. The ill conduct and lack of improvement in these establishments are quite inexcusable, as many of the chief native medical men have studied at Paris, Vienna etc., and have at least knowledge of better things. The regulation of prostitution having been forced on the Egyptian Government by the English authorities, the Arab hospital now contains about two hundred women, and their wards are simply disgusting. I trust, however, that the regulations have been effective, as considerable havoc was being made amongst the soldiers. The Council of Health having lately asked the views of the various consuls with regard to the extension of these regulations to European prostitutes, the representatives have unanimously replied in the affirmative, and this hospital was spoken of as the only suitable place for the purpose of such examinations. Isolated wards are being arranged for the reception of these cases.

Dr. A. Murison (who has for some years had extensive practice at Alexandria) has undertaken the duties of resident medical officer, and, on Lady Strangford's departure, two experienced nurses, and an English woman to superintend the laundry, will be left to assist him. Arrangements have also been made for two Coptic women to reside in the hospital to learn the art of nursing; and, if they are as apt and useful as the Arab ward-boys have been in adapting themselves to our requirements, they will soon become excellent nurses. The native wounded have proved very tractable, and have given no trouble whatever. They all belong to the "fellaheen." For adults they are the most simple, childish, superstitious people imaginable. Several objected much to the splints, but all in the end conquered their fears, with the exception of two, for whom a foot-weight for fractured thigh, and a short back-splint, had peculiar terro

"Effreets" (spirits) were believed to be running up and down their legs as long as they wore the obnoxious articles, and it was absolutely necessary at last to give in, and take them off. The thigh case was a severe compound comminuted fracture in the middle third, several large pieces of bone having to be removed. On January 21st, there was good union, with exactly one inch and three-quarters of shortening. Two other compound fractures of the thigh (one undoubtedly oblique) have left the hospital, the one with exactly two centimètres shortening, the second with rather less. I cannot claim any credit for these last two cases, as there was considerable union before they came under my care; but I quote them to show the remarkable kindness of nature, as in neither case was extension of any sort employed.

Several of the wounds for days after admission exuded a tenacious gelatine-like substance; and, in one or two cases, maggots appeared before it was entirely got rid of.

The natives, having once made up their minds, take chloroform well; I have never seen any struggling or sickness, even after prolonged inhalation; and, several times, after a first dose, they have held the lint over their own faces, for fear they should not get enough.

We have endeavoured to feed them exactly as they live at home, both as to time and kind of food. The following is the *menu* for one day:—6 a.m., coffee and native bread; 9 a.m., rice, milk, and eggs; 12 noon, meat and vegetables; 4 p.m., coffee and fruit; 7 p.m., meat and maccaroni. Each has had ten cigarettes served out daily, and as much more as his friends liked to bring him. I cannot help thinking that the constant smoking, night and day, has assisted greatly in keeping the hospital healthy, none of the staff having suffered in any way; and the wounded have done well in spite of the much abused drainage of Cairo.

All the closets are, however, well ventilated on to the road and roof, and none in the centre of the building are in use.

At first I tried to keep the windows wide open at night, but soon found that a little night air went a long way to produce marked rises of temperature in the Arab constitutions, and had to allow a very limited amount of ventilation in consequence. The Arabs invariably sleep with their heads tucked tightly in a blanket, and sometimes in two or three. I calculate that at least three-fourths of the wounds were in the lower extremities, and the number of amputations below the knee has been quite extraordinary. A great many of the wounded were quite old men; I found, on the death of one old fellow, his discharge, dated ten years back, which he had carefully preserved round his waist ever since. We have had two cases of perforation of the ilium; one has done remarkably well. The bullet entered mid-way between the top of the left trochanter and the crest of the ilium. Under chloroform I enlarged the wound, and took away a piece of bone rather larger than a shilling, covering an aperture of the same size. On passing the finger into the pelvis I was able to sweep it round freely in all directions, as far as it would go, without meeting any obstruction, but was not able to find the bullet, which the patient said "had jumped out again." The man has never had any abdominal trouble, and is now able to walk well.

In the second case, the perforation (a small horizontal one) occurred half an inch below the right crest; the patient has been at times very ill. I should have made an opening in the right groin (where there was a firm hard lump, as if the bullet had run down between the bone and iliacus muscle, tearing up the periosteum, and become surrounded with ossific deposit), but he was so weak that he nearly succumbed to the chloroform, and the attempt had to be abandoned. With weak injections of iodine, the discharge very much decreased. In this case, there has been a certain amount of tenesmus from time to time.

Colonel Duncan, R.A., who initiated the mission, and who has done much hard work to insure its success, has arrived here to take command of the Egyptian artillery; as a member of the Committee, he will continue to take an active interest in the undertaking, and has already begun to use it by sending in one of his men. It is to be hoped that, although the hospital is well launched, home interest in it (especially on the part of members of the St. John's Ambulance Society) will not entirely cease.

I have only to add that all first-class patients will be attended by any medical man they may choose, whether civil, military, or native.

THE resolution passed eighteen months since by the Council of Boulogne for the drainage of the town, is now carried out.

ON THE LIABILITY OF SOLDIERS TO CONTRACT DISEASES OF THE CIRCULATORY SYSTEM.

BY DEPUTY SURGEON-GENERAL D. CULLEN, M.D.

(*Concluded from page* 1060.)

THE functional diseases, syncope and palpitation, follow, though both are, probably in many instances, the indications of structurally degenerated, and asthenic morbidly irritable hearts, in which textural changes have commenced. The admissions from syncope range from 6 to 27 a year; the total deaths are 10, five years giving a blank return; the invalided are 6. It would appear to be as common at home as abroad. Of the deaths, 4 occurred at home and 4 in India. Inspector-General Lawson records two at Aldershot, in 1868, one of which would now be returned as from fibrinous concretion in the heart due to blood-poisoning. The other was in a muscular, healthy-looking sergeant-major, aged 35, "who was attending the divisional races, and was much interested in the performances of a horse on which he had betted. He ran towards the winning-post to see it come in. After proceeding about fifty yards he stopped to speak to some one, and while doing so he fell down, and, after a few gasps, expired." The left side of the heart was empty; the right chambers were full of fluid blood; the edge of one of the mitral valves was thickened; there was no other lesion discovered.

In the more recent statistical returns for 1879 and 1880, a case is given from Bermuda where death was induced by syncope, after prolonged diving, in a man with valvular heart-disease; and another in the West Indies, in which the death resulted from shock, caused by the falling of a barrack-roof during a hurricane.

Palpitation gives for the decade 5,474 admissions, 2 deaths, and 683 invalided, the rise being enormous in the second quinquennial period, and for each year of it, so that the last year gives ten times the average admissions of the first five. Its unequal prevalence in home regiments suggested the remarks which follow in the statistical reports for the year. "Of that form of disease of the heart, a designation for which is found by the employment of a symptom-palpitation, there were 405 admissions in 1873, more than a third of which are returned by ten corps only, whilst many corps had no admissions for palpitation; the 90th Light Infantry returns 36, and 8 men were invalided from this corps during the year on account of this disease. The 2-9th Foot returns 19 admissions, and 13 men were invalided from it on account of palpitation. The increase of this disease in the Army of late years cannot be explained on the supposition of its being an apparent one only, due to a fashion in diagnosis." In the same year the admissions from Bengal were 590, from Madras 181, and from Bombay 68, compared with 468, 68, and 47, in the previous year in these commands.

In 1870 the Mysore Circle, Madras Presidency, gave a high ratio, nearly double that of 1869; it is pointed out that the excess was caused by the admission of 26 cases of palpitation in the 3-60th Rifles, at Bellary, attributed "chiefly to the high temperature acting on men whose constitutions had been impaired by previous disease or intemperance, and upon young soldiers recently arrived in the country."

Surgeon-General Currie, C.B., writes, in 1873, of the Madras increase: "An analysis of the regimental returns seems to show that the extent of the prevalence of palpitation in a station, depends more on the presence in it of particular regiments than on conditions of climate, or duty; thus, more than one-third of all the admissions in the command for palpitation took place in one regiment, the 43rd Foot, at Cannanore; whilst in the 20th Brigade, R. A., the batteries composing which were quartered at various stations, and the aggregate strength of which exceeded that of the 43rd by nearly one-fifth, no admission is returned on account of this disease in 1873." The 43rd had only arrived from England in 1872, a very young, weak, and immature regiment, of whom 125 were sent to the Nilgiri Hills, for the hot season. At head quarters, on the coast, cases of enteric fever occurred, men suffered from bowel-complaints, and diseases of the digestive system, concurrently with the excess of palpitation.

Coming down to more recent years than the decade on the table, an excessive liability to this affection is still observed. In 1874, in the Bombay Presidency, two-thirds of the admissions for diseases of the circulatory system were for palpitation, "a disease of very disproportionate occurrence in the various corps;" in the same year, in Peshawur, it is noted, "that the comparative prevalence of diseases of this system was due to the relative frequency of palpitation amongst the troops generally, though in the 72nd Foot, the preva-

lence was somewhat greater than in any other corps: a comparison shows that the rate of admissions for palpitation in Peshawur is 43.6, and in Sangor .8 per 1,000 men." The 1-17th Regiment of Infantry, also at Peshawur, was sickly; it arrived in April, after a three months' march from Lucknow, and having saved a good deal of money on the march, "an Europe liquor-shop was opened, April 13th, and the opening of this establishment was the signal for a burst of intemperance, the after effects of which were abundantly illustrated in the hospital returns."

In 1875 it is remarked, in the Bengal report, that "two-thirds of all of the admissions from diseases of the heart were due to palpitation, the relative frequency of which is not in relation to locality; and in 1877, "the greater or less prevalence of palpitation amongst the troops in a division accounts for a rise or fall in the rate of admissions for the whole group; from the same cause also it results that the rate of mortality has no constant relation to the proportion of admissions for circulatory diseases."

In 1879 Cannanore again was tenanted by a regiment, the 48th Foot, giving an enormous number of admissions for palpitation; 56 occurred in the regiment, 49 being at Cannanore, and 6 were invalided. The medical officer reports that "the cases were purely functional, and attributable to the climate and habits of the men, in drinking and smoking to excess." Sir A. D. Home was struck with the very cachectic condition of the corps, "owing to its being stationed on the Malabar Coast for several years." This regiment had a concurrent high sick-rate from debility, dyspepsia, and hepatitis.

In Bermuda, in 1879, of 22 admissions for circulatory diseases, 17 were for palpitation, "ascribed to excess in drinking, and to exposure on the works." Delirium tremens, accidents from the effects of drink, a high admission-rate from dyspepsia, are noticeable features in the report; the principal medical officer observing on the amount of intemperance, "that the circumstance may be set down to the cheapness of rum, and the facility for purchasing the spirit afforded by the wages earned on the public works."

In Malta, in 1879, of 70 admissions for circulatory diseases, 52 were for palpitation; in Gibraltar, only 3 out of 36, although two Highland regiments, saturated with malaria from Cyprus, were on the rock. A similar disproportion in the two garrisons is observed in 1878; in Malta there were 70 admissions for palpitation out of 102, in Gibraltar they were of no importance; in 1880, while there was a large diminution of the disease in Malta, 26 out of 40 were for palpitation, in Gibraltar 4 out of 31.

Subsequently to the ten years reviewed on the table, the incidence of this functional disease in the home army has varied considerably. In 1874, it is pointed out that the infantry of the line suffer very disproportionately to the Foot Guards, their admission-rate for diseases of the circulation being four-fold, a disproportion which does not obtain in the invaliding- and death-rates; this greater frequency, it is said, "cannot be the effect of severer drill or duty;" in those respects the "balance is probably not in favour of the troops stationed in London." No solution of the cause is given, but it is pointed out that some infantry regiments suffer as little from functional diseases as do the Guards, and that two regiments of infantry return one-fourth of the cases. In 1875, the hitherto progressive rise of admissions for palpitation appeared to be arrested, the rate being 7.7, while in 1874 it was 7.8. Aldershot gave the highest admission-rate for the class of circulatory diseases, being 25.8, more than double that of some stations, as Woolwich, London, and the Channel Islands. In 1876 the admission-rate for palpitation was 7.1, varying from 8.7 at Aldershot to 1.7 in North Britain. In 1878, the class of circulatory diseases gave at Chatham an admission-rate of 28.4, at Aldershot of 16.5, and in the home district of 10.3. In 1879 it varied from 23.7 at Chatham, to 9.3 at Woolwich, and in 1880 it reached 31.2 at Aldershot. This is more than double the admission-rate in Bengal for that year, when it was 14.6 for the class, palpitation constituting 10.5. In 1879 it was 16.3, of which palpitation gave 12.6. Bengal shows the same inequality of incidence in the various returns: from Saugor a rate of 4, in Rohilcund of 28 per 1,000 for this class; the two years, 1879-80, giving 692 cases of palpitation out of a total of 924 in the class throughout the Presidency.

Farther inquiry is required to explain satisfactorily the unequal distribution of this affection. The "open canteen system" now in fashion in India is not one calculated to keep down ill-health arising from excess. A system "which places no restriction on the amount of beer with which a soldier is served, except that he must pay for it at once, and he must be sober at the time," does not commend itself to my mind; the class from whom soldiers are drawn possess little restraint where their appetites are concerned, and one cannot feel surprised that Dr. Crawford—the present director-general—should have written in 1880, as Principal Medical Officer of India—"so far the medical opinion appears to be that this leads to greater indulgence and disease."

The "holesome rede of sad sobriety" has found small favour hitherto in the ranks. As the wave of temperance spreads onward it may be that higher knowledge and more forethought will be displayed—that knowledge which will lead men to be mindful of such advice as Spenser's Hermit Leech could utter—

> "In vaine of me ye hope for remedie;
> And I likewise in vaine doe salves to you applie;
> For in your selfe your only helpe doth lie,
> To heale yourselves, and must proceed alone
> From your owne will to cure your maladie."

Diseases of the aorta show a marked increase in the second quinquennial period of the decade (Table II). The admissions rise from 317 to 617, the deaths from 299 to 519, the invalided from 24 to 163. Aneurysm of the aorta is the one important feature in this section; the deaths averaging 79 each year of the decennium, and in the latter half of it the mortality appears in excess of all other diseases of the circulatory system, averaging 99 *per annum*. In the home force the average yearly deaths are 35; in the Indian Army, 27. The millesimal admission-rate for the whole army is 0.53, the death-rate 0.45, and the invaliding-rate 0.09. The admission-rate is highest in the Straits and China group, being 0.77; in India it is 0.71; in the Cape group, 0.59; and in the Canadian group, 0.53. It is below the average in the West Indies, being 0.27; at home, 0.42; and in the Mediterranean, 0.48. The death-rate is highest in the Straits and China group, being 0.68; in the Canadian group, 0.56; in India and the Cape group, 0.47; and it is below the average in the West Indies, being 0.34; at home, 0.42; and in the Mediterranean, 0.44. The invaliding-rate is highest at home, in Canada, and the Mediterranean, the highest being 0.12; in India it is 0.06. Surgeon-Major Welch, for the decennium 1863-72, gives the relative loss in the component branches of the home force by deaths and invaliding conjoined, as in cavalry, 0.53; infantry, 0.52; and in artillery, 0.69. There would appear to be in more recent years a notable decrease in the mortality from aneurysm of the aorta, but the statistical reports, as recently presented, do not allow of this diminution being formulated. In Table I there will be observed, both at home and abroad, a gradual falling off in the recorded mortality of diseases of the circulatory system, commencing in 1874, when it was 250, or 1.42 per 1,000, and extending to 1879, when it was 124, or 0.73 per 1,000. This large reduction in six years in mortality, though not attended with any corresponding reduction in the admission or invaliding-rates, must not be overlooked; and the less fatality from a grave disease like aneurysm of the aorta, is a subject of congratulation. The obscurity in which the compilation of the reports leaves the most interesting facts, is my apology for not being able to put this in a clearer light.

The earlier volumes presented observations of great value, etiological and pathological, on this disease. Staff-surgeon P. Davidson, in 1863, showed, by an analysis of the necropsies at Netley, the extent of atheromatous aortic lesions associated with syphilis, lesions recognised as the forerunners of the destructive changes which conduce to dilatation and internal aneurysm.

Professor Aitken's researches into the causation of organic lesions of the walls of the great vessels through the effects of the syphilitic dyscrasia, are well known. Surgeon Corban's contribution in 1869, on diseases of the heart among soldiers, gives prominence to the facts he had observed in respect of constitutional syphilis being a potent cause of aortic, endocardial, and valvular disease. Surgeon-Major F. H. Welch, in the reports of 1870 and 1873, added much to the correct estimation of syphilis as a factor in the organic lesions of vessels. From the Netley necrological register, 1860-71 inclusive, he found that of the total deaths, 46.2 per cent. exhibited, by distinct specific visceral implication, the influence of the syphilitic virus, sometimes as the immediate cause of death, sometimes "playing but a subordinate part in the production of death, and obscured during life by graver defects of an alien nature, under which they are necessarily classified." Analysing 88 cases with specific lesions, he found atheroma of the aorta in 55 per cent., and atheroma of the endocardium in 3 per cent., this degeneration heading the list among the various organic lesions. In 57 instances of the aortic lesion, 34 had a clear syphilitic history, or a percentage of 59.6; and in a later analysis, embracing a wider area of cases, the percentage was 60.7. In 31 cases of aortic aneurysm, he found that 15, or 47 per cent., had syphilitic constitutions, and, adding to these 18 examples of "infantile aneu-

rysm,"—"dilatations either in the form of pouching, or distinct circumscribed sacculated projections"—the proportion of syphilitic subjects rose in 49 cases to 67 per cent.

The relative frequency of the regional site of aortic aneurysm he gives as embracing the arch, 63.3, the descending thoracic, 16.6, and the abdominal, 20 per cent. His conclusions as to causation are, that the lesion of the aortic walls, characterised by a specific fibroid growth, which, disintegrating, tends to produce dilatation and aneurysm, is, in the majority of cases, dependent upon syphilis, and, in a minor number of cases, on rheumatism and alcoholism, as exciting agencies; while, on the other hand, simple valve-lesions present the following associations in order of frequency; rheumatism, malarial poison, dysentery, and syphilis.

Aneurysm of arteries is not a subject which can be profitably reviewed here. The deaths and invaliding show a great diminution after 1869, corresponding with a rise in aneurysm of the aorta; no doubt, the introduction of the nomenclature in that year bringing about greater accuracy in the localisation of disease, and in its entry under appropriate terms. The reports, however, have never carried out the classification farther than the two headings, aneurysm of the aorta and aneurysm, and from 1874 all are merged into systemic groups.

Diseases of the veins are of little interest, except as a cause of invaliding, occasioned by varix. With the short service system now in force, and the careful selection of sound recruits, the invaliding-rate may be expected to fall from 0.61, which it was for the decennium, to 0.27, at which it stood in 1871, when the invaliding was under 50 for the whole army for this affection.

In the course of these remarks, frequent reference has been made to syphilis as the starting-point of organic lesions of the vessels. In conclusion, and in reference to recent retrograde action on the Contagious Diseases Prevention Act, it may be inquired: Has syphilis shown any marked decline in the army in recent years?

The earlier volumes of the statistical records give the combined admissions for primary and secondary syphilis in the United Kingdom, per 1,000 of mean strength, as stated:

In 1861	209.8	Average of the four years, 167.9.
,, 1864	168.5	
,, 1866	139.6	
,, 1867	153.8	

The last four volumes of the records present the following figures as admission-rates:

	Syph. Prim.	Syph. Sec.	Combined Total.	
1877 ...	48.8 ...	23.8 ...	72.6	Diminution, 73.1
1878 ...	60.7 ...	27.3 ...	88.0	
1879 ...	63.4 ...	29.0 ...	92.4	
1880 ...	95.8 ...	30.5 ...	126.3	
Average of 4 years	67.2	27.6	94.8	

If the admissions for primary venereal sores are taken only at the 14 stations protected by the Acts, where fully half the home force is aggregated, the last four years give respectively an admission-rate of 35, 40, 47, and 74, or an average of 49; while the 14 large unprotected stations give an average of 124.

From the point of view of the soldier's efficiency, more particularly looking at his liability to contract organic vascular lesions of a directly fatal tendency, the upholding of these Acts by the national voice appears a duty. It is equally so, if consideration be given to his return to civil life, from loss of health contracted in the period of his service.

The diminution of syphilis on foreign stations, if we judge by India and the Mediterranean, is not so striking in recent years. Taking the years 1860-68, the annual average admission-rates for the combined syphilitic group were, for Bengal, 121.1; Bombay, 120.1; Madras, 129.0. While for 1877-80, it was, for Bengal, 104.6; Bombay, 108.4; Madras, 128.6.

In the Mediterranean garrisons, taking the years 1859-68, it was, for Gibraltar, 77.4; Malta, 31.5; while for 1877-80, it was, for Gibraltar, 52.6; Malta, 30.9.

A paper based mainly upon statistics, is apt to be considered rather from the auditor's than the writer's sense of patience. I have tried to fulfil my intention at the starting-point, and must claim indulgence for prolixity, in the hope that something suggestive may have been touched on. There is too much inexplicableness about palpitation and its closely allied abnormal organic changes affecting particular regiments only. There would seem a combination of causes at work; and in immature soldiers the desire to get off irksome drill, by the getting up of a special symptom, easily induced by excessive smoking and kindred indulgencies, some of which border on hysteria, should not be lost sight of. It is not all the drill-sergeant.

The following is a summary of the incidence of diseases of the vascular system, during a four and a half year's charge of a Highland regiment at Gibraltar.

The regiment, as a body, was young and immature on arrival, with a modicum of seasoned soldiers who had been in India, and, during three years at home, drank pretty heavily. At Gibraltar, the admissions bearing on this class were—pericarditis, 1; valve-disease, 1; hypertrophy, 3; aneurysm of the abdominal aorta, 2; palpitation, 13; varix, 2. Deaths, none; invalided, 13, or 1 in 7 of the total invalids sent home. The case of pericarditis occurred during treatment for constitutional syphilis; the cases of hypertrophy were, in two instances, of inveterate tipplers, the third was complicated with palpitation and hysteria in a very heavy smoker; the case of valve-disease was double, with hypertrophy and dilatation, in a company's cook, an habitual drunkard; he died at Netley. The aneurysm cases were invalided; one of them was broken down with syphilis and malarial rheumatism; the varix cases were in old soldiers; the palpitation cases were in young soldiers, 7 apparently from inherent debility and climatic causes, all slight; the remaining 6 were in drunkards or masturbators, and some had commencing hypertrophy; all were smokers.

These personal experiences may induce others to put on record a wider study of the etiology of functional diseases of the heart in soldiers, which seem at present to cause an amount of inefficiency disproportionate to tangible morbific influences.

GALIUM APARINE AS A REMEDY FOR CHRONIC ULCERS.

By F. J. B. QUINLAN, M.D.Dubl., F.K.Q.C.P.,
Physician to St. Vincent's Hospital; Professor of Materia Medica and Therapeutics, Catholic University; Examiner in same, Royal University of Ireland.

FEW of those connected with the admission of patients into hospital fail to observe the number of applicants suffering from chronic ulcers, principally of the legs; and in some institutions there appears to be a tacit rule against their admission. When admitted, especially if old and broken-down persons, they frequently occupy a bed for months, to the exclusion of relievable sufferers, and sometimes with unsatisfactory results. The great difficulty in treatment seems the impossibility of maintaining permanent healthy granular action; and strapping, sponge-grafting, skin-grafting, and the application of irritants, such as mercuric oxide, silver nitrate, or cupric sulphate, are often tried in vain. I would wish to mention a remedy new to me, and which proved successful when all the above well-known methods had entirely failed.

Immediately after the publication in the JOURNAL of January last of a note upon a pulmonary remedial simple, I received letters from several parts of the United Kingdom, recommending me to try the effects of the galium aparine in the treatment of chronic ulcers—a recommendation which I was unable to adopt, for the sufficient reason that the plant was then nowhere to be obtained. I made a note of the matter, and a suitable opportunity for trial presented itself in due time.

The galium aparine is a wild annual belonging to the natural order *Rubiaceæ*, and is described in Sowerby's *British Botany*, vol. iv, pp. 225-6. An excellent coloured illustration is given in the appendix of the same volume, plate 658. It is a well-known weed, found in the hedges in every part of the United Kingdom, and of Northern Europe. It runs to from two to four feet in length, and has a succulent square stem covered with prickles, which can be felt by drawing the finger and thumb along the stalk in the upward direction. This circumstance causes it to adhere to the clothes of passers-by, and has procured for it in some places the name of "cleavers," or "catchweed." Its more usual name in England is "goosegrass;" in Ireland, it has the peculiar designation of "robin run the hedge," arising from the way in which it spreads; in France, it is called "gaillet gratoron;" in Germany, "Kletterndes Labkraut." In this country, it appears from about the beginning of May till the end of autumn.

Cornelius C., aged 74, from Clonmel, a very tall, weak, and worn-out old man, applied for admission to St. Vincent's Hospital on the 8th of February last. He suffered from enormous ulcers of both legs; that on the right being eight inches and a half long, and extending nearly round the whole limb; and that on the left being little smaller. He had just come out of another Dublin hospital, where he had been for four months under the care of a very eminent medical man, and with no good result. A more unpromising case of

such ulceration could not be imagined, and few hospitals would entertain the idea of receiving him. He was, however, admitted at the request of a very valued friend of the institution, who represented that he had come a long way from home in the hope of relief. Strapping being plainly out of the question, from the size of the ulcers and the low vitality of the surrounding skin, I grafted the entire surfaces with layers of sponge. This process went on in the usual manner, and left a healthy surface; the granulations of which, however, soon died away, and could not be kept up. Skin-grafting failed utterly.

We had now come nearly to the end of April, and our failure in this case was as complete as that of our sister hospital. It appeared to me that now was the time to try the galium aparine, which was beginning to peep out in all the hedgerows about Dublin. Here I must tender my acknowledgments of the zeal and energy of the members of my clinical class, who were untiring in their efforts to collect this herb, which was not to be had of any of the herbalists. An ample supply for this and other less severe cases has since been kept up, and it has been used with the most marked success in the following manner.

Grasping in the left hand a bundle of ten or twelve stalks, with a scissors held in the right hand, the bundle is cut into junks about half an inch long. These are thrown into a mortar, and pounded into a paste. This paste, which has an acrid taste and slightly acrid smell, is made up into a large poultice, applied to the ulcer, and secured with a bandage. It is renewed three times a day. Its action appears to be a slight steady stimulant, and powerful promoter of healthy granulation. Its effect in this most unhopeful case was decisive and plain to all. Healthy action ensued, and has since steadily continued; and, after a month of treatment, both ulcers have been reduced to considerably less than half their original size. If this action continue, which I have no reason to doubt, the cure will be accomplished within a measurable and short period. The patient is in the ward, and anyone can see the great amount of new dermatisation which has been effected during the month.

I could give several other cases not so striking as the above, but it would be mere repetition. Of one, however, I would wish to make brief mention.

Mary G., aged 34, was in a very advanced stage of pulmonary consumption, with great wasting and emaciation. Severe lesions of the left lung compelled her to lie always on her right side; and, as a result, she got bed-sores on the right shoulder and on the right trochanter. In addition to a large water-bed, I dressed both bed-sores with the galium pulp. The application was found most grateful and soothing, and rapidly healed the bed-sores. She is still alive, though passing rapidly away. She does not, however, suffer from the sores; and I have had some other instances of the same kind. As far as chronic ulcers are concerned, the application suits best in the indolent or in the healthy states. In irritable ulcers, its stimulating property causes pain. In such cases, it is necessary to reduce the irritability by poultices, iodoform, or other well-known remedies, before beginning the galium.

My reason for putting forward this remedy so soon is, that now is the time to try it. It is growing freely in almost every hedge, and can be got in any quantity during the rest of the season.

A difficulty at once suggests itself as to its general employment; viz., that in winter and spring it is not to be had at all. It appears to me that this difficulty can be effectually met by the method of ensilage, by means of which green food for cattle has for the last few years been kept perfectly sweet and fresh by burying it in silos under the ground. This plan is generally known, but all particulars about it can be learned in the pamphlet of Mr. Thomas Christy, F.L.S. (Christy and Co., 155, Fenchurch Street, London, E.C.). In the case of the galium, the process would consist of cutting the herb very fine, ramming it down by screw-pressure into a glazed earthenware jar with an air-tight cover, and burying it in the ground. Thus secured from air, moisture, and heat, it would be likely to keep through the winter. One of my pupils, Mr. M. Pierce, has already laid it thus down, and will report the result to me.* This plan, if successful, might be extended to other pharmaceutical herbs; for I have always had the idea that green herbs are more powerful than dried ones. Indeed, the late Mr. Donovan of this city used to maintain that, to make tincture of digitalis properly, the alcohol should be brought to where the foxglove was growing, and the live plant plunged into it.

Many virtues are attributed to the galium by old writers; but I have not been able to find any allusion to its employment in the treatment of ulcers. Linnæus mentions that in Sweden the shepherds use its stalks for straining milk—a fact also stated by Dioscorides. Its roots form a nice red dye. These are the only usesthat I have been able to ascertain in regard to it in the books at my disposal.

* The first jar was taken up on June 7th, after being buried for one month. The pulp was perfectly fresh and sweet.

CASE OF PERICARDITIS, WITH EFFUSION.

By JOHN W. MARTIN, M.D., Sheffield.

The following case is a good example of the insidious and unsuspected onset of pericarditis, accompanied by effusions into the pericardial sac.

Case. *Insidious Onset: Slight Preceding Muscular Rheumatism in the Right Arm and Shoulder: Dyspnœa: Orthopnœa: Assigned Cause, the House Cellar-Floor constantly covered with Water: Patient not Intemperate, but accustomed to take Five or Six Glasses of Beer, and One or Two of Spirits, a day: Treatment: Result.*—H. G. B., aged 29, residing in Sheffield, formerly a wine and spirit merchant, and, for the three months previously to my seeing him, occupied as traveller for a brewery, came under my care on January 5th, 1883. He was a large, well made, well developed, and well nourished man. He had always been accustomed to live well, and to take beer and spirits, but never to actual excess, as far as intemperance was concerned. For the time he had been engaged in travelling, partly in the way of business, he had been taking from five to six glasses of beer, and one or two glasses of spirits, on an average, a day. There was no family history of rheumatism, as far as the patient knew. He had always been strong and healthy. He changed his residence about three weeks previously to my visit. His former house was very damp, the floor of the cellar being almost always three or four inches under water, no drains existing to carry the water off. Before leaving it, he felt the present attack commence, the only symptoms being a dry troublesome cough and dyspnœa. Before the onset of these symptoms, he had slight pains in the muscles of the right shoulder and arm, but only very slight indeed, and attributed by him to holding his whip when driving. These pains were intermittent. He never had any joint-affection. The dyspnœa gradually increased to orthopnœa. For the ten days before my seeing him, he had not been able to lie down; and, for the last four or five nights, he could only get snatches of sleep of from twenty minutes to half an hour at the time.

When seen, his face presented a dusky, bloated, and congested appearance; the conjunctivæ were injected, causing the eyes to look red and ferrety. The veins of the neck were full and prominent, not extraordinarily so, but to a noticeable degree. The expression of the face was anxious and distressed. He complained chiefly of the shortness of his breath, and the troublesomeness of his cough, but did not complain of any actual pain. He seemed to think that his attack was one of bronchitis and congestion of the lungs, and had been diligently taking a mixture from a herbalist in Sheffield, each dose of which sickened him considerably, and gave him considerable distress, without proving in the slightest degree beneficial to the symptoms in the way of giving relief. Careful percussion and auscultation of the lungs failed to elicit any positive symptom of their being engaged. At the same time, so well nourished was the patient, and so abundant was his covering of adipose tissue, that I would not like to be positive as to there being no deeply seated congestion; but I could obtain no exact evidence of it.

Examining into the condition of the heart, I found slight tenderness, increased by percussion over it. The impulse was very weak, but there was no displacement of the apex-beat. The area of cardiac dulness was largely increased, measuring five inches in the vertical direction from the upper border of the fourth rib on the left side, and six and a half inches in the horizontal, from the midsternum, over towards the left side, on a level with the sixth rib. There was no thrill felt on placing the hand over the heart. The first sound could not be heard; the second was heard very faintly towards the base of the heart, on a level with the second intercostal space.

Over the whole surface of the heart, and well round into the axilla, a well marked double friction-murmur was heard, faint towards the apex, loud and rasping at the base. I could not detect any endocardial murmur. The pulse was 104, weak, with a slight thrill in it; no irregularity or intermittency. Temperature 98.4°; tongue clean; liver normal; bowels regular; felt a desire for food, but had an uncomfortable sense of fulness after meals. He was passing thirty ounces of urine daily, highly coloured, at present clear, but a little time before depositing lithates freely. It contained no sugar nor albumen. No casts

epithelium, or blood-cells, could be found. He complained of pain in the lumbar region. The treatment first ordered was the application of a blister six by six inches over the heart, for six to seven hours, and the following mixture: ℞ Potassæ bicarbon. ʒij; potassii iodidi ʒj; tincturæ digitalis ℥ijss; spiritûs ammon. aromat. ʒss; syrupi zingib. ʒj; aquæ chloroformi q.s. ad ʒviij. M. An ounce to be taken four times a day.

January 6th. The blister rose well. He was much relieved, and able to lie down. He slept fairly, as well as the pain of the blister would allow. Breathing was much easier. The pulse was stronger, 104°. The expression of the eyes and face was much improved. The conjunctivæ were clear. The congestion of the face was gone. The blistered surface would not permit a close examination into the condition of the heart. The treatment was continued.

January 8th. Improvement continued. The blistered surface was healing, but not sufficiently healed to permit percussion. The heart-sounds were reappearing, and the friction-murmurs were decidedly diminished in intensity. Tongue clean. Pulse stronger, 100; no thrill was felt. Breathing was easier. The treatment was continued, and he was ordered to take a Seidlitz powder to regulate the bowels.

January 9th. He slept well through the night, and felt thoroughly rested this morning; he was much improved. The cough was less troublesome; some slight expectoration accompanied it. The area of dulness was decidedly diminished. The friction-murmurs were not now heard in the axilla. They were confined to a space between the sternum and left nipple. These murmurs were heard very loud and rasping, as high as the upper border of the second rib. The first sound of the heart was again plainly, though faintly, heard. The second sound was stronger. I could not, owing to the friction-sounds, determine the existence or absence of endocardial murmurs. He was passing an abundance of urine, high coloured, and depositing lithates freely; specific gravity 1030; no albumen. His appetite was improving rapidly.

January 11th. I happened to call at dinner-time, and found him eating stewed rabbit with the heartiest of appetites, and relishing it thoroughly. His face and eyes and look were clearer and better than I had seen them for a long time. The veins of the neck were no longer visible. He expressed himself as feeling better than he had felt for a long time. The cough improved. There was no sense of dyspnœa nor pain. He slept well. He was passing an abundance of urine, and the bowels were acting regularly. There was no tenderness over the heart. Dulness was reduced to three inches in the vertical, and four and a half in the horizontal direction. The superior margin of dulness was now on a level with the middle of the fifth rib. The external margin of dulness was a little outside the left nipple-line. The heart's impulse was strong and diffused. The first sound was distinct, but not so distinct as in health. A single light brushing friction-murmur was heard over the apex, not confined to any single place or direction. Towards the base, the double friction-murmur noticed before was heard diffused over a very large area. These murmurs were greatly diminished in intensity all over, and seem inclined to disappear. They were heard faintly in the axilla. The pulse was taken in the standing position. and after the examination, which may account for its being 104; it was full and strong. The treatment was continued. His wife to-day told me she thought this attack had been stealing on him for some time, and that she had noticed him not to be quite himself for the last three months.

January 13th. The patient looked well, and expressed himself as quite ready for work. The eyes and the expression of the face were clear and healthy. He slept and ate well. The bowels were regular. He passed plenty of urine, clear, and free from deposit. The dulness over the pericardial region remained unchanged. The heart's impulse was stronger, but much diffused. The friction-murmur remained as last described, but was heard round into the axilla, and faintly in the upper portion of the interscapular space on the back. The pulse was 104, unchanged. No sense of dyspnœa was left.

REMARKS.—The foregoing, though by no means an uncommon case, is, I think, not altogether devoid of interest, or unworthy of notice, on account of the insidious character of the onset of the heart-affection; so much so, that the patient's attention was never once directed to the heart as the seat of mischief. If there had been any pyrexia, it had disappeared when I saw him. The case affords another good example of what seems to be pretty generally admitted, that the serous linings to the visceral cavities, and the envelopes to their contents, must be regarded in the light of lining membranes of joints; and that, in persons affected with any of the leading cachectic taints—gout, rheumatism, tubercle, or struma—these membranes may become affected primarily, and be the first, and indeed the sole manifestation of the constitutional diathesis. This view reduces the term "idiopathic" pericarditis, pleuritis, and peritonitis to very small limits; since, in the vast majority of cases, when we exclude extension of inflammation from neighbouring organisms, and injury, as causes, some one or other of the taints I have mentioned will be found present. That pericarditis, unaccompanied by any marked symptoms of muscular rheumatism, or by any joint-affection whatsoever, is a matter of fairly common occurrence, I have had many instances during the last fifteen years' experience in general practice. Indeed, this is one of the facts in clinical observation that fall peculiarly within the field of the general and family practitioner. Hospital physicians, and men who have attained a high standing in their profession as consultants, usually are called upon to examine and treat the grosser lesions, the results of pre-existing attacks, which possibly had not been observed or treated at the onset, or the effects of which probably had resisted all efforts to cure them.

When reporting a case of heart-disease to the *Medical Press and Circular*, March 31st, 1875, I then expressed my conviction that many cases of heart-affection take their origin in what is termed "a simple cold," where a tendency exists on the part of the patient to the rheumatic or gouty dyscrasia—attacks which I now regard as "rheumatic pyrexia,", in which, when the heart becomes affected, it does so as the local affection. I dwelt on the necessity for attention to the state of the heart in such cases, and for the utmost vigilance being exercised when there is morbidly excited action, accompanied by roughening and "buffing" of the first sound. I also pointed out how valuable a knowledge of family tendencies to inheritable diseases would be in guiding the physician in his treatment of what otherwise might be passed over as unimportant, and so happily enabling him to prevent such apparently simple cases from terminating in consequences the most disastrous. Since then, increasing experience has impressed upon my mind more and more the deep importance of never lightly passing over the condition of the heart when called upon to treat these so-called attacks of "feverish cold." Truly, in such cases, an over-caution is far preferable to carelessness. Rapid action, weakening even to a slight degree of the first sound, and the occurrence of "humming" or "burring" noises, tending to conceal or give the idea of prolongation to the first sound, are always signs that excite my attention and give rise to anxiety. Of course, just as we may have light and transient affections of the joints, which pass off and leave no trace behind, so, in perhaps the majority of instances, these symptoms may subside and leave no *souvenirs* to mark their occurrence; but, on the other hand I have too frequently watched them develop steadily into the full-blown and well-marked characteristics of advanced pericarditis, to permit of my treating them with contempt or indifference. In the case before us, I think it is a point of interest to note the occurrence of double friction-murmur at the apex, and in the axilla, when the loss of the first sound of the heart, weakening of impulse, and extent of dulness, would all point to effusion; in which case, we expect not to have contact and consequent friction. I can only explain it, first, by chest-wall conduction of the sound from the loud and rasping basal murmurs; secondly from the extent of dulness that still exists, together with the marked improvement in the local and general symptoms; also bearing in mind the full habits and free consumption of malt and spirituous liquors, which may have produced their effects on the kidneys and the circulatory system generally, I am inclined to think that possibly there may be some dilatation and hypertrophy present; in which case, a small amount of fluid only may have been present. This would explain also the absence of displacement of the apex-beat. Another point to be borne in mind is, that the heart itself may have shared in the unusual development of the body generally, and have been unusually large.

The rapid relief afforded by the treatment and the subsidence of the congested appearance of the face and eyes are also to my mind points of interest. No one in this case can well question the benefits derived from the measures adopted; the symptoms had existed long, and had been going steadily from bad to worse, and the relief followed immediately after the use of the remedies.

In conclusion, I would express the satisfaction I feel, at the new, and I think every one must admit, most important step taken by the Association in the collective investigation of disease. A vast amount of, so to speak, outlying and hitherto inaccessible clinical experience will be gathered in, tabulated, and made useful to the profession generally. It will give men fixed points on which to work,

and encourage them to closer and more exact observation; and to the record of such, men who would shrink from the labour of extended note-taking, with a view to publication, will not grudge the lesser labour of answering set questions on given points. I would also say one word to the junior members of the profession in favour of shorthand. Nothing can possibly be of greater use to them. The knowledge of its principles is easily acquired; with a good teacher it is simplicity itself. It only requires half an hour's daily practice, for from two to three months, from dictation, to attain a speed in writing of 80 to 100 words a minute. When written, it is as legible as the present style of writing, or more so, if only care be taken to practise and acquire the power of reading what has been written. It saves a vast amount of labour, and enables those who know it to keep most valuable records of their observations and experience. I owe many a valuable note of cases observed, to its labour-saving properties.

CLINICAL MEMORANDA.

A CASE OF ULCER OF THE STOMACH.

In connection with the two interesting cases recently published in the JOURNAL, by Mr. Battams, the following notes of one which came under my care at Ranibleet, East Indies, in November 1880, may not be uninteresting. No. 2,517, Pte. J. B., aged 30 according to his records, but evidently an old soldier, in India with the 30th Regiment nine months, of very intemperate habits, came a prisoner to hospital on the morning of November 3rd, and was detained for gonorrhœa. On the 20th, when on the point of being discharged, he complained of feeling "done up, and unable to do anything," also of dyspeptic symptoms, with irritability and uneasiness of the stomach, not relieved by sinapisms, effervescing salines and bismuth powders. Jaundice quickly followed, and he could retain no food. On the 24th he had several attacks of hæmatemesis, and passed a quantity of altered blood by stool. There was marked decrease in the size of the liver, as evidenced by percussion and palpation. Temperature was normal. The symptoms were slightly relieved by treatment. On the 26th, he was not quite so jaundiced. The hæmatemesis continued unchecked by gallic acid and opium, and other remedies. He was somewhat better. On the 27th, there was no vomiting or purging, and he retained a little food, but in the evening he passed a dark tarry stool, and suffered from collapse and great exhaustion: he was relieved by stimulants, but continued very weak from the excessive loss of blood. On the 28th he vomited a pint of altered blood, and complained of much pain in the epigastrium; he could retain no food; and was supported by nutritive enemata. On the 29th, there was no return of the hæmorrhage, but he was in great pain all night, extending up towards the right side, shoulder, and back; he had also symptoms of collapse, and was constantly bending forward to relieve the intense pain. He died quietly at midnight, after having asked a patient in an adjoining bed, what o'clock it was. The *post mortem* examination revealed congestion of the right lung; the heart was small and healthy; there was no atheroma of the valves or of the coats of the vessels. The liver was contracted, small, hard, and of a light nutmeg colour; the gall-bladder distended; the kidneys were enlarged and softened. The spleen was very small, contracted, and weighing only four ounces. The rugæ of the stomach were prominent, and the mucous membrane thickened, especially towards the pylorus, in the immediate vicinity of which was a small ulcer with thickened margins, and base congested where in contact with the liver. The intestines were healthy. No perforation was found. The ulcer was about the size of a four-anna piece.

ALBERT A. GORE, M.D., F.R.C.S.I., Surgeon-Major Army Medical Department; Female Hospital, Dublin.

OBSTETRIC MEMORANDA.

BREECH-PRESENTATION COMPLICATED BY SPINA BIFIDA.

I HAVE read with much interest a case of the above in the BRITISH MEDICAL JOURNAL of May 12th, by Mr. C. Penruddock, reminding me, as it does, of a similar labour which has recently occurred in my own practice. I copy the following notes from my case-book.

Mrs. C., aged 19, primipara, sent for me on April 21st at 8 A.M. Labour, I learnt, commenced the previous evening at eight o'clock. On examination, I found the os fully dilated, the pains strong and bearing-down in character, the presenting part of the child just entering the brim of the pelvis, the membranes being entire. First, my finger came upon what I supposed to be the tuber ischii of the child, and farther back a soft roundish swelling which, on firm pressure, felt like several vertebral spines, suggesting to me that, instead of a breech presenting as I supposed, possibly I might have a shoulder to deal with. This induced me to further examine for the fœtal clavicle, which I failed to find; so being a little puzzled as to what the presentation might be, I decided to insert my whole hand into the vagina, in order to more thoroughly explore the contents of the uterus. I then discovered that I had a breech complicated with spina bifida to deal with. As the os was fully dilated, I ruptured the membranes, and left the termination of the case to nature.

The child, a male, was born at 9.30 A.M. It was of average size, well nourished, and apparently perfectly healthy, with the exception of this arrest of development in the three lower lumbar vertebræ. The tumour was of the size of a large walnut, spherical in shape, and covered with a thin bluish membrane.

The child remained in fair health for the first fortnight, when ulceration of the sac commenced, and convulsions supervened at the third week, terminating fatally. The mother made an excellent recovery. She attributed the malformation of her offspring to a fright she had had from a dog when six months advanced in her pregnancy, stating soon afterwards to her husband that she felt sure the child was not right.

HAROLD THOMPSON, M.R.C.S., L.S.A., Oxford.

SURGICAL MEMORANDA.

OBSTRUCTION OF THE BOWELS: FÆCAL VOMITING: RECOVERY.

HAVING read Mr. Alder Smith's "Successful Case of Gastrostomy for Intestinal Obstruction," which appeared in the JOURNAL for May 26th, I am induced to communicate the following case, which is, perhaps, worth recording.

On April 11th, at 10 P.M., I was hurriedly sent for to visit a lady aged about 45, who was said to be suffering from "cramps of the stomach." She was in bed, vomiting frequently, and complained of intense pain of the stomach and bowels. Her pulse was little affected, her tongue clean, her temperature normal, and her bowels had been freely moved twenty-four hours previously, after the use of aperient medicine. I prescribed bismuth with hydrocyanic acid, and also a full dose of tincture of opium, under the impression of having to deal with a case of acute gastralgia. The treatment had no marked effect; for, upon visiting her five hours after, I found she had passed a restless and sleepless night. The pain was sometimes acute, and the nausea and vomiting recurred frequently. I was shown a hand-basin containing upwards of a pint of distinctly fæcal material which she had just vomited, and her breath had also a strongly fæcal odour. The real nature of the case was now apparent. On careful examination, I could ascertain no cause of strangulation; no external hernia, nothing abnormal within reach by the rectum, and no abdominal tumour existed, and fæcal impaction could not be looked upon as probable. Copious injections failed to bring a trace of fæcal matter from the bowels, and only served to show that obstruction was complete. The abdomen was distended, and the pain, as already noticed, often most severe. The early appearance of fæcal vomit was remarkable. In all the circumstances I ascribed the symptoms to a twist, or to an intussusception at some point in the course of the small intestines. If due to intussusception, might not the purgative taken by the patient have had something to do with its production? We know that invagination is apt to arise from causes that produce increased irritability of the bowel. The stercoraceous vomit enabled me to form an early diagnosis, a point of the greatest moment in these cases as it enables us to adopt a rational course of treatment. Better leave such cases entirely to nature, than administer a single dose of drastic medicine. No time was lost in placing the patient under the influence of opium. The drug was given as tincture, but generally in the form of powder, frequently repeated and continued throughout the attack; and no food of any kind was taken, for which, indeed, the patient expressed no desire. Ice was not procurable, but cold spring-water and soda-water were enjoyed in small quantities, frequently repeated to allay thirst. The effect of the opiate was soon apparent. Vomiting became less frequent, no doubt from the influence of the drug in controlling intestinal peristalsis; and the patient became comparatively easy, and had some

rest. The characteristic vomit continued to recur at much longer intervals. Occasionally the rejected material was merely a greenish fluid, consisting, no doubt, of the water swallowed mixed with bile. The symptoms were now less acute, but distension increased. Warm fomentations were constantly applied, and injections given occasionally. On the third day she was seen in consultation by Dr. Ridley of Gateshead, who suggested operative means, or at least tapping, for the purpose of relieving the tympanites, which was now becoming extreme, and that possibly the bowel might right itself. Her friends, however, were averse to any form of surgical interference; and the treatment was continued as hitherto, with the addition of nutritive enemata, and the free use of belladonna liniment to the abdomen, as recommended by Dr. Ridley. The opiate maintained its soothing influence, but the symptoms became more urgent. Hiccough was constant in the evening; tongue red and dry; pulse 134; temperature not taken. She had another good night, and in the morning looked decidedly better than on the previous evening. She had two attacks of fæcal vomiting during the day, but rested well. It was now the fifth morning, and the last upon which sickness and stercoraceous vomit appeared. Her pulse was good, and her expression cheerful. In the afternoon she informed me that "something had liberated itself in her inside," and that she was passing wind since I saw her last. A liquid motion followed soon after from the bowels, which contained a few firmer pieces of fæces of the size of hazel-nuts. From this date, her improvement was uninterrupted. She soon regained her usual health, and has since remained perfectly well.

Invaginations are said to be of frequent occurrence, giving rise to temporary derangement of the bowel, and they are also believed to become soon disentangled by the normal peristaltic movements. If this were a case in point, the favourable result was probably due to the free use of opium. Had purgatives been used, fatal strangulation would, I think, have inevitably supervened. A timely diagnosis would render the purely medical treatment of these cases more successful than it has hitherto been.

GEORGE R. FRASER, L.R.C.P.E., Surgeon.
Wark-on-Tyne, Northumberland.

PATHOLOGICAL MEMORANDA.

PECULIAR CONGENITAL CONDITION OF EXTERNAL EAR.

I HAVE recently come across (in a child seven months old) a peculiar though minute congenital malformation of the external ear, which I have never met with before, and of which I can find no notice in books. It consists of a minute orifice situated just where the helix of the ear subsides into the general surface of the skin, and about one-eighth of an inch from the edge of the helix. In appearance, it resembles the punctum lachrymale, but there is no elevation of the skin; and the mother states that, when the child cries, it secretes a drop of two of clear fluid; but, though symmetrical on the two sides, it is only the left opening which secretes. It is probably the orifice of a gland resembling in structure, and supplied by the same nerve, as the lachrymal; and the only point of practical interest lies in the fact that the child is of the fairer sex, and that, in after life, if "used to the melting mood," it will hardly add to the poetry of the situation to have to brush the dew-drop from her ear as well as from her eye.

CHARLES FIRTH, M.D.Lond., F.R.C.S.Eng., Gravesend.

THERAPEUTIC MEMORANDA.

CANNABIS INDICA.

IN addition to the undoubted value which attaches to cannabis indica in megrim, menorrhagia, and dysmenorrhœa, it exerts also a valuable influence as a safe sedative and hypnotic in a form of disease, in which, if the ordinary narcotics be prescribed, lethal effects may be expected.

In chronic renal disease, when vigil or neuritis are prominent symptoms, the extract of cannabis Indica (Squire), in one grain doses, may be given to an adult every four or six hours. It does not augment the albuminuria, and the sedative action is at once safe and pronounced.

The late Dr. Jeaffreson of St. Bartholomew's Hospital valued cannabis Indica highly, as a sedative which would manifestly control the exhausting jactitation which occurs in cases of severe chorea.

H. CRIPPS LAWRENCE, L.R.C.P.Lond.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

BIRMINGHAM GENERAL HOSPITAL.

ON A CASE OF CYSTIC DEGENERATION OF THE KIDNEY.

(By J. W. BOND, M.D., Resident Medical Officer, and B. C. A. WINDLE, B.A., M.B., Pathologist.)

THE following case appears worthy of being placed on record, first on account of the rarity of the disease; and secondly, because some hitherto undescribed symptoms rendered a diagnosis during life difficult if not impossible.

J. C., aged 38, a labourer on a sewage-farm, was admitted on March 24th, 1883, under Dr. Wade. Before the present illness he had always been healthy; but for many years had micturated several times every night. For the last six months, he had had daily cramping pains in the epigastrium and limbs. These persisted up to seven weeks before admission; he then became very "fagged," low spirited, and did not "seem as though he could do any work." Six weeks before admission, he had an attack of profuse hæmaturia which lasted for two days. For a month he had lost blood from his mouth continuously; as he thought, from the gums. For a fortnight he had passed a small quantity of black blood with every motion. For the same time he had had aching pains in the knees, especially at night. For the seven weeks preceding his admission, he had suffered from headache, noise in the head, thirst, loss of appetite, and constipation. He had a second slighter attack of hæmaturia, one week before admission. Vision had lately become dim. He had not had epistaxis, hæmoptysis, hæmatemesis, or purpura. He had lost much flesh during his illness.

When admitted on March 24th, the patient had slight hæmorrhage from the gums and from the rectum. The tongue was swollen, dry, and brown; the breath was extremely foul. He was drowsy and breathed deeply. Nothing abnormal was detected on examination of the lungs, heart, or liver. On the left side of the abdomen a tumour, apparently solid, could be indistinctly felt to the left of the umbilicus. The splenic dulness in the mid-axillary line began at the seventh rib. There was no blood in the urine. The skin over the face and abdomen was slightly bronzed. The mucous membranes were only slightly anæmic.

On March 25th he was in much the same state, dozing nearly all the time, now and then rolling over from side to side. The urine, of specific gravity 1014, was acid, and contained a haze of albumen, but no blood.

On March 26th the breathing was slow, extremely deep and noisy, and he swallowed and spoke with difficulty. The odour of the breath was even fouler than before. Thirty ounces of urine had been passed in twenty-four hours; the specific gravity was 1013; it was acid, and contained one-sixth of albumen, and much blood.

March 27th. The patient was sleeping heavily, but could be roused. Slight hæmorrhage had occurred from the rectum. The urine was pale yellow, acid, very slightly turbid, free from sediment, and the specific gravity was 1010; it contained albumen and a trace of blood, also renal and vesical epithelium, leucocytes and crystals of calcium oxalate. Hæmorrhage from the gums still persisted. Whilst apparently sleeping deeply, he would roll over suddenly every few minutes. The temperature at this date, and, indeed, during the time he was in the hospital, was subnormal. At 6 A.M., on March 28th, he died.

The necropsy was made next day. The abdomen was somewhat distended, and, as well as the face, was of a brownish hue; about the nose and mouth were black crusts of dry blood. In the substance of the heart were several extravasations of blood. A notable one in the right ventricle affected the entire thickness of the wall. In the cavities were large firm yellow clots. The lungs were extremely œdematous, and contained a few hæmorrhages, and had a most foul odonr, but were otherwise not abnormal. The abdomen was laden with fat, and the intestines much distended with gas. The left kidney weighed 39 ounces, and extended in the mid-axillary line to the seventh interspace. The right weighed 40 ounces, the bulk of each was about 10 × 5 × 2½ inches. Both kidneys were typical examples of cystic degeneration, and consisted of a

mass of cysts from the size of a pin's head to that of an apricot. These possessed different contents, some being filled with a clear yellow fluid, others with purple fluid, whilst a third variety contained a grumous yellowish brown substance. The pelvis major was quite apparent, but there were no vestiges of papillæ. A small amount of solid substance was present around the margin of the organs, and more especially at their concavities, but this did not resemble kidney-tissue, being white, fibrous, and studded with innumerable small cavities. The other organs were quite normal.

A microscopic examination of the grumous contents of some of the cysts showed leucocytes in a more or less fatty condition, quantities of amorphous granular *débris*, and a large number of plates of cholesterine. An examination of the more solid parts of the organs gave the following results. In no part could unaltered renal tissue be seen, but in some parts it was much more recognisable than in others. In inverse ratio to it was the amount of fibrous tissue, which was everywhere present. Scattered throughout this fibrous matrix, there were to be seen—(1) Malpighian tufts; (2) tubes approximating to the normal; (3) tubes compressed, and with obliterated lumen; (4) expanded tubes, passing through all degrees up to (5) cystic expansions of tubes; (6) larger cysts, with apparently a lining of fibrous tissue.

REMARKS BY DR. BOND AND MR. WINDLE.—In the smaller cysts, it was possible in almost every case to discover an epithelial lining of round, or in some cases ovoid cells. In some of the larger cysts this was invisible, whilst in others only fragments were to be seen. We are, however, of opinion that in all these cysts there was an epithelial lining, and that the entire or partial absence of it in some is accounted for by manipulation. In some parts there are appearances which very strongly suggest that, in some cases, two dilating tubes may become one cavity by the obliteration of the wall separating them. We were unable to find any evidence of the dilatation of Bowman's capsule, with compression of the Malpighian tuft, considered by some writers to be a cause of cysts. In no part were we able to detect any thickening of the coats of the vessels, nor do we believe that any such exists. This is a point to which we wish particularly to draw attention.

In the clinical aspect of the case, the chief points of interest appear to be: first, the occurrence of certain symptoms which we have not found elsewhere described, viz., pains in the knees, persistent hæmorrhage from the gums, and rectal hæmorrhage; secondly, the case might have been mistaken for one of leucocythæmia, since the tumour in the splenic region, the various hæmorrhages and the pigmentation of the skin have been found in cases of this disease. On the other hand, the patient's blood, his amount of bodily strength, and the low specific gravity of the urine, and the absence of pallor of the mucous membranes, were against this view. It was evidently not a case of scurvy, as the patient had lived on ordinary food, did not suffer from marked debility, and did not present the characteristic bruised appearance of the lower limbs. Again, it might have been an anomalous case of purpura hæmorrhagica without any skin-eruption. Most of all, perhaps, it resembled the ending of a case of Bright's disease; the comatose condition of the man, the hæmorrhages from mucous membranes, the history of nocturnal micturition, and the albuminuria pointing to this. But considering the presence of an abdominal tumour, the persistence of the hæmorrhage from the gums for over a month, the absence of casts, of œdema and dropsy, we could not safely make such a diagnosis. Thedifficulty of the case was much increased by the obese condition of the abdomen, which prevented the detection of the enlarged right kidney. Thirdly, the characteristic clinical features of the case were the hæmaturia, albuminuria, the enlargement of the kidneys, the epigastric pain, and the ending by uræmic coma.

A consideration of the pathology of this disease opens up many points of interest. The formation of cysts in the kidney has been accounted for in various ways, such as the abnormal development of epithelial cells, a persistence of a congenital condition, or the blocking of the tubes, with subsequent dilatation above the obstacle, and, lastly, by the contraction of fibrous tissue constricting the tubes in various places. We have been unable to see anything in our sections calculated to lend the least support to the first theory. We cannot see that the second accounts for the late cases of this disease. We do not think that such extensive degeneration could have been produced in our cases by the occlusion of tubes by plugs of coagulated blood, since no hæmaturia occurred until six weeks and a half before death. We would suggest that what occurs in this disease is the formation of an intertubular fibrous tissue, its contraction, strangulation of the tubes in parts, and their subsequent dilatation. From this point of view, the primary lesion would seem to be a form of interstitial nephritis. This being so, it may justly be asked how the disease differs from the ordinary granular kidney. Our opinion is that the unthickened condition of the arterial walls affords a clue to the answer to be given to this question. We believe the cirrhotic kidney to be a part of a general disease, whilst the cystic kidney is a purely local lesion, not necessarily connected with changes in other parts of the body. The unaltered condition of the heart lends additional support to this view.

In conclusion, we desire to express our acknowledgments to Dr. Wade for his permission to make use of this case.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 12TH, 1883.

JOHN MARSHALL, F.R.S., President, in the Chair.

Osteitis Deformans.—Dr. BARLOW showed a woman, aged 53, who was the subject of osteitis deformans, affecting chiefly the tibiæ and humeri, especially on the right side. He also called attention to the unusual position and character of a systolic cardiac murmur in the same patient.

Apparatus for Graphic Records of Movements.—Dr. FRANCIS WARNER showed a very elaborate collection of apparatus by which graphic records could be obtained of the movements of the fingers and upper extremity, etc. The apparatus consisted of (1) a set of motor tubes to be attached to the hand; (2) a frame supporting recording air-tambours; (3) a new form of electrical contact-making tambour; (4) a new and simple form of counting machine, worked by an electrical current interrupted by movements of the contact-making tambour, thus automatically registering the finger-movements. Tracings were shown of the spontaneous movements of infants, and the effect of light and sound upon such movements; indications of the time of an infant's sucking movements; ankle-clonus; movements of sternum; movements of chorea; athetosis; senile tremor; movements of limbs due to pulsation.

*On the Bacillus of Leprosy.** By GEORGE THIN, M.D.—A bacillus having been found in leprous tissues in Norwegian leprosy by Hansen in 1874, in the leprosy of Southern Europe by Cornil and Suchard, and Majocchi and Pellizzari, and in a leper from South America by Kœbner, the author made a series of investigations with the object of extending the inquiry regarding the presence of the parasite to the leprosy of other parts of the world. He had found it in three cases of Chinese leprosy in material supplied him for the investigation by Dr. Manson of Amoy, in West Indian leprosy in tubercles sent him by Dr. Hillis of Demerara, and in the epiglottis of a leper who died in New South Wales, the larynx having been sent him by Dr. Maclaurin of Sydney. He had also observed bacilli in the freshly drawn blood of a leper patient from Hindostan, which evidently had escaped from a ruptured lepra-cell which was present in the preparation. In all the cases examined by him, the size and arrangement of the bacilli were uniform. In the leprous infiltration of a leper-tubercle, the bacilli were in such numbers that under a low power the part seemed to be filled with them. The author was disposed to believe that in the skin the bacilli were always contained in cells. They were mostly seen either in the lepra-cells, or arranged in groups which corresponded to cells that in the course of preparation had ceased to be visible. The smallest cells of the leprous infiltration did not exceed white blood-corpuscles in size, but even the smallest of them contained bacilli. The author found in one section small cells, containing bacilli, distributed singly through the prickle-cell layer of the unbroken rete mucosum. He believed them to be white blood-corpuscles carrying bacilli, the corpuscles having migrated into the rete. This preparation showed that the statement, which had been made by some authors, that the bacilli were never found in the epidermis so long as the membrane was entire, was not of universal application. He had also found in a preparation a lymphatic vessel in the papillary layer of the cutis, with a lymph-corpuscle containing bacilli lying in the lumen of the vessel. On the border of the vessel, there were isolated single groups of bacilli, corresponding to lepra-cells. The part of the cutis in which the vessel was found was free from leprous infiltration, the infiltration of the tubercle being situated more deeply in the corium. The facts that cells had been found in the

* The research which is reported on in this paper forms part of a series of investigations on the Parasites of the Human Skin, towards which a grant has been made by the Scientific Grants Committee of the British Medical Association.

epidermis containing bacilli, and that a lymph-corpuscle containing bacilli had been found in a lymphatic vessel, suggested that these corpuscles were at least one of the media by which the parasite was conveyed from one part of the body to another. The site of predilection of the parasite in the skin was the deeper part of the corium, the part which was least richly provided with blood-vessels. The paper was illustrated by drawings accurately drawn to scale, showing the bacilli in the leprous tissues. The bacillus lepræ was shown by these drawings to be the same in size as the bacillus of tubercle, of which, for the sake of comparison, drawings were also given; all the drawings being made by Mr. Thurston. The beaded appearance of the tubercle-bacillus (suggestive of spore-formation) was not found in the bacillus lepræ. Drawings made to the same scale, of bacilli from cold-mutton infusion and from a section of a putrid cornea, were also given. These organisms were much thicker than the bacilli of leprosy, but did not materially differ from them in length. As exceptional forms, rods of double the ordinary length were observed. In these cases, although the sheath was continuous, breaks in the protoplasm showed the tendency in the organisms to break up into rods of a definite size. After the author had sent his paper to the secretary of the Society, he had examined the tissues in a case of leprosy, in which the disease was acquired in Hindostan. Bacilli were found in large numbers, and having the same form, size, and staining properties as those found in the other cases examined. He had also found bacilli in the blood-vessels in two cases. He had, further, by improved results in preparation, been able to easily distinguish in the bacilli in leprous tissues a beaded appearance indicative of spore-formation, identical in this respect with the similar appearance observed in tubercle-bacilli. The observation of this beaded appearance established a point in favour of the morphological similarity between tubercle and leper-bacilli. They were thus the same in size and form, they both contained spores, and they both retained fuchsin stain after the action of dilute nitric acid had bleached the tissues and elements amongst which they lay. —The PRESIDENT remarked that the very careful researches recorded in the paper led to the conclusion that, in some diseases at least in which microscopic parasites were constantly found, it seemed that they had singled out certain cells and invaded them; ant that previously to this invasion the cells were those of normal issue, very possibly leucocytes, and did not deserve the term leper-ells in any other sense than that they were the seat of this invasion. —Dr. SOUTHEY, as a member of a committee of the Clinical Society, had examined portions of skin from a leper boy, and had felt himself convinced that the bacilli, as described by Dr. Thin, were to be found in the diseased tissue. The coloured leper-cells had been found to owe their colour to the mass of coloured bacilli that they contained. The multiplication or spread of the disease was explained by the bursting of the cell and various methods of distribution of these fungous bodies.—Dr. THIN explained a careful series of drawings of the bacilli of tubercle and leprosy, and pointed out that it was a mistake to imagine that the leprosy bacillus would be distinguished as being the longer, for both were of the same length, both showed spores in a similar manner, and both acted identically as regarded dyes, at least with methylanilin, fuchsin and gentian-violet, which he had tried. The best preparations he had made had been with fuchsin, but he did not attribute any special value to the dye, except so far as it was pure, and was made fresh, and in a cool place, with careful precautions. He summed up his conclusions by saying that the growths of leprosy depended upon lymph-corpuscles, which had become the abode of parasites, had then enlarged, and continued to act slowly but destructively on the surrounding tissues. Such an action he considered probably as the method of other pathological changes.

On Urticaria Pigmentosa. By THOMAS COLCOTT FOX, M.B., B.A.—The objects of the paper were (1) to place on record an additional case of this rare affection; (2) to trace the history of three cases, originally described by Dr. Tilbury Fox, over a period of about 20 years; (3) to describe the result of a microscopical examination of sections; and (4) to present a tabular summary of the nineteen cases now on record, and review the nature and course of the disease. The history of the three cases described by Dr. Tilbury Fox showed that the special eruption was at the present date no longer involved, although ordinary urticaria was occasionally seen in two of the cases, and some old stains in all three were in process of dying away. The microscopic examination of sections clearly proved, in the opinion of the author, that the lesion was of an urticarial nature, that the appearances were those of a chronic localised œdema. The clinical evidence also seemed overpowering in favour of the view that the affection was a very chronic urticaria commencing in infancy, and peculiar in that the wheals were long persistent, and not evanescent, and that there was a special tendency to their pigmentation. This pigmentation was apparently derived from two sources, viz., in some measure from the breaking down of escaped red corpuscles commonly seen in the class of erythemata, and also from some special source connected possibly with hepatic derangement. —Dr. THIN said that he had had an opportunity of examining a case under the care of Mr. Morrant Baker, and had considered it to belong to the class of granulation-tumours. Its characteristics had been cell-infiltration accompanied by a destruction of the fibrous tissue of the skin, extending at least as low as the hair-roots. He considered Duhring's explanation of these cases the only satisfactory one—viz., that there were two classes of an entirely different nature, viz., one with no new cell-growth, which was urticarial, and the other where there was no new cell-growth, which was non-urticarial.—Dr. T. C. FOX said a few words of apology for the length of his paper, and in acknowledgment of Dr. Thin's criticisms.

Twelve Cases of Tumour of the Bladder (ten in the male and two in the female), in all of which an Operation was performed for the removal of the Growth; with their Histories and the Results. By Sir HENRY THOMPSON.—The object of this paper was to give the author's experience of the surgical treatment of tumours of the bladder. He had presented an account of five cases to the Society in January last, since which time he had operated on seven additional cases. The history, treatment, and histological examination of each of these was given in detail. The total result had been that, out of twelve cases, there had been seven recoveries, more or less partial, and five deaths. In nine cases, the age of the patients was over fifty. In malignant tumours, painful micturition had generally been the first symptom; in innocent tumour, hæmaturia had come first, and pain, if any, later. It had been frequent to find a little florid blood passed at the end of micturition only. Microscopical examination of the cells and fibres to be found in the urine had proved very valuable, though there were some points on which the observer was liable to be deceived; in some cases, villous processes could be found in the urine, and by these the diagnosis was rendered certain. In three cases, calculi had been found to coincide with papillomatous growths, which favoured the theory that the papillomata were the result of local irritation. In many cases, only a part of the tumour had been removed; but the author did not consider such cases as by any means necessarily unsatisfactory, for the cicatrisation thus produced often led to contraction and consolidation of the remainder. In the hospital-museums in London, there were about one hundred specimens of vesical tumours, which the author had inspected; and of these, as far as he could judge, about sixty were innocent and forty malignant. The label "cancer" he considered to have been too frequently used on the specimens. Out of the sixty cases of innocent tumour, about thirty or thirty-five, as far as could be estimated from their present condition, seemed to have been such as could have been removed, at least in part, by the author's method; and he wished it to be continually borne in mind, that any successful operation would have been a clear gain from an otherwise inevitable death; for, without the aid of art, such cases invariably bled to death, some of them needlessly. —Dr. PAVY admitted that these cases of chronic hæmaturia, which a physician was sometimes called upon to treat, were most disappointing, for styptics and all medicinal aid was useless, and he regarded the surgical recommendations, which he had just heard, as most important.—Mr. BERKELEY HILL had very recently had some experience in the matter, as he had removed two vesical tumours after the method recommended by Sir H. Thompson. He was glad to find that Sir H. Thompson did not consider it necessary to extract the whole tumour, as he had found very great difficulty in his attempt to get it all away, for there was very little room for both fingers and forceps in the urethral opening, and the danger of tearing the bladder was always imminent.—Mr. A. E. BARKER mentioned a case under his care at University College Hospital, in which the symptoms had led him to suspect vesical tumour, and he had made an exploration with the finger, but had found nothing. The symptoms had been aggravated thereby rather than relieved.—Mr. J. H. MORGAN gave the history of one case where he had performed the operation with some relief for six months, but the tumour recurred, and the patient died of hæmorrhage. He was anxious to learn from Sir Henry Thompson whether he had found tumours especially frequent in any one part of the bladder. It was common to localise them as most frequent in the trigone; and further he asked what he would recommend as treatment for a soft velvety, papillomatous growth which projected very little from the surface of the bladder. Did he consider, in such a case, treatment

advisable by caustics or abrasion or nitric acid?—Mr. ROGER WILLIAMS gave some particulars of a case in Middlesex Hospital of villous sarcoma of the bladder, which proved too large for excision, where the operation had had to be abandoned. The patient was still alive, but was slowly bleeding to death.—The PRESIDENT asked whether Sir H. Thompson's experience of cases in which no tumours were found on exploration, had furnished him with any certain clue to their diagnosis before operation?—SIR HENRY THOMPSON, in reply, said that the conviction was growing upon him strongly that there were many such cases as would justify operation which were not discovered, or in which operation was not attempted. He considered that cancerous cases should be eliminated by diagnosis before operation, and no operation attempted upon them, but that of the remainder about one half could be healed. He started from the hypothesis that all cases of vesical tumour would be fatal, sooner or later, by their hæmorrhage or their malignancy, and therefore regarded operation as the only possible method of cure. Of such cases and method of treatment, he admitted that three years ago he was comparatively very ignorant. Their most frequent history was that they came first under the care of a physician for hæmaturia; then after a time pain followed, and a surgeon was called n; he sounded the case and found no stone; the case passed on to another surgeon, who sounded again without finding stone; the hæmorrhage was sometimes supposed to be renal, and the patient was sent back to the country to die slowly of this chronic hæmaturia. That was one reason why so few specimens were to be found in the museums compared with the frequency of the disease. He had himself opened twenty-seven bladders in exploration, and had found only twelve tumours; but he considered that a very good result, for the results of the simple wound when the neck of the bladder was not cut through were very slight, and the wound healed rapidly. Four or five years of painful symptoms which were not clearly explicable on any other hypothesis certainly justified an exploratory incision. He had considered the use of nitric acid, and had come to the conclusion that it would do more harm than good. In two cases in which he had operated for papilloma, he had found a second operation on the remainder of the growth desirable; and that had given him the opportunity of placing his finger on the scar of his previous operation, and of finding that part of the coat of the bladder quite healthy. The mode of operation was admittedly difficult, and he showed many forms of curved and lateral forceps which he had found to give him much greater command of the whole surface of the bladder. He had never attempted to insert the forceps whilst his finger was in the blad er, for he considered that that would almost inevitably injure the neck of the bladder severely, and that was the point which he considered of the greatest importance to avoid, as rendering the healing of the wound very much more dangerous and lengthy. He described the plan he had found most successful—viz., to insert the forefinger first through the urethral incision, and mak e a complete examination of the interior of the bladder, so as to feel familiar with the exact position and size of any tumour present; then quietly to withdraw the finger and insert the forceps, guided only by the knowledge he had acquired, and make a decided nip with it with little or no traction; then to withdraw the forceps, reinsert the finger and remove, if necessary, with the fingernail, anything that the forceps had left incompletely divided. It was often best to leave the detached pieces of the tumour in the bladder for the moment, and remove them all at the end of the operation by the lithotomy scoop. If too much infrapubic pressure were employed, it made the depressed portion of the bladder feel like a tumour; this he attempted to avoid by keeping up the bladder-wall with a ball-probe alongside the forceps, but he was bound to admit that in one case the wall of the bladder had given way after an operation.

THE Epidemic Fund of one hundred thousand dollars, to be used in the discretion of the Presrdent of the United States, will be employed only in case of actual or threatened epidemic; in which event, the Secretary of the Treasury is empowered by the President to disburse the fund in aid of State and local board of health, to prevent the introduction or spread of the disease.

DONATIONS AND BEQUESTS.—Mr. Samuel Morley, M.P., has given one hundred guineas, additional, to the National Hospital for Consumption at Ventnor.—Mr. J. C. Jesse has given £100 to the Sussex County Hospital, Brighton.—The Royal Alexandra Hospital for Children, Brighton, has received £105 under the will of Mr. Trenham Old.—Mr. John Cosgrave has bequeathed £50 to the Royal Seabathing Infirmary, Margate; and £50 to the Kent and Canterbury Hospital.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 7TH, 1883.

WM. BOWMAN, F.R.C.S., F.R.S., President, in the Chair.

DISCUSSION ON EYE-SYMPTOMS IN SPINAL DISEASE.

DR. GOWERS stated that, in the memoranda on eye-symptoms in spinal cord-disease (BRITISH MEDICAL JOURNAL, March 24th, 1883, p. 591) which he had drawn up, at the request of the Council, to serve as a guide to the discussion, he had indicated certain points regarding two classes of symptoms—optic nerve atrophy and intra-ocular palsies—to which attention might with advantage be chiefly directed. They were topics on which all had some experience, and on which our knowledge was sufficient to define our ignorance, to indicate the new facts we most needed, and the directions in which they must be chiefly sought. Two general facts regarding these symptoms deserved mention at the outset; and the first was that they must be regarded as associations, and not effects, of the spinal lesion. The evidence of this was, that disease of the cord of any nature might exist in any degree, in any part, without the occurrence of these symptoms (if we except the rare paralysis of the dilators of the pupil in disease of the sympathetic tract in the cervical region of the cord); that the ocular symptoms, which might be absent when the cord-disease was advanced, might exist in extreme degree when such disease was in an early stage; and that, with the exception of the sympathetic symptoms just mentioned, we knew of no anatomical connection or functional mechanism by which the disease of the cord could produce the ocular symptoms. The second general fact was, that the ocular symptoms were the result of degenerative processes, and their presence showed that the cord-disease also was degenerative. This evidence, though often unnecessary, was of extreme value in cases in which acute processes masked the underlying degeneration, and in putting the observer at once upon the track of the morbid tendency from which a patient was suffering. The practical association of optic nerve-atrophy was chiefly with locomotor ataxy; in other spinal diseases, it was rare. As long as ataxy was believed to be a disease confined to the posterior columns of the spinal cord, the concurrence of a peripheral degeneration in the optic nerve was an anomaly; but recent researches, chiefly of Pierret (confirmed in part by Déjerine) had demonstrated the frequency of degeneration in the peripheral cutaneous nerves, and the occasional occurrence of degeneration in the optic centres. These researches had enlarged and, in enlarging, had altered our conception of the disease from a mere affection of the spinal cord to a "wide sensory neurosis," in which the optic nerve-atrophy fell into a definite place. But the occurrence of the peripheral spinal and central optic changes could not yet be detected during life, and we must confine our clinical study to the associations which we could recognise. The first question which presented itself was, what proportion of cases of atrophy were tabetic? The question practically was in what proportion of cases was there neither knee-jerk nor lightning pains, the two earliest symptoms. The question could only be answered by ophthalmic surgeons. We were not justified in assuming that any case would be followed by spinal symptoms if these were altogether absent at the time of examination. It was even more difficult to determine in what proportion of cases of tabes atrophy occurred because the spinal and ocular symptoms tended to separate the patients. It was probable that the proportion did not exceed 15 per cent. Dividing the course of tabes into three stages—(1) before affection of gait; (2) while the patient can still walk; (3) when he cannot walk except with the aid of another person—it was found that atrophy began twice as frequently in the first stage as in the second and very rarely in the third; but it was probable that a combination of the observations of ophthalmic surgeons and of physicians would show the excess in the first stage to be still larger. Not only did atrophy commence, but it advanced rapidly in the first stage, while the spinal symptoms often remained stationary, while affection of sight coming on in the later stages of the disease often had a less progressive character. The symptoms of atrophy, that is, the characters of the impairment of sight, probably presented more diversity than was generally admitted. While-colour vision was often impaired early, the field for white did not always present the limitation which was commonly said to occur before central vision failed. It might be unrestricted when there was considerable diminution of acuity of vision. It was improbable that the affection of sight presented many variations in its character, just as did the impairment of sensation in the leg. Irregular defects in the fields were of much interest in connection with the question whether the process of degeneration was ever more extensive behind the eye than in the termination of the optic nerve. Initial temporal hemiopia had been twice observed, and in one case

there was loss of the lower nasal quadrants, the former suggesting that the chief lesion was at the chiasma. In relation to the same point, another condition deserved notice, the occurrence of amblyopia without corresponding changes in the optic disc. In one case acuity of vision was reduced to one-tenth, without any visible change in the disc. Rapid increase in the failure of sight was sometimes met with, just as was sudden increase in the spinal symptoms. Was this attended with any variation in the appearance of the disc? Some discs were clear and excavated; others were occupied by a soft gelatinous-looking tissue. Did any difference in course correspond with this difference in aspect? In one case, with rapid failure, the grey tissue in the disc was very abundant. In other spinal diseases, atrophy was very rare; it was occasionally seen in insular sclerosis, still less frequently in lateral sclerosis, never in progressive muscular atrophy or myelitis. Probably, this was due to the fact that these affected chiefly the motor, tabes the sensory tracts. In general paralysis of the insane, which, though not strictly speaking a disease of the spinal cord, was often attended with spinal changes, atrophy was more common. The second part of the subject was the intra-ocular paralyses associated with spinal disease—accommodation, the associated contraction of the pupil, the light-reflex contraction, and the skin reflex-dilatation. All these were subserved by centres lying beneath the aqueduct of Sylvius; but the path of the last was circuitous, compressing the cervical part of the spinal cord and the cervical sympathetic. Like atrophy, the intra-ocular palsies were as common in tabes as they were rare in other diseases of the spinal cord. Loss of the light-reflex alone was most common, then total paralysis, and the rarest condition was palsy of accommodation without loss of the light-reflex. Of seventy-two cases of primary degenerative ataxy, the action of the intra-ocular muscles was normal in only six. There was some defect in sixty-six. The light-reflex was alone lost in sixty-eight, and in seven others it was impaired: thus, this was totally lost in two-thirds, and affected in three-quarters of the cases of ataxy. In the remaining eleven cases (15 per cent. of the whole), the pupil did not contract on an effort at accommodation, and in most of these accommodation was also lost. In two cases, accommodation was lost in one eye, and the action to light in both; in one case, accommodation was lost in both eyes, action to light in both; in two cases, accommodation was lost, and action to light was unaffected. The percentage with intra-ocular palsies was, in the first case of tabes, eighty-four; in the second, ninety-three; in the third, one hundred. Thus, the symptoms were usually early, but there was a manifest tendency for the cases which escape at first to appear later on. As a rule, there was no correspondence between the pupil-symptom, the size of the pupil, inequality, or irregularity, and the spinal symptoms; but in one case of tabes the pupil was smaller on one side, and on this there was unilateral sweating on the head and face, probably from sympathetic paralysis. The reflex dilatation on stimulation of the skin (to the loss of which, when the light-reflex is lost, Erb has called attention), could not, with all care, be invariably obtained in persons beyond middle age. Though usually with the light-reflex, it sometimes persisted, especially when the pupils were larger. All these intra-ocular palsies were excessively rare in other diseases of the spinal cord, with the exception of general paralysis of the insane. The instances of this disease in hospital out-patients presented slighter mental changes and a more progressive course than the asylum cases. In them the impairment of the intra-ocular muscles was almost as frequent as in tabes, and present in two-thirds of the cases; it was usually loss of the light-reflex. Intra-ocular palsies might occur without spinal disease, and were not preceded by constitutional syphilis, as Mr. Hutchinson had shown in the case of ophthalmoplegia interna. Of fifteen such cases, there was a history of constitutional syphilis in seven, and in two others of suspicious symptoms. The fact was of considerable interest in connection with the frequency of the symptom in tabes, and the supposed relation of syphilis to the latter disease. The pupil-symptoms were doubtless, in these cases, due to a degenerative process; but were as little justified in denying, as we should be in affirming, any relation to syphilis. It was a question of fact, and not of theory, what syphilis could or could not produce.

HUGHLINGS JACKSON, after remarking on the great excellence of the paper, spoke of the great complexity of tabes dorsalis. The symptoms were most various; joint-affections, gastric crises, very different morbid affections of the eyes, bladder-symptoms, etc. Of the so-called typical symptoms, one or more might be absent; ataxy was often absent; with ataxy, the knee-jerks might be lost. In one case of seventeen years' duration, the Argyll-Robertson symptom was not found. Some of the so-called typical symptoms were discovered in other diseases. The commonest pupillary condition was seen in some cases of general paresis. The knee-jerks were absent in many different morbid conditions, one of the most important of them being diphtherial paralysis, a disease which, superficially regarded, had sometimes a great likeness to locomotor ataxy. There were degrees of some, at least, of the symptoms; no ataxy, degrees of ataxy, and, so to speak, a degree beyond ataxy, and inability to walk at all. If there were not degrees of pupillary conditions, there were various such conditions. The width of the symptomatology was exceedingly different in different cases. There might be the Argyll-Robertson phenomenon with no other definite nervous symptoms, and when this was so, the nature of the case, beyond perhaps the vague diagnosis of nerve-degeneration, could not be concluded upon. A case of tabes without ataxy might present a far wider symptomatology than one with ataxy. Dr. Hughlings Jackson, admitting the frequency of eye-symptoms with disease of the spinal cord, knew of none from lesion of it, excepting when that lesion was in the cilio-spinal region, as, for example, in a section of half the cord from a stab with a knife (contraction of pupil on the same side, and narrowing of the ocular aperture). To statistics of optic atrophy, in its relation to other tabetic symptoms, he could offer nothing definite. The Argyll-Robertson condition was often found in cases of optic atrophy (tabetic), not only when sight was slightly impaired, but when there was bare perception of light; in one case, he had found it when the loss of sight was absolute. The pupils enlarged when the patient "made believe" to look at the clouds, and contracted when he "made believe" to look at his fingers held near him. On the other hand, with considerable impairment of sight, the pupils might remain contractile to light. To illustrate the varying width of association of optic atrophy with other tabetic symptoms, he mentioned five cases: (1) atrophy of one optic nerve and then of the other (green appearing grey, and red reddish brown), pupils acting to light, gait good, jerks present; in short, no other symptoms except lightning-pains; (2) optic atrophy with the Argyll-Robertson conditions, and without pains; and for the rest (saying nothing, however, of colour-perception, which was not tested) like the former case; (3) like 2, but with pains also; (4) optic atrophy (blind eight years) Argyll-Robertson condition, gait good, on knee-jerks; (5) a much more rapid case; pains one year, blindness complete, except for bare perception of light, in six months; could only just stand (loss of sight, no doubt, contributing to this disability); no knee-jerks. Dr. Hughlings Jackson then spoke of cases of double optic neuritis, with absent knee-jerks. A woman had bare perception of light, reeling gait, no knee-jerks; after mercurial inunction and iodide of potassium, she recovered, except that, when last seen, she had no return of the knee-jerks. A girl, seen with Mr. Bowman, had double optic neuritis, reeling gait, no knee-jerks then nor afterwards; later, right hemiplegia and aphasia; there was no necropsy. A man, who died with tumour of the left cerebral hemisphere, and had aphasia and right hemiplegia; both knee-jerks were present at first, both lost later; no morbid changes were found in the spinal cord by Dr. James Anderson. Dr. Hughlings Jackson had seen double optic neuritis with absent knee-jerks, and no, or at any rate, no other, localising symptoms. He had nothing to say as to the nature of any associations of optic neuritis with any morbid conditions answering to those of the knee-jerks. The jerks were present in some cases of tumour of the cerebellum, with double optic neuritis, in one case of a lateral lobe, in another of the middle lobe (necropsies). He then spoke of diphtherial paralysis. He had been correctly reported to have said that this disease was owing to a morbid affection of the sympathetic system. What he ought to have said—all that he really held—was, that the ocular, the palatal, and the rarer circulatory symptoms (great slowness of pulse) of this disease, were morbid affections of parts supplied through ganglia of the sympathetic; he believed the spinal cord, as well as higher parts of the nervous system, to be morbidly affected in this disease. He had not seen a case of so-called diphtherial amaurosis in a stage when the paralysis of the ciliary muscle was complete; in some cases, where accommodation was only weak, he thought the pupils acted well to light, whilst action of them during accommodation was at least imperfect. In one case, the knee-jerks did not reappear until one year after all the symptoms of diphtherial paralysis had gone. Dr. Hughlings Jackson then went on to speak, by stating cases, of the very different abnormal intra-ocular motor conditions met with in tabes, or existing along with one or more of the so-called typical symptoms of this affection. (1.) In one case, there was sudden and complete loss of both pupillary activities and of accommodation on but one side; gait good; no knee-jerks; there had been lightning pains four or five years; the other eye, carefully examined for the Argyll-Robertson condition, was

normal. (2.) The same condition as in the last case, except that the so-called good eye presented the Argyll-Robertson symptom. This patient, a healthy-looking intelligent sea-captain, had no other symptoms, mental or physical; hence the feature of his case could only be guessed at. (3.) Argyll-Robertson condition on but one side; ataxy, lightning-pains, no knee-jerks. (4.) A woman; loss of action of one pupil to light and during accommodation, accommodation itself being absolutely perfect (examined by Mr. Couper); the pupil of the other eye was normal; that eye had all her life been slightly defective; no other symptoms of any sort were discoverable, except the most significant one of absent knee-jerks. (5.) The same ocular condition on both sides (examined by Mr. Couper); ataxy, lightning-pains, no knee-jerks. (6.) The same ocular conditions, except that accommodation was slightly weaker than usual at the patient's age (examined by Mr. Nettleship); gastric crises, ataxy, lightning pains, no knee-jerks. (7.) Both pupils acting in no way, accommodation of each eye good; ophthalmoplegia externa; the only further tabetic symptom was absence of one knee-jerk and nearly loss of the other. Dr. Hughlings Jackson expressed his belief that Dr. Gowers's able paper would help greatly in the precise and methodical investigation of tabes dorsalis.

A paper on Ocular Symptoms occurring in General Paralysis of the Insane, by Mr. W. BEVAN LEWIS, was read by the SECRETARY. By the systematic examination of a large number of cases, the author had been led to the following conclusions. (1) A loss of reflex dilatation of the pupil to sensory stimulation occurred in the greater number of cases of general paralysis of the insane. (2) Next to this condition, the most frequent accompaniment of the disease was loss of pupillary reaction to light (reflex iridoplegia). (3) In 23 per cent. of the cases, the movements on accommodation were completely lost; and (4) in a few cases, cycloplegia was associated with this. (5) Ophthalmoplegia interna was found only in advanced stages of the disease; in one case, it appeared to commence as reflex iridoplegia. (6) With the exception of one case, reflex iridoplegia was always present when the movements on accommodation were impaired or lost. (7) Spinal symptoms (such as absence of patellar reflex) were by no means especially associated with the more grave ocular troubles. Finally, Mr. Bevan Lewis concluded, judging from the nature and progress of the disease, its duration, the history of cases in the earlier stages, and the condition of the paralytic in the more advanced stage, that the sequence of morbid phenomena occurring in the iris in this disease was this; that there was, first of all, loss of reflex dilatation to cutaneous stimulation; that, next, the action to light was lost (reflex iridoplegia); and that, in the final stage, ophthalmoplegia interna was developed, and became in the end complete.

Dr. SAVAGE was not prepared to bring forward any statistics bearing on the question. He believed that the examination of the optic disc would lead to a considerable increase in our knowledge with regard to general paralysis of the insane. When, now a good many years ago, he had first begun to examine patients suffering from this disease, with the ophthalmoscope, the results had been negative or unsatisfactory. In conjunction with Mr. Henry Power, he had made careful observations on a large number of these patients with the sphygmograph and the ophthalmoscope, but the results had been so purely negative, that it had not appeared worth while to make any permanent record of them. In recent years, however, he had gradually come to appreciate certain changes which occurred in the optic discs, not of all, but of a considerable number of patients suffering from general paralysis. In one class of these patients, tabetic symptoms were prominent, and sometimes preceded the other symptoms of the disease by many years; for instance, in one case tabes had been in existence for ten years before the development of general paralysis led to the admission of the patient into Bethlem Hospital. In such cases as these, changes in the optic disc were commonly found; he had, however, only recently learnt that these changes were not confined to the patients who presented tabetic symptoms, but that they occurred also in another class of patients—those who presented symptoms of lateral sclerosis. In this connection, the question arose whether this lateral sclerosis was secondary to degeneration of the motor tracts in the brain. He had met with a few cases of general paralysis of the insane occurring in young single men of steady habits, where lateral sclerosis developed secondarily to intellectual symptoms, and in these cases there were changes in the optic discs. It was now generally recognised that "general paralysis" was a wide term, embracing a number of separable conditions; in making this subdivision, a careful attention to alterations in the optic discs and in the reflex phenomena would be of great assistance.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MAY 4TH, 1883.

PROFESSOR HUMPHRY, M.D., F.R.S., President, in the Chair.

A New Clamp (Benham's) for the Treatment of Hæmorrhoids.—Mr. CARVER showed this clamp, which he had had occasion to use several times lately in the operation for hæmorrhoids. He referred to other methods of treatment, such as ligature and cautery, and the drawbacks attending the use of them. After explaining the action of this instrument, and the method of using it, he gave a short account of some cases in which he operated with good results. He wished to show that this clamp superseded both ligature and actual cautery, and that the pain caused by its use was trifling in comparison with the other modes of removing piles. Although in two of the cases he had used the actual cautery in addition to the clamp, he meant in future to use the clamp alone, feeling confident that if properly applied there was no fear of hæmorrhage.—The PRESIDENT agreed to this clamp being the best suited for the operation. He had operated on two similar cases, one with the ordinary clamp and cautery, the other with Benham's clamp; the latter was by far the most successful and the least painful. Although the use of the écraseur was sometimes followed by hæmorrhage, he had never had hæmorrhage after the clamp; this he believed, was due to the portion of tissue between the edges of the clamp being completely crushed and killed, and the vessels thereby occluded.—Mr. SHEILD drew attention to the importance in operating of removing the clamp carefully without tearing the crushed portion, or hæmorrhage was liable to occur. Great power could be employed with but the best instrument would break if too much tissue were included.

Anteflexion of the Uterus.—Mr. GRIFFITH (London) showed a preparation exhibiting extreme anteflexion of the uterus, the anteflexion being maintained and perhaps caused by adhesions. The patient, from whom it was taken, exhibited no symptoms.

Fibrinous Polypus in the Uterus.—Mr. GRIFFITH also showed the specimen, which was removed from a woman, whose last pregnancy was stated to have occurred two and a half years previous to her death, which was not due to this cause.

Acute Necrosis of the Orbit.—Mr. CARVER read the notes of the following case. A strong looking young man, aged 21, a schoolmaster in London, came into the country to spend Easter. He was quite well up to March 28th; on that day the left eyelid began to swell and was painful; the swelling increased rapidly, and the eyeball became prominent. An incision was made into the swelling and a little "fluid" escaped. Next day, another incision was made and pus escaped. On the 30th, he complained of pain at the top of his head. On admission into the hospital, the left upper eyelid was enormously swollen and sloughy, and the tissue around œdematous. The globe of the eye protruded, and the conjunctiva was much chemosed, so that the cornea was hardly visible. There was intense pain about the parts. Temperature 103°. Pulse 120, hard, and full. The skin was dry and hot. The patient had no delirium, but was quite rational. A poultice was ordered, calomel and colocynth given, and the chemosed conjunctiva scarified. On the 31st the pain was better, the discharge from the lid profuse and offensive; slight delirium at night. About 7 P.M. he became quite delirious with muscular twitchings, and moaned loudly. Temperature 104°. Pulse 124. He was put under chloroform, and the finger was passed through the slough in the lid backwards to nearly the apex of the orbit; the orbital plate and ridge were felt bare and devoid of periosteum. On April 1st, he was delirious all night, and died in collapse at 8 A.M. *Post mortem*, the whole of the orbital vault was found to be dry, bare, and of yellowish colour; the frontal sinus were filled with pus, and the lining membrane acutely inflamed. The meatus and bones of the nose were healthy. The dura mater at the spot corresponding with the middle of the orbital plate was thickened, adherent, and sloughing. All the convolutions of the brain were covered with a tenacious offensive pus. The superior longitudinal sinus was filled with disintegrating pus. Mr. CARVER remarked upon the acute course of the disease. The patient was taken ill on March 26th, and died April 1st. There was no history of syphilis or of injury. For years he had been subject to discharge from the left nostril, and the cavity often felt stuffed up. The patient attributed the attack to the cold wind.

A Malignant Tumour in the Neck.—The PRESIDENT showed a growth which he had removed from the neck of a man about 40 years old. It was situated beneath the sterno-mastoid muscle, was very firmly adherent to the subjacent structures and to

vessels. A portion of the internal jugular vein was removed with it, firmly attached to its posterior and inner surface.

Cystic Growth in the Axilla.—The PRESIDENT showed a multilocular cystic growth removed by Mr. Wherry from a boy. It grew in the inner wall of the axilla, and extended some distance up towards the joint. It contained a large quantity of clear fluid. He regarded it as, most likely, congenital, and alluded to the pathology of these tumours, and their probable connection with some morbid development of the lymphatic system.

REVIEWS AND NOTICES.

THE HARVEIAN ORATION, 1880, delivered June 25th, by JOHN W. OGLE, M.D.Oxon., Fellow of the Royal College of Physicians, Consulting Physician to St. George's Hospital (with additional Notes and an Appendix). London: 1881.

IT is certainly somewhat late to notice the Harveian Oration for 1880, when we shall shortly be expecting to receive that for 1883; but the author must bear part of the blame for this tardiness, for it was not printed till nearly two years after it had been delivered. For our own part, we must mention as our apology that it reached us just when the JOURNAL was especially occupied with the business of the Association, and that, since that time, we have been prevented by various other matters from giving it our attention. However, the delay is of less consequence than might be supposed, and, in fact (for a reason which will appear below), we are really better pleased that we did not notice it earlier. It is in several respects different from the orations that have preceded it, and we venture to think that it is likely to have a more permanent interest than most of them; for which reason we regret that it has not been published, but only printed for private circulation. The peculiarity of the oration, and its special interest, consist in the copious notes and illustrations, partly original, partly extracted from a great variety of authors, both ancient and modern. There are probably not many members of our profession who could have put these together. The oration itself is somewhat discursive, and the connection between some of the parts will, perhaps, appear to most readers to be rather slight. We will not, therefore, attempt to analyse it, but will content ourselves with noticing two or three of the points introduced by the author.

In connection with Harvey, and at the present time, it is (as Dr. Ogle says) "not unseasonable" to say something on the subject of experiments on living animals, commonly called by the offensive name of vivisection. Accordingly, he discusses this topic both in the Oration and in the appendix, and we heartily wish that all the writers who have taken part in the controversy had treated it in the same candid, philosophical, and religious spirit. He admits, first, that the practice has really been very much abused, and has naturally caused recoil; secondly, that the motive with many opponents is a very natural and right feeling of humanity." But, admitting this, he contends that "the objections have been most exaggerated and unreasonable, and many of them altogether unfounded."

He examines in detail, and (in our opinion) answers satisfactorily, the three principal assertions of his opponents, viz., "1. That man has no right to use animals for purposes of scientific research, or to put them to suffering in order to save himself pain, or to acquire knowledge which may be used for his benefit. 2. That no valuable knowledge has been gained by experiments on animals, and that those who have added the most to our stock of information have not practised vivisection. 3. That vivisection (or any experiments on living animals) is so demoralising in its tendency, that such practices should in every way be discountenanced, and should be entirely forbidden under any circumstances whatever."

In the same excellent spirit he discusses the more difficult questions of final causes, design, and evolution; quoting (among other passages), the words of Bacon, "that a little philosophy inclineth man's mind to atheism, but depth in philosophy bringeth men's minds about to religion;" and contending that the contradictions between religion and science are more apparent than real, and that the doctrine of evolution does not dethrone or ignore Divine sovereignty, but only throws the original creative power some steps further back.

There is only one other subject mentioned in Dr. Ogle's Oration which we have time to notice, and we shall do so with very mixed feelings; for while we are sorry to be obliged to differ from one for whose opinions we have so genuine a respect, we are by no means sorry to have another opportunity forced upon us of recurring to the state of medical education at Oxford. We do not intend to go into the whole question; but, as Dr. Ogle defends the present system, and is apparently well satisfied with it, we will try to answer some of his remarks; and as, again, in his mention of the "Lost School of Medicine," he alludes especially to this JOURNAL, we feel bound to accept his challenge. Our readers will easily believe that it is no light matter to be charged by a person of Dr. Ogle's high character with "either gross and culpable ignorance, or a calumnious and vindictive spirit" (p. 59); but from this sentence we must be content to appeal to the general body of the profession. We do not care to occupy our space with defending the name of the "Lost School of Medicine," which Dr. Ogle dislikes (though we do not consider that any defence or apology is required); but shall be content if we can be considered to have established our main proposition, viz., that the endowments intended for promoting the study of medicine at Oxford have not of late years been properly used, and that the present state of medical science and education (especially when compared with what is doing at Cambridge) is not creditable. Dr. Ogle compares the state of physical and biological science as it existed thirty years ago, with that at the present time, and "reflects with pleasure upon the teaching appliances and advantages now offered by means of the lecture-rooms, laboratories, museum, etc., the degrees in physical and natural science conferred, and the general progress and interest in such subjects." All this is very good, but we cannot see that it is any answer to our allegation, or that the study of physical and biological science can properly supersede or is incompatible with that of the subjects more immediately connected with medicine. No doubt, if Dr. Matthew Lee, Lord Lichfield, and Dr. George Aldrich had been alive when this state of things prevailed, they would have been highly gratified; but is there any reason to believe that they would have thought that their proposed endowments in favour of anatomy and medicine were therefore unnecessary? Or, if they could return to earth, and were to ask what their professors had been doing lately, and what had become of their endowments, can we conceive that they would be satisfied with the answer which they would get? It would seem that the governing body of the University is not quite satisfied with this total neglect of clinical instruction at the Radcliffe Infirmary, as it has been decided within the last few months to appoint, out of the funds of the Lichfield Trust, a physician and surgeon at that hospital to clinical lectureships in medicine and surgery respectively.

Dr. Ogle tells us (p. 62) that, "at a meeting held in London of above thirty medical graduates of Oxford, in 1878, to consider the desirability and feasibility of establishing a medical school *in the ordinary sense of the word* [the italics are our own] at Oxford, the proposal was negatived by an overwhelming majority." Without undervaluing the authority of this meeting (though we should have liked to have known more about it), we may be allowed to oppose to it "the memorial for the restoration of the medical faculty at Oxford which was signed by upwards of *two thousand* members of the medical profession" (BRITISH MEDICAL JOURNAL, Dec. 9, 1882, p. 1160). We do not, however, undertake to specify exactly how far a complete medical school, "in the ordinary sense of the word," could ever be established at Oxford; we only contend that much more might be done for medical education than has been done for many years past.

"In testimony that the [present] system.....has not been inoperative or unsuccessful," Dr. Ogle "alludes to the fact that the medical graduates of Oxford enjoying posts of high trust in the hospitals and schools of the land are.....very considerable in number." We should always expect this to be the case, even under the present system, when medical education is systematically neglected; and we believe that, when this state of things is amended, the Oxford medical graduates connected with hospitals and medical schools will be still more numerous.

Lastly, Dr. Ogle says that "what has been done *to prepare men in the best way through this channel for the clinical schools of the metropolis* [the italics are Dr. Ogle's], is far beyond expectation." If this was true in 1880, it can hardly be considered correct at present; or, at any rate, it seems hard to reconcile the statement with the following passage in the *Guardian* correspondent's letter from Oxford (May 23, 1883, p. 761): "At present, the Oxford scientific course does not seem to be regarded by the highest medical authorities as of any value as an introduction to that profession. Whether Oxford can or should ever have a medical school on the scale of Edinburgh, or even of Cambridge, is a point upon which doctors disagree." This latter sentenc is encouraging, as tending

to show that the good people of Oxford do not agree with Dr. Ogle's optimist views, but are beginning to see that the systematic exclusion of medicine from the curriculum of the University has been a disastrous mistake, resulting in a complete failure, which the next generation will have to repair.

We have thus noticed in detail Dr. Ogle's remarks on "The Study of Medicine at Oxford," which seem to us to have been introduced without any necessity, and which (at least, in our opinion) are hardly calculated to render the present state of things in that noble University more palatable to those of her sons who have her best interests at heart. We would have gladly noticed some other points in Dr. Ogle's very interesting book, which is not a mere pamphlet like most Harveian and Hunterian Orations, but a volume of more than two hundred pages, in which those of our readers who are so fortunate as to obtain a copy, will find a great deal of curious and instructive reading. We must not, however, omit to point out another peculiarity, which will be valued by those who like to welcome the union of art with science. We have, as a frontispiece, an engraving of Mr. Yearne's picture of "Harvey with the Two Children of Charles I at the Battle of Edge Hill, 1642;" and at p. 80 there is a woodcut of the reverse of a bronze Roman medallion in the British Museum, representing the introduction from Epidaurus into Rome of Æsculapius, under the form of a serpent, about B.C 291.

SAINT THOMAS'S HOSPITAL REPORTS. New Series. Edited by Dr. ROBERT CORY and Mr. FRANCIS MASON. Vol. xi. London: J. and A. Churchill. 1882.

THIS volume contains the valuable Medical and Surgical Reports for the years 1880 and 1881. These reports contain a record of the diseases and cure, relief or death, of the 7,848 patients who passed through the hospital in the two years. The medical reports comprise the usual "General Table of Diseases," and to these Dr. Gulliver has added several special tables, showing the cases of infectious disease arising in the hospital; the complications of acute rheumatism; the causes and complications of chorea; the cases of abdominal aneurysm and of empyema; the fatal cases of cerebral tumour and cerebral hæmorrhage and softening, of intestinal obstruction, and of ulcerative endocarditis. The last named table, which is very full, will well repay a careful study. We gather from it that, in six out of the eight cases, there was a distinct history of acute rheumatism at some long antecedent date; of these six cases, the mitral and aortic valves were both affected in three cases, the mitral only in two cases, and the aortic only in one case. Of the two cases in which there was no history of rheumatism, it is worthy of remark, that in both, and only in these two, the valves on the right side of the heart were affected, the tricuspid in one case, and the pulmonary in the other. This may be only a coincidence; but in the series of cases published by Dr. Goodhart in the last volume of the *Transactions* of the Pathological Society, in the four cases in which there was a distinct history of rheumatism, there does not appear to have been any active disease on the right side, though, in one case, "the tricuspid was narrow." The cases in these tables, however, do not appear to lend any support to the main contention of Dr. Goodhart's paper, which was that ulcerative endocarditis occurred in groups of cases.

The report of the surgical registrar seems to show that the conditions are, on the whole, favourable for the treatment of wounds. No case of pyæmia arose in the hospital in 1880, and only one in 1881; for we think that the second case recorded in that year cannot be fairly set down as other than an instance of autochthonous disease. In these two years, however, seventy-three cases of erysipelas arose in the hospital, resulting in seven deaths, of which six occurred in 1881.

We also notice that the death-rate among the surgical patients, which in 1878-79 had fallen to 6.0 per cent., rose to 6.2 per cent. in 1879-80, and to 6.9 per cent. in 1880-81. Is it possible that the sanitary condition of the hospital is deteriorating? We believe not, and that this small difference must be attributed to causes outside the control of the management.

The reports of the registrars are preceded by a series of essays of inferior interest. Perhaps the most valuable of these is Mr. Nettleship's clinical lecture "On Cases of Injury to the Optic Nerve." It deals with the rare cases where an injury to the head causes "fracture of the roof of the optic canal, with crushing of and hæmorrhage into the nerve, or, perhaps, occasionally tearing of the nerve on the brain side of the canal." The nerve never regains its function, and, after a period varying from a fortnight to six weeks, signs of atrophy of the optic disc may be noticed; but before this, the state of the pupil is very characteristic of disease of one optic nerve. "When both eyes are equally lighted, it is usually a little larger than its fellow; when the blind eye is shaded and lighted, its pupil remains unaltered (absence of direct reflex action). When the sound eye is shaded and lighted, the pupil of the blind eye usually acts quite well (presence of indirect reflex action)." The "associated action," that is, the contraction during the accommodation, remains, at least for a time.

Among the other essays in the volume, we may mention that by Dr. Ord, "On Some Cases of Paroxysmal Pyrexia simulating Ague," which is rather disappointing, owing to the absence of any adequate discussion of the cases, which in themselves are very interesting. Dr. Stone has some suggestive remarks "On the Use of the Continued Current in Diabetes," though the treatment does not appear to have been productive of any great amount of good in the two cases recorded. The same physician, in connection with Dr. Kilner, also contributes a paper "On Measurement in the Medical Application of Electricity," which he read before the Society of Telegraph Engineers and Electricians, which gives an account of some experimental researches at that time not complete. A careful and elaborate paper on "Congenital Hypertrophy" is also worthy of mention it is illustrated by drawings of a very unusual case. The volume contains an appreciative biographical notice of the late Dr. Peacock it is signed by the easily recognised initials J. S. B.

REPORT ON EPIDEMIC REMITTENT AND INTERMITTENT FEVER IN THE CITY OF AMRITSAR IN THE AUTUMN OF 1881.

IN the JOURNAL of the 24th of March in this year, the reports o Surgeon-Major Bennett, Deputy Sanitary Commissioner, Eastern Circle of the Punjab, were noticed. By the kindness of Surgeon General Townsend, we have been favoured with a copy of a note on Dr. Bennett's reports, which gives the facts of this destructive epidemic of malarial fever succinctly, with precise details of the incidence of the mortality from the fever on persons of different ages contrasted with the incidence of cholera, which prevailed in the city simultaneously with the fever.

Dr. Bennett gives the number of deaths from fever, between th 20th of August and the 31st of October, at 6,859, out of a populatio of 149,660, equal to an annual death-rate of 229 per 1,000. The epidemic followed an almost unprecedented fall of rain, by which th locality was flooded, the whole population being almost simultaneously attacked. Scarcely a person, native or European, escaped Nine-tenths of the shops were closed, and business was suspended Although the fever was essentially malarial in its nature and origin it was of a severe type and very fatal. The *sequelæ* were also of th usual malarial kind: enlarged spleen, albuminuria, general dropsy chronic dysentery, and diarrhœa. The fatality of the fever wa aggravated by sewage-pollution, by overcrowding, by scanty and in sufficient clothing and deficient food; in other words, by poverty and all it brings in its train. The mortality fell with the greatest severity on the Mahommedan section of the population, composed chiefly of Kashmeri shawl-weavers; and it is noted that the lo castes suffered least. The mortality among children was excessive high; 3,531, out of a total death-rate of 6,859, or more than one-hal were under twelve years of age. The mortality of infants under on year of age was greater than that at any other time of life, bein equal to forty per cent. of the number of infants living at the time the last census. Between ten and forty the mortality was comparatively moderate; after forty it rose, and attained a high figu among old people; at all ages, the mortality was greatest amon females.

Simultaneously with the fever which prevailed at Amritsar, an caused the terrible mortality described above, cholera was also pr sent. Dr. Townsend calls attention to some points of interest, as the incidence of mortality from this disease on different classes an at different ages. A very small number of infants died from choler in contrast with the enormous mortality from fever at the sam period of life. This curious fact is in accordance with statisti collected elsewhere in the Punjab, showing that infants at the brea are less liable to cholera than persons at any other age. The mo tality from cholera at Amritsar of children between one and fi years of age was greater than among older children and adults und sixty. But the highest cholera mortality was among people ov sixty. We have just seen that more females than males died fr fever, the reverse was the case as regards cholera; for, at all perio of life males suffered much in excess of females. The Mahommeda suffered most severely, both from fever and cholera; but, compar

with the Hindus, while the fever ratios of the two classes were in the proportion of 1 to 1.5, the cholera ratios were in the proportion of 1 to 3.6. Low castes suffered, as we have seen, much less than the Hindus from fever, but much more severely from cholera, Dr. Townsend, remarking on the above facts, observes, that "this analysis of the incidence of mortality from fever and cholera, on persons at different periods of life, and on different classes at Amritsar, seems to shew that there is a very radical difference in the nature of the two diseases, and on the conditions that favour their prevalence"; which Dr. Townsend illustrates by other facts pointing in the some direction. Both the medical and engineer authorities agree that the cause of this destructive outbreak of malarial fever was clearly traceable to the water-logging of the soil during the monsoon season, and it is satisfactory to know that energetic drainage-operations are in progress to prevent a repetition of the visitation of which Dr. Bennett has given so instructive a narrative.

L'Étude et les Progrès de l'Hygiène en France de 1878 à 1882. 8vo. Pp. 546. Paris: G. Masson.

The Société de Médecine Publique et d'Hygiène Professionelle of Paris, and the Sociétés d'Hygiène of France, Bordeaux, and Havre, have, within the last few years, done much to elicit a popular interest in sanitary matters; although, from that ineradicable tendency of the national character to ignore all that has been done by foreigners, and to believe that Frenchmen are the pioneers in every scientific work, the progress made has not been in proportion to the zeal and intelligence exerted. Last year, the Société de Médecine Publique instructed the secretaries, Drs. Napias and Martin, to collect, abstract, and classify, all the more important papers on matters affecting the public health published in France during the last four years, but without note or comment. Most of them had already appeared in the *Revue d'Hygiène*, but it was rightly thought that their reissue in a single volume would be useful as a retrospect, and a fresh point of departure.

In the first chapter, on the Hygiene of Childhood is an account of the various efforts of the State and of the numerous benevolent societies for the amelioration of the circumstances of the children of the poor, especially of such as are actually or morally abandoned by their parents. The latter, including "street-Arabs," and the children of the criminal classes, are mostly placed out in a kind of reformatory, and brought up to agriculture or useful trades. These institutions, which exist only in connection with the metropolis, now contain over 2,700 inmates. Among the infants under one year of age in the department of the Lower Seine, under the surveillance of the State, the mortality is at present but 7.76 per cent., or less by two or three times than that which is found among those of the same class at their own homes.

Next follows an elaborate report of a commission appointed to consider the construction and arrangements of public elementary schools, school furniture, and the influence of altitudes on health, and gymnastics for girls and infants, properly illustrated by plans and other figures.

Chapter II, on the Hygiene of Foods, describes the arrangements of the municipal laboratory of Paris, and the results of the analyses made in 1881, revealing a wide-spread practice of adulteration. Other towns have, within the last two years, established similar laboratories.

The stringent laws against the supposed dangers of trichinosis from the consumption of American hams and bacon were passed in opposition to the resolutely expressed opinion of the Society; and their needlessness is shown by the fact that, though forty million kilogrammes of such food were yearly consumed in France, the only case of trichinosis recorded was caused by home-fed meat. Figures are given of the trichina and five similar parasites from different animals. The various adulterations and metallic contaminations of articles of food and drink are considered in order, and the laws and police-regulations bearing on the same are given at length.

Chapter III is entitled Industrial, Professional, Naval and Military Hygiene; but, except as regards the army, the information is very scanty. The circular of the prefect of police on the management of factories in which the workmen are exposed to the risk of lead-poisoning, is given in full, and the ingenious mechanism adopted by M. Chain in his extensive printing offices for the prevention of accidents from machinery, is described and illustrated in detail.

Plans are given of the existing type of barrack, with ill-ventilated median corridors and numerous small wards, and of the same reconstructed as suggested by the eminent architect and sanitarian M. Tollet. The cavalry barracks at Bourges, which have been constructed throughout on the Tollet system, are described and figured, with their isolated pavilions of one story and ogival section, combining the greatest possible centre-space with the least area; and M. Tollet's principles are explained in his own words. A bed devised by Lieutenant Bertillon, which, nicely balanced on its centre of gravity, can be placed erect against the wall, making by day a stool and table, is well worth considering, wherever the same room is occupied day and night.

Chapter IV treats of private houses and unsanitary dwellings. It is a fact that the "improvements" in the streets of Paris, initiated by the Emperor Napoleon III, and carried out by M. Hausmann, regardless of cost, while imposing the heaviest burdens on the rates, have aggravated the overcrowding and misery of the lower classes, until the present state of their dwellings is almost without a parallel in any civilised country. Dr. Napias has recently called attention to the habitations of the poor in the *Revue d'Hygiène*, and the writers of the present chapter strongly insist on the utter inefficiency of all existing legislation, giving, at the same time, the text of a Bill drafted M. by Devillebichot, and of another by M. Martin Nadaud, having for their aim the establishment of standing commissions in every town, and the improvement of "unhealthy areas," after the manner of our Artisans' and Labourers' Dwellings Acts. Plans, elevations, and estimates of the cost of model dwellings ranging from £160 to £400 the pair, already erected in several quarters, and remarks on the choice of materials and the examination of the air of rooms, conclude this section.

Chapter V opens with an account of the remarkable observations made by M. Miquel at Montsouris, Montparnasse, and elsewhere, on the presence of cryptogams and bacteria in the atmosphere of towns and country under different circumstances of season and weather, with two full pages of illustrations. No fewer than forty pages are devoted to the consideration of the sewerage and *les odeurs de Paris*, both of which are at present a disgrace to its boasted civilisation, and will continue to be so until the authorities can be brought to believe that the expenditure of one or two millions sterling on an entire reconstruction of the sewers, whether on the separate system so successful at Memphis, or the *tout à l'égout*, carried out perfectly at Frankfort, and more or less so in most English towns, will in the end be far less burdensome than the several thousand cases of typhoid and diphtheria annually, and the cost of death, disease, and pauperism. Some few, both of physicians and of engineers, entertain right views on the question of sewerage, but we regret to see so much space devoted to such fancy methods of treating fæcal matters as the systems of Goldner, Berlier, Bonnetin, and to *vidanges automatiques*, *appareils mobiles*, and *tinettes filtrantes*. The sewage-farm at Gennevilliers seems as little injurious to health as that at Croydon, and to be commercially a success.

Heating, lighting, and ventilation of public buildings are discussed at some length, and illustrated by a description of the new Hôtel de Ville. Prisons, mortuaries, and cemeteries are considered in turn; and a clear explanation is given of the new arrangement of the Morgue, designed and carried out by MM. Mignon and Rouart; where, by irrigation with a saturated solution of calcium chloride, cooled by a Carré's refrigerator, the air is maintained at a point considerably below freezing and absolutely dry, thus completely preventing putrefaction, and arresting it when begun.

Chapter VII is devoted to a description of several Parisian and provincial hospitals, erected within the last few years by M. Tollet and others, mostly on the pavilion plan, although the spaces between the several blocks are scarcely wide enough. Still more in detail are the numerous maternities and foundling hospitals described, with particulars as to the mortality in each, and its causes. In the Maternité, at Paris, the death-rate of the unfortunate women had for many years averaged nine per cent.; and in 1864, when M. U. Trélat entered on his office, it was twenty-two. By adopting the most ordinary precautions, he at once reduced it to six, and his successor, M. Tarnier, brought it down to two. But, still dissatisfied with its construction, he erected a pavilion on a new plan, in which but one death has occurred in seven hundred and forty-three accouchements. The same ingenious physician has devised an incubator, warmed by steam, for infants born before the full term, which has been adopted at the Hôpital des Enfants Assistés, and will probably be introduced elsewhere.

In Chapter VIII we find a *résumé* of the experiments and researches of M. Pasteur, with drawings, from which it appears that he still adheres to his old methods, refusing to employ the pure cultivation of Koch in solid media. The remainder of this chapter is occupied with statistics, and with studies on the pathogeny and prophylaxis of the

various contagious diseases of men and animals, with legislation and regulations concerning the same.

Chapter IX explains the organisation of the medical and sanitary services, national and local; and Chapter X the course of instruction at the various medical, military, naval, veterinary, technical, and public schools, so far as relates to hygiene and allied subjects.

Lists of the members of the several societies of public health constitute the last chapter; and the rules, etc., of the Société de Medécine Publique, to which we owe this retrospect of work done and indications for future efforts, are added as an appendix.

We close the volume with mingled feelings of satisfaction and disappointment. English sanitarians will not find much practical help from it; but, to the scientific student of hygiene, it will be valuable for the lessons and warnings it contains. *Fas est ab hoste doceri;* and a study even of misdirected efforts is at times useful, while some of the papers incorporated in this volume possess no small intrinsic value.

NOTES ON BOOKS.

Food and Home Cookery: comprising the Cookery Scheme of the Leeds School-Board. By CATHERINE M. BUCKTON. (Longmans, Green, and Co.)—This is a reprint of a book that appeared some years ago, and it now has the cookery scheme of the Leeds School-Board prefixed. In our opinion, this preface is likely to be the most valuable part of the book; and we can cordially recommend it to the notice of any person who proposes to start a cookery class for working girls. The hints as to the arrangement of the pupils and the work are not only excellent in theory, but have been tested by some years' successful practice; besides which, Mrs. Buckton has a perfect genius for economising space. The lessons on food and home cookery are neither better nor worse than many similar works that have appeared of late. We are led to imagine that the writer is not a practical cook; and we are sorry to see that many of the instructions and recipes are wholly beyond the reach of the one-roomed families for whom the lessons are said to be given, while others peremptorily dispose of what we believe to be debatable matter in the culinary world. But a cook or teacher who can make these comments for herself will not read the lessons without profit. We must, however, join issue with the opinion that "the best cookery teacher is an intelligent person who has been trained to cook, and is ready to impart information drawn up for her, as in the following lessons." Neither these nor any other science lessons ought to be given parrot-like by a teacher, however intelligent, who has only been trained to cook. In our zeal for popularising science, we are apt to forget that, if a cookery teacher have not sufficient mental power and education to approach her subject scientifically, she had much better teach cookery on the old unscientific basis.

Medical Book-keeping Simplified: Carlyle's Self-indexing Medical Account Book.—We have received from Mr. G. E. T. Carlyle, of 6, Colquitt Street, Liverpool, a specimen copy of a new form of ledger for simplifying the mode in which medical accounts may be kept. It consists, as in the copy before us, of a book ruled for six months, commencing with the first month of the year, and going on to June, and which contains, first, a column for the name of the patient; then one for the address; then follows a column for each week of the month, and so on until the end of the six months. After this, there is a space for the amount of total attendance, the gross amount, and of arrears, which, with medical men, may be unfortunately always calculated on. By leaving sufficient space, the entries may be carried forward for the whole year, or for four or five years. All that appears necessary is to enter the name of each month below the column set apart for the same. The ledger is admirably indexed; consequently, the patient's name and account may be found easily; and all that is required in order to carry forward the same from the day-book to the ledger, is to sum up the amount for attendance and medicine for each week, and then to enter the same in the proper column. Our notice would not be complete without our stating that the originator is prepared to make, specially, ledgers of any size ruled on this plan.

The Quarterly Journal of Inebriety, April 1883 (London: Baillière, Tindall, and Cox).—This ably conducted journal continues to set forth the physical aspect of inebriety, and to point out that the system of the habitual drunkard is in a diseased condition. Dr. Howard of Montreal, in the current number, deplores the ignorance of the disease-aspect on the part of moral and social reformers generally. Dr. Day of Boston expounds the principles on which the American treatment of inebriates is based. Dr. Parrish of Philadelphia notes many practical facts relating to inebriety. Dr. Crothers of Connecticut calls attention to the present legal view of the criminality of inebriety. Dr. Norman Kerr, in a paper originally read to the last Church Congress, contends that inebriety has both a physical and a moral aspect. The views of this spirited journal are now attracting considerable attention.

The Student's Guide to Surgical Diagnosis. By CHRISTOPHER HEATH, F.R.C.S., Holme Professor of Clinical Surgery in University College, London, and Surgeon to University College Hospital, etc. Second edition. London: J. and A. Churchill.—This new edition of Mr. Heath's work is improved by a revised index, indispensable in a book of reference, however small and elementary; the author has also added certain subjects previously unnoticed, and given fuller details of some important points in diagnosis. We trust that the aim of the distinguished author of this manual will not be defeated by its perversion to a cram-book. If rightly used, it will prove a valuable aid to clinical study.

Illustrated Medicine and Surgery. E. B. Treat, New York: Trübner and Co., London.—This quarterly illustrated journal, published by Drs. Fox and Sturges, continues its course and deserves high commendation. The number of the first quarter of 1883 includes a very interesting series of illustrations, with some fine chromolithographs and photographs. The subjects treated are:—Dental Development, by Dr. Wm. Hailes, jun.; case of Palato-pharyngeal Sarcoma, by Dr. Johnson Emot; Excision of the Shoulder-joint, by Dr. Randolph Winslow; cases of Compound Complicated Harelip, by Dr. J. L. Little; Cysto-adenoma of the Thyroid Gland, by Dr. C. Buckley; Secondary Myeloid Disease of Pleura and Lung, by Dr. W. Osler; Congenital Union of the Fingers, by Dr. J. H. Pooley; A Teratological Contribution, by Dr. G. J. Engelmann; Apparatus for Treating Fracture of the Patella, by Dr. J. S. Wright.

General Medical Chemistry for the Use of Practitioners of Medicine. By R. A. WITTHAUS, M.D. Sampson Low and Co. 1882.—This volume forms one of Low's library of standard medical authors, and appears as an octavo of 433 pages. The purport of the work is stated on the title-page and in the preface. It is intended to form a general text-book of chemistry, but by condensing to a minimum those portions which deal with technical processes, and treating fully of the bearing of the science upon physiology, hygiene, therapeutics, and toxicology, this work has been rendered useful to the general practitioner. The work is serviceable and fairly reliable, but it scarcely fulfils its promise. It does not differ in any marked degree from other well known text-books of chemistry, except in the peculiarity of the classification of the elements—an altogether unimportant matter. The nomenclature of compounds is often peculiar; thus we meet with such names as "arsenia," "stibonia," "carbonous oxide," "ptoamines," etc. Notwithstanding these blemishes, some occasional obscurity of statement, and some obvious misprints, the work is one which, on the whole, can be recommended for general use.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BORACIC POWDER.

UNDER the name of Sanitary Rose Powder, Messrs. James Woolley and Sons (Manchester) have introduced, at the suggestion, we are informed, of Mr. Lund of Manchester, a very finely divided boracic acid powder, made with special appliances, so as to ensure the formation of an impalpable powder. The powder is pleasantly perfumed, and presented in such a condition that it will be found to be an improvement on the old-fashioned violet-powders, which are manufactured under very various formulæ. It is an advantage of this powder, as compared with ordinary Fuller's earth, that it is not liable to cake, and thus to excite irritation. In use, this boracic powder is very comfortable, and has the advantage of being antiseptic.

THE urinary test-case manufactured by Mr. Hawksley, to which we referred in a recent number, was, we are requested to state, designed by Dr. George Johnson, and is used by him.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 16th, 1883.

OFFICIAL SELF-SACRIFICE IN VACCINAL RESEARCH.

THE identity of the officer of the Local Government Board whose humane zeal in the investigation of the effects of doubtful fluids in vaccination has led him to sacrifice his health to the requirements of his research, has been not obscurely indicated. The chief vaccinator of the Local Government Board and head of its animal vaccine station, experimentally elucidating the effects of vaccination performed under various conditions, has made investigations of a perilous character on himself, with the result of infecting himself with enthetic disease. It is for some reasons to be regretted, although it was, we believe, unavoidable, that the present moment should have been selected for asking of Sir Charles Dilke a question on the subject. The fact of inoculation is, indeed, undisputed; but the conditions under which it happened are still matter of inquiry by a medical commission appointed to investigate the case. Meantime, much misapprehension may be expected to follow.

The words in which the President of the Local Government Board spoke of the occurrence were evidently carefully chosen. The inquiry of Sir Lyon Playfair was, whether one of the Board's officers, in the course of an investigation into the conditions under which syphilis could be transmitted in the act of vaccination, had infected himself, and had seriously injured his health; and whether, if that were true, the conditions under which he succeeded in infecting himself were such as might occur during legitimate operations of vaccination. Sir Charles Dilke's answer was that the officer in question, believing that this disease, although it had very rarely indeed been communicated in any of the operations of vaccination, nevertheless could, under some circumstances, be so communicated, was desirous of learning the conditions under which such a transmission was possible. His object was to obtain better information than any of the rare and accidental cases hitherto reported could afford, respecting the precautions proper to be taken for avoiding even the risk of such an occurrence during the practice of vaccination. The investigation required experiments to be made on the human body, and these (though of course not acting as an officer of the Board) he proceeded to make on his own person; and, at the end of his experiments, he did infect himself. Sir Charles added that the case was at present the subject of skilled inquiry, and a complete reply to the second part of the question could not be given until it had been reported on. He believed, however, that the result of transmitting the infection was not attained without departure, in essential respects, from the Board's instructions to public vaccinators, and from the recognised practice of all vaccinators. In Sir Charles Lake's expression of esteem for Dr. Cory's self-devotion, and regret for the personal suffering which he has endured, through his honourable sacrifice of himself in the interests of science and humanity, the profession will cordially join; but it will expect that the whole circumstances of the affair shall be made public without unnecessary delay.

So far as can be understood from what has as yet been communicated concerning this matter, Dr. Cory has inoculated himself with syphilis from certain doubtful products of a vaccinated arm, in a particular case. According to Dr. Seaton, the late chief medical officer of the Local Government Board, "the causes of all the inoculable infections are specifically so distinct that it has ever been held, by medical authorities, in the highest degree improbable that the unmixed inoculable products of any one should convey any other infection along with it."

The most recent researches in etiology support the belief that these infections "breed true." There are points of peculiar pathological interest, and of some obscurity, in the case of Dr. Cory; but it would be premature to express an opinion as to the origin of the infection. It is not stated, at present, whether any vaccinal effect was produced on Dr. Cory's arm before the syphilis manifested itself; or whether he experimentally inoculated himself with a doubtful animal fluid that he knew was not true vaccine lymph, but of whose character he could not otherwise satisfy himself.

Deeply as the consequences to Dr. Cory are to be deplored, it is to be remembered that vaccination, like everything else, requires care in its performance. It needs, as is well-known, to be done with clean instruments, and from well-selected subjects, with lymph that is clear and is free from blood. Looking to the unhappy frequency of hereditary and acquired syphilis in our population, who can doubt that if the doctrine were true that vaccine lymph from a child with latent hereditary syphilis could give syphilis to the vaccine, we should have had hundreds of thousands of cases of the kind reported? The few cases of syphilitic inoculation that have been brought to the notice of the Local Government Board, have been inquired into with the most painstaking care; and there is not one of them in which the fact could be regarded as at all proved.

It appears certain, from Sir Charles Dilke's answer, that the conditions of ordinary vaccination were violated in this particular occurrence. In what respects, and under what circumstances, these conditions were departed from, has yet to be examined.

NOTIFICATION OF INFECTIOUS DISEASES.

Now that the season is approaching when sanitary authorities draft local improvement Bills, or apply for provisional orders, it is incumbent on medical men everywhere, and especially on the local secretaries of the Branches of the British Medical Association, to scrutinise vigilantly the provisions of such Bills or orders, and to take steps promptly to oppose them if they should be inimical to the interests of the public and the profession. A conspicuous example of the necessity and advantage of such vigilance has been recently afforded by Bath. The sanitary authority of that city appointed a committee to inquire as to the operation of statutory provisions for the notification of infectious diseases. In the report which this committee presented, they especially referred to the return made to an order of the House of Commons on April 27th, 1882, from twenty-three urban authorities in England, which had had more or less experience of compulsory notification by medical men; and accepted without hesitation the expressions of opinion in favour of their Acts given by twenty-two out of those twenty-three authorities. They stated that, though there had been considerable opposition from the local medical profession in several districts, that opposition had in most cases entirely ceased shortly after the application of the clauses, and that a large majority of the population, as well as the medical men of the districts, favoured notification. They then urged that a memorial should be presented from the City Council to the Local Government Board, praying it to introduce into Parliament during the present session a Bill for the general notification of infectious disease to the sanitary authority of each urban district, and that, if the Local Government Board did not obtain such an Act, the necessary clauses for compulsory notification should be inserted in the next provisional order to be applied for

by the Bath sanitary authority. They furthermore stated that they had duly considered the various methods of notification which prevailed in different districts, and that they had determined to recommend a certain plan. This plan, in one respect at least, differed from all others. The originality, as will be obvious immediately, consisted in the suggestion as to the distribution of payment for notification. The diseases to be notified were small-pox, scarlet fever, typhus fever, typhoid fever, cholera, and diphtheria, and the duty of notification was to devolve upon the head of the family. The following four clauses, with which the report terminated, specially referred to medical men.

"In every case where a medical attendant shall attend a patient, he shall immediately give a certificate on the prescribed form to the head of the family, or person acting in that capacity, who shall, within six hours, deliver such certificate to the general inspector at his office.

"Such certificate to contain, amongst other particulars, a statement by the medical attendant whether proper and sufficient means of isolation and disinfection are to be obtained at the residence of the patient, and will be carried out, or whether it is advisable in his opinion that the patient be removed to the statutory hospital.

"A sufficient number of forms will be sent gratis to each medical practitioner in the district.

"A fee of two shillings to be paid to the medical practitioner for each certificate on the prescribed form, and a fee of sixpence to the bearer of such certificate to the general inspector."

A copy of the report, together with the following letter, was sent, presumably, to all the medical men practising in Bath.

"Urban Sanitary Authority, 3, Wood Street, Bath,
May 24th, 1883.

"Dear Sir,—On the other side, I send for your consideration copy of a report upon the subject of compulsory notification of infectious diseases, which will be submitted to the Sanitary Committee at a meeting to be held on the 4th day of June instant, and if approved, brought before the urban sanitary authority for adoption.

"The Committee hope the principle will meet with your approval, and will be glad to receive any suggestion from you thereon by Saturday, the 2nd day of June, addressed to the 'Chairman of the Sanitary Committee, Guildhall.'—Yours truly,

"F. H. MOGER, Clerk."

It will be seen, by a comparison of the dates given in the above letter, that very little time was afforded for joint action on the part of the profession. At the most, but eight or nine days elapsed between the issue of the report and the last day on which suggestions were to be sent in; so that it would have been difficult, within that time, to issue the necessary invitations, and hold a public meeting of medical men. One, however, of the gentlemen to whom it was sent, recognising the fact that it was proposed to place compulsion on medical men, even though they were not to be required to notify directly to the sanitary authority, and remembering that the principle of compulsory notification by medical men in any shape was distinctly opposed, by an overwhelming majority of the Association, at the annual meeting at Worcester, promptly drew up a memorial, of which the following is a copy.

"To the Chairman of the Sanitary Committee, Guildhall, Bath.—We, the undersigned registered medical practitioners, in active practice, and resident in the city of Bath, having received from your committee a report, on the subject of compulsory notification of infectious diseases, for our consideration, are opposed to the principle of placing compulsion on medical men. This principle has been opposed by the British Medical Association, at its annual meeting held in Worcester last year; by the Metropolitan Counties Branch of the British Medical Association, held in London at the beginning of this month; and by the whole of the medical profession in Liverpool. The return from twenty-three urban authorities in England is simply and solely the expression of the opinion of twenty-three medical officers of health, without any proof in support of it; their statements, in not a few instances, being contradicted by subsequent evidence. As to medical opposition ceasing after the Act is established in a town, the history of Bolton, of Leicester, of Birkenhead, of Blackpool, and probably of other towns, proves the contrary. Under the present Public Health Act, medical men have worked amicably with the local sanitary authorities, and have generally, we believe, reported those cases which they have considered desirable. If compulsory notification is to come into existence, it should be the law for the whole kingdom, and not for any special locality."

The above memorial was signed by all the medical men in active practice, except three; of which three, one was away from the city for a holiday, but would have signed it if he had been present, and another was the medical officer of health. The Sanitary Committee met on June 4th, when the question was fully discussed, and the medical memorial presented. Eleven members were present, but only three voted in favour of adopting the Committee's suggestions, which were therefore abandoned.

The lesson conveyed by the incident just related is obvious. If medical men everywhere, as in Bath, and as also in Sheffield, Rochdale, Liverpool, and other towns, with united front resist the attempts made by sanitary authorities to create for their profession a new offence punishable by fine, and to constitute themselves the direct or indirect betrayers of their patients' confidence for the sake (as it will seem to those patients to be) of a fee, whether it be small or great, such attempts cannot succeed.

That early notification of infectious diseases to a responsible authority, with the view of providing adequate security in doubtful cases against their spread, is desirable, has been affirmed by the Association; but with equal clearness, it has asserted its opinion that the onus of notification should not be imposed on him who, in all confidence, has been summoned to treat his patient's disease, but on the householder. It is also most desirable that the interests of the householder shall be rigidly guarded against needless injury at the hands of injudicious inspectors, or more evil will be done owing to his entirely neglecting to summon medical aid, or to his delaying it till the last moment through fear of possible loss, than will be counterbalanced by good; for this neglect or delay would be always in those very cases of which an early knowledge would be of the utmost importance.

Notwithstanding the returns from the twenty-three urban sanitary authorities so often alluded to, there is no proof whatever before the country that districts which impose compulsory notification on medical men make more rapid sanitary progress than other districts. Indeed, the evidence with reference to some of them seems clearly to point to an opposite conclusion. Yet the only justification of exceptional legislation for limited areas is that it is of the nature of an experiment, the result of which should guide the judgment of Parliament as to its extension or repeal. What is wanted just now is a dispassionate and careful inquiry into the actual saving of life effected in those localities where compulsory notification has been, for any considerable time, in operation, and not a still further extension of the experiment; and the only body competent to conduct this inquiry, and whose conclusions could be accepted with confidence, is either a select committee of the House of Commons, or a royal commission. Yet it cannot be too widely known that Mr. Hastings has expressed his intention of allowing it to be optional with the local sanitary authorities to adopt the provisions of his Bill, if it should be fortunate enough to get into committee, and that the experiment may be thus indefinitely extended, and the far off advantage as far off as ever.

UNIVERSITY OF CAMBRIDGE.

THE Cambridge Medical Board have recently issued a revised code of medical regulations for the approval of the senate, and have taken the opportunity of making several, not unimportant, alterations in the substance of the regulations.

While the study of anatomy will probably long retain its importance in medical education, the more recently developed science of physiology is more and more vindicating its place as the scientific basis of that part of medical science which is not purely empirical. The reputation of the vigorous and rapidly increasing school

medicine in Cambridge, rests in no small degree on the sound and thorough teaching of physiology, which is there carried on. Pathology, the physiological and therapeutic action of drugs, and other subjects, are growing year by year in extent and importance, but all the while the time at the disposal of the medical student remains the same. If the time available for the direct and practical study of disease and its treatment is not to be very seriously cut short, it is absolutely necessary to lighten the medical curriculum whenever this is possible, by omitting all subjects which are not absolutely necessary, and by so arranging examinations that as far as possible no time is wasted and no energy misdirected or thrown away. This is the object which the Board have had in view in the changes they have proposed.

Botany has hitherto formed part of the first examination, and comparative anatomy of the second. While systematic botany and systematic zoology have diminished in importance, the subjects have grown in other directions; and most students find it necessary to attend a two terms' course in botany and a two terms' course in comparative anatomy, in order to qualify themselves for passing the respective examinations.

In addition to this, nearly all medical students have for some years past attended the course of elementary biology, hitherto given by Dr. Michael Foster, in the summer term, as the best introduction to their anatomical and physiological studies. It is proposed that this course of elementary biology should be somewhat enlarged, so as to extend over two terms, and to form a more complete introduction to general morphology. It will then form a subject of examination, to the exclusion of botany and comparative anatomy, which no longer appear as such in the compulsory medical curriculum.

The first examination will thus consist of two parts, (1) Chemistry and Physics, and (2) Elementary Biology. These parts may be passed separately. This will probably be a considerable boon to those who come up with little or no knowledge of chemistry, or who have to give up a good deal of time to preparation for the previous examination in the subjects of general education, and are, therefore, unable to pass the whole of the first examination at the end of their first year. It is believed that the students will be more likely to retain a useful knowledge of the principles of each group of subjects, if they have given their individual attention to it for some months, that is, if they have attempted to get at the whole simultaneously, in a form fit for examination.

Another change is in the position of pharmacy and pharmaceutical chemistry. Much of the old materia medica and medical botany has disappeared from the examinations, but some knowledge of pharmacy is obviously necessary to the student, and it is probable that he ought to be examined in the subject at some period in his career. This has hitherto been done at the time of the examination in anatomy and physiology, but the time seems ill chosen. The student has his head full of other matters; he has forgotten many of the details of his chemistry, and has probably not embarked very seriously upon the practical study of therapeutics. He takes little interest in the subject, gets it up in a hasty and perfunctory way, and the examiners complain of the result. It is proposed that this subject may be taken either before or after the examination in anatomy and physiology, *i.e.*, either when the student is fresh from his chemistry, and probably has just begun his preliminary hospital practice, or else when he is beginning to work seriously and systematically at the study and treatment of disease.

The year's compulsory hospital practice before the examination in anatomy and physiology, which is, we believe, peculiar to Cambridge, is reduced to six months. It will thus be possible to do what is necessary in the long vacation, when the student is comparatively free, and can give more attention to a new study than is possible during the hurry of full term, and the stress of preparation for examination in a totally different series of subjects. The total amount of hospital practice (three years) required before admission to the final examination is unaltered.

The alterations in the third and final examination are not very important. Midwifery and diseases peculiar to women is substituted for midwifery pure and simple. The elements of hygiene are also explicitly recognised as a subject of examination. The number of papers, and the way in which different subjects are grouped in or distributed over the papers, are left to the discretion of the examiners.

THE DEBATE ON LORD WOLSELEY'S PENSION.

THE able speech of Dr. Cameron, of which we publish a special report in another column, was a powerful vindication of the conduct of the medical officers of the Egyptian Expedition. Although this occasion was skilfully and effectually used to bring the subject at once under parliamentary and public notice, it might of course have been of use to the purpose of vindication to lessen the rewards which the country has decreed to the eminent general-in-chief who had led the British army to a speedy and decisive victory. Lord Wolseley had throughout claimed for the medical officers their just share of honours and rewards; in his despatches and gazettes, he did full justice to their high qualities and their devotion to duty. He bore similar evidence on his return to England; and, on the occasion of the banquet to the medical officers, he entirely approved of that banquet of welcome and congratulation, and would have taken part in it—having himself been one who arranged the date for it—but for a Royal command to attend that evening at Windsor. The letter which he sent, on being summoned away at the last moment, was unequivocal in its language, and it may not be out of place to reproduce it.

"MY DEAR SIR WILLIAM,—I have just received Her Majesty's commands for us to dine at Windsor on Tuesday next, the day when you did me the honour to invite me to dine with the medical profession, to meet the army medical officers returning from Egypt. It is a sad disappointment that I am thus prevented from having the pleasure of taking part in an entertainment, intended to do honour to those whose services and whose devotion to their military duties are so highly appreciated by the army. There may be a diversity of opinion as to the value of our military medical systems of administration; but all who are acquainted with the work done by our surgeons in the field will, I think, freely admit that, individually, none are more devoted to their duty than those who are to be your guests next Tuesday."

Throughout, it was understood that Lord Wolseley held a very high opinion of the manner in which the medical officers did their duty, but was of opinion that the system under which the department was called upon to work, and the relation of other departments to it, required revision; an opinion which had been previously expressed by ourselves, and was set forth in detail, with suggestions for such revision, in the memorandum of an inquiry conducted by Mr. Ernest Hart for this JOURNAL, on the return of the troops, and to which wide publicity was given in the public press. The evidence of Lord Wolseley before Lord Morley's Commission is deplorably inaccurate, inconsistent, and unjust, and appears to have been governed by later influences, and by defective memory of regulations which ought to have been present to his mind. We have pointed out in detail the cruel wrong which his evidence cast upon a service which he was bound to treat at least with scrupulous fairness. The Parliamentary Bills Committee of this Association could not be indifferent to such a slur as has been unjustly thrown upon the whole service, and indirectly, although with great weight and after public inquiry, on the whole medical profession. Dr. Cameron's speech, and the expressions of concurrence which it elicited from Lord Hartington in the answer of Lord Wolseley's statements, have done much to repair the wrong. At the request of the Chairman of the Parliamentary Bills Committee, and with the support of eminent members of the Army Medical Service, Mr. Gibson, who has entered very fully and carefully into the question,

expressed the regret with which they would see the vindication of their professional conduct and character carried so far, or so misconstrued, as to imply that they desire to see any opposition raised to the rewards earned by the gallant general under whom they served. Further opportunity will yet be given to fully and deliberately develop their case. The forms of the House allowed Dr. Cameron to make his important statement in the course of the pension debate; but neither the civil nor the military medical profession would be disposed to take part in any attempt to lessen the glory or diminish the rewards which the government and the country have thought due to the illustrious general.

TYPHUS FEVER AT NAZARETH HOUSE, HAMMERSMITH.

THE many well-wishers of the home that, under the title of Nazareth House, affords so excellent and charitable a refuge for destitute children at Hammersmith, will rejoice that it has been amply cleared by the report of the Government Inspectors from the injurious aspersions cast upon its character for care and cleanliness. The allegations made in the local health-officer's report to the Fulham Board of Works were in themselves so surprising and difficult of belief concerning an institution of the reputation of Nazareth House, that it was evidently necessary for an independent inquiry to be made. Mr. Spear, the Commissioner appointed by the Government to investigate the matter, speaks in unambiguous language of the results of his inquiry, which may be summed up in his own words as follows.

"1. The spread of typhus fever at Nazareth House was not attributable, in any sense, either to overcrowding or to dirt; but it spread because, occurring at first in a mild form amongst children, the disease remained for some three months unrecognised, the sick, the convalescent, and the healthy mixing together.

"2. The sanitary condition, and the management so far as sanitary affairs are concerned, of the institution, are excellent; and the care habitually bestowed upon the children is worthy of special remark."

It is, perhaps, unnecessary to go in detail into the facts brought out by Mr. Spear's inquiry that have led him to this decision. They are given at length in his report, and whoever is concerned with the *pros* and *cons* may read them there. It may be admitted that, at the time of the health-officer's inspection, the children were probably not so exactly tended as usual, on account of some of the sisters being ill with the fever; but Mr. Collier's statement, that one of the reasons why a diagnosis could not be made was because of the dirty conditions of the bodies of the patients, was no doubt somewhat of an exaggeration.

The evidence is pretty conclusive, however, that there was some considerable development of lice in the heads of some at least of the children taken to the fever hospital on February 22nd; and the balance of evidence goes to show that there was some personal uncleanliness, specially noticeable in the rough skin of the knees and feet of these children. The question to be answered is, What is the interpretation to be given to these observations? Do they really mean habitual neglect, or do they indicate the relaxation for a few days, or perhaps for a week or two, of personal attention? On this question, Mr. Spear observes: "The amount of dirt which would be necessary to render it impossible to an experienced eye to diagnose, in a series of ten cases, typhus fever, would indeed be extraordinary; whilst, on the other hand, a very small amount, to an observer unfamiliar with typhus, suffices to obscure the eruption; or, what is very likely to happen, the very aspect and rash peculiar to the typhus patient might be mistaken for a general dirtiness."

As to the alleged overcrowding, Mr. Spear could not find "that there has been at any time an approach to overcrowding; nor can any room be properly spoken of as ill-ventilated."

Mr. Collier's report has undoubtedly been treated a little roughly in what Mr. Spear says. There seems to have been a measure of justification for what the health-officer said; and on the question of the diagnosis of the disease he points out, somewhat pertinently, in a letter which he has addressed to us, that, whilst Mr. Spear publishes letters from several practitioners, who all state that they had no difficulty in diagnosing, "these letters were all written after the disease was without doubt pronounced to be typhus fever." The Medical Superintendents of the Western and Stockwell Fever Hospitals, who might both be expected to have special skill in diagnosing typhus fever, were, on the other hand, slow to recognise the disease as such.

Into the other points raised by Mr. Collier, we do not think it necessary to go, as they do not seriously affect the general conclusion that the institution has effectually cleared itself of the charges made against its management. As to the more important general question of the way in which typhus fever was imported into the home, and, having been once imported, spread to so considerable an extent before its nature was discovered, the report is, from the nature of things, not so complete as could be desired. There is a story of the admission of a child who had previously suffered from symptoms "not unlike those of typhus fever in a child," but that is all. The subsequent cases were evidently due to personal contagion; and they all occurred, with one exception, among the elder or "class-room" children and amongst the sisters in attendance upon them. Altogether, the cases may be said to have been thirty-one in number; two priests besides were probably infected at the home; and a nurse at the hospital, who attended upon the children after their removal, contracted the disease. This patient died, as did also one sister and one child. The earlier cases are said to have been so mild as to arouse little suspicion of fever in the mind of the medical attendant, though this explanation does not strike the mind as entirely satisfactory.

MR. GEORGE W. E. RUSSELL, M.P., has been appointed Parliamentary Secretary to the Local Government Board.

The Professors of University College, London, have issued cards for a *conversazione* on Tuesday evening, June 19th.

THE first number of the *Bristol Medico-Chirurgical Journal* (which it is at present intended to issue half-yearly) will be published at the beginning of July.

A CORRESPONDENT of the *Standard* complains that considerable deductions are made from the "Hospital Sunday" collections in some churches for meeting any particular want, say "church expenses," and the balance is then handed to the Hospital Fund.

IN the French Assembly, the committee on the Pasteur pension have agreed, by 22 votes to 6, to an increase of the pension from 12,000 francs to 25,000 francs, with reversion to the widow and children.

EXPERIMENTAL physiology appears to have come to a complete standstill in Ireland. An inspector reports that no experiments have been carried out in Ireland during the year 1882, either under the licences or the solitary certificate in force.

IT is stated that, in connection with the investigations of the Royal Commission on Metropolitan Sewage Discharge, it has been decided to hold a special inquiry into the health of the population on the banks of the Thames in the neighbourhood of the main drainage outfall. The inquiry will be conducted by Dr. de Chaumont, F.R.S., on behalf of the Commission, and by Dr. Buchanan, F.R.S., as representing the Government.

A SPECIAL meeting of the Executive, General, and Medical Committees of the Great Northern Hospital was held on Wednesday at the Highbury Athenæum, to consider the proposed amalgamation with the new hospital for the North of London.

THE last number of the *Archives d'Ophthalmologie* contains a sympathetic notice of the late George Critchett, from the pen of Mr. Litton Forbes. It has been issued as a separate publication, and does ample justice to the attainments and character of the distinguished surgeon whose career it traces.

WE understand that Mr. Sydney Jones, of St. Thomas's Hospital, is likely to be once more a candidate for the Council of the College of Surgeons, in addition to the metropolitan candidates mentioned last week—viz., Sir William Mac Cormac, Mr. Brudenell Carter, and Mr. Macnamara.

WE understand that Lord John Manners is making as satisfactory progress as can be expected, taking into consideration the complications which attend a somewhat severe attack of gout. Mr. Sibley, who is attending him, entertains hopes that he may, ere long, recover his general health.

MR. EDWIN CHADWICK, C.B., will take the chair at the meeting at the Parkes Museum on Thursday evening next, when Mr. Robert Rawlinson, C.B., will read a paper on "The Hygiene of Armies in the Field." Mr. Rawlinson gained experience in this subject during the Crimean War, and will, we have been given to understand, discuss the question as to how far the recent somewhat complicated regulations and subdivision of authority have really tended to increase efficiency.

AT the meeting of the Royal Medical and Chirurgical Society on Tuesday last, Dr. W. B Carpenter, F.R.S., Professor W. K. Parker, F.R.S., Dr. E. Frankland, F.R.S., and Dr. Allen Thomson, F.R.S., were elected Honorary Fellows; and Dr. H. J. Bigelow of Boston, Professor Charcot of Paris, Professor Du Bois Reymond of Berlin, and M. L. Pasteur of Paris, were elected Foreign Honorary Fellows. Dr. Wilson Fox was elected Librarian in place of Dr. Hilton Fagge.

SCARLATINA of a very serious type has broken out at Wendron, in the Helston Rural Sanitary District. Thirty-four cases have already been reported, four of which have proved fatal. Owing to a dispute between the Local Government Board and the local authority, there is now no medical officer of health for the district. It is to be hoped that this outbreak may expedite the settlement of the dispute.

WE believe that many in the profession will be glad to know that the excellent medical reports published under the directions of Robert Hart, K.C.M.G., Inspector-General of the Chinese Imperial Maritime Customs, are to be purchased at Messrs. P. S. King and Son's of King Street, Westminster. The most remarkable contributions to this series of reports of late have been Dr. Patrick Manson's investigations into filaria disease; but there are many other reports in the volumes of unusual interest.

A CIRCULAR has been issued by Mr. Redgrave, asking certifying surgeons to make a return of the number of firms with whom contracts are made by them for periodical visits, and how much they are worth, and also the value of the fines received. Certifying surgeons have been so badly treated by recent legislation, that they are naturally suspicious of the object of any such requirements, and we apprehend that they will be very guarded in making replies to any such form until they are made aware of its object. It is to be regretted that this circular does not indicate the object with which it is made, or what scheme it may foreshadow.

THE NEW PROFESSORSHIPS AT CAMBRIDGE.

DR. MICHAEL FOSTER, F.R.S., Fellow of and Prelector in Physiology at Trinity College, has been elected Professor of Physiology; and Dr. Alexander Macalister, Professor of Anatomy and Comparative Anatomy in the University of Dublin, has been elected Professor of Anatomy, in place of Dr. Humphry; who, as has already been announced, has assumed the duties of Professor of Surgery. The election of Dr. Foster to the new professorship is a worthy acknowledgment of his devotion to biological teaching in the University, by which he has secured the lasting gratitude alike of the University and of the medical profession. In Dr. Macalister, the highly accomplished professor in the University of Dublin, the University of Cambridge has secured a teacher, whose reputation, as an anatomist of the foremost rank, has led to his aid being already called for by several institutions. It will be remembered that Cambridge has already on its teaching staff a gentleman of similar name, Dr. Donald MacAlister, a brilliant senior wrangler, Fellow of and lecturer on medicine at St. John's College, and Teacher of Medicine in the University, whose career up to the present indicates him to be a man of powerful intellect and enthusiastically devoted to science.

POISONOUS DISINFECTANTS.

ANOTHER case of poisoning by carbolic acid has occurred. An inmate of the Bridgewater Workhouse has lost his life by a dose of carbolic acid given to him in mistake for a "black draught." The verdict of the coroner's jury was "Homicide by misadventure."

SOCIAL SCIENCE CONGRESS.

THE selected questions for discussion in the Health Section at the next Social Science Congress, to be held in Huddersfield in the first week in October, are the following. 1. Is the modern system of education exerting any deleterious influence upon the health of the country? 2. Is it desirable to take any, and what, further measures to prevent the spread of zymotic diseases through the milk-supply of our towns? 3. Is it desirable to amend or extend the Habitual Drunkards' Act, and, if so, in what direction?

SANITARY RESEARCH.

DR. MATTHEW HAY, of the University of Edinburgh, who is a candidate for the Chair of Medical Jurisprudence in Aberdeen, has been awarded one of the two Research Scholarships of the Grocers' Company. These scholarships are of the annual value of £250, are tenable for one year, with eligibility for reappointment. The Court of the Company founded these scholarships with a view to encouraging the making of exact researches into the causes of important diseases, and into the means by which they may be prevented or obviated. The scholarship is a purely scientific one, and the award was made by the advice of the following Committee: John Simon, C.B.; J. Tyndall, F.R.S.; J. Burdon Sanderson, F.R.S.; and George Buchanan, M.D.

SANITATION OF DWELLING HOUSES.

AT a meeting of the council of the Sanitary Assurance Association on Monday, Sir Joseph Fayrer, F.R.S., in the chair, the following resolution, recently passed by a meeting at 9, Conduit Street, was considered, viz.: "That the council of the Association be requested to consider whether they cannot recommend legislation compelling the builders of all new dwellings to obtain a certificate from some authority, or qualified person, as to their sanitary condition, before it shall be lawful for such buildings to be inhabited." On the mo-

tion of Professor Hayter Lewis, seconded by Professor Corfield, a subcommittee was appointed to consider how best the object of the resolution may be obtained, and if desirable, to draft a Bill and report to the council.

THE MILITIA SURGEONS.

A DISCUSSION on the claims of the militia surgeons in the House of Commons has been raised at the request of our Parliamentary Bills Committee, and their claims were ably stated by Sir Eardley Wilmot and Dr. Farquharson; and unquestionable good has been effected. As might have been expected in a case in which the Government made a determined resistance, they secured a majority. It was plain, however, that the sense of independent members of the House was against them, and the results were sufficiently encouraging to justify continued exertions in order to have justice done. A distinct advantage was obtained by the debate, and this advantage should now be followed up by further vigorous measures. It may be hoped that the impression produced by the debate, and the very strong minority against the Government, will affect the Secretary of State sufficiently to induce him to reconsider his decision, which is obviously harsh and unequitable.

THE FRENCH HOSPITALS.

AT a recent sitting of the French Senate, M. Berenger, a member of the Left Centre, protested against the suppression of the posts of chaplains at the hospitals and the secularisation of the arrangements at those institutions in the name of liberty of conscience. He urged the Minister of the Interior to oppose the fanaticism displayed by the Administration of Public Charity and the Municipal Council of Paris in preventing the sick from acting according to their religious sentiments. The Minister replied that he had done all in his power to secure liberty of worship in the hospitals. He had entered into negotiations on the subject with the Archbishop of Paris, which, however, had fallen through. Finally, he acknowledged that there were hospitals in which chaplains and sisters of mercy were necessary. The matter then dropped.

INTERNATIONAL EXHIBITION AT NICE.

IT is proposed to hold early next year an exhibition at Nice, which will include the subjects of hygiene, medicine, and climatology. In the section of hygiene will be included the "Distribution and Purification of Water for Domestic Use," "House Drainage and Sewerage," "Hygiene of Public Establishments, of Houses, of Ships." In the medicine and surgery section "Pharmaceutical Preparations," "Mineral Waters," "Medical and Surgical Instruments and Appliances," "Veterinary Medicine," "Hydrotherapeutics," "Medical Gymnastics," "Life-Saving Apparatus," "Ambulances," "Special Treatises." In the section of climatology will be included "Meteorology Applied to Climatology," "Meteorological Observations," "Special Treatises, Plans, Charts." The agents in London are Messrs. Johnson, Castle Street, Holborn, E.C. In another column will be found a letter from Dr. West on the subject.

TYPHOID FEVER IN PARIS.

TYPHOID fever has again shown itself in a severe form in Paris. During the week ending June 7th, fifty-three deaths were registered from this malady, of which six occurred in the 7th arrondissement alone. This mortality, representing as it does a large number of cases of enteric fever, is considered altogether abnormal so soon in the year at Paris. As, however, only seventy-two patients were admitted into hospital during the week from the 1st to the 7th of June, against eighty-eight in the previous week, it is thought by the Municipal Sanitary Authority that the mortality from typhoid in the next return, will be proportionately smaller. The bad smells which were so distressing to the Parisians last year, have made themselves apparent this summer with increased unpleasantness, and the municipal authorities have had some consultations on the subject, but the result of their deliberations has not yet been made public.

MEDICAL CORONERS.

THE question of the peculiar fitness of a medical man for the post of coroner has been decided in the recent contest at Grantham, in a way which shows that the public are beginning to regard the matter in its true light, and to recognise that for the office of coroner, involving, as it necessarily does, an inquiry into the cause of death, no one is so well suited to discharge with efficiency the duties connected with that post as a medical man, whose medical training and whose daily work has been an inquiry into the origin of disease and the cause of death. The lawyer, whatever be his qualifications, certainly lacks the special knowledge familiar to a medical jurist: the knowledge of the principles of diagnosis, pathology, chemistry, and anatomy, essential for such an inquiry. By the election of Mr. J. C. Eaton, Grantham has, we are glad to see, followed the good example set by Lincoln and Boston; and the desire to have medical coroners is, at all events in that neighbourhood, on the increase. This is shown by the following list of coroners in the county: Dr. Mitchinson, Lincoln District; Mr. S. Lowe, Lincoln City; Mr. G. Lowe, Lincoln (Deputy); Mr. Clegg, Boston; Dr. Sharpley, Louth; and Mr. J. C. Eaton, Grantham District.

PROFESSOR MCKENDRICK'S LECTURES.

THE most interesting course of lectures by Professor McKendrick of Glasgow, of which we have recently published full abstracts in our JOURNAL, has now been brought to a close at the Royal Institution. These lectures deal with the course of physiological inquiry, and in the double sense of their historical relations and scientific value, have been of a peculiarly valuable kind. They have involved evidently a great amount of research, and have dealt with the profoundly interesting subject-matter in a critical spirit, and with full light of modern knowledge. Such lectures were much needed, and will be alike valuable in their full text to the profession and to the public. They convey information of a kind which is sorely needed by unscientific readers, and which is by no means useless to the best informed professional men. We are glad of learning that they will shortly be published in full as a volume, which will, we trust, find a host of readers. We feel sure that they have proved of profound interest to our readers; and that, when they are published in full, there are many who have studied the abstracts who will desire to possess themselves of the complete text.

THE DANGERS OF EXPERIMENT.

A SHORT time since, Professor Jolyet of Bordeaux nearly lost his life in endeavouring to demonstrate, by Grehaut's method of inspiring hydrogen, the lung capacity to his pupils. He had prepared the hydrogen gas, but, wanting some acid, he sent for it to a neighbouring laboratory, poured some into the apparatus, and then made the inspirations necessary for the demonstration. The acid he had used, though sold as pure, contained arsenic, so that, instead of pure hydrogen, M. Jolyet had inspired arsenicated hydrogen. Notwithstanding sudden feelings of illness, he had the great courage to continue his lecture to the end, but was obliged to go home immediately, overcome by a fearful attack of headache, vertigo, and symptoms of syncope. Still more serious symptoms supervened, which caused great alarm, and during some days M. Jolyet was very ill. Fortunately, there were no serious results, and although still very weak, M. Jolyet is, to the great joy of his pupils, quite out of danger.

EVOLUTION AT THE UNIVERSITIES.

THE enthusiastic reception of Professor Huxley at Cambridge as the exponent of the doctrine of evolution, and the enthusiastic

cheers with which the name of Darwin was greeted, is a notable circumstance in modern scientific and educational history. For the Rede Lecture, delivered on Monday in the Senate House by Professor Huxley, he chose as his subject "The Origin of the Existing Forms of Animal Life-Construction, or Evolution?" There were at least 1,100 persons present, and amongst them nearly all the University-dignitaries in residence. A large number of ladies and undergraduates also attended. Professor Huxley expanded and advocated the doctrine of evolution, illustrating his argument by diagrams of the pearly nautilus and the egg in their gradual process of development. The three objections to evolution were, he said, (1) that it was impossible, (2) that it was immoral, and (3) that it was opposed to the art of design. In answer, he argued that what was conceivable was possible, and that, further, there was proof of its being possible afforded in numberless instances every day. If it were immoral, what was true was immoral; and, with regard to its being opposed to the argument of design, he quoted the twenty-ninth chapter of Paley, in which he said he first became interested many years ago. His conviction of the truth of the doctrine of evolution was, he said, founded on the personal study of twenty years, having devoted all the time he could beg, borrow, and, he was afraid, steal from other vocations. On the proposal of the Chancellor, the Duke of Devonshire, a vote of thanks was accorded to the lecturer.

THE KEY OF THE STREET.

A FURTHER conference has taken place on the subject of the evils connected with the existing condition of some of the lowest class of lodging-houses in poor neighbourhoods. In such houses, the street doors are left open at night. Mr. S. Morley, M.P., Lords Shaftesbury and Mount-Temple, Dr. Dudfield, Mr. Lovett, and other medical officers of health, took part in the discussion. It was finally decided: 1. That this meeting, in consideration of the frequent lack of sanitation and general supervision in tenement houses inhabited by the poorest classes, resolves to memorialise the President of the Local Government Board to declare the enactment of the 35th Section of the Sanitary Act of 1866, referring to 'lodging-houses,' to be in force throughout the metropolis, according to the powers entrusted to him by the Act of 1874. 2. That the attention of the Local Government Board be called to the condition of tenement houses, owing to the frequent absence of locks to the front door, and even occasionally of the door itself." The more completely this is made a matter of police, the better will be the result. Vestries, medical officers of health, and their inspectors in the metropolis, have more than enough to do, and in many instances are satisfied with a minimum satisfaction of their existing responsibilities. Moreover, they are practically irresponsible, and subject to singular variability and fitfulness of action. The Metropolitan Police are better suited for what is really a work of constant vigilance, order, and discipline. We recommend Miss Bullar, to whom this useful movement is chiefly due, to rely mainly upon police supervision to remedy the moral and physical evils of which complaint is made.

PARLIAMENTARY TOPICS OF THE WEEK.

THE parliamentary report this week runs to unusual length, although most of the subjects were only discussed incidentally. In addition to Dr. Cameron's vigorous and effective skirmish on the Egyptian medical question, the vaccination question was more than once referred to, and with incidents of a delicate and distressing character. Mr. Taylor will, we believe, on Tuesday week, bring on his annual attack upon vaccination, reinforced by arguments derived from the lamentable results of Dr. Cory's self-sacrificing experiment in auto-vaccination. A memorandum of the results of vaccination as a prophylactic of small-pox, and a means of reducing mortality, is being prepared for the information of members of Parliament, on behalf of the Parliamentary Bills Committee of the Association. The grievances of the militia-surgeons were discussed vigorously, as we mention elsewhere. The immediate result, we think, ought to be, that militia-surgeons feeling aggrieved, and suffering from the regulations attacked, should at once avail themselves of the admissions and implied promises of Sir A. Hayter, by bringing their individual cases under the notice of the Secretary of State for War. It may be anticipated that, in the face of the very strong division of last week, the service will receive more satisfaction than hitherto. The Contagious Diseases Acts also came under discussion this week in the House of Lords, and the course adopted by the Government met with a chorus of disapproval, in which the responsible minister of the War Department joined, sorrowfully deploring the evils which he foresaw from the course pursued by his nineteen colleagues, who either voted or paired in favour of Mr. Stansfeld's resolution. He was, he expressly declared, "in favour of these Acts; he believed they had done good in regard to the health of the Army and the Navy;" and he was "satisfied they were popular wherever they were in operation," and that their "indirect effect had been a considerable improvement in the condition of the streets. The *Standard* observes, "These Acts, it must be remembered, are still as legally valid as they were before Mr. Stansfeld's motion was brought forward. Yet, after Lord Northbrook's admission, it is impossible to doubt that, as Lord Salisbury well put it, the Government have "practically repealed an Act of Parliament in deference to a vote of the House of Commons." What ministers have done is not, indeed, to proclaim that the Acts have ceased to exist, but to withdraw the guarantees for their enforcement. Compulsory examination is essential to their operation, and the Government decline to take any steps for procuring the money, without which compulsory examination cannot be carried on. Most persons, quite independently of the general feeling that the repeal of the Acts would be a disastrous mistake, will agree with Lord Salisbury in his forcible but temperate criticism. The whole subject, unpleasant though it be, demands investigation, and it is satisfactory that the leader of the opposition in the Upper House should have elicited a conditional promise from Lord Northbrook to produce the necessary correspondence and papers.

TWO DEATHS FROM CHLOROFORM.

WE find in local papers, of which copies have been kindly forwarded to us, reports of two deaths this week from chloroform inhaled as an anæsthetic. One of the daughters of Mr. Hutcheson, Chief Magistrate at Turriff, Aberdeenshire, suffered greatly from the toothache, and was compelled to have an operation performed. Notwithstanding this the pain continued, and to alleviate her sufferings she procured some chloroform and put it in a handkerchief and applied it to her mouth. Subsequently she retired to her bedroom, and as she did not reappear it was hoped she had obtained relief. The next morning she was found dead on the floor. Deceased was only twenty, and was a great favourite in the district. A millworker, named Margaret Houston, seventeen years of age, and residing at Penicuik, died while under the influence of chloroform, administered to her by Dr. Kennedy, of Penicuik. She had gone to Dr. Kennedy to get three teeth extracted, and insisted, against his advice, on being put under chloroform during the operation. We would again express the anxious wish that practitioners in whose practice such cases occur, and under whose professional attention they come, should take an early opportunity of getting the clinical facts of the case on record in our paper for the purpose of the general information of the profession, in furtherance of our accurate knowledge of the circumstances under which anæsthetics of all varieties prove fatal. This is, we think, an incumbent duty.

THE MINISTRY OF HEALTH.

IT is difficult nowadays to name a subject about which some question is not asked in the House of Commons. The minuting of some

Home Office papers by Sir Charles Dilke in help of Sir William Harcourt, apparently inspired some one, having knowledge of the fact, with the belief that certain of the functions of the Home Office were about to be transferred to the Local Government Board; and forthwith a paragraph on the subject went the round of the newspapers. Sir Richard Cross put a question on the subject to the Home Secretary on Monday, and was assured in reply that no attempt had been made, as alleged, to transfer to the Local Government Board the control of business relating to factories, artisans' dwellings, and burials, nor was such a scheme believed to be practicable. Of course an Act of Parliament would be necessary to authorise the transfer of business of the kind, in the same way that the Local Government Board Act of 1871 made provision for the taking over of the poor law, local government, and public health business from the several departments that were then performing it. But there seems no other stumbling block in the way, except the one of policy. And here is raised again the great question of the ministry of health which has for a time been slumbering. It cannot be denied that, in the abstract, all departments dealing with the public health of the people should be under one management and one sole responsible head. The principle of a separate minister for agriculture has been admitted, and why not a minister of health? Apparently because there is a well-founded distrust of giving the Local Government Board any more work to do than it has at present. That Board has consistently shown itself to be so leavened with its old poor-law instincts that it is apparently hopeless to get it to take an enlarged view of its functions. In theory, the work of the Home Office should be divided, the judicial work being placed under the control of a minister of justice, and the municipal and local business, together with all the business of the Local Government Board, under the charge of a minister of the interior—the Home Secretary, in fact, under another name. The physical welfare of the people is clearly a matter worthy of the individual attention of a functionary as high as the Secretary of State.

THE VALUE OF VARIETY IN DIET.

VARIETY in human diet is much more than a mere matter of taste; it is a point of high nutritive value, and one which cannot be neglected if health is to be preserved. While authorities are pretty well agreed as to the composition and relative quantities and qualities of the proximate dietetic principles which are necessary for the sustenance of life, experience has shown, by clear and numberless proofs, that it is not enough to furnish a man with alimentary substances in scientifically accurate combinations and proportions. Without variety in food, at least in civilised communities, nutrition is sure, sooner or later, to fail. To maintain the nutrition of the body in full perfection, it is an absolute necessity that due variety must be introduced into the dietary scale. As Dr. Parkes long ago pointed out, different substances of the same class must be alternately employed. He wrote: "Sameness cloys; and, with variety, more food is taken, and a larger amount of nutriment is introduced." Carried to a certain point, uniformity in diet is good, as, for example, in the hours of feeding, and in the characteristic features of the respective meals. In these points, to live by rule tends to preserve the assimilative processes in healthy vigour. But absolute uniformity in the composition of meals is bad, however excellent the dietetic substances employed. Nature furnishes us with foods of similar, but not of identical, composition in endless variety. The good effects of variety in diet are to be found in its action on primary digestion. Change is grateful to the stomach as well as to the palate, and gives a gentle and natural stimulus to assimilation. Where it is difficult to give any great variety to the composition of meals, much of the good of dietetic change may be secured by giving an artificial variety to foods by a judicious use of the different modes of cooking and dressing meats and dishes suggested by culinary art. The same meat may furnish some of the charm of change according as it is roasted, stewed, or boiled; and the same flour may yield various foods, as it is made into different forms of bread, cakes, and puddings. In feeding soldiers, and the inmates of hospitals, workhouses, and gaols, the good results of frequent dietetic changes have been incontrovertibly demonstrated. With respect to the value of variety of food, as in so many other important sanitary questions, children furnish us with delicate tests. It has been shown over and over again that a great improvement in the health of schools coincides with the maintenance of a various as well as a liberal *cuisine*. In increased attention to securing variety in the kinds of cooking of food for the young, has often been found the correction of bad health in the inmates of seminaries.

VIVISECTION.

THE Association for the Suppression of Scientific Discovery, which pursues its mistaken and mischievous ministrations under the name of the Antivivisection Society, can find little of either comfort or encouragement in the official report of the inspectors appointed under the Vivisection Act upon the operations performed upon living animals, for purposes of scientific research, in the year 1882, under the prescribed licences from the Home Secretary. From this report, which has just been issued, and which is signed by Mr. George Busk, it appears that forty-two persons held licences for such experiments, but, of these, sixteen performed none. The total number of scientific operations of all kinds performed upon living animals during the year was 406. Inasmuch as, in all these experiments, excepting those conducted under the powers of the special certificates which dispense either entirely or partially with the use of anæsthetics, the animals were rendered completely insensible, and kept so till death, there is no reason, Mr. Busk reports, to suppose that any appreciable suffering could be caused. He further adds: "So far as I have any means of judging, the amount of direct pain or suffering inflicted in the prosecution of physiological, pathological, and therapeutical researches during the past year was altogether trifling, and limited to between twenty or thirty animals, mostly frogs." These words are of great import. They come from a high, responsible, and recognised authority. While they prove how little support from facts antivivisectionists can find in this country, they record a national disgrace, in that they set forth to how low and pitiable an ebb the study of comparative physiology has fallen amongst us, in consequence of the paralysing legislative restrictions which have been imposed upon its progress. But it is not difficult to see that effectual and speedy relief to science must inevitably come with the publication of a few more official annual reports, such as that of Mr. Busk. In the face of facts so crushing to their cause, it will be impossible for antivivisectionist agitators to keep alive an effectual opposition to the repeal of the Vivisection Acts. The progress of the science of life, and of its correlative arts of medicine and of health, is daily growing in national importance and in public appreciation. One of the lines of this progress must be in vivisection. The medical profession, with characteristic consideration and tenderness, has ever been opposed to the barren and unnecessary repetition by vivisection of the proofs of established truths for purposes merely of demonstration; but the feeling amongst us is practically unanimous that our science can find sure ground, and our art win nobler triumphs by well-planned and scientifically conducted experiments upon living animals. Science must move; the humanest science may safely be trusted to move humanely.

THE DIVISION OF HOSPITAL SATURDAY FUNDS.

IN most of our large towns the Hospital Saturday movement has become securely established as yielding a considerable source of income for medical charities. It is a channel of revenue which marks an honourable and successful effort on the part of the artisa

class at maintaining their self support, and it is an element in the income of hospitals which bears signs of large and legitimate increase in the future. The time has come when it may be profitable to ask whether the method of dividing the funds at their disposal amongst the various medical charities of a district, which we believe is now usually adopted by the managers of a Hospital Saturday collection, is the best in the true interests of the contributing work-people. When the funds have been gathered in, the routine system of division is this: a list is made of the hospitals it is proposed to benefit, the items of their respective total expenditures, as given in the last published reports, are then set down, and a share of the Hospital Saturday collection is apportioned to each charity in strict proportion to its gross yearly expenditure. This rule is easy and simple, but a moment's reflection shows that it must be frequently unjust. The good a hospital does is certainly neither strictly, nor only, in proportion to the money it spends. To reward hospitals only in proportion to their expenditure, is to offer a premium to extravagance, and to encourage competition in a direction which will often, and possibly usually, be found to be wrong. But, while it is not difficult to discover the imperfections and injustice of the present plan of apportioning the proceeds of Hospital Saturday collections, it is not easy to formulate a scheme of division which shall be free from objection. The details to be estimated are numerous, intricate, and various. When the hospitals in question are fundamentally different from each other in the scope and character of their work, as is the case when general and special hospitals are concerned, in the comparison, the difficulties to be overcome in placing just relative money-values upon their respective services to a given community are very great. Where two or more general hospitals are to be compared, the problem is still complex, but it does not present the difficulties which are inherent in the first case we have supplied. With general hospitals the charity which spends the largest amount of money in a given time does not necessarily and for that reason, perform the greatest public service. In comparing such hospitals, the expenditure of each is certainly one factor in the calculation, and a very important one, but it must be checked and balanced by being taken in conjunction with several other important considerations, such as the relative numbers and proportions of in-patients and out-patients in each hospital, the number of beds in each institution, the average yearly cost of maintenance per bed, the average cost of each out-patient, and of each in-patient, and especially the average detention-rate for in-patients. The Hospital Saturday movement has now taken a prominent and permanent place in the support of medical charities. If the undertaking is to achieve all the good of which it is capable, its proceeds must be apportioned fairly. The subject is an important one, and we commend it to the careful consideration of hospital supporters and administrators.

THE LOCAL GOVERNMENT OF LONDON.

More than a month ago, in deploring what was even then the inevitable fate of the Bill for the reform of the local government of London, we urged the importance of the Bill being "introduced and circulated at once, in order that it may receive without delay the outside criticism to which it must sooner or later be subjected" (see page 876). It is, perhaps, a little remarkable that, at the great mass meeting held at St. James's Hall on Tuesday, this point should have been taken up and insisted upon in the resolution which the assembled citizens preferred to the more cautiously worded one of Mr. Firth. The member for Chelsea, whose name is so honourably associated with this movement, would have been satisfied with a resolution expressing extreme regret at the abandonment of the London Government Bill, and earnest hope that the measure will be introduced at the commencement of next session; but the movers of the amendment, which was ultimately enthusiastically carried, were not content with this; and the meeting accordingly expressed its "indignation at the intention of the Government to postpone the consideration of the London Municipality Bill," and strongly urged them "to introduce it this session, thus enabling the citizens to judge of its provisions, and gauge its merits." For the reasons which we have already indicated, nothing but good can arise from the adoption of this suggestion. Looking to the advanced period of the session, and the commitments of the Cabinet, it is, we are afraid, of no use to "impress upon the Government the absolute necessity of taking up this measure as adjourned business, and giving it precedence over all other Bills;" and Mr. Gladstone, with the best intentions in the world, may not be able to give much immediate or solid comfort to the deputation which has been appointed to wait on him as to this matter; but of the wisdom of introducing the Bill, and letting public opinion on it crystallise during the recess, we are more than ever convinced.

HOSPITAL AMBULANCE SERVICE IN LIVERPOOL.

We are glad to see that the excellent work of Mr. Reginald Harrison, in connection with the formation of an ambulance service, is likely to take root in Liverpool. At a meeting of the Committee, held on June 1st, it was unanimously resolved to establish a horse-ambulance service in connection with the Northern Hospital. Mr. William Joynson (Chairman of the Committee), in making a public appeal for funds, calls attention to the barbarous manner in which the injured in Liverpool are removed from the scene of an accident to the hospitals. A great number of cases, he says, are brought in cabs, and other conveyances utterly unsuited to the purpose, and, indeed, they are very frequently the cause of further injury of the worst kind to the unfortunate sufferer. He calls attention to the fact that, in America, every hospital has a horse-ambulance; and the service is so rapid, by means of telegraph and telephone, that, within a very few minutes of an accident, the ambulance is on the spot, accompanied by a qualified surgeon, and every requisite for removing the case properly and preventing further injury. In an able address to the Liverpool Medical Institution, in the session 1881 and 1882, Mr. Reginald Harrison said: "It was of the first importance that the hospital should practically be brought to the very spot where the injured person lay, in order that the transition might not be responsible for any serious consequences connected with it which might have been avoided; and he submitted that no hospital could now be regarded as complete in its equipment, for the treatment of both sick and injured, which was not provided with its ambulance department."

SCOTLAND.

Professor Grainger Stewart has, we are glad to announce entirely recovered from the severe illness which has kept him from the duties of his chair in Edinburgh for seven months past, and he returns this week to resume his work, after a prolonged holiday on the shores of the Mediterranean and in Switzerland.

BEQUESTS TO MONTROSE MEDICAL CHARITIES.

To the Montrose Infirmary £500, and to the Montrose Destitute Sick Society £300, have been bequeathed by the late Mrs. Bain of Craigo, widow of the Rev. John Bain, of Logie, Perth.

ROYAL INFIRMARY, EDINBURGH.

The Edinburgh Royal Infirmary has benefited to the extent of £100 by means which might be beneficially extended there and elsewhere to medical charities. Lord Rosebery sometime ago presented to the Edinburgh Football Association a charity cup for competition. As a result of the sums drawn during various competitions for the cup, £100 was allocated to the Royal Infirmary, Edinburgh, and reported to the managers on Monday. On the same day, the Infirmary lost one of its most liberal and constant supporters by the

death of Mrs. Buchanan of Moray Place, in the eighty-sixth year of her age. Apart from her general support of the institution, she will be specially remembered in connection with her munificence to the ward set apart for the diseases of women and for domestic servants. She also endowed a scholarship in the University of Edinburgh in midwifery and gynæcology, of the annual value of the interest on the sum of £1,000. This scholarship has already been held by two graduates.

ABERDEEN ROYAL LUNATIC ASYLUM.

IN his report on the Royal Lunatic Asylum, Aberdeen, the Commissioner in Lunacy, Dr. Arthur Mitchell, observes that the dietary of the inmates contains two articles of food not found in any other asylum dietary in Scotland, namely, oat-cakes and brose; and that the food is of good quality, and supplied liberally. He also directs attention to the overcrowding of the asylum, which, at the date of his visit, contained 568 patients.

SUICIDE OF A LUNATIC PATIENT.

LAST week, one of the inmates of the Lunatic Asylum, Rosewell, while in charge of an attendant, made his escape, and before he could be captured, threw himself in front of a train passing on the Peebles railway. A determined effort was made to rescue him, but he was killed. In him the suicidal impulse was strongly developed, as he was, at the time of his successful attempt, just convalescent from the effects of a previous effort he made to destroy himself by cutting his throat in two places about a fortnight before.

HEALTH OF GLASGOW.

FROM the report of the medical officer of health for the fortnight ending May 26th, it appears that the death-rate was 34 per 1,000 living, the number of deaths registered being 664. Of these, 129 were of persons aged below one year, and 64 of persons aged 60 years and upwards. There were 201 deaths from pulmonary diseases, representing a death-rate of 10 per 1,000 living, and constituting 30 per cent. of the total deaths. The deaths from fever numbered 8, viz., 4 from enteric fever, 3 from typhus, and 1 undefined. The infectious diseases of children caused 140 deaths, of which 86 were from measles, 37 from whooping-cough, and 17 from scarlet fever, each of these diseases showing an increased mortality, but especially measles, which had during the last four fortnightly periods advanced from 38 to 51—65, and 86 deaths in succession. The epidemic is still more intense on the north side of the river, only 12 deaths being registered in the southern districts, against 74 in the northern which, in proportion to population, is nearly in the ratio of 1 to 2. Excluding a fatal case in a male aged 37, the average age of the 85 fatal cases of measles was 21⅜ months, and of the 37 fatal cases of whooping-cough 21½ months.

HEALTH OF EDINBURGH.

ACCORDING to the report of the medical officer of health, submitted to the Public Health Committee of the Edinburgh Town Council, the death-rate of Edinburgh for the month of May was 18.29 per 1,000. This contrasts very favourably with the average of the same month during the preceding five years, which was 21.9. The number of deaths was 353; and of these, nearly 38 per cent. were of children under five years of age, about 36 per cent. were of people between the ages of five and sixty, while nearly 27 per cent. were of people over sixty years of age. Disease of the chest caused about 36 per cent. of all the deaths, while debility and old age contributed 34 deaths. The birth-rate was 34.72 per 1,000 of the estimated population. As to the intimations of infectious diseases, 368 cases were reported during May; of these, 229 were of measles, 115 of scarlet fever, 13 of typhoid fever, 10 of diphtheria, and 1 of typhus fever. As to their distribution, 48 cases of measles occurred in the New Town, 163 in the Old Town, and 18 in the southern districts; of the cases of scarlet fever, 49 occurred in the New Town, 43 in the Old Town, and 23 in the southern districts; of the typhoid fever, 5 were in the New Town, 7 in the Old Town, and 1 in the southern suburbs; while, of the diphtheria, 4 occurred in the New Town, 2 in the Old Town, and 4 in the southern suburbs; the solitary case of typhus occurred in the Old Town.

REMOVAL OF THE IRISH PAUPER LUNATICS.

A CASE which occurred at the end of last year, and has recently been brought under the notice of the House of Commons, reveals some points of importance as to the existing law for the removal of pauper Irish lunatics from Scotland to Ireland. A pauper, named Flanagan, was under treatment in Greenock Parochial Asylum, and was, in December of last year, removed to the union workhouse at Londonderry under the usual warrant, which also bore an endorsement, in red ink, as to the man's lunacy. Shortly after his arrival at the workhouse, he was discharged, and, a few days subsequently, in a fit of insanity, he murdered his father. Such an occurrence as this shows that there is something unsatisfactory about the present arrangements whereby pauper lunatics are removed from Scotch asylums to Irish workhouses; for this necessitates a fresh examination as to the pauper's mental condition, and that by persons who are to a large extent unacquainted with his previous history and the form of mental aberration from which he suffered. In the present instance, neither the medical man who examined him, nor the workhouse authorities, believed the man to be insane, and his discharge was granted, although the written statement which accompanies every pauper when removed stated that he was so. The best remedy for this state of matters seems to be the adoption either of the recommendation of the Scotch Board of Lunacy, that a lunatic ought to be removed from an asylum to an asylum, or of the procedure followed in England, whereby Irish-born pauper lunatics do not come under the ordinary removal statutes, and become chargeable to the county where they are maintained. In reference to this last course, it is right to mention that the Irish Local Government Board hold that it is illegal to remove a lunatic from a Scotch parochial asylum to an Irish workhouse, while the Scotch Board of Supervision are of an opposite opinion, and regard a pauper lunatic as coming under the ordinary removal statutes. To prevent the recurrence of any such unfortunate incidents as the present one, and in the existing uncertainty of the law, we think that the advice of the Scotch Commissioners in the matter is the safest and best.

IRELAND.

THREE very successful amateur theatrical performances under distinguished patronage have been given in the Victoria Hall, Belfast, by the officers of the 19th Regiment, and ladies, in aid of the Belfast Royal Hospital. The subject chosen for representation was Colman's play, *The Heir at Law*, and it was produced in a highly creditable and effective manner, and considerably above the ordinary amateur standard.

DEATH OF SAMUEL GILMORE, A.B., M.D., OF CASTLEBLAYNEY.

The county Monaghan has lost an experienced physician in the removal by death of Dr. Samuel Gilmore, of Castleblayney, at the comparatively early age of 52. Dr. Gilmore was a native of Crossmaglen, and commenced practice in Castleblayney about twenty years since. By unremitting industry and considerable capacity he obtained a foremost rank in his profession; and, besides several public appointments, he had a very lucrative private practice. His funeral took place last week, and, as a mark of esteem and respect the shops in Castleblayney were shut during the entire day, and the blinds of various houses drawn down. The procession to the

cemetery was the largest which has been seen in the town for many years.

DUBLIN MEDICAL STUDENTS' CLUB.

A GENERAL meeting of this club was held in the club-rooms on Monday last, and was largely attended. In the absence of the president and vice-president, the chair was taken by Mr. J. M. P. Kennedy. The committee presented their report on the registration of the club as a limited liability company, which was adopted. The meeting then passed to the consideration of the rules for the future government of the club; these having been decided on, a discussion followed on the club's present position and future prospects. Mr. Ternan (honorary treasurer) showed that the club had largely increased in members, that it had acquired a valuable stock of furniture, and that its debt was but a nominal one, which could be paid at once if necessary, while it had not touched its reserves, but had, on the contrary, a balance in hand. Messrs. Kennedy and Sprent were appointed auditors for the present year. At the conclusion of the meeting a resolution was passed, deprecating the absence of the qualified members, whose interest in the students contrasted unfavourably with that shown by their professional brethren in London and elsewhere. A vote of thanks to the chairman concluded the proceedings.

HEALTH OF BELFAST.

THE report of Dr. Browne, medical superintendent officer of health, for the month of May, shows that 49 cases of zymotic disease occurred amongst dispensary patients in the district. These were, typhus, 18; scarlatina, 26; and small-pox, 5 cases. The majority of them were removed to the Union Hospital for Contagious Diseases, and the houses were carefully examined, cleansed, fumigated, and every precaution taken to prevent the spread of infection. The Registrar-General for Ireland, in the four weeks ending the 26th ultimo, gave the return of the deaths which occurred in this district from zymotic diseases. There were, small-pox, 4; measles, 3; scarlet fever, 35; diphtheria, 2; whooping cough, 29; typhus, 5; typhoid, 1; simple fever, 6; and diarrhœa, 19 deaths; in all, 107. He also registered 120 cases of phthisis, and 152 of diseases of the respiratory organs; making 272 deaths from affections of the lungs. The deaths amongst children under one year amount to 106, and of persons at and above 60 years, 109. The total births registered were, in the time referred to, 659; deaths, 645. The average death-rate from all causes was 31 per 1,000; from lung-diseases, 12.7; from zymotic diseases, 5; of these, scarlet fever showed a rate of 2.4; and whooping cough, 2. The average reading of the barometer at 11 a.m. was 30.5. The average maximum temperature was 50 degrees. The winds were westerly on 10 days, and easterly on 23 days.

DUBLIN SANITARY ASSOCIATION.

A SPECIAL general meeting of this Association was held last Monday, to add to its rules and objects, so as to enable the Association "to provide its members, at moderate cost, with such advice and supervision as shall insure a proper sanitary condition of their own dwellings, and to enable them to procure practical advice as to the best means of remedying defects in the houses of the poorer classes in which they are interested." The Registrar-General, Dr. Grimshaw, in proposing this as a resolution, said that it would have the effect of making the Association a sanitary protective society. Members living in the city or in the townships would be entitled, on payment of a moderate fee, to the following advantages: first, an inspection and written report by the engineer of the Association on the sanitary condition of their dwellings, with specific recommendations, if necessary, as to the improvement of drainage, water-supply, and ventilation; secondly, a final inspection of any alterations in the sanitary fittings of such dwellings which might be carried out according to the advice of the engineer; thirdly, such supplementary inspection, specifications, and advice as might be required, at a tariff of charges to be fixed by the Society; fourthly, inspection of rows of houses, institutions, works, etc., at a scale to be fixed by the Society. A sanitary protection society simply meant a sort of co operative association for the securing of skilled advice with regard to sanitary matters at all times, by independent and competent men, on favourable terms. The system might be said to have had its commencement in Edinburgh, an association having been founded there in 1878, which had been followed by the establishment of similar associations in several other places. The object of sanitary reform was the promotion of the public health, and the protective associations went to the root of the matter by securing healthy dwellings, which were the primary element in maintaining the health of the population. The resolution was seconded by Professor Barrett, who regarded it of great importance that the inspection of houses should be carried out by an independent officer, not connected with any trade. He hoped the Society would soon be in a position to take up the subject of the heating, lighting, and ventilation of the houses of the people. For the present, however, the Association would devote its chief attention to the sewerage and condition of the drains of houses, and would furnish advice as to remedies for existing defects in that respect. The resolution was adopted by the meeting, as was also one enabling "associate members" to obtain "sanitary protection" for their houses on the same terms as full members.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

FROM the report of the Council presented at the late annual meeting of this College, we learn that, during the year ending April 5th, 1883, 15 candidates were admitted to the Fellowship of the College, and 114 received the Letters Testimonial; 7 licentiates obtained the diploma in midwifery; 108 candidates for the junior class examinations were rejected; and 51 candidates for the final examination were rejected. The entire number of Fellows on the lists of the College amounts to 351; of licentiates, 3,323; of licentiates in dental surgery, 474. During the year, 301 candidates presented themselves for the preliminary examination in general education, and the percentage of rejections was 25.4 per cent.; 51 were granted first-class, and 82 second-class, certificates; 77 were granted unclassed certificates, and 74 were rejected; 8 withdrew or were absent. Notwithstanding the opinion of the General Medical Council that "it is desirable that the examinations in general education should be left to the universities, and to such other bodies engaged in general education and examinations as may from time to time be approved by this Council," the College resolved not to abandon its preliminary examination; but it has agreed to recognise, under certain conditions, the pass certificates of the matriculation examination of the Royal University of Ireland, and of the Intermediate Examination Board. As regards the sum expended by the College on the improvement in its school of surgery—a matter that gave rise to much discussion at the previous annual meeting—it is satisfactory to know that the estimated cost of the improvements then made, viz., £2,989 3s., has been only exceeded by a sum of £211 10s. The College has been able to meet this expenditure by an overdraft on the bank, to which, at the close of the financial year, it was indebted in the amount of £1,451 0s. 6d., a sum which has since been further reduced. In addition to the resolutions adopted by the College at the annual meeting, mentioned in last week's JOURNAL, the following important one, as affecting the non-urban Fellows, was agreed to without a division: "That the necessary steps should be taken to have such alterations made in the Charter of the Royal College of Surgeons as shall enable provincial Fellows of this College to vote at the election of President, Vice-President, and Council, by voting papers or other means, as is the case in Trinity College, Dublin, the University of Edinburgh, and other institutions." It was also remitted to the Council to consider the best means of informing the Fellows, from time to time, of its proceedings.

ASSOCIATION OF GERMAN PHYSICIANS PRACTISING IN LUNACY.

THE yearly meeting of this Association was held at Berlin on May 16th and 17th. The first meeting took place in the Royal Charité Hospital, when the following matters were considered.

1. Petition for the adoption of Psychiatry in the State Examination.
2. Memorial concerning Lunatic Criminals.
3. The Report of the Care of Epileptics, advising the Separation of Sane from Insane Cases.
4. The Question of Drunkards, which was left to the association formed specially to investigate this matter.
5. The question of Overwork in the High Schools.

Ophthalmoplegia Externa in the Insane.—Professor WESTPHAL showed three cases of ophthalmoplegia externa in insane patients. The first case was one of dementia. There was no reaction of pupils to light and accommodation; speech was indistinct and nasal; both eyes were fixed; there was no ataxy; the right knee-phenomenon (patellar tendon-reflex) was absent, the left only slightly obtained. In the second case, also of dementia, the right eye was immovable; the left eye showed only slight traces of movement; the knee-phenomenon was well obtained on both sides. In the third case, the patient had been in a lunatic asylum, and now had both eyes immovable; he also had severe neuralgia of the right fifth nerve, causing trismus of the right facial and lower jaw muscles; there was no ataxy, but paresis of the lower extremities, and he could not walk. The pupils reacted to light. The knee-phenomenon was well marked. Professor Westphal gave a review of the recorded cases, mentioning those of von Gräfe, Benedikt, Förster, Hutchinson, Bresgau, Lichtheim, and Buzzard—in all, thirty-two cases, of which Westphal had observed six. Of these, mental derangement was observed in six; spinal disease in twelve (of these, three were already included among mental derangement); fourteen had facial paralysis; and there was optic atrophy in ten. It was mentioned that this affection was associated with spinal, bulbar, and mental diseases. In one case, the speaker made a *post mortem* examination, and found atrophy of the motor nerves of the eye. He could not yet examine the nuclei of these nerves. In the spinal marrow, there was degeneration of the posterior, and the posterior part of the lateral columns. Probably, the disease was situated in the nuclei of the eye-muscles.—Professor MEYNERT had observed a similar case, perhaps the same as Benedikt's; and, as this patient showed a mental derangement of the same kind, like intermittent mania, he imagined that the same process which occurred in the region of the nuclei of the eye-muscles, caused, through the excitation of the automatic centres, the functional brain-disease.

Dementia Paralytica.—Dr. TUCZEK (Marburg) showed microscopical sections from the brains of cases of dementia paralytica, in which the medullated nerve-fibres of the superficial layers were absent, when examined according to the method of Gauer (osmic acid); and he considered that this atrophy was primary, as it also occurred in recent cases in which neither the neuroglia nor spider-shaped cells *(Spinnenzellen)* were increased. The ganglion-cells appeared normal. He laid the chief stress on the absence of association-fibres.—Dr. MENDEL required proof that these changes were characteristic of dementia paralytica, and did not occur also in ordinary dementia. This proof he considered to be given in interstitial encephalitis. He contested the representation of the course of the affection, doubting that the ganglion-cells remained normal, if the nerve-fibres disappeared, and warned all against founding psychological theories on anatomical appearances.—Dr. TUCZEK said he had not maintained that his results were characteristic of dementia paralytica.—Professor WESTPHAL decidedly contested that Dr. Mendel or someone else had proved that the so-called interstitial encephalitis was characteristic or a constant appearance in dementia paralytica.—Dr. SMIDT mentioned, from good preparations of the "tangential fibres", by Weigert's method, the fragility of these fibres, and the care required for their detection.—Dr. MENDEL maintained firmly that interstitial encephalitis was proved by him to be present in most cases of paralysis, this being confirmed by other authors (Magnan, Lubimoff, and Mierzejewski), and also that other pathological processes in the cortex could produce the clinical picture of paralysis, as was shown in his monograph, and recently in a similar case (*Berlin. Klin. Woch.*, 1883, No. 17).—Professor WESTPHAL remarked that the opinions of investigators in dementia paralytica had always altered with the changed views concerning the alterations in connective tissue.—Dr. BINSWANGER described, in fresh cases, lesions of small-celled infiltration of the cortex, specially on the basal surface of the brain, which he found near the vessels, but also in parenchyma, resembling the lesions in leukæmic livers and kidneys.—Dr. HITZIG doubted whether one could draw up a distinct anatomical view of dementia paralytica from the preparations. After extirpating the anterior apex of the frontal convolutions in dogs, he found Baillarger's phenomenon, which appeared as a degeneration progressing from the front backwards, causing the cortex to be easily detached from the white matter.—Dr. ARNDT thought changes of nerve-substance the most important point, the causes of which were various, as diseased vessels, interstitial, or other processes. In paralytic women, often no change could be proved.—Professor MEYNERT thought it certainly dangerous to try to prove changes in ganglion-cells, because they suffered changes through œdema, in the act of dying, and through *post mortem* changes. However, in certain cases, the reference to an analogy with the pathological changes of the ganglion-cells in poliomyelitis anterior had given him valuable hints. He then discussed the different processes included under dementia paralytica. Sometimes the cortex was quite unchanged, in other cases it alone was attacked. Psychically, the disturbance of the association-movements was the chief point. The motor disturbances in paralysis also were caused by lesions in the association-fibres, so long as movements were still possible, though awkward and badly co-ordinated; but, as soon as paralysis occurred, it was a question that ganglion-cells were affected.—Professor WESTPHAL doubted, in opposition to Dr. Binswanger, whether the small heaps of cells found by him were characteristic of paralysis.—Dr. BINSWANGER allowed that other changes might co-exist, comparing it with Bright's disease, where new changes were still found.

Treatment of Hysteria and Melancholia.—Professor BINSWAUGER (Jena) read a paper on Weir Mitchell's treatment (careful feeding and massage) of hysterical patients, applied with success to cases of melancholia with refusal of food. He alluded to Dr. Playfair's cases in London.—Dr. JENSEN spoke favourably of head-massage in fresh cases of "katatonie."—Professor BINSWAUGER objected to it in cases of headache.—Dr. MENDEL warned against too optimist a view of the massage theory, while Nasse reported bad effects of the Amsterdam massage treatment.

The Nucleus Lenticularis.—Professor MEYNERT discussed the significance of the nucleus lenticularis. He had succeeded, in sections through the plane of the fibres, in seeing the passage of the fibres from the cortex (from the external capsule) into the outer part of the nucleus lenticularis. Preparations from the deer and guinea-pig were shown, which contradicted Dr. Wernicke's theory. The nucleus lenticularis was more concerned in the psychical use of the upper extremities; this was borne out by the comparative anatomy of walking and climbing animals; also by the pathological fact that, in aphasia following insular apoplexy, the upper extremities were more and lastingly paralysed than the lower (neighbourhood of nucleus lenticularis to island of Reil).

The Lemniscus.—Dr. MENDEL showed preparations from the man, dog, and ape, in horizontal, frontal, and sagittal (vertical, anterior, and posterior) sections, showing the "schleife" (lemniscus), about which ideas differed. A case of secondary degeneration of the lemniscus by Homen and Meyer was quoted, in which secondary atrophy of the olivary body was found. According to Dr. Mendel's preparations, the upper lemniscus arose from the grey mass in the floor of the third ventricle (lenticular nucleus?), and, collecting fibres from the anterior corpora quadrigemina, went to the pons Varolii. The lower lemniscus sprang from the posterior corpora quadrigemina, got fibres from the descending root of the trigeminus, and also transverse fibres from near the oculo-motor nucleus. The two layers of lemniscus ended partly in the formatio reticularis, and partly in the lower olivary body. No physiological explanation came from these facts; but, in the case of Meyer, descending and ascending secondary degeneration showed presence of motor and sensory fibres in the lemniscus.—Dr. HITZIG had a dissertation preparing on a case in which, after a lesion of the crus cerebri and the lemniscus, there was atrophy of the corresponding olivary body.—Dr. ROLLER had already described this connection of the lemniscus.

Preservation of the Brain.—Dr. MENDEL showed entire brains preserved dry, without change of colour, by immersion, when quite fresh, in concentrated solution of stannous chloride for five weeks, then in water for two or three days, and lastly in glycerine till the brain sank, when it must be dried.

Ophthalmoscopic Results in Insane Patients.—Dr. MOËLI read a paper on this subject. Two hundred and eighty patients had been examined for him by Dr. Uthoff by the direct method, to discover

any dimness (Trübung) of the retina. In 70 cases of general mania, melancholia, and intellectual mania, only five times were pathological changes found; of these, in four there was dimness with hyperæmia, accompanied by bodily disease, and in one traumatic neuritis. Nothing was found in thirty-five cases of ordinary and senile dementia. In thirty-seven epileptics, pathological changes, from which presence of brain-disease might be inferred, and of which epilepsy was one symptom, were found in some. Of sixty alcoholic patients, four had opacity of the retina, and several others showed a paleness of the optic disc on the temporal side. Of twenty patients with organic brain-disease, half had pathological changes. Of one hundred cases of dementia paralytica, twelve had atrophy, two had paleness of retina of doubtful nature. Dr. Moëli doubted that atrophy always came from neuritic processes. Of the paralytics, 20 per cent. had no knee-phenomenon; of the twelve with atrophy, six had no knee-phenomenon. He considered that in psychiatry, ophthalmological results were rarely found; more marked dimness occurred almost only in paralytics. The presence of pallor on the temporal side pointed to alcoholism.—Dr. WILDERMUTH had also seen this temporal pallor.

Alterations of Nerve-tissue in Tabes.—Dr. ARNDT demonstrated sections from a tabetic paralytic, in which rarefaction of nerve-substance, after usual microscopical treatment, remained as a net-work.

The Brain in Chronic Dementia.—Dr. SAKAKI (Japan) showed sections of the brain from a case of chronic dementia, showing changes of the circumcellular and adventitial spaces, which contained a yellow matter; this was found chiefly in the temporal convolutions and in the island of Reil, whilst it was absent in cortical, motor and occipital regions.

On the first afternoon the members of the Congress were conducted round the Hygiene Exhibition; and the second afternoon, they inspected the sewage-farm, for the drainage of Berlin, at Osdorf. The sewage is pumped from Berlin to Osdorf, a few miles distant, and distributed in ditches about the fields, the solid matter being kept back by wooden sluices, and thrown over the fields, while the purified inert water is carried into the Havel.

HOSPITAL ADMINISTRATION.

A CONFERENCE on the administration of hospitals will be held on Tuesday and Wednesday, July 3rd and 4th, at the Society of Arts, John Street, Adelphi, under the auspices of the National Association for the Promotion of Social Science, when Sir Thomas Fowell Buxton, Bart., will preside.

The programme will open with a statement by F. S. Powell, Esq., a past president of the Health Department, describing the steps already taken by the Association, with a view to promote the appointment of a royal commission of inquiry, for the purpose of obtaining reliable data upon which to base such reforms as may appear desirable. The consideration of the subject, which is one of magnitude and serious concern, will be divided under the following headings: 1. Hospital Administration: *(a)* The Governors and the Management of Hospitals; *(b)* The Selection and Appointment of Committeemen; *(c)* The Best Forms of Executive Government, *i.e.*, by Treasurer, House-Governor, or Medical Superintendent; *(d)* Medical Representation in the Management; *(e)* The Relation of the Hospital to the Medical School. On these subjects papers will be read by B. B. Rawlings, Esq., (on *a* and *b*); by J. S. Bristowe, M.D., on *c* and *d*); and T. Gilbart Smith, M.D. (on *e*). 2. The Present Financial Difficulties of the Metropolitan Hospitals: *(a)* Their Causes and Probable Results; *(b)* Hospital Finance and Audit. Paper by H. C. Burdett, Esq. 3. Can the System of Free and Pay Wards and of Payments by Out-Patients be Successfully Applied to Existing Hospitals? Papers by W. Fairlie Clarke, M.D.; T. Holmes, Esq., St. George's Hospital; and J. S. Wood, Esq., Chelsea Hospital for Women. 4. The Differences between the Systems for Raising Income and Controlling Expenditure at the Metropolitan and Provincial General and Special Hospitals. The papers will be read by T. Blair, Esq., Leeds General Infirmary; and R. Hordley, Esq., North Staffordshire Infirmary. 5. The Relation of Convalescent Institutions to Hospitals. Papers by B. J. Massiah, M.D., and E. Scarth, Esq. 6. The Necessity for a Royal Commission of Inquiry. Papers by Sir Rutherford Alcock, and H. Nelson Hardy, Esq., Secretary of London and East London Dispensary.

The conference will be held, by permission of the council of the Society of Arts, at their house in John Street, Adelphi. The chair will be taken each day at 11 A.M., and the Conference will adjourn for luncheon for half an hour between one and two o'clock. Admission to the Conference will be by tickets, for which application should be made at the office of the Association, 1, Adam Street, Adelphi, W.C.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 21st, and September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 11th day of July next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, June 14th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Derby, at 2 P.M. on Thursday, June 21st. Members wishing to read papers are desired to forward the particulars to Mr. Sharp, Derby, or to the undersigned.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, 2, East Circus Street, Nottingham.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned between this date and June 15th.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Keswick on Friday, July 6th, 1883. Members intending to read papers or show specimens are requested to communicate with RODERICK MACLAREN, Honorary Secretary *pro tem.*, or J. SMITH, M.D., Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held at the Medical Institute on Thursday, June 28th, at 3.30 P.M. An address will be given by the President, Dr. Balthazar Foster. The annual dinner will be held at the Grand Hotel, at 6 P.M. Dinner tickets, exclusive of wine, five shillings each. Members have the privilege of introducing a friend to the dinner, whether a member of the medical profession or not.—EDWIN RICKARDS, ALFRED H. CARTER, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The annual meeting of the above District will be held on Thursday afternoon, June 21st, at the Royal Forest Hotel, Chingford, at 4.45; Dr. Bridgwater, President of the Metropolitan Counties Branch, in the chair. After the business of the meeting is concluded, the members and their friends will dine together at six o'clock. Tickets, 8s. (not including wine) should be obtained of the Honorary Secretary before the 18th, so that convenient arrangements may be made.—FREDERICK WALLACE, Honorary Secretary, 96, Cazenove Road.—June 11th, 1883.

SOUTHERN BRANCH.—President, Surgeon-General W. C. Maclean, M.D., C.B., Southampton; President-elect, W. England, M.D., Winchester.—The tenth annual meeting of this Branch will be held at the Royal Hants County Hospital, Winchester, on Thursday, June 21st, 1883. (The President-elect has kindly undertaken to provide refreshments at the hospital.) The general meeting will commence at 12 o'clock. Members desirous of reading papers or other communications at this meeting are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect at 2 P.M. During the afternoon, the members will have an opportunity of visiting several places of interest in the locality. The dinner will take place at the Royal Hotel, at 5 P.M.; tickets 14s. each, including wine. The committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. T. C. Langdon, Northgate House, Winchester, on or before Tuesday, the 19th instant.—J. WARD COUSINS, M.D., Honorary Secretary and Treasurer.

NORTH WALES BRANCH.—The thirty-fourth annual meeting will be held at the Lion Hotel, Bala, on Tuesday, July 3rd, at 11.30 (for 12 noon), under the presidency of Mr. Roger Hughes of Bala. Besides the contributions already notified, Dr. Lloyd Roberts of Manchester is expected to read a paper. Titles of other communications should be given to the Honorary Secretary, not later than Tuesday morning, the 12th instant.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh, June 6th, 1883.

SOUTH-WESTERN BRANCH.—Mr. J. Harper, President; Mr. C. Bulteel, President-elect. The annual meeting will be held on Tuesday, June 26th, at the Royal Albert Hospital, Devonport. The chair will be taken at 2.15 P.M. The annual dinner will be at the Duke of Cornwall Hotel, Plymouth, at 6 P.M. The President-elect invites members to lunch at his residence, 84, Durnford Street, Stonehouse, from 12 to 2 o'clock. Mr. George Jackson will introduce for discussion the proposed Medical Provident Society scheme. The Secretary will be glad to receive notice of proposed papers and communications.—S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

CAMBRIDGE AND HUNTINGDON AND SOUTH MIDLAND BRANCHES.—A combined meeting of the above Branches will be held at Bedford on Friday, June 29th, at the Board Room of the Harpur Charity Trustees. It is proposed to have a dinner after the meeting at the George Hotel. Further details will be supplied in the circulars about to be issued. Gentlemen intending to read papers or cases are requested to communicate without delay to G. F. KIRBY SMITH, Northampton, Honorary Secretary, South Midland Branch.

CORRESPONDENCE.

AN INTERNATIONAL EXHIBITION IN NICE.

SIR,—Following the example of many other cities, the Mayor and municipality of Nice have resolved on opening an International Exhibition there in December next.

The Society of Medicine at once seized the opportunity to point out the importance of devoting a portion of the building to a Medical and Sanitary Exhibition, and you will see by the catalogue how anxious they are that it should be as complete and as practically useful as possible.

All of us who have been on the Continent know how far from perfect are the hygienic and sanitary arrangements of our neighbours on the other side of the channel, and the Riviera has had in these respects more than its fair share of blame.

If you, sir, and other members of the profession will lend your influence and help to promote its success, the Medical and Sanitary Exhibition at Nice may be the starting point of far better things than exist at present; and we may then send our patients south in search of health with none of those misgivings as to imperfect drainage, untrapped closets, and ill-ventilated houses, which make us sometimes hesitate as to whether an English winter, with its damp, and cold, and darkness, may not after all be safer than the cloudless sky and brilliant sunshine of the Mediterranean. The agents for England are Messrs. Johnson, Castle Street, Holborn, London, E.C., to whom all applications for space must be made, and from whom all information may be obtained. I shall also be most happy to answer any inquiries on the subject.—I am, sir, yours faithfully,

CHARLES WEST.

2, Bolton Row, Mayfair, W., June 11th, 1883.

SUMMER DIARRHŒA.

SIR,—*Apropos* of your article on summer diarrhœa in this week's issue of the BRITISH MEDICAL JOURNAL, and your invitation to a critical examination of the subject now the warm weather has commenced, comes the announcement that Dr. Ballard will open a discussion on this subject in the section of Diseases of Children, at the annual meeting of the Association to be held at Liverpool this year.

The discussion is likely to prove of more than passing interest; for not only will Dr. Ballard bring the rich experience gathered during his special investigations of the last two or three years, but also others, who have had large experience as hospital-physicians or medical officers of health, have consented to take part. But what will be of special value in adding to the interest of the debate, will be the experience of those who see much of family practice, both among the better and the poorer classes of society. May we appeal through your columns to such for help?—Yours faithfully,

Manchester, June 11th. HENRY ASHBY.

THE DIVISION OF LIGATURED ARTERIES.

SIR,—I read with interest two communications on the subject of deligation of large arteries by the application of two ligatures, and the division of the vessel between them, in your JOURNAL of the 7th and 21st of last month, and am glad to find that this proceeding is received with favour. If your correspondents will refer to the *Medical Times and Gazette* of October 19th, 1872, page 428, vol. ii., they will find some information on this subject; and Mr. Walsham will be interested to know that the method of dealing with ligature of large arteries, and of the femoral in particular, has long been advocated and practised in Italy. In 1872, when in Rome, I visited the wards of San Giacomo, the great surgical hospital of that city, and there saw the Cavaliere Giuseppe Corradi, the eminent Professor of Clinical Surgery in the University of Rome, tie the femoral artery in Scarpa's triangle for popliteal aneurysm in this fashion. After having completed the usual steps of the operation for laying bare the sheath of the vessel, he proceeded to lay open the sheath to a greater extent than usual, and his object in doing so soon became apparent when he applied two ligatures at a considerable distance apart, and completely divided the artery between them, the divided ends retracting to a considerable extent. That, he observed, took off tension, and diminished the probability of any unfavourable results such as ulceration, hæmorrhage, or suppurative inflammation; it favoured the rapid healing of the wound; and he found that it was attended with much success. Signor Corradi had, I believe, quite adopted this mode of tying the artery, and considered it safer and more successful in every way than that by a single ligature.

This distinguished surgeon is now in Florence; and I am sure from his courtesy in showing and explaining his operation and his views to me when I met him in Paris in 1872, that he would gladly give any further information to English surgeons who are interested in the subject.—Yours faithfully, J. FAYRER.

THE MEDICAL PROVIDENT SOCIETY.

SIR,—Now that the proposed "Medical Provident Society" is on the eve of assuming a practical shape, I should like to say a few words in reference to the voluminous correspondence which the idea has elicited. By far the greater portion of this is favourable; some, however, is the reverse of this; and some correspondents suggest various alterations or modifications of the scheme. It is to these latter classes that I would address myself.

First, a word as to the alterations and additions. It has been proposed—

1. That the Society should be a "Benevolent Society, partially at any rate."

2. "That it should undertake 'life-assurance.'"

3. "That it should, in cases of illness, provide a *locum tenens* instead of a money payment."

4. "That it should form a part of the British Medical Association."

Let us take these proposals *seriatim*.

1. There are plenty of benevolent societies already, most excellent institutions, and I wish they were better supported; but there is not one provident society.

2. It is quite possible that it might be advisable to take up "life-assurance" as an addition to the sick pay department at a time, if not at first. This, however, is a question for the actuary; for myself, I do not think it well to attempt too much at first.

3. This might answer in cases where the sick member has a practice; but when he has been compelled to abandon it, a *locum tenens* would be a somewhat useless incumbrance.

4. Let me refer those who think that any intimate relation is possible between the Association and the proposed Society, to the resolution of the Committee of Council on the subject. It will be found in the JOURNAL of April 21st, page 789.

It has been stated that the Birmingham Wesleyan Assurance Society will do all that can be done by such an institution as the one proposed. I have their tables now before me (for 1883), and find that in the sickness department they insure no one who is over 30, or for a larger sum than 15s. a week.

The difficulties that have been mentioned in connection with the scheme, fall naturally into two classes; namely, those common to all friendly societies, and those peculiar to one established for the medical profession. Since it is admitted on all sides that friendly societies, established by working men, succeed well when properly managed, I need say nothing in reference to the first class; these difficulties are perfectly well understood, the tables are so drawn up as to meet them, and, as a matter of fact, do overcome them successfully. We come then to the difficulties peculiar to a society connected with the profession; and those that have been urged may be divided into four classes.

1. "That we are not numerous enough."

2. "That we are more liable to sickness than the members of established friendly societies."

3. "That we should be more obnoxious to fraud than they."

4. "That we are a scattered body, whereas most of the established societies are local."

1. The medical profession in the United Kingdom numbers, I believe, about 26,000; surely it is fair to assume that at least 5,000 would join a well conducted society. I know several successful benefit societies with fewer members than this.

2. This is a difficult question, and one which only experience can decide. My own belief is that, at all events, the amount would be no greater than among the members of ordinary friendly societies. To be in the profession at all argues a certain amount of vital power, and I think that most medical men now-a-days lead more careful lives than the average working man. But, whatever the sickness-rate, I have no doubt that the claims on the Society would be proportionately lower than in societies formed by working men. Few will join till they are settled in life, and it does not pay a man with any practice to be laid up; every week that he is so is a dead loss to him, and six months' enforced idleness means ruin to most of us. In the working man, all this is reversed. He is often out of employ when there is every inducement for him to be ill, and he loses nothing by going on the box, except his wages for the time being. His income does not, as in the case of a medical man, suffer any permanent deterioration. He is, as a rule, obliged to claim pay, if only laid up for a few days, whereas a medical man loses practically nothing by a week or ten days' illness; it is in prolonged disease that he needs help. So much is this the case, that I would suggest that no one be entitled to pay until he has been laid up for at least a week.

3. Black sheep there must be in every flock, and to entirely eliminate fraud is obviously impossible. An allowance is always made in the tables of all friendly societies for a certain amount; the question is, should we have more? It seems to me that to say this is to assert that the medical man is morally baser than the working man. It should not be forgotten, as I have already said, that whereas the medical man, in the vast majority of cases, has every inducement to work to the last, in the case of the working man the converse is the case; and if our members were not entitled to pay for the first week or so of illness, there would be no going on the box for small ailments, and the funds would greatly profit thereby. With regard to inspection, I cannot see that we should be worse off than the established societies; they, it is true, send two of their members every week to "visit," but I have never in my own experience, and it is not a small one, known these visitors to discover a malingerer. Feigned illness is difficult enough for a medical man to discover; for an amateur it is impossible. Much has been made of the difficulty of inspecting a practitioner in a country district; but, if he were ill, some medical man would be in attendance and would sign the weekly certificate; besides which, the Society would reserve the right in doubtful cases of sending a medical man of their own choosing to examine and certify.

4. That we are a scattered body is a true, but not a vital objection. Many successful societies have members all over the three kingdoms. No doubt it entails extra expense in working, but nothing beyond this.

Even assuming that the difficulty of working and the liability to fraud should be thought, after investigation by a competent authority, to be as great as some of your correspondents would have us believe, what then? Simply this: the scale of payments must be made higher in proportion than those of the ordinary friendly societies. Let those gentlemen who fear that the annual premium will be too high look around them. Let them consult the records of any benevolent society in their own neighbourhood; let them look in the journals at the weekly appeals for help from penniless medical men, incapacitated for work by disease or old age; let them look at the list of applicants for help from the British Medical Benevolent Fund in the JOURNAL of May 19th, and reflect that they may some day be in the same condition themselves. Let them, I say, do these things, and I think they will agree with me that, were the annual premium of the proposed Society double what it is likely to be, immunity would be cheaply purchased from the risk of such terrible pauperism.—Faithfully yours,

T. H. RAVENHILL.

Bordesley, Birmingham, May 21st.

REPRESENTATION ON THE COUNCIL.

SIR,—With pleasure and care I have read the columns in your issue, pp. 1018 *et seq.* You will allow me, I trust, to make a few comments thereon.

Mr. Wheelhouse, as chairman of the meeting held on May 17th, to consider certain proposed changes in the Council of the British Medical Association, stated: "I asked" (by circular) "every member of the Association who had a grievance to make it known." Now, sir, inasmuch as the British Medical Association is composed, for the most part, of general practitioners, and these are so overworked and harassed, as a rule, that they have neither energy, time, nor endurance sufficient to read carefully their BRITISH MEDICAL JOURNAL and write their thoughts thereon, I do not wonder "that not one single letter in answer to that appeal has been received," etc. Good gracious! to answer every question made by letter, by circular, by telegram, by telephone, by post, would be simply impossible. From this, however, the Council of the British Medical Association must not infer that the members of the Association do not take a lively interest in its affairs, and do not read the JOURNAL as leisure will allow. But for the active minds in the Association to reply to, or to take notice of, what they may deem deserving it, when published in the BRITISH MEDICAL JOURNAL, is simply impossible.

I am glad to see that at this meeting the principle of "direct representation" was agreed to; but the "house-list" system should be done away with, if fair play is to be reached. The puzzle is how to reach the majority, and yet not to dictate. Now, sir, supposing a list were issued of all eligible members, and each voter were requested to place a cross opposite the name of the member he desired should enter the Council, would this not meet the difficulty? At present the representatives on the Council of each Branch, and those too on the General Council, form self-elected bodies. Those who have most time to attend election meetings get place; *e.g.*, in the last list of Council for the Lancashire and Cheshire Branch, I find nine members connected with the local medical school and large hospitals, and only three (in my opinion) representatives of the general practitioners. Examining the representation of local subdivisions (like Birkenhead, Rockferry, etc.), this evil becomes more apparent. The annual list of attendances proposed to be published will show how representatives on the Council do their work; but, in the first place, let them have the opportunity.

It seems to me that daily the gap between the practitioners of medicine and the teachers of medicine, at all events, in the provinces, is becoming wider and wider; the latter are holding aloof from, are grasping at honours, and are snubbing as much as possible the general practitioners. They forget that, next to medical officers of health, general practitioners have a larger number of important lives in their keeping than any other members of the profession. If then, the medical profession is not to degenerate into a trade, and each life be money-valued, I think "general practitioners"—the practitioners of medicine—should receive more honour, and be more numerously represented in the council of their governing body than they are. Of course, seniority has its claim, and past work to the Association should be recognised, but fresh fuel must be added to the fire if it is to burn.

I trust, therefore, that the outcome of the meeting held on May 17th, will be increased vigour instilled into the adult British Medical Association by the election of representatives to its Council from among general practitioners.

There are other grievances which will require consideration in their turn, but the most important one is that I have mentioned. At present, the high-class general practitioners, the best of men, are miserably represented in the central and branch councils of the British Medical Association. Indeed, if it were not for the able manner in which the BRITISH MEDICAL JOURNAL is conducted, the Association would readily fall to pieces.—I remain, yours, etc.,

P. M. BRAIDWOOD.

Birkenhead, June 4th, 1883.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, June 12th.

The Contagious Diseases Acts.—Viscount LIFFORD asked Her Majesty's Government whether their attention had been directed to the moral condition of naval stations, especially Portsmouth, since the practical repeal of the Contagious Diseases Acts.—Viscount CRANBROOK thought it was the duty of every one who had had anything to do with the Acts in question to raise his voice against the course which had been taken. When at the War Office he, after very careful and anxious consideration, came to the conclusion that the Acts produced beneficial effects. The same persons who agitated for the repeal of the Acts were opposed to compulsory vaccination. The town councils and principal inhabitants of the towns affected, including the clergy, had petitioned against the repeal of the Acts.—Viscount HARDINGE, as a member of the Royal Commission, expressed his thorough concurrence with what had fallen from the two noble viscounts. He asked how the Government proposed to supply the place of the metropolitan police, who had done their work efficiently, but were now withdrawn from the towns which had been subject to the Acts.—The Duke of SOMERSET, having been familiar with the working of the Acts from the beginning, wished to express his opinion of their great value and efficiency.—The Duke of CAMBRIDGE concurred in all that had been said as to the beneficial operation of the Acts. All the towns affected desired the continuance of the Acts, and those who agitated for their repeal were persons living at a distance. In one town alone there were 250 fewer houses of ill-fame after the Acts than there had been before. He would like to see the Acts extended, as they were a great protection to morality.—Lord STRATHNAIRN and the Earl of WEMYSS made some observations.—The Earl of NORTHBROOK was afraid that this was one of the subjects on which the opinion of their lordships was opposed to that which had been expressed by the other House of Parliament. As far as he was aware, women under treatment where these Acts were still in force were not allowed to leave the hospitals until cured. He was strongly in favour of the Acts, which he believed had done much good. The action of the Metropolitan Police had been most beneficial in keeping young girls off the streets and in leading to their reclamation. The Government, however, hoped to be able to secure the object of the Acts under a voluntary system. Although personally he regretted the vote of the House of Commons, it would be impracticable, in the present state of opinion on the subject, to extend the system over the whole country in order to give that general benefit to the health of the country which he believed would follow from the adoption of the Acts.—The Marquis of SALISBURY remarked that this question had two aspects. It had one of a social, sanitary, and administrative character, in respect to which much had been said in which he entirely concurred. But he wished to know precisely how far the Government had, on their own authority and without the consent of Parliament, suspended the operation of an Act of Parliament. If it was only the case that they had simply abstained from that action which absolutely required the vote of money by Parliament to sustain, and if they had not gone beyond that action, he did not blame them from the constitutional point of view. But he understood they had suspended compulsory examination. They had not merely ceased to pay special officers for doing it, but they had given orders that that which the Act prescribed should no longer be done, or, at all events, they had given orders that that which the Acts empowered them to do, should no longer be done; and they had done that, not at any bidding of Parliament, but simply by a vote, obtained at a single sitting of the House of Commons. A decision on the gravest question of public policy had been taken without any of those safeguards of repeated deliberation which Parliament required. He asked whether the Government would produce all letters and orders with reference to this subject since the vote of the House of Commons.—The Earl of NORTHBROOK did not think there would be any objection to producing the papers. The intention had been simply to withdraw the Metropolitan Police, who were paid out of the vote, from taking part in the operation of the Acts. They had no power to prevent the operation of the Acts apart from that. They issued certain instructions to the visiting surgeons, and he did not think there would be any objection to produce those instructions.

HOUSE OF COMMONS.—Thursday, June 7th.

Nazareth House.—Mr. O'CONNOR POWER asked the President of the Local Government Board when Mr. Spear's report upon an inquiry concerning Nazereth House, Hammersmith, would be printed; and whether Mr. Spears did not declare in the concluding portion of that report that the sanitary condition and the management, so far as sanitary affairs were concerned, of the institution were excellent, and that the care habitually bestowed on the children was worthy of special consideration.—Sir C. DILKE believed that such were the concluding words of the report, which was ordered to be printed some time ago, and wondered it was not already laid upon the table of the House. He had no doubt that it would be before the House in a day or two.

Syphilitic Infection by Vaccination.—Sir L. PLAYFAIR asked the President of the Local Government Board whether one of the Board's officers, in the course of an investigation into the conditions under which syphilis could be transmitted in the act of vaccination, had infected himself with syphilis and had seriously injured his health; and whether, if that were true, the conditions under which he succeeded in infecting himself were such as might occur during the legitimate operation of vaccination.—Sir C. DILKE said that the facts were substantially as stated in the first part of the question. The officer referred to, believing that syphilis, although it had very rarely indeed been communicated in any of the operations of vaccination, nevertheless could, under some circumstances, be so communicated, was desirous of learning the conditions under which such a transmission was possible. His object was to obtain better information than any of the rare and accidental cases hitherto reported could afford respecting the precautions proper to be taken for avoiding even risk of such an occurrence during the practice of vaccination. The investigation required experiments to be made on the human body, and these (though, of course, not acting as an officer of the Board) he proceeded to make on his own person, and at the end of his experiment he did infect himself with syphilis. The case was at present the subject of skilled inquiry, and a complete reply to the second part of the question could not be given until it had been reported on. Sir C. Dilke believed that the result of transmitting the infection of syphilis was not attained without departure in essential respects from the Board's instructions to public vaccinators, and from the recognised practice of all vaccinators. He could not conclude without expressing his esteem for this official's self-devotion and his regret for the personal suffering which he had endured through his honourable sacrifice of himself in the interests of science and humanity.—Sir C. DILKE, in reply to Mr. HOPWOOD, said that in some rare and accidental cases, and under special circumstances, syphilis might be inoculated by vaccination.—Mr. P. TAYLOR asked whether it had not been decided by the highest medical authorities that it was quite impossible, under all circumstances, to detect the syphilitic taint that might exist in the child.—Sir C. DILKE replied that the scientific report which was being prepared on the present case showed that the circumstances were such as may be brought to the notice of medical practitioners.

Friday, June 8th.

Militia Surgeons.—Sir E. WILMOT, on the motion to go into Committee of Supply, called attention to the subject of militia surgeons as regards pensions, and moved that "the continual refusal by the Administration of pensions to militia surgeons, compulsorily retired at sixty-five years of age, after long periods of service, and of compensation to those surgeons who had been deprived of a large amount of their incomes by the establishment of brigade depôts, also their complaints and great dissatisfaction thereat, embodied in a petition from them lately presented to the House, be referred to a Committee." He said he would at the outset make an appeal to the Prime Minister to at once grant the request for a small Committee. The case was a very hard and an unjust one against the militia surgeons, who felt much aggrieved, and the Government would do a generous act by conceding the moderate request made. The motion did not ask the Government to grant pensions, but simply to allow a Committee to hear and consider the grievances under which these officers laboured. Since 1855, the question

been several times brought before the attention of the House, and it had been practically admitted again and again that the militia surgeons had just ground for complaint, and were entitled to compensation on compulsory retirement at the age mentioned. Promises had been several times made that their claims should be fairly considered; and yet, in face of the admissions made by the previous Secretaries of State for War, the present Government were prepared to turn the surgeons adrift at sixty-five years of age, after twenty-five or thirty years' service, without any pension or compensation. No one could deny that this was a great grievance, and he ventured to say it was one at which the people generally of the country would be very indignant when they were informed of the fact. Having pointed out that militia surgeons were now deprived of many emoluments which they formerly enjoyed, he said the argument that, on leaving the service, they had their private practice to fall back upon, and therefore were not in need of pensions, was unfair and misleading, because the circumstances were such that few of them had any private practice, at least to the extent intimated. Analogous cases justified the claim of the militia surgeons. Pensions were granted to the surgeons when the Prisons Bill was passed, four years ago, and also to the Poor-law medical officers. Personally, he had no interest in the matter, but he was confident that, when a grievance as strong as this was fairly presented to the House, hon. members would not ignore it. It was unworthy of a Liberal Government to act as the present Government had done in respect to the matter, for the case was that of a deserving class of men, who had served their country faithfully, and whose claim was moderate and reasonable. At the present time, there were only thirty militia surgeons who asked for pensions, and surely the request to give an officer at sixty-five years of age, after a long period of service, six shillings a day for the few remaining years of his life was not an excessive demand. He therefore submitted his motion to the House with a feeling of confidence that it would be adopted. —Dr. FARQUHARSON said that it would not be necessary for him to trouble the House at any great length, as the entire case had been already stated with so much clearness and force by his hon. friend, and, indeed, at this stage of the proceedings, any great elaboration of detail would be superfluous, as the object of the present motion was not to ask for pensions or compensation, but to state in broad and general terms those facts and arguments which should induce the House to grant the proposed inquiry. Now, he could assure the House that this question had excited a good deal of interest out of doors; and, more especially, the powerful organisation known as the British Medical Association had sent in petitions through several of its Branches in favour of some further investigation of the claims and grievances of the militia surgeons. Those grievances, as had been already stated, were twofold. In the first place, the compulsory retirement at 65, recently enforced with embarrassing suddenness, was not only a great hardship, but, by being made retrospective, was virtually a breach of faith with those surgeons who had joined the service under the distinct understanding that their official career was only to be terminated by incapacity or old age. It is said that they had their private practice to fall back upon, but in many cases this had been greatly deteriorated by successive embodiments during war-time, by enforced absence at stated intervals during training, and by other causes, so that the militia pay was absolutely necessary to make both ends meet. When this was withdrawn, the practice, perhaps, could not support itself, and had to be given up. Private means were probably exhausted, no fresh occupation could be obtained, and poverty and even absolute destitution might be the result. In fact, it was believed that one unfortunate victim was actually in the workhouse. The militia surgeons held that they were fully entitled, on retirement, to a pension of six shillings a day, and that the contention of Government that this claim was rendered invalid by the fact that they were not on the permanent staff, was illegal and unsound. It was nowhere stated in any statute law or regulation that they must be on the permanent staff. Pensions had frequently been granted to officers of other branches of the militia, who occupied precisely the same position in this respect. Secondly, a claim was made for some sort of compensation to make up the serious loss of income incurred by the establishment of the depôt centres, and the consequent withdrawal of a large portion of the emolument from recruiting, previously engaged by the militia surgeons. The necessity for some consideration of this sort was tacitly admitted by the Chancellor of the Exchequer, who accompanied a deputation which waited upon Mr. Hardy in 1855, with reference to this very question, and also supported the movement with his presence, if not with his voice. In conclusion, he would appeal to the Government to grant the prayer of this motion, and appoint a small committee, either departmental or otherwise, before whom the militia surgeons might be heard personally, or by counsel, and by whose decision they would loyally abide. The claim for compensation could, in no case, be a large one; it was founded on justice and equity, and a preliminary investigation, at all events, whatever the result might be, would finally settle this long debated question.—Sir A. HAYTER said that the question had already been considered carefully by three Secretaries of State—by Lord Cranbrook, by his successor, and by his right hon. friend who was now Chancellor of the Exchequer—and on each occasion the decision had been adverse to the claims of the surgeons. There was no exceptional hardship in the position of militia surgeons. They had not been entitled to pensions since the year 1879, and were not compulsorily retired till five years later than their brother officers. When Lord Wellington was Prime Minister, and Sir H. Hardinge Commander-in-Chief, a circular was issued, stating that militia surgeons would be struck off the permanent staff, and from that time no pension had been granted to a militia surgeon. In the following session of 1829, a Bill was passed, at the instance of the Government, to carry out the change, and the question was not raised for many years. At the time of the Crimean war, when the militia went to the Ionian Islands, a circular was issued by Lord Panmure stating that no militia surgeon would be entitled to a retiring allowance unless he served for ten years, and it so happened that militia regiments were embodied no longer than two years. It was, therefore, clearly understood that the surgeons were not entitled to any allowance except for embodied service. In 1876, a warrant was issued by Mr. Gathorne Hardy, and it was stated that nothing contained therein should be held as giving a medical officer of militia a claim to a pension or retiring allowance. The case had been submitted to the Attorney-General and the Solicitor-General, and they agreed that the militia officers had no claim in law or in equity. They had received full pay at the rate of £1 a day for the time that they were out with their regiments; and, as they were only out for a month at a time, he could not admit that their private professional practice had been thereby ruined. With regard to the motion as it stood on the paper, he must point out that the "continued refusal" referred to had been made by three administrations preceding the present.—Mr. DUCKHAM knew of one case in which a militia surgeon was called upon to be away for twelve months with his regiment, and to break up his home, and all his professional connections; and yet, at the age of sixty-five, he was called upon to resign, with nothing to fall back upon. Whatever was done generally, he hoped this case would receive special consideration.

The House divided. The numbers were: for the motion, 48; against it, 61; majority, 13.

The Medical Service in Egypt.—Dr. CAMERON asked the Secretary of State for War whether, the hospital at Troados, in Cyprus, having been given up with the consent of the principal medical officer of the British army in Egypt on or before August 24th, and Sir Garnet Wolseley having on August 30th stopped the *Carthage* with 196 sick on board for Cyprus, the principal medical officer, after communication with Cyprus, on September 3rd wrote to the Chief of the Staff that it seemed a great pity to disturb the hospital arrangements made elsewhere than at Troados, in Cyprus; whether on September 4th he received from the Chief of the Staff the reply, "Sick can be sent to Cyprus;" whether on September 9th 72 sick were sent to Cyprus; whether on September 14th 300 more were ordered to sail for Cyprus; whether he had, before August 24th, ordered that Cyprus should not be used as a hospital until October; whether the principal medical officer stated before Lord Morley's Commission that up to January 19th he had never heard of this decision; whether he would state whose duty it was to inform the principal medical officer of the decision of the Secretary of State; and whether the Director-General of the Medical Department at home was ever informed of it. The hon. member also asked whether, when Ismailia was seized and the plan of campaign developed in Egypt, the principal medical officer and the principal commissariat officer of the army were informed of so much of the General's plan as was necessary to enable them to arrange for the efficiency of their respective departments under the altered conditions; and, if so, at what date was the seizure of Ismailia as a base sanctioned by the War Office, and at what date were these officers respectively informed of the intention to seize it.—The Marquis of HARTINGTON: Nearly all the points in this long question relate to local details in connection with the conduct of the campaign in Egypt. I have no information on these points beyond that contained in the evidence given before Lord Morley's Committee, which is before the House.

With regard to the last part of the hon. member's question, I will read the minute of Sir John Adye, Chief of the Staff, approved by the Secretary of State, which contains the only thing in the nature of an order given on the subject by the War Office prior to the despatch of the expedition. As I have before stated, any subsequent orders varying this decision would be given by the Commander-in-Chief of the expedition. The minute is as follows: "I have seen the Director-General of the Army Medical Department and the principal medical officer of the force. They concur that, looking at the season of the year, and that the weather will be cool towards the end of September, Troados may be given up, and a hospital established at Polymedia, near the place of disembarkation. (Signed) John Adye, August 3, 1882." This answer applies also to the hon. member's last question. The determination of the base of operations in Egypt was wholly a matter for the determination of the General commanding the force; and it was for that officer, acting through the Chief of the Staff, to convey to the heads of departments under him such instructions as he might think necessary and desirable.—Dr. CAMERON gave notice that he should oppose the grant proposed to be given to Lord Wolseley, unless the matters to which he had drawn attention by his question were fully explained.—In answer to questions put by Sir H. WOLFF, the Marquis of HARTINGTON said that the hospital in Cyprus was not given up until after the victory of Tel-el-Kebir, when the campaign was virtually over. It was thought then that the hospital would not be required.

Purchase of Army Supplies.—Dr. CAMERON asked the Surveyor-General of Ordnance whether it were true that, while supplies purchased for the army in London for special occasions, such as the Egyptian campaign, were purchased and dealt with by civilian brokers, similar articles were purchased and passed at home and abroad, and under all other circumstances, by the Commissariat; and whether the Director of Supplies, officially responsible for the purchase of the flour sent to Egypt, or the Commissary-General, were consulted as to the recommendation of Messrs. Boville that American flour should alone be sent out, or as to the mode in which it was to be shipped.—Mr. BRAND: Supplies purchased in London are obtained under the system in force in the London market. This system gives us the advantage of highly trained experts in the various branches of trade. Under other circumstances, speaking generally, garrisons at home and abroad are supplied under periodical contracts. As a rule, these supplies are delivered direct to, and are inspected and passed by, the troops. But the contractor can appeal against a rejection to a special board, of which the Commissariat officer, when available, is appointed a member. The officer acting as Director of Supplies dealt with the question of the purchase of flour for Egypt. It was never intended to depend solely on American flour. Local supplies were to be secured, and the shipment in question was only made to meet immediate wants on landing.

Monday, June 11th.

Vaccination.—Mr. HOPWOOD asked the President of the Local Government Board whether his attention had been called to the proceedings at an inquest on Saturday last respecting the death of Herbert Walsh, vaccinated in St. Pancras Workhouse by the Public Vaccinator, in which a medical witness attributed the death of the child to the cessation of mother's milk, caused by the mother having been revaccinated without her consent being asked, the day after the child's birth; to the statement of the Public Vaccinator that in revaccinating mothers a few hours after their confinement he was acting under the advice and with the knowledge of the Local Government Board; whether the child was vaccinated when only eight days' old; whether the Local Government Board approved the revaccination of a woman with or without her consent so early after her confinement while nursing her infant, or of the vaccination of an infant so young; and whether the Board would issue directions to restrain a practice attended with such results.—Sir C. DILKE said that the Board had obtained a copy of the depositions taken at the inquest respecting the death of Herbert Walsh. It was stated by a medical practitioner at the inquest, that he was of opinion that the vaccination of the mother caused the flow of milk to cease, and the verdict of the jury was to the effect that the child died of inanition or wasting, caused by the absence of the mother's breast-milk and want of proper nourishment. On the other hand, three medical men, including Dr. Sharkey, assistant-physician at St. Thomas's Hospital, and Dr. Henderson, pathologist of St. Mary's Hospital, who were examined at the inquest, could see no connection between suppression of the milk of the mother and the vaccination, and, in fact, there was no cessation of the milk for a month after the time when the woman was vaccinated. The mother was revaccinated on the day after her confinement. She was admitted into the workhouse in labour, and was delivered early in the afternoon of the same day. There had consequently been no previous opportunity of revaccinating her. The labour was a natural one, and the mother was progressing favourably, and the medical officer was satisfied, from his previous experience, that the operation could be performed without injurious effect. With regard to the question whether the consent of the woman to the revaccination was obtained, the medical officer in his evidence at the inquest, stated that the mother knew that she was going to be vaccinated, and raised no objection, and that in cases where objection has been made, he has not vaccinated. The Board had not advised the revaccination of mothers a few hours after their confinement, and the Board had no reason to suppose that this is a general practice. The child was vaccinated when eight days old. As regards the revaccination of mothers on the day after their confinement, the Board had been content to leave this to the discretion of the medical attendant. The Board had not had occasion to announce their approval or disapproval of the practice, but under ordinary circumstances would think it better that any required revaccination should not be associated with the accidents of the lying-in room. With respect to the case of the mother referred to in the question, the Board would communicate with the medical officer.

Hampstead Hospital.—Mr. TORRENS asked the President of the Local Government Board, whether he would by acquiescence sanction the renewal of litigation by the Metropolitan Asylums Board with the owners of properties and residents of Hampstead, respecting the use of the hospital there for fever or small-pox patients.—Sir C. DILKE: The Lord Chancellor, in delivering judgment, said: "I think that there ought to be a new trial in this case, because the verdict of the jury upon the main issue does appear to me to have been founded upon a state of evidence which is not to my mind satisfactory, having regard to the nature and importance of the question to be determined." The heavy expense which the litigation involves is much to be regretted. The Board have reason to believe that an endeavour has been made to arrive at a compromise, but that the offer has not been entertained by the plaintiffs. In the event of the case proceeding no sanction on the part of the Board is necessary to enable the managers to defend the action brought against them, and the matter is not one in which the Board have any authority to interfere.

The Army Hospital Corps in Egypt.—The Marquis of HARTINGTON in reply to Sir T. LAWRENCE, said it was not the fact that, but for Indian doolie-bearers, the wounded at Tel-el-Kebir could not have been removed, without a long delay, from the field. At the same time, the doolie-bearers rendered valuable services, which he had no wish to depreciate. He would refer the hon. baronet to the evidence of Sir J. Adye, chief of the staff, and Sir H. Macpherson, before Lord Morley's Committee, as showing that the superfluity of strength of one department was, as a matter of common sense, appropriated to meet the requirements of another department.

Artisans' Dwellings.—Sir R. CROSS asked the Secretary of State for the Home Department what provisions had been agreed to between the Secretary of State and the Commissioners of Sewers as to rebuilding on the sites cleared under the Artisans' and Labourers' Dwellings Acts, 1875 and 1882; and when the correspondence, for the production of which an address was agreed to on May 3rd, would be in the hands of members.—Sir W. HARCOURT was understood to say that these sites were being got ready for building, and that the correspondence referred to would shortly be in the hands of members.—Sir R. CROSS asked when a Bill would be brought in for confirming the Provisional Orders made in the four schemes under the Artisans' and Labourers' Dwellings Acts, 1875 and 1882, brought forward by the Metropolitan Board.—Sir W. HARCOURT was understood to say that the Bill had been already brought in.

The Home Office.—Sir R. CROSS also asked whether the right hon. gentleman's attention had been drawn to a leading article in the *Times* of June 6th, which stated that "an attempt has been made to relieve the Home Office of a part of its work," a scheme for transferring to the Local Government Board the control of business relating to factories, artisans' dwellings, and burials; and if the statement was correct; and, if so, under what statute such transfer had been made.—Sir W. HARCOURT said it was not true that any such transfer had taken place. Owing to the pressure of business, the Local Government Board had rendered assistance, but there had been no transfer whatever of responsibilities to that Board.

MILITARY AND NAVAL MEDICAL SERVICES.

LORD WOLSELEY AND THE ARMY MEDICAL DEPARTMENT.

ON Monday night, in the House of Commons, on the second reading of the Lord Wolseley's Grant Bill, Dr. CAMERON seconded Mr. Labouchere's amendment, for the purpose of vindicating the medical department in Egypt against the charges which Lord Wolseley had, he thought, very ungenerously, brought against it, and which had been sent forth to the world in all their nakedness, owing to the action of a member of the Goverment in prematurely handing to one single newspaper a copy of the report of the Morley Committee. So far as results were concerned, the medical department in Egypt could boast of results as brilliant in their way as those of Tel-el-Kebir, results secured by scientific knowledge and hard work. There had been bungling in the medical department, as in other departments, but it alone had been criticised. Lord Wolseley had himself severely criticised it. He did not say that the severity of Lord Wolseley's criticism on the shortcomings he denounced was unjustified, but he proposed to show that for those shortcomings Lord Wolseley alone was responsible, and his criticisms therefore reflected on himself alone. Lord Wolseley denounced the state of the hospitals at Ismailia and Cairo, and there was a chorus of complaint about the absence of medical equipments and requirements along the line of operations. Well, who was responsible for that. The *Carthage* was the principal hospital ship. She had 326 tons of hospital equipment on board, including three movable and two stationary hospitals. It would be remembered that the seizure of Ismailia and the change of base from Alexandria to that town was effected with the greatest secrecy. The change of base involved an entire change in the medical arrangements of the campaign, but the Surgeon-General was never informed regarding it; knew nothing about it, in fact, until he found himself in the canal. He did not say that Lord Wolseley was not perfectly justified, on military considerations, in keeping his secret to himself, but if he did so he ought to bear the responsibility, and not attempt to throw it on other people's shoulders. Had he disclosed his intention to the Medical Department, or had he simply instructed the *Carthage* to be ordered to accompany the transports, she might have arrived with them at Ismailia on the 21st or 22nd. Instead of that, the medical department, being kept in entire ignorance of the change of base, the *Carthage* did not arrive at Ismailia until August 26th, and could not get her stores landed till the 27th and following days. Meanwhile the empty palace had been handed over as a hospital, the Surgeon-General, on the 22nd; engagements had taken place the 24th, 25th, and 28th, and the changes which the arrival of the *Carthage*, about that busy time, involved, added to the work and confusion. Had she and the *Courland* arrived, as they might have done, in time, had Lord Wolseley but given an hint, there is evidence to show that there would have been no hitch whatever. But not only was the Surgeon-General kept in ignorance of the intended change of base, but when the order for embarkation, issued at Alexandria on August 17, and involving an entire redistribution of the medical staff, was drawn up, he was never consulted about it. Had those orders been carried out, they would have upset the whole medical system, and they had to be abandoned. He was informed that the Commissary-General also had been kept in ignorance of the proposed change of base to Ismailia. He did not know whether that officer had been consulted regarding the provisions concerning the Commissariat embodied in the orders of August 18; but, if not, he thought that the army might be congratulated on having fared so well as it did, and that many of the faults laid at the door of the Commissariat might, with greater justice, be placed elsewhere. The mention of the Commissariat reminded him that Lord Wolseley repeatedly charged the medical staff with incapacity, with "lack of initiative," he called it, in not undertaking the work of the Commissariat Department, and purchasing against them in the local markets. He had confessed before Lord Morley's Commission that he was ignorant of an order which had been issued on the subject to the Surgeon-General by the Minister for War no later than August 5th, and which distinctly and peremptorily laid down the duties of medical officers in the matter. "It is essential," says Mr. Childers, "that, except in the case of petty office or departmental purchases (which may be made by heads of departments), there should be but one purchasing department in the local markets." Had Lord Wolseley known of the existence of this order, he would have known that it was his business not to find fault with the medical staff for adhering to it, but to insist on the Commissariat, on whom the circular laid the responsibility, performing its own proper functions. Being ignorant of the order, Lord Wolseley had omitted to perform what was really his own duty in the matter. Lord Wolseley found great fault with the system of evacuating the sick from Egypt, and cast the blame of it entirely upon the medical department. "I think," he said, in answer to Question 6,212, "that the medical department at this time were beginning to feel a little frightened at what had taken place. The hospitals were in such bad order that they got rid of the patients by putting them on board ship, and sending them to England. In many cases, men were sent off who would have been well in a few days." Now, what were the facts? One of the earliest decisions arrived at as to the medical plan of the campaign was that Cyprus should be used for a base hospital. It was only twenty-four hours' sail from Egypt, and the design was that the serious cases should be sent there to recover, and, when convalescent, rejoin their regiments. The original intention was that the hospital should be established on the high land at Troados; but, on August 4th, the Director-General, the Surgeon-General, and the Chief of the Staff, agreed that the hospital at Troados should be given up, and a hospital established instead at Polymenia, near the port of disembarkation. The minute on this subject was approved by the Secretary for War. In the proceedings of the Committee, reference is made to another order sent out by the Secretary for War on August 9th, that Cyprus should be abandoned altogether, that it should not be used or relied on for hospital purposes until October. Now, this order was never communicated to the Surgeon-General. He never heard of it till January last. He (Dr. Cameron) had asked a question on the subject, but could get no information. The noble lord the present Minister for War referred him to the evidence before Lord Morley's Commission. He had looked then, and this is what he found. On August 30th, the *Carthage* was at Ismailia with 196 sick on board, ready to sail for Cyprus, when she was suddenly stopped by order of Lord Wolseley. Colonel Lord William Seymour, attached to the naval Commander-in-Chief, had given some clear and impartial evidence which explained what occurred. In reply to Question 1,638, Lord William said: "There was one thing which very much put out the whole medical arrangements, which was that the Surgeon-General had sent away a ship almost empty—I think it was the *Orontes*—saying he had no further use for her, thinking that he could send the *Carthage* to Cyprus; but in the afternoon he got an order that Cyprus was not to be used as a hospital. That threw 400 sick on his hands, which he was not prepared for." Again (Question 1706), Lord W. Seymour narrated a conversation which he had had with the Surgeon-General on the occasion. "I have just," said the Surgeon-General, "been disappointed of the whole hospital at Cyprus; I have been told not to send any sick there. I wish now I had been able to send more away in the *Orontes*. Instead of the *Carthage* making a twenty-four hours' trip to Cyprus, she will probably have a much longer one to make to Malta." This, be it remembered, was on August 30th, at a moment when there had been three engagements within the six preceding days. Surgeon-General Sir James Hanbury, in his evidence before the Commission, supplemented this by an account of a conversation which he himself had had with Lord Wolseley on the matter on the following day, August 31st. He told him that the Director-General at home had instructed him to use Cyprus for slight cases, "as a sort of stopgap to prevent too rapid evacuation to England"—exactly the fault of which Lord Wolseley now complains. What Lord Wolseley then said, according to the Surgeon-General, was this: "Dr. Crawford does not know Cyprus as well as I do. It is much more unhealthy than this, and, I believe, the best way is to send the sick to England." And yet, in the face of this statement, Lord Wolseley now came forward and accused the department of having become frightened at what had occurred, and of shipping the sick to England in order to get them off their own hands. To say the least of it, they should have some explanation of this very irreconcilable evidence. But the vacillation regarding Cyprus did not end with the stoppage of the *Carthage* on August 30th. After further communication with Cyprus, the Chief of the Staff, on September 4th, gave the order, "Sick may be sent to Cyprus." On September 6th, 72 sick were there, and, on September 13th, 300 were shipped and ready to start, when, owing to the decisive result of Tel-el-Kebir, their destination was altered, and they were sent home. As the result of this shillyshallying, the hospital was locked up at Cyprus when most needed in Egypt, and did not arrive at Alexandria until September 30th. There was some further delay in getting it on to Cairo. Hence the unfurnished state of the Cairo Hospital, of which Lord Wolseley complains. Now had the hospital at Cyprus been used, as originally intended,

it would have been invaluable. Had the Surgeon-General been informed that it was not to be used, it would have been his duty to bring its staff and equipment to Egypt, where extra accommodation was much required. But he was neither allowed to use Cyprus, nor told that he was not to be allowed to rely on it, as arranged, until the first batch of sick were on board ship on their way to it. Even then, he was not told that the Cyprus hospital had been abandoned, and that he was free to utilise it elsewhere; but he was kept in suspense till the end of the war, and the services of the Cyprus establishment was thus lost during the entire war. Three times after Tel-el-Kebir—on September 16th, 24th, and 30th—Lord Wolseley had written or telegraphed home, to the effect that the Medical Department was "everything that could be desired," that "it reflected the greatest credit on the Surgeon-General," and that "it was working to his entire satisfaction;" and then he had come before Lord Morley's Commission, and said that he "never saw a properly equipped field-hospital during the war;" "medical officers constantly held others responsible for failing to do what he considers should have been their own principal duties;" that he "supposes the base-hospital was never brought from Cyprus to provide accommodation at Ismailia, because the Principal Medical Officer never thought of it at the time, or never brought the subject forward." The Chief of the Staff, Sir John Adye, in his evidence, had not only given a much more favourable account of the actual state of things in the military hospitals, but he had frankly told the Committee that, from the nature of the campaign, military considerations, supreme above everything else, had compelled troops to be sent forward to Kassassin in advance of supplies, in advance even of ammunition, and, of course, in advance of medical appliances and comforts. Had Lord Wolseley impressed this fact upon the Committee, and accepted the responsibility that properly devolved on him, not a word could have been said. But what he (Dr. Cameron) complained of was, that, for a state of things entirely the result of his own arbitrary action, he had chosen to cast the blame upon the Medical Department of the Army. Lord Wolseley found fault with the medical staff for not "taking the initiative" and undertaking the work of another department. After the experience they had had of his lordship's baneful fondness for taking the initiative and undertaking the management of the Medical Department, of which he knew nothing, but whose responsible heads he never appeared to think it worth while to consult, it seemed to him (Dr. Cameron) a matter of congratulation that one class of officers, at least, among those serving under him had been found who were content to devote themselves strictly to their own duties. To that it was to be attributed that, despite all that Lord Wolseley had done to mar their efficiency, they had been able to bring the European forces through, in this arduous and trying campaign, in an unhealthy climate, with a total death-rate, per 1,000 *per annum*, including deaths in battle, from sickness and from wounds, exceeding by a mere fraction that which normally prevailed in the civil population of this metropolis. To this it was to be attributed that they had been able entirely to ward off pyæmia, to deprive ophthalmia of its terror, and to deal with the wounded after Tel-el-Kebir, with a promptitude and efficiency characterised by the Commission as unequalled in military history. Lord Wolseley had talked a great deal about initiation; but he (Dr. Cameron) considered that he would have displayed a much sounder and wiser initiative, as well as much more intelligent solicitude for the well-being of the sick and wounded, if he had instructed the Surgeon-General to order up the *Carthage* to accompany the transports to Ismailia; and acquainting him with his views regarding Cyprus, had left him to utilise its hospital appliances elsewhere, than he displayed in acting as he had done—leaving the Medical Department in ignorance of his intentions and decisions; arbitrarily overturning the most vital arrangements; writing home that all was well, "false and malicious reports to the contrary notwithstanding;" and then, coming home and coolly casting on the shoulders of the Medical Department the entire responsibility for shortcomings directly the outcome of his own peculiar mode of conducting the medical business of a campaign.—Mr. GIBSON said he should be prepared at the proper time to refute the charges which had been brought against the Medical Service. At the same time, he held that the fact that those charges had been made ought not to be put forward as an argument against the grant which it was proposed to confer on Lord Wolseley, who had shown himself to be most anxious that the Medical Service should receive the measure of reward to which it was entitled. He believed that the evidence given by Lord Wolseley before Lord Morley's Committee referred not to the conduct of the officers, but solely to the system. He did not agree with all the evidence he gave, but he thought that it ought not to interfere with the reward which it was now proposed to bestow upon him.—In reply, Lord HARTINGTON pointed out the inquiry was more directed to the organisation and management of the Medical and Commissariat Departments and of the Army Hospital Corps in all its branches, and to the experience with respect to them derived from the Egyptian campaign. It was in no sense an inquiry into the merits or demerits of an individual or set of individuals. The inquiry was not conducted in such a way as to enable the House to judge the conduct of any particular individual. Lord Wolseley was examined before the Committee, but some of the evidence mentioned in the discussion was taken subsequently, and as Lord Wolseley was not in England, and had had no opportunity of replying to it, it was not fair to condemn, and hardly desirable even to discuss, his conduct. But whatever might be the facts of the case as to the Committee, they formed no reason why Lord Wolseley's services in Egypt should not be recognised by a grant of money. The hon. member for Glasgow had said that the medical officers were kept in ignorance of the intended move to Ismailia, and so were prevented from making proper arrangements. It was possible, no doubt, that they might have been impeded and embarrassed by the absolute secrecy observed as to Lord Wolseley's plans, but that secrecy was necessary and was of the utmost importance for the successful conduct of the campaign. All the information as to the war shows that Lord Wolseley was amply justified in the secrecy he maintained, even though it had the effect of throwing out the departmental arrangements. The reason that the sick men were not sent to Cyprus, was because the battle of Tel-el-Kebir having been fought, it was supposed that the war was over, and, therefore, instead of the order to send the sick to Cyprus being carried out, they were sent home. He might, and did, regret the terms in which Lord Wolseley had referred to some of the medical arrangements, but he denied that anything had been brought forward which should dissuade the House from ratifying the thanks which had been voted to Lord Wolseley, and from rewarding him by a pecuniary grant.

HOSPITAL AND DISPENSARY MANAGEMENT.

PRINCESS ALICE MEMORIAL HOSPITAL, EASTBOURNE.

ON the death of Her Royal Highness the late Princess Alice, it was decided by the inhabitants of Eastbourne to erect a hospital, as a memorial to her memory; Her Royal Highness, during her lengthened visit to Eastbourne in 1878, having made herself much beloved by her kindly acts and gracious manners. The first plans for the hospital were prepared in the early part of 1880, and, during that year and 1881, various plans and revisions were made by the architect, in consultation with the committee and subcommittee of the leading physicians and surgeons of Eastbourne.

His Grace the Duke of Devonshire kindly offered the committee a choice of two sites on which to erect the memorial; but they were both considered to be too far from the centre of the town, and were reluctantly declined. Mr. C. D. Gilbert, the lord of the manor, then offered an acre of land, close to the railway station, which was accepted; and, in the early part of 1882, tenders were invited by the committee for the erection of the hospital. These were sent in, and the lowest accepted; and, when the building was about to commence, the site had to be changed, in consequence of the railway company proposing to enlarge their goods department, and making the position unsatisfactory for hospital purposes. Mr. Gilbert kindly gave another acre of land at the top of Hartfield Road, and the committee agreed to buy an additional quarter of an acre. A contract was entered into with Mr. W. Gregor, builder, of Victoria Wharf, Stratford, London, in June; and, on July 5th, the foundation-stone was laid with some ceremony by Her Royal Highness Princess Christian of Schleswig-Holstein; Eastbourne being *en fête*, and the day being observed as a general holiday.

The building is now finished, and is to be opened the third week in June by their Royal Highnesses the Prince and Princess of Wales, who visit Eastbourne for the first time for this special purpose.

In anticipation of this event, a detailed description of the hospital may be of interest.

The Site.—It is situated at the top of Hartfield Road, leading out of Upperton Road, a short distance from the railway station. It is an acre and a quarter in extent, and being of triangular form is open on two sides. The subsoil is chalk. The front of the building faces the south-west.

The ground floor is constructed with local red bricks, the first

of half timber work filled in with brick and plastered; the whole of the roofs are covered with Broseley tiles. The hospital is planned with the administration in the centre, with wards on the pavilion system on either side, connected by cross ventilated corridors. In the centre is the entrance hall with open fireplace and seats for visitors and patients, with porter's room adjoining. On the right is the matron's room, and on the left the surgery and consulting room, with private lavatory, water-closet, etc. Shut off by a door is the linen and work-room. The kitchen is fitted with Brown and Green's smoke-consuming kitchener, dressers, cupboards, etc. The scullery adjoining has large enamelled slate sink, supplied with hot, cold and soft water. The larder has white enamelled slate shelves, and white glazed tile lining to the wall. The pantry has wood shelves and white tile lining; these were originally intended to be lined with white glazed bricks. In the kitchen yard are the tradesman's entrance, knife-house, servant's water-closet, dust, coal and wood-house all under cover and paved with tiles. There is a detached building fitted with lockers for patients' clothes, soiled linen, ambulance, etc., the whole enclosed with wall and gates. The upper floor of the centre building contains five bedrooms, a bath-room, and water-closet for the matron and servants.

The entrance hall and passage is shut off from the corridors on both sides by a pair of swing doors. The corridors leading to the men's and women's wards have doors in front opening on to the verandah, and at back to a garden, with windows on each side for cross ventilation, to disconnect the wards from the administration block.

The water is supplied by meter from the company, stored in a large cistern in a room in the roof. Two of Atkin's large cistern-filters purify all water for drinking and domestic purposes. The rain-water is stored in two tanks over the corridors, and this also passes through the charcoal filters to scullery and surgery for cooking and pharmaceutical purposes.

The drainage is carried to the main sewer by Stanford's ground jointed glazed earthenware socket pipes. Every drain is taken direct and separately from the water-closet, bath, or sink into the principal drain. No drain runs under the building; all rain-water pipes are detached and ventilated, and from every water-closet a three inch ventilating pipe is carried from the trap to the roof of the building. At the two highest points are placed Field's flushing tanks, into which is carried the waste water, the tanks being automatic, the drains are flushed with forty gallons of water from each tank once a day or oftener. There is an inspection and ventilating shaft placed at the boundary of the land to disconnect drains from sewer.

The cost of building, independent of land and furnishing, will be about £5,000.

The Wards. The right hand pavilion contains two wards for men, the left pavilion, two wards for women. At present the front wards will contain four beds for medical cases; and the back, separated by the nurses' room and lobby, two beds for surgical cases. The plan has been arranged so that, by the removal of the end wall, the wards can be increased to eight-bedded wards, or even more; and with the present administration and offices, the hospital can be increased to accommodate double its present number at a nominal cost. The axis of the pavilions is N.W. by S.E. The walls are built hollow from the damp-proof course, which is asphalte. Internally the walls are finished in plaster trowelled to a fine face and distempered. The floors are of deal, stained oak colour and wax polished, so as to be kept clean without scrubbing or wetting, by daily sweeping and dry polishing. They were intended to have been double floors, the upper of oak (and all woodwork of wards), and polished, but the funds would not permit of this being done. No moulding, skirting, or projection of any kind is used to collect dust or dirt. The woodwork is painted a light colour and varnished.

Size of Wards. The front wards (four beds) are 22 feet wide by 30 feet deep, and 15 feet high, which gives 110 feet of floor space to each bed. The cubic space is 1,622 feet 6 inches to each bed. The back wards (two beds) are 22 feet wide by 12 feet 6 inches deep, and 15 feet high, which allows 137 feet of floor space, and the cubic space 2,028 feet per bed.

Windows. The windows are placed opposite to produce cross-ventilation, and are divided into three parts. The lower divisions are double-hung sashes, the upper portion hinged at the bottom, falling inwards, with glazed shields at the sides to protect patients from draught. All the sashes are glazed with plate glass, and the total area of their effective glazing surface is, in four-bedded wards four windows, 84 feet, or 21 feet per bed; in two-bedded wards three windows, giving 63 feet, or 31 feet 6 inches per bed.

Ventilation and Warming.—Fresh air is admitted by air-shafts under each bed, which can be opened or shut at pleasure, and enable the space under the beds to be swept with fresh air. The lower sash raised, and the upper sash lowered, will admit air at these levels, whilst the top sash with plate-glass wings, enables air to be admitted at all times, and at a high point of the room, and can be so regulated that it can be opened from one inch to fifteen. Sherringham's ventilators, placed over each bed, admit air at a still higher level. When all the windows are open to the fullest extent, the total area through which air can be admitted by them into the wards is 47 feet in four-bedded wards, or 11 feet 3 inches per bed; and 35 feet 3 inches in two-bedded wards, or 17 feet 7½ inches per bed. In addition to this, there are the Sherringham ventilators a little below the ceiling, and the locked gratings in floor.

Warming is effected by a Galton stove with open fire, in each ward. These stoves have large air-chambers at the back, through which fresh air is admitted, warmed, and delivered into the wards at a height of 12 feet. All hearths are laid with glazed tiles, to reflect heat. All ward flues are swept from outside the building.

Ventilation is by purely natural means, the admission of fresh air, and by the open fire extracting the vitiated air, and by a large extract flue in the centre of ceiling, heated by gas burner and carried to the foul air shaft in chimney, and further, by a heated extract flue in the end of the wall.

Lighting.—Each ward is lit by three light gas pendants on the Rickett principle. The light is enclosed in a globe, and all fumes are carried away by a metal shaft into the extract flue. All gas-lights in the rooms are covered with metal tubes, by which all the vitiated air is carried direct into the extract flue, and the air of the room kept pefectly pure.

The Nurses' Room is situated between two wards, commanding a view of both, but is totally distinct from them, and has a large supply of fresh air from the open area and ventilated corridors. The room is fitted with a small dresser and cupboards for ward crockery, etc.; white porcelain sink, with hot and cold water; an open fireplace, with small oven for warming patients' food; gas, enclosed in a ventilating tube, to carry off the fumes; and a speaking-tube to the kitchen. On one side of each ward are the cross ventilated corridors to detach them from the administration offices. In front of the corridors, facing the south-west, are tile-paved verandahs, which will be a great boon to semi-convalescent patients in fine weather. In winter it is proposed to enclose them with glass, to form a day-room, or ambulatory. On the other side are the cross ventilated passages leading to slop-sinks, ward water-closets, and bath-room. The walls to the whole of these passages, closets, and bath-rooms were originally intended to be lined with white glazed bricks, but this had to be omitted on account of cost; oak floors were also omitted. The whole of the slop-sinks, water-closet apparati, baths and lavatory basins are of white porcelain, or pottery lined with white glaze. The slop-sinks are quite distinct, enclosed in a recess, lined with white glazed tiles, one to each ward, and are carried direct to the drain. Each sink is supplied with a siphon cistern, which is automatic, and flushes the rim of the sink at regular intervals; a tap over the sink is provided. The water closets are wash-out closets, all of glazed pottery; the water is supplied by flushing cisterns, which discharge two gallons of water every time the seat is raised; by this seat-action the water supply is not dependent on the carelessness or feebleness of the patient, but is self-acting. The baths stand detached from the wall, and are of one piece of glazed pottery, supplied with hot and cold water, and can be quickly filled or emptied. At the end of the bath, sunk in the floor, is a sink for emptying portable baths. In each bath-room are two tip-up lavatory basins, set in white enamelled slate top. The gas is enclosed in a closed lantern, with a tube to carry off the fumes. All sinks, baths, and lavatories are free from enclosure, to promote cleanliness. The whole of the slop-sinks, water closets, baths, lavatories, porcelain sinks, with their fittings, have been supplied by Mr. George Jennings, of Lambeth, excepting the wash-out closets, which are Messrs. Doulton's. The hot water service, ventilating gas-lights, ventilators, speaking tubes, and pneumatic bells have been executed by Messrs. Richardson, Ellson, and Co., of London, from the architect's drawings.

Over the entrance door is an allegorical panel 9 feet by 3 feet, with the arms of H.R.H. the late Princess Alice in the centre, modelled in terra cotta by Mr. John Wilson, of Trafalgar Studio, London. The ground has been laid out and planted by Mr. Milner, of Dulwich.

It was originally intended to have erected a mortuary and laundry, designs for which were prepared by the architect; but these have

been abandoned for the present. Considering the importance of the former to the community at large, not to expatiate on the social and sanitary advantages, it is to be hoped that Eastbourne, with its 25,000 inhabitants, will not be content to remain much longer without this hygienic necessary.

The Hospital has been erected from the designs and under the direction of the architect, Mr. Thomas W. Cutler, F.R.I.B.A., of Queen Square, Bloomsbury. The funds have been raised by voluntary contributions. The success of the movement is greatly indebted to the personal exertions of Mr. George Gurney, Honorary Treasurer.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

UNHEALTHY DWELLINGS.

In his last report, Dr. Liddle, the Medical Officer of Health of Whitechapel, draws attention to some newly erected dwellings, partly in Commercial Street, and partly in Shepherd Street, Spitalfields, one block having 73 rooms for 39 separate families. There are 151 persons—59 adults and 92 children—living in 53 of the rooms, some of which, the Doctor says, "are totally unfit for human habitation." There was no light in them even on a bright day, and "the sanitary arrangements" were "very unsatisfactory." There is no yard or open space to a building intended for more than 200 people; and Dr. Liddle thinks that this case exemplifies, in a striking manner, the necessity of such legislative enactment as shall prevent the erection of unhealthy dwellings. Some of the rooms have been closed by order of the authorities. Another building of the same character is described as "Plough Street Buildings," Whitechapel, having in one block 83 rooms, of which 79 were occupied by 178 persons, 91 of whom were adults and 87 children, "the lower order of foreigners, and very dirty." As in the other case, the ground-floor is occupied by shops; and, though the building has only been erected about four years, it is described as, in part, quite "unfit for habitation."

Health of Foreign Cities.—It appears, from statistics published in the Registrar-General's return for Juue 2nd, that the death-rate averaged 32.4 per 1000 in the three principal Indian cities; it was equal to 29.7 in Bombay, 31.6 in Madras, and 35.4 in Calcutta. Cholera caused 92 deaths in Calcutta and 28 in Bombay; and small-pox 27 in Madras, 21 in Bombay, and 9 in Calcutta. According to the most recent weekly returns, the average annual death-rate in twenty-one European cities was 30.5 per 1000, and was no less than 11.1 above the mean rate in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 36.7, and the 653 deaths included 35 from "fever," 29 from diphtheria, and 8 from small-pox. In three other northern cities — Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 21.9, and ranged from 12.8 in Christiania to 26.9 in Stockholm, where 4 of the 90 deaths resulted from scarlet fever. The death-rate in Paris was equal to 26.9; 49 deaths being referred to diphtheria and croup, 35 to typhoid fever, and 10 to small-pox. In Brussels, the rate was 26.3, and the deaths included 7 fatal cases of small-pox. The 49 deaths in Geneva, including 15 from measles, were equal to a rate of 36.5. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague — the mean death-rate was 28.1, the rate differing but slightly in the three cities; 6 fatal cases of small-pox occurred in Rotterdam, and 2 in Amsterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 32.9 per 1000, and ranged from 25.8 in Dresden and 28.5 in Berlin, to 37.3 in Buda-Pesth and 46.7 in Prague. Small-pox caused 10 deaths in Prague and 2 in Breslau; 10 fatal cases of diphtheria and croup occurred in Munich, and 10 of "fever" in Buda-Pesth. Venice was the only Italian city furnishing a return, and showed a death-rate of 30.0. The 122 deaths in Lisbon included 3 fatal cases of diphtheria, and were equal to a rate of 31.9. Among the principal American cities, the death-rate was equal to 20.5 in Philadelphia and 23.9 in Baltimore; scarlet fever and diphtheria were somewhat fatally prevalent in Philadelphia, and scarlet fever in Baltimore.—The return for the week ending the 9th instant show that the annual death-rate in the three principal Indian cities averaged 33.3 per 1000, and was equal to 28.5 in Bombay, 44.1 in Madras, and 38.4 in Calcutta. Cholera caused 145 deaths in Calcutta, 54 in Madras, and 25 in Bombay; the fatal cases of small-pox were 6, 39, and 17, respectively. According to the most recent weekly returns, the average annual death-rate in twenty-two European cities was equal to 30.2 per 1000 of their aggregate population; the average rate last week in twenty-eight of the largest English towns did not exceed 19.5. The rate in St. Petersburg was equal to 36.7, and the 655 deaths included 25 from typhus and enteric fever, 18 from scarlet fever, and 16 from small-pox. In three other northern cities —Copenhagen, Stockholm, and Christiania—the mean death-rate did not exceed 21.6, the highest rate being 24.7 in Stockholm, where 6 fatal cases of diphtheria and croup were reported. No return from Paris is published in the returns. The 210 deaths in Brussels were equal to a rate of 26.3, and included 10 fatal cases of small-pox and 7 of measles. Iu Geneva, the epidemic of measles caused 7 more deaths; the death-rate, however, did not exceed 23.1. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the death-rate averaged 27.9, and ranged from 27.2 in Amsterdam to 28.9 in Rotterdam; small-pox caused 12 deaths in Rotterdam and 3 in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 31.5, ranging from 25.9 and 26.3 in Trieste and Dresden, to 33.7 in Hamburg and 42.1 in Prague. In Rome, the death-rate was equal to 30.0, and 8 deaths from typhoid fever were reported; the rate was equal to 22.1 in Turin (including 4 deaths from typhoid fever), and 22.2 in Venice. The 113 deaths in Lisbon, of which 3 were fatal cases of typhoid fever, were equal to a rate of 27.9. The death-rate in four of the principal American cities averaged 23.0; the rate was 18.9 in Baltimore, 19.9 in Philadelphia, 22.0 in Brooklyn, and 24.9 in New York. Small-pox caused 5 deaths in Baltimore, typhoid fever 6 in Philadelphia, diphtheria 15 in Brooklyn, and in New York scarlet fever and measles were both somewhat fatally prevalent.

MEDICO-LEGAL NOTES AND QUERIES.

CHARGE OF ISSUING A FALSE CERTIFICATE OF DEATH.

At a recent meeting of the Merthyr Tydfil police-court, Mr. John Evans, surgeon, of Beaufort and Pontlottyn, was charged with having issued a false certificate of the death of one Margaret Morgan; and his assistant, Mr. E. W. Probett, with having given the said certificate as true to the father of the deceased child, he well knowing it to be false. The prosecution was undertaken by the direction of the Registrar-General. It appeared from the evidence, that Mr. Evans had left with his assistant a signed book of forms, one of which was filled up by Mr. Probett, and given to one William Morgan, father of the deceased.

In defence, it was urged that there was no evidence to show that the cause of death entered in the certificate was untrue; the only thing complained of being that the certificate said that Dr. Evans saw the child on a certain date, which was not the case, his assistant having attended the child. No doubt Mr. Evans was guilty of carelessness in appending his name to the certificate without some sort of qualifying remark, but that carelessness could hardly be said to amount to a criminal offence. In future, no doubt, Mr. Evans would be more careful and refuse to sign another certificate of the kind, and would only put the cause of death, or certify the case was attended by his assistant. The magistrate said that, while it was a very reprehensible act to leave a blank book about, the certificate was filled up after his signature was attached, and, therefore, was not wilfully made by him. Mr. James, who prosecuted, obtained permission to take the case to a superior court should the Registrar General think such a step necessary. In the case of Mr. Probett the magistrate said that the defendant was clearly guilty of the offence with which he was charged, as he not only made out the certificate, but also gave it as true to Mr. Morgan; the evidence implicated him as clearly as possible. The penalty to which he had rendered himself liable was £10; but, as that was the first case of the kind that had been brought before the magistrate, a penalty of £ and costs only would be imposed.

Dr. Garson will begin the third and last part of his course Demonstrations, in the Museum, on Tuesday afternoon, at fo o'clock. This portion of the course will be upon the Comparati Anatomy of the Circulatory System in the Vertebrata, and will treated of in six Demonstrations, on each succeeding Tuesday, the same hour.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations for the Fellowship, at a meeting of the Court of Examiners on the 24th, 25th, and 26th ultimo, were reported to have acquitted themselves to the satisfaction of the Court, and, at a meeting of the Council on the 21st ultimo, were admitted Fellows of the College, viz.:

Messrs. Charles Gross, L.R.C P.Lond., Walworth, diploma of membership of the College dated July 31st, 1876, of Guy's Hospital; William Henry Elam, Mirfield, Yorkshire, November 17th, 1877, of the Charing Cross Hospital; William Archdeckne Duncan, L.R.C.P.Lond., Lambeth Palace Road, April 22nd, 1879, of St. Thomas's Hospital; David Collingwood, M.B.Lond., Bedford Street, Liverpool, July 29th, 1880, of the Liverpool School; E. A. Haden Horsley, M.B.Lond., Gower Street, November 17th, 1880, of University College; and Benjamin Wainwright, M.B.Edin., Belmont, Lee (not a member), of the Edinburgh School.

Two Members of the College passed the Fellowship examinations, but, not having reached the legal age, were not admitted; and ten candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 7th, 1883.

Holloway, Robert, Higham Ferrers.
Huxtable, Arthur Edwin, Queen's Road, Kingston Hill.
Jago, Charles Sprague, Devonshire Terrace, Forest Hill.
London, John Edward, Berbice, British Guiana.
Mathew, Charles Pynsent, Millman Street, W.C.
Tenison, Edward Heron, St. Paul's Crescent, N.W.
Ward, Charles Walton, Buckhurst Hill, Essex.

MEDICAL VACANCIES.

The following vacancies are announced:

ALNWICK INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by June 22nd.

ALVERSTOKE MEDICAL BENEFIT SOCIETY.—Medical Practitioner. Salary, £200 per annum. Applications to Mr. John Ellicott, 10, Shaftesbury Terrace, Gosport.

BOYLE UNION, Boyle No. 1 Dispensary District.—Medical Officer. Salary, £135 per annum and fees. Election on June 16th.

CARLISLE DISPENSARY FEVER HOSPITAL. — Senior House-Surgeon. Salary, £130 per annum. Applications to Mr. John Ostell, 14, Bank Street, Carlisle, by June 16th.

CASTLEBLAYNEY UNION, Workhouse and Fever Hospital.—Medical Officer. Salary, £75 per annum, with £10 yearly as Consulting Sanitary Officer. Election on June 20th.

COUNTY DONEGAL INFIRMARY.—Surgeon. Salary, £100 per annum, in addition to the Grand Jury Presentment. Election on the 19th instant.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £120 per annum. Applications to Mr. T. E. Drake, Solicitor, Exeter, by June 18th.

DOWNHAM UNION.—District Medical Officer. Salary, £46 per annum. Applications by June 20th.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E. —Registrar and Chloroformist. Salary £30 per annum, with an additional £20 if the post is held for twelve months. Applications by June 25th.

HEREFORDSHIRE RURAL SANITARY.—Medical Officer of Health. Salary, £500 per annum. Applications by July 3rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 30th.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Salary, £150 per annum. Applications by June 30th.

QUEEN'S HOSPITAL, Birmingham. — Honorary Surgeon. Applications by July 9th.

QUEEN'S HOSPITAL, Birmingham.—Resident Physician. Salary, £50 per annum. Applications by June 20th.

ROCHESTER AND DISTRICT FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Salary, £200 per annum. Applications to H. Kybett, 55, High Street, Chatham, Kent.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by July 4th.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington, W.—Demonstrator of Physiology and Histology. Salary, £100 per annum. Applications by July 7th.

ST. THOMAS'S HOSPITAL.—Secretary. Salary, £200 per annum. Applications to the Dean by June 16th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £200 per annum. Applications by July 14th.

TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay. — Junior House-Surgeon. Salary, £90 per annum. Applications to W. H. Kitson, Esq., Hemsworth, Torquay, by July 16th.

WESTERN DISPENSARY, Rochester Row, Westminster.— Consulting Accoucheur. Applications by June 30th.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Chair of Anatomy. Applications by June 16th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician (who will also be required to act as Chloroformist, Pathologist, and Medical Registrar). Salary, £100 per annum. Applications to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

BALLANCE, C. A., M.B., F.R.C.S., appointed Assistant-Surgeon to the West London Hospital.

BARNES, J. J. F., F.R.C.S., appointed Assistant Medical Officer to the Fisherton House Asylum.

BROWN, J. Macdonald, F.R.C.S.Eng., M.B., M.C., appointed Surgeon for Out-patients to the North-West London Hospital.

EDWARDS, F. Swinford, F.R.C.S., late Assistant-Surgeon, appointed Surgeon to the West London Hospital.

EVANS, D. T., M.R.C.S., appointed Assistant Medical Officer to the Three Counties Asylum, Beds, *vice* E. C. Rogers, M.R.C.S., resigned.

EWART, C. Theodore, M.B., M.Ch., appointed Assistant Medical Officer to the Fisherton House Asylum, Salisbury, *vice* W. G. Coombs, M.D., resigned.

FINEGAN, L. P. J., L.K.Q.C.P.I., appointed Medical Officer to the Baillieborough Union, *vice* E. Morrissey, L.K.Q.C.P.I., deceased.

FROST, W. A., F.R.C.S., appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* H. R. Whitehead, F.R.C.S., resigned.

GLASSINGTON, C., F.R.C.S., appointed House-Surgeon to the National Dental Hospital, 149, Great Portland Street, *vice* F. Bate, L D.S.

GLOSTER, J., M.B., appointed Resident Medical Officer to the St. Marylebone General Dispensary, 77, Welbeck Street, W., *vice* Percy A. Gabb, M.D., resigned.

GRAHAM, C. R., M.R.C.S., L.R.C.P.Ed., appointed Honorary Medical Officer to the Royal Albert Infirmary and Dispensary, Wigan.

GRAY, J. A., M.R.C.S.E., appointed Resident Assistant Medical Officer and Dispenser to the Parish of St. Mary, Islington.

GREAVES, T., L.R.C.P., appointed Junior Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary *vice* G. F. Gubbin, L.R.C.P., resigned.

HARTLEY, Isaac, M.B., appointed House-Surgeon to the Whitehaven and West Cumberland Infirmary and Fever Hospital, *vice* H. C. Nance, L.R.C.P., resigned.

HERRINGHAM, W. P., M.B., M.R.C.P., appointed Assistant-Physician to the West London Hospital.

HOOD, D. W. C., M.D., M.R.C.P., late Assistant-Physician, appointed Physician to the West London Hospital.

HOWELL, J. B., M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton.

KEETLEY, C. R. B., F.R.C.S., late Assistant-Surgeon, appointed Surgeon to the West London Hospital.

LEES, F. A., L.R.C.P., appointed Resident Medical Officer to the Reading Amalgamated Friendly Societies' Medical Association, *vice* W. H. Short, L.R.C.P., deceased.

LEGGE, R. J., M.D., appointed Assistant Medical Officer to the Derby County Asylum, *vice* W. W. Horton, M.B., resigned.

WALKER, T. Shadford, M.R.C.S., L.S.A., appointed Honorary Consulting Ophthalmic Surgeon to the Royal Albert Infirmary and Dispensary, Wigan.

WILLIAMS, R., M.R.C.S., L.R.C.P.Ed., appointed Honorary Ophthalmic Surgeon to the Royal Albert Infirmary and Dispensary, Wigan.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The ordinary monthly meeting of the Council of the College was held on the afternoon of Thursday, the 14th instant. The minutes of the last Council, held on May 10th, were read and confirmed. The signatures to the by-laws of members elected to the Fellowship were received. Reports were received from the Court of Examiners on candidates found qualified for the fellowship at the examination held last month, and from the Nomination Committee. It was reported that there will be a vacancy in the Court of Examiners on the 10th of July next, by the expiration on that date of Mr. Timothy Holmes' term of office. Professors Flower and Parker were nominated for re-election as Hunterian Professors of Comparative Anatomy for the ensuing year; and Sir Henry Thompson, Hunterian Professor of Surgery and Pathology, in the place of Professor Jonathan Hutchinson, who did not seek re-election. Professor Schäfer, of University College, was nominated Arris and Gale Lecturer on Physiology in place of Mr. Henry Power, who did not seek re-election. Mr. F. S. Eve was reappointed Erasmus Wilson Lecturer on Pathology. The elections will take place at the next meeting of the Council in July. Mr. John Edward Smyth, of Sugden Road, Clapham, who became a member of the College in June 1842, was elected to the fellowship, being a member of over twenty years. The motion, of which Mr. Cadge gave notice at the last Council meeting, "That it is expedient that, at the election of the Council, the Fellows shall be allowed to vote either in person or by papers," was discussed, and ultimately it was referred to a committee to conside the expediency of the change. Drs. Bristowe, Dickinson, Gee, an Frederick T. Roberts were re-elected Examiners on Medicine, an Mr. G. Ernest Herman, M.B., and Dr. John Williams were re-elected Examiners in Midwifery for the ensuing year.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A CAUTION.

SIR,—I find that a Mr. Garibaldi Watson is making an unwarranted use of my name for the purpose of obtaining money; and I trust that this letter will put your readers on their guard.—Yours truly, M. FOSTER.

New Meadows, Cambridge, June 11th, 1883.

CLINICAL SOCIETY OF LONDON.

DR. HABERSHON requests us to state that the report of the discussion on his paper on a case of ulceration of the pylorus is erroneous, where, at page 1068, line 7, it makes him reply that "gastric ulcer was not a frequent disease." A previous speaker had said that almost every painful affection at the stomach was gastric ulcer; and, in reply, Dr. Habershon said that "gastric ulcer was not so frequent as that previous speaker had stated."

THE BRUSSELS DEGREE.

SIR,—Permit me to address you respecting the announcement you have recently made concerning the M.D. degree of Brussels (that it gives no legal title). Coming with the weight of your authority, it has seriously compromised us in the eye of the public, to whom it has conveyed the idea that we are improperly and illegally assuming a title to which we have no right. This surely was not contemplated by you; yet I have already had evidence of such an effect. It is painful to allude to the professional jealousy which will take advantage of this, but which nevertheless exists.

I am sure that you will admit that the degree is *bonâ fide*, and that the University is of high standing. With all respect and deference to you, I beg to submit that a degree being not registrable, does not make its title illegal. The title of Doctor of Medicine belongs to the graduate of right, and becomes his lawful title and distinction, and does not depend upon place or country. A Belgian graduating at Oxford is not the less a "Doctor" when he returns to his own country, although the law there takes no cognisance of his degree. I hope that, with the fairness which distinguishes our JOURNAL, and which I have noted this fifteen years past, you will be able to make such further announcement as will clearly define our position, and relieve us from the charge of illegally assuming a title to which we have no right.—I am, sir, yours faithfully, M.D.BRUSSELS.

*** Our correspondent accurately defines the meaning with which the word "illegal" was used. No foreign diploma of medicine can be registered, or give the legal status of M.D. in this country. The Brussels degree is, in this respect, in the same position here as the degrees of Paris and Berlin, which, like it, are nevertheless highly honourable diplomas.

A COUNTRY AMBULANCE.

SIR,—At a meeting of the members of the Brighouse and District Centre of the St. John Ambulance Association, held for the purpose of presenting the successful candidates at the recent examination with their certificates, Mr. Furley, the Honorary Director of Stores of the Association, was pleased to say that Brighouse and District were second to none with respect to ambulance material. Such being the case, a short description of our appliances may, perhaps, be interesting. Brighouse and the surrounding neighbourhood is a very busy mining and manufacturing district, and serious accidents are of frequent occurrence, especially in the stone quarries. Indeed, it was an accident in one of these quarries, resulting in severe injury to five men, all of whom sustained some fracture of the lower extremities (and had to be conveyed either to the Huddersfield or Halifax Infirmary, the former four and a half and the latter five and a half miles distant), that first gave an impetus to a slumbering feeling that a suitable conveyance was urgently needed for the conveyance of injured persons to one of these infirmaries. An appeal to the public was responded to in such a manner, that very soon the handsome sum of over £200 was at the disposal of the committee. With this sum, they have purchased a horse-ambulance carriage, four Ashford litters, seven stretchers "Furley" pattern, and one ordinary stretcher. The horse-ambulance carriage has been designed by Mr. Furley; and, next to the comfort of the patients, simplicity and lightness have been the principal points aimed at in its construction. It is capable of great adaptability, and can be employed with one or two patients in the recumbent position, and three or four seated, or with four patients on stretchers, and two attendants seated. Seats for the driver and one attendant in front are so arranged, that they can be drawn back over the front wheels, in order that the attendants may pass through the carriage without any obstruction. The slip at the back is the whole width of the carriage, and, when closed, forms a door. A lamp is so placed, that it can be turned up in the interior, or outwards upon the road. At the back, and below the floor, is a case of "first aid appliances," containing everything necessary for the immediate treatment of accidents. The under carriage is built of English oak and ash, and the body of the carriage of ash and American birch. It is fitted with a pedal-brake, with patent rubber blocks, shafts, and pole and crossbar. The weight complete is about 13 cwt.

The four Ashford litters are also designed and patented by Mr. John Furley and form a carriage on two wheels on elliptical springs, upon which the stretcher rests without any fastening. The great advantage of this vehicle is that the bearers can pass with the stretcher between the wheels and over crank-axle, and thus avoid lifting the patient over the wheels.

The seven stretchers are also "Furley" pattern, and have telescopic handles to admit of their use in mines, where the cages are not sufficiently large to take the ordinary stretcher. They have small India-rubber wheels under the head to facilitate their being put into the ambulance carriage. They are also provided with covers, which can be folded and strapped up with the stretcher. The weight of each Ashford litter and stretcher complete is about 110 pounds. The ordinary stretcher is kept at the police-station, and is for use in such cases as are forbidden by the rules being conveyed on the "Furley" pattern stretchers.

The ambulance carriage is kept in a central position at a livery stable, and the committee have made arrangements to have it horsed at certain fixed charges. It may be used for any surgical or medical case (not infectious) upon the production of an order from a medical man. No such order is required for the use of the Ashford litters, but the person having used one is required to inform the secretary without delay. The litters are distributed over the district at distances of about a mile from the horse-ambulance carriage, which may be considered as the centre.—I am, etc.,

Brighouse, May 2nd, 1883. GEO. A. FARRER, M.R.C.S.

The University of St. Andrew's.

Sir,—At the meeting of the Medical Council on April 26th (*vide* British Medical Journal of May 5th), Dr. Heron Watson and Professor Pettigrew made some very appropriate remarks on the present position of the University of St. Andrew's. With your permission, I would supplement those remarks by stating a few facts connected with the Scottish universities in general, and with St. Andrew's in particular.

St. Andrew's is the oldest of all the Scottish universities. From a very early period, it had a reputation for learning; and, during the twelfth and thirteenth centuries, it was the seat of notable schools. It was finally chartered as an university in 1411, by Pope Benedict XIII; and since then, till 1858, it enjoyed the right to grant medical degrees, without residence (like London), to all comers who fulfilled its requirements. When, however, the Medical Act of 1858 was passed, by which English, Scottish, and Irish qualifications were freed from their restrictions, and placed on an equality as legal qualifications to practise in any part of the Empire, the universities and other corporate bodies became jealous of St. Andrew's, imagining that their students would flock to St. Andrew's, pass its examinations, and so obtain at once a legal qualification and an university degree, and this to the pecuniary disadvantage of the other licensing bodies. Instead of adopting a liberally high-minded policy, which would alike have been a benefit to the medical profession and the public, by requiring that St. Andrew's should so regulate its examinations that none but the most thoroughly competent should be admitted to its degrees, jealous and selfish interests unhappily prevailed, and pressure was brought to bear on the Government to deprive that University of its right to grant open examinations and degrees in medicine. Accordingly, with the exception that St. Andrew's was permitted to grant the M.D. degrees annually under certain restrictions, she was placed under the same rules as the other three Scottish universities. The rule which bears adversely to St. Andrew's is one which necessitates what is called "university residence;" for it is enacted that no candidate for a medical or surgical degree—be he student or be he practitioner—may graduate in any Scottish university unless he shall have spent at least half of his medical curriculum at an university—that is, two years' "residence." Now, let us see the practical working of this rule.

At *Edinburgh*, it means almost the entire curriculum, or four years' residence; for students wishing to graduate M.B. there do not think themselves safe unless they study all their time there, *i.e.*, pay all their fees into the pockets of the professors, who are also their examiners.

At *Glasgow*, it means the same thing in a lesser degree.

At *Aberdeen*, it probably does mean a minimum of two years' residence out of the four years of study; and it is probably owing to the fairness of the examinations there that the Aberdeen degree is somewhat popular among students of the London colleges, who feel that, if they know their work, they can take their college diploma, and also graduate M.B. at Aberdeen, with only two years' residence.

At *St Andrew's*, it means no M.B. graduates, because St. Andrew's, like London, having no teaching school, and all candidates being obliged to have two years' "university residence," they will, of course, go for examination and graduation where they are compelled to reside, and where they are known. Very occasionally, there is a candidate for the M.B. and C.M. degree, but he is always the subject of some special circumstances, which have prevented him from graduating at his own university, or he is already a practitioner, who, not having before thought of an university degree, suddenly finds that, having had two years' residence at some university, he is eligible for examination, when he again takes to reading privately, and goes up for the degree. But these instances are so rare, that they do not alter the practical fact that St. Andrew's has, in the interests of the other universities, been debarred from granting its degrees to those who would come for them. Again, the ten M.D. degrees annually conferred by St. Andrew's can only be given to those who are already practitioners, registered, and above forty years of age.

Now, how does all this affect the profession? I know, from daily experience, that there are many diligent students who cannot afford the expense of "university residence" away from home, but who can find very ample means of medical study in their own towns. There are also many practitioners who never thought of university honours in their student days, but to whom now a medical degree has become a great desideratum. For such students, the hope of obtaining a degree would be a great stimulus to higher study; and such practitioners would only be too glad to read privately for the degree were it obtainable without residence. That this is so is sufficiently shown by the numbers who yearly take the Brussels M.D., which, although it confers no legal *locus standi*, is still a coveted distinction.

I ask, therefore, is it not a disgrace to our medical laws that able and competent practitioners should be forced to leave their own country to seek in a foreign land for an university *imprimatur* on their knowledge—and this simply to protect the pockets of the universities and their professors? Again, I would ask, Do the University Faculties of Medicine exist for the benefit of the profession and the public, or do the public and the profession exist for the special benefit of the faculties?

England has, in the London University, one open to all comers without residence. Ireland has lately got a similar one in the new Royal University; and why should Scotland be deprived of a similar right in St. Andrew's, and one, moreover, which existed before either "London" or the "Royal" were chartered? Were the ancient right of St. Andrew's restored to it, I have no doubt the scheme of examination which now obtains there for the somewhat rare M.B. would be offered to all comers, and that it would be greatly taken advantage of without any detriment to the pecuniary interests which certain bodies are so frightened about. Such facilities would promote a more thorough course of scientific and medical study, both before and after qualification.

St. Andrew's is a small university, but it is, perhaps, the most liberally enlightened of all the Scottish universities. It was the first to institute the title of L.A. (Literate in Arts) for women—a title nearly equivalent to the M.A. degree, and which is conferred after examination, without restriction as to previous study. This was instituted in 1877, and so well has it met a want and encouraged female education, that last year there were over four hundred entries for it. So little is known in England of the work of this University, that I may be pardoned if I quote from Mr. J. M. Anderson's *Historical Sketch of St Andrew's University* the following words.

"Benedict XIII, when granting his Foundation Bull, expressed a very strong desire that the University might 'produce men conspicuous for maturity of counsel, adorned with the ornaments of virtue, and learned in the doctrines of the various faculties.' Looking backwards from the long distance of four hundred and sixty-five years, no one need have any hesitation in saying that the Pope's good wishes have been amply gratified. In proportion to its size and influence, the University of St. Andrew's has turned out far more men of eminence and distinction than any other seat of learning in Scotland. In every branch of knowledge, and in every sphere in which scholarship and talent find their widest scope, *alumni* of St. Andrew's are to be found excelling. They are to be met with as theologians, philosophers, and historians. Many have shone at the Bar and in Parliament, while others have acquired fame in the various departments of science—in mathematics, physics, chemistry, natural history, and medicine. Some have become national poets, and not a few hold honoured places in literature."

Such is St. Andrew's; and the medical examiners both past and present are men well known for their ability in their respective branches. Taking, therefore, all these circumstances into consideration, instead of silently acquiescing in the self-interested cry of those who would take from St. Andrew's what little is left of her medical degree-granting power, it would be, I apprehend, the true interests of the profession to agitate to have restored to her her original right of freely examining all candidates, and granting *bonâ fide* British medical degrees, which shall confer on their recipients a valuable and legal *locus standi*.—I am, sir, A St. Andrew's M.D.

A Repudiation.

Sir,—I see to my surprise, from a report just sent me, that my name is printed as one of the vice-presidents of the London Society for the Abolition of Compulsory Vaccination. As I am not a member of that Society, and as I have never authorised the use of my name, I object to be forced into its ranks, and I protest against such compulsion.—I am, etc.,

Rock House, Hastings, May 29th, 1883. Elizabeth Blackwell, M.D.

Handbills.

Sir,—May I ask you to publish the enclosed bill, so that it may act as a warning to young members of the profession who may be meditating starting practice in a colliery district; as the enclosed gives one a fair idea of means used by qualified men in opposition. Copies of the enclosed have been left at the houses of my club-patients by Dr. Marr: "Notice! Notice!! Messrs. Marr and Robins have pleasure in informing the inhabitants of Wingate, Station Town, and District, that in compliance with the earnest wishes of many, they have completed arrangements enabling them to embrace the above-named districts in their daily visitations, professionally. Attendance will be given daily, between the hours of 10 and 12 a.m., and 5.30 and 7 p.m., at Miss Mitchell's, dressmaker (Tonk's late furniture shop), where all messages, etc., can be left. All urgent cases requiring medical aid during the night will be duly attended to by Dr. Arthur, at the Colliery Surgery, on behalf of Drs. Marr and Robins. Castle Eden, April 16th, 1883."—Believe me, yours truly,

Castle Eden, County Durham. M. Duggan, M.R.C.S., Etc.

Dr. Laidlaw was perfectly right to make sure that his fee would be paid before he gave the confidential information that was required; but was not such an assurance contained in the first letter that he received?

Hay-Asthma (Hay-Fever).

Sir,—I should be glad if any of your readers will let me know the usual duration and progress of an attack of hay-fever. I have been suffering from this troublesome complaint during the past week; have not had a previous attack, nor is it in my case hereditary. It began soon after passing through some hay-fields, while on a few hours' visit in the country. As yet, only the conjunctival and nasal mucous membranes have been affected; there has been very little dyspnœa, or tightness of the chest; no cough or expectoration. I noticed an apthous patch of ulceration on the left tonsil, with congestion and swelling of that gland. The symptoms were not mitigated by the internal use of arsenic, but have subsided almost completely after the local application of a weak solution of quinine. I should imagine, judging from my own case, that asthmatic symptoms are not common, from the nasal and conjunctival mucous membrane being first implicated; perhaps the bronchi are protected to a slight extent by the stiff hairs at the margins of the nostrils. In conclusion, I should like to know if there is any reason why a small number of persons only are susceptible.—I am, sir, yours truly,

Stoke Newington, N., May 25th, 1883. J. H. Kisby.

Schoolmistress.—We know of no such book.

Unqualified Assistants.

Sir,—Every right-minded practitioner must, I think, view with considerable satisfaction the resolution passed by the General Medical Council respecting the employment of unqualified assistants. Men who are unable to obtain any qualification are manifestly unfit to discharge the duties too often entrusted to them, and the public generally have not been fairly dealt with by the profession, in allowing such a system to be carried on for so long a time. All practitioners who have more patients than they can themselves attend to, ought, in common honesty, to employ qualified men to assist them. Unqualified assistants ought, as a class, not to exist, except as dispensers and book-keepers; and, further, at the most only visit convalescents strictly under the guidance of their principals. This, of course, the General Medical Council allow.

Apart from the public, the system has been unjust to young qualified men and to young practitioners. From my own knowledge, I can avow that there are many of the latter struggling honourably to obtain a livelihood, but hampered by the unqualified assistants of neighbouring practitioners, who are "palmed off" upon the public as "doctors," and assisted and encouraged in gaining connections of their own, by attending at a cheaper rate than their principals. This is not honest, because their patients are led to believe that they are being treated by qualified men; nor is it just, because those who have worked and qualified are injured by it. In all large towns, there are now numerous so-called "dispensaries," and in these more particularly there is much harm done to the public and to the juniors of the profession. Many of these are managed by men not only unqualified, but who have never gone through any curriculum; of this I have proof in three cases, even in my own neighbourhood.

Happily, by the further resolution that this practice shall be considered as "infamous conduct under the Medical Act," there is now opportunity for putting a stop to it; and I trust that all who know of practices conducted in this manner will at once bring the facts to the knowledge of the Medical Council.—I am, sir, yours faithfully, A General Practitioner.

Medical Etiquette.

Sir,—In the interest of the medical profession at large, I feel it incumbent upon me to challenge the opinion published by you in the Journal of May 12th, on the correspondence which has taken place between Mr. Patchett and myself, and to appeal, through your columns, for the opinion of any members of the profession who may wish to state their views on the question. I hold that I have acted strictly in accordance with medical etiquette, as I declined to take charge of the case on my own behalf, until the parents had themselves communicated to Mr. Patchett the statement they made to me, namely, that they were not satisfied, and did not any longer wish for his services; this being the case, I consider I am entitled to receive an apology from Mr. Patchett for the insulting message he sent me through the patient's father, and which he adheres to in his letter of March 31st.

I fail to see why I should have couched my letter of March 30th in more conciliatory language, when such a highly improper message was sent to me by the gentleman I was writing to.

I have received numerous expressions of opinion from medical men, in every case totally at variance with that of your referee. I enclose the copy of one which comes from a total stranger to me, which I request you will publish with this letter in your next issue.

I may also add that an opinion very different to yours appeared in the *Lancet* of April 7th, fol. 622, to which authority Mr. Patchett sent the correspondence, *minus* the note written by Mr. McLaren to me, which at the time Mr. Patchett had not seen.—I remain, dear sir, yours faithfully,

Wren's Nest House, Shaw, May 19th, 1883. Andrew Spearing.

(*Copy.*)

"24, Wimpole Street, Cavendish Square, W., May 13th, 1883.

"Dear Sir,—I have read, with much interest, the correspondence between yourself and Dr. Patchett in the British Medical Journal for this week, as well as the extraordinary comments thereon by the person to whom the case in dispute was submitted by the Editor.

"It seems to me that your statement of the facts (corroborated by Mr. McLaren) being correct, there can be no doubt that you acted precisely as any man of judgment, and with perfect self-respect, should have done. According to the "Mentor," it ought to be made a matter of impossibility for a patient to call in another medical man in the place of the one with whom he is dissatisfied. Had you acted in accordance with such a suggestion, by declining to attend except in conjunction with Dr. Patchett, Mr. McLaren would, no doubt, have replied to the effect that he thanked you, but was unable to afford the expense of two doctors; and since you declined to attend under any other conditions, and since he had no confidence in Dr. Patchett, he must call in some other man. You would thus have done Dr. Patchett no good, and yourself much harm; for it is quite clear to my mind that Mr. McLaren merely made use of the opportunity of Dr. Patchett's absence to carry out an intention which had been previously in his mind. I trust you will not think I have taken a liberty in saying so much, but I really feel so strongly that the powers of this "Mentor" are quite unequal to the discharge of the task assigned him, that I cannot refrain from expressing my views.

"I have written to you direct, as I feared I might not (when speaking so strongly against its spokesman) have found my way into the columns of the British Medical Journal; but you are at perfect liberty to make what use you please of this.—Believe me, dear sir, faithfully yours, (Signed) William E. Burton.—Dr. Spearing, Shaw."

*** The referee (than whom we know no higher living authority), whose comments on the case of Messrs. Spearing and Patchett recently appeared in the columns of the Journal, and to which Mr. Spearing and Mr. Burton take exception in the above letters, is, we think it well to observe, a gentleman of great practical experience in all medico-ethical subjects, who has long and loyally rendered us valuable assistance, and in whom, it is scarcely necessary to add, we have entire confidence. The following are his remarks on Messrs Spearing and Patchett's letters.

"Dear Mr. Editor,—While fully conceding to Mr. Spearing his undoubted right to dissent from my view of his regrettable dispute with Mr. Patchett, I would courteously remind him that our respective standpoints are essentially different; his, naturally, is a more or less interested and biassed one; that of the referee disinterested and altogether uninfluenced by other than an honest desire to be just between the disputants, and a wish to promote the honour and welfare of the profession. With that sole object in view, I have reperused and carefully weighed the several points in the correspondence which passed between them, with the simple result that, while (as in my former remarks on the case) I cannot but regard Mr. Patchett's ill-judged attempt to disparage Mr. Spearing's professional qualifications as unjustifiable and reprehensible, and also disapprove of his snappish reply-note of March 31st (evidently written under the smart of supersession, and the irritating threat made in Mr. Spearing's note of the previous day, to 'put it to the test of further opinion through the medical press'), I see no reason whatever to modify the opinion therein expressed. Indeed, I hold that Mr. Spearing was, in accordance with the rule of the profession, morally bound, ere he paid a second visit to Mr. McL.'s, to have communicated, either in person or by note, the fact and circumstances of his attendance to Mr. Patchett, which, however, he omitted to do, although twenty-four hours intervened between the morning of the 29th and that of the 30th, the dates of his first and second visit.

"In reference to Mr. Burton's conviction, as expressed in his note of May 12th, viz., 'it is quite clear to my mind that Mr. McL. merely made use of the opportunity of Dr. Patchett's absence to carry out an intention which had been previously in his mind,'—assuming such to have been the fact, is it, I would ask, unreasonable to suspect that Mr. McL., in order to conceal his default in straightforwardness, prevaricated in his statements, and misled both Mr. Spearing and Mr. Patchett, notwithstanding the averment in his note of April 3rd? (By whom was that note drafted?) Be that as it may, Mr. Patchett, in his notes of March 31st and April 2nd, distinctly asserts that the statement made to him by Mr. McL. differed entirely from that alleged by Mr. Spearing; and such, I believe, would prove to be the case if Mr. McL. were confronted with Mr. Patchett, and closely questioned; and I speak advisedly, inasmuch as it has unfortunately, in the course of a long professional life, fallen to my lot to have been engaged in many like cases—of one of which, that occurred nigh thirty years ago, I have a vivid and pleasing recollection, in so far as I was happily the means of averting a painful estrangement between three personal friends who had severally been deceived by false statements on the part of the friends of, and silently acquiesced in by, a patient—a case which eventually terminated in a perfect reconciliation, and an excellent dinner, as can be personally testified by yours faithfully, The Referee."

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Labour Among Primitive People; Showing the Development of the Obstetric Science of To-Day from the Natural and Instructive Customs of All Races, Civilised and Savage, Past and Present. By G. Engleman, M.D. Second Edition. Revised, Enlarged, and Rearranged. Forty-nine Illustrations. St. Louis: J. H. Chambers and Co. 1883.

Hospital Construction and Management. By F. J. Mouat, M.D., F.R.C.S. London: J. and A. Churchill. 1883.

A Guide to Therapeutics. By Robert Farquharson, M.P., M.D.Edin., F.R.C.P.Lond. Third Edition. London: Smith, Elder, and Co. 1883.

Mineral Waters of Europe; Including a Short Description of Artificial Mineral Waters. By C. R. C. Tichborne, LL.D., F.C.S., M.R.I.A.; and Professor James, M.D., M.R.C.P. London: Ballière, Tindall, and Cox. 1883.

Medical Essay, 1842-1882. By Oliver Wendell Holmes. Boston: Houghton, Mifflin, and Co. New York: 11, East Seventeenth Street. Cambridge: The Riverdale Press. 1883.

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A LECTURE
ON THE
FUNCTIONAL CARDIAC MURMURS OF ANÆMIA.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
Lecturer on the Principles and Practice of Medicine in the Extra-Academical School of Medicine, Edinburgh.

It is customary to include under the term functional murmurs all those cases in which the murmur depends upon temporary and curable conditions, or in which no distinct alteration in the valvular mechanism (it would, perhaps, be more correct to say in the valvular segments) can be detected after death. Functional murmurs are always systolic in time, and are generally heard at the base of the heart, most commonly to the left of the sternum, in the second interspace, *i.e.*, in the region of the pulmonary artery. They are sometimes also heard in the aortic, mitral, and tricuspid areas.

The exact significance and mode of production of the functional murmurs, which are audible at the base of the heart, have given rise to great debate, and are among the most unsettled points in cardiac pathology.

Walshe divides the so-called functional murmurs into two great groups, which he respectively terms hæmic and dynamic. Under the former, he places "murmurs originating within the heart and dependent upon an unnatural state of the blood;" while, under the latter, he includes "murmurs which result from abnormal action on the part of the heart," the proper valvular mechanism being healthy. And this division indicates the two great causes of functional murmurs, viz.: (1) *defective muscular action* allowing of mitral and tricuspid regurgitation; and (2) an *altered condition of the blood*, which probably aids, at least, in the production of the pulmonary and aortic murmurs which are met with in conditions of anæmia.

But it will be necessary to consider the subject in more detail. Anæmia, more particularly those forms of anæmia (such as chlorosis, progressive pernicious anæmia, etc.) in which there is defective formation of blood, is the chief clinical condition in which functional endocardial murmurs occur. Now, in cases of this description, the muscular fibre of the heart becomes fatty, the cardiac cavities become dilated, and the weight of the heart also becomes increased; in fact, there is a condition of combined fatty degeneration, dilatation, and hypertrophy, dilatation being, however, in excess of hypertrophy.*

Such a condition of the heart is just such as we would expect to produce "relative incompetence;" and, as a matter of fact, all careful clinical observers are, I presume, agreed that, in cases of this description, mitral and tricuspid regurgitation do ultimately occur. All observers are also, I suppose, at one in thinking that arterial murmurs (pulmonary and aortic murmurs) are usually present in advanced conditions of anæmia. The point which is still undecided, and which has lately given rise to so much controversy, is the nature and significance of the basic murmur, which is heard in the second left interspace, in the earlier stages of anæmia. Three theories, all of which have warm supporters, have been advanced to account for the condition, viz.:

1. *That the Murmur is Pulmonary.*—The exact manner in which the murmur is supposed to be produced in the pulmonary artery, has not been very clearly defined by the supporters of this view. The sudden propulsion of a large blood-wave of abnormal (spanæmic) composition into the vessel, which is, probably, in some cases at least, dilated, seems to me an efficient cause for its production; and we know, as a matter of fact, that the heart, in cases of chlorosis, is not only weak, but that it is unusually irritable; that even in the earlier stages the right ventricle is to some extent dilated; and that the blood is markedly altered in composition.

2. *That it is due to mitral regurgitation*, and that the murmur is conducted to the anterior wall of the chest, through the dilated appendix of the left auricle. (Dr. George Balfour's theory.)

3. *That the murmur is produced in the pulmonary artery* as the result of *constriction* of that vessel; the constriction being caused by the pressure of the *dilated left auricle* (Dr. Russell's theory). Dr. Russell further believes that the systolic murmur heard in the second, third, and fourth left interspaces, in the later stages of such cases, is due to tricuspid regurgitation.

Before considering the arguments for and against these different theories, I may say that the question is still an open one; the balance of evidence, in my opinion, being in favour of the first or pulmonary view. I do not think, for the reasons to be presently given, that Dr. Balfour has conclusively proved his point; on the contrary, there seem to me to be grave objections to his view; and I do not see that anything which has as yet been advanced, conclusively negatives the first or purely pulmonary theory.

Dr. Balfour's Theory.

The facts and arguments on which Dr. Balfour bases his theory, and the facts and arguments which seem to be opposed thereto, may be summarised as follows:

1. (*For.*) That in organic diseases of the mitral valve a systolic, basic, and apparently pulmonary murmur is often present. Admitted that this is so.

2. (*For.*) That this supposed pulmonary murmur is, as Naunyn was the first to suggest, not pulmonary at all, but that it is due to mitral regurgitation, and is conducted to the second left interspace through the dilated appendix of the left auricle.

(*Against.*) While granting that, if the appendix of the left auricle were dilated and were in contact with the chest-wall, the systolic murmur of mitral regurgitation would probably be conveyed to the second left interspace; and that, as Dr. Balfour points out, Naunyn's theory has been accepted as highly probable by many leading Continental authorities, it must be allowed that it has not been accepted as conclusively proved, more especially by many competent British observers. But, even granting that it is true for some cases of organic disease (*i.e.*, granting that cases of mitral regurgitation, in which the usual symptoms and signs of that condition, more especially a systolic murmur audible at the apex, are present, and in which the auricular appendix is dilated and is in contact with the chest-wall, do occur), it by no means follows that the chlorotic murmur with which we are now more particularly concerned is produced in the same manner.

The arguments with which Naunyn supports his theory are these.

(*a*) (*For.*) That the murmur has its point of maximum intensity at a point an inch and a half to the left of the sternum.

(*Against.*) Now, speaking for myself, I have in several cases of anæmia failed to satisfy myself that the position of the maximum intensity is so sharply defined as Dr. Balfour's statements seem to indicate. The murmur has seemed to me in several cases quite as loud half an inch to the left of the sternum as over the so-called auricular area, *i.e.*, an inch and a half to the left of that bone. Hayden, who is admitted to be a trustworthy observer, goes much further in this respect than I am disposed to do, for he states that the murmur is best heard at midsternum.

But even granting that the point of maximum intensity of the murmur, in cases of chlorosis, is in the position which Dr. Balfour describes it, it does not seem to me by any means to prove that it is not pulmonary. In the first place, Sibson has shown that "in the large majority of cases" which he examined, "the greater part (in twenty-five of forty-five instances), or the whole (in fourteen of forty-five instances), of the artery, bore to the left of the sternum, and presented itself behind the upper costal cartilages and their spaces from the first cartilage to the third space (Russell Reynold's *System of Medicine*, vol. iv, p. 35); and further, that the average breadth of the vessel in Pirogoff's five front views of the healthy heart was an inch and a quarterr (*Ib.* p. 115). I see nothing improbable, therefore, in a pulmonary murmur having, in many cases, its point of maximum intensity considerably to the left of the sternum.

In the second place, there seems good reason to suppose, as Dr. Russell's observations seem to show, that in consequence of the dilated condition of the heart (of the right ventricle more especially), the relative position of the parts is somewhat altered, and that the pulmonary artery may be displaced forwards, and perhaps somewhat to the left of its usual position.

(*b*) (*For.*) That this point does not correspond to the origin of the pulmonary artery, but does exactly correspond to the spot where the appendix or the left auricle comes up from behind, just to the left of that artery, and that in cases of this description (*i.e.*, where the murmur is loudly heard in the second left interspace) the

* These changes are seen in the human subject in cases of progressive pernicious anæmia; and they have been shown by Beau to occur in the lower animals after venesection.

appendix of the left auricle is dilated, and is closer to the chest, and therefore nearer to the ear than usual.

(*Against.*) It is not proved that the appendix of the left auricle is dilated in cases of chlorosis (with which we are at present more immediately concerned. On the contrary, there are, as we shall presently see, positive observations to the contrary; and there are, as Dr. Russell has pointed out, grave anatomical objections to the theory that the left auricular appendix is in closer contact with the chest-wall in cases of chlorosis than in health. This point will be again referred to.

But, granting for the moment that cases of mitral regurgitation do occur, in which the left auricular appendix is dilated, and in closer contact to the chest-wall than usual, and in which the systolic murmur produced at the mitral valve is heard as loudly in the second left interspace as at the apex, that is no reason for supposing that, in a case of anæmia, in which a murmur is heard in the second left interspace, and in which there is no murmur, be it observed, at the apex, and no other indication of mitral regurgitation present, that this apparently pulmonary murmur is of mitral origin.

The fact that the murmur is better heard over the auricular area than over the apex—the normal position of maximum intensity for mitral murmurs—Naunyn explains by attributing it to the better conduction of the murmur along the course of the regurgitating blood-current, the fluid veins producing sonorous vibrations louder at the point of impingement than at that of origin—a view which is adopted and endorsed by Dr. Balfour in support of his theory. He says: "the fluid veins formed in the early stage of chlorotic regurgitation are of low tension and but little force, hence the vibrations they originate are but slightly propagated to the left ventricle, and only with difficulty from it to the chest-wall in the mitral area, where they are heard as an impure first sound. But, on the other hand, these vibrations are readily communicated to the wall of the auricle on which these fluid veins impinge, and are easily transmitted to the chest-wall with which the auricular appendix is in contact, becoming audible in the auricular area as a distinct murmur."

Against this view it may be argued that, if the fluid veins produce sonorous vibrations louder at their point of impingement than at their point of origin in one case, why should they not do so in all? In other words, if this theory be correct, we ought to hear the systolic murmur of organic mitral regurgitation much more frequently and much more loudly in the second left interspaces than is admitted by the majority of British observers, at all events.

Again, it may be asked if this explanation is correct in cases of chlorosis; and, if, as Dr. Balfour admits, "the auricle, at the moment of ventricular systole, is not only full, but somewhat tense from unusual dilatation," and if the fluid veins produce sonorous vibrations louder at their point of impingement than at their point of origin, why is it that the murmur is not heard in the back, behind, *i.e.*, under the left scapula, as the murmur of organic regurgitation so often is?

3. (*For.*) That in some cases of mitral disease, the apparently pulmonary, but in reality auricular murmur, is occasionally actually louder than that audible in the mitral area, and that the murmur of mitral regurgitation is sometimes only to be heard in the first named situation, *i.e.*, in the second left interspace. Dr. Balfour, indeed, goes so far as to state that "a more or less distinct murmur in this (*i.e.*, the auricular) area, is one of the earliest indications of mitral regurgitation, from whatever cause" (second edition, p. 163).

(*Against.*) While admitting that some authorities—Rosenstein, for example—support this view, it is certainly contrary to the recorded opinion of almost all the best observers in this country; and I am not prepared to admit that a systolic murmur heard in the second left interspace is, *per se* (as Dr. Balfour states in the following passage), indicative of mitral regurgitation.

"In chlorosis," says Dr. Balfour, "in which all these phenomena, to which I may now comprehensively refer under the head of cardiac dilatation consecutive to spanæmia, exist only in the very slightest degree, this pulmonary, or rather auricular, murmur is always present, and is often—so often as to constitute it almost invariably—the sole sign of mitral regurgitation in these cases" (*Diseases of the Heart*, second edition, p. 172).

4. (*For.*) Dr. Balfour claims "that Naunyn's view is even more applicable in chlorosis than in any other form of heart-affection, because the essential cardiac lesion in chlorosis is muscular relaxation and progressive dilatation; hence, at a comparatively early stage of the disease, the dilated right ventricle has separated the left ventricle from the chest-wall, while the dilated appendix of the left auricle has been, *pari passu*, brought into closer contact with it."

"The peculiar position of the murmur is due," says Dr. Balfour, "to the altered position of the heart.....This is due to the dilatation of the right ventricle, which dilates *pari passu* with the left ventricle, and, like a water-cushion, separates it from the chest-wall, leaving the dilated appendix of the left auricle the only part of the left side of the heart in contact with the chest-wall."

Dr. Balfour further claims that the pulsation of the auricular appendix can be seen, felt, and graphically recorded by the cardiograph. He says: "In this situation, the dilated appendix not unfrequently gives rise to so distinct a pulsation, that its movements can be traced by the cardiograph; and the history of several such cases has been published, and their cardiograms figured, by my former resident, Dr. George Gibson; while the pulsation is so well marked and forcible in some of these cases, that the late Dr. Hughes Bennett sent me, on one occasion, a case of chlorosis as a case of aortic aneurysm." (*Diseases of the Heart*, second edition, p. 175.)

Against these statements, it may be argued, *first*, that Naunyn's explanation seems more particularly to apply to those cases of mitral regurgitation in which a systolic murmur is audible *at the apex*, *i.e.*, in the usual mitral area, *as well as* in the second left interspace; but that, in the earlier stages of chlorosis, the apparently pulmonary murmur is, as Dr. Balfour himself admits, usually the sole sign of mitral regurgitation; in other words, the usual evidence of mitral regurgitation, *i.e.*, a systolic murmur in the mitral area, is wanting.

Secondly, that, in the later stages of anæmia (chlorosis), a true mitral murmur, *i. e.*, a murmur audible at the apex—in the mitral area—does actually occur. This Dr. Balfour himself admits, and he explains it in the following manner, "By-and-by, as the regurgitation increases, and the ventricle hypertrophies, these fluid veins gain force sufficient to be communicated through the ventricle also; hence, in the later stages of chlorosis, we have a mitral murmur associated with the auricular one. It is, however, quite possible that this murmur in the mitral area is really tricuspid, due to the increased dilatation of the right ventricle, the apex of which may even occupy the mitral area. This not unfrequently occurs in mitral stenosis; it is not an improbable event in chlorosis; and it is of little consequence which explanation we accept, the actual truth probably embracing both conclusions, being sometimes due to the one cause and sometimes to the other." (*Diseases of the Heart*, p. 177.)

Now I agree with Dr. Balfour in thinking that in many cases of advanced chlorosis the systolic murmur, which is heard at the apex, is due to mitral regurgitation, but I differ from him, inasmuch as I believe that it is a distinct murmur from that heard in the second left interspace; and I am unable to accept the theory which he advances to explain the supposed fact that a mitral murmur may, in the earlier stages of the condition, be confined to the base, while in the later stages it is heard at the apex. For is it not the fact that as cases of chlorosis (and more especially of progressive pernicious anæmia, in which the same sequence of events occurs), advance, that the degeneration of the heart-muscle increases, and that dilatation of the heart-cavities, with increased feebleness of action, rather than hypertrophy with increased force of contraction, occurs. If this is so, Dr. Balfour's explanation obviously cannot hold good; and he himself states that "the essential cardiac lesion in chlorosis is muscular relaxation and progressive dilatation."

The order of recovery, too, seems to be opposed to this view. If the hypertrophy of the left ventricle is the cause of the mitral murmur being audible at the apex in advanced stages of the case, and if the mitral and so-called auricular murmurs depend on one and the same cause, *i.e.*, upon mitral regurgitation, why, in cases which recover, should the basic murmur persist long after the apex murmur has disappeared? It can hardly be suggested that the left ventricle becomes weaker during the process of recovery; and if both murmurs depend on one and the same cause, *i.e.*, upon mitral regurgitation, and if the ventricle does not become weaker, both murmurs, surely, ought to disappear at one and the same time.

Thirdly. Dr. Russell has shown that in a case of progressive pernicious anæmia, in which both pulsation and *bruit* were present in the second left interspace during life, the auricular appendix was not dilated, and was not in contact with, but was far removed from, the chest wall, and that the pulsation, percussion-dulness and *bruit* were respectively seen and heard over the conus arteriosus. (*Edinburgh Medical Journal*, November 1882, page 408.)

Dr. Balfour's counter argument against this, "that the

position of the auricle *post mortem* is no proof of its state during life, and where there is no mitral stenosis, an auricular appendix, beating in the second interspace during life, may very well empty itself and contract out of sight in the act of dying," is not, to my mind, a very convincing one. In the first place, our knowledge of the normal position of the appendix (including Naunyn's own observations, which Dr. Balfour quotes as one of his main arguments) has been largely acquired by the same means which were adopted in this case. And in the second place, in cases of progressive pernicious anæmia, such as this was, the heart is usually (I think I may say invariably) relaxed and flaccid after death. It seems unlikely, therefore, that in this case the appendix emptied itself and contracted out of sight.

Fourthly, that when the right cavities of the heart are dilated, as Dr. Balfour admits is the case, in *chlorosis*—the condition we are considering—the left auricular appendix is usually quite invisible from the front, a fact which Dr. Russell has also urged. I have had several opportunities of verifying this statement during the past session, two of the cases being typical examples of pernicious anæmia. In none of these cases was the appendix much dilated; indeed, in one of the cases of pernicious anæmia it was considerably smaller than usual. Dr. Russell says: "It is further recognised that, in debility, owing to dilatation of the right ventricle, the left is displaced outwards and backwards; or a change occurs which may be regarded as a rotatory movement of the heart round its longitudinal axis; and this must be conceded as having a displacing effect on the auricle analogous to what it has on the ventricle of the same side." Further, Dr. Russell argues that, since "the origin or root of the appendix is overlapped in part by the pulmonary artery, so, to reach the parietes, the appendix has to traverse a course equal to the diameter of that vessel. Any increase in the diameter of the artery from increase of its contents will thus place the appendix deeper in the chest." (*Edinburgh Medical Journal*, August 1882, page 131.)

I can from personal observation testify, as Dr. Russell's argument implies, that the pulmonary artery is dilated in (some) cases of pernicious anæmia; presumably, therefore, it is dilated in some cases of chlorosis.

It must be at once conceded that pulsation is frequently to be observed in the second left interspace in cases of chlorosis. I cannot, however, say that I have ever been able to satisfy myself that it was auricular; and, like Dr. Broadbent, I am not convinced that Dr. Gibson's latter tracings, to which Dr. Balfour particularly refers (see *Edinburgh Medical Journal*, October 1882, page 294), prove the pulsation to be produced by regurgitation into the ventricle from the auricle.*

Further, in common with Dr. Broadbent, Dr. Goodhart, Dr. Russell, and other observers, whose pathological experience is not inconsiderable, I have not met with any case of cardiac dilatation—certainly not in any case of anæmia, and I have had an opportunity of examining seven or eight cases, after death—in which the left auricular appendix was so markedly dilated "as to warrant the belief that it could have been the cause of the extensive pulsation claimed for it by Dr. Balfour in the second and third left spaces." (BRITISH MEDICAL JOURNAL, August 26th, 1882, page 354.)

Dr. Russell thinks that the left auricular appendix is more frequently thrombosed than dilated in mitral stenosis, and that this is an argument against Dr. Balfour's view.

My experience agrees with that of Dr. Russell, in so far as I have frequently seen thrombosis of the left auricular appendix in cases of mitral stenosis. I do not, however, lay any stress upon this point, for a thrombosed appendix may also be dilated; and if it be granted that a large appendix can come in contact with the chest-wall, the fact that it was thrombosed would rather favour than interfere with the conduction of sound, *i.e.*, of the murmur. A thrombosed appendix could hardly, however, be the cause of the extensive pulsation which Dr. Balfour describes.

Further, Dr. Russell claims to have frequently satisfied himself that the pulsation in the second interspace in cases of organic mitral disease, is due to the dilated right ventricle. (*Edin. Med. Journ.*)

I can corroborate Dr. Russell's statement in this respect, inasmuch as I have in several cases of right-sided dilatation—notably in a case of pernicious anæmia—found that a needle passed into the second left interspace transfixed the conus arteriosus of the right ventricle, and did not transfix the pulmonary artery, as it does under normal circumstances.

* The tracings published by Dr. Russell in the JOURNAL of June 2nd seem also opposed to Dr. Gibson's view.

A MEMORANDUM

ON THE

INFLUENCE OF VACCINATION IN THE PREVENTION AND DIMINUTION OF MORTALITY FROM SMALL-POX.

Presented to the Parliamentary Bills Committee of the British Medical Association.

BY ERNEST HART,
Chairman of the Committee.

1. THE introduction of vaccination was followed by a marked decrease in the small-pox death-rate; and, concurrently with the diffusion of vaccination, the small-pox death-rate has further progressively diminished.

Prior to the introduction of vaccination, small-pox was an almost universal disease. Continuously present in all large centres of population, it assumed epidemic proportions at intervals of two to four years, while the smaller towns and rural villages—except such as were exceptionally isolated—were, as a rule, visited by an epidemic of the disease once in every three to six years.[1] No class of society was exempt from its ravages; and while most fatal in the filthy homes of the poor, yet it spared not the palaces of kings nor the mansions of the rich.[2] So common, indeed, was the disease that it was rare for anyone to reach adult life without having passed through an attack.[3] The dread with which it was looked upon may readily be inferred from the eagerness with which inoculation was had recourse to towards the end of the eighteenth century. After the introduction of vaccination, the mortality from the disease underwent a marked diminution. How great this diminution has been in the case of London is shown by the following table.

Table showing the Small-pox Deaths per 1,000 *Deaths from all Causes in London from* 1631 *to* 1882.[4]

Period.	Small-pox Deaths per 1,000 Total Deaths.		Period.	S. P. Deaths per 1,000 TotalDeaths	Period.	S. P. Deaths per 1,000 TotalDeaths
1631-35	48		1741-50	73	1801-10	67
1651-60	59		1751-60	100	1811-20	41
1661-70	39		1761-70	103	1821-30	33
1671-80	66		1771-80	97	1831-40	23
1681-90	76	Measles	1781-90	92	1841-50	16
1691-1700	53	included.	1791-1800	93	1851-60	11
1701-10	58		...	...	1861-70	11
1711-20	81		...	...	1871-80	19
1721-30	83	Inoculation occa-	...	...	1881-82	17
1731-40	77	sionally practised	...	...	...	...
	Preinoculation Period.		Inoculation Period.		Vaccination Period.	

The table shows that the proportion of small-pox deaths to deaths from all causes, has undergone considerable diminution. It is, moreover, universally admitted that the total death-rate of the metropolis is now much lower than it was in the seventeenth and eighteenth centuries. Hence, as the small-pox death-rate has diminished in greater ratio, it is clear that the diminution in the small-pox death-rate must be enormous.

As regards England generally, it is equally certain that the mortality from small-pox is now infinitely less than in prevaccination days, although the absence of registration in the earlier period precludes any accurate statistical comparison. In registration times, however, the mortality from the disease has steadily declined, as the following table shows.

[1] Hillary: *Rational and Mechanical Essay on the Small-pox.* London, 1735.

[2] *See* Burnet's *History of William and Mary*, pp. 136, 304; Walpole's *Letters* (April 2nd, 1750); Pepys; Evelyn; St. Simon; Besenval; Vehse, etc.

[3] Hillary: *loc. cit.*; Haygarth: *Sketch of a Plan to Exterminate the Natural Small-pox.* London, 1793.

[4] Calculated from data in Marshall's Bills of Mortality and the Registrar-General's Annual Reports.

Mean Annual Death-rate from Small-pox per Million living in England and Wales, 1838-79.[5]

		Compulsory Vaccination.	
1838-42	571	1855-59	199
1843-46	No Returns.	1860-64	190
1847-49	303	1865-69	147
1850-54	279	1870-74	433[6]
...	...	1875-79	82

Some idea of how much less is the present mortality from small-pox than the mortality during the last century, may be gathered from the fact that the average annual deaths from that disease during the seven years 1873-79, in England and Wales, were very slightly in excess of the annual average deaths during the eighteenth century in London alone; the population in the first case being about twenty-four millions, in the second, considerably less than one million.[7]

2. There is no cause sufficient to explain this diminution in the small-pox death-rate other than vaccination.

It is maintained by some that the decrease in the mortality from small-pox is explained by the improved sanitary condition of the population. Improvement in this respect must undoubtedly have tended to diminish in some degree the death-rate by that disease, but other causes have been at work with an opposing tendency. The population of the country has grown denser, the facility of intercourse has increased a hundredfold, and the movement of the population is incalculably greater now than during the last century. All these latter circumstances necessarily increase the danger of diffusion of infectious diseases, and it is more than doubtful whether the sanitary condition of the people has yet attained such perfection as to neutralise their effect. Moreover, in the case of measles and whooping-cough,[8] there is not only no diminution, but even a slight increase in the proportion of deaths from these diseases to the total deaths; and if sanitation has had no perceptible effect on these diseases, it is absurd to credit it with a large effect on small-pox, whose contagion is stronger and surer than that of any other disease.

3. The manner in which, and the times at which, the diminution chiefly occurred, point clearly to the existence of a causal relation between that diminution and vaccination.

While showing a steady tendency to diminish, the mortality from small-pox underwent the greatest decrease in the periods immediately following the legislative measures for the promotion of vaccination. In 1840, the legislature made public provision for vaccination, and immediately thereafter came a large fall in the small-pox mortality. In 1854, vaccination was made compulsory in England and Wales, and, in the following years, a second marked fall occurred in the small-pox death-rate of these countries. In Scotland, where vaccination was not yet compulsory, the death-rate remained high, being 50 per cent. higher than that of England and Wales in 1855-59, and over 100 per cent. in 1860-64—there being no marked difference in the condition of the two populations other than the absence of compulsory vaccination in Scotland. The enactment of compulsory vaccination in Scotland was speedily followed, as in England, by a large diminution in the small-pox death-rate.[9] The remarkable sequence of events thus briefly described, amounts almost to a demonstration of the influence exercised by vaccination on the small-pox death-rate.

4. While a marked decrease has occurred in the total small-pox death-rate, a still greater decrease has occurred in the small-pox death-rate among children.

In prevaccination periods, the deaths from small-pox occurred almost exclusively among the very young. Thus, out of 622 total deaths from that disease in Kilmarnock in the 36 years 1728-64, 563 were of children under 5;[10] in Chester, in the six years 1772-77, of 378 deaths, 369 were of children under 10, and of these, no fewer than 335 were under 5,[11]; in Warrington, in 1773, of 211 persons dead of small-pox, all were under 10, and 199 were under 5[12]; in Carlisle, in the nine years 1779-87, of 241 deaths, 228 were of children under 5.[13]

In epidemics of small-pox since the introduction of small-pox, a comparatively small proportion of the deaths occur among children under five, and this proportion has progressively diminished with the diffusion of vaccination. For example, out of 7,982 deaths from small-pox in London in 1871, only 2,945 or 37 per cent. were of children under five. Of 2,371 deaths from small-pox in London in 1881, only 620 or less than 22 per cent. were of children under five.[14]

It is therefore clear that of the total small-pox deaths, the proportion occurring among children has been very much less since the introduction of the vaccination than it was before that event. But the total postvaccination death-rate is much less than the total prevaccination death-rate, hence it follows that the small-pox death-rate among children has undergone an enormous reduction since the introduction of vaccination.

5. In epidemics of small-pox, the unvaccinated portion of the community suffers to a much greater extent than the vaccinated. This fact is well illustrated in the case of the year 1882, when small-pox was epidemic in London. During that year 2,371 deaths[15] were registered from small-pox. Of these, 524 were stated to have been vaccinated, and 962 unvaccinated, while regarding the condition of the others as to vaccination, no statement was made. It is tolerably certain that among the population of London, not more than 10 per cent. are unvaccinated, and if 10 per cent. be supposed to be doubtfully vaccinated, there will remain 80[16] per cent., presenting clear evidence of vaccination. If, then, the vaccinated and unvaccinated had been equally liable to fatal small-pox, the former would have died at the same rate as the latter, and since 962 of the unvaccinated died, there would have died 7,696 among the vaccinated. But the actual number of deaths among the vaccinated was 524; hence it is clear that the vaccinated and unvaccinated were not equally liable to death from small-pox.

Moreover, if the mortality among children be considered, the difference between the vaccinated and the unvaccinated appears still more striking. The deaths from small-pox during 1881 included 27 of vaccinated children under the age of five, and 368 of unvaccinated children under that age. If unvaccinated and vaccinated children had been equally liable to fatal small-pox, the vaccinated children would have died at the same rate as the unvaccinated, *i.e.*, (taking the proportion of vaccinated and unvaccinated as previously stated), the deaths among the vaccinated children under five would have been 2,944. But the actual number was 27, and it is therefore obvious that unvaccinated children are liable to fatal small-pox in an enormously greater extent than vaccinated children; or, in other words, vaccinated children are to a large extent protected from fatal small-pox.

Statistics[17] of a similar nature might be multiplied indefinitely; and it may be laid down as a fact admitting of no question, that whenever small-pox attacks a community, the unvaccinated part of that community will suffer in enormously greater proportion than the vaccinated.

6. Among persons attacked by small-pox, the mortality is greater in the unvaccinated than in the vaccinated.

The difference in the mortality of the two classes is shown by the following tables, which require no comment.

1. *Mortality from Small-pox among the Vaccinated, Doubtfully Vaccinated, and Unvaccinated.*[18]

	Cases.			Deaths.			Mortality Per Cent.		
	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.
London Small-Pox Hospital (1836-67)[19]	10,398	263	2,920	790	106	1,043	7.59	40.3	34
Metropolitan Asylum Board Hospital[20] ...	13,575	2,130	3,973	1,027	671	1,593	7.56	31.5	40

[5] Taylor, P. A.: *Nineteenth Century*, May, 1882.

[6] The considerable increase in this quinquennium was due to the severe and widespread epidemic of 1870-73, at which time all circumstances combined to favour the occurrence and diffusion of a great epidemic. Compared with similar epidemics of prevaccination periods, this epidemic affords incontestable evidence of the value of vaccination. *See* Fraser: "The Epidemic of 1870-73, in relation to Vaccination. *Sanitary Record*, April, 1883."

[7] Total small-pox deaths in England and Wales, 1873-79, 14,566. Annual average, 2,081. Total small-pox deaths in London (within the Bills), 1701-1800, 196,365. Annual average, 1,964.

[8] Guy: "Two Hundred and Fifty Years of Small-Pox in London." *Journal of Statistical Society*, September, 1882.

[9] See Dr. Carpenter's letter on "Small-Pox and Vaccination," addressed the Right Hon. Lyon Playfair, April 23rd, 1883.

[10] McVail: *An Inquiry into the Prevalence of Small-Pox in Kilmarnock in the Last Century*. Glasgow, 1882.

[11] Haygarth; *loc. cit.*

[12] Percival: *Essays, Medical, Philosophical, etc.* Warrington, 1789.

2. Mortality from Small-pox among the Vaccinated, Doubtfully Vaccinated and Unvaccinated, under 10.

	Cases.			Deaths.			Mortality Per Cent.		
	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.	Vaccinated.	Doubtfully Vaccinated.	Unvaccinated.
Metropolitan Asylum Hospitals[21]	1,291	359	1,512	56	102	745	4.33	28.4	49.2

7. Among the vaccinated attacked by small-pox, the severity of the disease is inversely proportional to the quality of vaccination.

The severity of small-pox is found to vary with the quality of the vaccine marks. It is found that the more closely the cicatrix resembles the typical cicatrix (*i.e.*, the cicatrix resulting from the performance of vaccination in the best-known way), the less severe is the disease. The fact has been demonstrated by clinical experience, and is clearly illustrated by the following tables.

Classification of Small-pox Cases (Vaccinated) according to the Number and Quality of the Vaccine Cicatrices.

Table 1. *Metropolitan Asylum Board Hospitals,*[22] *(Mac Combie).*

	Marks.	Cases.	Deaths.	Mortality Per Cent.
Vaccination Imperfect	1	2,004	341	16.7
	2	2,476	279	11.2
	3	1,778	133	7.4
	4	949	46	4.2
Vaccination Good.[23]	1	1,095	70	6.4
	2	1,461	51	3.7
	3	1,095	41	3.7
	4	826	23	2.7

Table 2. *London Small-pox Hospital (Marson).*[24]

	Marks.	Cases.	Deaths.	Mortality Per Cent.
Vaccination Indifferent.	1	1,555	353	21.43
	2	1,866	252	12.18
	3	1,161	65	4.77
	4	1,196	37	1.69
Vaccination Good.	1	1,059	34	2.75
	2	1,306	24	1.38
	3	992	14	1.01
	4	1,263	11	.07

Classification of Small-pox Cases (Vaccinated) under 10, *according to the quality of the Vaccine Cicatrices.*[25]

	Cases.	Deaths.	Mortality Per Cent.
Good Vaccination	372	2	0.53
Imperfect Vaccination	651	49	7.52

[13] Heysham: Works.
[14] Reports of Registrar-General.
[15] *Vide* Registrar-General's Annual Summary for 1882.
[16] This estimate is certainly well within the true proportion.
[17] *Vide* Bousquet: *Traité de la Vaccine*, Paris 1883 (Statistics of the Epidemic of Small-pox in Marseilles in 1828, prepared for Soc. Roy. de Méd.); Cross: *History of Norwich* (Statistics of Small-pox in Norwich in 1819); Thomson: *Small-pox* (Epidemic in Quebec, 1819-20), etc. Compare also reports of Sanitary Commissioners in India, *e.g.*, Dr. Little's *Report on Vaccination in Berar* for 1881.
[18] In the statistics of the metropolitan small-pox asylums, the "vaccinated" are those who present marks, however imperfect, of a primary vaccination; the "unvaccinated," those who present no marks, and in whose case it is admitted by the patients themselves, or their guardians, that they have never undergone the operation; the "doubtfully vaccinated," those who present no evidence of vaccination, but who profess to have undergone the operation, or have no knowledge as to whether they had ever undergone the operation. It is evident that the "doubtfully vaccinated" are really "unvaccinated."
[19] Marson: Evidence before the Select Committee on Vaccination, 1871.
[20] These include cases admitted into the following asylums:—Deptford, 1878-81; Hampstead, 1876-78; Homerton, Small-pox Hospital, 1871-82; Homerton, Fever Hospital; 1876-77 and 1881-82; Stockwell, 1882. *Vide* annual reports of the several hospitals. For further figures consult report of Board of Health of the City of Philadelphia, 1872; papers on vaccination by Mr. Simon; etc.
[21] Homerton Small-pox Hospital, 1871-80; Deptford Hospital, 1878; Stockwell Small-pox Hospital, 1882.
[22] Deptford, 1878-79; Fulham, 1877-78; Hampstead, 1876-78; Homerton Fever, 1876-77; Homerton Small-pox, 1871-78.
[23] "Good Vaccination" is defined in the Metropolitan Asylums Board Hospitals Reports to mean "a superficial area of not less than one-third of a square inch of one or more cicatrices thoroughly well foveated."

7*a*. The value of vaccination is further shown by the almost absolute protection against small-pox afforded by successful revaccination in the adult, following efficient vaccination in infancy.

Revaccination affords protection to those, even, who are constantly exposed to the infection, as the nurses and attendants on small-pox hospitals. During thirty-five years' experience in the London Small-pox Hospital, Mr. Marson never had a nurse or a servant contract small-pox, all having been revaccinated.[26] In the hospitals of the Asylums Board during the last twelve years, small-pox has been almost unknown among the revaccinated members of the staffs.[27] This immunity is not to be explained on the supposition that the majority of these attendants had previously suffered from small-pox, because only a very small proportion of them were thus protected.[28] Nor is it to be explained on any hypothesis of "tolerance", because no such tolerance exists among unprotected nurses exposed to fever;[29] and those members of the staff of small-pox hospitals who had not been successfully revaccinated, and who had not already had small-pox, contracted the disease.[30]

Further illustration of the protective power of revaccination is furnished by our own army and navy,[31] and by the German as contrasted with the French army during the Franco-Prussian War.[32]

8. Vaccination does not, in the vast majority of cases, endanger the life of, or cause injury to, the individual submitted to it.

It has occasionally been alleged that the operation of vaccination may be the means of conveying the poison of syphilis to the child submitted to it. That this risk may exist under exceptional combinations of circumstances may readily be admitted; but, seeing that syphilis can be produced only by its own specific virus, the inoculation of that disease in the operation of vaccination is compatible only with the grossest carelessness on the part of the operator. In England, the risk, if it exist at all, is certainly infinitesimal; and in no single instance have the Government inspectors of vaccination been able, after the most rigid inquiry, to find one single case of syphilis after vaccination.[33]

In a small proportion of cases, the operation of vaccination is followed by erysipelas. When this occurs, however, it is, in most instances, due to avoidable circumstances, and in no case is it directly dependent on the vaccine virus. Moreover, the cases in which it occurs are so exceedingly rare that no reasonable man would hesitate, on account of this risk, to have his child vaccinated.

9. The facts adduced in the foregoing statement demonstrate that, by conferring protection against the most virulent of all contagious diseases, vaccination annually saves thousands of infant lives; and that its inestimable benefits are obtained at the cost of an infinitesimal amount of suffering.

[24] Marson: Evidence before Select Committee on Vaccination, 1871. In calculating percentage mortality, Mr. Marson has deducted those deaths occurring from superadded diseases; this is not done in the previous table.
[25] Metropolitan Asylum Hospitals, Homerton Small-pox, 1871-78; Deptford, 1878-81.
[26] Marson: Evidence before the Select Committee.
[27] Sweeting: *Memorandum on Vaccination*, presented to Metropolitan Asylums Board. Upwards of 20,000 cases of small-pox have been under treatment, during this period, in these hospitals.
[28] At Fulham, out of a staff of 295, only 42 had previously had small-pox; at Stockwell, 16 out of 340 had been patients at Homerton (during eleven years) 34 were selected from old patients; at Deptford, 20 out of 265; and on the *Atlas*, 3 out of 161. *Vide* Sweeting, *loc. cit.*
[29] In the three great fever hospitals of London, during the ten years 1871-80, during which period only 2,177 cases of typhus came under treatment, no fewer than 78 members of the staffs contracted that fever, with a fatal result in 21 instances. At Homerton Fever Hospital, during the two last winters, when typhus was somewhat prevalent in London, 14 members of the staff contracted the fever, of whom 2 died. *Vide* Reports for 1880, 1881, and 1882.
[30] *Vide* Sweeting, *loc. cit.*
[31] *Vide* Hart: *The Truth about Vaccination*, pp. 57, 58, 74 and 75.
[32] Total deaths from small-pox in German army (where revaccination was rigorously enforced), 263; in the French army (where revaccination was neglected), 23,469. Cf. Colin: *La Variole.*
[33] *Vide* Stevens: BRITISH MEDICAL JOURNAL, December 1879, p. 956.

DONATIONS.—Mrs. Barrs, of Haden Hill, has given £1,000 to the Guest Hospital, Dudley, and promised £5 5s. annually.—"A Lady" (per Messrs. Berwick and Co.) has given £500 to the Worcester Dispensary.—Sir Julian Goldsmid, Bart., has given 100 guineas, and Lady Goldsmid 50 guineas, to University College Hospital.—Sir Donald Currie, M.P., has given 100 guineas to the National Hospital for Consumption at Ventnor.—The Baroness Burdett Coutts has given £100 to Miss Mary Wardell's Convalescent Home for Scarlet Fever.—The Earl of Dartmouth has given £100 to the Salop Infirmary, Shrewsbury.

ARSENICAL POISONING BY WALL-PAPERS.

I.

REPORT ON EVIDENCE REGARDING THE INJURIOUS EFFECTS ON HEALTH ARISING FROM ARSENICAL WALL-PAPERS AND OTHER ARTICLES CONTAINING ARSENIC.

By T. LAUDER BRUNTON, M.D., F.R.S.

THE evidence on this subject consists partly of articles published in various journals, and partly of answers to a circular on the subject sent out by the Medical Society of London (see BRITISH MEDICAL JOURNAL, February 21st, 1880). The nature of the evidence is, first, that certain symptoms have occurred in persons exposed to the influence of certain conditions; secondly, that, on attempting to analyse these conditions with the object of finding out the cause of injury, none could be discovered at all likely to produce the symptoms, except arsenic; thirdly, that the symptoms coincided in many respects with those produced by arsenic when administered internally; fourthly, that the symptoms disappeared when the arsenic was removed, although, as far as could be ascertained, the other conditions remained unaltered. The number of cases on which the report of the Committee of the Medical Society of London was based was a little over one hundred; and, besides these, numerous cases have been reported in medical journals. Considering the extensive use of arsenic in wall-papers and articles of clothing and furniture, the number of cases may appear very small, and quite insufficient to prove the necessity for any form of legislative interference. This objection, we believe, however, to be invalid. It is exactly the same in kind as that which may be brought against interference with systems of drainage which contaminate drinking-water with typhoid excreta, or against the free distribution of milk supplied from dairies where typhoid or scarlet fever exists. The comparative smallness of the number of cases of poisoning by arsenical wall-papers is, we believe, simply due to ignorance of the injurious action of arsenic in papers, dress, or furniture, and consequent failure to perceive the connection between the illness and its cause. One circumstance which renders this connection more easily overlooked, is the fact that all persons are not equally susceptible to the injurious action of arsenic. It is well known that, in Styria, many persons are accustomed to take quantities of arsenic which would be fatal to others unaccustomed to it. It seems possible that the same may occur with arsenical papers; for, in a house at Hampstead, where the former occupants had enjoyed good health, another family, shortly after their entrance, began to suffer from symptoms of arsenical poisoning. The wall-paper was examined, and found to be arsenical. On its removal, all the symptoms ceased. The immunity which the first of these families enjoyed, although exposed to the action of the arsenical paper, may have been due to their having become gradually inured to the presence of arsenic; but it may also have been due to a less degree of sensitiveness; and this is all the more probable, because the second family have suffered three several times in the same way. Should one member of a family be more sensitive than others, he or she may suffer while the rest escape. In such a case, suspicion will be averted from the arsenical paper, as all have been exposed to its influence. In one case reported to the Medical Society, two children of an eminent consulting surgeon died from enteritis, while the nurses escaped. The cause of the illness and death of the children was a mystery, until the nursery papers were examined and found to contain arsenic. Another cause of the failure to connect the symptoms due to arsenic with its presence in wall-papers is, that the symptoms are those of irritation of the intestinal or respiratory tracts, or of the conjunctiva; and these may frequently be attributed to other causes than the true one, especially if no suspicion of the presence of arsenic be entertained. Thus, in thirty-five cases reported to the Medical Society, nausea, diarrhœa, and digestive disturbance occurred; and these symptoms might be ascribed to errors in diet, to chills, to imperfect drainage, or to worry or overwork; or might be vaguely ascribed to constitutional disturbance by those who did not suspect, and therefore failed to discover, the true cause. The same may be said of the cough and asthma which occurred in nine cases, or of the conjunctivitis which occurred in nineteen. In support of this view, it may be mentioned that one-fourth of the cases of poisoning reported to the Medical Society had occurred in the persons of the medical men themselves who reported them, or in members of their families and that a large proportion of the cases reported had been observed by men qualified in an especial way, either by knowledge or by training, to discover the true cause of the symptoms which occurred.

Another reason why arsenic as a cause of disease is overlooked, is that, when given as a medicine, it produces no injurious action in quantities which are probably larger than those which enter the bodies of persons exposed to the action of arsenical papers. The reason of this may be twofold: either it may be that the arsenic given off from the paper is absorbed by the lungs instead of the stomach, or it may be that the arsenic is given off from the paper in a specially poisonous form. The difference between the effect of poisons taken by the mouth and introduced into the body in other ways, is shown by the fact that the venom of vipers, although very poisonous when applied to a wound, is quite innocuous when swallowed. That arsenic, in different combinations, has different poisonous powers, is shown by the fact that, in the form of cacodyl, although exceedingly offensive to the sense of smell, it is not poisonous; while, on the other hand, arsenic, in the form of arsenes, appears to be more poisonous than arsenious acid.

At all events, however, a considerable amount of positive evidence has already been obtained of the injurious action of arsenical papers and fabrics; and, whatever may be the reason why it is not greater, it is sufficient to justify vigorous action in the matter.

II.

NATIONAL HEALTH SOCIETY: COMMITTEE ON ARSENIC IN DOMESTIC FABRICS.

Chemical Report on the Test to be employed for the Detection of Arsenic.—It was found that, on the Continent, Acts or decrees exist, forbidding the sale of wall-papers, curtains, carpets, and textile fabrics generally, if they contain arsenic. We had before us the decrees in force in Germany and Sweden. In the former, the prohibition of the sale of goods containing arsenic is absolute; in Sweden, a concession is made to manufacturers to this extent, that a paper or textile fabric shall be considered practically free from arsenic if an opaque black or brown arsenical mirror cannot be obtained from 68 square inches of paper, or 34 inches of a textile fabric, in a tube of 2 mm. (.078 inch) internal diameter. In the printed certificates issued by the Government, to be filled up by the chemist making the analysis, it is stated that the method known as the Von Babo and Fresenius test should be employed. The process is then minutely described, so as to insure uniformity of results. We ascertained from the Government analyst, in Stockholm, that the fact of the mirror being opaque is determined by observing whether or not a black line on a white ground could be seen through it. The fact that the presence of arsenic in domestic fabrics is injurious to health having been already ascertained by the Committee, the question for our consideration is simply that of the mode of testing. The first point for consideration is whether the prohibition of arsenic must be absolute, extending to the most minute trace, or whether such minute quantities may be allowed as arise from accidental and unavoidable contamination. A very large proportion of fabrics of all kinds are found absolutely free from arsenic, no known test discovering the slightest trace; but, again, with regard to many fabrics, some traces are unavoidable in consequence of the very wide diffusion of small quantities of arsenic in natural products. The consideration consequently arises: first, as to what amount of arsenic it is requisite to allow as unavoidable and accidental contamination, in order that trade may not be hampered or interfered with to any undue extent; and next, whether that allowance may be permitted with due consideration to health. There are manufacturers of wall-papers (the principal articles in question) who have, on principle, abjured the use of all arsenical colours; the result of their work affords, therefore, an excellent guide for what may be demanded without unreasonable interference with the freedom of trade. An examination of a very large number of papers, supplied by these manufacturers, leads to the conclusion that an allowance of half a grain of arsenic per "piece of paper"—a piece being 12 yards in length and 21 inches wide—would be ample for accidental and unavoidable contamination; and this quantity, it is considered, would not be injurious to health. It is found that a suitable size for a sample to be tested is 16 square inches, to be cut from one part; or if thought well, from several parts of the pattern, so as to include

all the colours. The proposed limit of half a grain per piece gives .001 grain per sample of 16 square inches. For ordinary uniform materials, a square of 4 inches by 4 inches may, therefore, be taken as the portion to be tested. We may remark, that the quantity of arsenic which we allow to pass by these tests, is more than four times as much as would be permitted by the Swedish decree. We were at first of opinion that Reinsch's process, carefully conducted so as to ensure uniformity of results, might be employed; but several wall-papers and many textile fabrics having been found which gave no arsenical reaction with Reinsch's test, however carefully conducted, but which, nevertheless, were subsequently proved to contain notable quantities of arsenic, this method was proved not to be an absolutely reliable test. A modification of Marsh's test is recommended as the most reliable, and as most suitable for a standard test to be inserted in an Act of Parliament. Detailed instructions are subjoined for both tests, in order that those who still desire to use Reinsch's method may get results comparable with the prescribed test by the modification of Marsh's process where arsenic is found.

Standard Test.

No paper should be passed as "non-arsenical," unless, when treated as hereafter described, it fails to yield a mirror in a tube $\frac{1}{8}$ inch internal diameter, sufficient to cut off at any point a black line on a white ground, technically known as thick rule (eight to pica).

Specimen Line.

In a three-necked bottle* of the form A, Fig. 1, of about 10 ounces capacity, place 200 grains of pure zinc.† To the centre neck, fit a tube funnel and stop-cock, B, and to one of the side necks a right-angled tube, and stop-cock, C. The third neck should be closed with a ground stopper. Connect with C a chloride of calcium tube, D, and with this a tube of hard glass, E, $\frac{1}{8}$-inch internal diameter, and about .04 inch thick in the glass, if the paper or other material to be tested does not contain sulphur; but if, on being treated with hydrochloric acid, it yields sulphuretted hydrogen, the modification of this tube E, hereafter mentioned, must be adopted. Let this tube traverse a clay chimney, F, $1\frac{3}{4}$-inch diameter, and 6 inches high, in the top edges of which two slots have been filed to admit E, to the depth of one inch, and let E be supported on a thin bridge of the same material as the chimney, $\frac{1}{4}$-inch wide and a $\frac{1}{2}$-inch thick slightly notched, to rest on the sides of the chimney. This chimney surrounds a Bunsen's burner, G, of $\frac{1}{2}$-inch diameter. Over the top of the chimney, place an arched cover, H. Round E, at $\frac{3}{8}$-inch from the chimney,‡ roll a strip of thick blotting-paper or calico, $\frac{1}{4}$-inch wide, secured by a thread, as at I. This should go at least twice round the tube, and hang down, as shown in Fig I; on to this, water dropped from a bottle, K, at the rate of about 120 drops per minute (in very hot weather even faster). When the apparatus is thus arranged, pour through B two ounces of dilute hydrochloric acid, one part acid to eight water. If any sample of zinc do not yield hydrogen with sufficient rapidity with this acid, slightly stronger must be employed. The hydrogen should be evolved with sufficient rapidity to keep alight at the end of the tube when fired. Close stop-cock on B, and let hydrogen escape through C, D, E, till all air is expelled. Now light G, and when E is quite red-hot, close C, and introduce through the stoppered neck the 16 square inches of paper, cut into strips of one inch by two inches, and rolled up, so as to pass readily through the neck. This must include within the 16 square inches of paper portions of every part of the pattern, so that all the colours may be tested. Replace the stopper, open stop-cock C, and let the action continue for one hour. Now, extinguish G, and observe if a brown or black mirror be formed in E, between I and the chimney. If no mirror be formed, the paper is absolutely free from arsenic; if a mirror be formed, which, if the operation be properly conducted, will occupy about $\frac{3}{16}$ inch in the tube, lay E along the black line before spoken of, in front of and pointing towards a window, and observe, with one eye exactly over the tube, whether at any point the mirror be thick enough to obscure the line. Should this not be the case, the paper may be passed as containing no more arsenic than may have got into it from unavoidable causes; should the line be at any point obscured, it only remains to make sure that the mirror is arsenical. If, when sublimed with access of air, the mirror yield octahedral crystals, it is arsenical. This operation is best performed as follows. The portion of the $\frac{1}{8}$-inch tube containing the mirror being cut out, take a thin hard glass tube, $\frac{1}{4}$-inch internal diameter and $1\frac{3}{8}$-inch long, sealed at one end, and lipped like a test-tube at the other. Suspend this by dropping it through a hole cut in a piece of stout sheet-brass or copper, not less than four by two inches, so that the lip just supports the tube, and place the brass or copper plate on the ring of a retort stand. Heat the tube nearly to redness, to expel the last trace of moisture; when cold, insert the portion of the $\frac{1}{8}$-inch tube containing the mirror, and place, over the mouth of the tube and resting on it, a microscopic slide, warmed in a spirit-lamp till all the moisture at first deposited has disappeared. Now heat the tube with the spirit-lamp, letting the flame play on the under side of the brass plate. In a few seconds, a sublimate will

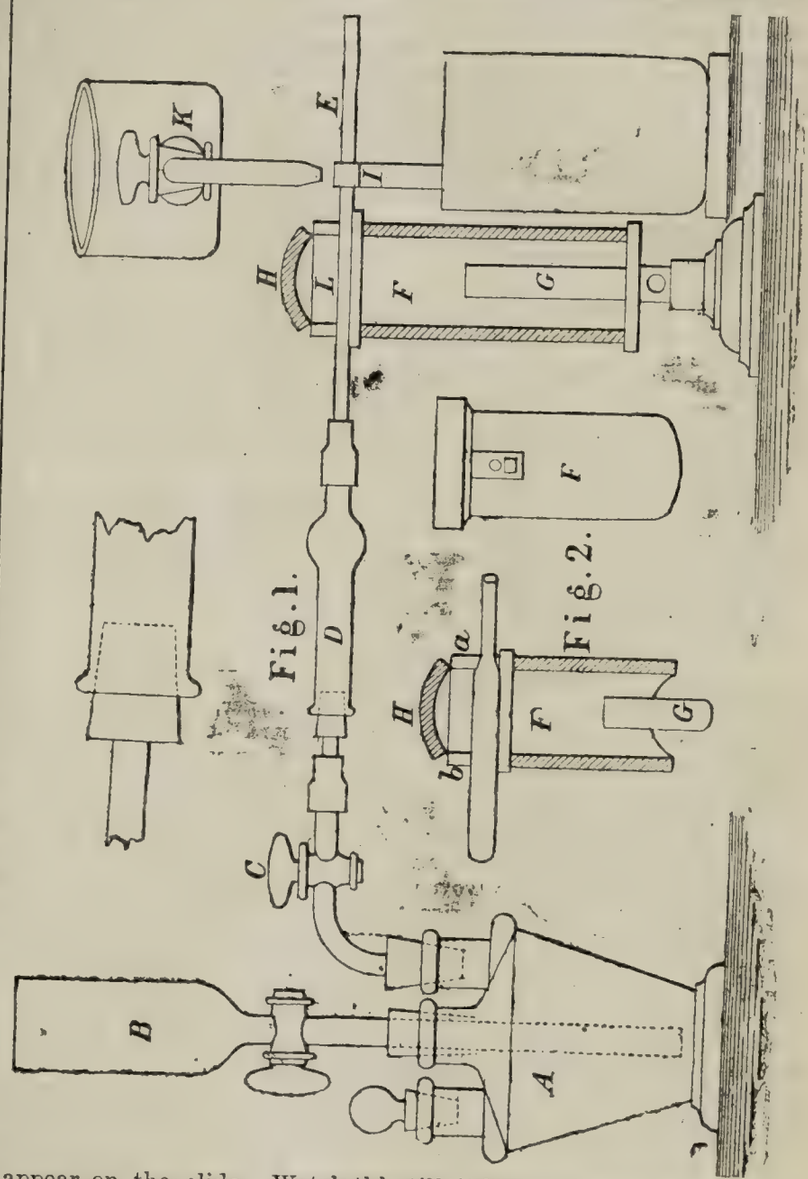


Fig. 1.

Fig. 2.

appear on the slide. Watch this till it begins to shrink from the edges, and form a patch just the size of the bore of the tube. Remove the lamp, allow the slide to cool, and examine the sublimate with a magnifying power of not less than 220 diameters. If the sublimate is found to consist of octahedral crystals, it is arsenical. Such crystals are well shown on the photographs taken by Mr. J. H. Jennings, of 14, Beach Avenue, Nottingham.

If, on being treated with hydrochloric acid, a paper or other substance yield sulphuretted hydrogen, as before mentioned, or if, on being treated as above described, a yellow or whitish-yellow sublimate be found instead of a mirror, the following modification must be adopted.

Substitute for the tube E a tube of $\frac{1}{4}$-inch diameter, having the $\frac{1}{8}$ tube sealed on to its end (Fig. 2); at *a*, the junction of the two,

* This form is recommended, as, in case of frothing, which frequently occurs, the froth is not driven into the tubes.

† Zinc sufficiently pure for this purpose can only be prepared by dissolving the purest commercial zinc in pure acid, so as to expel any arsenic as arseniuretted hydrogen; precipitating the zinc with pure carbonate of soda, washing the precipitate, and, when dry, reducing it. Messrs. Johnson and Matthey, of Hatton Garden, prepare zinc exactly in this manner, and supply it in bars, guaranteed free from arsenic. This zinc gives off hydrogen so freely, that it is desirable to have the requisite quantity in one piece in the bottle, so as not to expose too great a surface to the action of the acid.

‡ The chimney is conveniently made by cutting the bottom off a Daniell's porous cell, and the cover by cutting a piece $1\frac{1}{4}$ inch long off a similar cell and splitting it into three. The bridge also is best made of the same material.

place a small plug of asbestos; fill the portion which traverses the chimney with a mixture of dry carbonate of soda and charcoal; and behind this, at *b*, place another plug of asbestos. The rest of the arrangement is the same as in Fig. 1. The red-hot carbonate of soda and charcoal retain any sulphur, etc., but permit the arsenic to pass. In this case, a little water is formed, and carried forward with the arsenic, which prevents the mirror having such well-defined limits as when it is perfectly dry; but a few experiments, made with known quantities of arsenic, will enable the operator to say with accuracy if a paper contain more than the permitted maximum of arsenic. It is remarkable how small a quantity of sulphur will completely mask a considerable amount of arsenic. Thus, sufficient ultramarine, mixed with a white pigment to give it a greyish tint, will quite prevent the formation of an arsenical mirror with four times the maximum quantity of arsenic permitted.

In the case of textile fabrics to be worn next the skin (as gloves, socks, or vests), experience has shown us that no trace of arsenic, however small, should be permitted. Curtains, carpets, etc., come under the same rule as wall-papers. In the case of carpets, it is better to remove the hempen backing on which they are frequently made up, and only to put the wool into the bottle. Some textile fabrics will not yield up their arsenic without previous maceration in strong acid. It is, therefore, desirable in all cases to submit the material to the action of pure hydrochloric acid, sufficient thoroughly to saturate it for a period of at least twelve hours previous to testing. When commencing to test, water should be added to dilute the acid. Textile fabrics should also be submitted to the action of zinc and acid for a longer time than papers; and it is safer, when the first portion of acid has nearly ceased to act, to add a quarter of an ounce strong acid through B, and let the action proceed for a second hour.

The only novelties that are claimed in this process are, first, the chimney of a non-conducting material, which confines the intense heat to one and three quarter inches of the tube; and, secondly, the sharp condensing action of the water passing over the strip of blotting paper or calico. By these means, the arsenical mirror is concentrated, and not permitted to be carried off as arsenuretted hydrogen, as we have found to be the case when these precautions are not insisted on.

We recommend the Society to adopt and publish the proposed test, as a standard test according to which wall papers, and other materials described in Appendix A, may be classed as "arsenical" or "non arsenical," and their manufacture or importation be regulated accordingly.—H. C. BARTLETT; CHAS. HEISCH; F. DE CHAUMONT.

APPENDIX A.

Articles in which Arsenical Pigments, Dyes, or Mordants are used within the Knowledge of the Subcommittee.—Paper, fancy and surface coloured; in sheets; for covering cardboard boxes; for labels of all kinds; for advertisement cards; for playing cards; for wrappers and cases for sweetmeats, cosaques, etc.; for the ornamentation of children's toys; for covering children's and other books; for lamp shades; paperhangings, for walls and other purposes; artificial leaves and flowers; wax ornaments for Christmas trees and other purposes; printed or woven fabrics intended for use as garments; printed or woven fabrics intended for use as curtains or coverings for furniture; children's toys, particularly inflated India-rubber balls with dry colour inside, painted India-rubber dolls, stands and rockers of rocking-horses and the like, glass balls (hollow); distemper colour for decorative purposes; oil paint for the same; lithographic colour printing; decorated tin plates, including painted labels used by butchers and others to advertise the prices of provisions; japanned goods generally; Venetian and other blinds; American or leather cloth; printed table baizes; carpets; floorcloth; linoleum; book cloth and fancy bindings.

POPULAR TEST.

Although the Committee are of opinion that Marsh's test alone gives results of sufficient delicacy and accuracy to justify the taking of legal proceedings thereon, and have therefore adopted it in a modified form as the standard test to be appended to the proposed Bill, they are fully aware of the insuperable difficulties that stand in the way of its general employment in ordinary business transactions. It can only be practised by experts, and the fee which they would very properly require would, in the great majority of cases, deter the public from availing themselves of their assistance, although when a prosecution was contemplated it would be otherwise. Reinsch's test, though less delicate, and indeed not absolutely free from the possibility of error, has been proved in hundreds of comparative trials to be, when carried out as they direct, accurate enough for all ordinary practical purposes, *i.e.*, for indicating the presence of a dangerous amount of arsenic, and when no graver consequences are involved than the acceptance or rejection of a particular paper.

Its advantages are that it could be undertaken by any professed chemist at a fee within the means of everyone, no small consideration when a large number of papers have to be examined; indeed, with the apparatus provided at the suggestion of the Society by Messrs. Griffin, of 22, Garrick Street, London, manufacturers, tradesmen, and intelligent householders might use it for themselves.

They thus hope that the end they have in view, the discouragement of the employment of arsenical colours, would be more speedily attained by the education of the public generally, than by a few isolated cases of prosecution.

They, therefore, give directions for the performance of Reinsch's test.

Testing by Reinsch's Process.—The following is the mode in which this test should be used.—Sixteen square inches of the paper, either in one piece or several, so as to include all parts of the pattern, to be cut up and put in a test-tube or flask, with 2 ounces of dilute hydrochloric acid (4 distilled water to 1 of acid), and brought to the boiling point, a vertical condenser being used, if convenient; it is however, not essential. A piece of copper foil, 1 inch by ½ inch, clean and bright, is now placed in the flask, suspended by a thin platinum wire, by means of which it can be withdrawn, from time to time, for examination. After boiling gently for half an hour, the copper must be rinsed repeatedly in water, and finally held under a tap, in a pair of forceps, to remove all traces of acid, etc. On no account is the copper to be touched with the fingers, as, even when wet, the grease of the finger interferes with the subsequent operations. No great stress can be laid on the amount of discoloration, as it varies very much, even with the same amount of arsenic, in the presence of other substances, such as sulphur, mercury, etc. The copper must then be treated as follows.—Dry it between two pieces of clean blotting-paper, and, holding it in the forceps, warm it very gently over a spirit-lamp; then, still holding it in the forceps, cut it into strips. Take a thin glass tube, ¼ inch internal diameter, and 1⅜-inch long, sealed at one end, and lipped like a test-tube at the other. Suspend this by dropping it through a hole cut in a piece of stout sheet-brass or copper, not less than 4 by 1 inches, so that the lip just supports the tube, and place the brass or copper plate on the ring of a retort-stand. Heat the tube nearly to redness, to expel the last trace of moisture; and, when cold, put the copper strips within, and place over it, resting on the mouth of the tube, a microscopic slide, warmed in a spirit-lamp till all the moisture at first deposited has disappeared. Now heat the tube with the spirit-lamp, letting the flame play on the under side of the brass plate. In a few seconds, a sublimate will appear on the slide. Watch this until it begins to shrink from the edges and form a patch just the size of the bore of the tube. Remove the lamp, allow the slide to cool, and examine the sublimate with a magnifying power of 220 diameters. If the sublimate consist of octahedral crystals, the discoloration of the copper is due to arsenic.

It is of course essential that the copper and hydrochloric acid used for this test be free from arsenic.

III.

ON THE BEHAVIOUR OF ARSENIC IN CONTACT WITH PUTREFYING ORGANIC SUBSTANCES.

BY THOMAS STEVENSON, M.D.,
Professor of Toxicology, Guy's Hospital.

IT has now for some time been a well established fact that nitrogenous organic substances, *e.g.*, flesh, give rise during putrefaction to the formation of alkaline or basic substances. Ammonia is the best known of these products. There are, however, other and less known bases, or alkaloids, as the organic bases are termed, also produced during decay, *i.e.*, substances formed, as the chemist terms it, on the same type as ammonia. Two chemical bodies are said to be of the same type when they contain the same number of atoms, or groups of atoms (compound radicals), arranged in the same manner. Thus bodies so diverse as water and alcohol are said to belong to the same type, because one of the two atoms of hydrogen contained in the molecule of water in alcohol is replaced by a group of atoms of carbon and hydrogen, known collectively as ethyl; and water and alcohol, regarded in some aspects, have similar chemical properties. Ammonia, abundantly produced during putrefactive decompo

tion, is itself the type of organic bases (alkaloids), among which are such beneficent substances as quinine, and such destructive bodies as strychnine and aconitine. Trimethylamine, a base which may be regarded as ammonia in which the three atoms in its molecule have been replaced by three groups of the atoms collectively spoken of as methyl. The class of bases formed on the ammonia type, by substitution, are termed *amines*. But not only may the hydrogen atoms of ammonia be thus replaced by such groups of atoms as methyl, but even the fourth atom of the ammonia molecule, nitrogen, may be also replaced by an atom of a different character. Thus by substituting for the nitrogen atom in ammonia and compound ammonias (amines) an atom of arsenic, a series of basic substances is obtained, termed arsines. In this way we have the well-known deadly gas arsenuretted hydrogen (arsine *par excellence*), which is a compound of one atom of arsenic with three atoms of hydrogen, just as ammonia is a compound of one atom of nitrogen with three atoms of hydrogen. Numerous arsines can be prepared by the chemist, and they are frightfully poisonous substances.

During the last quarter of a century, attention has been drawn to the occasionally poisonous character of substances obtained by putrefaction. Panum first obtained from these a poison which acted as a ferment. The present writer, in conjunction with Dr. Fagge, also showed that various dead animal substances extracted with alcohol acted as poisons. Bergmann went further, and described, under the name of sepsine, an alkaloid generated by putrefaction, which acts as a septic poison producing a kind of blood-poisoning or pyæmia.

Still more recently the subject has been developed, chiefly by the labours of Professor Selmi of Bologna; and numerous alkaloidal products of decay have been obtained and made the subject of physiological experiment. To these alkaloidal products of putrefaction and decay the terms "cadaveric alkaloids" or "ptomaines" (πτῶμα, a corpse) have been applied. Some of these bodies are poisonous, whilst others are innoxious. Unfortunately, the descriptions of these bodies given by foreign writers are usually vague, and the doses employed appear to have been indefinite. MM. Gautier and Étard have, nevertheless, endeavoured to elucidate their chemical composition, and have endeavoured, with some success, to show the analogies between the cadaveric alkaloids and the basic substances obtained by acting artificially upon albuminous substances with baryta and the alkalies.

Naturally enough, the well-known analogies existing between the amines and the urosines—bodies, as we have already seen, formed on the same ammonia type—led to the supposition that arsenic, when absorbed into the system, and arsenic when present in putrefying animal matters, might give rise to poisonous arsines; and Professor Selmi's researches point to the formation of such bodies. This observer examined the urine of animals whilst they were being poisoned with arsenic, and found in this secretion arsenic, not only in the ordinary form of an arsenite or arsenate, but also as a volatile basic compound of arsenic—an arsine, in fact. Selmi has, moreover, found in the corpses of persons who had died from arsenical poisoning, as well as in anatomical preparations preserved by means of arsenic, poisonous arsenical bases, one of which, though volatile, is stated to have a strychnine-like physiological action.

The existence of these volatile arsines may serve to throw light upon the anomalies attending the use of arsenical wall-papers. It is well known—and has hitherto not received any satisfactory explanation—that some highly arsenical wall-papers have been used without manifest injury to health; whilst others, on the other hand, though containing much less arsenic, have produced distressing results. It may be that in the one case volatile arsenical bases have been formed, and not in the other. The fact that the frequenters of dissecting-rooms, where bodies are injected with preparations of arsenic, do not suffer from arsine-poisoning is, however, adverse to the theory of the formation of these bodies under the influence of putrefaction, unless in very exceptional cases.

Our readers have doubtless heard tales of secret poisoners of the Middle Ages, and how aqua tofana was employed by these persons for their nefarious purposes. Possibly, the formation of the arsenical ptomaines may throw light upon the constitution of this hitherto fabulous liquid, the potency of which toxicologists of the present age have been prone to doubt. It is a matter of tradition that aqua tofana was prepared by sprinkling white arsenic upon slices of pork, and collecting the liquid that drained from these; the juice of a kind of toadflax being also added. Now, the volatile arsenical ptomaine which Selmi has described as acting like strychnine was prepared in this very manner. We can, then, well understand how from arsenic a liquid may have been prepared, highly poisonous, yet totally differing from arsenic itself in the symptoms resulting from its administration. Selmi's discovery needs confirmation and further elucidation; but it may be that the Italian professor has rescued aqua tofana from the category of myths, and that, in a not distant future, toxicologists may have to deal with a whole class of new alkaloids. It need hardly be said how important the ptomaines are from a forensic point of view; but it does not fall within the scope of the present article to point out how they may be recognised under circumstances in which their presence might be mistaken for that of the poisonous natural vegetable alkaloids.

ON THE TREATMENT OF SPINAL CURVATURE BY RECLINATION IN ITS EARLY STAGES.

By EDWARD LUND, F.R.C.S.,

Consulting Surgeon to the Manchester Royal Infirmary; Professor of Surgery in the Owens College, Victoria University, etc.

I HOPE to exhibit, at the forthcoming meeting of the British Medical Association at Liverpool, a form of couch for the treatment, by reclination, of spinal curvature in its early stage, and weakness of the muscles of the spine, which embodies in its action a principle of treatment for such cases too frequently overlooked.

In the excellent method of treating curvature of the spine advocated by Dr. Sayre, at the time of applying his plaster-of-Paris jacket, he very properly insists upon having the spinal column elongated to its utmost, and its curves corrected as far as can be done, while the jacket is being fixed. He also recommends repetition of the process from time to time, so long as the jacket is in use, by a mode of self-suspension which the patients, in favourable cases, soon learn to use for themselves, from the conscious benefit which they experience from it.

In this act of self-suspension, as Dr. Sayre has styled it, one important condition is observed—namely, the weight of the head with its attendant downward pressure on the spinal column is, for the moment, entirely neutralised, and the chief cause of the persistence of the spinal curvature is corrected. This is done by raising the body off the ground by means of a leather apparatus, which encloses the skull from the chin to the occiput, and the weight of the body itself when so suspended, certainly that portion of it represented by the pelvis and the lower limbs—draws down the spine, thereby straightening and lengthening it. Dr. Sayre's effort in applying his fixing jacket under these conditions, is to preserve this restored position of the spinal joints—*i.e.*, to correct the deformity for which it is employed. All other forms of spine-supports, such as the steel girthings and supporting apparatus, fail to effect this object with any certainty, because they are made to act upwards from the pelvis as a fixed point, and they do not lift and support the weight of the head, a constant factor ever influencing and intensifying, in the vertical position, these spinal curves. Such steel supports as are commonly employed in the treatment of lateral curvature of the spine, if they really elongate the spine when they are worn, do so, partly by acting on the movable shoulder-girdles of the scapulæ and clavicles, with their surrounding muscles, by pressure acting through crutches placed in the axillæ, and partly by means of lateral or dorsal pads made to press directly on the curves, and, for the time, to obliterate them, or at least to conceal their existence. On the system practised by Dr. Sayre, reliance is placed exclusively upon forces acting on the entire length of the vertebro-cranial axis itself; and the upper limbs, as appendages attached to the trunk, are left free and untouched, by the pressure which is then applied.

The couch which I have to recommend, and which will be shown at Liverpool, is designed to carry out by reclination the same principle of treatment as operates in the method of vertical suspension, only in a more gradual and prolonged manner. I have called my couch a "slippery couch," and I think the construction and mode of action will justify the term. I have used it with marked benefit during the last few years, in more than thirty cases, in private practice. It is made in this way. A piece of wood is prepared, of suitable thickness, and about six feet long and eighteen inches wide. At about four inches from one end, a hole is cut through the wood, of circular form and six inches in diameter, with its margin on one surface of the wood slightly bevelled inwards. This end of the piece of wood is to be the upper or higher part, when it is fixed at such an inclination by means of a block or cross-piece as to raise it about one foot at the higher end. It is well to have four wooden legs screwed on, one at each corner, the upper pair being longer than

the lower in the same proportion; and to still further influence the angle at which the couch is to be used, by means of extra screw holes in the wood; the longer pair of legs being brought nearer to the foot of the couch, a greater elevation can be secured. The flat piece of wood being so prepared, is covered with several folds of soft thick blanket to about two inches in thickness, the blanket being just the size of the wood on one surface only; over this a piece of well polished black horse-hair cloth is stretched, and being turned tightly over the edges of the board, is nailed underneath, so as to produce a smooth, somewhat soft, but yet slippery, almost polished surface. Where the blanket crosses over the hole already described, it must be cut across in two directions, longitudinally and transversely, and the horse-hair cloth should be left loose over the same spot, so that, if pressure be here applied, an indentation will be quickly made.

Now, if a couch be prepared in this way, and placed at such an angle of elevation as I have here described, about one part in six of its length, a person lying upon it on his back will soon find, unless he make some effort to resist, that he will quietly slide down towards the lower end of the couch; and if his attention is otherwise absorbed, he will have his feet over the end of the board, as he is sliding beyond it. By a very simple device, this tendency to slide or slip downwards may be very beneficially utilised for the object we have in view.

A small, firm, cylindrical pillow is prepared, about the diameter of the wrist, and a foot in length, and this is attached by strong tapes, one at each end of the pillow, and fixed to each upper corner of the couch, the length of the tapes being such as to place the pillow transversely on the board immediately below the lower edge of the hole in the wood. With this pillow in position, and the patient so placed that the pillow may be received into the recess of the nape of the neck, the projection of the occiput falling into the depression made by the hole in the wood, the body is retained in position, and the sliding down is prevented, but yet there is a constant gentle dragging action on the spinal joints from the weight of the pelvis and lower limbs, which will act most favourably in the required direction.

It is desirable, when a patient uses this couch for the first time, that he should try it without the pillow; and, if needful, the elevation of the couch should be adjusted until the peculiar sliding movement is experienced. Then, with the help of the pillow, and the back of the head falling into the recess prepared for it, the patient will be aware of the principle upon which the couch is intended to act, and be more likely to continue its use.

All other couches, such as the Ilkley couch, and couches with a double angular bend to support the knees, or with a foot-piece against which the feet can rest, are entirely opposed in principle to the plan of this "slippery couch." Using them, the patient may feel rested, and experience some temporary relief; but I know of no way, by reclination, to secure a certain degree of spinal extension, better than to fix the upper segment of the vertebro-cranial axis at one spot, and allow the weight of the lower part to induce direct "self-extension."

PERFORATING ULCER OF THE FOOT, AND ITS CONNECTION WITH DISEASE OF THE NERVOUS SYSTEM.

By F. A. SOUTHAM, M.B.Oxon., F.R.C.S.,
Assistant-Surgeon to the Manchester Royal Infirmary.

CONSIDERABLE interest attaches to perforating ulcer of the foot, owing to the fact that, in many instances, it is found associated with locomotor ataxy. Four well-marked instances of this affection have recently come under my observation; and, from a comparison of them, I think we are justified in dividing cases of this nature into three distinct classes, as follows.

CLASS I.—*When the Ulcer is entirely due to Local Causes, e.g.*, suppuration of a bursa beneath a corn. When suppuration occurs in this situation, the pus may penetrate the thickened epidermal tissue, and discharge through the centre of the corn; in other cases, failing to pierce the thickened epidermis, it may, making its way in the direction of least resistance, find an exit at some other point, often on the dorsal surface of the foot. Under these circumstances, a condition is produced, which, though generally spoken of as a perforating ulcer, should perhaps be more correctly described as "suppuration beneath a corn." In many instances, this condition is associated with disease of the neighbouring bone or joint. In uncomplicated cases, with rest, scraping the sinus, and stimulation, the ulcer will often heal; but when, as is so often the case, the bone or joint are involved, amputation of the toe will be required. Under these circumstances, the stump usually heals readily, and no recurrence of the disease takes place.

CASE I.—Charles W., aged 60, presented himself at the out-patient room, in March 1882, with what is usually described as a perforating ulcer, situated on the outer aspect of the phalangeal joint of the great toe, the history of which pointed to the fact that it had commenced as suppuration beneath a corn. On examining the toe and exploring the sinus, the phalangeal joint was found to be diseased; there was no evidence of locomotor ataxy, and the condition of the foot itself was in all other respects perfectly normal. Amputation of the toe was performed at the metatarso-phalangeal joint; the wound readily healed; and, when last seen, twelve months after the operation, the patient was in all respects perfectly well, and there had been no recurrence of the disease.

CLASS II.—*When the Ulcer occurs in connection with Locomotor Ataxy, and apparently independent of any Disease of the Peripheral Nerves.* Under these circumstances, the ulcer may, as Ball and Thibierge have shown (*Trans. Internat. Med. Congress*, vol. ii, page 52), occur, in some instances, as an early or premonitory symptom, in other instances, as a late or terminal symptom, when the disease is well established. The following cases illustrate these two conditions.

CASE II.—Thomas W., aged 40, sustained a slight contusion of the right foot, six years ago. Some weeks subsequently, an ulcer appeared on the joint of the great toe; and, as it would not heal, amputation of the toe was performed. Two and a half years ago a similar ulcer formed on the great toe of the left foot, for which he was admitted into the hospital, and the toe was removed; at this time, no symptoms of locomotor ataxy were present. Twelve months ago, he began to experience shooting pains in the limbs, and suffered from attacks of vomiting; shortly afterwards, symptoms of ataxy appeared. Six weeks ago, the right ankle-joint suddenly became extremely swollen and œdematous. The patient was again admitted into the hospital, and, under the influence of rest in bed, the joint symptoms gradually subsided. At the present time, the symptoms of locomotor ataxy are well-marked; the patient presents the characteristic ataxic gait, and is unable to stand with his eyes shut; there is absence of patellar tendon-reflex on both sides; the pupils are unequal, and present the Argyll-Robertson symptom. There is marked loss of sensation in both feet. There has been no recurrence of the ulcers, and the stumps of both great toes remain firmly healed.

In this case, the ulcers appeared on the one foot five years, on the other foot one and a half years, before any ataxic symptoms showed themselves. The affection of the ankle was, no doubt, an example of the benign variety of arthropathy described by Professor Charcot.

CASE III.—Edward S., aged 48, was first attacked about two months ago with shooting pains in both legs, pains about the abdomen, and dimness of vision; subsequently, he began to experience gradually increasing difficulty in walking. Six months ago, ulcers appeared over the little toe of the left and great toe of the right foot. At the present time, ataxic symptoms are well-marked, being very similar to those described in Case II. The ulcer on the left foot is closed, but that on the right is still present, and obstinately refuses to heal.

In this case, the ulcers appeared at a much later stage than in the preceding, and when the ataxic symptoms were well established. The relation which perforating ulcer bears to locomotor ataxy is somewhat obscure; for in this affection the morbid changes are usually limited to the spinal cord and posterior nerve-roots, the latter structures only becoming implicated in the later stages of the disease. Recent investigations, however, show that, in certain cases, atrophy and sclerosis of the nerve-fibres of the sciatic nerve is present, while in others a diseased condition of the terminations of the sensory nerves has been observed. It is quite possible, therefore, that further research will reveal the fact that, in cases of locomotor ataxy complicated by perforating ulcer, disease of the peripheral nerves is also present; otherwise, we must regard the local affection simply as an example of a tropho-neurosis dependent upon changes in the nervous centres.

CLASS III.—*When the Ulcer occurs in connection with Disease of the Peripheral Nerves, without any evidence of Locomotor Ataxy or other disease of the central nervous system.*

CASE IV.—Charles W., aged 40, presented himself as an out-patient, in the summer of 1881, both feet being affected with perforating ulcers, which had first shown themselves in 1877. Two

had been amputated, and in each instance the disease had recurred in the stump. The patient was admitted into the hospital under Mr. Heath, and both feet were eventually amputated. A microscopic examination of the nerves from both feet was made by Mr. Priestley (*Lancet*, 1883, vol. i, page 452), and in each instance he found well-marked evidence of sclerosis.

In this case, which has now been in progress for six years, and which is still under observation as an out-patient, there has never, from first to last, been any evidence of locomotor ataxy. The changes here found in the peripheral nerves resemble very closely those met with in a case recorded by Messrs. Savory and Butlin (*Medico-Chirurg. Trans.*, vol. lxii, Case v, page 378). Almost identical cases have also been described by other writers; so that it appears probable that perforating ulcer may, in some cases, be dependent simply on disease of the peripheral nerves, without any apparent implication of the nerve-centres. Of course, it is quite possible that, in cases of this kind, symptoms of central disease (*e.g.*, of locomotor ataxy) may eventually develop themselves; but, in Case V, six years have now elapsed, and as yet no indications of the onset of that condition are present.

CASE OF SECONDARY SUTURE OF ULNAR NERVE SIX MONTHS AFTER ITS DIVISION.

By HERBERT W. PAGE, M.A.Cantab., F.R.C.S.Eng.,
Surgeon and Lecturer on Surgery at St. Mary's Hospital.

In a paper on "The Immediate Suture of Divided Nerves," published two years ago in this JOURNAL (vol. i, 1881, p. 717), I referred to cases of secondary nerve-suture which had recently been under my care. The following seems of sufficient interest to deserve a brief record.

J. H., aged 25, six months before admission to St. Mary's Hospital, received on the left wrist a severe wound from glass, which took a month to heal. From that time he had extreme pain in the cicatrix, his ring and little fingers became bent and useless, he was obliged to carry his arm in a sling, and his general health became seriously affected by the constant pain which extended both upwards and downwards from the site of the wound. Here, on admission, there was found a dense cicatrix an inch and a half long, running in a curved direction upwards and outwards on the anterior surface of the forearm from the styloid process of the ulna. It was excessively tender, and he dreaded the least touch. He had lost the power of extending the two last phalanges of the ring and little fingers, and to a less extent of the other fingers also, and the thenar and the hypothenar eminences, together with the interossei, were markedly wasted. Sensation was very defective, though not entirely absent, in the ring and little fingers, more especially on their palmar surfaces. The whole hand, indeed, was somewhat anæsthetic, and looked lifeless and withered from long disuse. It sweated constantly and profusely; the little finger was blue and slightly swollen, and the nail was much misshapen. Opposite the head of the fifth metacarpal bone was a dark purple patch of the size of a shilling, and just below the cicatrix the skin was distinctly hyperæsthetic.

The man was anxious to have something done for his relief, and accordingly, on April 4th, 1881, I cut down on the site of the ulnar nerve, and after much difficulty the separated ends were at length discovered. The upper end of the lower portion was completely hidden from view, being turned downwards and inwards, and ended in a thick cicatricial tissue on the under surface of the tendon of the flexor carpi ulnaris. It was not enlarged, and a transverse section of it, when freed from the cicatrix, showed the appearances of healthy nerve. The lower end of the upper portion was swollen to about three times its natural size, and ended in a firm bulbous nodule, which was bound in cicatricial tissue. From this it was dissected, and a third of an inch had to be removed before the section looked natural. It was necessary to dissect the upper part of the nerve free for a couple of inches, before the two ends could be brought into comfortable apposition. They were then joined by three fine catgut sutures passed through both sheath and nerve. The wound healed by first intention, thus fulfilling one requirement for the success of the operation. As early as the 13th, the man said his fingers "felt somehow different," and the anæsthesia when tested was certainly less marked. By the 28th, the sensation had decidedly improved, the cicatrix was free from pain, and he even had some returning power of extension of the last phalanges of the ring and little fingers.

He was discharged on April 29th, with instructions to use his hand as much as possible. He returned in a fortnight, having made but little progress; and it was, therefore, deemed advisable to place him under the care of Mr. de Watteville, who has kindly given the following record of his treatment.

"When he was first examined electrically, the phenomena of the complete reaction of degeneration in its advanced stage were present. At first galvanism only was used: the hand being placed in a basin containing hot water and one of the poles, and a flexible metal plate covered with wash-leather, and connected with the other pole, being fixed upon and above the seat of injury. The strength of the current was the maximum endurable; voltaic alternatives were made; and the application, lasting ten to fifteen minutes, repeated every day for the first few weeks. Later, faradisation of the muscles of the hand and ulnar nerve *above* the seat of lesion was used, conjointly or alternately with galvanism. The applications were reduced to two or three a week. After about a year of this treatment, the only muscle which was distinctly wasted was the abductor indicis. This muscle at first had almost entirely disappeared, so that the most powerful galvanic currents scarcely produced any visible fibrillary contractions. Having regained a fair use of the hand, the patient ceased to attend the hospital, but applied the faradic current himself every day for about six months, until the hand practically regained its normal appearance and functions."

When last seen, on February 23rd, 1883, the man stated that he had been at work as usual for several months, and that his hand was as useful as ever it was. There was then no sign of trophic disturbance; sensation was normal; there was no wasting; and his only complaint was of occasional pain in the cicatrix on change of weather, and inability to perfectly extend the last phalanx of the little finger.

Without making any further comment on the subject of nerve-suture, about which much has been written during the last few years, and with which I dealt at some length in my former paper, this case seems worthy of publication as an instance of complete recovery of nerve-function brought about by suture as late as six months after the division of the nerve, and also by the *steady and long-continued use of electricity* to restore the nutrition of the wasted muscles. Not a little, however, is the successful result in this case due to the patient himself, to his perseverance in using his hand after the operation, and his endurance of the pains of galvanism. In a case on which I operated about the same time, where there was an almost exactly similar wound, the same kind of trophic change, and a like incapacity, the patient, a nervous hysterical woman, gave no help whatever after the operation, and the result has in consequence been far from satisfactory. The nerve-ends had been pretty easily brought together, union of the wound had occurred without suppuration, and the trophic changes altogether disappeared; but the woman persisted in nursing her hand in a sling, and the needful application of electricity so distressed her, that she ceased attending the hospital, better in some respects than before the operation, but with a result very different from that of the man.

THE RISKS OF "MASSAGE."

By JULIUS ALTHAUS, M.D.,
Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

"MASSAGE," which has for a long time been the Cinderella of therapeutics, has recently seen a considerable change in its fortunes, and become as thoroughly fashionable as mesmerism and homœopathy have been at previous periods in the history of medicine. The "Weir-Mitchell treatment" more especially, which has been found very useful in some obstinate forms of hysteria, is now being indiscriminately applied to all sorts of cases of cerebral and spinal disease of which loss of power forms a conspicuous symptom; and it is therefore time that we should say, "Hands off!" lest a procedure which does good in a limited class of cases should suffer by the excessive praises of injudicious partisans, and eventually be thrown aside altogether.

Professor Busch of Berlin, who has written the most recent and sensible treatise on massage and gymnastics (in vol. ii, part 2, of von Ziemssen's *Handbuch der Allgemeinen Therapie*, Leipzig, 1882), recommends these proceedings chiefly for the treatment of deformities, and of muscular pain. Amongst nervous affections which have thus been treated, he mentions scriveners' palsy, stammering, some forms of hysteria, and muscular paralysis or paresis after poliomyelitis; without, however, saying much in favour of this treatment

in the latter conditions. It is well known that at various times epilepsy, idiocy, and some forms of insanity, have been treated by massage and gymnastics; but, fortunately, we now hear very little of such therapeutical aberrations.

It appears to me that diseases of the brain and spinal cord must, on account of the anatomical situation of these organs, be inaccessible to the influence of massage, which can only be applicable to more superficial parts of the body. Apart from this, however, it is important to consider that many of the most important diseases of these organs are of an inflammatory or irritant character, either primarily or secondarily; and this should make it self-evident that massage should not be used for their treatment, even if the suffering parts could be reached by it. I will here only allude to many forms of cerebral paralysis from hæmorrhage, embolism, and thrombosis, which are followed by sclerosing myelitis of the pyramidal strands; and most forms of primary lateral, posterior, or insular sclerosis of the spinal cord.

It is only charitable to assume that the advocates of massage, who recommend their favourite procedure in such and similar cases, are somewhat at sea with regard to the pathology and diagnosis of diseases of the nervous system.

That which may be good for developing and strengthening healthy muscles, or muscles which have been enfeebled by disuse or certain local morbid conditions, etc., is not for that reason suitable for the treatment of muscular paralysis owing to central disease. In most cases of lateral and insular sclerosis, which are, unfortunately, now much treated with massage and exercises, rest is indicated rather than active exertion; and overstraining of the enfeebled muscles acts prejudicially on the state of the nervous centres. I have recently seen quite a number of instances in which the central disease had been rendered palpably worse by procedures of this kind; and, in a case of cerebral paralysis which was some time ago under my care, the patient had, after four such sittings, been seized with collapse, which nearly carried him off.

CANNABIS INDICA.

By G. C. WALLICH, M.D., Surgeon-Major, Retired List.

THE following facts, though bearing but indirectly upon those special medical uses of Indian hemp to which attention has been drawn in recent issues of the BRITISH MEDICAL JOURNAL, may serve in some measure to explain the conflicting estimates that have been formed of the general value of the drug by different observers.

My knowledge of Indian hemp as a therapeutic agent dates from the year 1838, when its properties were communicated to me in Calcutta by my friend Dr. W. B. O'Shaughnessy; and, at his request, I made the sketch of the plant which is appended to his earliest memoir on the subject. During my subsequent service in India, I had many opportunities of testing the efficacy of Indian hemp in cases of cholera, tetanus, hydrophobia, and various minor disorders. But, though fully convinced of its value, like many other medical men, I soon became aware that the action of the drug was singularly uncertain, and that doses which in one locality produced a given effect, frequently failed to produce the same effect in another. Eventually it became manifest that this uncertain action was due to inherent differences in the composition of the resinous extract of the plant, incident on its being grown either in the plains or in the hill-districts of India. The drug had not, at this period, been supplied on indent to military hospitals at a distance from the Presidency; and those who wanted to employ it experimentally in their practice were, therefore, obliged to procure it for themselves from the native drug-dealers, either in the form of the crude dried plant or of the inspissated extract, which went by the native name of "churrus."

The fact which came to light was, that the therapeutic efficacy of the plant grown in the plains is very markedly inferior to that of the plant when produced in the hill-districts. I had no means at my command of ascertaining the particular conditions of soil, temperature, and mode of culture and preparation, upon which this superiority of the hill-plant is dependent; but it is now quite impossible to doubt that the conditions are of an analogous kind to those which, in a major degree, cause the same species of cannabis to produce a highly energetic medicinal ingredient in tropical and subtropical countries, whilst they exercise no such effect upon it when grown in our own temperate latitudes.

The fact of the superiority of the extract and mixture prepared from the hill-grown plant was, however, suggested to my mind by what had been communicated to me in the years 1841 and 1842 by Dr. W. L. MacGregor, at Kurnal, a station then notorious for its extreme unhealthiness, and visited, at the period referred to, by consecutive outbreaks of cholera in its worst form, acute dysentery, and enteric fever.

Dr. MacGregor claimed to have successfully treated the two first-named of these formidable diseases by such enormous doses of "hill-opium" and croton-oil combined, that, had I not myself witnessed the results, I should have hesitated to vouch for their authenticity. Fortunately, those who would like to see a formal record of my friend's practice will find it in his work *On the Principal Diseases affecting European and Native Soldiers in the North-Western Provinces of India*, by Surgeon W. L. MacGregor, M.D., published in Calcutta in 1843. Meanwhile, it may interest the readers of the JOURNAL to learn that it was not unusual with him to give as much as "fifteen drops of croton-oil in the course of twenty minutes, or nineteen drachms of laudanum in the same number of successive hours, the doses of croton-oil being occasionally increased to twenty drops," without causing any untoward consequences whatever. Dr. MacGregor further states that "the smallest dose of opium given for sedative purposes in hypercatharsis, was from three to six grains; whilst in cholera it was given to a much greater extent."

On the merits or demerits of this practice I have no desire to express any opinion; but of this fact I still entertain a vivid recollection (and what I state can easily be confirmed by other medical officers who were stationed at Kurnal in the years named), that many cases *did unquestionably survive and recover*, if they did not actually owe their recovery to this supremely heroic treatment. Under any circumstances, it must, I think, tend to convince all who give the matter their serious thought, that there is even yet a good deal to be learned concerning the action of some of the most powerful known drugs upon the human organism, when it is already under the fierce spell of some form of blood-poisoning.

WOOLSORTERS' DISEASE.

By THOMAS WILMOT, L.R.C.P., M.R.C.S., Bradford.

THE following interesting case came under my observation. W. Hird, aged 41, a "carder," worked for eight weeks on night-turn, to the 12th of May. He was a man of intemperate habits, but h always had very good health up to the time of the present illne He was taken ill about mid-day on May 13th, but had no rigor vomiting. I was called to see him about 4 A.M. on the 14th of M and found him in the following condition.

He was lying on his right side, and breathing quickly, and co plained of being very poorly and feeling a tightness across the che but he had no pain, and only a very slight cough; his ears, hands, a feet were bluish and cold, the skin was covered with a cold clam perspiration; the temperature was subnormal in the axilla and rectu The tongue was covered with a thick yellow fur, and he had a gre thirst on him, was almost pulseless, and in a state of collapse, a was evidently in a dying condition. Physical examination revealed few mucous *râles* over the chest, but no crepitation or dulness.

I came to the conclusion that the man was suffering from the fo of blood-poisoning known as "woolsorters' disease." Dr. Bell s the patient with me about 10.30 A.M. the same day, and agreed w me in my diagnosis. He was then rapidly sinking, and died an h after our visit. Some blood was taken from the back of the ha which did not flow at all freely; it was dark and stagnant. bacilli were found in the blood taken before death. He lived ab twenty-eight hours from the onset.

I made a *post mortem* examination fifty-four hours after death the presence of Dr. Bell. His body was fairly well nourished; th was a slight discoloration at the upper part of the thorax (considering the heat at the time, the body was in a good stat preservation). There were no external marks or bruises. The b was healthy. On removing the sternum, I found a gelatinous k of substance in the anterior mediastinum, of a yellow colour. C fluid flowed freely from both pleural cavities; the right contai between three and four pints, the left two or three pints. The r lung was collapsed, and the left was very slightly congested. Th were no signs of inflammation in either the lungs or the ple The pericardium was full of clear fluid. On opening the heart, cavities were found quite empty, the valves were natural; there a distinct staining in the left ventricle, which was continued the aorta. The blood was dark, and very fluid. The trachea tained a little frothy mucus; there was no enlargement of

bronchial glands. The spleen was soft and pulpy, and the other organs were apparently healthy.

REMARKS.—At the mill where this man worked, they had been carding "faller pickings" for the last two weeks. These consisted of waste from a number of different preparing boxes, and included waste from Cape and Van mohair. The Van is considered the most dangerous; but it had passed through the following process before reaching the man. It was first steeped for two hours in hot water, at a temperature of 130° Fahr., and was then washed in soap and water, and sorted in the damp state; and subsequently washed twice again before going to the carding room of the "faller pickings." About one-hundredth part was Van. The man usually took his food at the mill, and was known to be careless and dirty in his habits. Whether the poison entered his system through the food which he handled, or whether it was breathed in while he was at work, it is not easy for me to say.

SURGICAL MEMORANDA.

TWO CASES OF OPERATION IN ADVANCED AGE.

THE following cases may be worth recording from a practical point of view.

CASE I.—Mrs. H., aged 76, a feeble and anæmic old lady, who had had for nearly twenty years chronic ulceration, with purulent discharge, in the neighbourhood of the right instep, came under observation in the first week of June 1882, with right hemiplegia, accompanied by almost complete anæsthesia of the right side. The paralysis passed off to such an extent, that the patient was able to get out of bed without assistance.

On the evening of July 27th, during the absence of her attendant from the room, Mrs. H. got out of bed, and, in so doing, fell with the right foot twisted under her; at the moment of falling, she felt no pain, but heard a distinct snap, as of a broken stick. The attendant, hearing the fall, came into the room, and observed that her foot was in a pool of blood. My partner, Dr. G. H. Batterbury, was summoned immediately, and, on his arrival, found her in bed, with much hæmorrhage going on from the foot, and a compound fracture through the diseased tarsus. He thereupon requested my immediate attendance, with a view to operation. He commenced giving chloroform (mixed with ether, on account of the feeble action of the heart), but, before anæsthesia was complete, we found that sensation in the foot was so imperfect, as to render the further administration of the anæsthetic unnecessary. I did a modification of Chopart's operation, obtaining an excellent covering from the plantar tissues. There was no hæmorrhage of any importance, nor shock, and the old lady took an intelligent interest in the operation during its performance. The stump was dressed with Jeye's disinfectant fluid, and everything progressed so favourably that, at the end of six weeks, a sound and healthy stump was the result.

CASE II.—Mrs. B., aged 88, who has been almost completely bedridden from rheumatoid arthritis for twenty years, and has suffered much from constipation, always requiring aperients or an enema, was seized, on May 7th, 1883, with vomiting and abdominal pain, no action of the bowels having occurred since May 5th. These symptoms continued and increased in intensity up to the evening of May 9th, when the vomit became feculent. On the morning of May 10th, her daughter applied for advice. My partner, Dr. G. H. Batterbury, saw Mrs. B. as soon as possible, and diagnosed a strangulated inguinal hernia of the left side. The patient was not aware of having ever been ruptured. He used moderate taxis on a tumour in the left groin, no bigger than half a walnut, but with no success. In the same afternoon, he and I saw her together, and, in spite of the objections of her children and some friends, who strongly urged that, at her advanced age, "it was cruel not to let her die in peace," he put her under chloroform, and I proceeded to operate. The operation was of the simplest character. A tight constriction was found at the internal ring; this was readily divided by a few touches of the probe-pointed bistoury, without opening the sac, as in manipulation. I felt the gut suddenly slip out of the sac, leaving it intact between my fingers and thumb. The hæmorrhage was of the slightest possible description; four stitches were applied, a pad of dry lint put over the wound, without any antiseptic, and held in place by strapping and a spica bandage.

Progress towards recovery was uninterrupted and rapid; the temperature never rose above 99°, nor the pulse above 90. She had one or two doses of opium, but suffered no pain; the vomiting ceased immediately after the operation, and the bowels acted freely on the third day after a dose of senna. The stitches were removed on the ninth day after operation, and we found that union had occurred throughout by the first intention, without one drop of hæmorrhage or pus.

The practical bearing of these two cases seems to me this: that surgeons should hesitate to withhold from patients of advanced age, and under unfavourable conditions of health and surroundings, such operative assistance as they would fearlessly accord in the case of younger and more healthy patients. I would also urge my professional brethren not to allow the querulous and ignorant objections of relatives and friends to influence them against the better and more courageous convictions of modern surgery. Had my partner and I been less pachydermatous, both these lives would have been sacrificed, and two useful precedents lost to ourselves and the profession.

WALTER WYKE-SMITH, Wimborne.

DETECTION OF STONE IN THE BLADDER IN CHILDREN.

I WISH to call attention to the ease with which, in children, when thoroughly anæsthetised, a stone in the bladder may be detected, and its size and shape estimated, by a finger introduced into the rectum, and one or two fingers of the other hand placed on the abdominal wall; the stone being felt between them.

In my last two cases of lithotomy, I was able in this manner to judge the size of each stone to within a few grains; one, which I estimated at ten grains, proved to be twelve grains, and the other at twenty-five grains was thirty grains. In each case, I had previously found the stone by the sound.

Probably others have noticed this fact, but I have not seen it mentioned before.

THOS. SANSOME, M.R.C.S.Eng.,
Surgeon, West Bromwich District Hospital.

CLINICAL MEMORANDA.

SCARLET FEVER, WITH SUPPURATION OF THE RIGHT EYE.

EMILY B., aged 8, child of a married emigrant, showed, on October 28th, 1882, all the symptoms of scarlet fever. The throat was not very badly affected; but the temperature remained for six days fairly high—that is, between 100° and 105°; and the patient was, for the first three days, delirious. The fever passed on to a crisis at the usual time, and desquamation proceeded in due course, there being nothing remarkable to notice. On the second day of the attack, the right eyelid became much swollen; and on October 31st, two brownish growths appeared, one on each side of the cornea, springing up from the conjunctiva. These growths were very vascular, and might easily be lifted up from the conjunctiva. On November 1st, the eyeball itself became much swollen and protruded; it was very tense, and the cornea was wrinkled and slightly steamy. The cornea became very steamy on November 3rd, and there was manifestly pus in the anterior chamber. I passed a small scalpel into the anterior chamber, and let out a fair quantity of pus. After the operation, the eye began to shrink, and the two growths before mentioned dried up and dropped off. The eye continued to improve till November 14th, when the lid became much swollen, and there was marked fluctuation of the lacrymal sac. I incised the sac, and evacuated a great quantity of pus; but this resulted in no very marked improvement, for the eye again began to suppurate freely, the patient became very sick, the temperature rose from 100° to 105°, and a well-marked erysipelatous flush made its appearance on the cheek. This state of things, however, yielded to treatment; and, as soon as everything was quiet, I excised the right eye. After the operation, the patient began to mend; but on November 28th she died quite suddenly. Unfortunately, I was unable to make any *post mortem* examination.

THEO. M. KENDALL, B.A.Sydney, L.R.C.P.Ed., late Surgeon-Superintendent, Emigrant-ship *Euterpe*.

PATHOLOGICAL MEMORANDA.

CONGENITAL CYSTS AND FISTULÆ OF EXTERNAL EAR.

THE case related by Dr. C. Firth, in the number of the JOURNAL for June 16th, is a good example of branchial fistula. In the sixty-first volume of the *Medico-Chirurgical Transactions*, there is a valuable contribution on this subject, written by Sir James Paget, and entitled "Cases of Branchial Fistulæ in the External Ears." In 1873, I saw,

in the surgery of St. Bartholomew's Hospital, a young man who had a distinct pin-hole depression, one-eighth of an inch deep, on the surface of the most anterior part of the helix in each ear. In Sir James Paget's memoir, there is a woodcut of a similar case, that had been under the care of Mr. Cumberbatch. In the same paper, the relation of the malformation to certain facts in embryology is discussed at length, and a valuable series of references is provided for the benefit of the reader. In relation to the same subject, a paper, by Mr. Wagstaffe, on "Congenital Dermoid Cysts occurring in the Branchial and other Clefts," should be consulted. It will be found in the twenty-ninth volume of the *Transactions of the Pathological Society of London*. Sir James Paget, referring in his contribution to a monograph by Cusset, observes that the pathology of the branchial apparatus is overpassed when the cutaneous cysts, found by the upper margin of the orbit, and in the intermaxillary and other fissures, are included among branchial cysts. In other words, fistulæ of the ear and neck, and dermoid cysts of the face, must be studied separately. But there can be no doubt that some embryological connection exists between dermoid cysts and the complicated clefts formed by the bending down of the fronto-nasal process to meet the maxillary offshoot of the first visceral arch. A reference to Mr. Wagstaffe's tables will support this doctrine. In these same statistics, one case is recorded where the cyst was in the external auditory meatus, and another where the cyst lay "in the front of the ear above the tragus." Here the growth was in the region of the congenital fistulæ in question. Seven weeks ago, I had a remarkable case under my care, the details of which I intend to publish at length on a future occasion. The patient was a woman, about twenty-five years old. A large cyst lay immediately behind each external ear. Both cysts contained pure liquid fat, and one bore a mass of coarse black hair, perfectly free from the walls, which were smooth and hairless. I have seen precisely the same condition in a dermoid ovarian cyst. The lining membrane, in such cases, must have gradually lost its primitive power of growing hair. It is perhaps easier to understand how a tract of hair-growing integument may be involved in the closure of an embryonic cleft, and form a dermoid cyst, than to comprehend how a depression on the fold of integument extending backwards from the second visceral arch, and giving rise in mammals to the external ear (Huxley), can be considered as a relic of a cleft between the second arch and the first. The true origin of the depression is, however, almost proved by analogy; for a branchial fistula in the neck, clearly a trace of an embryonic cleft, is sometimes associated with a supernumerary pinna.

ALBAN DOBAN.

SARCOMA IN A COMMON FOWL.

MALIGNANT growth is probably common enough in birds, but as indubitable cases are not often described, the following account of the development of a sarcomatous tumour in the neck of a common hen may prove of interest.

The bird was hatched in the spring of 1880, and a year ago a swelling was first noticed growing from the neck immediately below the beak. This growth, when I first saw it in January 1883, was a little larger than a cricket-ball; it was perfectly distinct from the crop, and freely movable; it was very heavy, so that its weight prevented the bird from raising the head, or flying from the ground; it weighed six ounces and three-quarters when removed. The skin adhered on the under surface, on account of the irritation and hardening produced by contact with the earth. I removed it under chloroform on January 26th, and brought the wound together, which healed by first intention. During the week following, the bird gained seven ounces in weight, and soon recommenced laying eggs; this had stopped entirely during the year's growth of the tumour. About the beginning of May she hatched a brood of healthy chickens produced from her own eggs. Two months after the removal of the growth the disease recurred in the scar, and the glands round became rapidly affected. Mr. Bowlby of St. Bartholomew's Hospital has been kind enough to make a microscopic examination of the part removed, and he says that "it consists of round cells, each about the size of a human red blood-corpuscle, without any definite cell-body, and somewhat granular. There was no appearance indicating an alveolar arrangement; but scattered irregularly amongst the cells was a little fibrillated tissue. There can be no doubt of the malignant nature of the growth, which seems to belong to the sarcomata rather than the true cancers or carcinomata."

H. HATHAWAY, M.R.C.S

Langton House, Battle, Sussex.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

A CASE OF ABSCESS OF KIDNEY: NEPHRECTOMY.

(Under the care of Mr. WHITEHEAD.)

[Reported by WILLIAM THORBURN, B.Sc.]

J. J., aged 45, a married woman, with no occupation, was admitted on January 16th, 1883. Her general family history was good, and presented nothing of interest. She was born in the country, and had lived there. She was always a strong woman; she had been accustomed to hard work, but was always well fed and clothed. When a girl, she had typhus fever and inflammation of the chest; she had rheumatic fever after a confinement eleven years before admission, and had had slight attacks of rheumatism since. She ceased menstruating in April 1882.

In January 1881, while she was standing, and holding a weight, she felt a sensation as if the bowels had dropped suddenly into the pelvis, and had also pain in the back. The pain passed off in a few hours. In about six months she had a return of the same affection, and she continued to have similar attacks with increasing frequency until about February 1882, when they became almost weekly, and she consulted a medical man, who diagnosed prolapsus uteri and replaced the uterus, which, she stated, had since given her no trouble. During this time, also, she began to have some pain in passing urine, which had since increased, and for which she did not seem to have been treated. About June 1882, she first noticed blood in the urine, but no clots; she stated that at times the secretion of urine stopped, and she only passed a little blood; then the blood would stop again for a time, and she passed urine copiously. About last October her medical attendant began syringing the bladder regularly, which, she thought, made the hæmaturia worse. During the three months previous to admission, she passed clots in her urine on an average about three times a week; this was preceded on each occasion by pain in the right kidney, passing down the course of the ureter. There was no history of her ever having passed gravel or calculi.

She was admitted to the Infirmary as a medical patient under Dr. William Roberts, on December 26th, 1882; while she was in the medical ward the hæmaturia diminished somewhat, but was intermittent.

On January 16th, 1883, she was transferred to Mr. Whitehead's care. On January 18th and 26th, the bladder was explored with negative results. Since that time the hæmaturia had ceased, and her urine contained only pus.

Her condition on March 12th and 13th and following days was this. She was emaciated, of sallow complexion, feeble and apathetic. Her temperature averaged between 100° to 101°, but had been as high as 103° at times. Her pulse was 112, weak, but of high tension. At times she had palpitation; the aortic sound was accentuated. Her appetite was poor, and she was very thirsty at night; the tongue was red and raw, and the bowels tended to be confined. She had constant shooting pains across the bowels, and running down to the urethra, with pain especially in the right inguinal region. The pain was worse just at the time of and after passing urine, and she strained a good deal afterwards. She had not passed blood since the beginning of February. In the right inguinal and lumbar regions there was tenderness on pressure, and in the lumbar region could be felt a distinct rounded swelling, which did not move with respiration. The colon could not be felt. On percussion, dulness was found to extend two inches nearer the middle line on the right than on the left side, and was bounded by a line convex towards the middle line. Behind, there was a distinct swelling in the right lumbar region, and dulness extended one and a half inches further out from the middle line than on the left side. The urine was acid, of specific gravity 1021°, and gave a heavy deposit—about one-sixth—of pus, while the supernatant fluid remained cloudy. The deposit consisted almost entirely of pus-cells, with a few doubtful hyaline casts. There was a large quantity of albumen, giving, on boiling, a precipitate of about one-half.

After admission, her pain gradually became worse, and the swelling larger; and, as there seemed to be no chance of alleviating her s

ptoms, an operation was decided upon. This was done on April 9th. The patient being anæsthetised with ether mixture, the operation of nephrectomy was performed under the spray and with the usual antiseptic precautions. The abdomen having been carefully washed, an incision was made along the linea alba, extending about one inch above and two inches below the umbilicus. This was subsequently extended to a length of about six inches. There was a good deal of bleeding from small vessels, which were, however, all carefully secured by torsion before the abdomen was opened. The peritoneum being then divided, and the hand introduced, the large hard kidney could be distinctly felt, but it was found that there was not room to remove it. An incision was, therefore, carried outwards from the umbilicus at right angles to the first, and reaching to a point vertically above the anterior superior iliac spine, all vessels being secured before cutting the peritoneum. The colon being now drawn towards the middle line, the kidney could be distinctly seen; the peritoneum over it was divided and its capsule was exposed. It was now found that there were great adhesions behind, the mass being almost fixed. An exploratory puncture with a subcutaneous injection-syringe showed it to contain pus of a healthy looking nature. A small skin-incision being now made in the lumbar region behind, a large trocar and cannula was introduced into the kidney, and the pus entirely drawn off. The capsule of the kidney, which was nearly one thirty-second of an inch thick, was then divided in front and detached. There was some bleeding, which was stopped by torsion. The organ being now separated from its connections, a double ligature of strong silk was placed round the renal vessels, and the kidney cut out by scissors, part of the inner wall of its pelvis remaining with the vessels and capsule. A large vessel which was divided in the process was ligatured, and the ligatures then cut short. An India-rubber drainage-tube was introduced through the posterior incision, and brought out through the outer angle of the wound in front. The abdominal cavity was then carefully sponged out, the edges of the wound brought together with silk ligatures, and antiseptic dressing applied. The operation occupied one hour and fifteen minutes.

Towards the end of the operation, the patient was much collapsed, and was given a subcutaneous injection of ether. She then rallied a little, and the pulse improved, but after the operation she was suffering much from shock. She had more ether, brandy, and enema of brandy and beef-jelly, but never regained consciousness. Her temperature was below 95°. About two hours after the operation, she died.

The excised kidney weighed four ounces and three-quarters. It formed an irregularly shaped bag, with walls from one thirty-second to half an inch in thickness, and contained ramifying cavities large enough to admit the finger, these cavities being lined with granular whitish matter (No. 220, Owens College Museum). Microscopically, very slight increase of fibrous tissue was observed, with proliferation, swelling, and, in parts, degeneration of the epithelium.

At the necropsy, it was found that there had been no hæmorrhage, only about one ounce of fluid blood occupying the right lumbar region. The peritoneum around the wound was intensely congested. The right ureter was so surrounded by firm fibrous tissue, as to form a band as thick as an average thumb. Its lumen was normal, and contained pus; there was no calculus. The left kidney was enlarged, weighing six ounces; its ureter was normal. The capsule was adherent in parts, and the surface, on section, was pale and granular, with small cysts.

QUEEN'S HOSPITAL, BIRMINGHAM

CASE OF EXCISION OF LARGE BRONCHOCELE, WITH PRELIMINARY TRACHEOTOMY.

(Under the care of Mr. BENNETT MAY, B S.)

THE patient, a married woman, 42 years old, had been the subject of goître for twenty years, without much discomfort. In the summer of 1881, it began to grow rather suddenly, and she then became an out-patient at the hospital. Treatment, which included parenchymatous injections of iodine and ergotin, with the internal administration of hydrofluoric acid, iodine, ergotin, and iron, did no good. Some supposed cysts were also tapped, but blood only was evacuated. She became an in-patient October 1st, on account of increasing dyspnœa. The tumour was then of unusual size, covering the trachea from the hyoid bone down to the sternum, which it overlapped, and, laterally, pushing the great vessels and nerves of the neck to the surface. It was hard in some parts, soft and pulpy in others; there was slight exophthalmos, but no *bruit*.

She quickly grew worse after admission, became unable to lie down, and was much distressed by dyspnœa. This, though continuous throughout inspiration and expiration, was also paroxysmal, the worst attacks occurring at night; and it appeared to be due to the combined influence of direct pressure on the trachea and implication of the laryngeal nerves. She had violent attacks of convulsive coughing, and her voice was faint and husky. Mr. Bennett May greatly wished to open the trachea, but it was nowhere approachable, even if its position could have been made out; and extirpation of the tumour seemed out of the pale of practical surgery. One day, since it appeared as if she would die, Mr. Bennett May essayed to open the trachea through an incision immediately above the sternum, but this tube was nowhere to be found. It was evidently displaced from the median line by the pressure of the tumour, but in which direction it lay could not be ascertained. He therefore incised freely through the centre of the mass, which, somewhat to his surprise, was bloodless; after considerable searching, the trachea was found much compressed and deflected to the left side. For a tracheotomy-tube, a large piece of rubber-tubing had to be employed, as no ordinary tube could reach the tracheal opening, which was three or four inches from the surface. Respiration being satisfactorily established through this tube, which afterwards served for the administration of chloroform, Mr. May proceeded to dissect out the entire tumour. This was not encapsuled, but adherent to the tissues with which it lay in contact, and these were nearly all the important structures of the neck. The trachea was cleared with difficulty, and the great vessels and nerves of the neck required careful dissection. There was little or no bleeding, either from the tumour or nutrient arteries; there were no nutrient arteries of visible size. In a few places, where a large vein came into view, it was ligatured before division. The tumour varied much in consistence, being, in some parts, pretty firm, and of a pale buff colour; in others, a red granular pulp. It was probably an adenoid tumour undergoing sarcomatous change. The operation having been completed without injury to any important structure, every effort was made by counter-openings, etc., to carry away the drainage of this extensive wound from the tracheal opening, in which an ordinary tracheotomy-tube could now be placed. She was comfortable for some time after the operation, but died on the fourth day, apparently from suppurative bronchitis. No *post mortem* examination was permitted.

REMARKS BY MR. BENNETT MAY.—The general sentiment of surgeons is so opposed to attempting extirpation of goîtrous tumours that some special or exceptional circumstance should exist to justify the operation. Such circumstances will be encountered when presure of the tumour on the air-passage, the nerves, or the blood-vessels, causes danger to life, either impending or prospective. Only a small proportion of bronchoceles in this country ever become dangerous in this way, and it would be as well if we could determine such as are likely to do so. It appears as if a dangerous epoch were approaching, when one which has long remained quiescent suddenly takes on active growth. Normal gland-tissue is then undergoing changes, secondary processes which have the character of retrograde metamorphoses. Some are permanently sources of anxiety, depending on position and consistence. The worst are those situated low down in the neck, where there is no room for their expansion. Hard central goîtres affecting the isthmus soon compress the trachea or implicate the laryngeal nerves. As a result of the low estimation in which the operation is held, its performance is often delayed, and the surgeon is not always in a position to deal in the best possible manner with the complications that may arise. A most undesirable complication is encountered if the trachea require to be opened simultaneously in order to avert impending asphyxia. The ordinary dangers of the operation are then complicated by those arising from the tracheal wound, and these again are much greater than in tracheotomy under ordinary circumstances. Of course, if the trachea can be opened by a preliminary and independent proceeding, one source of danger, that of asphyxia during the operation, is averted; but it rarely happens that there is sufficient space below the tumour to permit this. It is desirable, therefore, to entertain the question of operation at an early period, directly symptoms become formidable and minor treatment has failed. The experience of the last few years has abundantly justified operation under these circumstances; and it had much better be done before the trachea is compressed out of shape or the recurrent laryngeal nerves involved in the tumour. I believe that in this case an earlier operation, fully three months oner, would not have been fraught with great difficulty or danger, nd at that time the necessity to open the trachea would not have xisted. Under the circumstances, however, it becomes impossible o prevent some blood entering the air-passages during the operation,

and septic discharges afterwards. Consequently, septic bronchitis and pneumonia are very likely to follow.

The nature of this tumour appeared to be somewhat exceptional; it could not have been removed by the method of Dr. Watson, as the gland had no capsule, nor was there a single nutrient vessel which required a ligature. Probably at an earlier period, before active growth set in, it had an investing capsule.

REPORTS OF SOCIETIES.

OPHTHALMOLOGICAL SOCIETY.

FRIDAY, JUNE 8TH, 1883.

R. BRUDENELL CARTER, F.R.C.S., in the Chair.

ADJOURNED DISCUSSION ON EYE-SYMPTOMS IN SPINAL DISEASE.

DR. WALTER EDMUNDS related a case in which the chief point of interest was the occurrence of complete temporary blindness. The patient was a man aged 57, who had had syphilis nine years before he came under observation; six years later, he fell from his horse and hurt his neck, and, three months after his first fall, he again fell from his horse during, as he thought, an attack of unconsciousness. Soon after this, he one day suddenly became blind, without any giddiness, headache, vomiting, or loss of consciousness; the blindness remained for a quarter of an hour. At subsequent periods, he had three attacks of vomiting. When he came under observation, his gait was awkward, but not ataxic, the pupils did not react to light, and in accommodation the right reacted less than the left.

Mr. J. B. LAWFORD read notes of seven cases of general paralysis of the insane, in which optic atrophy occurred. In five out of the seven, there were symptoms of spinal sclerosis; in one, tabetic, in the others, lateral sclerotic. Of twenty-two cases of general paralysis recently examined at Bethlem Hospital, Mr. Lawford had found optic atrophy in three, in all of which special symptoms were present. Microscopic sections and drawings of the optic nerves, chiasma, and tracts of one of the cases, were exhibited.

Mr. R. MARCUS GUNN said that, in response to the question in the memoranda with regard to the proportion of cases of optic atrophy in which symptoms of locomotor ataxy could be observed, he might state that out of eighteen cases that had been admitted during his term of office at Moorfields Hospital, two undoubtedly had the disease, and in three others there was a suspicion of it. As to the date at which the atrophy supervened; out of nine cases of ataxy, seven had optic atrophy, and in all it appeared during the first stage; in five of these cases, the changes were more marked in the left eye, in two in the right eye, in three cases the changes were known to have commenced in the left eye. Three instances of temporary arrest of the atrophy, and even of slight improvement were given; and in conclusion Mr. Gunn related the case of a woman who, after an attack of intermittent fever, became the subject of widely spread paralysis which lasted for two years; she also had exophthalmic goître. About a year ago it was noticed that the pupils were small, and did not act to light, but acted to accommodation, that there was paresis of the external rectus with slight ptosis on the left side; and that the knee-jerks were diminished. Recently it was ascertained that the paralysis of the ocular muscles had disappeared, that the pupils acted to light, and not to accommodation, and that the knee-jerk was absent.

Dr. MAHOMED thought that it was proper to remember, that in dealing with the diseases of the nervous system, we were dealing with the diseases of one organ and of one tissue; it was everywhere continuous, and its diseases were, similarly, in many cases, continuous, that is, uniformly distributed throughout it. In observing the changes in the optic disc, or in testing the intra-ocular reflex phenomena, we might be only discovering, in the most susceptible part of the system, disorder which might exist in a lesser degree in all the coarser reflex actions. He thought there was a tendency to attach too much importance to individual symptoms, and to attribute to them a greater pathognomonic significance than they deserved. Dr. Mahomed concluded by quoting several cases in support of his contention, that too much importance ought not to be attached to alteration in the knee-jerk, to ankle-clonus, or to nystagmus, as evidence of structural disease.

Dr. SEYMOUR J. SHARKEY contributed an account of three cases. The first was that of a woman who, at the age of 29, began to suffer from giddiness, thickness of speech, trembling (on the right side chiefly), and severe headache. Three months later, the case came under the care of Mr. Hulke, at the Royal London Ophthalmic Hospital, for optic neuritis and defective sight in the left eye. She came under the care of Dr. Sharkey when thirty-four years of age; there were then incomplete atrophy of both optic discs, and distinct symptoms of disseminated sclerosis. The second case, was that of a man who came under care when twenty-two years of age. The right disc was then hazy and slightly œdematous. A year later, he was admitted into St. Thomas's Hospital, under the care of Mr. Nettleship; and the right disc was found to have passed into a state of grey atrophy. The left disc could be only imperfectly seen, owing to old corneal opacities. Three years later, when twenty-six years old, he came under Dr. Sharkey's care with characteristic symptoms of disseminated sclerosis. The third case was that of a man aged 42, who presented symptoms of the same disease. These symptoms were said to have been present for about fifteen years, but his sight had only been failing for about twelve months. His vision was $\frac{2}{3}\frac{0}{0}$; and the discs were slightly pale and misty all over, the borders being nowhere quite clear. Vision subsequently slightly improved.

Mr. NETTLESHIP made some observations on some of the points relating to optic atrophy in Dr. Gowers's address. He thought there were clinical reasons for believing that optic nerve-changes in locomotor ataxy began at the disc, not in the trunk of the nerve or optic tract; he had seen no unequivocal cases of spinal disease in which sight failed before ophthalmoscopic changes became apparent; whilst it was commonly observed, on the other hand, that the appearances of atrophy were more pronounced than the condition of the sight would lead one to expect. Of seventy-two patients under his care with progressive atrophy of the optic nerves, thirty-six were undoubtedly tabetic, eight had symptoms of mixed spinal and cerebral disease (allied to general paralysis), seven had some other forms of chronic spinal disease, not ataxy, eight had, besides optic atrophy, reflex iridoplegia ("spinal pupils"), but no other symptoms of disease of the cord or brain; in the remaining thirteen, there was no proof of disease of the nervous system, but in some of these, the notes were incomplete. He had been struck with the rarity of the complete absence of spinal symptoms in progressive atrophy. Alluding to the mode of failure of vision in progressive atrophy, he pointed out that the field of vision was often invaded in a precisely symmetrical manner in the two eyes, although, at any given time, one eye was usually worse than the other. He had only seen two or three cases in which one eye became quite blind before the other began to fail.

Mr. BRUDENELL CARTER said that the papers which had been read had contained a great wealth of material, and had shown very plainly the complexity of the problem. It would be a great gain if even a hypothesis could be framed which would guide the practitioner in the prognosis of the class of cases in which atrophy would occur. He had been accustomed to attach great importance to the continued presence of the knee-jerk, but Mr. Lawford's cases seemed to show that, even with this, the prognosis might be grave. He felt the want of some standard by which to test such cases.

Mr. MCHARDY related the case of a woman suffering from disseminated sclerosis, in whom there was papery atrophy of the optic disc, and retinitis pigmentosa of the left eye, while the right eye presented no morbid condition, and had vision very little below normal.

Dr. GOWERS, in reply, said that he was much gratified by the interest which the discussion had excited. Mr. Gunn's case of Graves's disease was one of great interest and complexity, and was remarkable because the loss of the reflex to light preceded the loss of the knee-jerk. With regard to Dr. Mahomed's remarks, he wished to observe that the manner in which certain tracts of the nervous system suffered was very striking; for instance, the lateral column of the cord might be destroyed, and the rest of the system remain intact; he preferred to regard it as one tissue, but containing many organs. The knee-jerk was very seldom, if ever, absent in health; in his paper in the *Transactions of the Royal Medical and Chirurgical Society*, he had recorded a few cases, but he had not since met with a single instance, and was, therefore, inclined to doubt the accuracy of his earlier observations. In testing the pupil for the reaction to light, there were several fallacies to be guarded against; if artificial light were used, it was especially necessary to see that the patient did not accommodate for the source of light. Dr. Sharkey's cases were extremely interesting; it was necessary to remember that, in disseminated sclerosis, sight might be lost, owing to a patch of sclerosis in the trunk of the optic nerve, without any primary atrophy of the disc.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 6TH, 1883.

H. GERVIS, M.D., President, in the Chair.

Sarcoma of Ovary.—Dr. GALABIN (for Dr. ELDER) showed a tumour of the right ovary, having the microscopical characters of spindle-celled sarcoma, which had been removed from a woman aged 55.

Anteflexion with Hypertrophy of Uterus.—Dr. GRAILY HEWITT (with Dr. A. Q. SILCOCK) exhibited a specimen of general and considerable congestive hypertrophy of the uterus, with acute anteflexion and an ovarian cyst. The patient was aged 40, and sterile. The enlarged uterus nearly filled the pelvis; it was adherent on all sides, and acutely anteflexed; it weighed twenty ounces. There was a kind of dilatation of its cavity just above the angle of flexion. There was no evidence of separate fibroid formation, but it was a symmetrical hypertrophy of the whole uterus. No doubt the enlargement had existed for years, bringing about interference with the circulation in the uterus and pelvis generally. Dr. Graily Hewitt had seen cases analagous to this during life, but the large size of the uterus in this case rendered it almost unique. Dr. Hewitt also showed an acutely anteflexed uterus from University College Museum. This uterus was, in miniature, very like the large specimen.—Dr. ROBERT BARNES had recognised cases of this kind clinically, and treated them successfully by the use, for several months, of iodine injections (one in eight), the iodine passed by osmosis through the body of the uterus, checking growth, promoting absorption of the hyperplastic tissue, and thus gradually reducing the uterus to the normal size, and effecting a complete cure. He had in one case seen iodism produced, proving that the iodine went through the uterine wall.—The PRESIDENT asked where Dr. Hewitt drew the line between congestive hypertrophy and myo-fibromatous growth. The naked-eye appearances of the specimen closely resembled those of a fibroid.—Dr. HERMAN pointed out that in the second specimen slight dilatation of the uterine cavity was produced by the way in which the specimen was mounted.—Mr. LAWSON TAIT thought that, if the case had come under his care, he would have regarded it as an ordinary uterine myoma. The presence of ovarian cysts was important, for he thought that if they had been removed, the uterine tumour would have been cured.—Dr. HENRY BENNET could testify to the value of iodine in chronic inflammation, with hypertrophy, of the cervix, extending or not to the body of the uterus. Iodine applied to the skin left no permanent marks. He applied iodine solutions freely to the cervical canal, but did not inject them into the interior of the uterus. The cavity of the body was separated from that of the cervix by a sphincter, which was closed in health. The injection of fluids by a syringe, the nozzle of which passed beyond this sphincter, was not free from risk. He had had one case of fatal peritonitis, and had repeatedly seen serious symptoms follow it, probably from the fluid passing through the Fallopian tube into the abdominal cavity.—Dr. MURRAY did not think injecting the uterine cavity was free from risk. He had seen instant pain and subsequent inflammation follow it; and the late Dr. Tyler Smith had mentioned to him a similar case.

Adhesion of Polypus to Vaginal Wall.—Dr. POTTER showed a polypus, of the size of a small hen's egg, growing from the body of the uterus by a short thick pedicle, and inseparably fixed by adhesion to the vaginal wall.

Pyosalpinx.—Mr. LAWSON TAIT showed specimens of pyosalpinx removed from two patients. In one the cause was not known, and the symptoms had only lasted a few weeks. In the other, the symptoms, which were constant pain, aggravated by menstruation and marital intercourse, followed confinement and had lasted ten years. Both patients were recovering.—Mr. KNOWSLEY THORNTON showed a specimen of double pyosalpinx, one tube containing half a pint of pus, removed from a single woman aged 30; the ovaries were left. The patient was doing well.

Myxomatous Degeneration of Uterine Fibroid.—Dr. GODSON exhibited a tumour removed from a patient aged 61, the upper part of which, attached to the anterior uterine wall, presented the characters of an ordinary sloughing fibro-myoma, while the lower part was myxomatous. He thought this kind of degeneration of fibroid was very rare.

Acute Gangrene of the Vulva in an Adult: with Remarks.—This paper was read by Dr. HERMAN. The case related was one of acute gangrene of the skin of both labia, the perinæum, and margin of the anus, and the mucous membrane of the lower part of the vagina and urethra, occurring in a patient aged 37, without clearly discoverable cause, the gangrene being apparently the result of acute inflammation. The author had collected all the published cases that he could find of similar gangrene of the vulva in adults, occurring independently of venereal phagedæna. He found that they might be divided into four classes: 1, those occurring in patients suffering from acute diseases, viz., the specific fevers and cholera; 2, epidemic puerperal gangrene, which has occurred in hospitals only, beginning as isolated round or oval sloughs in the inner surface of the labia, the process usually stopping with the separation of the sloughs, though sometimes going on to extensive destruction of the parts; 3, acute gangrene occurring independently of contagion, and beginning with acute inflammation of the external genitals, more superficial than noma, and not spreading like erysipelas; 4, spreading gangrenous cellulo-cutaneous erysipelas. The author did not think there were grounds for a positive conclusion as to whether the differences between these classes were essential differences in the morbid process, or merely minor differences due to the circumstances of origin; but he thought probably the latter was the case.—The PRESIDENT thanked Dr. Herman for his paper, and remarked on the rarity of the malady described.—Dr. CLEVELAND suggested that the gangrene in Dr. Herman's case might have been caused by a chill, occurring in a woman ill-clad and of broken-down constitution.—Dr. FENTON JONES suggested that the gangrene might have arisen from local septic inoculation, occurring through chafing and the use of a dirty napkin.—Dr. MATTHEWS DUNCAN referred to sloughing cellulitis of the scrotum in males and analogous cases in the female. He had seen a fatal case of puerperal sloughing of the vulva resembling hospital gangrene, with cystitis. Sloughing of the hymen and bags of lacerated tissue were often seen. He had seen a case of linear sagittal sloughing of the perinæum after a difficult labour. He had found both labia gangrenous from the presence of a large protruded fibroid.—Dr. HICKINBOTHAM had seen two cases, one occurring in a woman lying in a room in which were cases of scarlet fever; the other in a woman whose husband was the subject of erysipelas of the scalp.—Dr. HERMAN said that in his case the skin seemed to be the seat of disease, rather than the cellular tissue. The puerperal gangrene occurring epidemically seemed to run a more acute course than ordinary hospital gangrene. The sloughing in it affected uninjured tissue, and was quite distinct from the common sloughing of bags of lacerated tissue.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MAY 18TH, 1883.

J. W. TRIPE, M.D., President, in the Chair.

Small-pox in the Hackney Union Infirmary.—An account of the outbreak was given by the PRESIDENT. On March 28th, he received notice that a case of small-pox had been removed from the workhouse infirmary; and having been consulted as to the course to be taken to prevent the spread of the disease, advised the revaccination of those in the same ward, isolation, and disinfection of the clothes of the sick. Other cases having occurred on April 9th, he recommended more strict isolation and more complete disinfection. The patients had already been isolated from the other inmates, and the medical officer had also begun to revaccinate not only those in the ward where the disease first appeared, but in another ward where cases subsequently occurred. The history of the outbreak was as follows. A man, No. 1, was admitted into the infirmary on March 20th, suffering from secondary syphilis. On March 23rd or 24th, a rash appeared, which was at first believed to be syphilitic. On the 27th, there was no longer doubt as to the nature of the disease, and he was removed to the Homerton Small-pox Hospital. Before his disease was recognised, his clothes were sent away to be washed with others, but afterwards the beds and bedding were taken away to the disinfecting chamber, but probably everything was not removed. On March 26th, No. 2 was admitted into this ward for some slight illness, and was discharged on the 30th; on April 9th, he was removed to the Small-pox Hospital. No further extension of the disease from this case took place. On April 8th, No. 3 had the rash of small-pox upon him, having ailed for a day or two previously. On the 9th, Nos. 4 and 5, both in the same ward as No. 1, were removed to the Small-pox Hospital. On the same day, No. 6, sleeping in another ward (female), who was engaged in the laundry, was attacked with small-pox and removed to hospital. None of these persons had been revaccinated, but the whole of the inmates of this ward, which was in no way connected with the male ward in which the disease broke out, were revaccinated as quickly as possible. On April 14th and 15th, two other cases, Nos. 7 and 8, occupying a third ward, were attacked; No. 7 was employed in the laundry

No. 8 was not, but occupied a bed immediately opposite No. 7. The inmates of this ward were all revaccinated, and everything they had used properly disinfected; and when fifteen days had elapsed from the occurrence of the last case, the ward was emptied. The history of this outbreak was unusually instructive. No. 1 must have received his infection before his admission. No. 2 waited upon him, became frightened on hearing what the disease was, and was removed to hospital ten days after he left the infirmary and fifteen days after he was exposed to infection, if it were assumed that small-pox was not infectious during the incubation period. At any rate, there could be no doubt as to the source of his infection, nor of Nos. 3, 4, and 5, who were removed to the hospital from the same ward on April 8th and 9th. But the question arose, would these cases have occurred if they had been revaccinated on March 25th, as soon as the rash appeared on No. 1? According to Mr. Marson's opinion, they would not, as he believed that, if revaccination were effectually performed within two or at the most three days after infection, small-pox would not result. At any rate, no one else suffered as soon as revaccination was performed on all the inmates. The cause of the outbreak in the women's ward was not so simple, as there was no direct communication between the two sides of the infirmary, the only persons passing from one to the other being the medical officers. The fact, however, that No. 6 was employed in the laundry to which nfected clothes had been sent without disinfection, and that she sickened about the usual time after the clothes were sent to the laundry, seemed satisfactory evidence as to the origin of the disease. No. 7, who had no connection with No. 6, except that both were employed in the laundry, was removed to hospital on April 14th, and No. 8 on April 15th, both of these being inmates of the same ward. How No. 8 caught the disease it was difficult to say, unless the clothes of No. 7 became infected in the laundry; if so, it was not clear why the outbreak in this ward was limited to these two, unless the speedy revaccination of the inmates of the ward prevented any further spread of the disease. Considering there were 800 inmates in the infirmary, the rapidity with which the outbreak was stamped out was most satisfactory, especially showing the efficacy of revaccination; for it should be remembered that, although three cases occurred in two crowded wards, the disease did not extend further, notwithstanding that, judged by the number of successful revaccinations, many must have been previously susceptible to small-pox.—Mr. JACOB gave an account of two outbreaks of small-pox in workhouses which had come under his notice.—In the discussion which followed, Dr. Willoughby, Dr. Dudfield, Dr. Bristowe, Mr. Wynter Blyth, and Dr. Corner took part.

Dr. WILLOUGHBY read a brief paper on the statistical reports of the Municipality of Frankfort-on-the-Main.

THE SURGEON-GENERAL'S LIBRARY IN WASHINGTON.—The *Sanitary Engineer* prints a very interesting account of the library of the Surgeon-General's office of the United States Army, obtained from a conversation of one of their reporters with the librarian, Dr. J. S. Billings. This now famous collection of books had its origin in a small collection in the office of the Surgeon-General, which was probably commenced by Surgeon-General Loball, about 1830. At the beginning of the late war, this collection consisted of about 350 volumes, mostly medical text-books and journals. In 1862 and 1863, while Dr. Hammond was Surgeon-General, about 360 volumes were added, being chiefly works relating to military medicine and surgery. A catalogue, published in the autumn of 1865, shows that the library then contained about 1,800 volumes. The catalogue of 1872 placed the number of volumes at 13,000, which chiefly related to military hygiene, medicine and surgery, to public hygiene and medical statistics. In 1874, there were 25,000 volumes and 15,000 single pamphlets catalogued, and since that date the growth has been uninterrupted and progressive, and at the present time the library contains 60,000 volumes and 66,000 pamphlets. Authorities now regard the library a better practical reference and working collection for medical purposes than the great library in the British Museum, or the Bibliothèque Nationale in Paris. Dr. Billings's assistants are Dr. Robert Fletcher and Dr. H. C. Yarrow.

COUNTY AND CITY OF CORK MEDICAL AND SURGICAL ASSOCIATION.—The following officers have been elected for the Session 1883-84: *President:* Dr. J. P. Golding. *Vice-President:* Dr. C. Y. Pearson. *Council:* Dr. D. D. Donovan; Dr. O'Connor, junr.; Dr. C. A. Harvey; Dr. E. Finn; Dr. O'Connor, senr., and Dr. E. R. Townsend. *Honorary Treasurer:* Dr. T. G. Atkins. *Honorary Secretary:* Dr. J. Cotter.

REVIEWS AND NOTICES.

CHAPTERS IN THE HISTORY OF THE INSANE IN THE BRITISH ISLES. By D. HACK TUKE, M.D., F.R.C.P. London: Kegan Paul, Trench, and Co. 1882.

THIS work forms an interesting book upon a most important subject. Of Dr. TUKE's ability to deal with such a matter, there is no need to speak; and there is hardly, we should hope, any greater need to insist upon the importance of the better understanding, not by professional men only, but by all citizens, of the history and present position of the questions affecting the insane. It is singular to think how recently many things, now so familiar to us that we think them self-evident, have come to be recognised even by the most advanced and enlightened sections of society. We are shocked when Dr. Tuke relates how the eminently high-minded, rational, and humane statesman who wrote the *Utopia*, calmly takes credit for having publicly whipped a lunatic—not as a punishment, but as a simple and natural curative measure, and, indeed, a work of charity. It seems amazing that, in the far more recent days of the Lunacy Commission Reports, the horrors of the then Bedlam should have been possible; still more, that they should have found their apologists. But, in truth, these things are not so strange. For before a new truth is announced, and brought to the clear light of proof and practice, almost any amount of error may be natural. The most preposterous fancies often seem self-evident to the ablest men, for generations together, in the absence of the one master-key, the pregnant idea that solves the problem.

Of nothing is this more true than of the history of insanity. Until the possibility of a humane treatment had been shown, and the recognition of madness as a disease had become general, nothing was too absurd to say or do about a subject so anomalous. It is well, therefore, to be reminded by such books as Dr. Tuke's, how great a change has happened, and how recent the new system is; and also how incomplete is still the application in detail of those new principles which no educated man would now question in theory. The truth is, that the social importance of the difficulties which surround the whole subject has been obscured by the unwillingness of individuals to bring their family skeletons before the public. It is only by chance, or in some very extreme case, that public opinion is appealed to; and, of course, those who are most vitally concerned—the more or less insane patients themselves, or those accused of insanity—are by their position rendered helpless. A man who is certificated can hardly complain; and even if he be not certified to be mad, but only suspected, his very efforts to appeal to the public may often bring him only into greater danger. But perhaps a more terrible difficulty than either lies in the vulgar *fear* of the insane, both as individuals and as a class. It is this sentiment which leads many, otherwise merciful men, to see nothing very disastrous in the verdict of guilty pronounced upon some wretch accused of serious crime, whom every competent medical man would send to an asylum.

All these obliquities of social vision are very serious, and it behoves us to call attention to them with a view to further effectual reform. A special duty obviously lies upon the medical profession in this matter. It is in great part dependent on the lawyer for practical execution, both in the administration of justice and in legislative enactments. But lawyers will always be wrong on such points, until doctors have converted, not only legal, but general public opinion. It is natural that the law should be conservative in so difficult a case; but the conservatism can be overcome. When "common sense" is clear upon the subject of insanity and irresponsibility, the law will follow it.

The greater part of Dr. Tuke's present treatise is historical. In his introductory chapters, he brings together a collection of curious notices of the insane and their treatment prior to the days of "Bedlam," among which it is interesting to note that the author of the *Vision of Piers Ploughman* was one of the few who spoke kindly of the wandering lunatic or idiot beggars that were then a feature in rural life. After the first foundation of the "Hospital or Priory of the Order of Bethlehem" in 1247, about a century and a half appears to have elapsed before it became an asylum for lunatics, and even then it received only very few. It was 1632 before the governor was a medical man. From that time onwards, there was always a medical superintendent; but, from the evidence given by Dr. Munro at the Committee of 1815, the patients would have been as well without the "medical" treatment provided. "Patients," he said, "are ordered to be bled about the latter end of May, according to the weather; and after they have been bled, they take vomit

once a week for a certain number of weeks; after that we purge the patients. That has been the practice invariably, for years, long before my time. It was handed down to me by my father, and I do not know any better practice."

Every one will agree with the praise which Dr. Tuke bestows upon the wise and generous founder of the York Retreat in 1792. As an example of sagacious benevolence, and of the immensity of the results which one man's earnestness can bring about, it has few parallels. The revolution in treatment is almost inconceivable to those who have been trained to accustom their minds to better systems than any one dreamt of in the end of the last century. We cannot refrain from quoting one pathetic anecdote.

"A patient was admitted who had nearly lost the use of his limbs from being chained, and for some time it was necessary to lead him about like an infant. He was found to require no restraint, and was after a while able to walk without assistance. When one of his friends visited him, and asked him what he called the place, he replied, with great earnestness, 'Eden, Eden, Eden!'"

For the weary history of the early attempts at plainly necessary legislation, and the shameless opposition by which they were obstructed and defeated, until another generation of men had grown up under the miseries of the old abuses, we must refer to Dr. Tuke's pages. They are a warning to those who have any share in forming public opinion, that our successors, fifty years hence, may be forced to regard as very brutal the opponents of many reforms which now are thought startling or unimportant, and are hindered by the natural inertia of the British mind. It will be an occasion of very cynical comment for future historians of the English Parliament, that, notwithstanding the revolution established by the York Retreat, and the hideous disclosures of the Commission of 1815, it was 1845 before any really effective measure for the regulation of private and Poor-law asylums was allowed to become law.

Dr. Tuke's chapter on the criminal lunatics at Broadmoor is very important, and we commend it to our readers; as also that which follows on the lunacy jurisdiction of the Chancery Court. It is a fact worth prominent notice, that, although the ratio of those found insane to the prisoners tried has risen from $\frac{1}{3\frac{1}{2}}$ in 1836-48, to $\frac{1}{1\frac{1}{4}}$ between 1862-74, yet the average of those who appear at Broadmoor not to be really insane has always been, and still remains, extremely small. There are also special sections relating to Scotland and Ireland; and the author's presidential address to the Medico-Psychological Association, upon "The Progress of Psychological Medicine during the last Forty Years," is reprinted as the concluding chapter of this admirable and most interesting book.

LECTURES ON THE LOCALISATION OF CEREBRAL AND SPINAL DISEASES, Delivered at the Faculty of Medicine of Paris. By J. M. CHARCOT, Physician to La Salpétrière, etc. Translated and edited for the New Sydenham Society by W. B. HADDEN, M.D. Pp. 341. London: 1883.

THE New Sydenham Society has been well advised in presenting to its readers one of the most important neurological works which have appeared of late years, soon after its publication in France. We might be accused of carrying owls to Athens if we were to say much in praise of M. CHARCOT'S researches on the pathological anatomy and clinical history of the diseases of the nervous centres; yet we cannot help stating that the present work is one which marks an era in the history of the subject of which it treats, and which will live, and be consulted again and again, when many bulkier and more comprehensive treatises on the same subject will hardly be remembered by name. It is not that the present work contains any new discoveries which are here presented to the profession for the first time; on the contrary, it may be said that those who have followed the literature of this subject up to the present, will not be startled by any new or unexpected facts or theories; but the book contains, in singularly simple and beautiful language, the ripe results of steady original work, both at the bedside and in the deadhouse, carried on for a lifetime by one of the acutest thinkers, and most unprejudiced and wary observers of the present generation.

M. Charcot has done a great deal of original work in various departments of medicine, and it has occasionally seemed to his friends and admirers, that some of the subjects which he had chosen for investigation were hardly worthy of his powers. Such a remark, however, could not by any possibility apply to the matter of the present work, which deals with the highest and most important problems of pathology; and we may justly say that, by the manner in which these have been dealt with, the author has constituted for himself a *monumentum ære perennius*.

This being so, we confess to some disappointment that the translator should not have left the book entirely as it was. In a case like the present, we should have conceived it to be the translator's duty to efface himself completely, and to let the great French master speak to us alone, only in a different tongue. The *Translator's Preface* we consider to be entirely out of place, and it jars on our nerves. It consists of three different parts, the first of which gives an outline of Ferrier's and Gerald Yeo's experiments on the relations of the angular gyrus and the occipital lobes to vision; the second part treats of a case, which was said to be one of locomotor ataxy, but unfortunately no further clinical history could be obtained, and in which the translator made a *post mortem* examination; the third and last part gives some recent views of Dr. Horrocks and others on the tendon-reflexes. We should be glad to see this part excised in a subsequent edition; otherwise the translation is tolerably good. Some blemishes, such as the use of the word "observation" for a written "case" (pp. 326 *et seq.*), "decomposing" instead of "dissecting" (p. 39), "each" instead of "either" (p. 84), etc., should be removed were another edition called for. It should also be mentioned that the plural of poliomyelitis in English is not "poliomyelites" (p. 312), as it is in French, but "poliomyelitides."

The book consists of two parts, the first of which (pp. 1 to 146) is devoted to cerebral, and the second (pp. 147 to 316) to spinal localisation. An appendix (pp. 317 to 336) contains some further information on amyotrophic lateral sclerosis. Eighty-nine woodcuts are added to illustrate the text,

The first three lectures give a succinct and clear account of the anatomical and histological features of the brain, and more especially of its cortex. In the fourth lecture, a parallel is drawn between spinal and cerebral lesions, the fundamental difference between the two being that the spinal cord is principally subject to the so called system-lesions, or elementary affections, such as infantile paralysis, in which the lesion is confined to the grey horns; and locomotor ataxy, where the posterior columns are invaded, etc.; while in the brain such system-lesions are absent, or nearly so, and "it is the vascular system which governs the situation." The medulla oblongata forms, as it were, the transition between the spinal cord and the brain; for, on the one hand, system-lesions are found there analogous to those seen in the cord; while, on the other hand, hæmorrhage, thrombosis, and embolism, which are the chief vascular lesions of the brain, are by no means rare. The next four lectures are devoted to a description of the arterial circulation of the brain, without a thorough knowledge of which it is impossible to understand the pathological changes which take place in the different portions of it.

The author, after these preliminary expositions, plunges *medias in res*, and gives, in short and pithy language, a number of the most important results at which he has arrived with regard to the regional pathology of the nervous centres. Lesions limited to either of the grey central nuclei without implication of the internal capsule, cannot at present be recognised by special clinical features. Hemiplegia consequent on circumscribed alterations of the grey nuclei is generally transitory, *i.e.*, defined, non-persistent, and comparatively mild. Lesions of the internal capsule, on the contrary, usually give rise to the marked and persistent form of cerebral hemiplegia, even when of very inconsiderable size. Where the lesion involves any part of the anterior two-thirds of the capsule, there will be motor paralysis only, and no permanent disturbance of sensation; while, if the posterior third of the posterior segment of the capsule be affected, cerebral hemianæsthesia will be the result. More frequently the lesion being situated, as it were, on mixed ground, the sensory disorders are accompanied by more or less pronounced hemiplegia; but cerebral hemianæsthesia may be the only permanent symptom, where the most distant and posterior parts of the capsule alone are definitely affected. For the proof of these propositions, which are of capital importance in cerebral pathology, the reader must be referred to M. Charcot's volume.

The next two lectures are occupied with a further discussion of cerebral hemianæsthesia, crossed amblyopia, lateral hemiopia, and the origin of the cerebral parts of the optic nerves. The author then takes up the important chapter of secondary degeneration, or descending sclerosis, in the investigation of which L. Türck of Vienna was the pioneer, and which was subsequently most carefully studied by Charcot and Vulpian; the general result being, that the nature of the pathological lesion has no marked influence in producing that change, which is, on the contrary, chiefly determined by the seat and extent of the lesion.

The second part of the volume is occupied with spinal localisation, the principal subject treated being the anatomy and physiology of the pyramidal tracts. The first three lectures of this part give a topography of the spinal cord, more especially of the pyramidal strands and their development in the fœtus, as well as their relations in the crus cerebri, the internal capsule, and the centrum ovale. The author thus considers the secondary degenerations to which the pyramidal strands are liable in the crus cerebri, pons Varolii, medulla oblongata, and spinal cord, as well as the exceptional degeneration of the internal fasciculus of the crus, and the division of the latter into three separate regions. These subjects were for a long time considered as simply interesting in a scientific point of view, while it has now been shown that they are also of considerable practical importance, more especially for prognosis. After fully describing the secondary degenerations of cerebral origin, the author reverts to those of spinal origin, with chief regard to compression of the cord in Pott's disease. The compressing agent in such cases is the thickened dura mater, which becomes inflamed through being in contact with caseo-tubercular deposits derived from the bodies of the vertebræ. At the seat of the compression a reaction of an inflammatory nature is established, a transverse myelitis, which involves indiscriminately the grey matter and all the white columns of the affected region. The same change occurs apart from Pott's disease, whatever may be the cause of the compression; hence cancerous and sarcomatous tumours and psammomata, arising primarily outside the spinal cord, are liable, as they increase, to cause transverse myelitis by compression, with all its consequences; and the intraspinal tumours, such as gliomata, syphilomata, and solitary tubercles, syphilitic, traumatic and other forms of myelitis, will produce the same result, provided that there has been a total transverse lesion. The mode of development and the system-lesions of Goll's and Burdach's columns, constituting together the white posterior columns, are then discussed.

Of special interest to the practitioner will be found the clinical description of the symptoms which are referable to the secondary degenerations, amongst which late rigidity and tendon-reflexes are conspicuous.

The work finishes with lectures on transverse myelitis and spasmodic tabes dorsalis, spinal amyotrophies, and localisations in the grey matter of the cord. In this last chapter, the author enters into the pathology of acute protopathic spinal paralysis in infants and adults, of subacute anterior poliomyelitis, which corresponds to the affection described by Duchenne as subacute anterior general spinal paralysis; and lastly, of chronic systematised anterior poliomyelitis, as represented by that form of amyotrophy which Aran and Duchenne have described as progressive muscular atrophy, and Roberts as wasting palsy.

From this brief summary of the contents of Professor Charcot's lectures, it will be seen that these do not by any means constitute a complete treatise on the pathology of the brain and spinal cord; nor has it been the intention of the author to write such a book. Their chief merit for the student and practitioner consists of the forcible manner in which the most important and elementary facts in cerebral and spinal pathology, to the elaboration of which the author has himself contributed so much, are put forward, so as to impress themselves deeply on the mind of the reader. Charcot's volume is a book to read and re-read for all of us—a task much facilitated by the charms of a style which are unfortunately somewhat dimmed by the not altogether adequate English garb in which they have been clothed.

AN ADDRESS ON SCOTTISH MEDICAL TEACHING, ACADEMIC AND EXTRA-ACADEMIC; delivered at the Glasgow Western Medical School, November 12th, 1882. By D. C. McVAIL, M.B., Lecturer on Practice of Physic.

THIS is a reprint of an introductory address read at the opening of the Extra-academic Western Medical School of Glasgow. It is singular in its subject-matter—the history of medical teaching primarily in Glasgow and Edinburgh, and cursorily in the other Scottish Universities. It is from this special and distinctive feature that this introductory lecture stands apart from similar annual productions of the schools, and derives what value it possesses; and, as few of us have any acquaintance with the rise and growth of medical education in Scotland, this pamphlet will be read with interest and instruction. A review of the main facts recorded in it may not be out of place in these columns.

To Edinburgh belongs the honour of initiating medical teaching in Scotland. This was in 1505. It was no act of royal patronage or policy, but the outcome of the revival of science, letters, and art, which characterised that era, which had reached the town council of the city; and as these were the days of guilds and corporations, the attempt to improve the art and mystery of medicine was the institution of a corporation, consisting of the recognised surgeons and barber-surgeons of the city, who were declared the only legal practitioners, and the distributors of future licences, to be acquired by due apprenticeship to them, and the acquisition of the civic status of freedom. Moreover, an examination was required as a test of proficiency; and to secure anatomical teaching, one victim of the hangman was annually delivered up to the corporation for dissection.

This annual contribution to the zealous anatomists of Edinburgh appears to have sufficed until a Mr. Alexander Monteath, a member of the guild, in 1694, contrived to convince the town council that a more liberal supply of "subjects" would be advantageous to the learners of anatomy. The next step taken was the erection of a suitable theatre for the public dissections and the operations; and this, again, was followed by the appointment of a professor, in 1705, the honour falling to Mr. Robert Elliott, who was to receive £15 *per annum* for his anatomical demonstrations and for the charge of the "rarities in the colledge," and for drawing up an inventory of the same.

The "colledge" here referred to was the progenitor of the University of Edinburgh, which started into existence in 1582, in conformity with a royal charter granted by James VI, who, however, allotted it the name of King James's College. But the anatomy school of Elliott was not merged in the Royal College, and for several years the professorship of anatomy was a joint office, and the Surgeons' College worked harmoniously with the newer institution, but was under the more immediate control of the town council.

The dual character of the arrangements for medical teaching had an inherent weakness; and as time went on, the College of Surgeons and the University were not always in harmony. The former institution was erected into a Royal College in 1778; and, in 1790, the two colleges were finally estranged, chiefly on account of the celebrated John Bell having begun to teach anatomy in opposition to the University authorities. The work started by Bell grew rapidly, and out of it arose the extramural school of the College of Surgeons.

In 1726, the then existing body of professors was empowered to grant degrees in medicine by the sole authority of the town council; but it was not until 1767 that a certain curriculum of education was required of those who presented themselves for degrees.

To the town council of Edinburgh, Dr. McVAIL gives great credit. He represents it as the originator of medical education, as its promoter, and diligent and judicious regulator, and as the successful opponent of attempts at a monopoly of education made from time to time, especially on the part of the University.

To now turn to Glasgow; it was not until 1599 that medicine was placed on a recognised footing as a profession. In that year, James VI founded by charter the Faculty of Physicians and Surgeons of Glasgow, at the instance of Peter Lowe, one of His Majesty's surgeons. At this time, Glasgow had a population of only seven thousand, and the rights and jurisdiction of the new foundation were limited to the city and "barony." The candidates for its licence were required to serve an apprenticeship of seven years, and to pass an examination at the end of the third, the fifth, and the seventh years; the final examination being made to a considerable degree a practical one. The Faculty very soon assumed the functions of a teaching body, and appointed teachers in medicine, surgery, and pharmacy, unhappily ignoring anatomy.

The University of Glasgow had entered into existence in 1450, but its medical department exhibited no vitality until nearly the middle of the eighteenth century. In 1744, the celebrated Dr. William Cullen commenced to teach medicine in Glasgow, first as an extramural teacher, and afterwards as an University professor. He subsequently, in 1756, migrated, as is well known, to Edinburgh. Another distinguished man, John Burns, commenced an anatomy class in 1799, and by his efforts and reputation an important extramural school arose in rivalry of the University. That Glasgow has not acquired the position of Edinburgh as a seat of medical education, Dr. McVail attributes to the monopolising spirit and action of Glasgow University. It has always endeavoured to suppress extra-academic teaching; and, indeed, so recently as 1875, refused to accept certificates of attendance of lectures given outside its own walls, and issued regulations for its degrees most adverse to other medical schools than its own. To substantiate his argument, th

writer is able to quote the enlightened opinions of the late Dr. Andrew Buchanan; and as a further exemplification, he contrasts the condition of the Faculties of Medicine in the Scottish universities with those of Arts. He points to the vast success of medical education, particularly in Edinburgh, where it has been unimpeded for a long period by monopoly, and then to the non-success and small reputation of the Art Faculties in the same universities, compared with what is found in England; and the cause of this he finds in the monopoly of teaching still retained in respect of the most important chairs. In consequence, Dr. McVail looks forward hopefully for reform to the appointment of an Executive Commission, alluded to as a Government proposal by Lord Roseberry in his address delivered not long since in Edinburgh.

The foregoing summary of the lecture by Dr. McVail suffices to show that, within its brief compass, he contrived to introduce much interesting and valuable information.

THE SYSTEMATIC TREATMENT OF NERVE-PROSTRATION AND HYSTERIA. By W. S. PLAYFAIR, M.D. London: 1883.

THE system of treatment for nerve-prostration and hysteria advocated by Dr. PLAYFAIR has become very generally known through the pages of the medical press, but the reprint of the papers now before us will be hailed with satisfaction by the profession, as placing the matter in a more convenient form; and it may be added that, in thus re-issuing his contributions, the author, so to speak, sets his seal to them, and appends, moreover, some additional notes, the result of further experience.

The haphazard cures of hysterics at hydropathic establishments and retreats for nervous patients, which have largely made the reputation of such institutions, have been due to the operation of one or more of the therapeutical proceedings which are now reduced to a systematic form and recommended to us on rational and physiological principles. The partial recognitions and conceptions of previous experimenters have been brought together and systematised; and Dr. Playfair does not fail to insist upon the claims of Dr. Weir Mitchell in initiating this beneficial proceeding. The record of recovery of apparently hopeless cases of hysteria is most encouraging; and whilst, on the one hand, the system in question relieves the practitioner from the position of apparent helplessness when dealing with long-standing inveterate nerve-prostration, it likewise, on the other, reduces the area for quackery and fraud.

NOTES ON BOOKS.

Kallos: a Treatise on the Scientific Culture of Personal Beauty and the Cure of Ugliness. By a Fellow of the Royal College of Surgeons. (Simpkin, Marshall, and Co.)—This is a manual of deportment, and what may be called self-culture, the self that is to be cultured being material, not mental and moral. It contains a kind of popular anatomy of beauty. The author attempts to describe the normal, the beautiful, and the ugly forms of each feature and limb; to explain the causes of difference of form in different individuals, and to give directions, medical and hygienic, for the improvement of the ugly or unhealthy appearances which mar the limbs, bodies, and faces, of many mortals. The entire manual is written in a pleasant and very readable style, repaying perusal even if undertaken only for curiosity. Several subjects which the author has introduced are not very easy to handle, yet he has treated them, on the whole, with delicacy; others are very intricate, even when discussed professionally by the anatomist or the artist. But it would be ungracious to criticise severely a work where the topics range from rickets and hypertrophy to what are conventionally known as "æsthetics." The author informs us, in his preface, "that this book is chiefly intended to excite the interest, and add to the information, of the *public*;" and the italics are not our own. We feel confident that he will succeed in his object.

Case of Radical Cure of Inguinal Hernia: Approximation of the Pillars of the Ring by Means of Chromicised Catgut: Recovery. By JAMES WHITSON, M.D., F.F.P. and S.Glasgow.—It is satisfactory to find that surgeons generally are becoming alive to the fact that an operation for the cure of hernia is not only justifiable, but, under certain circumstances, obligatory; and every surgeon who has in his matter the courage of his convictions is entitled to credit. But in reading a pamphlet like this, it occurs to us most forcibly that if the author had the sentiment of modesty well developed, such a narrative would not have come under our notice. There is, unfortunately, a growing, and we think a mischievous, tendency on the part of young surgeons to publish individual cases, and to deduce from them general conclusions of very imperfect accuracy. Such an one is the present, in which the writer first assumes what is not correct, "that surgeons have generally been in the habit of using silver wire, in order to obtain a permanent approximation of the pillars of the ring;" and next proceeds to speak of chromic catgut as a novel mode of dealing with such cases. It is scarcely necessary to say that numerous surgeons have already recorded the results of treatment with various kinds of animal ligatures in this class of operations, based upon their experience in a large number of cases; and the conclusions from them differ from that drawn by Dr. Whitson from his solitary instance. Exception must be taken also to the statement, that in the case here recorded the patient was, in less than five weeks after operation, "cured." More cautious surgeons would have been content to wait at least a year before making such a statement; and we would advise young surgeons to consider the rule which bids them to refrain from publishing premature results, which may possibly bring discredit on a good cause, and defeat the object they have in view.

The Rudiments of Cookery; With Some Account of Food and Its Uses: A Manual for Use in Schools and Homes. By A. P. M., Examiner to the Northern Union of Training Schools for Cookery. Liverpool: Adam Holden. London: Simpkin, Marshall, and Co.—In this little book, a great deal of useful information is given in a small compass by a writer who appears to have a deep interest in, as well as practical knowledge of, her subject. The form in which it is given—that of question and answer—is always attended with serious drawbacks, though we are ready to admit, on the other hand, that, in these days of cramming and competitive examinations, it has also very definite advantages. Indolent students, spite of the warning in the preface, will persist in learning the questions and answers by rote. Now the peculiarity of lessons in domestic economy is, that they alone of all school-lessons are immediately practicable in every-day life, and the problems of life, even if they be of no loftier interest than the correct boiling of a pudding, invariably appear from an unsuspected quarter. Domestic problems are, in reality, very few, but the modes of presentation are infinitely varied; the question-and-answer method is the exact converse of this. With this exception, the faults are chiefly those of omission. We should have been glad to see a few more questions on the value of whole meal, of the pulses, on the joints of meat best suited for the poorer classes, for whom the book was presumably written, and on the necessity for fresh fruits and vegetables in our daily diet. For this we would gladly sacrifice the few receipts at the end of the book, which do not appear to be very novel, or particularly characteristic.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

WHEELER'S PIXENE.

INTRODUCED BY MR. J. WHEELER, ILFRACOMBE.

PIXENE is a purified extract obtained from *pix liquida* or pine tar. It is a clear, cleanly, transparent fluid, having a powerful but rather agreeable odour. On the addition of water, it forms an emulsion which may be used for disinfecting purposes. It is destitute of toxic properties, and exerts no corrosive action on the skin. Used in the form of an inhalation, it would probably prove useful in cases of bronchial catarrh and chronic bronchitis. The "pixene" soap is a white, antiseptic, and peculiarly agreeable toilet soap, very soothing, and likely to be widely acceptable and useful.

BARFF AND WIRE'S KREACHYLE.

THIS is a preparation of which the mode of manufacture is not stated. It is said to contain all the albumen of meat, and to excel beef-tea and all known extracts and essences of meat. It is not necessary to warm it, and it is best taken alone, without the addition of water. It is fairly palatable, and we know of instances in which its administration has been attended with considerable benefit. In cases of great debility of the digestive organs, it certainly deserves a trial.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 23rd, 1883.

THE MEDICAL ACT AMENDMENT BILL.

No medical bill has ever been laid before Parliament which has secured such general support as the Medical Bill of the present Government, which has passed through the House of Lords, and which now awaits its second reading in the House of Commons. Universal praise has been awarded to it by the leading organs of the daily press, and by legal periodicals. The Royal College of Surgeons of England has foregone its early opposition, and is now decidedly in favour of it. Petitions in its favour have been presented to the House of Commons from medical practitioners in Brighton, Rochester, Chatham, the Tower Hamlets, Wrexham, Norwich, the Isle of Wight, Carlisle, the Thames Valley District, Hertfordshire, Tunbridge Wells, Chelsea, Essex, Marylebone, Cardiff, Dover, Newcastle, Faversham, Kent, Maidstone, Eastbourne, Hackney, Middlesex, Leeds, Southwark, Chester, and Westminster; one petition alone being signed by upwards of 1,100 registered medical men. Petitions have also been presented in favour of it from the Council of the Leeds School of Medicine, from the medical and surgical staff of the Leeds General Infirmary, from the professors and lecturers of the Medical Department of Owens College, Manchester, from the Medical Faculty of University College, Liverpool, from the Manchester Medico-Ethical Association, from the Aberdeen Medico-Chirurgical Society, from the Council of the Metropolitan Counties Branch of the Association, from the President and Council of the South Eastern Branch, from the President and Council of the Birmingham and Midland Counties Branch, from the President and Council of the North of England Branch, etc., and from the Council of the British Medical Association, when every member present at the numerously attended meeting in Birmingham, on the 17th May last, signed the petition. The Council of the Lancashire and Cheshire Branch presented a petition in the early part of last month; and, in proof of their having thus acted in accordance with the views held by the members of the Branch, which numbers nearly 900 members, the report presented and unanimously carried at the annual meeting of the Branch in Manchester on Wednesday, the 13th instant, referred to the Medical Bill as one of the subjects which had specially engaged the attention of the Council since the last annual meeting, and stated that every legitimate means had been used to induce members of the legislature to support the Medical Bill. In addition to this striking evidence of support, the leading medical journals are unanimous in earnestly promoting it. Members on the front Opposition Bench are also willing — nay, anxious, to assist its progress through Parliament, and such general concurrence of support to any measure has rarely been experienced. In reply to Lord Randolph Churchill, the Prime Minister stated that the Bill was the result of very great labour, and would, he believed, have a favourable reception in the House, and he looked forward to its becoming law during the present session.

There can be no doubt that Lord Carlingford and Mr. Mundella are both in earnest in their desire to proceed with the Bill, and to avail themselves of all the facilities which the goodwill of their chief may be able to grant them; but, unfortunately, the House of Commons does not work smoothly, and does not appear disposed to promote the despatch of any business, and the prospect of the Medical Bill becoming law is not as clear as is the importance of the measure to remedy the scandal at present existing in the granting of licences. It is not asserted that the Bill is perfect, but it is, notwithstanding, the best basis that has yet been offered by any Government for the settlement of the difficult questions involved in the education and examination of the medical practitioner, due regard being had to the existing privileges acquired by corporations and universities, and account being taken of the powerful parliamentary influence which they are able to command. The opposition which all attempts to control these bodies encounter, shows that no private member could fail of defeat; and the fact that two powerful governments have been driven to abandon Bills which they had carefully elaborated should, if the profession desire any progress in the settlement of the question, teach them that they ought to do what they can to help the passing of the present Bill by urging every member of parliament within their influence to vote for the second reading, reserving amendments for its stages in committee.

That very few things can be said about medical reform which will not excite controversy, has been abundantly shown during the several years that the subject has been under consideration. Many well-meaning persons have not hesitated to rush in with crude suggestions, in utter ignorance of the inherent difficulties which beset the subject, and unaware that their views have long since been condemned as impracticable or unattainable, although perhaps abstractedly desirable. Sometimes opinions are too hastily formed on erroneous data. The report of the annual meeting of the East Anglian Branch records that a motion was, after lengthened discussion, carried, "protesting against the action of the Parliamentary Bills Committee of the Association, in proposing that no man be entitled to have his name entered on the *Medical Register* as a registered medical practitioner unless, in addition to the licence of the General Medical Council, he shall be attached subsequently to one of the universities or medical corporations, and be authorised to register the title so acquired." With regard to this resolution, it must first be observed that the Parliamentary Bills Committee has carefully abstained from all interference with the subject of medical reform, which the Association has always confided to a specially appointed committee, styled the Medical Reform Committee, holding office directly from the Association, and annually re-appointed. Secondly, the Medical Reform Committee, in receiving its mandate from the Association, obtains definite instructions to guide its action; and as long as the Committee acts in accordance with these instructions, any Branch which arraigns the Committee for carrying them out is wanting in loyalty to the Association, and, so far as its influence extends, weakens the force and power of the Association as a united body. Thirdly, the Medical Reform Committee has not made any proposal of the kind indicated in the resolution of the East Anglian Branch, but has simply, in obedience to the mandate of the Association, imposed on it at the last annual meeting, memorialised the Government to introduce a Bill based on the report of the Royal Commission on the Medical Acts; and in response the Government have framed and carried through the House of Lords the Bill now before the House of Commons, which has received very general support on the part of the Association. The composition of the Medical Reform Committee, which has contained all the chief officials of the Association, besides several past presidents, all men versed in the work of the Association, may be considered a guarantee of faithfulness to the trust confided to them. Fourthly, the Bill does not enact that "no man shall be entitled to have his name entered on the *Medical Register*, as a registered medical practitioner, unless he shall be attached subsequently to one of the universities or medical corporations." On the contrary, the Bill specially provides that as soon as he has passed the examination of the

Medical Council, his name shall be entered on the *Register*, whether affiliated or not to any medical corporation, and every man on the *Register* will unquestionably be a registered medical practitioner, even if nothing else.

There has been and still is a strong party in favour of the so-called "compulsory affiliation;" but the present Government, strengthened by the report of the Royal Commission, are in a more commanding position than the late Government, and have given that party no encouragement. We again conclude with an urgent call to the members of the Association earnestly to support the Government, and to do all in their power to push forward legislation during the present session.

THE SURGICAL ARRANGEMENTS AT THE BATTLE OF TEL-EL-KEBIR.

IT is of interest to examine into the arrangements that were made for supplying the necessities of the wounded on the occasion of the fight at Tel-el-Kebir—the crowning action of the late Egyptian campaign—on account of the disparaging remarks regarding them that have been made in some quarters. It is not easy to gather, with precision, either from the report of the Committee, or from the evidence attached to it, all the details of the surgical arrangements. It is stated in the report that, on the eve of the battle of Tel-el-Kebir—that is, on September 12th—there were at the front near Kassassin, the whole of No. 1, and the greater part of No. 2 Bearer Company, together with two and a half movable field-hospitals. When, at 1.30 A.M. on the morning of the 13th, the First and Second Divisions of the British part of the force advanced from their positions near Kassassin towards the enemy's works, the two bearer-companies marched with them. The Indian Contingent, which did not commence its move in the same direction until an hour later, was followed by the native bearer establishments which had accompanied it from India, with the exception of a part which had been temporarily lent to the home portion of the force. These establishments comprised, in round numbers, 1,500 native bearers, carrying 69 covered litters for the carriage of wounded (doolies), and 219 litters for the same purpose, but without covers (dandies). The Indian Contingent had also three light field-hospitals, one in the European part of the force, and two for the native troops.

While the bearer-companies were moving with the troops towards the enemy's entrenched position at Tel-el-Kebir, detachments from two of the field-hospitals at Kassassin were forwarded by boats, with the view of forming an advanced hospital at a point on the canal as near as possible to the lines of Tel-el-Kebir. These detachments succeeded in taking up a position near a dam which had been placed across the canal at a point where it intersected the enemy's works. Here was formed what by some was called the dressing-station by the canal," by others the "field-hospital' at the canal. The position was as near as possible to the scene of conflict. At the same time that these means of assistance were in close connection with the attacking force, preparations were made for the reception of the wounded in the field-hospitals at Kassassin; while at the base of operations, at Ismailia, all the patients who were in a fit condition for removal were transferred from the stationary Palace field-hospital, and from the hospital-ship *Carthage*, to the transports, so as to provide all necessary accommodation for the wounded in these hospitals whenever they might arrive from the front. The naval authorities made arrangements for conveying the wounded from the dressing station or advanced field-hospital, near the Tel-el-Kebir dam, by the canal route to Kassassin Lock, and thence downward to the base; while the railway authorities made similar preparations for the conveyance by train of such of the wounded from the front as might appear best able to bear that mode of carriage. The committee of inquiry reports, in the course of the few observations it has made on the arrangements for the battle, that "it would have been impossible to devise a more favourable method for transporting wounded men in any circumstances;" and, on a consideration of the whole of the plan of assistance, not only as regards the transport of the wounded, but also as regards their care and treatment, it seems, after the event, to have been as good as could have been framed beforehand for supplying the needs which the engagement actually produced.

According to the official despatches, the entrenched position of the Egyptian army at Tel-el-Kebir was assaulted a little before sunrise on the morning of the 13th, and the enemy, completely surprised, after a short resistance, was entirely put to the rout. The fighting is reported to have been at an end by 5.35 A.M. The evidence given to the Committee shows that the bearer companies were at work on the field from the time the first shot was fired, and that all the wounded of the British force were picked up and carried to the dressing-stations by about 9 o'clock A.M. The contingent of Indian dhoolie-bearers (of whom 411, with 65 dhoolies, were attached the day before the battle to the British part of the forces, and 384, with 96 dandies, on the morning of the fight) joined with the men of the two bearer-companies, and rendered invaluable aid in transporting the wounded from the field to the dressing-stations and to the canal. The Surgeon-General had, at an early hour of the morning, given orders to a party of the Indian dhooley-bearers to bring all the wounded they picked up to the dressing-station by the canal. Its position was distinguished by a flag. It seems to have been by no means a simple dressing-station, but to have had all the essential qualities of a field-hospital. Deputy Surgeon-General Marston, who was in charge of it, states, in his evidence before the Committee, that it was able to provide all that was necessary for the treatment and feeding of the wounded. At first, there were two tents which were obtained from a camp near at hand that had been deserted by the enemy, but afterwards about twenty-five tents were pitched. These tents had been brought up with the stores and equipment that had been conveyed early in the morning by the flotilla of boats from Kassassin. A cooking-place was established, food was prepared, and men were told off to supply at regular intervals the wounded with nutriment. Wounded men reached this field-hospital about half-past seven, or a little later, in the morning; and from this time they continued to arrive, first, those who were brought direct from the field, some in dhoolies, some on stretchers, some carried on mule-litters and cacolets, and, subsequently, other wounded men who had already received some preliminary attention at the dressing-stations formed by the bearer-companies. The cutters and horseboats by which the equipment for this field-hospital had been brought up the canal were littered with hay, awnings were placed over them, and, at noon, 58 of the wounded Europeans were carried from the field-hospital, and, without removing them from the stretchers, were laid upon the hay at the bottom of the boats. They were placed under the charge of a medical officer, and the boats were then towed down the canal to the hospital-station at Kassassin Lock, where there was an abundance of ice, champagne, and all the usual sorts of nutriment proper to be given to such patients, together with any surgical appliances that might be wanted beyond those which had been carried up to the advanced field-hospital at the Tel-el-Kebir dam. The boats returned from Kassassin and arrived at the advanced field-hospital about six in the evening, when the remainder of the badly wounded were taken away by them. The less severely injured were removed by the railway. Altogether, close upon two hundred European wounded were attended to at the advanced field-hospital in the course of the day, and about the same number of Egyptians.

The Committee state in their report that "the field hospitals and bearer-companies were embarrassed by want of transport," and it appears from the evidence that the stores and equipment of one of the field-hospitals that was moved from Kassassin to Tel-el-Kebir were actually carried by the dhooly-bearers in dhoolies and dandies

from want of the means of transport, that is, in conveyances specially contrived for the carriage of sick and wounded men, and really unsuited for any other purpose. This was a misapplication of these appliances, that nothing but a necessity of extreme urgency could justify. The deficiency of suitable means of transport might have created serious difficulty in the working of the bearer-companies, and have occasioned great delay in removing and attending to the wounded, had the action not been as brief, and the victory as complete as they were at Tel-el-Kebir, had the circumstances of the battle, in short, been what they have been in numerous instances in the course of recent campaigns in India as well as in Europe. A summary of the hospital establishments provided for the troops of the Egyptian expedition is given in the appendix to the Report of the Committee, and it is there shown that two bearer-companies, with mountain equipments, one for each division of troops, were the establishments provided for the service of the first line of surgical aid. We are referred to page 186 of the Army Medical Regulations, for an account of the composition of these bearer-companies. We there find that a bearer-company with mountain equipment, that is, a bearer-company whose stores and means of carriage of sick and wounded are conveyed on the backs of pack animals instead of being carried in wagons and carts—comprises a staff of 11 officers, eight of whom are medical officers, 36 men of the Army Hospital Corps, 106 bearers and batmen, 50 muleteers, and 10 other men of the Army Service Corps. The animals allotted to the bearer-company are 115 in number, of which 15 are riding-horses for officers and non-commissioned officers, and 100 are pack-mules. Of the latter, 76 are for the carriage of patients on cacolets and litters, two for the operating-tents, two for two pairs of field-panniers containing surgical appliances, four for water-bags, 11 for the carriage of camp-equipment, and five are spare mules to replace casualties. The regulations state that if the mules are untrained, as from the evidence those which were supplied in Egypt appear to have been, double the number of muleteers will be required, so as to allow one man to each mule; and if tents are carried for the officers and men, a further addition of pack animals for their transport is to be supplied. It is not possible to determine with precision from any part of the report, or the appendix to it, how far this regulated scale of establishment was furnished to the two bearer-companies.

At page 588 of the report, it is stated that the medical and surgical equipment issued to each bearer-company consisted of two pairs of field-panniers complete, with instruments, thirty haversacks and water-bottles, with ten haversacks and water-bottles for instruction on board ship. Nothing further is there mentioned. It was evidently understood that the necessary transport animals for carrying the equipment would be supplied by the Commissariat and Transport Corps on the arrival of the bearer-companies in Egypt. It is stated at page 667 of the report, in an account of the services of No. 1 bearer-company, that the company landed at Ismailia on August 24th; and that on the 26th seventy-eight mules and six horses were handed over to the company. Some of the mules are described as being very wild, and giving much trouble. There is no account of any further supply of pack-animals and horses to this bearer-company. As regards No. 2 bearer-company, we do not find any clear account of the amount of transport it obtained for the carriage of sick, or for the transport of equipment. At page 669 of the report, there is a copy of a letter from the surgeon-major commanding the company, which shows the difficulties the company was in as late as the 7th of September from want of transport. This officer commences his letter, which is directed to the Surgeon-General, in the following terms: "Having exhausted all means known to me, private, personal, and official, in endeavouring to have the equipment of No. 2 bearer-company sent to the front, and having so far failed in my object, I beg to inform you that I do not see any means to carry the question further." The same day on which this letter was written, however, railway-wagons were placed at the disposal of the company by the railway authorities, and the stores and equipment reached Kassassin on the evening of the following day. What the nature of the equipment was which this company had with it, how far it accorded with the scale laid down in regulations, and what number of pack-animals were furnished for its carriage, on the day of the battle of Tel-el-Kebir, is not stated. But, whatever the means placed at the disposal of the medical department, the evidence is quite conclusive that the wounded were most promptly removed from the places where they fell; and that, without any avoidable delay, they received all the surgical care and treatment which their necessities required. The energy of the medical officers themselves and their subordinates; the important fact of a field-hospital having been brought up and opened close to the very front of the fighting line, and in a most favourable position for giving primary attention to the wounded, and also for facilitating their subsequent removal by the canal; and the material assistance afforded by the native bearer-companies of the Indian Contingent, rendered available by the very small number of casualties in that part of the force, all contributed to this desirable result.

On reviewing the whole of the surgical arrangements on the occasion of the action at Tel-el-Kebir, we are, indeed, led to doubt whether, if a comparison be made between that and any previous battle of like importance, the wounded have ever on any occasion been placed under equally favourable conditions as regards surgical care and attendance. The means of affording surgical aid, not merely such superficial and hasty assistance as can usually be given in the immediate vicinity of the place of conflict, but aid such as, in most battles, can only be given in hospitals far in the rear, at Tel-el-Kebir were close at hand. Even nourishment was prepared and ready to be administered to the patients on their arrival at the advanced field-hospital. The wounded were in no such overwhelming numbers as they often are after important battles, so that the surgical attendance which was close at hand, was also adequate in amount. All the circumstances were propitious for making the relief as complete as possible. Instead of the action ceasing at night, with darkness interrupting many of the opportunities of affording succour, as so often happens, the fighting was at an end soon after daybreak, so that a whole long day was available for administering to the needs of the patients, and removing them to places of shelter and comparative comfort. The enemy were completely beaten and dispersed, and the legitimate powers of the country being on the side of the British forces, there could be no possible source of anxiety from threatened incursions of hostile bodies of troops, or from any attempts to interrupt measures which were being taken for the protection and removal of the wounded. The transport of the patients was of the easiest kind. Instead of the jolting and shaking in ill-suited carts over bad roads, which wounded men have had so often to endure, the badly wounded, after Tel-el-Kebir, were conveyed in well-littered boats on smooth water, to hospitals in which, at any rate at the date of Tel-el-Kebir, the means of surgical care and nursing were superior to what had ever been previously found in similar establishments in time of war. And there was further afforded, after the battle of Tel-el-Kebir, from the war being at an end, and plenty of transport ships available, the opportunity of gratifying the natural wishes of the patients to be sent home to their native country, at an earlier period after the date on which their wounds were inflicted than had ever before happened to British troops at war in a distant country.

Yet, in spite of all these favourable circumstances, the complaints against the surgical arrangements have been, in some quarters, numerous and unqualified. Statements have been published that there were no bearer-companies to be seen near the place where the action of Tel-el-Kebir was fought, and the British wounded have been said to have been left lying on the ground unattended to for hours after the battle had been concluded, at a time, indeed, when the most satisfactory proofs have been forthcoming that all the

wounded had been carried to places of shelter, and were receiving surgical attention. The statements regarding the absence of bearer-companies can only be explained on the supposition that some of the correspondents by whom they were made were unacquainted with the nature and composition of these companies, as well as with the uniforms of the men belonging to them. At any rate, the assertion affords another proof of a well-known fact, that spectators of a field of battle, when the action takes place over an extended line of ground, as a rule, see little that takes place beyond a very limited space in their own immediate neighbourhood. Complaints of neglect do not in any instance appear to have been made by either officers or men who were severely wounded; but whenever they have been made by military men, it has almost invariably been the case that they have emanated from officers whose wounds were comparatively slight. In some of these instances, the complaints have come from officers who have manifestly had no previous acquaintance with the usual conditions of a state of warfare. They will have their eyes opened as to what war really is, and to what privations and suffering the wounded after a great battle are apt to be exposed, if, unhappily for themselves, they should have to take part, and should happen to be wounded, in a large engagement in some European theatre of warfare. We would recommend to such persons a study of the published accounts of the manner in which the wounded were dealt with after the principal battles of the most recent wars to which the Continent of Europe has been a victim—the Franco-German war—for in those accounts may be found a very impressive contrast to the speedy attention and great amount of care which the wounded of the British army received after the battle of Tel-el-Kebir in Egypt.

THE VACCINATION DEBATE.

It may somewhat confidently be hoped that the ghost of the Parliamentary agitation against vaccination has now been effectually laid, at any rate whilst the present Parliament lasts. When Mr. Peter Taylor, after much preliminary advertisement, rumours of strong whips, divided counsels in the Cabinet, and the like, succeeds in getting only fifteen members, out of a House of more than three hundred, to follow him into the lobby, he will probably think twice before he again exposes himself to ridicule as the advocate of an unscrupulous and noisy knot of agitators. Although the present House of Commons is largely made up of men with crotchets, the good sense of the majority of members has preserved it from such another exhibition of weakness as characterised the recent debate on Mr. Stansfeld's motion. It was very generally hinted, even by Ministerial organs, that the Government were indisposed to take any decided view of their own on the question of compulsion in vaccination, and were proposing, after the dangerous fashion that has lately sprung up, to regard it as one of the open questions concerning which private members were to be left to exercise their own judgment. A more striking condemnation of the *laissez-faire* attitude recently exhibited by the Government in questions of this nature could hardly be found than in the results of Tuesday's debate. The admirable speeches of Sir Lyon Playfair and Dr. Cameron had no doubt done much towards convincing honourable members who might still be sceptical as to the advantages of vaccination; but the vigorous, clear, and decided declaration by Sir Charles Dilke of the views of the Government was of high official importance in contributing to Mr. Taylor's downfall.

The House has been left too much at the mercy of the exponents of strong views on questions of this nature not to appreciate at its full value the statesmanlike speech of the President of the Local Government Board; and although in any circumstances Mr. Taylor would have been in a hopeless minority, the figures might not have been so striking had Sir Charles Dilke adopted a less uncompromising attitude of opposition to the resolution before the House.

We have never been amongst those who believed in the existence of any widespread objections to the compulsory clauses of the Vaccination Acts. The agitation against them has been carried on in a guerilla-like manner, by an extreme set of thinkers, who have made up in activity what they lacked in numbers. The propagation of their peculiar doctrines has been conducted in an extremely vigorous and astute fashion, and it is only lately that there has been any easily accessible antidote to their pernicious misstatements. By circulating amongst members of Parliament, as the Parliamentary Bills Committee had done, an authentic preliminary printed statement as to the actual results of the enforcement of vaccination, much misconception has probably been avoided, and the open minds of some members filled with digestible and wholesome figures. A share in the satisfactory figures of Tuesday's debate may, therefore, fairly be claimed as the result of the Committee's action.

Mr. Taylor's speech was of the usual character, and to analyse its fallacies in detail would be to go over familiar and well trodden ground again. Although the terms of his proposed motion were of an apparently innocent kind, namely, that it was "inexpedient and unjust to enforce vaccination under penalties upon those who regard it as inadvisable and dangerous," his speech was throughout a demand for the extermination of vaccination, root and branch, as a useless and dangerous piece of medical superstition. Since vaccination had been made compulsory, argued Mr. Taylor, small-pox had increased, so that there was no protection to be gained by practising it; and, on the other hand, vaccination was the means of importing into the human system foul diseases, as well as of increasing the mortality from various causes. Against such reckless and irrational statements there can be no need seriously to argue. Not one particle of evidence was adduced in support of these assertions, and such figures as were given were completely demolished by the statistics of Sir Lyon Playfair, Dr. Cameron, and the President of the Local Government Board. These statistics have all, at one time or other, appeared in these columns, and their salient features have been incorporated into the memorandum of the Parliamentary Bills Committee before referred to. It is not, therefore, necessary to go into detail concerning them, even if the profession needed their support for a belief which every day's practical experience tends to confirm.

Leaving, therefore, the general question of the utility of vaccination, as a matter now placed beyond the need for discussion, it remains only to touch upon the best method by which the needful compulsion can be enforced. Mr. Taylor, apparently relying upon the weak-kneed attitude of Mr. Dodson in 1880, would have had the House declare its opinion of the inexpediency and injustice of enforcing vaccination upon those who regard it as inadvisable and dangerous. In other words, he would let the compulsion remain for those who need no compulsion, and would let the idle, the careless, and the fanatical shelter themselves behind "conscientious objections" for their neglect to carry out a measure imperatively required in the interests of the public health. The tempest of popular and scientific disapproval with which Mr. Dodson's ill-advised Bill for the sale of vaccination indulgences was met in 1880 must have convinced the Government of the strength of the national belief in the necessity for the compulsory character of the Acts being maintained in its integrity.

The pressure of the Acts in individual cases is no doubt sometimes unduly great; but, as Mr. Simon said before the Select Committee of 1871, when individuals set themselves up to struggle against the law, to see which shall conquer, there is, in such cases, often "a strong dash of conceit, which makes the martyrdom less severe than it might seem to outsiders." Moreover, the people who are prosecuted repeatedly for non-compliance with the law, are not unfrequently those who go about the country, or about their district, spreading fabrications as to the harm done by vaccination, and frightening mothers into thinking that their children will die or be

permanently injured if they be taken to the vaccinator. It is absolutely necessary to prosecute such people, in order to ensure due respect to the law. But at the same time, it is desirable for those locally responsible for the maintenance of vaccination, to carefully consider each case of non-compliance on its merits, so that prosecution may not seem to degenerate into persecution. The continuance of a fruitless contest with a parent may have a tendency to produce mischievous results, by exciting sympathy with the person prosecuted, and thus creating a more extended opposition to the law. On the other hand, it is undeniable that a repetition of legal proceedings has often resulted in the vaccination of a child, when such vaccination has not been procured by the previous proceedings; and it is therefore important, with the view of securing a proper observance of the law, that parents should be well assured that proceedings, in case of non-compliance with its requirements, will not be lightly discontinued. These views were adopted by the Local Government Board in the letter which they addressed to the Evesham Guardians in 1875, and they were endorsed by Sir Charles Dilke in his speech in reply to Mr. Taylor.

Sir James Pease, who in 1872 brought in a Bill with the object of limiting the number of penalties, advocated on Tuesday the appointment of a Select Committee to inquire whether a limitation of the accumulative penalties for non-vaccination could be effected without endangering the practical efficiency of the Vaccination Act. Such a Committee would, however, be not only unnecessary, the Select Committee of 1871 having exhausted the subject, but it would afford another airing-ground for the misstatements of the antivaccinators on which the House has just delivered so crushing a verdict. The resolution of Sir Lyon Playfair—"That the practice of vaccination has greatly lessened the mortality from small-pox, and that the laws relating to it, with such modifications as experience may suggest, are necessary for the prevention and mitigation of this fatal and mutilative disease"—admirably expressed in terse yet vigorous language, the common sense view of the subject, and its adoption by the overwhelming majority of 286 to 16, is a matter for very sincere congratulation in the best interests of the nation at large.

THE COUNCIL ELECTIONS OF THE ROYAL COLLEGE OF SURGEONS.

In the last number of the BRITISH MEDICAL JOURNAL were two announcements which, when considered side by side, must have appeared very remarkable to our readers. In our columns of Irish news, we stated that, at the annual meeting of the Council of the Royal College of Surgeons, a resolution of the profoundest importance as affecting the non-urban Fellows was agreed to without a division. This resolution was, that the necessary steps should be taken to have such alterations made in the charter of the Royal College of Surgeons in Ireland as shall enable provincial Fellows of that College to vote at the election of President, Vice-President, and Council, by voting papers or other means, as is the case in Trinity College, Dublin, the University of Edinburgh, and other institutions. At page 1209, in a report of the last ordinary meeting of the Council of the Royal College of Surgeons of England, we further announced that a motion, made by Mr. Cadge at the previous meeting, that it is expedient that at the election of the Council, the Fellows shall be allowed to vote either in person or by papers, was, after some discussion, ultimately referred to a committee to consider the expediency of the change. In short, the Irish College, after very little delay, has recognised the justice of proxy-voting, and legalised it in consequence; the English College, on the other hand, is still "considering the expediency of the change;" yet year after year our columns bear witness to the just complaints of provincial Fellows in respect to the method of conducting the elections, and practically excluding large proportions of the Fellows from taking their part in performing their electoral duties.

This exclusively tends to preserve for the Council the undesirable reputation of being but a narrow clique of metropolitan hospital-surgeons who have, it can never be denied, great interests to support, but cannot represent all the interests of an enlightened majority of the profession. As long as proxy-voting remains illegal, we shall continue to see the familiar spectacle of an election controlled by cohorts of young and excellent hospital-demonstrators, registrars, and waiters for appointments at London schools of medicine. These gentlemen may be, and in some cases will be, the future heads of their profession; but, at least in the stage at which they can be observed during a college election, they do not represent all its highest interests. To them, a medical man is apt to mean a metropolitan hospital-surgeon; they have very vague ideas of the profession outside the wards of our great London charities, or of the relation of the profession to the public. Their great aim, as often openly expressed on the staircases and in the galleries of the College, is simply to secure the election of a surgeon belonging to their particular school of medicine. This seems quite fair as far as this kind of voter is individually concerned, on the principle that every elector votes for his own man. But we know how it is with Fellows of another kind. The young teachers and juniors from a large London hospital have only to spend an hour of their time—most valuable and well-spent time, we admit—or even less, in walking over to Lincoln's Inn Fields and recording their votes. We can now see at once how unfairly handicapped the provincial voter must be, and still more how unjustly the chances of a provincial candidate are compromised by the present system. Where twenty London Fellows, at least, can vote for one London candidate at the expense of an hour, it is probable that nearly as many, or possibly more, can flock from different parts of the country to vote for the same candidate, their old teacher, or a man they think worthy to be in the senate of British surgery, but these latter voters will lose at least a day. Bad as it is for them, the provincial candidate is placed at a still greater disadvantage, for he has no large body of supporters close to the site where the elections are held; nearly all who vote for him must have come up to town at a great disadvantage as regards time; in short, his constituents are only those corresponding to the second class of voters who, as just described, support a London candidate. The provincial candidate is peculiarly badly off as regards local support, for a large body of Fellows may not exist in his town; and, if they do, comparatively few can be expected to come up to London, as they are tied by circumstances other than mere loss of time, which in no way affect the typical supporters of a London candidate.

We have said enough to demonstrate what must be the nature of a majority in a College election under the prevailing regulations, and how undesirable are the results which such a majority must ensure. In view, too, of the changes which the Medical Acts Amendment Bill must involve when it becomes law, a thorough understanding between town and country is at the present moment peculiarly desirable; and this will not be obtained if Londoners act on a principle which is indeed "narrow provincialism" in the worst sense of the term. Within the last twelve months, Dublin has amalgamated medical societies, and permitted proxy-voting at elections for members of the Council of her College. Is the English metropolis determined to show herself more obstructive and less enlightened?

SIR JOSEPH HOOKER, Bart., M.D., Director of Kew Gardens, has been awarded the Albert Medal of the Society of Arts.

A PORTRAIT of Sir Galbraith Logan, K.C.B., Director-General (retired) of the Army Medical Department, has just been painted by Mr. Sydney Hodges. The portrait, which is to be placed in Netley Hospital, will be on view for a short time at Mr. M'Lean's gallery, 7, Haymarket.

THE London Hospital Sunday collection thus far amounts to about £27,000.

IT is announced that Mr. Stansfeld and his coadjutors intend to press for the entire repeal of the Contagious Diseases Acts.

AT the lecture to be given at the Parkes Museum, on Thursday, the 28th instant, by Mr. E. C. Robins, F.S.A., on "Hospital Construction," the chair will be taken by Dr. F. J. Mouat, General Inspector to the Local Government Board.

THE Queen has conferred the honour of knighthood upon Mr. Alfred Roberts, Honorary Secretary and Consulting-Surgeon to Prince Alfred Hospital, Sydney, New South Wales.

THE Medical Officer of Health for the City is, we are glad to see, active in suppressing the smoke nuisance. He has served notices on various clubs and restaurants. *Sic itur ad astra.*

FOUR Assistant-Physicians, a Pathologist, an Anæsthetist, and a Resident Medical Officer have been added to the medical staff of the Chelsea Hospital for Women, preparatory to entering the new hospital, which contains sixty-five beds.

WE understand that all the London hospitals have adopted the rule enacted by the management of the Glasgow Royal Infirmary, that all their resident surgeons should hold qualified certificates before they are permitted to administer anæsthetics.

AT the levée held at St. James's Palace last week by the Prince of Wales on behalf of Her Majesty, amongst the presentations we note Dr. Thomas F. Chavasse (Birmingham) and Dr. Grainger Stewart (on his appointment as Physician in Ordinary to the Queen in Scotland).

THE annual *conversazione* of the Medical Society of London will be held on Monday, July 2nd. Professor Lund will deliver the annual oration at 8.30 P.M. His Royal Highness the Prince of Wales has announced his intention of being present at the *soirée* afterwards.

MORTALITY OF EMIGRANTS.

THE mortality of emigrants is a question which is related to the efficiency and conditions of engagement and control of the medical service of the commercial navy, to which ship-surgeons are requesting the attention of the Parliamentary Committee of our Association. We observe that the *Melbourne Argus* of May 7th, reports that the ship *Allanshaw*, with 341 Government immigrants, had arrived at Sydney. Eleven deaths occurred during the voyage from scarlet fever. The matron also died of apoplexy.

CONVERSAZIONE AT THE ROYAL COLLEGE OF SURGEONS.

A CONVERSAZIONE was given by the President of the Royal College of Surgeons and Lady Wells, in the Museum of the College, on the evening of Wednesday last. The museum was illuminated by Weston's electric light, and the conservator, Professor Flower, and his assistant-officers, demonstrated to the visitors the more interesting specimens on the ground-floor. The band of the Coldstream Guards played a selection of music. Among the visitors present were the Lord Chancellor and the Countess of Selborne, the Earl and Countess of Ducie, Lord Walsingham, Admiral Sir Edward and Lady Fanshawe, Sir Arthur and Lady Hobhouse, Sir John Conroy, General H. A. Smythe, the President of the Royal Academy, Sir Frederick Leighton, and most of the leading metropolitan members of the profession.

ST. ANDREW'S GRADUATES' ASSOCIATION.

THE fifteenth anniversary session of the St. Andrew's Graduates' Association will be held at 11, Chandos Street, Cavendish Square, on Saturday, June 30th, at 5.30 P.M. The annual dinner will be at the Holborn Restaurant at 7.15 P.M. the same evening; Dr. B. W. Richardson, F.R.S., in the chair. A large number of the graduates are expected to assemble. The Lord Rector, Sir Theodore Martin, K.C.B., and others, have accepted the invitation of the President and Council.

LORD WOLSELEY.

LORD WOLSELEY will deliver an address to the medical students of Charing Cross Hospital on July 5th next, at 3 P.M., when he will preside at the annual prize-gathering. This will provide an opportunity for giving some explanations concerning the evidence before Lord Morley's Committee, which has been palpably inconsistent with his former declarations, singularly unjust to the medical officers attacked, and has been—and will yet further be—much criticised.

LECTURES TO NURSES.

A COURSE of lectures to the nurses of the Victoria Hospital for Children, Chelsea, has been commenced this summer by Mr. Frederick Churchill, surgeon to the hospital. The introductory lecture contained a forcible exposition of the main principles which should guide a nurse in her relation to the patient and to the doctor, in which Mr. Churchill took exception to the doctrines recently advanced by Mr. Walter Besant in the *Gentleman's Magazine*. Mr. Besant laid it down that "the first duty of a nurse is blind obedience to the doctor's orders," and that "it is not always desirous for a nurse to be a doctor." A nurse is not a doctor, and the doctor demands, not blind obedience, but an intelligent, watchful, seeing, though implicit obedience. Among the later lectures of the course, we note several dealing with subjects where the intelligent co-operation of the nurse is a necessity, if success is to attend the labours of the doctor; for instance, the Dietary of Children, Hospital Hygiene, and the General Management of Fevers.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

APPLICATIONS are invited for the office of surgeon to the Queen's Hospital, Birmingham, which has been rendered vacant by the lamented death of Mr. J. F. West. We understand there are two strong local candidates in the field, namely, Mr. Jordan Lloyd and Mr. Hawkins. Both these gentlemen have done good work in connection with the Birmingham School, and they have both, as casualty surgeons, for some time been members of the honorary staff of the Queen's Hospital.

HOSPITAL ACCOMMODATION FOR NORTH LONDON.

A MEETING of representatives of the Great Northern Hospital and of the proposed Central Hospital for North London, was held on Saturday at Highbury Athenæum, to consider the main features of a scheme for uniting the two institutions. It was unanimously agreed that an amalgamation was very desirable, and that it was likely to result in the establishment of a large and prosperous general hospital on a combined free and graduated pay-system. A subcommittee was appointed to draft a detailed scheme, and to report to the joint committee.

THE LATE SISTER DORA.

STEPS are being taken to raise a fund for the erection of a statue to the memory of the late Sister Dora in the town of Walsall. The inhabitants of the town, immediately after her death, placed a memorial window in the parish church, and formed a small endow-

ment for the Convalescent Home. Since the publication of Sister Dora's life, correspondents from various parts of England and the colonies have expressed a desire to contribute to a memorial of one for whose life and labours so much admiration has been expressed. Those who wish to join in the work may send their contributions to the Secretary of the Walsall Cottage Hospital.

MEDICINE AT CAMBRIDGE.

THE Vice-Chancellor of the University of Cambridge has issued to the members of the Senate what is truly described as a remarkable document. It consists of two parts, the first part being devoted to an attempt to give the approximate number of undergraduates engaged in each branch of study, and the second being the report of the General Board of Studies with regard to the present wants of the Moral Sciences. The report states that the number of those studying medicine at the University has rapidly increased of late years, and that it now amounts to two hundred. There are only thirty undergraduates.

ST. BARTHOLOMEW'S CONVALESCENT HOME.

THE foundation-stone of a Convalescent Home was laid at Swanley, Kent, last week, by the Rev. Samuel Kettlewell, M.A., of Eastbourne. The building is intended as an adjunct to St. Bartholomew's Hospital, London, and is the gift of Mr. Charles Kettlewell, a governor of the hospital. The house, which is a few minutes' walk from the London, Chatham, and Dover Railway Station, occupies a charming position. The treasurer, Sir Sydney H. Waterlow, was present, and mentioned that the land, which consists of fifteen acres, was an anonymous gift. It is estimated that the cost of the building will be about £18,000.

GREAT NORTHERN HOSPITAL.

A MEETING of the executive, general, and medical committees of the Great Northern Hospital and the Council of the proposed Central Hospital, was held on Friday, June 15th, at the Highbury Athenæum. The Hon. R. Capel, Mr. Burdett Coutts, Mr. Murdoch, Mr. H. H. Gardiner, Professor Leone Levi, Mr. H. C. Burdett, Mr. Lang, and others interested in the scheme for amalgamating the two hospitals into one large institution for the north of London, were present. A subcommittee was appointed to draw up a scheme for amalgamation, and to present a report to the governors and subscribers of the two institutions. The new combined hospital will contain free wards as well as wards upon the graduated pay system.

PROPOSED NEW HOSPITAL FOR BIRMINGHAM.

IN their report for last year, which has just been issued, the Committee of the Birmingham General Hospital again refer to the proposed establishment of a suburban branch hospital in connection with their venerable charity; and they express a hope that they may soon find opportunity for carrying out this long projected extension of their institution. The Committee are of opinion that the increasing pressure upon the beds of the General Hospital continues to render more apparent the necessity for the erection of a branch hospital, in the immediate neighbourhood of Birmingham, for the treatment, under the best sanitary conditions, of such chronic cases as now occupy, for comparatively long periods, the beds of the old hospital.

CITY GARDENS.

NOWHERE are open spaces and recreation grounds more needed than in the City of London. We are glad to see therefore that at a meeting of the Commissioners of Sewers yesterday, it was resolved that they should, as the Burial Board of the City of London, forthwith put in decent order all disused burial grounds within the City, and charge the costs and expenses to the overseers of the respective parishes in which such burial grounds are situate, pursuant to the 18th Section of the Burial Act, 1855. We hope that the Commissioners will see their way to going a little further, and have all these grounds as far as possible laid out as City gardens, planted, provided with seats, and kept open as recreation grounds.

WARNING TO DRUGGISTS.

WE have been favoured with a letter from Dr. Mortimer concerning the death, which we reported last week, of Miss Hutcheson of Turriff, from chloroform. It appears that this lady had been in the habit of purchasing chloroform for inhalation for the relief of toothache. On the last and fatal occasion, she had purchased nearly two ounces, part of which she inhaled in her bedroom, and thus produced a fatal result. The druggist who sold so large a quantity of chloroform without a medical prescription, excused himself by stating that he had sold on previous occasions for similar purposes, like quantities of chloroform to the unfortunate young lady. The fatal result of selling chloroform without a medical prescription, in this case, will, it is to be hoped, act as a warning to other chemists in dispensing to the laity such a powerful and dangerous drug as chloroform.

THE INFLUENCE OF VACCINATION ON SMALL-POX.

WE print, on another page, a memorandum on the influence of vaccination in preventing and diminishing the mortality of small-pox. This memorandum, which summarises the leading facts, was prepared at the suggestion of an eminent parliamentary authority, and a copy was forwarded to each member of the House of Commons on the day of the motion of Mr. Peter Taylor. We have reason to believe that its timely distribution contributed in some measure to the crushing majority by which the motion was rejected. The memorandum will be issued in a cheap form, for the purpose of distribution, by those who are annoyed by the misstatements of anti-vaccinators, and who find it necessary, on sanitary grounds, to have at hand, for distribution, a condensed statement of the facts and figures which demonstrate the life-saving power of vaccination.

THE HEALTH OF PARIS.

A PARIS correspondent points out that some steps will undoubtedly have to be taken to prevent the recurrence of an epidemic of typhoid fever similar to that of last year. The odour in the northern part of the city is said to be overpowering on sultry evenings, the neighbourhoods of St. Denis and La Villette being the worst in this respect. Medical reports were sent in more than two years ago stating that the coming epidemic might be calculated upon with almost mathematical certainty, but all to no effect. The quarrel between the Prefect of the Seine and the members of the Paris Corporation seems to absorb all attention, while a plague threatens the capital, and whole districts are poisoned by nauseous odours. The Municipal Council has really done nothing, although some of the members have visited London and Antwerp to study the drainage question.

PROTECTION OF HOSPITALS AGAINST FIRE.

STIMULATED by a recent alarm of fire in the neighbourhood of the Maison de Santé in Paris, the Municipal Council of that city has decided that the following measures shall be carried out for the protection of hospitals and their occupants in case such an emergency should arise; 1. That hospitals shall be isolated as completely as possible from other buildings; 2. That special exits in case of fire *(bouches d'incendie)* shall be constructed in all hospitals. We are always learning something in hospital management; and, though the resolutions just mentioned have probably not now the force which they would have had in the days when sanitary principles had not begun to impose on hospital architecture the same regu-

tions as the Parisian Municipal Council, still the suggestions contained in them are valuable; and we commend them to the consideration of all who have to do with the construction or the location of public buildings, whether intended for the reception of the sick or not.

MEDICAL HERBALISTS.

A TYPICAL example of the evil results of the ignorance of herbalists, and the dangers to the population involved in their practice, is afforded by the result of an inquest held at Leicester on the body of Charles Hanger, boot and shoe maker, who died from an overdose of opium. Deceased suffered from a chest-complaint, and on a Sunday consulted a herbalist named Whiteley, who prescribed for him. On the next Wednesday, Hanger asked Whiteley to give him something to induce sleep. The herbalist gave him a pill containing two and a half grains of opium, which he took, became unconscious, and died in the evening. A verdict that death had resulted from bronchitis and an overdose of opium, indiscreetly administered by Whiteley, was returned, and he was censured by the coroner accordingly. Hitherto Parliament has refused to consider, and statesmen have declined to accept, any enactment levelled at herbalists, as such, and have insisted on the principle "caveat emptor." If the public choose to employ a person who has no medical degree, and who does not falsely assume to possess one of the medical titles consecrated to registered medical practitioners, the state has hitherto declined to interfere between the quack and his patrons. This attitude of the political and legislative mind is very distasteful to a certain number of our profession; but the Royal Commission, and many successive Governments, have declined to take any other view. It has been the basis, indeed, of the Medical Acts up to the present time. Their preamble sets out that they aim at preventing the false assumption of titles by medical impostors, and at enabling the public to distinguish between duly educated and qualified practitioners on the one hand, and unqualified practitioners on the other. Mr. Mundella recently expressly refused, as all his predecessors have done, to go further, and to absolutely prohibit unqualified practice. We wish we could hope that such cases as that we now cite, would operate to induce our legislators to take a more stringent view, and to protect the public even against their will. But the hope is, we fear, but a faint one; the current of public opinion is, in some places, setting rather strongly against what is now often hastily denounced as medical tyranny. This case occurs very opportunely for demonstrating the evil effects of the absence of restriction upon herbalists, and the unwisdom of those who choose to consult them.

NEW BILL FOR THE REGULATION OF DAIRIES.

THE Government have at length fulfilled the pledge which they gave last session, to bring in a Bill transferring the duty of the regulation of dairies from the county justices to local sanitary authorities. This is a measure which we have consistently advocated. Indeed, the existing legislation on the subject has been, except in boroughs, where the sanitary authority and the veterinary authority chance to be identical, nothing more than a farce or a dead letter. The Bill transfers to the Local Government the power of making general and special orders under Section 34 of the Contagious Diseases (Animals) Act, 1878, with regard to dairies, cow-sheds, and milk-shops. These powers include those of making orders (1) for the registration with the local authority of all persons carrying on the trade of cowkeepers, dairymen, or purveyors of milk; (2) for the inspection of cattle in dairies, and for regulating the lighting, ventilation, etc., of dairies and cow-sheds; (3) for securing the cleanliness of milk-shops and milk-vessels; (4) for prescribing precautions against infection or contamination; and (5) for authorising a local authority to make regulations for these purposes. The local authority in question is to be the urban or rural sanitary authority, except in London, where it is to be the corporation for the City, and the Board of Works for the rest of the metropolis. The Bill provides that any officer of a local authority may enter any land, or dairy, or other building, for the purpose of ascertaining whether an order under the Act is complied with or not. If a local authority fail to enforce any order in force in their district, the Local Government Board can empower some person to enforce it, and determine his remuneration for this: the expense so incurred to be paid by the local authority. Where, however, a dairy or cow-shed is declared to be in an area infected with cattle-plague, etc., the order of the Local Government Board is to be administered in subordination to any order made by the Privy Council. The Act is to apply to Scotland and Ireland, as well as to England and Wales, the power of making orders under the Act being conferred upon the Board of Supervision for Scotland and the Local Government Board for Ireland respectively. The Bill has been introduced by the Lord President of the Council, and now awaits discussion by the Lords. No difficulty is to be anticipated in its passage through either House.

HAY-FEVER.

UNDER the names of hay-asthma, hay-fever, summer cold, and catarrhus æstivus, we recognise a troublesome and periodic disorder, which, Continental writers assure us, is observed with especial frequency in England, and which causes, year by year, particularly in the months of May and June, considerable annoyance to thousands of persons in this country. While there is very strong evidence to show that hay-asthma is proximately caused by the irritative action of the pollen of certain grasses upon the mucous membranes of the eyes and nose, a study of the literature of the subject and of the histories of actual cases of the affection abundantly proves that an essential, if little understood, factor in the causation of the malady is some peculiar idiosyncrasy which renders some people prone to become the subjects of the disease. One of the most curious facts about hay-asthma is that it especially affects the "well-to-do," while haymakers and others who work amongst hay are almost exempt from it. The best account of hay-asthma with which we are acquainted, is that given by the late Dr. Elliotson, in his well-known and valuable work on the Practice of Medicine. One of the earliest essays on the disease is that of Dr. Bostock, the celebrated chemist, who was himself a sufferer from the malady, and who ably described it, under the name of catarrhus æstivus, in the tenth volume of the *Medico-Chirurgical Transactions*. Dr. Bulman, of Newcastle-upon-Tyne, quoted by Dr. Elliotson, gave a remarkably clear clinical description of the affection, founded on several cases which came under his own notice. According to his experience, the disease invariably commences, about the second or third week in June, with a sense of uneasiness, heat, and itching of the conjunctivæ. These symptoms are attended with watering of the eyes, increased secretion from the Meibomian glands, a sense of fulness and distension of the eye-balls, intolerance of light, and weight in the forehead. The itching gradually increases, and, in severe cases, soon becomes almost insufferable. In the course of a few days, especially if the patient have exposed himself to the sun, the irritation and inflammation extend to the Schneiderian membrane of the nose, causing itching and stuffing of the nasal passages, with increased secretion of mucus and frequent paroxysms of sneezing. These paroxysms are sometimes also excited by dust of any kind, exposure to heated external air, effluvium of new made hay, the odour of the bean-flower, etc. As the disease advances, the mucous membrane of the fauces, trachea, and bronchi, becomes affected, giving rise to a sense of dryness and itching, or pricking in the throat, tightness of the chest and difficulty of breathing, and to cough, with which there is little or no expectoration. In severe cases, there are several violent fits of sneezing daily, which are accompanied by a copious discharge of mucus from the nasal pas-

sages. Various drugs have been recommended as remedies for hay-asthma. Dr. Bulman advised that diluted ointment of the nitrate of mercury should be applied to the eyelids; this he found greatly allayed the conjunctival itching and smarting, and he thought it also diminished the irritability of Schneiderian membrane, by being carried into the nostrils with the tears. Dr. Elliotson's favourite remedy was a solution of chlorinated lime or soda, used as a wash to the face and as an inhalation. Arsenic has been praised as a good remedy in hay-asthma. Dr. Ringer states he has found it of little or no value in true hay-fever, that is, "where the paroxysmal sneezing is excited by pollen." Dr Hyde Salter strongly recommended ipecacuanha. We lately met with a case of hay-asthma in the person of a surgeon, who found marked relief from frequently bathing his face with very hot water.

DANGEROUS DOORS.

If the recent appalling disaster at Sunderland have its due effect as a terrible warning, in the institution of adequate precautions against similar catastrophes in the future, it will point to the necessity for several reforms in the usual channels of egress from public buildings, and especially in the construction and working of the doors which close such openings. It is a truism to assert that doors are made to open; but this is precisely the function of doors which their constructors seem often to forget. The final cause of most of the fatalities from panics in public buildings appears to have been a block in some doorway, passage, or other channel of egress. There has been an unyielding obstruction in front, and an irresistible pressure behind, and human beings have been crushed or trampled to death between the two. Such a block has sometimes arisen at a point where two passages, crowded with streams of people, have joined at an unfortunate angle. But experience has shown that many fatalities have occurred solely because of defects in the construction of doors closing the outer apertures of egress from public buildings. Two such defects have found lamentable illustration in the recent Sunderland catastrophe. A faulty door, by only opening one way, namely, against the rushing stream of excited children, converted a passage into a *cul-de-sac*, and was the proximate cause of the fatal block; while the obstruction was, unfortunately, further intensified by the door in question becoming fixed by a faulty fastening in a partially closed position. Adequate authority ought to insist that all doors in the passages of large buildings, which are likely to become crowded, should swing freely both outwards and inwards. It is dangerously difficult, and it may become impossible at a critical moment, to open a door which can only be opened against the impact of a pressing crowd. The fastenings of such doors should be regarded as perilously faulty, unless they are so arranged that they can be quickly and readily loosed, without risk of fixity. Probably the most dangerous fastening for the doors of public places is one like that which contributed to cause the disaster in Sunderland—namely, a vertical trailing bolt at the bottom of a door, which becomes fast by dropping into an opening in the flooring over which the door moves. If these and some other important points in the number, capacity, and direction of the channels of egress from public buildings, and especially in the construction and working of the doors of such passages, were efficiently remedied, we should probably hear of fewer instances of loss of life from the inevitable rushes and panics of persons confined in crowded spaces.

DIVIDED AUTHORITY.

The evidence given at an inquest held at Bolton, on May 26th, discloses a most unfortunate conflict of authority between the house-surgeon of the infirmary and certain other authorities in it. It would appear that a man named Slater was admitted into the infirmary, suffering from an attack of erysipelas, following on a severe injury of the hand. Subsequently, by the order of the matron and of a Mr. Ferguson, a member of the Infirmary Committee, the patient was suddenly dismissed from the infirmary, on account of coarse and abusive language, which it was alleged he had used to the nurse. Dr. Glasier, the house-surgeon, in his evidence, gave it as his opinion that the conduct attributed to the deceased "was done in his delirium," but that he did not countermand the order for his removal, as he might have come into antagonism with other persons at the infirmary. The deceased's wife gave evidence that Dr. Glasier told her that her husband was not fit to be removed, and said that "he would not be responsible for him." The fears of the house-surgeon were sufficiently well founded, for the man died before he reached his own home. This case hardly calls for comment from us, the significance of the facts must be patent to all; the matron, and the member of the Infirmary Committee, stepped out of their proper sphere of duty, and ventured to arrogate to themselves an authority, and to form an opinion, on a purely medical question, with the most fatal result. It is, perhaps, to be regretted that Dr. Glasier did not act with more firmness and decision, but his position, no doubt, was a difficult one. We wish that we could believe that this unfortunate occurrence was likely to be a warning to ladies and gentlemen who meddle with details of hospital management, on which they are incapable of forming an opinion; unfortunately, from the tone of the evidence given by the member of the Infirmary Committee, who, with the matron, was responsible for the dismissal of the patient from the hospital, there seems to be no probability that in this particular instance the lesson has been learnt. In most hospitals, there is a by-law providing that no patient shall be dismissed except on the written order of one of the medical officers. In hospitals where there is only one resident medical officer, this is liable to cause occasional inconvenience; a little method and forethought, however, will always avoid any such inconvenience; and we are strongly of opinion that hospital committees ought to insist on absolutely rigidly adherence to this rule.

INFECTIOUS PNEUMONIA.

In reporting on the health of the Newtown Local Board District, Mr. Harold Palmer gives an interesting account of an outbreak of infectious pneumonia which claims some particular notice. The first case appeared in the person of a man of robust health and regular habits. He had been complaining for more than a week of not feeling well, when, with characteristic suddenness, he was seized with an inflammation (croupous pneumonia) of both lungs. The inflammation spread rapidly throughout the greater part of the lungs, the general symptoms assuming typhoid character from the first. The character of the symptoms, in conjunction with the previous history of the case, gave rise to a suspicion that the disease had a septic origin. On instituting an examination of the premises, Mr. Palmer found that one of the drains in connection with the main sewers opened inside the house; that the closets were insufficienty supplied with water; and, as the water had to be carried from some distance, there was a strong suspicion that the house-drains were improperly flushed. There were at the time two children living in the house, suffering from whooping-cough. These facts led Mr. Palmer to entertain a very strong belief that the pneumonia was induced by the vitiated atmosphere in which the patient lived. At all events, there can exist little doubt that, however the original mischief was induced, these conditions must have invested the case with its special features. The infectiousness of the disease was strongly indicated by the fact that, although prompt measures were taken to remedy the existing sanitary defects, the medical attendant who was in close and constant attendance, together with a friend who assisted in the nursing, were both seized with this fatal form of pneumonia, and succumbed in a few days after being attacked. There were in all four cases of double pneumonia during the outbreak; two were fatal; and in every instance male adults were attacked.

THE SUNDERLAND DISASTER.

THE terrible catastrophe which caused the death of nearly two hundred little children at Victoria Hall, Sunderland, on Saturday last, must, we fear, rank among the large series of avoidable accidents which are common in great centres of civilisation. We have already made some reference to the question of sufficient room for the egress of a crowd. Besides this factor, which played so direct a part in the accident, we have in this case to consider the extraordinary want of supervision which allowed a large body of excited children, including mere infants, to dash precipitately down the stairs of a public building, their course being uncontrolled by the orders or warnings of mothers and nurses. It appears that the moment before the accident there were eleven hundred children, and only a dozen adults, in the gallery. The fatal event has shown how very easily a mass of human beings, driven into a corner, may asphyxiate themselves; and, from accounts we have received, we are led to believe that, had the crowd been composed of as many adults, far fewer even of the individuals actually impacted against the doorway would have been sacrificed, for men in a panic generally strike out with great force, using fists and sticks, so that a certain amount of breathing space is secured around the strongest combatants, in spite of the severest pressure. Children, on the other hand, cannot resist so well in this manner, so that there is much less active opposition to pressure, from the first, and, consequently, fewer spaces of circulating air in the midst of the crush, and, what must also be taken into account, less time gained before assistance arrives. Mr. Waterston, in a letter kindly communicated to us, gives a graphic description of the completely passive impaction which was the result of the rush of these unfortunate children against the half-opened door. "What struck me most," he observes, "was that there were very few surgical injuries, most of the children having been crushed to death or asphyxiated, partly by overlaying, and partly by breathing the vitiated atmosphere. I cannot possibly conceive that a body of children by their own impetus should have so wedged and entwined themselves, that in some cases it required all the physical force of Dr. Beattie, another gentleman, and myself, to extricate them from what was apparently a solid mass." Drs. Murphy and Welford examined a large number of the victims, and found only a few cases of fracture of the ribs and the bones of the upper extremity; nor did but a very few of the corpses present the features of death from shock; in most cases the congested features and other appearances indicated death from asphyxia. Mr. Mordey Douglas also testifies to the paucity of injuries other than those which would cause, or be caused by, asphyxia. We publish some reports of cases which he has kindly forwarded to us. Mr. Potts, whose surgery is, fortunately for some of the sufferers, close to Victoria Hall, informs us that thirteen children brought into his surgery apparently dead were resuscitated by his assistant, Mr. Wallis, one at least requiring the aid of electricity. All these survivors showed the well-known signs of asphyxia, and of the considerable number of dead children examined by Mr. Potts nearly all appeared to have died in that condition. Dr. Lambert's interesting letter, published in another part of our columns, whilst describing at length the mechanism of the calamity, corroborates the evidence of our other correspondents as to the chief cause of death. Each child, as it was involved in the struggle, must have resisted feebly, and then been seized with panic, and rapidly stupefied by the impure atmosphere, and the pressure of the crowd on its ribs, which prevented respiratory movements. According to the daily papers, one survivor, a little girl, describes how she ran down stairs, could not move any further, and then fell asleep. This explains the whole nature of the mortality which included so many of her companions, she herself having been saved through the incompleteness of her asphyxia, and through having incurred no injury to her ribs. Of injuries due to active resistance we hear little or nothing, either in the case of the dead or of the survivors. All the daily papers concur in giving the highest praise to the medical men of Sunderland for their energy in rescuing, and their skill in treating, the survivors.

THE NEW PROFESSOR OF ANATOMY AT CAMBRIDGE.

WE reported last week that Alexander Macalister, F.R.S., Professor of Anatomy and Comparative Anatomy in the University of Dublin, was appointed to the Chair of Anatomy in the University of Cambridge, rendered vacant by the resignation of Professor Humphry, who has been appointed to the newly-founded Chair of Surgery in his University. Professor Macalister, though born and brought up in the Highlands of Scotland, received his medical education in the University of Dublin, and fills several important appointments in Ireland. He is a member of the Senate of the Royal University, Secretary of the Royal Irish Academy, Member of the Board of Visitors of the National Museum of Science and Art, Professor of Anatomy in the School of Art, and Examiner in Comparative Anatomy in the University of London and on Physiology in the University of Glasgow. He is Thomson Lecturer on Natural Science and Theology in the Free Church College, Aberdeen, and author of an *Introduction to Animal Morphology*, and of a work on *Morphology of Vertebrates*. He is also the author of various papers of considerable value published in the *Philosophical Transactions*, the *Proceedings* of the Royal and the Zoological Societies, and the *Journal of Anatomy and Physiology*. At the meeting of the International Medical Congress held in London, he was a vice-president of the Section of Anatomy. As professor in Trinity College, he took the most active part in establishing the Dublin University Biological Association; and by identifying himself as he did with his pupils, he exerted an influence over them of no mean importance in their education and training. His loss to the Trinity College Medical School will be as great as the advantage that will accrue to the University of Cambridge by the appointment of so distingished and so universally respected a man. His election at Cambridge cannot be considered otherwise than most satisfactory, since it is by indomitable perseverance and hard work that Professor Macalister has won for himself his reputation. This the electors have wisely recognised, in selecting him before other and younger men who were competitors for the prize. In his new sphere of labour, Professor Macalister will find ample scope, not only for developing a young, though thriving, school of medicine and science, but for extending scientific knowledge by research, in conjunction with several other earnest workers in this ancient seat of learning.

SCOTLAND.

UNIVERSITY OF ABERDEEN.

THE members of the classes of Natural History and Botany formed a joint excursion to Stonehaven on Saturday last, under the direction of Professors Nicholson and Trail. Both the zoologists and botanists were well rewarded by the numerous specimens which they obtained.

DIPHTHERIA AT FETTES COLLEGE, EDINBURGH.

ONE of the large education institutions in Edinburgh, Fettes College, had last week to be closed, on account of the occurrence of several cases of diphtheria among the scholars. Accommodation is being provided for the school in a hydropathic establishment in Perthshire.

INFECTIOUS DISEASES IN EDINBURGH HOSPITALS.

THERE are three institutions in Edinburgh in which infectious diseases are received—the Old Infirmary, the City Hospital, and the Sick Children's Hospital. On Monday, there were, in the Old

Infirmary, 8 cases of typhoid, 16 of scarlet fever, and 12 of erysipelas; in the Sick Children's Hospital, 3 cases of typhus, 2 of typhoid, 3 of scarlet fever, and 3 of measles; while in the City Hospital there was one case of typhus, making a total of 48 cases at present in these three institutions.

THE DANGERS OF ILLICIT DRINKING.

NOTHING can show more conclusively the necessity for vigilance on the part of the authorities in suppressing illicit drinking than an analysis made of five samples of Greenock shebeen whiskies. Two were simply diluted Berlin spirit; a third was a raw grain whisky, containing about one per cent fusel-oil, and three to four per cent. methylated spirit; the fourth was an inferior whiskey, containing six per cent. of methylated spirit and artificial flavouring matters; while the fifth was a mixture of malt and Berlin spirit with about forty-three grains of vitriol.

BEQUESTS TO SCOTTISH MEDICAL CHARITIES.

BY the death and munificence of the late Mr. Robert Couper of Cathcart, several medical charities in Scotland are to benefit, the West of Scotland Seaside Homes, Dunoon, to the extent of £200; the Kilmun Seaside Home for Convalescent Poor, £200; the Glasgow Eye Infirmary, £100; the Glasgow Maternity and Lying-in Hospital, £100; and the Glasgow Medical Missionary Society, £100. Principally to be noted, however, is that the residue of his estate is to be given for the erection of a hospital or infirmary on the south side of the Clyde, in or near Crosshill, and of a convalescent home in connection with such infirmary or hospital. It is believed the erection of the two buildings will soon be commenced.

GLASGOW DISTRICT LUNACY BOARD.

THE negotiations which were being carried on for the purchase of a site for the new District Asylum have been concluded; and of the two sites under consideration, the Board has decided in favour of Hartwood. The total area of the property acquired amounts to about six hundred acres, and lies at a distance of fifteen miles by rail from Glasgow. The amount paid for the ground and the dwelling-houses on it is £26,500. The new asylum which it is proposed to erect will be on an extensive scale, and fitted up to accommodate 900 to 1,000 patients; and it is reckoned that its ultimate cost will not be less than £150,000.

THE GLASGOW WESTERN INFIRMARY.

IN consequence of the managers of this hospital being desirous of conferring with the medical and surgical staff on the question of the administration of anæsthetics, a conference between representatives of the board of directors and the members of the staff has been arranged for. No doubt, this proceeding has arisen from the fatal occurrence which recently took place within the institution, and from the general public being at present a good deal exercised by the dispute at the Royal Infirmary as to what precautions are and are not taken in the matter. If the subject be approached in a proper and conciliatory spirit by both parties at the conference, nothing but good can come out of it, and we shall hope to find that some satisfactory result will be arrived at.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending June 9th show that the death-rate in the eight principal towns was 26.9 per thousand of estimated population. This rate is 3.7 above that for the corresponding week of last year, and 2.0 above that for the previous week of the present year. Perth showed the lowest mortality, viz., 11.9 per thousand; and the highest was in Paisley, viz., 35.3 per thousand. The death-rate in Glasgow was 33.8 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 4.5 per thousand, or 0.3 below the rate for the previous week. Measles and whooping-cough were the most prevalent epidemic diseases, the mortality from which was most marked in Glasgow. Seven deaths from whooping-cough were registered during the week in Dundee. There were 112 deaths from acute diseases of the chest, or 12 more than in the previous week. The mean temperature was 52.6°, being 0.5° below that of the week immediately preceding, and 2.7° below that of the corresponding week of last year.

THE SCOTCH UNIVERSITIES AND PUBLIC FUNDS.

RECENTLY, in connection with the Universities (Scotland) Bill, returns were called for by the House of Commons as to the amount of money furnished to the Scotch Universities during the last ten years out of the public funds. These returns have now been published; and they show that the grand total is £409,250, of which £108,757 were grants, paid over the ten years, for new works, including purchases of sites, leaving a sum of about £300,000 to represent the ordinary issues from public funds for salaries, pensions, maintenance of buildings, and other charges. An examination of the different tables under which the sums are grouped shows the notable fact that Glasgow alone among the Scotch Universities has received no grant for the maintenance of her buildings—a state of matters which has been frequently brought under the notice of the Government, but as yet without avail.

DUNDEE LUNATIC ASYLUM.

AT the annual meeting of the directors and subscribers to the Dundee Royal Lunatic Asylum, held on Monday, the medical report submitted showed that 465 patients had been under treatment during the year, being an increase of 39 as compared with the previous year. During the year, 139 new patients had been admitted, and of that number there were recoveries to the extent of 43.88 per cent., while the percentage of the deaths calculated on the whole number was 7.09. In their report on the financial condition of the institution, the directors state that the old buildings had not been sold, owing to the long depression of trade; that these buildings had been valued at £65,000, and, if sold for that sum, the cost of the new buildings at Westgreen (£60,000) would have been defrayed; the interest on the new buildings was, therefore, a heavy tax upon them. The income for the year was £9,557, and the expenditure £9,797, showing a deficiency of £240. In the circumstances, the directors could not think of adding to the large debt of the institution, and would reluctantly be compelled to raise the rate of board for pauper-patients, which at present stands at 10s. per week.

IRELAND.

THE ADELAIDE HOSPITAL.

MR. F. W. WARREN has been appointed surgeon to this Hospital, in succession to the late Mr. B. W. Richardson. Mr. Warren is a demonstrator in the School of Surgery of the Royal College of Surgeons, and has been lately acting as surgical registrar to the Hospital.

THE PROFESSORSHIP OF ANATOMY AND CHIRURGERY IN TRINITY COLLEGE, DUBLIN.

THE election to this professorship, rendered vacant by Professor Alexander Macalister's resignation of it, on his appointment to the chair of anatomy in the University of Cambridge, as notified in last week's JOURNAL, will be made by the Provost and Senior Fellows on September 29th next. The emoluments and advantages of the Professorship consist in a fixed salary of £250 per annum, and o fees of three guineas, payable by each student attending a three months' course of clinical lectures delivered by the Professor in St Patrick Dun's Hospital. The Professor is also entitled to charg

reasonable fees, to be paid by all persons attending his lectures (other than clinical), such fees to be regulated, from time to time, by the Provost and Senior Fellows. He is also entitled to a portion of the profits arising from the dissecting-room, such proportion being, from time to time, regulated by the Provost and Senior Fellows.

BELFAST ROYAL HOSPITAL.

AT the quarterly meeting of the general committee recently held, it was stated that the total amount of subscriptions collected for the current year was £1,371, which includes upwards of £400 obtained from the employés of various firms in Belfast. During the past quarter a sum of £650 was received by donations and bequests; and although the accounts are paid to May 1st last, yet the bank account has been overdrawn to the extent of £772. As regards the two new departments established in the hospital, viz.: one for the diseases of women and the other for ophthalmic cases, the results, so far, appear to be satisfactory. Dr. Byers, who has the charge of the former department, reports that, in the beginning of the year, a very commodious and suitable ward containing four beds was set apart for patients, and since then twenty-three women, suffering from diseases incidental to their sex, have been treated, all the beds having been almost continuously occupied. The attendance also at the extern part has been very numerous. Clinical instruction is given to the senior students attending the hospital in these departments.

LOCAL GOVERNMENT BOARD FOR IRELAND: ANNUAL REPORT.

FROM the eleventh annual report, which has been issued this week, we learn that the average daily number of persons receiving in-door relief during the year amounted to 50,569, being 2,203 fewer than in the preceding year. The out-door lists, it is also satisfactory to learn, diminished by 1,361, the average daily number being 58,835. During the year ended the 21st January last, the total number of deaths in the various workhouses was 11,272, showing an increase of 25 deaths as compared with the number in the previous year. Of these, fever caused 588, as against 552; lung-disease 2,027, against 2,317; and deaths by small-pox 76, as compared with 64 in 1881. There were, for the twelve months ending September 29th, 54,435 admitted into workhouses for sickness, being a decrease of 1,592, as compared with the previous year; a decrease of 27,783 in the number admitted who were not sick; while there was an increase of 450 in the number suffering from fever or other contagious disease. In the various dispensary districts, the medical officers during the year attended 430,293 cases at the dispensaries, and 184,843 patients at their own homes, or a total of 615,136, and vaccinated 132,825 persons. The vaccination returns show an increase of 19,268, as compared with the previous year. Of these 132,825 persons vaccinated, 92,284 were under one year old when vaccinated, 22,127 above one year, while 18,414 were revaccinations. During the year ended the 21st of last January, small-pox caused 76 deaths in workhouses, being a slight increase as compared with the previous return; but the number of cases treated in dispensary districts were considerably more (479 as against 114) than those recorded in the twelve months ending September 30th, 1881. The disease principally prevailed in the Belfast, Waterford, Armagh, and Clonmel unions. As regards fever, there were 8,389 cases attended by dispensary medical officers, being a decrease of 344, as contrasted with 1881; and also a decrease in the number of scarlet fever patients by 1,228. The Medical Charities' Expenditure amounted to £159,028, under which heading is included the cost of medicines and medical appliances, salaries of medical officers and apothecaries, vaccination fees, and other expenses, showing an increase of £1,784 over that of the preceding year. The Commissioners have recommended loans, amounting to £66,954, to various towns in Ireland, principally for sewerage and water-supply; while the amount of sanitary expenditure in rural sanitary districts came, in the year ended September 29th, 1882, to £51,345, in comparison with £48,918 in the preceding year.

PARLIAMENTARY BILLS COMMITTEE.

A MEETING of the Parliamentary Bills Committee of the British Medical Association was held on Monday, June 18th, at the Offices of the Association, 161A, Strand. There were present: Mr. ERNEST HART in the chair; Dr. R. Barnes; Mr. Wickham Barnes; Dr. A. Carpenter, Croydon; Dr. E. Dewes, Birmingham; Dr. T. Eyton-Jones, Wrexham; Dr. A. Forsyth, Greenwich; Mr. H. Nelson Hardy; Dr. A. Macmillan, Hull; Dr. D. Nicolson, Broadmoor; Surgeon-General S. B. Partridge, Anerley; Mr. J. Prankerd, Langport; Dr. J. Rogers; Mr. C. H. Rogers-Harrison; Mr. S. W. Sibley; and Dr. E. H. Vinen.

The minutes of the previous meeting were read and approved.

It was announced that communications had been received from the following gentlemen, expressing their regret at being unable to attend: Mr. H. H. Phillips (Reading), Dr. Ord, Mr. Henry Stear (Saffron Walden), Dr. Philipson (Newcastle-on-Tyne), Dr. Thomas Williams, Dr. Alfred Sheen (Cardiff), Dr. Royle (Manchester), Dr Ewing Whittle (Liverpool), Mr. Spanton (Hanley).

Militia Surgeons.—The CHAIRMAN reported that he had communicated with Sir Eardley Wilmot, M.P., and Dr. Farquharson, M.P., who, in a very able manner, had brought the claims of the militia surgeons before the House of Commons in Committee of Supply. They had met with unexpected success, there being but a small majority of ten against them, including the Government supporters. This was, he said, extremely encouraging, for it showed that, at a more favourable time, and with a little additional effort, the Government would have been beaten. Sir Arthur Hayter, M.P., who spoke on behalf of the Government, expressed the desire of the Government to take into consideration individual cases of hardship, and desired that such cases would be submitted to them. He (the Chairman) had accordingly communicated with the gentlemen representing militia surgeons, and suggested that each should now send in a statement of his particular hardship, and communicate to the Committee the result. He suggested, also, that questions should from time to time be put in the House as to the manner in which such individual cases may be dealt with.

Honorary Queen's Cadetships.—The CHAIRMAN stated that the question of closing honorary cadetships against the sons of medical officers, whereas these were given to the sons of combatant officers, had received attention, and would shortly be brought to the notice of Parliament by members who had promised to give it their support.

Ship-Surgeons.—The CHAIRMAN reported that the memorial to the President of the Board of Trade (published in our issue of March 24th) had been duly forwarded, and a formal acknowledgment received. An elaborate statement of facts, with the articles which had appeared in the JOURNAL on the subject, had been prepared, printed in pamphlet form, and circulated among a large number of members of Parliament. Necessarily, the action they had taken had provoked hostile criticism in the interest of shipowners, and from the shipping press. It was stated that a memorial from the ship-owners was being signed, and would be presented to the President of the Board of Trade, stating their view, which naturally differed widely from the view supported by the Committee. He (the Chairman) had written to Dr. Irwin, who had taken the most energetic action in the matter, to come to London, and assist in arranging a deputation to the President of the Board of Trade.

Notification of Infectious Diseases.—The CHAIRMAN stated that, in accordance with a resolution passed at their last meeting, a memorial had been drafted by the subcommittee appointed for the purpose, and presented to the President of the Local Government Board, asking him to receive a deputation on the subject of the compulsory clauses contained in Mr. Hastings's Bill. Dr. Carpenter had an interview with Sir Charles Dilke on the subject, and would state what had taken place in reference to this matter.—Dr. CARPENTER said that he brought before the President of the Local Government Board the desire of the Committee to wait upon him by deputation. He found he was very unwilling to receive a deputation, and stated that his view of the matter was that it was a subject which each district should decide for itself. He (Dr. Carpenter) combatted that idea as far as possible, and pointed out that they, as a profession, would not be in any better position if this matter were legislated for on the principle of each district doing as it liked; on the principle of local option, they were not likely to have the matter put in the best light; for, as was evident from the transactions which were taking place with boards of guardians and

others on the subject of vaccination, if local option were to decide this matter, the probability would be that it would be disadvantageous to the public health. He was told that it was no use arguing the point, for he (the President of the Local Government Board) had made up his mind most thoroughly that there should be local option in this matter. Mr. Hastings's Bill would not be likely to come before Parliament this session. Sir Charles Dilke distinctly declined, at that time, to receive a deputation.

The CHAIRMAN said one reason why it was opportune to call this meeting together was, that just at this time many local bodies were considering their local Bills, and this question would probably arise in connection with some of these local Bills. Bath was a case in point. It occurred to him that there was another point of view in which they might carry out the spirit of the resolution passed at Worcester, and as to which Sir Charles Dilke would probably receive a deputation. At present, when local bodies came up for private Bills, the medical man was put at great disadvantage, because it was extremely difficult and costly to get a *locus standi* and conduct a case before Private Bill Committees. He suggested that they should communicate with Sir Charles Dilke, calling his attention, "first of all, to the desire of the Committee that the Government should obtain some more accurate information as to the working of the existing local Acts, and as to any influence which they may have had, or may not have had, in preventing the spread of infectious diseases; and therefore ask that, before any general legislation should take place, there should be a general inquiry; secondly, meantime, that the Local Government Board will take such steps as to secure that, before any local Acts are passed containing these clauses for localities asking for private Bills, the medical men of that locality shall have the opportunity of being examined by their representatives before the Committee." He had endeavoured to prepare the way for the reception of such a deputation.

Dr. CARPENTER said he thought there was a good deal to be said in favour of this proposition; and the experience obtained of what was transpiring in other places showed that the voice of the profession should be heard in such cases in a better manner than it was. No more striking instance of the necessity of that proceeding could be mentioned than what had recently occurred at Hastings. The Hastings Town Council had appointed, as their medical officer of health, a homœopath, who was in antagonism to the whole of the profession at Hastings and St. Leonard's. Was it, he asked, likely that such a man could expect active support from the medical profession, or that they would report their cases to a man who was a homœopath? and yet he was appointed, in spite of the opposition of the whole of the medical profession. This showed, he observed, how impotent in local affairs the profession frequently were, and how liable they were to be ridden over roughshod in matters where local option came into play. It would be an advantage if they could get some of these facts to put before Sir Charles Dilke.

The CHAIRMAN proposed that Sir Charles Dilke should be asked to receive a deputation, and that the following gentlemen should be asked to form such deputation: Dr. Alfred Carpenter (Croydon), Mr. Nelson Hardy, Dr. Partridge (Anerley), Dr. Carter (Liverpool), and himself. This was put to the meeting, and carried unanimously.

Burgh Police, and Health (Scotland) Bill.—The CHAIRMAN explained that this Bill had undergone various changes, in respect to the clauses relating to the notification of infectious diseases, since it was first brought before the notice of the Committee. The Bill, which applied solely to Scotland, had considerable interest for the Committee, from the fact that they had a large number of members in Scotland, and that any legislation in this respect for Scotland would undoubtedly form a precedent for England. The Bill had passed its first reading; the time for its second reading had not been fixed. The general provisions of the Bill, he suggested, should be referred to a subcommittee. The particular clauses which dealt with the subject of notification were the following.

5.—MITIGATION AND PREVENTION OF DISEASE.

319. *Notice to be given of Persons suffering from Infectious Disease.*—In order to secure that due notice be given to the Commissioners of any inmate of any building used for human habitation, or any ship, who is suffering from any infectious disease, the following provisions shall take effect (that is to say): (1) If any such inmate be suffering from any infectious disease, the occupier, or the person having the charge, management, or control of such building or ship (or, if such occupier or person be prevented by reason of such disease, then the person in charge of such inmate) shall, so soon as he shall become aware of the existence in any such inmate of any such disease, forthwith give notice thereof to the medical officer at his office. (2) If such inmate be not a member of the family of such occupier or person, the head of the family (resident in such building) to which such inmate belongs, or if there be no such head, or if such head be prevented by illness, then such inmate (unless prevented by reason of such disease or of youth) shall, on becoming aware of the existence in such inmate, or in his own person, as the case may be, of such disease, forthwith give notice thereof to such occupier or person. (3) The Commissioners shall provide and supply gratuitously to every registered medical practitioner resident or practising within the municipal boundary, who shall apply for the same, forms for the certificate or declaration to be made by such medical practitioner, of the particulars herein-after mentioned in relation to such cases, according to the form set forth in the schedule to this Act. (4) Every medical practitioner attending on or called in to visit such inmate shall, on becoming aware that such inmate is suffering from any infectious disease, forthwith fill up, sign, and deliver, or send to the medical officer at his office, a certificate or declaration stating, according to the form so prescribed, the date of the notice, the address, and the nature of the infectious disease from which, in the opinion of such medical practitioner, such inmate is suffering. (5) The Commissioners shall pay to every registered medical practitioner who shall, in pursuance of this section, duly make and give any such certificate or declaration, a fee of *two shillings and sixpence* for each such certificate or declaration: Provided that not more than one fee shall be paid to any medical practitioner for any certificate given by him in respect of the same infectious disease occurring in the same house or ship at the same time, or within thirty days of the date of the first certificate; and provided further, that no fee shall be paid for the notification of cases of infectious disease occurring in poor-houses, prisons, reformatories, hospitals, and other public institutions. (6) And any person who shall wilfully offend against this enactment shall, for every such offence, be liable to a penalty not exceeding *forty shillings*.

320. *Other Diseases may be declared to be within the foregoing Provision.*—The Commissioners may from time to time, by resolution on the report of the medical officer of health, and approved of by the board of supervision in Scotland, order that any infectious disease, other than those specifically mentioned in this Act, shall be deemed to be an infectious disease within and subject to the provisions of this Act.

321. *Removal to Hospital of Persons suffering from Infectious Disease, and without proper Accommodation.*—On the certificate of the medical officer of health that any person within the burgh is suffering from infectious disease, and is without lodging or accommodation proper for the treatment of the case, and sufficient for the purpose of isolation, so as to prevent the spread of the disease, the Commissioners may give notice to the head of the family (resident in the same building) to which the person so suffering belongs, requiring the removal forthwith of such person to a hospital provided by the Commissioners for the reception and treatment of persons suffering from infectious disease, or to any place of temporary accommodation provided by them for that purpose; and that if such notice is not complied with, application will be made to the sheriff, or the magistrates of the burgh (at a time and place to be stated in the notice), for an order for such removal, provided that if there is no such head of the family so resident, or if such head of the family is absent from the burgh or cannot be found, such notice may be given to the person so suffering. Any notice under this clause shall be sufficiently given by leaving the same addressed to the person to whom it is given upon the premises in which the person suffering as aforesaid is lying. If the person to whom such notice is given consents, the Commissioners may forthwith remove the person so suffering to such hospital or place of accommodation as aforesaid; but if the person to whom such notice is given refuses to consent to such removal or to be removed, or is by reason of age, disease, or otherwise incapable of giving such consent, the sheriff or the magistrates may, at the time and place mentioned in such notice, on the application of the Commissioners, and after hearing the evidence (if any) which may be adduced by or on behalf of the person to whom such notice has been given, make an order for the removal of the person so suffering to such hospital or place of accommodation as aforesaid. Such order may be addressed to an officer of the Commissioners, or to any constable of the burgh, and any person who disobeys or obstructs the execution of such order shall be liable to a penalty not exceeding *ten pounds*, and to a daily penalty not exceeding *twenty shillings*. The Commissioners shall defray all expenses incurred by them in respect of the conveyance of such person to such hospital or place of accommodation, and his maintenance and treatment therein.

The expression "infectious disease," it is stated on page 4, shall mean and include "small-pox, typhus, typhoid, scarlet, relapsing, continued and puerperal fever, measles, scarlatina, and diphtheria, and such other diseases as the Commissioners, or Her Majesty, by order in Council, may from time to time declare for the purposes of this Act to be infectious."

It would be seen that the clauses, as they at present stood, made it the duty of both the occupier and the medical officer to give notice, and was what was termed concurrent notification. This was a plan against which the Association pronounced at Worcester, and a plan to which a majority of the medical profession objected in England. It occurred to him that their proper course would be, that they should ask the Lord Advocate to receive a deputation from the Committee, expressing their objection, as an English body, to the principle of this clause; and that communications should be sent to the Secretaries of each Scotch Branch, calling attention to it, and requesting them, as speedily as possible, to ascertain the feeling of their Branch, and to communicate with the Committee, or with the Lord Advocate direct if they thought better. It was obvious that in a matter which concerned Scotland, it would be important that the opinion of the Scotch profession should be distinctly made known.

Dr. FORSYTH said the question had been discussed very much among the medical societies in Glasgow, and opposition to such clauses had proceeded from the highest authorities.

Dr. CARPENTER noted that the word "may" in the earlier editions of the Bill had been altered to "shall," and he suggested that they should strive to get the word "may" reinserted, that the profession might not be placed in the position of having a penalty liable to be levied against them by every homœopath and every o

else who might have a vicious feeling against his fellow brother practitioner.

The following resolution was proposed and carried:

"That the Lord Advocate be requested to receive a deputation from this Committee to represent the views of the British Medical Association as to the best method of securing compulsory notification of disease; that the attention of the Scotch Branches be drawn to the clauses relating to the notification of disease contained in the Burgh Police and Health (Scotland) Bill, and that they be requested to communicate their views on the subject to this Committee, or to the Lord Advocate."

Vaccination.—The CHAIRMAN reported that at the instance of highly influential members of the House of Commons he had prepared and circulated to the members of the Committee a Memorandum on Vaccination, copies of which, it was suggested, should be sent to every member of Parliament, in order to afford them reasons to support Sir Lyon Playfair's amendment on Mr. Taylor's resolution.

Dr. CARPENTER said the one thing which did so much harm to the cause of vaccination, was the injudicious way in which some bodies worked it by continual recourse to penalties, and some other plan, he thought, should be adopted.

It was moved, seconded, and adopted, that the statement, "A Memorandum on the Influence of Vaccination in the Prevention and Diminution of Mortality from Small-pox," now presented, be adopted, and a copy sent to every member of Parliament.

Payment of Representatives of Branches.—The CHAIRMAN called attention to the proposal under discussion in the Association to pay the railway expenses of representatives of Branches on the Committee of Council, and said that he did not express any opinion in favour of that proposal, but, if that principle were finally endorsed, it seemed proper to submit to the representatives of Branches on this Committee whether the question should be submitted to the Association, in proper time and place, of extending that principle, should it be endorsed by the Association at large, to the case of the representatives of Branches on the Parliamentary Bills Committee.

Mr. NELSON HARDY thought that the question was not open to discussion at that Committee.

Dr. ALFRED CARPENTER expressed a strong objection to the principle of the payment of the railway expenses of Branches on any of the Committees of the Association, but considered that, if the principle were adopted for the Committee of Council, it was quite open to the Branches and to this Committee to consider whether it should be extended to payment of fares of Branch representatives on the Committee.

The CHAIRMAN ruled that the discussion was in order so far as related to the wishes of the representatives of Branches on this particular Committee, and their relation to their Branches.

A short discussion followed, in which Mr. NELSON HARDY, Dr. ROGERS, and Mr. EYTON JONES took part.

It was resolved that the Committee should not take action in the matter.

THE MEDICAL ACT AMENDMENT BILL.

APOTHECARIES' HALL OF IRELAND.

ON Tuesday, June 12th, a deputation from the Apothecaries' Hall of Ireland had an interview with Mr. Mundella at the Privy Council Office, to ask him to reinstate their body on the Medical Council, as the Bill was introduced to the House of Lords by Lord Carlingford; and they also desired to be placed on the new Medical Board to be formed under the Bill. The deputation was accompanied by Mr. O'Shaughnessy, M.P., and Mr. Henderson, M.P.; the former gentleman pointing out that the members of the Apothecaries' Hall had always been recognised, and that their services to the lower middle and lower classes of Ireland were very great. Mr. Mundella, in reply, said that the decision to exclude them had been come to, the report of the Royal Commission being against them; and all he could do was to put their arguments before the Lord President. Everybody was agreed as to the measure being desirable, and the only contest was with reference to the representation on the Divisional Board. He could not promise that they should be reinstated, in the teeth of an agreement come to between Lord Cairns and the Lord President of the Privy Seal.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

AT the late annual meeting of this College, the following resolutions were proposed by Dr. Kidd, and unanimously adopted.

1. That the incoming council be recommended to have the Medical Acts Amendment Bill further amended, so as to establish and maintain a closer supervision over medical education on the part of the College than the present Bill proposes to do. That it appears to the College this could best be done by defining in the Bill that all previous examinations should be conducted by the "medical authorities."

2. That the Board examination should be accepted by each of the medical authorities for the final examination.

3. That candidates who have passed the previous examinations of any medical authority, and the final examination by the Board, should receive the qualifying diploma of such authority, and be registered in right thereof.

THE SCOTTISH CORPORATIONS AND THE MEDICAL ACT AMENDMENT BILL.

THE agitation in reference to this measure on the part of the Scotch corporations still continues, and the latest shape in which it has taken expression was in the form of a public meeting held in Glasgow on the 15th instant, under the chairmanship of the Lord Provost of that city, when the new state of matters contemplated by the Bill was discussed. The three resolutions brought forward and carried were to the effect: (1.) That there was too large a preponderance of university nominees on the proposed Medical Board; (2.) That the medical corporations should have equal representation with the universities on the Medical Board, and that at least one-half of the nominees of the former should be extramural teachers; and (3.) That there should be an uniform fee for all classes of students. It will thus be seen that the views put forward were very similar to those that had already found expression at previous meetings of different bodies; but on the present occasion additional interest was given to the proceedings by a very temperate and able speech from Professor Leishman, Dean of the Medical Faculty of Glasgow University. He pointed out how the present legislation was in no way sought by the universities, but had been forced on them, and that the constitution of the Scotch Medical Board was in accordance with the report of the Royal Commissioners, who had come to the conclusion that the examinations of the corporations were not altogether satisfactory, and that a preponderating influence on the Board was simply the due of the universities. He also very clearly showed that the proportion of the university to corporation votes was really not eight to three, but seven to four, as experience had shown that, in its Medical Faculty, St. Andrew's had closely allied itself with the corporations of Edinburgh in the conducting of its examinations. Speaking for himself as well as his colleagues at the University, Professor Leishman paid a high tribute to the extramural schools as a source of strength to both Glasgow and Edinburgh Universities; and while he was willing that some increase of voting power should be given to the corporations, he considered that the demand for three more representatives was excessive, and it would be strenuously opposed by the universities. This is one of the few public occasions on which the views of the university authorities have been made public on the proposed medical legislation; and a perusal of Professor Leishman's speech shows that their cause was placed in very able hands.

THE MEDICAL DEFENCE ASSOCIATION.

AT a meeting of the Council of the Medical Defence Association, held on the 15th instant, the following resolution was proposed by Surgeon-General Gordon, C.B, seconded by Dr. Danford Thomas, and carried unanimously.

"That the members of the Council of the Medical Defence Association, while they foresee that in the practical working of the proposed Medical Act some modifications may be found necessary, are of opinion that on the whole the Bill fairly meets the interests of the public and the requirements of the profession of medicine. The only point the Council would seriously press is that, in order to prevent unnecessary legal complications and definitions in the future, some simple but distinctive title ought to be assigned to the licentiates of the new Medical Boards."

It was further resolved to send a copy of the above resolution to the Vice-President of the Privy Council.

MR. MARK H. JUDGE, who has from the first acted as Honorary Secretary and Curator of the Parkes Museum, and by whose exertions its success has been greatly promoted, has been compelled by stress of professional engagements to retire from the post, which is one of increasingly onerous labour.

THE IRISH MEDICAL ASSOCIATION.

THE Annual General Meeting of this Association was held on June 4th, being the first Monday in June, and the day upon which the annual general meeting of the Royal College of Surgeons in Ireland, and the annual meeting of the Royal Medical Benevolent Fund Society of Ireland, are also held. Mr. Molony, of Tulla, co. Clare, President of the Association, occupied the chair. The report of Council was read by the Honorary Secretary, Mr. Chapman. It referred to the incorporation of the Association and to the action of he Council with reference to the Medical Act Amendment Bill, the introduction of which is "welcomed as a legislative embodiment of the principles which have long been adopted by medical reformers. But the Council propose, while giving the measure their warmest support, to press for such changes as are necessary to make the measure perfect in the interest of the public and the medical profession generally." A sketch was given of the progress and present position of the Union Officers' Superannuation (Ireland) Bill, which now stands for second reading, but has been "blocked" by Mr. Biggar and Mr. Power. The Council express, in their report, a fervent hope that the Bill may soon pass. "They earnestly solicit the co-operation of all the members of the Association in the effort to influence their Parliamentary representatives in favour of the measure; and they suggest that that influence would be best obtained by personal letters. With regard to the notification of Infectious Diseases (Ireland) Bill, the Council have requested Mr. Meldon, M.P., to re-introduce the Bill on the subject, which was drawn up and agreed to by the Association in conjunction with the Dublin Branch of the British Medical Association, in order that both Mr. Hastings' Bill and this Bill might be before the House at the same time. Mr. Meldon is only awaiting a favourable opportunity to re-introduce the Bill, the principles of which have been approved of also by the College of Physicians and the Royal College of Surgeons. The Council remind the Association that the principle of this Bill is to make notification of infectious diseases to the Sanitary Authorities in Ireland obligatory on the householder or guardian of the patient, the medical attendant being at liberty to notify if he voluntarily undertake that responsibility, and thereby bind himself under penalty to perform it, but not otherwise. In practice, the Council believe such cases will, almost without exception, be voluntarily reported by the medical attendant at the request of the householder, and thus the occurrence of cases of infectious diseases will be more generally notified to the sanitary authority than under any other system of which the Council is aware." The following resolution was subsequently unanimously adopted:—"That Mr. Meldon's 'Notification of Infectious Diseases (Ireland) Bill' deserves the support of this Association, and that the Council are hereby directed to oppose any Bill which proposes that the duty of notifying infectious diseases to the sanitary authorities shall be made obligatory upon the medical attendant." Matters affecting the interests of workhouse, prison, and dispensary medical officers, with regard to which the Council had taken legal and other action, were also referred to in the report. The following officers were elected for the ensuing year. *President*—Dr. Archibald Hamilton Jacob. *Vice-Presidents*—Leinster: Dr. J. Ridley, Tullamore; Ulster: Dr. Bagot, Enniskillen; Munster: Dr. G. Peirce, Newcastle, Limerick; Connaught: Dr. Kinkead, Galway. *Council*—Drs. C. Bent Ball, Dublin; Parsons Berry, Mallow; J. W. Boyce, Stillorgan; R. Brown, Rathmines; Wm. Carte, J.P., Dublin; H. G. Croly, Dublin; T. Darby, Bray; T. Drapes, Enniscorthy; R. V. Fletcher, Ballinasloe; J. R. Harvey, Dublin; R. S. Hayes, Naas; G. M. Hearn, Cavan; W. J. Hepburn, Dublin; David Jacob, Maryborough; J. B. Kelly, Drogheda; J. Martin, Portlaw, County Waterford; A. Meldon, Dublin; W. Malcomson, Cavan; G. J. Mackesy, Waterford; R. M'Donnell, Dublin; F. V. M'Dowell, Baltinglass; G. Morrogh, Dublin; J. Molony, Clare; A. O'K. Nolan, Galway; J. F. Pollock, Dublin; G. H. Porter, Dublin; T. Purcell, Dublin; A. O. Speedy, Dublin; J. M. Tabuteau, Portarlington; R. M. Taggert, Monkstown; J. W. Usher, Dublin; and J. L. Walshe, Kilmacthomas. *Auditors*—Dr. Albert Croly, Rathfarnham; and Dr. H. Colpoys Tweedy, Dublin. Dr. Archibald H. Jacob, the newly elected president, then took the chair amid applause. The annual dinner took place in the evening.

FOREIGN HOSPITAL CONSTRUCTION.—The Government has appointed Mr. P. Gordon Smith, of the Institute of British Architects, and architect to the Local Government Board, to visit Berlin for the purpose of reporting on the system of construction adopted in some of the municipal hospitals. Mr. Smith has previously furnished valuable reports to the Government on other Continental hospitals.

THE SUNDERLAND CATASTROPHE.

WE are indebted to Dr. W. Osborne Lambert of Sunderland for the following statement of this terrible disaster, which has resulted in the death of nearly two hundred little children.

"The first intimation I had of something wrong in the hall was from a messenger who said a little boy had taken a fit, and was dying. I went at once; and, on the second landing leading to the gallery-stairs from the dress-circle, I found a little boy, about nine years of age, lying on his back, quite dead. He presented the appearance of death by apnœa; his face was puffy, cyanosed, and blackish; vessels of the neck turgid, eyes protruding, pupils dilated to the utmost, hands and feet violet colour. There was a strong odour of fæces and urine. No one was beside him to give me any information. I then remembered that, about three o'clock, crowds of children, averaging from seven to twelve years of age, were about the large door of the hall, kicking and shouting for it to be opened. My little boy, too, had teased me to go to the entertainment, but he did not go.

"I had, in a moment, a presentiment that a mortal struggle was going on in some part of the stairs. I then rushed on up some fifteen stairs; and, on turning to my left, I beheld another dead body, and, although so near now to where the struggle was going on, I heard but little noise. A little further on, I saw a sight in the half-darkness of a heap of, as near as I can tell, about three hundred children, and most of them apparently dead. Looking down from the top of the stairs to the area or pit below, the sight beggared description. The heap was massed, I should think, seven or eight feet high at the furthermost part; many of the children were down, and others locked together in a manner almost inextricable; many seemed to be feebly struggling and moaning. Every moment lost meant many lives; indeed, I should think a hundred must have died within the first five minutes after the rush occurred. I saw that I might be the means of saving scores more lives by trying to rescue the living from the dead, than by any professional aid I could render; and I knew many medical men must soon be on the scene.

"During these agonising moments, volunteer rescuers were what were most needed. After some minutes of intense physical exertion, and increasing exhaustion, in getting out the bodies, I was joined by Mr. Waterston, surgeon; then by Drs. Beattie and Bolton, who agreed with me that more lives could be thus saved by rescuing the injured and the dead; and we worked as surely never men worked before. We soon had plenty of helpers. The carriers conveyed the children up the left side of the stairs, back over, with orders that those who were alive were to be quickly conveyed into the open air for treatment. They returned on the opposite side. By this disciplined chain on each side, taking away and returning for others, I think a hundred lives must have been saved. The stench all the time was intolerable and overpowering, for almost in every dead child expulsion of fæces and urine had taken place. As near as I could tell, the removal of the bodies was accomplished in about half an hour.

"When the last body was removed, lights were procured and the fatal door was examined, when it was found to be immovable against the united strength of nearly a dozen men, being bolted down.

"In most of the cases that had advanced beyond the initial stage of suffocation, we noticed convulsive movements of the eyes and limbs, and almost insensibility; but it was astonishing even in these cases, where we were assured there was only a spark of life in them, how soon they would recover, and after a drink of water, would walk away with a little assistance.

"The dead nearly all presented the same characteristic appearance, namely, a congested, puffy face, purple or blackish turgescence of the vessels of the neck, closed eyelids, protruding and fixed eyeballs, pupils dilated to the utmost, bloody froth issuing from the nose and mouth, giving the appearance of an intense degree of suffering and anxiety; yet, in twenty-four hours after death, much of this passed off and the face reposed into a slight smile, as seen in sleep.

"Cadaveric rigidity was universally absent, the muscles and joints being extremely flaccid."

Mr. Mordey Douglas, Senior Medical Officer to the Sunderland Hospital for Sick Children, sends the following particulars about some special cases.

"My attention was principally devoted to two children, one of whom, Mary Elizabeth Fox, aged 7, I took in a cab to the Hospital for Sick Children. For some time after she arrived at the hospital, bloody froth issued from her mouth. Her respiration was marked by lengthened pauses of a dyspnœal character, her pulse was small

and quick, and her skin was pale and moist, although the child seemed in considerable danger; but I resolved to act cautiously, and I did not deem it necessary to mark the faradisation of the phrenic nerve, but, with the view of relieving the congestion of the lungs, I immediately placed the child in a warm bath. The beneficial effect of the warmth to the whole surface soon became obvious in the improved respiration, and the increased volume and slowing of the pulse. The child was then wrapped in a hot blanket and put into her cot. As soon as she could drink, some hot tea and milk was given to her. Our very excellent matron, Mrs. Croudace, watched the child nearly the whole night until 4 o'clock on Sunday morning. Mary was restless and started; she also wandered, and would say: "Get away, man; get away. There is a man sitting on my breast." She, however, slept for some time after 4 o'clock on Sunday morning, when her father came to see her. Mary did not know him, and she mistook the rails of her cot for children, to whom she offered biscuits. On Monday she also said there was a man in the ward when there were only nurses present, but since then she has gradually improved, and will be, I believe, quite convalescent in a day or two more. She has never mentioned her home, nor asked where she is. Two of her brothers were killed, and a third was taken to the General Infirmary, having sustained injury to the back. Thomas Rent, aged nine years, was received into the Children's Hospital on Tuesday evening with a fracture of the middle third of the right humerus. He was suffering a good deal of pain in consequence of his arm having been improperly bandaged and plastered by a bone-setter, to whom the child had been taken in the first instance. The arm was very tightly constricted by plaster, which was evidently the cause of the considerable swelling of the forearm and hand which was present. The arm about the bend of the elbow was considerably bruised. In consequence of the bruising and swelling, it seemed desirable at first to put the fracture up in straight splints extending well down the forearm, so that the limb might be laid on a pillow with the hand a little raised, to facilitate a reduction of the swelling. The result so far is satisfactory; the boy is to-day comfortable and doing well. It may be interesting to know that Rent was apparently the last child through the fatal door. He had got his head and body through the door when he paused for his little brother, and in an instant the rushing crowd of children jammed and broke his arm against the edge of the door. His little brother seems to have been carried on the heads of the crowd downstairs and was found safe, but with his head thrust through an open window. Isabella Howie, aged 10 years, the other child under my care, is at home. She presents contusions of the right arm and of the left side of the head, but they are not of a serious character. She also complains of pain over the lumbar spines, but there is no evidence there of contusion. She is very nervous, but altogether may be said to be progressing rapidly to convalescence, Howie came down the gallery-stairs hand in hand with Annie Maria Peace; when near the fatal landing, two boys separated them, the result being that the former escaped with the somewhat slight injuries described, whilst the latter was killed."

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—At the annual meeting for election of officers, the following were elected for the year 1883-84. *President:* Dr. Thudichum. *Vice-Presidents:* Dr. Alderson, Mr. Lawrance, Dr. Travers, Dr. Hart Vinen. *Treasurer:* Mr. Alfred Cooper. *Secretaries:* Mr. Keetley, Mr. Hendley. *Council:* Mr. Alderton, Dr. Atkinson, Mr. Chippendale, Mr. F. S. Edwards, Mr. Hemming, Dr. Pope, Mr. Webber, Mr. Barnes, Mr. Lunn, Dr. Pickett, Mr. Potter, Mr. Walker. The report showed that an average of more than thirty-eight members had attended each meeting; that the total number of members was now one hundred and forty-five; and that the prospects of this new society were in every respect most satisfactory.

LONDON SANITARY PROTECTION ASSOCIATION.—At a meeting of the Council of this Association, held at 1, Adam Street, His Grace the Duke of Argyll was unanimously elected President, in place of Professor Huxley, who resigns the office of President, but retains his seat at the board; and the Hon. and Rev. C. Carr Glynn, Vicar of Kensington, was unanimously elected a member of Council. We are informed that the Association continues to progress; that, instead of the 533 members annouced at the end of last year, it now numbers close on 700, and hopes to reach the thousand by the end of the current year. When that number is reached, we believe the Council intends to raise the entrance-fee, which is at present only one guinea.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., September 26th, in accordance with the regulation for the election of members passed at he meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 11th day of July next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, June 14th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Keswick on Friday, July 6th, 1883. Members intending to read papers or show specimens are requested to communicate with RODERICK MACLAREN, Honorary Secretary *pro tem.*, or J. SMITH, M.D., Honorary Secretary.

SOUTH-WESTERN BRANCH.—Mr. J. Harper, President; Mr. C. Bulteel, President-elect. The annual meeting will be held on Tuesday, June 26th, at the Royal Albert Hospital, Devonport. The chair will be taken at 2.15 P.M. The annual dinner will be at the Duke of Cornwall Hotel, Plymouth, at 6 P.M. The President-elect invites members to lunch at his residence, 84, Durnford Street, Stonehouse, from 12 to 2 o'clock. Mr. George Jackson will introduce for discussion the proposed Medical Provident Society scheme. The Secretary will be glad to receive notice of proposed papers and communications.—S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held on Thursday June 28th, at the Medical Institute, Edmund Street, at 3.30 P.M. An address will be delivered by the President, Dr. Balthazar Foster. The annual dinner will take place at the Grand Hotel, after the termination of the annual meeting, at 6 P.M. Dinner tickets, exclusive of wine, 5s. each. Members have the privilege of introducing one friend each to the dinner, whether a member of the medical profession or not.—EDWIN RICKARDS, M.B., A. H. CARTER, M.D., Honorary Secretaries.

SHROPSHIRE AND MID-WALES BRANCH.—The annual general meeting of this Branch will be held at the Salop Infirmary on Tuesday, July 3rd, at 1.30 P.M. An address will be given by the President, Dr. Edwyn Andrew. The annual dinner will be held at the Raven Hotel, at 5 P.M. Dinner tickets, including wine, 12s. 6d. each.—EDWARD CURETON, ARTHUR STRANGE, Honorary Secretaries.

THAMES VALLEY BRANCH.—The annual meeting of this Branch will be held at the Board Room of the Richmond Hospital, on Thursday, July 5th, at six o'clock. Members who intend to bring forward any communications are requested to give notice to the Honorary Secretary, EDWARD L. FENN.—Richmond, June 19th, 1883.

SOUTH-EASTERN BRANCH: WEST SUSSEX DISTRICT.—The next meeting of the above District will take place at Horsham; Mr. Bostock in the chair. Gentlemen intending to read papers or to bring forward subjects for discussion are requested to send notice to the Honorary Secretary, G. B. COLLET, 5, The Steyne, Worthing.—June 20th, 1883.

CAMBRIDGE AND HUNTINGDON AND SOUTH MIDLAND BRANCHES.—A combined meeting of the Cambridgeshire and Huntingdonshire and South Midland Branches will be held at Bedford on Friday, June 29th, 1883, under the presidency of R. H. Kinsey, Esq. A preliminary committee meeting of the Cambridge and Huntingdon Branch will be held at 12 o'clock, and of the South Midland Branch at 12.15 P.M.; and a general meeting will take place at 2.45 P.M. —all at the rooms of the Harpur Trustees. The President invites members to luncheon at his house, Harpur Place, at 1 o'clock, and he will be obliged by a reply, not later than Tuesday, June 26th, from all gentlemen accepting his invitation. 1. The President will deliver a short Introductory Address. 2. A discussion will be opened by Dr. Bradbury on the Etiology of Pneumonia. 3. Dr. Buszard will introduce a discussion on Croup and Diphtheria. The following cases and papers have also been promised. 4. Professor Humphry: The Crescentic Form of Cutaneous Diseases. 5. Dr. Jones: A Case of Poisoning from Arsenical Fabrics. 6. Dr. Latham. 7. Dr. Ingle: Imperfect Recovery after Delivery. Mr. R. W. Watkins will make a few remarks on the Medical Act Amendment Bill. Dr. Jones will exhibit some specimens of Tubercle Bacilli. A Report will also be presented by the Collective Investigation Committee of the Cambridge and Huntingdon Branch. Cards and explanatory memoranda relating to Acute Pneumonia, Chorea, Acute Rheumatism, Diphtheria, and Syphilis, can be had on application to the Honorary Secretaries, B. Anningson, M.D., and G. F. Kirby Smith, Esq.—BUSHELL ANNINGSON, M.D., Cambridge; G. F. KIRBY SMITH, Bedford, Honorary Secretaries.

NORTH WALES BRANCH.—President, Roger Hughes, Esq.—The thirty-fourth annual meeting will be held at the White Lion Royal Hotel, Bala, on Tuesday, July 3rd, at 11.30 (for noon). Members desirous of reading papers are requested to communicate their titles to the Honorary Secretary. Agenda: 12.15, President's Address. Papers: 1. On a New Method of Treating Extensive Lacerated Wounds: by Dr. G. J. Roberts, Festiniog. 2. On Medical Reform—Local: by Dr. S. Griffith, Portmadoc. 3. Paper by Dr. David Lloyd Roberts, Manchester. 4. On Sanitation *v.* Infection in Zymotic Diseases: by Dr. J. R. Hughes, Denbigh. 5. Case of Strangulated Hernia: by Mr. Roger Hughes (deputy). 6. On Fifty Cases of Turning: by Mr. F. H. V. Grosholz, Aberdovey. The President requests the pleasure of members' company at luncheon at the Hotel on the arrival of the morning trains. After the meeting, the members and guests will dine together at 3 o'clock; tickets (inclusive) 10s. 6d. each.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh.—June 20th, 1883.

METROPOLITAN COUNTIES BRANCH.—President, Thomas Bridgwater, M.B.; President-elect, Charles J. Hare, M.D.—The thirty-first annual meeting of this Branch will be held at the Ship, Greenwich, on Wednesday, July 11th, at 4 P.M. Dinner at 6.30 P.M.; tickets, 12s. 6d. each, exclusive of wine. Members intending to dine are requested to apply to one of the Secretaries on or before July 7th. —ALEXANDER HENRY, M.D., 132, Highbury Hill, N.; W. CHAPMAN GRIGG, 6, Curzon Street, W., Honorary Secretaries.—June 21st, 1883.

WEST SOMERSET BRANCH.—The annual meeting will be held at the White Hart Hotel, Martock, on Thursday, July 12th. The President-elect, J. D. Adams, M.D., will take the chair at a quarter-past three o'clock punctually. Dinner at 5 o'clock.—W. M. KELLY, M.D., Honorary Secretary, Taunton.—June 20th, 1883.

BATH AND BRISTOL BRANCH.—The annual meeting of the above Branch will be held on Wednesday, June 27th, 1883, at the Museum and Library, Bristol, at 4.30 P.M., when J. K. Spender, M.D., will resign the chair to E. Crossman, Esq., President-elect, who will deliver an address. The business of the meeting will be to receive the report of the Council; to elect the officers of the Branch; to transact the necessary business; and to discuss such subjects connected with the interests of the Branch and of the profession as may be brought before it. The dinner will be held at the Royal Hotel, College Green, Bristol, at 6.30 P.M. Dinner tickets, including ice and dessert, 7s. 6d. each. The wines will be served at moderate charges.—E. MARKHAM SKERRITT, Honorary Secretary for the Bristol District, Thornton Villa, Richmond Hill, Clifton; R. J. H. SCOTT, Honorary Secretary for the Bath District, 13, Bladud Buildings, Bath.

YORKSHIRE BRANCH.—The annual meeting of the Yorkshire Branch will be held at Firth College, Sheffield, on Wednesday, June 27th, at 3 P.M., when the following business will be transacted. The President (Dr. Keeling) will deliver an Address. The Report of the Council will be read. The Officers and Council for 1883-4 will be elected. Mr. Snell will, at 2.45 P.M., exhibit several Ophthalmic Cases. The following papers will be read. Dr. C. F. Hutchinson: The Convalescent Institutions of Scarborough. Mr. Cooke: A recent case of Poisoning by Butter of Antimony, with some remarks on the Sale of Poisons' Act. Dr. Barrs: Tabetic Disease of the Hip-Joint (Charcot). Dr. W. R. Thomas: On Obstinate Constipation; its Prevalence and its Consequences; with the Relation of some curious Cases. Mr. Snell: Two cases of Congenital Absence of Eyeball; and other cases of Congenital Eye and Ear Defects. Dr. Little: Medical Rubbing *versus* Medical Electricity. Mr. Pridgin Teale: Uterine Hæmorrhage arrested by Rapid Dilatation of the Os and Cervix, and the application of Carbolic Acid. Mr. W. A. Garrard: A case of Nephrotomy, in which a Calculus was removed from the Pelvis of the Left Kidney. Dr. Banham: Two cases suffering respectively from Exophthalmic Goitre and Descending Lateral Sclerosis. Dr. Little will propose the following resolution: "That, in the opinion of this Branch, the time has fully come when distinguished medical men, in addition to being granted baronetcies, should also be made life peers." After the meeting, the members will dine at 6 P.M. at the Wharncliffe Hotel. Tickets (exclusive of wine), 7s. 6d. each.—ARTHUR JACKSON, Secretary, Wilkinson Street, Sheffield.—June 20th, 1883.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

THE Fifty-first Annual Meeting of the British Medical Association will be held at Liverpool, on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1883.

President: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

President-elect: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, and Professor of Medicine in University College, Liverpool.

An Address in Surgery will be delivered by REGINALD HARRISON, F.R.C.S., Surgeon to the Royal Infirmary, Liverpool.

An Address in Pathology will be delivered by C. CREIGHTON, M.D., formerly Demonstrator of Anatomy, University of Cambridge.

The business of the Annual Meeting will be conducted in ten sections.

SECTION A. MEDICINE.—*President:* John Cameron, M.D. *Vice-Presidents:* Thomas R. Glynn, M.D.; Frederick T. Roberts, M.D. *Secretaries:* Richard Caton, M.D., 18A, Abercromby Square, Liverpool; Byrom Bramwell, M.D., 23, Drumsheugh Gardens, Edinburgh.

SECTION B. SURGERY.—*President:* Edward R. Bickersteth, F.R.C.S. *Vice-Presidents:* W. Hargreaves Manifold, M.R.C.S.; W. Mitchell Banks, F.R.C.S. *Secretaries:* Rushton Parker, M.B., F.R.C.S., 61, Rodney Street, Liverpool; Edmund Owen, M.B., F.R.C.S., 49, Seymour Street, Portman Square, W.

SECTION C. OBSTETRIC MEDICINE.—*President:* W. M. Graily Hewitt, M.D. *Vice-Presidents:* John Wallace, M.D.; David Lloyd Roberts, M.D. *Secretaries:* John E. Burton, L.R.C.P., 64, Rodney Street, Liverpool; W. C. Grigg, M.D., 6, Curzon Street, Mayfair, W.

SECTION D. PUBLIC MEDICINE.—*President:* T. P. Teale, M.B., F.R.C.S. *Vice-Presidents:* William Carter, M.D.; W. Honner Fitz-Patrick, M.D. *Secretaries:* F. Pollard, M.D., 52, Rodney Street, Liverpool; George Goldie, M.D., 123, Hyde Park Road, Leeds.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* Professor E. A. Schäfer, F.R.S. *Vice-Presidents:* William Stirling, M.D.; Richard Norris, M.D. *Secretaries:* James Barr, M.D., 1, St. Domingo Grove, Everton, Liverpool; A. W. Mayo Robson, F.R.C.S., Hillary Place, Leeds.

SECTION F. PATHOLOGY.—*President:* T. H. Green, M.D. *Vice-Presidents:* E. H. Dickinson, M.D.; Joseph Coats, M.D. *Secretaries:* Frank Thos. Paul, F.R.C.S., 44, Rodney Street, Liverpool; James F. Goodhart, M.D., 27, Weymouth Street, W.

SECTION G. PSYCHOLOGY.—*President:* T. L. Rogers, M.D. *Vice-Presidents:* G. H. Savage, M.D.; D. Yellowlees, M.D. *Secretaries:* G. E. Shuttleworth, M.D., Royal Albert Asylum, Lancaster; W. Julius Mickle, M.D., Grove Hall Asylum, Bow, E.

SECTION H. OPHTHALMOLOGY.—*President:* T. Shadford Walker, M.R.C.S. *Vice-Presidents:* E. Nettleship, F.R.C.S.; C. E. Fitzgerald, M.D. *Secretaries:* E. A. Browne, M.R.C.S., 86, Bedford Street, Liverpool; C. E. Glascott, M.D., 23, St. John Street, Manchester.

SECTION I. DISEASES OF CHILDREN.—*President:* Samuel Jones Gee, M.D. *Vice-Presidents:* M. G. B. Oxley, M.D.; T. R. Jessop, F.R.C.S. *Secretaries:* H. G. Rawdon, M.D., 42, Rodney Street, Liverpool; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION J. OTOLOGY.—*President:* G. P. Field, M.R.C.S. *Vice-Presidents:* Edward Woakes, M.D.; C. Warden, M.D. *Secretaries:* Thos. Barr, M.D., 10, Albany Place, Sauchiehall Street, Glasgow; R. Williams, L.R.C.P., 82, Rodney Street, Liverpool.

Honorary Local Secretary: Alexander Davidson, M.D., 2, Gambier Terrace, Liverpool.

Honorary Treasurer: W. Mitchell Banks, F.R.C.S., 28, Rodney Street, Liverpool.

TUESDAY, JULY 31ST, 1883.

10.30 A.M.—Church Service at Pro-Cathedral. Sermon by Bishop of Liverpool.

12.0.—Meeting of Committee of Council.

12.30 P.M.—Meeting of the Council, 1882-3.

3 P.M.—First General Meeting: Report of Council and other business. Adjourn at 5 P.M.

8.15 P.M.—Adjourned General Meeting: President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 1ST, 1883.

9.30 A.M.—Meeting of Council, 1883-84.
11 A.M.—Second General Meeting. Address in Surgery.
1 30 to 5 P.M.—Sectional Meetings.
9 P.M.—*Soirée* in the suite of rooms forming the Arts Gallery, the Picton Reading Room, and the Free Library, by the President and Local Committee. To this, ladies will be invited.

THURSDAY, AUGUST 2ND, 1883.

9 A.M.—Meeting of Committee of Council.
10 A.M.—Third General Meeting. Sectional Meetings. Adjourn at 1 P.M.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner in the Philharmonic Hall.

FRIDAY, AUGUST 3RD, 1883.

10 A.M.—Fourth General Meeting. Address in Pathology. Sectional Meetings.
2 P.M.—Concluding General Meeting.
9 P.M.—*Soirée* by the Mayor of Liverpool, at the Town Hall. To this, ladies will be invited.

SATURDAY, AUGUST 4TH, 1883.

Excursions.

ANNUAL MUSEUM.

The museum will be in the same building as the reception-room, the general meetings, and the sectional meetings. In fact, all the business of the annual meeting will be carried on in one building, viz., the College, Shaw Street, Liverpool. The room which is specially devoted to museum purposes is a gallery, 300 feet in length, in the upper story, lighted from the roof. On the same floor are several additional rooms, so that the accommodation for exhibiting drugs and instruments is ample. On the second floor, adjoining the room where the Pathological Section meets, are two class-rooms, one of which will be used for the exhibition of pathological drawings and specimens, the latter for microscopes. A large hall on the ground-floor has been set apart for sanitary appliances, among which it is expected there will be a good exhibition of ambulances.

The museum will comprise: 1. Latest inventions in medical and surgical instruments, and appliances of all kinds, including No. 4. 2. New chemicals and apparatus; new drugs and their preparations; and new articles of diet for invalids. 3. Drawings, diagrams, or models, or apparatus connected with sanitary appliances. 4. Microscopes, thermometers, and other instruments of investigation. 5. Pathological specimens, etc.

Communications should be sent to Dr. Davidson, the General Secretary, 2, Gambier Terrace, Liverpool, or to the following: drugs, Dr. T. Bushby, 32, Clarence Street; surgical instruments, Dr. Alexander, 102, Bedford Street; Rushton Parker, Esq., 61, Rodney Street; sanitary appliances, Dr. Imlach, 16, Canning Street; pathological specimens and drawings, F. T. Paul, Esq., 44, Rodney Street. General Museum Secretary, Dr. Whitford, 37, Shaw Street.

Notice to Exhibitors.—Applications to be made as soon as possible, mentioning the space required. Each object to be accompanied by a written description or reference, and it is important that these descriptions should be sent as early as possible, viz., not later than July 20th. All parcels to be delivered on or after July 23rd, and not later than July 28th, and to be removed within three days after August 3rd; they must be addressed: The Curator of Annual Museum, British Medical Association, the College, Shaw Street, Liverpool. All expenses of carriage and all risk to be borne by the exhibitors. A card bearing the name and address of the exhibitor to be inclosed in each package, ready to be fixed to the outside.

The following papers, etc., have been promised in the various Sections.

SECTION A.—MEDICINE.

1. A Discussion on Aphasia will be opened by Professor Gairdner of Glasgow. Dr. Hughlings Jackson, Dr. Broadbent, Dr. Ferrier, Dr. Mahomed, Dr. Drummond, and Dr. Ross, will take part.

2. A Discussion on the Causes and Consequences of Abnormal Tension in the Arteries will be opened by Dr. Broadbent. Dr. Milner Fothergill, Dr. B. Foster, and Dr. W. F. Wade will take part in the same.

3. A Discussion on the Treatment of Purpura will be opened by Dr. Stephen Mackenzie. Dr. Finny (Dublin) and Dr. B. Foster will take part.

The following papers are also promised.

BENNETT, A. Hughes, M.D. 1. Spastic Paralysis. 2. A Case of Hysterical Malignancy; Experiments in Metalloscopy.
BRAMWELL, Byrom, M.D. Cheyne-Stokes Respiration.
BRUNTON, T. Lauder, M.D., F.R.S. Headache.
CARTER, William, M.D.
CATON, Richard, M.D.
DAVIDSON, Alexander, M.D.
DRUMMOND, David, M.D. 1. Perforating Tumour of the Dura Mater. 2. An Unusual Case of Locomotor Ataxy.
GABBETT, H. S., M.D. The Diagnostic Value of the Discovery of Koch's Bacilli in Sputum.
GLYNN, T. R., M.D.
MORRIS, Malcolm, Esq. The Use of Antimony in certain Skin-Diseases.
OLIVER, George, M.D. Bedside Urinary Testing.
ROSS, James, M D. Rupture of the Brachial Plexus.
SHEARER, George, M.D. The Opium-Habit.
SMITH, Solomon C., M.D. Antiseptic Inhalations.
STRANGE, William, M.D. Sporadic Septicæmia.
THOMSON, —, M.D. Rupture of the Brachial Plexus.

Dr. Byrom Bramwell will give a Demonstration of Diseases of the Spinal Cord.

SECTION B.—SURGERY.

1. Mr. Clement Lucas will open a Discussion on Surgical Diseases of the Kidney, and the Operations for their Relief.

2. A Discussion on the Treatment of Intestinal Obstruction by or without Operative Interference will take place.

The following papers have been promised.

ATKINSON, E., Esq. Drainage of Joints.
BARTLEET, T. H., Esq. Roux's Amputation at the Ankle; its Superiority to Syme's.
BELLAMY, E., Esq. The Clinical Value of the Fasciæ.
BERNARD, Armand, Esq. Observations on Primary Venereal Sores.
BROWNE, J. W., M.D. Cases of Hernia.
CROSS, F. Richardson, Esq. The Treatment of Arthritis by Incision.
DRYSDALE, C. R., M.D. Recent Experiments on the Treatment of Syphilis.
FAGAN, John, L.K.Q.C.P. The Nature, Diagnosis, and Treatment of Hæmarthrosis of the Knee-Joint.
HARDIE, James, Esq. Amputation by Oblique Circular Incision.
HEATH, Christopher, Esq. The Use of Plaster-of-Paris Bandages in the Treatment of Recent Fractures.
JESSOP, T. R., Esq. Some Results derived from Experience in Colotomy.
JONES, Thomas, Esq. Cases of Resection of the Ankle-Joint for Disease and Injury.
LE PAGE, J. F., Esq. The Evacuation of Deep Abscesses.
LOWNDES, F. W., Esq. Venereal and Sexual Hypochondriasis.
MORGAN, J. H., Esq. The Operative Proceedings in Cases of Intestinal Obstruction.
MORRIS, Malcolm, Esq. The Comparative Advantages of Scarification and Scraping in the Treatment of Lupus Vulgaris.
OWEN, Edmund, Esq. The Treatment of Large Nævi.
PEMBERTON, Oliver, Esq. Gastro-enterotomy.
RABAGLIATI, A., M.D. Cases of Osteotomy.
ROTH, Bernard, Esq. The Treatment of Non-spasmodic Torticollis.
SOUTHAM, F. A., Esq. A Case of Femoral Aneurysm, treated by Injection of Fibrin Ferment, and subsequently by Ligature of the External Iliac Artery.
STOKES, William, Esq. Excision of the Shoulder-joint.
WHITEHEAD, Walter, Esq. A Further Series of Twenty-five Cases of Excision of the Tongue with Scissors.

SECTION C.—OBSTETRIC MEDICINE.

Special discussions are expected to take place in this Section on the following subjects.

1. Total or Partial Extirpation of the Uterus for Malignant Disease. Introduced by papers by Professor Schroeder (Berlin) and Dr. Wallace.

2. On Operative Treatment of Uterine Fibromata. Introduced by papers by Dr. Keith, Mr. Knowsley Thornton, and Mr. Lawson Tait. Dr. Wallace has promised to take part.

3. On Metria (so-called Puerperal Fever). Introduced by a paper by Dr. Atthill. Drs. Grigg and T. More Madden have promised to take part.

4. Porro's Operation. Introduced by a paper by Dr. Clement Godson.

The following papers are promised.

ALEXANDER, William, M D. On Shortening the Round Ligaments for the Cure of some Forms of Uterine Displacement.
BARNES, Fancourt, M.D.
BURTON, J. E., Esq. A Plea for the more Persevering Treatment of Uterine Cancer in Cases in which Operation by Removal is Impracticable.
LE PAGE, John F., Esq. On Axis-Traction in Delivery with Obstetric Forceps. Mr. Le Page will also exhibit Le Page's Axis-Traction Forceps.
MADDEN, T. More, M.D. Further Observations on certain Mental and Nervous Disorders peculiar to Women.
ROBERTS, D. Lloyd, M.D. Inversion of the Uterus.
TAIT, Lawson, Esq. Are Diseases of the Ovary (specially Cystoma) on the Increase?
WILLIAMS, A. Wynn, M.D. 1. On Displacements of the Uterus and their Treatment. 2. On Epithelioma of the Uterus and its Treatment.

SECTION D.—PUBLIC MEDICINE.

Four topics have been selected for discussion in this Section.

1. Directions in which Public Health Law might be advantageously Amended or Extended. Mr. Charles Wills will read a paper on this subject. Mr. Ernest Hart will read one on the Advisability of an Extension of the Law for the Regulation and Registration of Plumbing in Houses. Dr. William Carter will open a discussion on these papers.

2. Quarantine. Dr. Imlach will read a paper on Quarantine; and Dr. Stocker, lately Government Emigration Inspector at Queenstown, will read one on a cognate subject.

3. Disposal of Town-Refuse. Dr. Goldie and Dr. E. Whittle will read papers on this subject.

4. Etiology of Diphtheria and Autumnal Diarrhœa. Drs. Alfred Carpenter, H. J. Alford, and E. F. Willoughby will read papers on Diphtheria; and Mr. M. D. Makuna one on Autumnal Diarrhœa.

Captain Douglas Galton, C.B., F.R.S., has promised to read a paper on Hospital Construction.

The following papers are promised.

DRYSDALE, C. R., M.D. The Mortality of the Rich and the Poor.
JAMES, J. Brindley, Esq. On Cremation.
KERR, Norman, M.D. The Present Position of the Habitual Drunkards Movement.
LOWNDES, F. W., Esq. How to Make our own Houses Sanitary, with Personal Experiences.
MAKUNA, M. D., Esq. Small-pox and Vaccination Statistics; Diseases and Injuries to Health Attributed to Vaccination.
MARTIN, Johnson, Esq. On the Injury done to the Health of the Young by the Present System of Education.
MILLICAN, K. W., Esq. Evolution in Disease.
SHEARER, George, M.D. On the Opium-habit.

SECTION E.—ANATOMY AND PHYSIOLOGY.

The following papers have been promised.

ANDERSON, Edward C., M.D. Koumiss: its Modes of Preparation, Varieties, Physiological Uses, etc.
BARR, James, M.D. The Causes and Mechanism of the Cardiac Impulse.
HADDEN, W. B., M.D. Westphal's Phenomenon, or the so-called Paradoxical Contraction of Muscles.

Mr. Lennox Browne will exhibit on the magic-lantern screen, by means of oxyhydrogen light, a series of photographs of the Larynx and Soft Palate in the production of various Musical Tones.

Afterwards, Mr. Emil Behorke, from whom the pictures have been taken, will exhibit his Larynx to the members present, so as to demonstrate practically the physiological facts illustrated by the photographs.

Dr. Francis Warner will give a Demonstration of an Apparatus for obtaining Graphic Records of the Movements of Fingers, Hands, Head, etc., and enumerating them and their combinations.

Dr. John Harker will show a sketch of Abnormal Hands and Feet in the case of an Infant.

Mr. Sibley Hicks will exhibit a series of Embryos to illustrate the Development of the Chick.

SECTION F.—PATHOLOGY.

The following discussions will take place.

1. On Micro-organisms in Disease. To be opened by Dr. Dreschfeld.

2. On the Pathology of Dropsy. To be opened by Dr. Lauder Brunton.

3. On Chronic Inflammations of Bone. To be opened by Mr. Charters J. Symonds.

4. On Primary Growths of the Urinary Tract. To be opened by Mr. Frank T. Paul.

Cirrhosis and allied conditions of the Liver will be brought forward, should time allow.

It is desired to illustrate in as complete a manner as possible, by means of preparations and microscopical specimens, the Primary Growths of the Urinary Tract, especially of the Kidney, Bladder, and Prostate. The object of this investigation is to collect all the information that is to be obtained in this country, with the view of deciding what are the primary growths that have been met with in this region. The specimens lent will be arranged in the museum, and a report of the investigation will be brought forward in the Pathological Section by Mr. Paul. The Subcommittee will be very glad to receive (1) recent specimens; (2) mounted specimens of rare growths; (3) microscopical sections (these are specially requested). The specimens and sections will be returned to their owners after the meeting.

The following paper has been promised.

SILCOCK, A. Quarry, M.D. Some Points connected with the Repair of Fractures, with Specimens, etc.

SECTION G.—PSYCHOLOGY.

The following special subjects have been selected for discussion.

1. The Employment of the Insane. Introduced by Dr. Yellowlees.

2. Bone-Degeneration in the Insane. Introduced by Dr. J. Wiglesworth.

3. Cerebral Localisation in relation to Psychological Medicine. Introduced by Mr. W. Bevan Lewis.

4. General Paralysis. Introduced (if time permit) by Dr. W. J. Mickle.

SECTION H.—OPHTHALMOLOGY.

A Discussion on Tests for Colour-sense and for Acuteness of Vision, with special reference to Schools and Sailors, will be opened by Dr. W. A. Brailey, followed by Dr. Snellen (Utrecht). Messrs. Nettleship, Fitzgerald, and Higgens have promised to take part.

The following papers have been promised.

ABBOTT, George, Esq. Obstruction of the Nasal Duct, and its Treatment by Styles.
CRITCHETT, G. Anderson, Esq. Ulcers of the Cornea, their Varieties and Treatment.
FORBES, Litton, Esq. 1. On the Relations existing between certain states of the Sexual Organs and Visual Disturbance. 2. The Doctrine of Enucleation.
HIGGENS, Charles, Esq. On the Treatment of Painful Corneal Ulcers by Warmth and Eserine.
JONES, A. Emrys, M.D. 1. A Case of Orbital Abscess Communicating with the Brain. 2. A Case of Embolism (?) of the Central Artery of the Retina connected with Facial Erysipelas.
JULER, Henry, Esq. On the Relative Merits of the Various Methods of Testing the Refraction of the Eye.
LEE, Charles George, Esq. Notes on the Refractive Conditions of Deaf-Mutes.
MCKEOWN, W. A., M.D. 1. On the Use of the Magnet in Ocular Surgery. 2. The Treatment of Accidental Dislocation of the Lens.
MACNAMARA, Charles, Esq. On the Pathology and Treatment of Zonular Cataract.
MULES, P. H., M.D. An Elastic Movement for Carter's Astigmatic Clock.
SHEARS, Charles, M.D. Tobacco Amblyopia.
SNELL, Simeon, Esq. Miners' Nystagmus.
TAYLOR, Charles Bell, M.D. 1. On the Operative Treatment of Sympathetic Ophthalmia, with Cases. 2. On Transplantation of Skin with Temporary Pedicle without Scar. 3. Notes on the Operation for Cataract, with and without Iridectomy.
WATSON, W. Spencer, Esq. Shot-silk Appearance of the Retina.
WOLFE, John R., M.D. 1. On the Transference of Conjunctiva from the Rabbit to the Human Subject for the Cure of Symblepharon. 2. On the Treatment of Suppuration of the Tear-passages.

SECTION I.—DISEASES OF CHILDREN.

Three special subjects have been selected for discussion.

1. Dr. T. Barlow will open a discussion on Rheumatism and its Allies in Children. The following gentlemen have promised to take part in the discussion: Dr. O. Sturges, Dr. Rickards, Dr. Finlayson, Dr. Donkin, and Dr. Byers.

2. Dr. Ballard: On the Etiology and Pathology of Summer Diarrhœa. The following gentlemen have promised to take part: Dr. Borchardt and Dr. Seaton.

3. Mr. Morrant Baker: On Acute Epiphysal Necrosis and its Consequences. The following gentlemen are likely to take part: Mr. J. H. Morgan, Mr. R. W. Parker, and Mr. G. A. Wright.

The following papers are promised.

ASHBY, H., M.D. On Scarlatinal Rheumatism.
GEE, Samuel J., M.D. Some Kinds of Albuminous and Purulent Urine in Children.
MORGAN, J. H., Esq. A Case of Epiphysal Necrosis of the Humerus, followed by Considerable Shortening of the Arm.
MORISON, B. G., M.B. Infantile Diarrhœa and its Treatment.
OXLEY, M. G. B., M.D. Fatal Case of Chorea in a Child aged 10 Years.
PUGHE, R. N., Esq. Operations for the Radical Cure of Hernia in Childhood.
RAWDON, H. G., M.D. On the Operation for Hare-lip.
STURGES, O., M.D. On the Alliance of Rheumatism and Chorea.
TOMKINS, H., M.D. On the Clinical Features of Typhus Fever in Children.
WRIGHT, G. A., Esq. On the Value of Localising the Primary Lesion in Joint-disease, as an Indication for Treatment.

SECTION J.—OTOLOGY.

Discussions will take place on the following subjects.

1. A discussion on the more serious aspects of Chronic Purulent Inflammation of the Middle-ear will be introduced by Dr. W. Laidlaw Purves.

2. A discussion on the various forms of Artificial Tympanic Membrane, and their Comparative Value, will be introduced by Dr. F. M. Pierce.

The following gentlemen have expressed their intention of taking part in the discussions: Dr. Edward Woakes, Dr. Thomas Barr, Dr. Urban Pritchard, Dr. William A. McKeown, Dr. J. W. Browne, Dr. Richard Ellis, Dr. H. J. Hardwicke.

The following papers have been promised.

BARR, Thomas, M.D. Practical Observations on the Use of the Cotton-Pellet (Yearsley's Artificial Tympanic Membrane) as an Aid to Hearing.
CASSELLS, James P., M.D. An Analysis of Ten Years' Aural Surgery.
FORBES, Litton, Esq. The Indications for, and Therapeutic Value of, Myringectomy.
MCBRIDE, P., M.D. The Prognosis of Chronic Non-Suppurative Inflammation of the Middle-ear.
TORRANCE, Robert, Esq. Deafness in Cerebro-spinal Meningitis.
WILLIAMS, Richard, Esq. A Fatal Case of Chronic Purulent Inflammation of the Middle-Ear, from Extension to the Intracranial Cavity.

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Section in which it is to be read, not later than July 25th.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay with the secretaries of the respective Sections.

FRANCIS FOWKE, *General Secretary.*

London, June 21st, 1883.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE forty-seventh annual meeting of the Lancashire and Cheshire Branch was held at Manchester on June 13th. Dr. BORCHARDT presided, and there was a large attendance of members.

Report of Council.—The report of the Council was read as follows.

The Council have the satisfaction of reporting to the annual meeting the continued growth and prosperity of the Branch. They regret to recall to the recollection of the members the death of Dr. MacEwen of Chester, President for the year, which took place soon after the last annual meeting. Dr. MacEwen entered the medical profession in the year 1833. He had been a member of this Branch for twenty-four years. Besides the President, 8 other deaths took place, and 22 resigned, most of them on account of having left the district; a few were struck off the roll for non-payment of subscriptions. In all, there have been 36 names removed from the list, reducing the numbers from 805 to 769; while 103 have joined during the year, so that our present number is 872. The additions made to the membership during the last two years have amounted to 197.

At the first Council-meeting after the death of Dr. MacEwen, Dr. Borchardt, one of the Vice-Presidents, was elected to act as President during the remainder of the year.

No intermediate meetings of the Branch have been held during the year, for the reason that no invitations were received to hold such meeting from any of the towns in our district. This inaction of the Branch is no doubt partly due to the circumstance of the approaching annual meeting of the Association in Liverpool. In the absence of an invitation from any other town to hold this annual meeting, the Council had the satisfaction last month in receiving an invitation from Manchester; and it cannot help expressing how deeply the Branch is indebted to Manchester for stepping in in the emergency.

Two subjects have specially engaged the attention of the Council during the past twelve months. The first was the proposed alterations in the laws relating to the education and registration of medical practitioners. Last year, this Council sent a memorial to the Government in favour of legislation in accordance with the recent Report of the Royal Commission on Medical Reform; and, when the Government Medical Act Amendment Bill was introduced into the House of Lords, the Council unanimously petitioned in its favour, and used all legitimate means to influence members of Parliament to support it.

The second subject was the constitution of the executive body of the Association (the Committee of Council). In December, this Council, learning that the subject was under the consideration of the Committee of Council in London, unanimously passed a resolution, that no change in the mode of election of members of the Committee of Council will be acceptable, which does not include direct representation of each Branch in proportion to its numbers; and, by a large majority, they resolved, that the railway travelling expenses of the representatives of the Branches be defrayed out of the funds of the Association. These two principles have been embodied in the proposed change in the constitution and government of the Association, which are to be brought before the annual meeting of the Association in Liverpool. Should this change be carried into effect, it will involve alterations in our Branch laws, which will necessitate a special meeting of the Branch being called. The Council petitioned also against Mr. Hastings's Bill, which compels medical men, under a penalty, to notify all cases of infectious disease to the public authorities.

The finances of the Branch are in a satisfactory condition. The following is the financial statement for the year ending December 31st, 1882: Balance in hand, January 1st, 1882, £77 19s. 10d.; subscriptions received, 1882, £94; total, £171 19s. 10d. Expenditure for 1882, £78 12s.; balance now in hand, £93 7s. 10d.

The following were elected office-bearers for the ensuing year:—*President*, L. Borchardt, M.D. *Vice-presidents*, D. Lloyd Roberts, M.D.; Leslie Jones, M.D. *Vice-presidents elect*, W. Carter, M.D.; J. W. Watkins, M.D. *General Secretary*, C. E. Glascott, M.D., 23, St. John Street, Manchester. *Local Secretaries*, C. E. Steele, Esq., Liverpool; J. E. Garner, M.D., Preston; J. M. H. Martin, M.D., Blackburn; W. Hall, Esq., Lancaster; J. Taylor, Esq., Chester; D. De Vere Hunt, Esq., Bolton. *Twenty ordinary members of Council*, J. Atkinson, Esq., Crewe; W. M. Banks, Esq., Liverpool; W. C. Barnish, Esq., Wigan; S. Buckley, M.B., Manchester; J. E. Burton, Esq., Liverpool; A. H. F. Cameron, Esq., Liverpool; P. M. Deas, M.D., Macclesfield; A. M. Edge, M.D., Manchester; W. Heath, Esq., Southport; A. Jamison, M.D., St. Helens; T. R. Jones, Esq., Manchester; J. H. Lightbourne, M.D., Preston; E. H. Monks, Esq., Wigan; S. H. Munro, M.D., Nantwich; J. E. Scowcroft, Esq., Bolton; G. E. Shuttleworth, M.D., Lancaster; W. J. Sinclair, M.D., Manchester; W. H. Stevenson, M.D., Blackburn; J. H. Wallis, M.B., Whittingham; E. Waters, M.D., Chester. *Forty-three representative members on the General Council*, F. J. Bailey, Esq., Liverpool; J. A. Ball, M.B., Heaton Norris; James Barr, M.D., Liverpool; G. Barron, M.D., Southport; L. Borchardt, M.D., Manchester; C. J. Cullingworth, M.D., Manchester; W. Macfie Campbell, M.D., Liverpool; W. Carter, M.D., Liverpool; D. M. Cassidy, M.D., Lancaster; J. Corns, M.D., Oldham; A. Davidson, M.D., Liverpool; J. Dreschfeld, M.D., Manchester; J. Farrar, Esq., Morecambe; W. H. Fitzpatrick, M.D., Liverpool; A. Gamgee, M.D., Manchester; C. E. Glascott, M.D., Manchester; T. R. Glynn, M.D., Liverpool; A. Godson, M.B., Cheadle; J. Hardie, M.D., Manchester; Leslie Jones, M.D., Manchester; J. Lambert, M.D., Birkenhead; D. J. Leech, M.D., Manchester; H. R. Ley, Esq., Prestwich; J. Dixon Mann, M.D., Manchester; H. Colley March, M.D., Rochdale; G. W. Mould, Esq., Cheadle; W. Musson, Esq., Clitheroe; Chauncey Puzey, Esq., Liverpool; A. Ransome, M.D., Manchester; E. Rayner, M.D., Stockport; D. Lloyd Roberts, M.D., Manchester; T. L. Rogers, M.D., Rainhill; J. Ross, M.D., Manchester; C. Rothwell, Esq., Bolton; S. Spratly, M.D., Rock Ferry; A. W. Stocks, Esq., Salford; G. Thomson, M.D., Oldham; C. Thorp, Esq., Todmorden; A. T. H. Waters, M.D., Liverpool; J. W. Watkins, M.D., Newton; F. P. Weaver, M.D., Frodsham; C. White, Esq., Warrington; W. Whitehead, Esq., Manchester.

Resignation of Dr. Davidson as Secretary.—A resolution expressing regret at the resignation by Dr. Davidson, of the office of secretary, and offering thanks to him for the able and energetic way in which he had for four years performed the duties of the office, was unanimously adopted.

President's Address.—The president, Dr. Borchardt, delivered an address on infant mortality and the milk supply.

Communications.—The following communications were made. 1. Dr. Lloyd Roberts showed two Dermoid Cysts of the Ovary. 2. Dr. Walters showed a patient on whom he had performed Nephrectomy. 3. Mr. Thomas Jones read notes of a case in which Spontaneous Fracture of the Femur had occurred twice in the same patient.

Medical Provident Society.—Mr. BROWN, of Bacup, read a paper on the proposed Medical Provident Society. He urged the necessity of forming a Benevolent Fund, which should be co-extensive with the British Medical Association, the aims of which would be to assist needy qualified medical men, their widows and orphans, and to provide for the education of sons and daughters, or other relatives of members. The terms of membership should be £1 1s. per annum; honorary members should pay £2 2s., and upwards. It was calculated that, if Lancashire and Cheshire were divided into fifty districts, and medical men appointed as stewards to personally canvass for members and the laity to join as patrons and benefactors, at least 500 would join. Mr. Brown proposed the following resolution, which was seconded by Dr. Walter, and carried unanimously, "That this meeting heartily approves of the formation of a medical society which shall combine the provident and benevolent principles, the latter being of paramount importance as the recent appeals in the JOURNAL too painfully prove, and that it desires the Committee of the Council of the British Medical Association to bring this question as early as possible before each Branch of the Association."

Lunch was provided by the president, Dr. Borchardt, at the place of meeting.

Dinner.—The members dined together at the Queen's Hotel, when Principal Greenwood, Mr. O. Heywood, and other well-known public men of Manchester, were present.

EAST ANGLIAN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at King's Lynn on Thursday, May 24th. About eighty members were present. The chair was taken by the retiring president, W. M. CROWFOOT, M.B.

Address of the Retiring President.—Dr. CROWFOOT delivered an address on the Medical Act Amendment Bill, the greater part of which was published in last week's JOURNAL. In conclusion, he said: It only remains for me to congratulate the members of the East Anglian Branch on the success of the meetings held during the past year. In spite of unfavourable weather, the meeting at Beccles was fairly attended, and that held at Dereham was an unusually large one. The Branch had not before, I believe, held a meeting in that part of the district, and the medical men residing in the neighbourhood mustered in large numbers, and entertained the meeting in the most hospitable manner. At both meetings the supply of papers and cases was abundant, and the discussions on these were of much interest. I am sure that I am only expressing the feelings of every member of the East Anglian Branch, when I say that it is a very great pleasure to us to be joined, on this occasion, by the members of the Cambridgeshire Branch. Such a conjoint meeting can scarcely fail to be a successful one.

Dr. Crowfoot then resigned the chair to the president for 1883-84, John Lowe, M.D., of King's Lynn.

The Medical Act Amendment Bill.—Mr. C. PALMER (Great Yarmouth) proposed, and Dr. BROWNE (Great Yarmouth) seconded "That we protest against the action of the Parliamentary Bills Committee of the Association in proposing that no man be entitled to have his name entered on the *Medical Register* as a registered medical practitioner unless, in addition to the licence of the General Medical Council, he shall be attached subsequently to one of the universities or medical corporations, and be authorised to register the title as acquired." After a lengthened discussion, the motion was carried.

Report of Committee of East Anglian Branch.—The Honorary Secretary (Dr. W. A. ELLISTON) then read the following report of the Council. "The Council beg to report that they have met for the consideration of business of more or less importance on three occasions since the last annual meeting—at Dereham in September; at Norwich, at which Mr. T. W. Crosse was elected the representative of the Branch upon the Parliamentary Bills Committee, and this morning. The Council have pleasure in announcing a large accession of members during the past year. Last year they reported the members of the Branch as upwards of 150, and this year, notwithstanding the loss of some esteemed members, including two former presidents (Messrs. Roger Nunn of Colchester, and Spencer Freeman of Stowmarket), they are able to announce that the East Anglian Branch exceeds 200, and now stands tenth in numerical strength of the thirty-seven Branches of the Association. The Council recommend that the autumn meeting in 1883 be held at Newmarket; the annual meeting for 1884 at Colchester; and that R. F. Symmons, Esq., of Colchester, be President-elect. The Council beg to direct the attention of the Branch to the impending change in the government of the Association, which, as it has received the sanction of a summoned meeting of both the Committee of Council and of the Council of the Association, will almost with certainty be adopted. The principle of the change is the abolition of the Council and of the Committee of Council, and the election of a new governing body by direct representation of the Branches. As every Branch of upwards of 200 members will have the privilege of electing two representatives, the East Anglian will be called upon to elect two; and the Council recommend that the senior Honorary Secretary (Dr. William Alfred Elliston) and Mr. Thomas William Crosse, be elected to represent the Branch, and that their travelling expenses to and from London at each quarterly meeting be paid by the Branch. The Council recommend that Mr. George Edwards Jeaffreson be elected the representative of the Branch upon the Parliamentary Bills Committee. The Council are of opinion that all the expenses of postage and printing incurred by the Collective Investigation Committee be defrayed by the Branch."

Upon the motion of Dr. OWENS, seconded by Dr. DALE, the report was received and adopted.

New Members.—Twenty-six new members were elected.

Council.—The following gentlemen were elected the Council for 1883 and 1884, in addition to the President (John Lowe, M.D.) and the Honorary Secretaries (W. A. Elliston, M.D., and M. Beverley, M.D.); T. E. Amyot, Esq.; F. Bateman, M.D; W. Cadge, Esq.; E. G. Barnes, M.D.; E. Crickmay, Esq.; W. M. Crowfoot, M.B.; G. C. Edwards, Esq.: R. V. Gorham, Esq.; F. Haward, Esq.; J. S. Holden, M.D.; H. S. Robinson, Esq.; R. F. Symmons, Esq.

President's Address.—The PRESIDENT delivered an address on the Influence of the Antiseptic Treatment on the Theory and Practice of Surgery. A special vote of thanks for the address was moved by Mr. CADGE and seconded by Dr. EADE.

Luncheon.—The PRESIDENT entertained the members, at 1.30, at an elegant luncheon at the Town Hall.

Papers.—After luncheon, the meeting was resumed, and the following papers were read.

1. Dr. Paget (Cambridge): A Case of Coincidence of Diphtheria and Typhoid Fever.
2. Dr. Eade (Norwich): A Case of Asthma; Treatment by Galvanism.
3. Dr. Latham (Cambridge): Megrim; Its Pathology and Treatment.
4. Dr. Dale (Lynn): Pulmonary Consumption and Infection.
5. Mr. S. H. Burton (Norwich): A Case of Scarlet Fever followed by Pyæmia.

Collective Investigation of Disease.—Mr. BURTON (Norwich) read the report of the Collective Investigation of Disease Committee, stating that thirty-four cases had been recorded by various gentlemen in Norfolk and Suffolk, in addition to a report of an epidemic of seventy cases of diphtheria at Magdalen, Norfolk, by Mr. W. L. King.

Dinner.—At six o'clock the members adjourned to a dinner at the Globe Hotel, where a large party assembled, under the presidency of Dr. Lowe.

CORRESPONDENCE.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—Enclosed is a copy of a letter which I sent to Mr. Wheelhouse of Leeds, in reply to one addressed to the candidates for election on the Council of the Royal College of Surgeons.—Faithfully yours, W. MAC CORMAC.

13, Harley Street, June 16th.

"13, Harley Street, W., June 15th.

"Dear Sir,—Should I be fortunate enough to be elected a member of the Council of the College of Surgeons, it will become my duty to help, to the best of my ability, to carry on the business of the College. I shall also endeavour to promote all that may appear most conducive to the dignity and prosperity of an institution of which not English surgeons only, but surgeons all over the world, are proud.

"Until I have an opportunity of fully considering the merits of a question, and more especially its bearings on a particular case, I should be sorry to pronounce judgment. I shall, therefore, if elected, enter the Council free to follow that course which may appear best, and I must decline to pledge myself beforehand to a particular line of conduct.

"I find that the question of Fellows voting 'either in person or by voting-paper' has been referred to a committee of the Council. If successful as a candidate, I should have to consider the report of this committee, and it appears to me wrong to prejudge so important a matter.—Faithfully yours, WILLIAM MAC CORMAC.

"C. G. Wheelhouse, Esq."

ALLEGED DEATH FROM VACCINATION.

SIR,—Under this heading, you reported in your issue of May 26th, the inquest held by Dr. Thomas, the coroner of West Middlesex, on the death of George Andrews.

As this case has excited some considerable interest, I trust you will allow me to state certain facts of importance omitted from your report, and also to correct one or two inaccuracies. In the first place, the inquiry resulted from the refusal of Mr. Henry F. Burns (then a non-registered practitioner) to give a certificate of death, on the ground, as he stated at the inquest, that the vaccination had not been skilfully performed; and that one of the punctures had degenerated into a suppurating wound one inch in depth by measurement. This condition was proved to be absolutely non-existing by the oath of five medical men who were present at the *post mortem* examination, all of whom also swore that the vaccination had been properly performed. I should here state that Mr. Burns was not, as stated in your report, present at the necropsy, although he had received notice of the time and place from Mr. Willoughby, the

gentleman appointed by the coroner to make the examination. I think it is also important to call attention to the circumstance that all the medical men expressed an opinion that the vaccination was not the cause of the meningitis from which the child died, excepting Mr. Makuna, who deposed that the inflammation had resulted from "constitutional irritation," set up by the vaccination. Mr. Makuna arrived at this conclusion after excluding, by inquiry, all causes which occurred to him, such as bad food, impure air, admitting, however, on cross-examination, that "anything," to use the very words put to him, might have originated the inflammation. Certainly, as far as my opinion goes, Mr. Makuna's reasoning is unsound in the extreme. He uses, to arrive at his conclusion, a process of exclusion which entirely breaks down upon examination. He admits, by his phrase "anything," that there are an infinite number of factors to originate the inflammation; and enumerating and excluding several of these, he arrives at the manifestly unwarrantable conclusion, that the vaccination was the cause. This conclusion arrived at by Mr. Makuna, seems to me without reason, and even in direct opposition to reason, when one bears in mind the fact that thousands of children are vaccinated and never suffer from any cerebral affection, and a large number of children suffer and die from meningitis, and other brain-conditions before the period of vaccination, the origin of which it is impossible to trace. Mr. Burns's evidence amounts to this: that meningitis occurring before vaccination, is a purely idiopathic affection, but after that operation, it is due to "constitutional irritation," resulting from vaccination.

Finally, your report does not correctly state the verdict, and this is of some moment, for it will be seen that the jury, in framing the verdict, clearly and purposely pointed out the vagueness of the evidence connecting the death with vaccination. The verdict was that "The deceased died from convulsions following inflammation and congestion of the membranes of the brain; and, in the absence of any other assignable reason as a primary cause of this disease, it arose from the natural constitutional irritation following vaccination," and the jury further say, "that such vaccination was properly performed."—I am, sir, yours faithfully, C. C. CLAREMONT.

Millbrook House, Hampstead Road, May 30th, 1883.

THE MEDICAL PROVIDENT SOCIETY.

SIR,—I received a copy of your JOURNAL a few days ago, containing a form to be filled up by those favouring the establishment of a Medical Benefit Society.

The notice accompanying it is rather ambiguous. I gather from it that the British Medical Association has no official connection with the scheme, but that only members of the Association are to be invited to assist in forming the Society. Is this view correct? I am not at present a member of the Association, but would gladly give in any adhesion to the Benefit Fund proposal.—I am, sir, yours faithfully, C. B. A.

June 16th, 1883.

*** All members of the profession would, we feel sure, be welcome as adherents to the proposed Society.

SIR,—In your issue of May 26th, there is a letter from Mr. Hardwicke, advocating a scheme of medical benefit in sickness, etc., which he states he has been preparing some weeks, on which I ask you to allow me a very short comment. First, I believe the scheme if not altogether impracticable, is so cumbrous, and hedged about with conditions, and so costly, that all practical men must reject it.

That the scheme is cumbrous one has only to look over the part of it under the head "management, etc;" that it is hedged round with needless conditions, at the head "benefits and sick members;" and that it is costly at the head "premiums." It is this last head, however, that I have read with most surprise; for I venture to assure Mr. Hardwicke that any of our brethren (or for that matter, any man) in good health, and at the age of 22 years, can insure for himself in sickness, in a highly respectable and long established society, £2 2s. per week for a whole year, if his sickness continue a year, and £1 during the whole of life, should he not be able to follow his employment, be it professional or otherwise; and all this, for not more than £4 per annum at most; I have not the rules by me, so that I cannot state the exact sum charged, but I know that I did not join the society until I was 34 years of age, and I am entitled to the above benefits, for a little over £5 per annum. With regard to the benefits to be obtained by the wives and children of medical men, as stated in Mr. Hardwicke's scheme, I think he will find that they are to be obtained, at far less cost than by his scheme, of any insurance society granting annuities, etc.; and which many married medical men are wise enough, I doubt not, to secure.—I remain, sir, yours obediently, CAUTION.

PRELIMINARY EXPENSES FUND.

THE following additional sums have been received:—

Mr. W. E. Soffe, East Harling, Norwich, 10s. 6d.; Mr. R. Davison, Battle, Sussex, 10s. 6d.; Mr. J. R. Minnett, M.B., Nenagh, County Tipperary, 10s. 6d.; Mr. W. J. Stephens, Brighton, 10s. 6d.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS, Thursday, June 14th.

The Contagious Diseases Acts.—The Marquis of SALISBURY moved for a copy of all orders given with respect to the operation of the Contagious Diseases Acts since the vote of the House of Commons in reference to compulsory examination.—The Earl of NORTHBROOK replied that a statement was made by Viscount Lifford, on the authority of a correspondent of his, that on the arrival of a transport at Portsmouth with troops, thirty women had left the Lock Hospital at Portsmouth uncured. It seems that some similar story appeared in one of the London papers, and the visiting surgeon for Portsmouth, Dr. Parson, wrote to the Admiralty at once on seeing it, to say that "there is no foundation whatever for the statement therein contained of women having left the hospital, nor have any expressed any desire or shown any intention to do so until cured."

Tuesday, June 19th.

Public Health (Dairies, etc.) Bill.—Lord CARLINGFORD moved the second reading of this Bill, the object of which he stated to be to transfer from the Privy Council to the Local Government Board the power of making orders for the protection and regulation of dairies and cowsheds. The administration of this matter was really a sanitary question, and ought to be in the hands of the sanitary authorities.—Lord BALFOUR OF BURLEIGH asked why it was proposed to make the Bill applicable to Scotland. The present law was satisfactory enough, and it would be most inconvenient to have an authority for each parish.—The Duke of RICHMOND supported the Bill as far as England was concerned, but doubted whether it was equally necessary for Scotland. Perhaps the Lord President would consider this question before the other stages of the Bill were reached.—Lord CARLINGFORD would inquire into the application of the Bill to Scotland, though he was under the impression that a change was as much needed there as in England.—The Bill was then read a second time.

HOUSE OF COMMONS, Thursday, June 14th.

The Small-pox Hospital at Darenth.—Mr. Alderman COTTON asked the President of the Local Government Board whether he would withhold his sanction for the Metropolitan Asylums Board to erect a small-pox hospital for convalescents and for patients suffering from the disease in a mild form at Darenth, near Dartford; and whether he was aware that such hospital would, if erected, be in a large residential locality, and also in close proximity to the following institutions: the City of London Asylum for Imbeciles, the Kent Penitentiary, the St. Vincent Industrial Schools, and the Metropolitan District Asylum.—Mr. G. RUSSELL said that the Board, after full consideration of the circumstances, expressed their general approval of the proposal of the managers of the asylum district to purchase 130 acres of land at Darenth for the purpose of the erection of a hospital, and the Board are aware of no sufficient reason for withholding their formal sanction to the purchase. The information before the Board does not support the statement that the hospital, if erected, would be in a large residential locality; and with regard to the institutions which it is stated would be in close proximity to the hospital, the Kent Penitentiary is about three-quarters of a mile from the land on which the hospital is proposed to be erected, the City of London Pauper Lunatic Asylum about a mile and a quarter, and the St. Vincent Industrial Schools at a distance of about two miles. The Metropolitan District Asylum is nearer, but there will be a large belt of land separating the two institutions, and it is to be observed that both will be under the same board of managers.

Infectious Diseases in the Metropolis.—Mr. Alderman COTTON asked the President of the Local Government Board whether he had de-

clined to receive a deputation of metropolitan guardians, representing a conference of the guardians of the metropolis, in reference to a scheme for the care and maintenance of persons suffering from infectious diseases in the metropolis, upon the ground that such scheme would be an entire reversal of the present arrangements which had been in force for the past sixteen years.—Sir C. DILKE said that the Board had had communicated to them a scheme for the care and maintenance of cases of infectious disease in the metropolis, which was ordered to be prepared at a conference of guardians, and they were asked to receive a deputation on the subject. The scheme contemplated that the thirty metropolitan boards of guardians should be empowered to deal with pauper cases "each union in its own locality," that non-pauper cases should be referred to the sanitary authorities, and that those authorities also should provide hospital accommodation. The Metropolitan Asylums Board was constituted in consequence of no adequate provision having been made by boards of guardians for cases of infectious disease, and the great difficulty which attended the provision of such accommodation in each union and parish. The Board believed that, independently of the expense which the establishment of so large a number of hospitals, each with its own staff of officers, would involve, it would, in the case of many unions—such, for instance, as the Strand and Westminster—be almost impossible for the guardians to obtain suitable sites within the unions for small-pox cases. Not a single board of guardians in the metropolis, so far as the Board were aware, had as yet expressed its concurrence in this scheme, and it appeared to the Board that there would be no advantage in receiving the proposed deputation.

Visitation of Army Hospitals.—Mr. C. ROUNDELL asked the Secretary of State for War whether, under the Army Regulations, adequate provision was made for the regular visitation of hospitals by responsible officers other than those belonging to the medical staff while the Army was in the field; and, if not, whether Her Majesty's Government would cause such provision to be made.—The Marquis of HARTINGTON replied, that the Queen's Regulations explicitly hold General Officers responsible for seeing that hospitals are frequently visited, either by themselves, or by other officers under their direction.

Monday, June 18th.

The Sanitary Condition of Whitechapel.—Mr. BRYCE asked the Secretary of State for the Home Department whether his attention had been called to the two last reports presented to the Whitechapel District Board of Works by the medical officer of health on the sanitary condition of the Whitechapel district, in which he condemned as unsanitary and ill-arranged several new buildings recently erected in that district, and expressed the opinion that amendments in the existing Building Acts were urgently required; and whether, if sufficient powers to prevent the erection or order the closing of unsanitary dwellings were not now possessed by local authorities, he would undertake to bring in a Bill to amend the Building Acts in this important particular, by investing the proper local authorities with such powers.—Sir W. HARCOURT replied that he should be glad to bring in Bills upon this and many other subjects, but there was no time for them.

Irish Lunatic Asylums.—Mr. MOORE asked the Chief Secretary to the Lord Lieutenant of Ireland whether there were any truth in the rumour that it was intended to transfer the control of lunatic asylums in Ireland to the Local Government Board; whether he could explain the reason of this change; and whether legislation was required for this purpose.—Mr. TREVELYAN said that it was the intention of the Government to make the transfer referred to, should Parliament consent; a Bill for the purpose had already been introduced into another place. He would be glad to explain fully the reasons for which the change is considered desirable when the Bill reaches this House. But, in the present state of business, it was extremely doubtful whether the Bill could be carried to maturity.

Vaccination.—Mr. HOPWOOD asked the President of the Local Government Board a series of questions in regard to the case of Rosina Walsh, revaccinated a day after her confinement, and also to the inquest on her infant, which was vaccinated at eight days old, and died of inanition.—Sir C. DILKE: Dr. Dunlop states that his own experience of the vaccination of women at an early period after labour extends to nearly 1,500 cases, and that these vaccinations have not been attended by any injurious effects. With regard to the question whether the practice is approved by the Board, a similar question was answered on Monday last. The testimony of Mr. Whitefoord, which is said to be contained in the *Lancet*, as to the arms of the mother affording clear evidence of vaccination and revaccination, has not been found in that journal. The depositions taken by the coroner do not show that Mr. Whitefoord gave any evidence on the subject; but Rosina Walsh stated that she had been vaccinated in infancy and about seven years ago. Dr. Dunlop says that he does not remember having asked in the particular case whether the woman had ever been revaccinated; but that it was his usual practice to do so; and that there were no marks suggestive of anything like recent vaccination. If Dr. Dunlop did not make inquiry as to previous revaccination, the Board considers that he should have done so. The mother stated before the coroner that Dr. Dunlop vaccinated her without her being asked whether she wished to be vaccinated; while Dr. Dunlop says that she was aware she was going to be vaccinated, but raised no objection. The woman stated that her arm was swollen and bad after the vaccination, and that she had it in a sling. According to the evidence of Dr. Dunlop and the midwife, the arm of the woman when she left the workhouse had only dry scab upon it, and there is no evidence that she "suffered severely" from the effects of the operation. I have already stated that steps would be taken to inform Dr. Dunlop of the Board's view upon the case, but see no occasion for the issue of formal instructions.

Quarantine in Egypt.—Mr. PUGH asked the Under Secretary of State for Foreign Affairs whether the attention of Her Majesty's Government had been directed to the action of the International Sanitary Board of Egypt, and in particular to the recent re-imposition of quarantine, owing to an alleged outbreak of cholera in India; and whether Her Majesty's Government had taken, or would take, any steps to prevent the constantly recurring inconvenience and loss caused to Her Majesty's subjects by such action.—Lord E. FITZMAURICE: The attention of Her Majesty's Government has been directed to the action of the International Sanitary Board, and to the recent re-imposition of quarantine owing to an alleged outbreak of cholera in India. Her Majesty's Government fully recognise the inconvenience and loss occasioned thereby, and they are taking steps which, it is hoped, may suffice to remedy these evils.

Tuesday, June 19th.

Vaccination.—Mr. TAYLOR called attention to the laws relating to vaccination, and moved: "That in the opinion of this House it is inexpedient and unjust to enforce vaccination under penalties upon those who regard it as unadvisable and dangerous." At considerable length, he repeated his well-known views on vaccination, condemning it as an ineffective prophylactic, productive of disease, and supported, not by the inductions of science, but by the "coruscations of quackery." Compulsion he regarded as an odious tyranny, a measure of class legislation, which had been imposed on the country by the official experts, on inadequate evidence and without the knowledge of the public; and he maintained that foreign countries, which had originally followed our example, were now abandoning it.—Mr. HOPWOOD seconded the motion.—Sir J. PEASE, while admitting that the balance of evidence was in favour of vaccination, thought the practice of cumulative prosecutions raised a prejudice against it; and moved as an amendment: "That a Select Committee of this House be appointed to ascertain whether a limitation of the accumulation of penalties for non-vaccination can be effected without endangering the practical efficiency of the Vaccination Acts."—Sir LYON PLAYFAIR, in defending the utility and efficiency of vaccination, admitted that communication of disease was possible, but the cases were infinitesimally rare, and constituted no reason why the community should not protect itself against the most loathsome and fatal of diseases. As to the efficiency of vaccination, it had never been put forward as an unfailing protection, but as certain to mitigate the virulence of the disease and stamp out epidemics. The returns showed that while the rate of mortality from small-pox was 3,000 per million in the last century, the voluntary vaccination in force during the first forty years of this century reduced it to 600, the State-aided vaccination which followed brought it down to 305, and under the present compulsory system it was only 156. In an interesting review of the last epidemic at home and abroad, and its effects on the civil and military population, he showed the comparative immunity of the vaccinated, and maintained that, but for vaccination, the disease would be as malignant and as destructive as ever. The State, therefore, he maintained, had a right to interfere to protect society against this danger.—After some remarks from Dr. CAMERON, in support of Sir L. Playfair's arguments, Sir C. DILKE went, in some detail, into the historical statistics, to illustrate the diminished mortality from small-pox due to vaccination, and referred also to the experience of the nurses in the small-pox hospitals of the London

Post Office and of the Telegraph Service. A comparison of the mortality in the vaccinated and unvaccinated portions of the London population during the late epidemic gave the same result; and as to the possibility of disease being communicated, he showed that erysipelas, the disease most likely to be communicated, had actually diminished. With regard to the cumulative penalties, the policy of the Local Government Board had always been to discourage them, and that was his own personal opinion. A Bill to that effect had been introduced by his predecessor, which, however, had been badly received, and he doubted whether it would be possible at present to pass such a Bill. A Select Committee was not needed; and he, therefore, advised Sir J. Pease to withdraw his amendment, and allow Sir L. Playfair to move his, which expressed approval of vaccination and of the present law, with any modifications which might be necessary.—Mr. SCLATER-BOOTH expressed approval of this course; and, after some remarks from Mr. TAYLOR, in reply, Mr. COLLINS, Sir T. LAWRENCE, and Mr. HOLLOND, Sir J. PEASE withdrew his amendment.—Sir L. PLAYFAIR moved as an amendment: "That in the opinion of this House the practice of vaccination has greatly lessened the mortality from small-pox, and that laws relating to it, with such modifications as experience may suggest, are necessary for the prevention and mitigation of this fatal and mutilative disease."—On a division, Mr. Taylor's resolution was negatived by 286 to 16, and Sir L. Playfair's resolution was agreed to.

Irish Lunatic Asylums.—In reply to Mr. CORBET, Mr. TREVELYAN said: While admitting the efficiency of the lunatic asylums system, the Government are of opinion that it is capable of undergoing changes for the better, some of which could not be carried out without the proposed change of control. With regard to the relative costs of the Irish and other departments, I am not prepared at present to enter upon any analysis of the subject, and I do not think that a mere comparison of the number of persons employed in the respective departments, and of the amount of salary paid to them, would be a sufficient basis upon which to form a sound opinion. I stated yesterday, in reply to a question put by the hon. member for Clonmel, that whenever the bill, which is already under consideration in another place, comes before this House, I will explain fully the policy of the proposed change; but I do not think I can satisfactorily do so in reply to a question.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

FROM the forty-second annual report, just issued, it appears that the ordinary income for the year 1882 was £5,580, as compared with £4,834 in the previous year, when the ordinary income was supplemented by the further sum of £4,356 from the Hospital Sunday collection, which falls to the Queen's Hospital once in three years. The chief items of ordinary income were, subscriptions 1881, £2,780; 1882, £2,788; donations, 1881, £397; 1882, £237; Hospital Saturday, 1881, £711; 1882, £852; legacies, 1881, £208; 1882, £870; dividends, 1881, £178; 1882, £199; registration fees, 1881, £538; 1882, £597. The expenditure for the year was £7,264, as compared with £6,997 in 1881. The number of in-patients in 1882 was 1,669, as compared with 1,663 in 1881; the number of out-patients was 16,538, as compared with 14,490 in the preceding year. The cost of each in-patient was £3 2s. 3¼d., as compared with £3 2s. 4¼d. in 1881. Of the in-patients, 811 were admitted by registration, the remainder being treated as accidents or urgent cases. Of the out-patients, 8,359 were admitted by registration, the remainder, namely, 8,179, were admitted free. The registration fee was one shilling; this fee was remitted in accidents and urgent cases, and whenever the applicant was too poor to pay it. Special care was taken to exclude paupers from the hospital. In the special departments the following cases were attended:—diseases peculiar to women, 330; midwifery cases, attended at patients' homes, 239; ophthalmic cases, 659; dental cases, 463. At the beginning of the year Dr. Sackling was elected to the office of physician for out-patients. With this exception, no change occurred in the honorary staff. Respecting the system of registration, which yielded the large sum of £597 in 1882, the committee report:—"This system is in no way inquisitorial. It is designed to preserve the hospital for the use of the poor, and to prevent their being crowded out by those who can afford to pay for advice. The questions asked are put in a kindly and delicate way, and are such as no one who seeks hospital relief should object to answer. The lines which determine a person's fitness for that relief are liberally drawn, and the special circumstances of each case are uniformly taken into account. If any be too poor to pay the fee, which is intended to keep out trivial cases, it is at once and willingly remitted." During the year a second course of lectures to nurses was given, in the theatre of the hospital, by Drs. Sawyer and Carter, and Messrs. Bennett May, Priestley Smith, and Jordan Lloyd, and it was well attended and much appreciated.

THE RANGOON LUNATIC ASYLUM.

SURGEON-MAJOR GRIFFITHS, who is Medical Superintendent of the Lunatic Hospital for British Burmah, reports that two hundred and eighteen male and twenty-six female lunatics were treated in that institution during 1882. Of the sixty-nine patients admitted during last year, forty-four were Burmans, twelve Hindus, seven Mahomedans, and two Europeans. Of the total number of patients treated, ninety-three suffered from acute mania, thirteen from chronic mania, fifty from melancholia, thirty-nine from acute dementia, eight from idiotcy, twenty-two from imbecility, and only two from general paralysis of the insane. The small proportion of cases of general paralysis amongst the insane population of British Burmah is certainly remarkable; as is also the fact that thirteen persons were admitted into the asylum in 1882 who were found to be not insane. It would seem that personal liberty is less jealously guarded, and the examination of supposed lunatics less strictly conducted, in British Burmah than it is in England. Linguistic difficulties must sometimes, doubtless, in a highly mixed population, interfere with the diagnosis of mental derangements, which are to so large an extent recognised by the oral statements of those suffering from them. Referring to the medical treatment of his patients, Surgeon-Major Griffiths says that antiphlogistic or reducing remedies are seldom resorted to; and that he has observed, that cases that have been submitted to blistering and violent measures by the native doctors, previous to their admission to the asylum, are more tedious in their course than other cases that have escaped such heroic treatment. In cases, however, of various forms of insanity of recent origin, he has found the use of brisk aperients, and of evaporating lotions to the head, followed by the administration of conium, bromide of potassium, and chloral, decidedly advantageous. During the passage from acute to chronic insanity or dementia, and in chronic melancholia with delusions, counter-irritation to the scalp (as recommended by Dr. Bucknill) has been found useful. Cold effusion to the head, hyoscyamus, and other sedatives, have been employed in some cases of excitement, with the view of tranquilising the patient and producing sleep, without being followed by those unpleasant symptoms which have been alleged to attend their use.

PRIVATE DISPENSARIES.

SIR,—Mr. J. B. James deserves my gratitude for his letter in your issue of May 12th. I appreciate his kindness in quoting so largely from his article in the *Student's Journal*, as I have had no opportunity of seeing that paper lately. But his sympathy for my ignorance makes him lose sight of the point at issue and take the trouble to prove facts concerning which there can be no difference of opinion. No one doubts the value of the clubs and assurance associations of which Mr. James speaks, but in spite of his careful perusal of my letter, he does not appear to have noticed that I expressly said the patients at our private dispensaries are drawn from the same class as the out-patients at our hospitals, who before our day had either to go to the parish doctor or the hospitals and lose time, I thus excluded by inference the members of sick and benefit clubs and assurance associations who pay for medical attendance, and therefore would neither become out-patients at our hospitals nor apply to the parish. Will Mr. James inform me what is to become of these unfortunate people, who having been rejected by the medical examiners of the clubs, etc., are unable to make provision for sickness, and cannot afford time to attend hospital. I quite see the necessity for the medical examination; they must be examined, and if the association is to succeed, they must be rejected, no doctor would care to take members at one shilling a quarter if there were a number of diseased ones among them. For these, in my humble opinion, the private dispensary is a real boon, they need lose very little time, they have only to pay during their illness, and then only the small sum of sixpence for a bottle of medicine, and they do not lose their self-respect by being compelled to apply to the parish. I am surgeon to several benefit societies, and think every healthy man ought to belong to one, also, where possible, their wives and children. Nearly all the members of my club send their wives and children to be treated at my dispensary, and they, and the public generally, know quite well the difference between the public and private dispensaries, and do not confound one with the other. I cannot deny that there are sham dispensaries carried on by unqualified men, but sooner or later they come to grief, but when patients are well treated and supplied with good medicines and sound medical advice by properly qualified men at a reasonable fee, they are sure to appreciate it and support that practice in spite of all opposition, and whether it is conducted under the title of dispensary, surgery, or any other name, really matters very little. Trusting you will give insertion to this letter, believe me, yours faithfully,

P. D.

MILITARY AND NAVAL MEDICAL SERVICES.

VOLUNTEER MEDICAL ORGANISATION.

A MEETING of the Executive Committee was held on Friday, June 1st, at Charing Cross Hospital. The Secretary reported that considerable progress had been made in the movement, favourable expressions of opinion having been received from a great many hospital surgeons and physicians in London and the provinces. Volunteer surgeons to the number of fifty-one have already placed their names on the General Committee, and all the medical schools in London have now representatives on either the Executive or the General Committee. The Secretary was directed to convey to Messrs. Savory and Moore the thanks of the Committee for the kind grant of twenty field-haversacks, complete, for the use of the Ambulance Company at Charing Cross Hospital. The National Aid Society have very courteously allowed the Organisation to hold committee meetings at, and to have letters addressed to, their office, 5, York Buildings, Adelphi, London. Besides Charing Cross Hospital, where a trained corps already exists, St. Bartholomew's Hospital is about to take up the movement on a large scale. The London and St. George's Hospitals are also moving in the matter.

SURGEON-MAJOR H. W. GRAHAM. Assay Master, Bombay Mint, who attained his fifty-fifth year in September last, has had his service extended for three years with retention of appointment.

DEPUTY SURGEON-GENERAL R. HUNGERFORD, Army Medical Department, has been appointed principal medical officer on the staff of Major-General H. Torrens, C.B., commanding the Cork District, in succession to Deputy Surgeon-General J. L. Jameson.

THE Woolwich correspondent of the *Times* writes that the temporary arrangement by which the Home District and the Woolwich District, although commanded by two separate general officers, have but a single principal medical officer, does not give satisfaction. Owing to the numerous stations in the Home District, and the demands it makes upon an official's time, a separate principal medical officer is ordered for it. The system, also, of keeping the principal medical officer's office here detached at the distance of a mile from the general and staff offices, is very inconvenient, leading to much useless correspondence and much trouble to individuals. All the offices of staff-officers of a district should be close together, and, where possible, under one roof.

ANNUAL MOBILISATION OF THE SWISS MEDICAL CORPS.

SIR,—In a communication which I have received from the office of the Chief Surgeon of the Swiss army, it is stated that the annual mobilisation of the medical corps of a division of the Swiss army will be held at Zug, Switzerland, from August 31st to September 6th, 1883, under the command of Colonel Goldlin, of the medical corps of the national army.

As medical officers of the army, whether of the regular service or the volunteers, who may be in Switzerland during the autumn, may like to see these exercises, I take the opportunity of asking you to publish this information.—I am, sir, GEORGE G. H. EVATT, M.D., Surgeon-Major, A.M.D.

Woolwich, June, 1883.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

SIR,—I am glad that "A.M.D." has noticed, in a recent issue, my letter on the wretched profpects for promotion which are looming up before surgeons-major of the army, since it is fast becoming a serious question, and ought to be fully discussed. Permit me some short comments on his observations.

"A.M.D." puts forth, in extenuation of the situation, that the retiring allowances are good, and that men should go, after twenty or twenty-five years' service, and take up private practice or a regimental district, which gives £150 a year in addition to their retired pay. Now, as regards these districts, the number available is not large, while the taking up of private practice, after so many years' service in tropical climates, requires the retiring officer to have a decided bent in this direction, in order to encounter the uphill work which the general practitioner always has for the first few years. It is, in fact, turning over a new leaf somewhat late in life—a performance which is of proverbial difficulty.

Supposing, however, that a considerable number of men should retire by these two doors, the fact remains that the others—the majority—who like their service, and want to get on in it, who know that they are best at the work in which they have been so long engaged, find their way blocked, and advancement in this their chosen career hopeless. It is poor comfort to such men to say, "Retire, and take up private practice." No, sir; the only remedy which I can see is putting a limit to the tenure of the administrative appointments.

"A.M.D." says, "It is useless to hope" for this. I do not see why he should sound this note of despair. Faint heart never won anything, Is the proposal reasonable? would it be efficacious? is there any precedent—a thing so dear to the British mind? In these respects, it is to be judged, and I hold that the verdict must be favourable. As to the precedent, what more powerful and suggestive one than that of the commands of regiments which are now given for a limited period? We must look, I plainly see, to the profession outside, and its great organisation the British Medical Association, for most of our help in this matter.—I remain, etc., A SURGEON-MAJOR.

THE ARMY MEDICAL SERVICE.

SIR,—It is not long since the authorities were able to congratulate themselves on the fact that the Army Medical Service had become sufficiently popular to attract, as candidates, some of the best class of young medical men. Whether the service be popular or otherwise, medical officers have no control whatever over its organisation, and can in no wise be held responsible for defects outside their sphere of action. If, however, they are to be made the scapegoats for all deficiencies and shortcomings, no matter whence arising, how long is their branch of the service likely to remain popular?

When, under the pressure of active service, the Ordnance Store Department and the Commissariat found themselves unable to comply satisfactorily with the requisitions made upon them, in compliance with regulations, by the Army Medical Department, an outcry is raised, not that the Commissariat and Transport prove to have been overtaxed, but that the Army Medical Department has utterly collapsed!

When the responsible medical officer very properly points out, that alleged shortcomings are not the result of any dereliction of duty on the part of his department, but of failure on the part of those upon whom he is obliged to rely for supplies of food and equipment for his establishment, he is represented as "shielding himself behind the Commissary of Ordnance and others."

Had the regulations provided that, in case of default on the part of the departments named, the head of the medical service was authorised to make local purchases of food and appliances, the case would have been materially different, and the strictures which, under existing circumstances, wear an appearance of absolute injustice, might have become appropriate and deserved. As it is, medical officers are bound by a rigid and inelastic routine, which, in practice, deprives them almost altogether of discretionary power.

It might hardly be believed, for example, that a medical officer of long standing would not be permitted to issue a little wine or beef-tea for the use of a sick woman or child, without obtaining a certificate from the officer commanding, to the effect that the patient is a suitable person for such a "concession;" and yet such is the rule in the medical charge which the writer is at present holding. As the only branch of the military service composed of professional men—the chaplain's department excepted—the Army Medical Department might be supposed to have especial claim to some share of autonomy and self-dependence; but, as a matter of fact, it has from time immemorial been kept in a most subordinate condition; and it is after generations of such dependence that the alleged shortcomings of a few individuals are contemptuously, to a certain extent, excused by a member of the class that has alone held power, on the ground that they acted "according to their lights, and the customs or habits they had been brought up in." The re-introduction of what is called the regimental system, under which, the most direful breakdown occurred during the Crimean war, and which from the nature of things, does not permit any comprehensive military medical organisation, is strenuously demanded by those who view with dissatisfaction any independence granted to medical officers, and who desire to see them subordinated in every detail to military authority.

Whatever attempts may be made in the way of reorganisation, based upon the recommendations of Lord Morley's Committee, it is to be hoped, in the interests of the service, that no attempt will be made to introduce more extended military interference with medical duties. There is already interference enough in this direction, and, if exaggerated, it can only lead to increased dissatisfaction and probably to a disaster. If the best results are to be obtained from the medical department of the army, its officers must be entrusted with adequate authority to manage their own affairs with as much independence as is consistent with discipline and the general good of the service, and then only upon them will justly fall the responsibility of failure when failure occurs.—I am, sir, your obedient servant, SERVICE.

THE VOLUNTEER MEDICAL SERVICE.

SIR,—Everyone who is interested in the efficiency of the Volunteer Force must feel glad that at last there seems some prospect of the development in connection with it of a properly organised medical department, and that many volunteer surgeons are themselves actively working to that end. It is to be hoped that Surgeon-major Evatt's suggestion of a meeting and dinner during the Association's week at Liverpool, will meet with strong support. Nothing could be more unsatisfactory than the present disjointed condition of things, or more anomalous than the position of volunteer medical officers. One surgeon only is appointed in medical charge of a battalion, even should it include as many as twelve detached companies or batteries, scattered over a wide district, and he alone holds a commission. As many acting surgeons may be appointed as the commanding officer may think are necessary, provided that the number does not exceed one for each company or battery. As a rule, most battalions have one or two acting surgeons. These officers (who are looked upon only as doing *locum tenens* duty for the surgeon) are allowed the relative rank of lieutenant, but are not commissioned; their rank remains ever the same, irrespectively of length of service, and their appointments cease immediately upon the regiment being called out for active service. In common with the surgeons, they are allowed to go up for a proficiency examination should they wish to do so, but their doing so is a perfectly optional matter. Their success or failure does not affect their position in the least (though it is true that, by success, they earn the officer's capitation grant). In this respect, they differ from all other officers of the corps. They have no definite duties of any kind to perform, save to put in an appearance at the inspection, and at gun or rifle-practice, if required; and, under present arrangements, they are simply ornamental supernumeraries.

Lastly, where, as at depôts and outlying stations, it is necessary for the army surgeon in charge to have assistance, it seems to be a not uncommon custom to pass over volunteer medical officers, and to employ practitioners who are in no way connected with the army or auxiliary forces. To this point, undoubtedly, attention needs to be drawn.

Were the points which I have mentioned more generally known, and the absurdity of the system recognised, it is hardly possible to believe that an alteration for the better would not be made. It is to be hoped that the discussion of the subject will not be fruitless, and that the object of Surgeon-major Evatt and his coadjutors, viz., the formation of a really efficient Volunteer Medical Department, will, before long, be in a fair way of accomplishment.—I am, sir, yours faithfully, X. Y. Z.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

SIR,—The subject of your able leader last week is of great importance to the profession and to the public. Every one will agree with you that legislation with regard to it should be narrowly watched, for the tendency of the age is undoubtedly to burden the profession with duties which are stated to be of national importance. Hitherto, as in the Registration and Vaccination Acts, our services have been put in requisition without the smallest recognition of their value, and now on all sides corporations and the public generally are bestirring themselves to secure for the community the benefit of Acts for compulsory notification. As a recognised leader of professional opinion, you discuss the bearings of such Acts, and very properly warn us against their latest edition at Bath. I venture to point out that it is of prime importance that as little loophole as possible be afforded to the sanitary authorities for interfering with private practice, and that the only certain way of effecting this is to constitute the medical attendant sole judge of the question, whether any interference is required on the part of the local authority. He should be master of the occasion, and it is only at his bidding that the sanitary officials should take action. Now such a scheme has been in operation in Edinburgh since November 1879, with the following results.

Table of Intimations of Infectious Disease during the undermentioned Years.

Disease.	1879.	1880.	1881.	1882.	Totals.
Fever, typhus	6	18	23	45	92
Fever, typhoid	33	336	413	639	1,421
Diphtheria	17	172	171	217	577
Small-pox	1	5	4	1	11
Scarlatina	206	1,897	1,904	2,111	6,118
Measles	123	3,216	691	4,050	8,080
Total	386	5,644	3,206	7,063	16,299
Cases removed to hospital	35	323	396	539	1,293

These results are all the more noteworthy as, thanks to very great sanitary clearances, etc., the death-rate of Edinburgh had undergone marked improvement, and yet, in order to diminish the risk of the spread of epidemic disease, our corporation introduced, amid universal opposition from the medical profession here, the well known Act. It is now popular with the profession and with the general public of our enlightened metropolis—the citizens of which willingly allow themselves to be taxed for an Act which tends still further to lower the death-rate and to limit the area of infectious diseases. This marked success has been attained just because, by our plan of intimation not only have "the interests of the householder been rigidly guarded against needless injury at the hands of injudicious inspectors," but the equally important interests of the medical attendant have been as scrupulously cared for. The result has been, as the table shows, that both by the general public and by the profession, the Act in question has been legally carried out. We have had none of those dreaded "heart-burnings" in consequence of the secrets of households having been ruthlessly disclosed, and no medical man has ever complained of undue interference on the part of the sanitary officials. In answer to all this, we are politely told the profession in Edinburgh have been bribed into acquiescence, and that we have no results to show. The fact is significant, that all the removals to hospital in the table were carried out at the request of the medical attendant, and that in no case had the local authority to take the initiative. That veteran sanitarian, Dr. Stewart, was surprised, when I told him that, instead of two years as he had expected, in my opinion, it would take more than ten to show of a just comparison being made of the working of the Act. Infectious diseases move in cycles, and to judge correctly of coercive measures, the period of observation must not be too limited. But here are our statistics up to the present year.

In the four years prior to the Act, the average death-rate of Edinburgh was 20.08 per 1,000. Since the Act, it has been 19.41; while the percentage of zymotic mortality for ten years prior to the Act was 15.31, and since the Act it has fallen to 12.18.

All other plans of intimation, whether of the householder alone, or by an informer, as proposed by Dr. Gairdner, necessarily involve investigation by the local authority to verify the fact of the presence of infectious disease; and thereby opportunity is afforded for vexatious interference by over-zealous officials. Again, if certificates are to be handed to relatives of the sick poor in the back slums of our great towns and in country districts, what guarantee is there that such information will ever reach head-quarters? The payment of a sixpence, as proposed at Bath, would involve great difficulty in the keeping of accounts, and would lead to impersonation and all the risks attending the informer.

It is high time that the profession should consider this important subject in all its bearings, and insist, in any compulsory Act, that their position as medical attendant should be fully recognised.—

Yours,

HENRY D. LITTLEJOHN, M.D.

Edinburgh, June 19th, 1883.

SIR,—Should the Bill now before Parliament become law, every member of the profession will be obliged to give information to the authorities concerning his private patients. I had hoped to see some general expression of opinion from us all about it. In your number of May 5th is a report of a special general meeting of the Metropolitan Counties Branch; and a notice of a medical meeting at Nottingham, where they resolved to request the town council to suspend the clauses relating to compulsory notification, till the subject is settled in Parliament. It is not the right position for our profession, to be subject to the fiat of a town-council in such a matter. The medical men of this kingdom ought not to be governed, or interfered with, by local Acts. Whatever laws we are subjected to, should emanate direct from the British legislature, which we are bound to obey. But, as we are bound to obey, so ought we to use all proper means to obviate the passing of unjust or derogatory laws. Once passed, it may not be easy to get them repealed. Other professions, other classes of men, various trades, for instance, are quick to perceive when and where their corporate interests are touched, are ready to combine for their protection, and do so promptly and effectively. This question, and the pending Act of Parliament, have been some time before us. A petition signed by members of the profession generally would probably have weight with Parliament. I have been hoping to find in your columns an approved form of such petition, with notice of the address to which signatures should be sent.

In this question, some of us do not seem to see the distinction between our duties as medical men and our duties as citizens. Our diplomas make us no part of the legislature. Our knowledge of the causation of disease, gives us no further authority to act, than constantly to make known how to prevent disease, and repeatedly to warn against mistakes and hurtful proceedings in every way. It is not our business, nor our interest, to frame laws, or to urge the passing of them, or to be strong partisans about them. To do so is unwise. For the people are thereby led to suppose, that sanitary statutes are passed in the interests of the doctors; that we got something by them; and our position is thus lowered, and our teaching and warning mistrusted and discredited. As medical men, it is not our business to regulate the notification of infectious diseases; we can only ask that it be not made compulsory on us. It is for the legislature to make the laws. We have quite work enough with the various doubtful and unsettled questions belonging to every department of our multifarious art. These remarks apply to other matters than the notification of infectious disease. For instance, I think we ought not to intermeddle in the question of penalties for neglecting to vaccinate, except so far as to point out what is the medical effect of such and such an enactment. I am strongly in favour of all laws for preventing and stamping out disease, but have, as a surgeon, no greater right than other citizens to press these things forward. It is doing ourselves injustice, and to our profession a serious wrong, to act so that the people shall say they are "doctor-ridden," shall think this or that is a "doctor's Act of Parliament," or shall fancy that we seek in the smallest degree to have any hand in ruling. There is a day coming, when we shall feel thankful if we have stood perfectly clear in this matter. It is most natural for all who give attention to public health, to pursue that vital subject to the utmost, even too zealously; but sooner or later, if we go beyond our lines, we shall surely repent it, and shall do mischief. There has been some confusion between the registration of current diseases, which I have repeatedly advocated, and this Notification of Infectious Diseases, which, if compulsory on us, everyone who respects his profession must oppose. I have formerly pointed out that we cannot be expected to do the duty of detectives, and will now only express a hope, that the profession will on this occasion be unanimous and true to itself.—I am, sir, yours faithfully,

W. E. C. NOURSE, F.R.C.S.

Exeter, May 9th, 1883.

THE ST. PANCRAS VACCINATION CHARGES.

MR. LLOYD ROBERTS, the district auditor for St. Pancras, has given his decision on the three objections affecting payments to and on behalf of Dr. Dunlop, the resident medical officer of St. Pancras Workhouse. The items were; the solicitor's bill of £26 12s. 10d. for defending Dr. Dunlop when charged with the manslaughter of a child vaccinated by him when a few days old; the shorthand writer's charges for taking notes of the hearing, £13 3s.; and a fee of 1s. for revaccinating Jane Fisher contrary to the 8th section of the Vaccination Act, 1867, which provides for the revaccination "of persons who may apply" to the public vaccinator. The objectors were Mrs. Howell (an ex-guardian), Mr. C. T. Wickham, and Mr. J. Graham Spencer. The auditor disallowed the first item, the solicitor's charges, but passed the other two. The signatories to the cheque for the payment of the solicitor's bill were Mr. Commissioner Kerr (the chairman of the St. Pancras Guardians), Mr. Drew (taxing master in Chancery), and another; and these three will, in the ordinary course, be surcharged the amount disallowed.

UNIVERSITY INTELLIGENCE.

THE RELATION OF OXFORD TO THE PROFESSION OF MEDICINE.

SIR,—I should very much like to call your attention to a letter received by Lord Granville, from Dr. Acland, and published in the JOURNAL of April 28th, p. 846, as well as in the daily papers, which is calculated to give a false impression to the public concerning the medical and scientific curriculum in the University of Oxford.

The writer divides the course of instruction for medical education at Oxford into three categories, upon which it may not be uninteresting to offer a few words of comment.

1. "General philosophical education as represented by the old *Literæ Humaniores*." The existence of such a branch of learning is certainly true, but there is evident omission of the fact that it is not a pass, but an honour school, and one which, with very rare exceptions, it generally takes four years' hard reading to pass.

2. "The study of the natural sciences." After passing one's two obligatory classical examinations, "Smalls," and "Mods," an interval of at least six months elapses before what is termed the "preliminary science" (chemistry and physics) examination takes place. Save those few who take these sciences as two of their three subjects in the pass finals, this examination has to be passed by every undergraduate at some time previous to his taking a science degree. The unfairness of this arrangement is obvious, for, *inter alia*, while those men who make chemistry or physics their final subject have but one extra science to get up, those who go in for biology (and the majority here have thoughts of ultimately entering the medical profession) are obliged to read two extra ones. It may not be out of place to mention that until last term, when an elementary course of lectures on Human Osteology was started, there has been no scientific instruction whatever in Human Anatomy for the last five or six years, and, as far as one may judge by appearances, there seems little chance of any, for some time to come.

3. "The actual study of disease itself," which, as the writer adds, is left "to the vast opportunities of the metropolitan hospitals and schools." Now, sir, it is indeed curious for Dr. Acland, the Regius Professor of Medicine himself, to have given expression to a statement wherein lies a correct representation of perhaps one of the greatest abuses of trust to which undergraduates have ever been exposed. At the beginning of every term there appears some such notice as this, in the official organ, the *University Gazette*. "The Regius Professor of Medicine, Dr. Acland, will give Informal Instruction in Medicine, on Mondays, at twelve."

Off trots the guileless youth to the place appointed, to find the extremely affable Professor. The writer of the letter to Lord Granville—who, by this time, is quite polished in the art—discourses most eloquently, touches on the glories of the Alma Mater, lays stress on his own still unrecognised merits, quotes, may be, a little Latin or Greek, but, *experto crede*, at the same time, distinctly gives his undergraduate visitor to understand that Oxford is not the place fitted for a medical school, and that, so far as medicine is concerned, he does not intend lecturing during the rest of the term. I have it on reliable authority that at the last appointed time of meeting three men turned up for "informal instruction," but the instruction was the thing that failed.

It does indeed seem strange that an university, having, as it does, an infirmary with well-appointed staff, should tolerate conduct such as this in a professor, who, though receiving handsome emoluments *ad hoc*, absolutely refuses to lecture himself, or to find a substitute. In conclusion, it is needless to point out that practices, such as these, are far from being conducive to the promotion, success, and welfare of the scientific study of medicine in the University of Oxford.—Believe me, sir, yours, A SCHOLAR OF HIS COLLEGE.

MEDICO-LEGAL NOTES AND QUERIES.

CORONERS AND POST MORTEM EXAMINATIONS.

SIR,—A few days ago a man, aged 73, who had only complained of indigestion and rheumatism in one leg, and had not required any medical attendance for ten years, went to take his usual afternoon's nap on his bed; in an hour and a half afterwards, his wife found him lying dead on his bed. There was not anything to suggest suicide or poisoning. The coroner elected to hold an inquest, a course he felt bound to take in accordance with a recent decision of the Lord Chancellor, and issued an order to me to "make an external *post mortem* examination," and report thereon at the inquest, I having been called in to see the body as soon as it was found. Will you kindly inform me: 1. Has the coroner the power to limit the *post mortem* examination to an external examination? 2. With such an order, am I legally entitled to the usual fee of a guinea for a *post mortem* examination?—I am, sir, yours faithfully, M.D.

*** The order form which our correspondent received from the coroner, and which he enclosed, is, we believe, the usual one issued when a complete *post mortem* examination ("comprising an examination of the viscera, head, chest and abdomen, and, if necessary, an analysis of the contents of the stomach") is required; but the coroner, by inserting the word "external" before the words "*post mortem*," evidently intended that the medical witness should view the body only. Nevertheless, as "M.D." obeyed the coroner's mandate, and made a special "external *post mortem* examination," as requested in the order, we think he is justly entitled to an extra fee for so doing; but it is doubtful whether he could claim it legally. Should he again, however, receive a similar order, it would be well to communicate with the coroner before proceeding to examine the body.

DR. WILLIAM COLLINGRIDGE, Medical Officer of Health of the Port of London, was a successful candidate in the recent examination for the degree of Master of Laws of the University of Cambridge.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 14th, 1883.

Gardner, Thomas Frederick, Watford, Herts.
Hill, Hugh Gardiner, Coton Hill, Stafford.
Spencer, Herbert Ritchie, Atherstone, Warwickshire.
Wigmore, Frederic Henry, Eccleston Street, Chester Square.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly Examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, June 4th, 5th, 6th, and 7th, the following candidates were successful:

For the Licences to practise Medicine and Midwifery.—Adela Bosanquet, London; Daniel Wycherley Donovan, Dublin; James Edward Fitzgibbon, Castlerea, co. Roscommon; George Robert Moore Graham, Melbourne, Australia; Francis Brunel Hawes, Kingstown, co. Dublin; Elizabeth Lougheed, Londonderry; Arthur William McMath, Dublin; Patrick Harward Murray, Strokestown, co. Roscommon; John Joseph O'Hagan, Mullingar, co. Westmeath; Alfred Ernest William Ramsbottom, Aliwal North, Cape Colony; George Peirce Ridley, Dublin.

For the Licence to practise Medicine only.—John Joseph Lyons, Dublin.

For the Licence to practise Midwifery only.—Christopher Peter Kelly, Navan, co. Meath; John Maxwell Trimble, M.D., M.Ch.Roy.Univ.Bel., West Bromwich.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the provisions of the Supplemental Charter of December 12th, 1878, were duly enrolled as Members of the College:

Gilbert Lynch, M.D.Univ.Dub., Lic. Med., 1876, London; George Lombe St. George, L.R.C.S.Edin., Lic. Med., 1871, Lisburn, co. Antrim; Ann Elizabeth Clark, M.D.Berne, Lic. Med., 1878, Birmingham.

MEDICAL VACANCIES.

The following vacancies are announced:

ALVERSTOKE MEDICAL BENEFIT SOCIETY.—Medical Practitioner. Salary, £200 per annum. Applications to Mr. John Ellicott, 10, Shaftesbury Terrace, Gosport.

BOROUGH OF BRADFORD.—Medical Officer of Health. Salary, £500 per annum. Applications to the Chairman of the Sanitary Committee, and endorsed "Medical Officer of Health," by June 30th.

BOURNEMOUTH COTTAGE HOSPITAL AND DISPENSARY. — Resident Medical Officer and Secretary. Salary, £120 per annum. Applications to the Secretary.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the First District. Salary, £40 per annum. Applications by July 2nd.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the Workhouse. Salary, £10 per annum. Applications by July 2nd.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the Fourth District. Salary, £46 5s. per annum. Applications by July 2nd.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary, £100 per annum. Applications marked "Eastern Dispensary," to the Honorary Secretary, Rev. Conway Joyce, M.A., 6 Richmond Hill, Bath, by July 2nd.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E. —Registrar and Chloroformist. Salary £30 per annum, with an additional £20 if the post is held for twelve months. Applications by June 25th.

GLASGOW EYE INFIRMARY.—Resident House-Surgeon. Salary, £75 per annum. Applications by July 10th.

HEREFORDSHIRE RURAL SANITARY.—Medical Officer of Health. Salary £500 per annum. Applications by July 3rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 30th.

HUDDERSFIELD INFIRMARY. — Senior House-Surgeon. Must be duly qualified. Salary, £80 per annum. Applications to Frederick Eastwood by July 6th.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Must possess registered qualification. Salary, £40 per annum. Applications to Frederick Eastwood by July 6th.

JOINT COUNTIES ASYLUM, Carmarthen.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Hearder by July 7th.

LEEDS SCHOOL OF MEDICINE.—Resident Curator. Salary, £80 per annum. Applications by July 3rd.

LEIGH LOCAL BOARD.—Medical Officer of Health. Salary, £70 per annum. Applications by June 25th.

LIVERPOOL NORTHERN HOSPITAL.—Resident House-Surgeon's Assistant. Applications to the Chairman by July 3rd.

LONDON LOCK HOSPITAL, MALE AND OUT-PATIENT DEPARTMENT, 91, Dean Street, Soho, W.—House-Surgeon. Applications by June 23rd.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Salary, £150 per annum. Applications by June 30th.

PUBLIC DISPENSARY, 59, Stanhope Street, Clare Market. — Dispenser. Salary, £5 per month. Applications to the Secretary, 5 Bishop's Court, Lincoln's Inn, by June 25th.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—Assistant-Physician. Applications by July 4th.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon. Applications by July 9th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by July 4th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Joint Physician. Personal applications at the Dispensary, No. 60, King Street, Golden Square, W., on Thursday, June 28th, at 4.30 P.M. punctually.

ST. PANCRAS AND NORTHERN DISPENSARY.—Physician. Applications to the Committee by June 28th.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington, W.—Demonstrator of Physiology and Histology. Salary, £100 per annum. Applications by July 7th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £200 per annum. Applications by July 14th.

SUNDERLAND INFIRMARY.—Second House-Surgeon. Salary, £60 per annum. Applications by July 3rd.

TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay.—Junior House-Surgeon. Salary, £90 per annum. Applications to W. H. Kitson, Esq., Hemsworth, Torquay, by July 16th.

WESTERN DISPENSARY, Rochester Row, Westminster.—Consulting Accoucheur. Applications by June 30th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton—House-Physician (who will also be required to act as Chloroformist, Pathologist, and Medical Registrar). Salary, £100 per annum. Applications to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

BURNET, Robert W., M.D., C.M., appointed Pathologist to the Chelsea Hospital for Women.

CAIGER, F. F., M.R.C.S. & L.R.C.P.Lond., appointed Resident Accoucheur to St. Thomas's Hospital.

CHADWICK, Charles M., M.A., M.B.Oxon, appointed House-Physician to the London Hospital, E.

CLARKE, Ernest, M.B., B.S., appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.

DICKINSON, T. V., M.D., appointed Assistant-Physician to the Chelsea Hospital for Women.

FELL, W., M.A., M.B.Oxon., M.R.C.S., L.R.C.P., appointed House-Physician (extension) to St. Thomas's Hospital.

FENTON-JONES, W. Hugh, M.D., appointed Anæsthetist to the Chelsea Hospital for Women.

HAIG-BROWN, C., M.B. & C.M.Aberd., M.R.C.S., L.S.A., appointed House-Physician (extension) to St. Thomas's Hospital.

HARPER, James, M.B., appointed Resident Medical Officer to the Chelsea Hospital for Women.

HERRINGHAM, W. P., M.B., appointed Casualty-Physician to St. Bartholomew's Hospital, *vice* P. Kidd, M.B.

HORROCKS, Peter, M.D., appointed Assistant-Physician to the Chelsea Hospital for Women.

SAINSBURY, Harrington, M.D., M.R.C.P., appointed Physician to Out-patients at the North-West London Hospital.

SHARPIN, E. C., M.R.C.S., appointed House-Surgeon to the Lincoln County Hospital.

SHEPPARD, W. J., M.B. & M.S.Durham, M.R.C.S., L.R.C.P., appointed House-Physician (non-resident) to St. Thomas's Hospital.

STEAVENSON, W. E., M.B., appointed Casualty-Physician to St. Bartholomew's Hospital, *vice* S. Mall, M.B.

STONHAM, Charles, M.R.C.S.Eng., appointed Surgeon for Out-patients to the North-West London Hospital.

TRAVERS, William, M.D., appointed Assistant-Physician to the Chelsea Hospital for Women.

VENN, A. J., M.D., M.R.C.P., appointed Assistant Physician for Diseases of Women to the West London Hospital.

VINRACE, J. H., M.B., appointed Assistant to the Resident Medical Officer to the Hospital for Consumption and Diseases of the Chest, Brompton.

WALLER, Augustus, M.D., appointed Lecturer on Physiology at the London School of Medicine for Women, *vice* E. A. Schäfer, Esq., F.R.S., Jodrell Professor of Physiology, resigned.

WELLS, A. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon (extension) to St. Thomas's Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

HOPGOOD.—On the 15th instant, at Albion House, Stockton Road, Sunderland, the wife of Thomas F. Hopgood, of a daughter.

MARRIAGES.

ALEXANDER—PRIDHAM.—On the 21st ultimo, at St. Jude's Church, South Kensington, by the Rev. A. Lempriere Foulkes, M.A., assisted by the Rev. Clement Davis, M.A., and the Rev. C. McAnally, M.A., James Alexander, Esq., M.D., of Paignton, South Devon, to Mabel Blanche, only daughter of Charles Pridham, F.R.C.S.E., of 62, Hogarth Road, South Kensington.

[illegible]—LOCKWOOD.—On the 2nd instant, at St. Peter's Church, Brighton, by the Ven. Archdeacon Hannah, D.C.L., John Harris Ross, M.D., of St. George's Place, Brighton, to Susie, daughter of Philip Causton Lockwood, C.E., of Brighton.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

Unqualified Assistants.

Sir,—In your Journal of the 2nd instant, I see a communication under the above heading, signed by "The Doctor." I should like him to hear that "dishonesty and enormity" are not necessary concomitants of an unqualified assistant's career. Everything has its abuse, and no doubt our subject is no exception to the rule. In "The Doctor's" own case, there was abuse and folly too; why did he undertake the duties of "the situation" if he were incompetent—and from what he says about his knowledge of midwifery at that time, it is evident that he knew of his own incapacity?

Your correspondent writes as if no man could have knowledge unless he has a diploma. He says: "The so-called experienced assistants had assurance without knowledge." Now, knowledge must even be obtained first to get a qualification; therefore, to say that, because a man is unqualified he is also ignorant, is absurd. I know two unqualified men who do very large practices in this neighbourhood. Are these men successful only in spite of their ignorance?

From "The Doctor's" letter, one is inclined to think that his experience in assistants is rather limited. He divides them into two classes, viz., old stagers and mere boys; the first he makes out to be really dishonest and pilfering, but that might have been avoided by obtaining a character from the man's last employer. The mere boys were, of course, beginning to learn, having sense enough to run to their employer when in difficulty, which was well enough so long as too much was not expected of them.

But there is another class which "The Doctor" appears never to have known: hard-working conscientious men, whose life is all study and work, but who are kept back by shortness of means and the dire necessity of earning a livelihood. Such men as the last are preferred by practitioners as assistants, and are acknowledged by them to know more of general diseases and their treatment than does the qualified youngster fresh from college, who is generally inflated with the latest theories, and yet, in many cases, knows not the simplest dispensing. The most palpable dishonesty, on an assistant's part, is taking a situation which he knows he cannot fill, as in "the Doctor's" fortnight's experience; however, under these circumstances, the ordinary routine duty, or a trip into the country on foot, seems to have a great eye-opening effect in showing the "dishonesty and enormity" of his position. On the employer's part, dishonesty chiefly lies in sending an ignorant man to treat important cases, which no sane man who cared for his practice would do. I would only say, in conclusion, that a man of average thought would hesitate to brand as dishonest all who belong to the class of an

Unqualified Assistant.

Sheffield.

Sir,—I agree with your correspondent "D. Durham" that it would be a great hardship to forbid general practitioners to make use of unqualified assistants. He truly says that many such cannot afford to employ a qualified man, and yet find it necessary to have some one at hand to take casual cases temporarily, while they themselves are absent visiting outlying patients or attending midwifery cases. It would be an additional hardship so long as druggists are practically allowed to visit and prescribe.

In my own practice I have actually to compete with three visiting druggists. One of these has just succeeded in getting his son qualified, and has handed over to him a practice which he had legally no right to possess. That this son, though nominally a member of our profession, is actually indifferent to its laws of etiquette, is not wonderful. My practice lies among a population accustomed to pay 1s. 6d. a visit, and who cannot afford to pay more. It would be satisfactory if they all could pay this; many hardly pay anything at all. To refuse every patient who will, I know never pay me, would be to throw the poorer classes more and more into the hands of the druggists; to give them all the attention they ask from myself, would be impossible. I therefore employ an unqualified assistant, generally a student who is reading for his final examination, to assist me in the minor cases, and to relieve me of some burthensome but unprofitable labour. I may say that his services are practically given away by me, as I could do very well without him if I only undertook the work for which I was sure to be paid.

I agree also with your correspondent in his statement that unqualified assistants who are working for means to continue their course, are generally more satisfactory than newly qualified men who have never been assistants at all. These have too often "little or no knowledge of ordinary practice and surgery work," and have no idea of accommodating themselves to the habits of the people. They have no idea of routine; they behave to private patients who expect to be humoured, as they have been accustomed to behave to patients of hospitals and infirmaries. They are too far on in their profession to condescend to learn the small details which are so essential to success in general practice; and altogether they are highly unsuccessful as subordinates in such a position. Also I think, speaking from another point of view, the position of assistant to a qualified man is an useful education to one intending to qualify himself; I go so far as to think it is a necessary part of education for a man intending to enter upon general practice. When I have had men under me who have not undergone such an experience early enough in their career, I have found it almost impossible to induce them to attend carefully to the details on which success must be built up.

It is a small consolation to know that a man's theoretical knowledge is complete, if his application of it be careless; the knowledge of the use of instruments is marred by an indifference to the cleaning of them at once, or by a habit of breaking or mislaying them, so that they are not in order when urgently needed. The capability of making a correct diagnosis is not of more importance than of giving the patient distinct directions, of making up prescriptions correctly, and putting the right names on medicine bottles. Repeated dealings with young men who have only undergone the ordinary course, and have not been taught these details by the only apprenticeship left for medical men, in assistantships under a qualified practitioner—has compelled me to come to the conclusion that such a course is not sufficient, and that a young man who has had nothing else, has his difficulties considerably increased when he enters upon practice for himself; his patients have also for some time to suffer for his want of training in the mere routine of his work.

Assistants practising under cover of medical men, or assistants who have neither pas ed any preliminary, nor studied in any medical school, are, I agree with your correspondent, out of the category; but the *bona fide* assistant fills a place useful to the public (without which the poor-law officer would have much more to do), helpful to his principal and beneficial to himself.—Yours truly,

M.R.C.S.

X. Z. asks the name of the publisher of the *Food Reform Journal*.

"Borderers on Insanity."

Sir,—In the Journal for April 14, there appears an article on Dr. Ball's lecture on "Borderers on Insanity." Without going so far as to say that all men are mad upon some point, he tells us that the world abounds with people, whom a strict scientific diagnosis would condemn as mad, or more or less "touched," yet at no time of their life would it be permissible to put them under restraint.

The examples then brought forward are all cases which illustrate the last part of this theory, being such as could by no means be legally incarcerated. But with regard to the first part of it, that these people are on the borderland of insanity, it cannot be said that the learned doctor has furnished typical examples, some of them being apparently rational beings, and the others victims of thoroughly developed mental disease. The first case referred to is that of Dr. Johnson, who found it necessary to touch every lamp-post as he walked up the Strand. Dr. Bucknill (*Manual of Psychological Medicine*, p. 344) has told us that there are two forms of eccentricity. The one has intellectual powers of the lowest order and little individuality, the other arises from an excess of individuality. "Such a man is often endowed with more than an average portion of good sense and of moral courage, displayed in adhesion to his own opinions, and in setting at naught the ill-founded ridicule of the world. It may be safely affirmed," he goes on to say, "that an eccentric man of this type is further removed from the chances of insanity than most of the sane people upon whose prejudices he sets such a remorseless foot."

Anyone who has studied the character of Dr. Johnson, and who is cognisant of the great intellectual labours he performed during his lifetime, must confess that such a man cannot be alluded to as an example of a case on the borderland of insanity. His very eccentricity displayed his strength of mind, not its feebleness.

2. The next group includes persons who are haunted with an overpowering impulse to laugh on occasions of peculiar solemnity. This class, we should consider, would be more appropriately placed under the head of hysteria.

3. Another group is that in which pious people are tempted to indulge in blasphemous or profane language. Several cases of this kind of irresistible habit have occurred amongst the acquaintances of the writer. The peculiarity is hereditary, and often connected with phthisis; but such persons, in our experience, have not died of, nor are they prone to, attacks of insanity.

4. Dr. Ball's next instances are those of suicidal and homicidal impulse. These cases, we agree with him, form some of the hardest psychological nuts that the alienist has to crack, and some of them may well be placed on the borderland of insanity; yet there are others about whose mental disorder there can be no doubt—cases connected with epilepsy or other neuroses, ably described by Maudsley, Morel, and Esquirol.

We are unable to agree with this attempt of Dr. Ball's to classify these cases on the borderland of insanity. With all respect to his views, we would suggest that he has only described cases of eccentricity and of mental disease itself, and we are unable to find in his examples types of what are really marked forms of true borderland insanity. It has always appeared to the writer that "patients on the borderland of insanity are those who are suffering from distinct mental symptoms," such mental symptoms being absolutely morbid, such as are exemplified by unfounded suspicions or positive delusion.

On a previous occasion (see an article in the 6th Volume of the *West Riding Asylum Medical Reports*, p. 109) the writer has divided these cases into five groups, which were not to be considered as necessarily exhausting the subject, but as rather including, under convenient subdivisions, the cases most commonly met with in private practice. On this occasion the subdivision was criticised in the *Annales Médico-Psychologiques*, in which paper it was stated the classification was an arbitrary one. But the division was only suggested for convenience of classification. It included five groups.

1st. Cases of moral depravity.
2nd. Cases complicated with hysteria.
3rd. Cases of congenital imbecility.
4th. Cases with premonitory symptoms.
5th. Cases of convalescence from insanity.

Space will not allow us to give the cases illustrating these groups in detail They are to be found in the reports for which the article was originally written.

Four out of the five groups speak for themselves as including borderland cases. But of the second, referring to cases complicated with hysteria, it may be said that Dr. Ball's patients, who had a tendency to laugh at odd times ought to be comprehended in it.

With this we disagree, as the mental symptoms were absolutely morbid and of a more severe character than would be illustrated by touching lamp posts or hysterical giggling.

The first case mentioned by the writer was that of a young lady who had taken an unfounded dislike to a relative who had always treated her kindly She insisted on taking food ten times in the twenty-four hours, and even the accused her parents and the servants of attempting to starve her.

The nervous system in this case was so undermined that the patient suffered from a temporary hesitation of speech, from which she afterwards recovered under proper treatment. This patient never became insane.

Another, somewhat similar case, ended, however, in hysterical mania, but as long as the premonitory symptoms lasted, it might be considered as having remained on the borderland. Although taking severe exercise, this young lady almost entirely refused her food for some days before the attack. semi-comatose condition, screaming, and incoherent raving, accompanied intense pain in the head, and well-marked delusions, soon conveyed the patient into the region of mental alienation. But during the premonitory stage she was still on the borderland of insanity.

Opinions may differ as to what does and what does not constitute insanity But let us not include pure eccentricity, nor pure hysteria, in that mysterious circle which lies enveloped in darkness, betwixt sound and unsound mind.

H. Sutherland.

Richmond Terrace, Whitehall.

Registration of Foreign Degrees.

Sir,—As a "Doctor Medicinæ, Chirurgiæ, et Artis Obstetriciæ, of the University of Heidelberg" (by examination), I shall be obliged if you will, in your Notes to Correspondents, kindly inform me whether I shall be able to register my degree should the Medical Bill pass both Houses of Parliament.—I am, etc.

F.R.C.S.E., etc.

*** The degree will be registrable if it fulfil the conditions expressed in the Bill (Clauses 22 and 23).

Medical Men as Jurors.

SIR,—On the 5th instant I received a summons to serve on the jury at the Old Bailey, on Monday, June 11th, in the matter of the dynamite conspiracy.

Believing that I was exempt from such service, being a medical man in active practice, I went to the summoning officer and stated my case; learning from him that I must in any event obey the summons, I attended the court on Monday last. My name was called out about sixth in the list, and I found myself in the jury box. I then begged to be excused from serving on the jury, on the ground of being a medical practitioner, but the Lord Chief Justice said "that is no excuse, we shall be delighted to have you." So I had nothing to do but to sit down and submit to my fate. On rising, however, to take the oath, one of the prisoners, Dr. Gallagher, objected to my serving as a juror, and I thus escaped a long detention, and what would have been to me a very serious loss, as I had made no provision of a *locum tenens* to act for me during my absence, trusting in what I believed to be my immunity from this service. Will you kindly give your opinion on this subject?—Yours faithfully, KNOWLSON TOWNSEND, L.R.C.P.Lond., M.R.C.S.

168, Lewisham High Road, S.E., June 13th, 1883.

*** There can be no doubt that our correspondent was legally entitled to exemption from serving on the jury. The Medical Act, 1858, distinctly states, in Section XXXV., "Every person who shall be registered under the provisions of this Act shall be exempt, if he shall so desire, from serving on all juries and inquests whatever," etc. Mr. Townsend is a registered practitioner under the Act, and, as such, was entitled to the benefit of the clause above quoted.

Mole on Child's Upper Lip.

SIR,—Would any of your correspondents kindly state what measures can be taken to prevent the growth and finally destroy a mole upon the upper lip of a little girl aged 3. The mole appeared as a tiny speck, about six weeks ago, and is evidently extending, which will cause disfigurement; it is just above the line where the mucous membrane is reflected? H. S.

Moist Hands.

SIR.—Could any of your readers tell me of an effectual remedy for moist hands? The patient, a girl, aged about 18, is in good general health. MIKE.

White Substances in the Throat.

SIR,—The case described by your correspondent, "Beta," is almost certainly one of chronic follicular Tonsillitis. The affection is a very troublesome one, and often at intervals occasions considerable pain and irritation. The white or yellowish cheesy looking substances consist of the morbid secretion from the tonsillar follicles, which is often retained for a considerable period, and then is very offensive. The secretion becomes not unfrequently completely encysted, and then requires enucleation. The spotted appearance of the tonsil, produced by this affection, is very frequently mistaken for ulceration, even by medical men, and patients seem to take a pride in considering the constantly recurring attacks as those of diphtheria, which have been successfully combated. If the tonsils are seriously enlarged, the best treatment is undoubtedly excision; if, however, the tonsils are small, or, as is often the case, the affected follicles are few in number, I usually insert the acid nitrate of mercury on a wool-tipped probe, with the best results. A gargle of tannic and carbolic acids, should be used afterwards. LLEWELYN THOMAS, M.D.

15, Weymouth Street, W.

Croup.

SIR,—I heartily sympathise with "Anxiety," in the disappointment he feels with the results of the usual treatment of croup. In my practice I have been very much dissatisfied with the usual medicines, viz., ordinary diaphoretics with ipecacuanha, and warm baths. These remedies are so very depressing, more particularly in delicate children. It has, indeed, seemed to me, sometimes, that the patient has died more from the remedy than the disease.

Again, what is there in ipecacuanha to prevent further formation of false membrane, supposing the first to be got rid of. In future I intend using the compound spirits of ammonia in large doses, with the double purpose of stimulation and "defibrination" of the blood; and with this the salicylate of soda to produce profuse diaphoresis, and thus relieve the internal congestion. This will also be my treatment in my next case of diphtheria, of course coupled with the application of antiseptics locally.—I am, sir, yours truly,

"OMEGA."

Tricycles for Medical Practitioners.

SIR,—I have recently been riding the "Omnicycle", with a view to test its capabilities as a tricyle for all-round work, both in town and country. I consider that it is just the machine needed by the medical practitioner. It is a machine which is worked easier and with less fatigue than any yet in the market—as the crank and ordinary chains are dispensed with, and the rider's strength is directly applied to the segment of a circle on the main shaft. The peripheral surface of this segment can be made to expand or contract at the will of the rider, so that his force is directly communicated to the driving wheels with equal power throughout the whole of their revolution. All dead points are thus avoided, and an alteration of power is obtained without increase of friction or variation in the length of tread. The gear can be altered whilst riding, and three powers obtained: viz., 50-inch for the level, 40-inch for ordinary inclines, and 30-inch for stiff hills. The machine will mount hills (with comparative ease) which no bicyclist, and very few tricyclists, would care to mount. In fact, with the "Omnicycle," hill-climbing, instead of being a toil, becomes somewhat of a pleasure. I have myself ridden the machine over some of the most hilly roads round Leeds, and up the steepest streets in the town. There is no fear of the machine running back on a steep hill, as it cannot do so; but there is a "reversing wheel" which will enable the machine to be run either backward or forward for stabling or other purposes. The tricycle only weighs about 95 lbs., but is made of the best workmanship, and will stand a good deal of wear. I know of no machine which will so perfectly answer the requirements of practitioners in hilly districts, and for town use. It is far superior to a horse, and may be ridden with much less fatigue. The motion is particularly easy. It is manufactured by Messrs. Singer and Co. of Coventry, a firm which turns out the best workmanship. I would advise any medical man who is thinking of a "mount" to see and try the "Omnicycle."—I am, sir, yours, etc.,

H. A. ALLBUTT, M.R.C.P., etc.

24, Park Square, Leeds, June 11th, 1883.

The Future Medical Register and Professional Titles.

SIR,—In your JOURNAL of April 28th, page 822, appear these words "The title of Member of the Royal College of Surgeons will be registered." Will you inform me, if by obtaining that licence alone men can be registered without passing the examination of one of the three divisional boards?

Secondly, will you say if it will be considered illegal for men to use the title of "surgeon" who have passed the examination of one of the divisional boards only, and not become members of the Royal College of Surgeons?

Thirdly, will you inform me in what way the new Act will affect students who are now passing through their studies? It is greatly to be desired that the "curriculum" for such students should not be altered, otherwise it must seriously interfere with their studies.—Yours obediently, A MEMBER.

*** 1. No.—2. Yes, under the Bill as it at present stands.—3. This will depend upon the date fixed for bringing the Act into operation, and the status of the student.

Vaccination.

SIR,—In reply to a letter signed "Partners" in your issue of June 2nd, I have to thank them for their kind recommendation to me to adopt the "acreage system" to satisfy the inspectors and obtain the grant of the Local Government Board, but my contention has been all along for quality rather than quantity, and I do believe most firmly that one perfect mark of vaccination, showing that pure and potent lymph had been used, would be more protective against small-pox than a score marks of puny pimples, the result of using the almost inert vaccine that has been supplied to us as a rule, until very recently, from the National Vaccine Establishment.

I do, however, vaccinate in as many places as I can have the parents' consent to, three or four, at least; but I prefer to scarify three places on one arm, to two on each arm, for the reason that they are less likely to be rubbed and inflamed when one arm only has to be guarded in nursing or carrying the child, instead of both arms.

A PUBLIC VACCINATOR OF OVER THIRTY YEARS' STANDING.

Benzole in Whooping-Cough.

Dr. Neale writes: "In the *Lancet*, 1880, and *British Medico-Chirurgical Review*, 1857, the uses of benzine inhalations are described, and are stated to be identical with those from gas-lime exhalations, to the good of which many observers testify. *Vide Medical Digest*, sect. 714: 3."

Holidays at Sea.

Dr. Farquhar (Prince's Square, Harrogate) kindly offers to give "A Member" a great deal of information germane to this subject.

The Penal Clauses of the Medical Acts Amendment Bill.

SIR,—I wish to deal more especially with the penal clauses, and therefore refrain from reference to many other objectionable points of omission and commission in the Bill.

The amendment proposed by the Reform Committee runs as follows: "If any person, whether a registered medical practitioner or not, who practises for gain, or professes to practise, or publishes his name as practising medicine or surgery, or receives any payment for practising medicine or surgery, takes or uses a medical title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding £20." As I pointed out in a former letter, a clause which aims only at the prevention of the assumption of medical titles is useless. The quack is generally much too wily to do anything so foolish. Why should he bring himself within the clutches of the law, when he can practise daily as a medical man, visit, dispense, and receive fees for the same, sign death certificates, etc., without rendering himself in any way liable? Those who are acquainted with practising quacks know that death-certificates are constantly signed by them, and accepted by the registrars as valid. Indeed, I do not see how, under the present Registration Act, they can be refused acceptance, as "information concerning the death," unless the registrar be acquainted with some very suspicious circumstances in connection with it. Practically then, the only privileges we have conferred upon us for having spent time and money and brains in the acquirement of medical knowledge, and in complying with the law, are the assumption of medical titles and the power of suing for the recovery of fees. The latter is certainly only just, but it is within the knowledge of most general practitioners that, owing to the many inconveniences connected with it, the power of recovery of fees in the County Court is an almost worthless privilege.

The assumption of medical titles is then all that remains to us. The question will present itself to most minds whether the game is worth the candle. If, after spending four years in the acquirement of medical knowledge, with the necessary outlay accompanying it, passing examinations, and complying with the provisions of the law, we are to be afforded no more protection against infringers by the new Medical Bill than is given in the clause above, the study of medicine must be considered as a very poor investment indeed. It would be more consistent either to make the practice of medicine a free trade, or if, on the other hand, compliance with certain regulations is required, those who comply therewith were adequately protected from infringers.

Under the Apothecaries' Act of 1815, prosecution of these quacks was a possibility of which we are now to be deprived, so that we shall be in a worse position under the new Bill than before. I would suggest the following amendment of the amendment as meeting the case: "If any person, except a registered medical practitioner, practise for gain, or profess to practise, or publish his name as practising medicine or surgery, or receive any payment for practising medicine or surgery, or, whether a registered practitioner or not, take or use a medical title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding £20."—Yours truly, JAS. MCNAUGHT, M.D., M.R.C.S.

Newchurch-in-Rossendale.

Sclerotic Acid.

SIR,—Could any of your numerous correspondents enlighten me as to the practice of treating *post-partum* hæmorrhage by the subcutaneous injection of sclerotic acid. I see in the *London Hospital Pharmacopœia* a formula for the preparation of the subcutaneous solution of the drug, indicating, I presume, its constant use at that hospital. Is it effectual and safe, and is the injection unaccompanied by local inflammation? I should be very grateful for any information.—Your obedient servant, G. H. R. DABBS, M.D.

Shanklin, Isle of Wight, June 11th, 1883.

Luminous Paint.

SIR,—I do not know whether it has occurred to my professional brethren that the "luminous paint" might be made of great advantage, especially in country places where gas does not abound, either to paint "name" or "night-bell," or a circle round the latter.—Yours, etc., W. J. LAND.

Tonbridge, June 14th, 1883.

*** The suggestion has already been made; see BRITISH MEDICAL JOURNAL, 1881, Vol. ii., pages 656 and 924.

A Couple of Questions.

SIR,—1. Will you, or some member, kindly give me the recipe for "Brodie's gout and rheumatic pills," as prescribed by the late Sir B. Brodie? Are they really as magical in their results as is sometimes claimed for them? I presume the basis is colchicum.

2. Has anyone yet faithfully tried "Naquet's hair-dye," the recipe for which was given in the JOURNAL for October 7th, 1882, p. 690? and what is his experience respecting it? How often should it be used, and how? After carefully following the directions as to its manufacture given in the place quoted, and after a couple of months' daily application, I regret to say that the hair still keeps to its pristine grey. I do not like to prescribe a lead dye; but as Naquet has failed, I fear I shall have to submit. Will some one kindly give me a really good receipt—a lead dye, if there be nothing better.—I am, sir, faithfully yours, HIRSUTUS.

The Feeding of Infants.

SIR,—If, in any future cases of apparent inability to digest cows' milk and water, Mr. Crichton will make close inquiry as to whether the milk has been boiled or scalded, I do not think he would ever require to resort to any elaborate and impracticable diminishing of the casein by means of rennet. The boiling or scalding is very frequently carried out at the dairy, with a view to the better preservation of the milk; but, wherever done, it renders the casein as comparatively indigestible as hard boiling makes the albumen of eggs as compared with raw ones.

On looking over the counterfoils of my certificate of death book, I find it is considerably over two years since I have had occasion to sign a certificate of death for an infant in my own practice (I do not include an acephalous monster and three very premature infants, as not either of them was born with sufficient vitality to carry on existence for more than a very few hours), during which period there have been about one hundred births; but I feel very sure I should not have enjoyed this immunity if I had not, in many instances, strenuously urged upon the mothers and nurses the importance of stopping the boiling or scalding, and of getting the milk fresh twice a day. This may appear a small point; but in my experience it is frequently a very vital one in the successful rearing of infants.—Yours faithfully, LAC BUBULUM.

Subcutaneous Injection of Ergot.

SIR,—In reference to the subcutaneous injection of ergot, the preparation which has been found most useful here is one prepared after Professor Simpson's recommendation. ℞ Ergotinæ (Bonjean's) ʒij; aquæ ʒvj; chloral hydratis ʒss. M. This makes a solution, 20 minims of which contain 5 grains of ergotine, and 20 minims is a good dose for injection. The chloral keeps the solution for some weeks, but after this lapse of time it becomes unreliable. It is, however, preferable to glycerine, etc., as glycerine causes more pain after injection, and is doubtfully as good a preservative. The needle should be entered at least an inch and a half directly into the buttock, about midway between the great trochanter and the tuber ischii. It ought to be rapidly entered, slowly emptied, and quickly withdrawn. Here it is given in almost every case directly after expulsion of the placenta; and those cases which do not have it suffer more from after-pains, and have the lochia rubra longer persistent. I have never seen any local effect from the injection, the pain is trifling, and the action speedy.—Yours faithfully,

G. ARMSTRONG ATKINSON, M.B., C.M., House-Surgeon, Edinburgh Royal Infirmary.

Lauriston Place, Edinburgh, June 11th, 1883.

Brougham Ventilators.

MR. PRIDGIN TEALE informs us that Messrs. Silk and Sons, carriage-builders, Long Acre, have just completed a new brougham, having in the roof a window ventilator, which Mr. Teale has devised and used for his own personal use, which is, he feels, likely to prove a great boon to medical men who live much in their broughams. He states that for the convenience of medical men who may desire to see it, Messrs. Silk will keep a carriage a fortnight on view before sending it down to him at Leeds. It is, he says, the first carriage which has been built in London with Mr. Teale's ventilators.

A MEMBER.—The conduct described by a member who writes to us from the Welsh mining district, appears to us to be illegal, and he would do well to consult a solicitor.

Medical Acts Amendment Bill.

SIR,—I would suggest that no one, however superior his qualifications might be, who kept an open shop, selling hair-oil, tooth-brushes, etc., should be on the *Medical Register*.—Yours obediently, JOHN DALE.

Stockton-on-Tees, June 11th, 1883.

DILEMMA.—It would be well to decline to consider any such proposition until a vacancy has actually occurred. That is time enough for the question to be put and answered.

Error of Misplacement.

SIR,—I shall be much obliged if you will correct an error which appeared in the JOURNAL of June 2nd, page 1066, "Case of Recurrent Sarcoma of Femur." It was a private case, and not one of my infirmary patients as stated.—I am, yours sincerely, R. BURDETT SELLERS.

Rochdale, June 3rd, 1883.

Treatment of Syphilis.

SIR,—1. In the treatment of secondary syphilis, is the biniodide of mercury a safe and readily eliminated remedy? 2. Is one-sixth of a grain of perchloride of mercury, dissolved with five grains of iodide of potassium in an ounce of water, an excessive dose for a strong adult man? THERAPEUTIST.

*** 1. Yes. 2. It would depend on whether the patient were accustomed to mercury, the nature of the symptoms present, and the frequency of administration. One-sixteenth to one-eighth of a grain is the usual dose.

P. Q. R. should apply to the secretary of the Charity Organisation Society, 15, Buckingham Street, Adelphi, who will give him the desired information.

COMMUNICATIONS, LETTERS, etc., have been received from:

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THE HARVEIAN ORATION,

DELIVERED AT

THE ROYAL COLLEGE OF PHYSICIANS,

Wednesday, June 27th, 1883.

By S. O. HABERSHON, M.D., F.R.C.P.,

Late Senior Physician to, and Lecturer on Medicine at, Guy's Hospital.

MR. PRESIDENT AND GENTLEMEN,—When I received the request that I would, during the present year, deliver the Oration which is associated with the name of the illustrious Harvey, I felt great distrust in my own capabilities of rightly performing the duty allotted to me; and that feeling has become more intense as the work has gradually opened before me. The eloquent words that fell from previous orators, the learning and research that have been displayed, the talented vindication of the memory of Harvey, and the substantiation of those claims, which have most justly been awarded to him, as the discoverer of the circulation of the blood, have added to my consciousness of the difficulty of my task, and have rendered it almost impossible to find new subject matter to place before you. I must ask your indulgence whilst I seek to fulfil the object of Harvey in establishing this annual oration—namely, to commemorate those who have shown themselves benefactors to the College, and to exhort the members to search out and study the secrets of nature by way of experiment.

Harvey was a lover of scientific truth, and he sought to advance science by observation and by direct experiment. Like others who had preceded, and still more those who have followed in the same pursuit, the mind not only became absorbed but enraptured in the work; and as any fragment of truth was unfolded, the desire to discover more became intensified. The eye was not satisfied by seeing, the intellectual thirst could not be quenched nor the hunger assuaged; and such is always the character of true scientific research. There is a dignity in science, and the mind that seeks to find out its mysteries is ennobled in the search; it expands with the effort, even although one branch of science alone be studied, and one line of thought be pursued. There is a reward even in the mental exercise, for it gives intellectual strength and constant pleasurable excitement. Each truth really gained is a stand-point for further advance. An Alpine traveller experiences intense satisfaction when the summit of his mountain climb is attained—when, after hours of labour, and it may be of danger and fatigue, he feels that his object is reached, not to speak of the wonderful beauties then unfolded before him; but his delight is not to be compared with the joy of the philosopher when the discovery of some new fact in science has rewarded his toil, and a higher stand-point of truth has been arrived at.

Like the very mountains themselves, truth is stable; not as the vague hypothesis which too often surrounds it like dense vapour or fog, truth is unchangeable, even as is its author. The works of God reveal Himself, for He is the author of that which science searches out.

> "Thou art in all things great, not small in any,
> Thine even praise shall never rise nor fall;
> Thou art in all things one, in each thing many,
> For Thou art infinite in one and all."

Every object in nature bears the impress of the Divine hand, and the book of nature reveals His wisdom, His beneficence, His creative power, and His superintending providence. I have no sympathy with those who, whilst they seek to open the book of nature, would close the more precious volume of Divine revelation; both emanate from the same source, and, when rightly understood, will never contradict each other. The Scriptures were not intended to teach science, but they never contradict it, however they may seem to be opposed to the false teaching of imperfect investigation. The unfolding of scientific truth is truly an evolution; it is a gradual process like the expansion of the beautiful leaf-bud; wonderfully wrapped together, but spread open under the silent powers of light and heat and growth; so is truth gradually revealed under the sunlight of advanced science. It would be unwise to guess the form and the delineations of the expanded leaf or flower from the mere outline of the bud, and guesses in science too often mislead and hinder the advance of truth. *Direct experiments* have led to the establishment of scientific facts; but mere *reasoning* on hypothetical data has been the greatest hindrance to the progress of science. The history of physiological science illustrates these statements, and in no branch of physiology is it more remarkable than in that of the circulation. In the discovery of the circulation of the blood, the process was a gradual one; the steps were often uncertain, and too frequently were retrograde in character. The story of the great discovery of Harvey has been often told, and my predecessors have traced it out step by step with accuracy and with skill. I do not wish to go over the same ground, for it has been better done than I could possibly expect to be able to do it.

Fragments of truth as to the function of the heart and the nature of the circulation are found in the writings of Plato, of Aristotle, and of Hippocrates; and the term that Plato gave to the large vessel—the aorta—is still retained by us; but the knowledge was very confused. The lungs were regarded as an apparatus to cool the heated blood, and to reduce the natural warmth, both emanating from the heart as their source; it was believed that the arteries contained spirit, and that the veins distributed the nourishment collected from the stomach and intestines to the rest of the body. Aristotle declared, that the pulsation of the heart arose from its sudden inflation from new material supplied by the food for fresh formation of the blood. It is difficult for us so to divest ourselves of facts now established, as to realise the state of medical knowledge in those early times.

But let us turn to another great physician, one who was almost regarded as divine in his unfoldings of the truth of medical science. I refer to Galen; he was born in the year 131 after Christ, when the Roman empire had become aroused by the power of Christianity. Galen lived in a time of persecution; although he was regarded by some as an enemy to Christianity, I cannot conceive of a pagan giving utterance to the sentiments which Galen wrote, and he was evidently acquainted with the writings of the Old Testament. Galen, though the friend of the Emperors Hadrian and Marcus Antoninus, held views which were inconsistent with pagan worship; he says that "true piety is not shown in the sacrifice of hecatombs of bulls or in causing clouds of fragrant incense, but in studying myself to know, and in making known to others, the wisdom, the power, and the goodness of the Creator."* It would be well if many men of high attainment of our own day could copy such an example. Galen held correctly that the heart, though unlike other muscles, was still muscular in its action; he knew the structure of the valves of the heart, but he affirmed that there were pores in the septum between the ventricles which allowed some of the blood to pass from the right to the left side of the heart. Here he asserted what reason fancied rather than what he learnt by direct observation—a lesson to us, even at the present day, of the danger of forming our opinions on hypotheses rather than on established facts. Reason affirms that such and such things are true, but further observation subsequently disproves them. How slow we are to learn this lesson, but how disastrous has been the result, when the statements of reason are received as facts, and are regarded as solid bases upon which scientific truths may be built! Like buildings upon unstable foundations, they crumble and decay when really tested. It is a slow process to get rid of these phantoms; the authority of great names, and the attraction of beautiful theories nicely accommodated and smoothly glossed over, give these emanations of thought the semblance of truth; and those who will not receive them are regarded as far behind in that which constitutes mental vigour and attainment. The vague notions of Galen had immense power, and held the minds of men in bondage for nearly 1,200 years; and it was only when direct observations were made, and dissections were carefully studied by Vesalius and Servetus, that those shackles upon thought were unloosed. Galen regarded one ventricle of the heart as connected with nutrition and nourishment; the other, the left, had to do with vital spirit. He believed that the blood sent to the lung was especially for the nourishment of the lung itself, though he was quite ignorant of the circulation of the blood through the lungs. Vague notions of emanations and interchange of blood and air between the arteries and veins were held, but nothing like the true circulation of the blood was dreamt of; the blood was said to flow backward and forward, the vessels having different offices; and, instead of the blood being propelled by the contraction of the muscular structure of the heart, the expansion of the heart, the

* In writing on the use of parts in the animal body, he seems to be struck with its beauty, and says, "Ego Conditoris nostri verum hymnum compono; existimoque, in hoc veram esse pietatem, non si taurorum hecatombas ei plurimas sacrificaverim, et casias aliaque sexcenta odoramenta ac unguenta suffumigaverim; sed si noverim ipse primus, deinde et aliis exposuerim quænam sit ipsius sapientia, quæ virtus, quæ bonitas."—Galen, *De Usu Partium*, Lib. iii.

diastole, was regarded as the most important movement, and it was attributed to an imaginary innate heat. How different from the simple truth brought to light by the immortal Harvey! When direct experiment was made by Galen, truth was elicited, and one link was formed in the chain of facts connected with the circulation; he showed that, when an artery was ligatured and afterwards opened, blood was poured out, proving the nature of its contents to be blood and not spirit; and he also ascertained by experiment that bleeding from the arteries emptied the veins. These observations led to results of a very different character from his deductions from reason. One careful observation as to the nature of the ventricular septum would have disproved his hypothesis of perforations through which blood could mix between the two sides of the heart. The experiment led to the truth; the reasoning without fact led to error. The fallacies engendered by the fertile imagination of a learned philosopher were only dispelled by the direct observations of those who followed, and especially by the untiring labours of Harvey. The opponents of research by experiment on living animals would have left us in the darkness and ignorance of Galenic times, for the dawn of light and scientific truth were due to experiment, and not to mere reasoning.

Vesalius, in 1512, rebelled against the assertions of the older fathers in physic, and he set at nought the mere authority of Galen. He first showed that the blood passed through the vessels of the lungs from the right to the left side of the heart, and that the blood was modified in its transit. Servetus, about the same time, published the same truth of a pulmonary circulation, but he still held, that the venous blood derived from the liver was for nourishment, and that the blood in the arteries was spirituous and adapted for the heat and vital endowment of the body. The former great anatomist, Vesalius, nearly lost his life from the Inquisition, but Philip II, having interposed, he was compelled, in order to escape a cruel death, to make a penance journey to Jerusalem, and having been shipwrecked on his homeward journey, died at Zante or Crete. The latter philosopher or enthusiast, Servetus, was, in 1553, burnt at the stake by those from whom more charitable measures might have been expected, whatever wild errors and false doctrines were entertained.

Other anatomists followed, and prepared the way for the fuller investigations of Harvey, Columbus Realdus, Eustachius, Fallopius, and Arantius. Fabricius of Aquapendente was Professor of Anatomy at Padua when Harvey was a student there in 1598. Fabricius had no correct idea of the circulation, although he rediscovered the valves in the veins. Cæsalpinus, born in 1519, had been professor at Rome; he died in 1603, and a remarkable circumstance connected with his history is, that his countrymen have, after his death, attempted to prove that he knew more than he ever dreamt of during his life; he knew the pulmonary circulation, but adhered to the doctrines of Galen, and believed that the blood had a to-and-fro motion in the vessels; it is considered by those who have given him the honour to which he was never entitled, that Cæsalpinus knew the circulation, because he found that the veins swelled beyond the ligature, but he explained the phenomenon by stating that the blood sought to return to the heart in its wonted direction.

My predecessor, Dr. Johnson, has, I believe, fully shown that the claims of Cæsalpinus are without adequate foundation; and, whilst we would give all the credit that is due to the talents and researches of Cæsalpinus, we cannot find any warrant for the statements that Harvey obtained from him the knowledge of the circulation. The truths that had been ascertained were the result of direct experiment and exact research; the vague hypotheses that had been handed down from century to century had been the result of reasoning on insufficient data.

The times of Harvey were among the most eventful of English history; the liberty of religious thought was being felt, and exercised its influence; the demand for civil and religious freedom was coexistent with scientific research, with literary advancement, and with extension of commerce. It is surprising that the tumultuous years of civil strife did not check the ardour of the student of nature. Harvey was born at Folkestone in 1578, during the closing years of Elizabeth's reign; and, it is probable, that when a boy of ten, he saw from the cliffs of his home something of the Spanish Armada, which was intended to stop the freedom of thought and of spiritual life in our favoured land. The facts of Harvey's life are well known, how at sixteen years of age he went to Caius College, Cambridge, took his bachelor's degree in medicine, and then spent four years at Padua, where all that was known in anatomical science was taught, and where the germs of his future discoveries were probably formed. In 1602 he graduated in medicine, and soon after came to London and began the active duties of his professional life, but we have very slight records of these years. In 1604 he joined the Royal College of Physicians and became Fellow of the College in 1607. Two years later, we find that he obtained the office of physician to St. Bartholomew's Hospital, and had received royal support in his application. In 1615, Harvey was appointed lecturer on anatomy and surgery at the College, but it was not till 1628 that his great work was published, his "Anatomical Disquisition on the Motion of the Heart and Blood-vessels in Animals." James I had died three years before, in 1625; Shakespeare had finished his career, and Sir Walter Raleigh had been unrighteously led to the block when the eventful time of Charles I was ushered in. Harvey was a lover of peace, and a student of science, but he could not have remained unmoved by the political events that were passing before him. In the same year that his great work was published, 1628, was the Petition of Rights; in 1629 Sir John Eliot was condemned to the Tower, and the king began that system of defiance to the Parliament which led to the civil war and to his death. Harvey had been appointed one of the physicians extraordinary to James I, but it was not until Charles had been on the throne for five or six years that Harvey was appointed physician in ordinary to the king.

Harvey was then in the height of his professional career; his discoveries were becoming generally known, and he had established the great truths connected with the action of the heart, and the course of the circulation. For hundreds of years it had been supposed that the diastole of the heart, its expansion, was the most important movement; but Harvey *saw* the heart contract, and proved that the contraction, the systole of the heart, was that which was pre-eminently the propelling power, forcing the blood into the lungs and into the arteries, whose walls, more dense than the veins, yielded to the pressure. If he had been content to reason only, he could never have shown the error of the Galenic doctrine. It was by experiments on living animals that the truth was made clear to the mind of Harvey. Let us quote his words, and I use the translation of Willis, published for the Sydenham Society. "In the first place then, when the chest of a living animal is laid open, and the capsule that immediately surrounds the heart is slit up or removed, the organ is seen now to move, now to be at rest. There is a time when it moves, and a time when it is motionless. These things are more obvious in the colder animals, such as toads, frogs, serpents, small fishes, crabs, shrimps, snails and shell-fish. They also become more distinct in warm-blooded animals, such as the dog and hog, if they be attentively noticed, when the heart begins to flag, to move more slowly, and, as it were, to die; the movements then become slower and rarer, the pauses longer, by which it is made more easy to perceive and unravel what the motions really are, and how they are performed."

Again he writes: "The very opposite of the opinions commonly received appears to be true; inasmuch as it is generally believed that when the heart strikes the breast and the pulse is felt without, the heart is dilated in its ventricles and is filled with blood; but the contrary of this is the fact, and the heart when it contracts is emptied. Whence the motion which is generally regarded as the diastole of the heart, is in truth its systole; and in like manner the intrinsic motion is not the diastole, but the systole; neither is it in the diastole that the heart grows firm and tense, but in the systole, for then only, when tense, is it moved and made vigorous."

One quotation further from the works of Harvey; he writes: "What remains to be said upon the quantity and source of the blood which thus passes, is of so novel and unheard of a character, that I not only fear injury to myself from the envy of a few, but I tremble lest I have mankind at large for my enemies, so much doth wont and custom, that become as another nature, and doctrine once sown and that hath struck deep root, and respect for antiquity, influence all men. Still the die is cast, and my trust is in the love of truth, and the candour that inheres in cultivated minds. And sooth to say, when I surveyed my mass of evidence, whether derived from vivisections and my various reflections on them, or from the ventricles of the heart and the vessels that enter into and issue from them, the symmetry and size of these conduits—for nature, doing nothing in vain, would never have given them so large a relative size without a purpose—or from the arrangement and intimate structure of the valves in particular, and of the other parts of the heart in general, with many things beside, I frequently seriously bethought me, and long revolved in my mind, what might be the quantity of blood which was transmitted, in how short a time its passage might be effected, and the like; and not finding it possible that this could be supplied by the juices of the ingested aliment,

without the veins on the one hand becoming drained and the arteries on the other getting ruptured through the excessive charge of blood, unless the blood should somehow find its way from the arteries into the veins, and so return to the other side of the heart, I began to think whether there might not be a motion as it were in a circle. Now this I afterwards found to be true; and I finally saw that the blood, forced by the action of the left ventricle into the arteries, was distributed to the body at large, and its several parts, in the same manner that it is sent through the lungs, impelled by the right ventricle into the pulmonary artery, and that then it passed through the veins and along the vena cava, and so round to the left ventricle, which motion we may be allowed to call circular." Thus Harvey made known to the world the discovery which has been of the greatest value in physiological science; it has revealed many things in the pathology of disease which could not otherwise have been understood, and has conferred the greatest benefit on the human race.

Never was the value of experimental research more clearly demonstrated. The links in the chain of truth on this all important physiological question had been obtained by experiment; Harvey united those links to which he had made such important additions, and proved beyond doubt the circulation of the blood. He showed how the blood passed in a continuous stream, and although the valves of the veins had been previously described by several older anatomists, as by Sylvius, Eustachius, and especially by Fabricius of Aquapendente, Harvey explained their true value and demonstrated their action. His work absorbed his mind and his energies, even whilst in his strange duties on the field of battle at Edge Hill, in October 1642; whilst in charge of the young Prince and of the Duke of York he was engaged in reading, till warned by cannon-shot that he was in dangerous proximity to the scene of carnage.

Soon afterwards, in the same year, we hear of him at Oxford, with Dr. George Bathurst, watching the development of the chick, more congenial to his peace-loving soul than war and bloodshed. The victories of Cromwell and the Parliamentary armies at Marston Moor and at Naseby, indicated the waning fortunes of the king, and after 1646, Harvey, who had attained to 68 years of age, ceased to follow the king, to whom he seemed to have been greatly attached, and he went to reside with his brother. His interest in science did not cease; the same industry in the study of physiology was characteristic of his later as well as of his earlier years, and in 1651, his work on generation was published; it was imperfect in many respects, but it was an indication of the character of the great philosopher. His manuscript medical observations had been destroyed in the earlier part of the Civil war by a senseless mob, and he never ceased to deplore the loss he sustained.

Harvey retained his mental faculties till an advanced age, and died in 1657, aged 80 years, a year before one who had taken the most active part in the civil contest of the time, and had placed himself on the pinnacle of power—I refer to Oliver Cromwell. The views of Harvey were regarded as extravagant, and truly they might well be so esteemed, for they were in direct opposition to many views that had been regarded as established truths. It had been supposed that the blood flowed from the larger veins into the smaller; Harvey proved that the reverse was the case, and that the blood reaching the smaller vessels from the arteries, returned from smaller venous branches to the larger trunks till the heart was reached. He did not know of the true anastomoses of the vessels; that remained for Malpighi, who was born in the year that Harvey's work was published, and who, in 1661, saw the capillary circulation in the frog. What Harvey had attained was gained by direct observation; where he failed, was in leaving this safe path for one of hypothesis; but it is pleasant to regard him as a man of earnest religious thought; and Cowley writes,

> "Thus Harvey sought for truth in Truth's own book,
> Creation; which by God Himself was writ."

Harvey believed in the immediate agency, and fully recognised the personal character of God and His superintending power. True science has not been advanced by the effort to set aside this great fact, which runs through the whole of Divine revelation.

I delight to read from Willis's translation of Harvey's works the following words of truth from a student of nature. "We acknowledge God, the supreme and omnipotent Creator, to be present in the production of all animals, and to point, as it were, with a finger, to His existence in His works, the parents being in every case but as instruments in His hands. In the generation of the pullet from the egg, all things are indeed contrived and ordered with singular providence, divine wisdom, and most admirable and incomprehensible skill; and to none can these attributes be referred save to the Almighty first cause of all things, by whatever name this has been designated; the Divine Mind by Aristotle, the Soul of the Universe by Plato, the Natura Naturans by others, Saturn and Jove by the ancient Greeks and Romans; by ourselves, and as is seeming in these days, the Creator and Father of all that is in Heaven, or earth, on Whom animals depend for their being, and at Whose will and pleasure all things are and were engendered." (*On Generation*, p. 462.)

Such was the immortal Harvey; a mind endowed with the highest gifts. The attainment of the knowledge of the circulation was a gradual evolution of the truth, as one portion after another was observed, till the whole was clearly seen in the beauty of its simplicity; it was the reward of patient research, and often by experiment on the living animal. I cannot find a better answer to those who, in their mistaken kindness of heart to lower animals, would perpetuate ignorance, than by reference to the inestimable benefit of the researches of Harvey. To stop the advance of science is to encourage the darkness of ignorance. If the laws of the present day had existed in the time of Harvey, we might have remained for long years ignorant of the action of the heart and of the circulation; and the knowledge of disease and the best curative measures would have remained unknown; or Harvey might have returned to Padua to make his experiments. If it were possible, it might be well for those who raise such a vehement outcry against the means often best fitted for physiological research, namely, experiment on living animals, if they ceased to partake of the advantages which humanity has received from these researches.

Time would fail me to describe the advances made in physiological science since the time of Harvey. The lacteal vessels were discovered by Aselli, and more fully by Pecquet of Dieppe, who described the mesenteric vessels, traced them to the receptaculum chyli, and onward to the thoracic duct. It was a hundred years after Harvey's work that Stephen Hales used a manometer to estimate the pressure of the blood, and afterwards Poiseuille introduced a mercurial one. More recently, Volkmann and Ludwig have advanced our knowledge of the subject; but perhaps the most interesting investigations of later times in connection with the circulation have been those of Claude Bernard, who has shown that section of the central sympathetic on one side of the neck was followed by a rise in the temperature and dilatation of the blood-vessels on the same side; on these experiments followed the discovery of the inhibitory action of the pneumogastric nerve on the heart itself.

Leaving these facts connected with the circulation, let us turn for a few moments to one of the most ardent students of nature of recent times, most patient in observation, diligent in research, an investigator of those minute circumstances which are often the guide to clearer truth, a profound philosopher, on whom this college delighted to confer the highest honour as a physiologist. I refer to Darwin; his facts are wonderful and entrancing, his deductions are *not* proven. What is more pleasant than to study his observations on plants and on animals? and perhaps none of his works are more attractive than his investigations on earth-worms, in which he shows that animals hitherto regarded as of but little interest and service in the economy of nature are of the greatest value, and designed to be of incalculable benefit to man. Darwin proves that animals undergo changes greater or less in degree from modifying circumstances, and in this way that varieties are formed, and wonderfully adapted to the circumstances in which they are placed; that these variations are transmitted to the offspring; that many changes in plants and in animals can be produced at the will of man by altering the conditions of life; that some varieties are more permanent than others, and the surroundings of particular animals or plants may be so altered, that they fail to comply with the necessities of life, and the animals or plants then cease to exist. There may, indeed, be a struggle for existence, and a survival of those which can live under existing conditions; but all these modifications do not *prove* that animals in their varied forms and characters are derived from a few forms, or from mere living protoplasm, without divine interposition, or even that species are thus produced. Some of the lower forms of life, the infusoria and rhizopoda, have existed unchanged for enormous periods of time, whilst others have by some means or other attained to wonderful instinct and to marvellous adaptations to life. How full of interest are the minute changes in ants, their peculiar habits, their sterile members, their slave-holding propensities! There are alterations in different varieties, but they are ants still, and they show throughout, we think, the wonderful design of a superior mind, the mind of God. The instinctive skill of the bee may lead to the construction of the per-

fect cells of the hive-bee, and the less perfect one of the humble bee, but they are bees still; and it is difficult to believe that, by tracing backward, however remotely, to primitive germs, we should find the ant and the bee produced from a similar origin, without divine interference, although belonging to the same division of the animal kingdom. To what but direct design could we trace the electric organs of the torpedo and electric eel; or the remarkable arrangement for the fertilisation of orchids? The manifold peculiarities of animals and their adaptations require, we think, more than mere natural selection and the forces of the living structures of the animals themselves to produce structural changes; the exquisite beauty of the eye in the different classes of animals, according to their conditions of life, is, we consider, due to the direct power of a beneficent Creator, and so with every other sense, and the instincts of every species; the tribes of insect-life and their wonderful habits, the adaptations of birds and animals to their food-requirements and mode of life, the carnivorous to its need and the herbivorous to its wants, the migratory birds and the aquatic diver, each indicates more than mere progressive development by insensible steps.

According to some theories, the swallow would at first, we presume, be satisfied with short journeys, but the next and succeeding generations would take more extended flight to warmer climes. The poison-bag of the cobra or of the rattle-snake would, according to the same theory, by slow degrees attain its deadly venom; but whence the first beginning?

The difficulty of the non-propagation of hybrid species has not been fully overcome in these reasonings; neither do we witness the interminable variations of species which would exist, if the theory of self-progressive formation were correct.

Whilst allowing all the facts that Darwin discloses, let us keep to the facts themselves, and not be led into hypotheses which are not proven. Science has been advanced by facts observed and proved, but where deductions are brought forward and received as truth, when the basis is only hypothetical, science has not been helped, neither by Galen nor by Harvey, nor by any student of nature. The wonderful and beautiful truths elucidated in embryology, do not prove the statements of evolutionists, but rather show that a higher power controls the development. Darwin says, "I believe that animals are descended from at most four or five progenitors, and plants from an equal or lesser number" (*Origin of Species*), but is number anything with the Creator, or does He descend to our standard?

The development of higher animals is a gradual process and by successive stages; but the presence of branchial fissures in the embryonic neck does not necessarily show that the animal is at that stage a fish; neither does the imperfect septum in the heart of the mammal during embryonic life show that at that time it was a reptile. These gradations are doubtless the steps by which the end can be best attained; just as, in the formation of a sheet of glass, the workman takes a portion of molten glass, but he does not roll it into a plate as one might suppose; on the contrary, he blows it into a sphere; then by gentle pressure, whilst he rotates the globe of glass, he moulds it into that which is well known as a glass shade; then, whilst still revolving, he cuts off the upper part, and leaves a cylinder of glass; at last, by dividing the cylinder longitudinally, and placing it in the furnace it gradually unfolds and becomes a plane surface. The process is that best adapted to carry out the design of the workman, and so in higher development and with a nobler artificer.

It is difficult to understand, that in the Australian continent the marsupial animals, similar in character to those which existed before the chalk in geological periods, should not have continued to evolve new species, if the laws referred to had been simply in operation; in other countries, the most diverse forms of animal life are recognised, because, we think, new species were there introduced by direct interposition.

There is constant change on every hand, gradual development in every part of the natural kingdom, one variety by almost imperceptible steps is linked on to another, and withal the hand of God is seen in every gradation. Just as in the unfolding of His character and purpose towards man; at first only by type and shadow, until we see the full unveiling of Himself in the incarnation of his own Son; ever and anon by fresh *direct* manifestation adding to that already given; so in nature, we have indications that there has been *direct* interference with the chain of events; often gradual, sometimes changes of overwhelming force, but all carrying out the scheme of infinite wisdom.

Whilst speaking of these changes in animals, I would advert to those of even greater interest in man. On him more than in any other form of animal life has the influence of modifying circumstances been manifested in altering his character, in raising or lowering his mental endowments, and even in changing his physical structure. Slowly have these changes been brought about, and at our own day they are seen to be in operation. The climate in which man resides wonderfully reacts upon his physical state; the heat of the torrid zone demands that the system should become accustomed to it; the requirements for the maintenance of animal heat are altered; the normal functions are easily disturbed; the activity of the cutaneous transpiration is necessarily increased; the mind during the intensity of the heat often becomes less able to perform its function, and unless by degrees the system becomes acclimatised the health utterly fails and the life may be forfeited. The Hindoo and the Negro have become accustomed by many generations of life to a state that the European cannot bear; the organism is changed, and the alteration is not only represented by the pigmental colouring of the skin, but by an adaptation in the whole economy. An opposite state is observed amongst those whose lot is cast in the colder regions near the Arctic Circle; the Greenlander and the Esquimaux, by many years of change through succeeding generations, can bear, with impunity and with enjoyment, a temperature which would soon be fatal to the inhabitants of Central Africa. The food requirements of man are different, and whilst the Hindoo can live and thrive on rice, the Icelander needs his more oleaginous sustenance, the oil and the blubber become his life-supply; and every intermediate condition is found in the varied countries and localities of the world. An insufficient supply of nourishment soon tells, not only upon the growth and nutrition of the body, but upon the energy and power of the mind. The poor half-starved peasant in the Connemara bog and desolate land deteriorates not only in his physical organism, but in that which is man's proudest endowment, his faculties of thought and his power of reason. The struggle to obtain a meagre existence drags the man down to a lower level, and the same painful fact is demonstrated among the tribes of Africa, the degraded inhabitants of Terra del Fuego, or the famine-stricken inhabitants of India or China. The condition of man may change in a descending scale instead of advancing to the civilisation of more privileged races. The circumstances of social life add other modifying conditions to man in his national existence. Compare the lithe athletic Indian with the phlegmatic Turk; the Bedouin Arab, in his wild nomadic life, with the quiet cultivator of the soil; the hardy fisherman and sailor, exposed to the vicissitudes of weather and to the storm and tempest, with the man whose life is spent in one close room or for long hours in a poisoned atmosphere. The life is changed, and the consequences are seen in succeeding generations, till the whole race is affected, and the impress is witnessed in the most marked divergence of character, thought and action.

But there is another evolution in man. Morbific changes take place from the result of modifying conditions; an evolution which is the direct result of pathological states. The parent may be affected with syphilis, and the offspring becomes altered in its whole development and growth; and if, beside, one or both parents have a strumous or scrofulous diathesis, or have shown a proneness to cancerous disease, the state of the offspring is modified still further; or with a tendency to gout, another force is presented, and the resultant is an altered phase of life. Still further, the parent may have a nervous system that is extremely sensitive and easily disturbed; it may be that there have been epileptic attacks, or a tendency to mental affection and insanity; a superadded source of disturbance is given, and the resultant of combined forces is manifested. All these causes of change may be yet more diverted from healthy action by the circumstances in which life is placed; not only as regards good food, pure air, and the surroundings of civilised life and education, as contrasted with the wretched state induced by poverty and starvation, imperfect clothing, dark and offensive dwellings, *but* to these may be added an aguish locality, producing miasmatic disease, and having a baneful influence upon the whole being. The clinical observer witnesses the result of these combined morbific forces in a hundred forms; and they produce results which are most embarrassing, unless understood.

Almost every advance in science has been made by the direct questioning of nature, whether we go to Lavoisier and trace the wonderful steps in chemical science, or from Bichat we note the progress in biology. It has been by experimental researches, and especially on living animals, that the important discoveries on the nervous system have been fully established; but very little was known of the difference between the motor and sensory fibres of

the spinal cord before the observations of Sir Charles Bell. The truths that he made out were due to experiment, for, when he rested on mere reasoning, his deductions failed; but the facts he did establish have wonderfully assisted in the right understanding of disease, and they have been of the greatest value. I need not refer to Marshall Hall, to Duchenne, to Brown-Séquard, to Hughlings Jackson, and to many others; but the more recent investigations of Dr. Ferrier, also connected with the nervous system and the localisation of cerebral function, have been and will be of increasing value in rendering the knowledge of disease more accurate, and in leading to correct diagnosis and treatment.

An illustration of the value of study of the kind just mentioned is well shown in the pathological investigations connected with tubercle. The subject is one replete with interest, and especially in connection with a disease of so frequent occurrence as phthisis. The phenomena of tubercle, since the time of Laennec and Carswell, have been wonderfully cleared up. There was truth in the views of Dr. Williams, who referred tubercle "to a degraded condition of the nutritive material;" and said that in its origin it differs, not in kind, but in degree of vitality and capacity of organisation. The clinical observations of Dr. Addison rested on a sound basis, when he declared that inflammatory changes were of the greatest importance in the pathology of the disease. The microscopical observations of Gulliver have been advanced by W. Addison, Virchow, Langhans, Rindfleisch, and many others; but perhaps the most interesting observations have been those of Villemin.

He shows that animals inoculated with fresh tubercle become tuberculous. Tubercles were found in the spleen, in the lungs, and in other viscera. From his experiments, it was supposed that there was a special virus which would reproduce the same morbid change when introduced into the system. If these experiments had been made twenty years later, the original statements might have gone forth as established truths; but science was then less trammeled. Burdon Sanderson, Wilson Fox, and others, tested the theories that had been broached. It was found that, although the experiments were true, that tubercle could be artificially produced, it did not require tubercle to be used; that other animal substances, that vegetable irritants, and still more, that a mere wound, would suffice under certain conditions; that these irritants, when placed within the tissue, became surrounded by product of a cheesy and inflammatory character; and that the subsequent changes in these products, in a diathesis of a tubercular type, led to secondary deposit of an advanced character in connection with the lymphatic system. It is true that some guinea-pigs were used to establish these most interesting and important pathological truths; mere reasoning would have misled. The advance of science was due to *direct experiment;* and, happily, the barriers were not then existing, and the obstacles to research had not been devised. With all these observers, from the commencement, the unfolding of medical science has been a gradual one, as step by step the darkness of ignorance was dispersed by increasing knowledge.

It is the object of science to attain to exactness in knowledge, and the advance of one line of truth reacts upon others in close relation with it; during later years, how much has been ascertained as to the character of the blood itself, its more precise composition in various periods and states of health, not only as to its white corpuscles and the red corpuscles, and perhaps other forms, but as to the migratory character of the leucocytes? Chemical science has unfolded much, and will do still more; but the microscope and the spectroscope have added immensely to our knowledge in relation to the pathological, as well as the physiological changes of the blood itself. With a better knowledge of the heart and its valves, and the altered states of its muscular fibre, we have learnt not only the true nature of the sounds of the heart, but the import of their morbid changes; the sphygmograph and cardiograph have led to as much accuracy in clinical observation, as the use of the thermometer has done in the study of febrile conditions. The discoveries in the physiology of the brain and the whole nervous system have explained the facts of pathological science; but it has been a gradual evolution of truth. In no branch of medical science have greater advances been made, than in the knowledge of the diseases of the spinal cord and of the whole nervous system.

During the last few years, a comparatively unexplored field of research has been laid open, which is now being pushed forward with determined zeal: the study of the morbid germs, and their connection with the etiology of disease. The bacteria are now regarded as the actual or the proximate causes of many maladies; they are the simplest forms of vegetable life, and are classified according to their several characters. To the presence of some of these forms of the micrococci are attributed many terrible varieties of disease, as pyæmia, erysipelas, and internal suppurations. Some of these bacteria are found in the blood; they undergo stages of development and decay, and induce secondary changes in the tissues with which they come into contact.

Pasteur, in his observations on splenic fever in animals, and the manner in which the bacilli may be modified by successive germinations in proper fluids, has unfolded facts which will probably prove of immense value, but the interest has been eclipsed by the observations of Koch in reference to the bacilli of phthisis. That these bacilli are found in the expectoration of true phthisis has been established, and their presence has also been observed in the tubercle in the lung itself; while it is stated very positively that they do not exist in other forms of pulmonary disease, as chronic pneumonia and chronic bronchitis; that, in consequence, phthisis is a disease directly communicable from one person to another. Whilst there is much to warrant this opinion, let us bear in mind that it is not as yet established; fuller facts will doubtless be brought forth by other observers, and it is wiser to wait for clearer knowledge before we at once accept the opinions of these observers upon the data already made out. We desire to know more of the natural history of these bacilli; whether they are really animal structures possessing individual life and advancing to fuller development, or mere fragments of living organism about to pass into inorganic forms. They increase in size, spores appear to be produced and set free, or they propagate by simple division. But whence do these bacilli come to be found in the cells of tubercle, and not to leave traces behind them of their mode of entrance? Or are these the commencement of degenerative change in ill-developed tissue?

The munificent grant of the Grocers' Company in the city of London, for the establishment of a Quadrennial Discovery Prize, may, we trust, lead to advancement in the knowledge of these organisms, which are placed at the very threshold of animal life, but capable, it would seem, of stopping the course of life itself in the highest forms of development.

It would be premature to say that the morbific germs of ague and of fever have been fully recognised, but it would be an incalculable boon if the germs of such diseases as cholera, of scarlet fever, of small-pox, could be so made out that we might be led to measures which would mitigate their severity, render them harmless, and stop the ravages which they produce. In reference to the last-named, small-pox, if one fact more than another in medical science seems to be established, it is that by vaccination properly performed, the system becomes so fortified against variola that the severity of the disease is mitigated, and that it is frequently rendered almost harmless in its attack, or entirely warded off.

It may be quite correct that, in some cases, after vaccination from syphilitic subjects, the system may become contaminated; but such instances are still doubtful, and they are of very rare occurrence; and we believe that with proper care they would never have happened. So also the disturbance from the vaccine inflammation may be followed by eczema or impetigo, or glandular enlargements; but these troubles would probably have arisen in cachectic children, even if vaccination had not been performed.

The science of pathology is advancing with rapid strides, but the fear is lest, by hasty generalisation, its progress be retarded, and that hypotheses imperfectly established be used as the solid bases upon which to build explanations of disease and modes of treatment. The safeguard against these disastrous results lies in the plan adopted by Harvey in the study of the circulation of the blood—patient research, direct experiment and exact observation. Every one interested in the advancement of medical science must, we think, desire that those hindrances which have been formed by mistaken sentimentalism may be laid aside, and that true knowledge may be promoted in all its beneficent purposes. The advancement of science is the pride of a nation and a benefit to the whole human race.

The science of medicine is unselfish in its character; the members of its profession give their knowledge for the general good, and the influence is spread for the service of man wherever he may be found. The advances made in Germany, in France, in the United States, and elsewhere, are soon known and reflected back, with additions obtained by our own investigators. The International Medical Congress two years ago was an illustration of the commonwealth of science, and of the brotherhood of medical men. Medical science, like a stream, flows on quietly and noiselessly as regards the external world. Its source is far back in ages that are gone by, but it diffuses on the right hand, and on the left, a thousand benefits to those who avail themselves of it. It derives strength and power

from other sciences as they join in, as streams flowing on in like direction, and thus the power for good is enhanced.

The surface of the stream may be ruffled by stones or by mud thrown in, but these sink to the bottom and are soon forgotten. Those who have derived benefit, and it may be almost life itself from medical skill, often cast aspersions when the need has ceased —they foul the spring that has refreshed them. According to the published accounts, we have no record of a campaign where the wounded suffered less from blood-poisoning and sloughing sores than in the recent war in Egypt. Sir W. Mac Cormac states: "During this campaign there was never any outbreak of those infective diseases that have hitherto decimated the wounded in time of war. There was no pyæmia, no erysipelas, and no hospital gangrene as the result of wounds. Not a single man lost his eyesight, though there were 1,494 cases of inflammatory diseases of the eyes admitted to hospital;" but the doctors were expected to take the onus of the failure of other parts of service, to secure pure and wholesome bread, supplies of beds and sheets, pure water, and to contend with the plague of Egyptian flies; they have, however, the consciousness of having rightly performed their duty, and when the facts are fully known we believe they will be honoured.

It has been the common experience of medical men, that oftentimes when the praise was most deserved they have received the least; and it may require years and even a life-time to show the true value of work and to remove the mistakes of insufficient knowledge and of prejudice. It was so in the great work of Harvey himself; some of the practitioners of his own time thought lightly of his views and of his practice, for they did not understand the importance of his discovery. The mountain-peak may shine brightly in the morning sunlight, but a deep shade may be cast from the mountain side till a brighter light and noonday sun dissipate the shade; in like manner some great truth may stand forth in all its brightness, but a dark shadow may be cast beyond, till ignorance is lost in the sunlight of completer knowledge.

The pages of nature lie open before us all; and the lessons we have sought to establish from the works of Galen, from Harvey, and from Darwin are, that we must seek to unfold the mysteries of science by patient research and experiment, and that we must not accept as truth any theory which is the result of our own reasoning unless it can be proved by observation. To every humble-minded investigator there is an ample reward, and the fault is not in nature, if we do not enrich ourselves from the stores laid before us.

> "Accuse not nature; she has done her part,
> Do thou but thine; and be not diffident
> Of wisdom; she deserts thee not, if thou
> Dismiss not her, when most thou need'st her nigh."

CLINICAL INDICATIONS FOR CONVALLARIA MAJALIS.—Dr. E. L. Trudeau, of Saranac Lake, writes (*New York Medical Record*, March 3), "From what has already been published in regard to convallaria, it seems that, as the study of this drug is in its infancy, little is known as yet in regard to the class of patients to whom it is most serviceable. It has been noted that in some cases of cardiac difficulty it acts most energetically, while in others it is of little value. Some broad indications to guide us in its use are, therefore, most desirable. From a year's experience in prescribing this drug, it has seemed to me that such an indication may, perhaps, be found in the fact that it is most successful in all cases where, to restore the balance of the circulation, stimulation of the *right* heart is imperative, while it is much less active where increased energy on the part of the left ventricle is called for. Its striking power in controlling dyspnœa in cases of emphysema, fibrous, and chronic phthisis (cases in which digitalis frequently fails), in relieving the orthopnœa of mitral disease, increasing at the same time the flow of urine, and its failure to mitigate the symptoms of aortic mischief or to increase the flow of urine in such cases, are clinical facts which tend to confirm this suggestion. It is in relieving dyspnœa that convallaria attains its most brilliant results, while it has only an uncertain and trifling power over œdema and dropsy, and it succeeds often in precisely the cases in which digitalis fails. Another indication for its use not hitherto dwelt upon, is in controlling the symptoms of purely functional heart disorder. Its efficacy in such cases confirms Dr. Beverley Robinson's opinion that it acts through the nervous system. Paroxysmal palpitation and dyspnœa due to nervous causes, rapid and irregular heart-action dependent upon debility, are symptoms almost always benefited by it, and often entirely disappear during its exhibition. Convallaria is a drug which offers a most promising field to physiological research."

AN ADDRESS

ON THE

POLITICAL POWERLESSNESS OF THE MEDICAL PROFESSION: ITS CAUSES AND ITS REMEDIES.*

BY BALTHAZAR FOSTER, M.D., F.R.C.P.,
Professor of Medicine at Queen's College, Physician to the General Hospital Birmingham, etc.

My first duty is to thank you, as I do most sincerely, for the honour you have done me in making me your President. The Birmingham and Midland Counties Branch, numbering as it does nearly 400 members, forms one of the most vigorous medical societies outside the metropolis. It is not merely a branch of the Association called together mainly for Association purposes, but a most active scientific society. During the session, the Branch and Section bring the profession together once a fortnight on the average, and transact an amount of medical, surgical, and pathological work that would do credit to any society in the world. This position has been attained by the energy and devotion of the members, and the same qualities promise still greater success. I may, therefore, well feel grateful for the distinction of presiding over you. It is twenty years since it was my good fortune, at my first annual meeting, to hear that distinguished surgeon, H. D. Carden, of Worcester, deliver his presidential address. When I contrast the small meetings of those days, even to hear so eminent a man, with the large gatherings of the Branch now, I feel proud of the increased strength of the society, but I equally feel the greater responsibility of addressing it. I do not, however, stand here to-day presuming to teach any novel or original views on medical science. The annual meetings have become so full of business details, that they can hardly be regarded as the most suitable occasions for scientific addresses. Through the winter and spring months we devote our time to the exposition and criticism of new ideas, and the new modes of practice which they justify or suggest; but on this occasion it is, I think, more fitting to speak on some subject of general professional polity.

The tendency of the legislature for some years past, to give more and more attention to social and sanitary questions, has naturally interested us as a profession. Hardly a session has passed of late without some measure being introduced to Parliament more or less affecting our relations with the State. This growing importance of sanitary and scientific legislation has naturally led us to think more and more on public questions, and to desire a greater influence in guiding legislative action. This year, in addition to more general measures, the introduction of the Medical Act Amendment Bill, has given the proceedings of Parliament a personal interest to every one of us. I need hardly, therefore, apologise for submitting to you certain thoughts on our relations to the legislature, which have occurred to me during a study of Medical Reform and other subjects recently before Parliament.

The Medical Act of 1858, which we this year hope to see amended, was the result of more than a quarter of a century's agitation on the part of the Association and of its active Medical Reform Committee. As far back even as 1831, the profession had begun, under the leadership of that honoured veteran, Dr. A. P. Stewart, to demand an improved educational course; and in 1833, at the second annual meeting of the Association, medical reform was discussed in Dr. Barlow's address. From the beginning even until now, we have consistently and continuously pleaded "that, instead of having sixteen modes (now nineteen) of entering the profession, one only should be adopted, and that the profession at large should be represented on its Medical Council." In 1840, these demands were first drafted into shape in Mr. Wakley's Bill; and then, session after session, attempts were unsuccessfully made to pass some measure. The history of these attempts at medical reform, from 1837 to 1858, form about as depressing a piece of reading, for any one jealous of the position and influence of his profession, as I can well imagine, except the dismal diary of our struggles and failures from 1858 till now. In

* The Presidential Address delivered at the annual meeting of the Birmingham and Midland Counties Branch.

both periods we have a similar catalogue of petitions presented and forgotten; of deputations courteously received and dismissed; of select committees and royal commissions framing laborious reports; of remonstrances unheeded; of hopes raised, and disappointments reaped. When, at the end of the first twenty-five years' campaign, we did at last obtain the Medical Act of 1858, we won neither of the essentials demanded by the Association: neither a single mode of entering the profession, nor direct representation on the Medical Council. Direct representation, we were told, could not be granted till a *Register* of the profession was made to enable it to vote. For a quarter of a century the *Register* has been complete; the medical practitioners of the United Kingdom have contributed from their narrow means £150,000 for the support of a Council to represent and defend the interests of the colleges, in opposition to the wishes of the profession; and, as a result of our taxation, to leave us the worst governed medical body in Europe.

For about seven or eight years, the General Medical Council was allowed to carry out the Act in peace; but in 1866, the sense of its failure forced the Medical Reform Committee to recommence their work. In 1869, the indignation of the profession at the deficiencies of the Council found expression in the monster petition of about 10,000 practitioners, ably drafted by certain ex-Presidents of this Branch, in which direct representation and an uniform mode of admission to practice were demanded as essential reforms.

The Medical Council showed themselves so indifferent to the demands of the profession, that since then reform has been sought through Parliamentary channels; and the Council has continued to make history, "a history of failure, a history of nineteen bodies out of sympathy with the profession, several of which are superfluous, striving to perpetuate themselves and all their individual privileges, without reference to public advantage, and the question of justice to those on whom exacting examinations and fees are imposed." (*Lancet*, September 16th, 1882.)

Year after year Medical Bills have been introduced and withdrawn, because we, as a profession, have had no adequate medical representation in the House, to expose the interested obstruction of corporations, or the cynical indifference of the Council. This year, after the Report of the Royal Commission, and mainly as the result of the untiring labours of Dr. E. Waters, the Chairman of the Medical Reform Committee of the Association, we find ourselves cheered by the nearer prospect of actual legislation. The Bill now before Parliament institutes an uniform examination in each division of the kingdom as a preliminary to registration, alters the constitution of the Council, and also concedes direct representation to the profession. But how does it concede it? In a Council of eighteen, four seats are allotted for the representatives of the 24,000 practitioners of the United Kingdom. We who provide the funds out of which the Council is to be supported; we for whose education and government this Council is to exist; we who have struggled so patiently and so perseveringly for direct representation—now, after half a century of effort, are given four members on a Council of eighteen, of which the Crown appoints six! The 16,000 practitioners of England will have two representatives, Scotland and Ireland one each, while the other fourteen seats will, directly and indirectly, remain under the control of the same corporations who have for twenty-five years mismanaged our affairs and resisted our demands.

Worn by the long weariness of waiting; broken by repeated disappointment and defeat; we accept this bill as the best we are likely to obtain. But surely such small success, after such long labours, must convince us of the political impotence of the profession to which we belong.

Now let us glance for a few minutes at another incident of modern legislation, that has grievously afflicted us from a scientific point of view. Between 1860 and 1870 there was a remarkable advance in the scientific development of medicine. Old methods were passing away and all things promised to become new. The greatest of modern physiologists, Claude Bernard, by his wonderful experimental enquiries, his keen insight into the nature of living processes, and above all by his profound sagacity in insisting on the true relations between physiology and practice, had opened more widely than ever the path by which medicine was to become strictly scientific. An art based upon observation, and aided now and then by the blind gropings of empiricism, was for the future to rest on a knowledge of function. The revelation of the mechanism of all the processes that make up health, was to lead to a knowledge of that disordered mechanism which is called disease. The physician looked hopefully to the near future, when he should be able to modify and control disordered function, to arrest the changes in nutrition that lead to degeneration, and thus carry on his beneficent work with a new precision and a fresher faith. Medicine, like other sciences, had entered on a new stage in her evolution. Observation was no longer her sole method of research, but experiment and comparison, so fruitful in other branches of knowledge, promised her a riper and a richer harvest.

But!—all this was rudely checked. An agitation got up by well-meaning, soft-hearted, and soft-brained philanthropists, on the cruelties, or rather the imaginary cruelties, of vivisection (for in this country the reproach of cruelty has never been justly levelled at the medical profession) resulted in the passing of the Cruelty to Animals Act. Since then, physiological research in the United Kingdom has been practically abolished in consequence of the difficulties the Act throws in the way of experimental enquiry.

A sickly sentimentality, half-sister to that æstheticism which made a large section of society contemptible to healthy and robust manhood, was allowed to influence the legislature at the expense of knowledge, and in opposition to the protest of a profession, tender, trusty enough to hold in its daily charge the lives of our dearest and best, but yet, forsooth, so full of devilish cruelty that it could not be trusted with a cur or a cat!

If the medical profession ever were united against any legislation, they were united against the Cruelty to Animals Bill. The British Medical Association, its Branches, the Colleges of Physicians and of Surgeons, the Universities, the Metropolitan and Provincial Societies, all petitioned against it. Even the General Medical Council was for once in healthy harmony with the profession, and showed in its elephantine way an unexpected amount of agility, since after a debate lasting over three days it added another lengthy but able protest against the Bill. As a result of all these petitions and of many a deputation, some slight amendments were made, and the profession, distrustful of its strength, ceased to protest. Lord Sherbrooke (then Mr. Robert Lowe) urged us to continue our opposition in the following vigorous piece of advice—"I do not," he wrote, "agree with you, that as things stand now you ought to submit to any legislation. The law is this: any person may inflict any pain short of torture on any domestic animal, and any torture he pleases on any non-domesticated animal. So long as the law stands so it is a gross insult to the medical profession to single them out as the only exception to these general rules, and I would advise them not to submit to it. The proper course would be for Parliament to make a law prohibiting torture or unnecessary pain, and then to make an exception in favour of physiologists, under whatever conditions Parliament may think right. There is all the difference in the world between allowing yourselves to be singled out as the only people whose dealings with animals non-domestic require regulation, and being made an exception to a general law of mercy on account of the benefit you confer on mankind. People are very often taken at their own valuation, and I would never admit that you are the only persons with whose liberty it is necessary to interfere." If our courage had not been broken by long years of political powerlessness, we should have followed this wise counsel and have obtained better terms. As it is, we find ourselves now, after six years' experience of the working of the Act, face to face with a powerful organisation for making it more and more stringent. The noisy clamour of the faddists, whose fad is to denounce the cruelty of the doctors, still rings in our ears, and a great novelist uses his waning powers to spread the libel by the help of grotesque caricature, and the meanest conception of the scientific character. (*Heart and Science*, by Wilkie Collins.)

Our most earnest seekers after truth, men actuated by no paltry pettiness of personal vanity, such as the novelist suggests, have to visit the continent to test a new method of healing or to investigate the nature of a disease. All the world has been lately agitated by the discovery of the bacillus tuberculosis. Men's hearts beat quickly at the thought, that we had at last found a clue to that mysterious malady, which slays our cherished children when budding into the rich promise of maturity. But here, in free England, we can hardly test the truth of Koch's researches, but have to trust to the freer laboratories of the Continent to prove a theory big with the fate of thousands!

It is no wonder to me, that a distinguished member of the Upper House, who once fought for us in the Commons, should have said, that in all political action we doctors are such poor creatures, as to be hardly worth fighting for.

Only a few weeks ago, we had another startling rebuff from the legislature on a medical question. The Contagious Diseases Acts have now been in operation since 1867 in certain garrison towns. They have been subjected to an amount of searching criticism, such as seldom falls to the working of any Act of Parliament. Official

and independent statistics, the Report of a Royal Commission, and recently the report of a Select Committee, that sat for the greater part of four sessions, have all shown the results to be eminently favourable to the diminution of disease and the improvement of morality. When these acts were first applied to certain military stations, the medical profession was so struck by the importance of the system as a means of lessening a loathsome malady, that an Association was formed for the purpose of extending the Acts to the civil population.

We, who in our daily work see the ruinous ravages of venereal disease, who see the strong man broken down in body and marred in mind, while the miserable victims of his brutal and untameable passions rot to death from a neglected complaint; we who too often see a mother's health destroyed, or a fresh young wife polluted in the first year of her wedded life by the most loathsome of diseases; are naturally anxious to stamp out these maladies for the sake of the innocent. But there is a band of innocent ones who cry out more eloquently still, the puny puling offspring that we find in the houses of rich and poor, children who fade and pass away in the early months of life, the blighted issue of a father's sin, or who grow up for the even sadder lot of bearing on their fronts the debasing brand of inherited disease.

We who daily observe all these horrors, have naturally a vivid conception of the importance of the Contagious Diseases Acts, and in the interest of the health of the people, most of us would gladly see them extended. But in spite of this feeling on the part of the medical profession, in spite of the statistics of lessened disease and greater effective strength in our soldiers and sailors, in spite of the hundreds of poor women saved from pain and suffering, and reclaimed for better lives; the House of Commons, deaf to the protest of the doctors, careless of the judgment of ministerial experience, but pliant before the energy of a sentimental fanaticism, has pronounced the practical abolition of the Acts.

After this, as the leading journal remarked, it will be surprising if other fanatical devotees, the opponents of vaccination and vivisection, do not take heart of grace, and push their crotchets with redoubled energy. That the vaccination laws can for a moment be regarded as an open question, is incomprehensible to any scientifically educated mind; but while this pliant propensity to bow before the noise of the fanatical faddist exists in Parliament, we, as the ministers of health, may well feel anxious, and should be up and stirring to prevent irrational agitators from sacrificing the health of the nation. We must remember that only two sessions ago the Government proposed to abolish multiple penalties for the non-observance of vaccination. The profession then, ably led by the Parliamentary Bills Committee of the Association and its chairman, Mr. Ernest Hart, and supported by the great mass of public opinion, were able to obtain the withdrawal of the Bill. The cry, that compulsory vaccination is an interference with private rights, a restriction of personal freedom, will be raised again, but we must make people remember that freedom to contract small-pox means also license to spread the disease, and that individual freedom, or rather individual license, means death to some and suffering to more. We speak on these matters as we do on all health matters, from a platform of knowledge and disinterested devotion to the public good. All miserable motives of professional advancement and gain we have trampled under foot, we have always striven to destroy disease and diminish death, and we therefore feel justly indignant when any reasons of policy even suggest a concession which will injure the health and life of the nation.

In these references to comparatively recent legislation, and I might multiply them largely, I have adduced evidence enough to justify the title of my address, "The Political Powerlessness of the Medical Profession." Now, I would ask your attention to what appear to me to be the causes of this impotence, and the means by which it is to be remedied. The causes are of two kinds: one belonging to the medical institutions of the country, and the other depending upon us as individuals. First, let us consider the causes connected with our institutions. Take them all, from the General Medical Council downwards, and on all public questions except those that are purely technical they exercise comparatively little power. Whenever a question arises not wholly medical, but ever so slightly mingled with some other interest or sentiment, the professional influence yields before the onslaught of some clamorous class of the community. In my earlier remarks, there is evidence of this. Why, then, is this force lacking to those who speak on behalf of the profession? Man for man they can compare with the leaders of any class. In eloquence, we boast a Paget, in lucid exposition we have a Gull, for high and noble character we revere a Jenner. Yet on all great questions our influence is less than such powers should make it.

Now, as I read it, the cause is this: our leaders act and speak only as individuals, or as the representatives of small bodies of the profession: there is no power of numbers behind them. The members of the General Medical Council represent no great mass of practitioners. The elective members are appointed by small committees or councils, and in no sense are they representatives of great medical bodies; they represent the interest of the Colleges, but not the interests of the members and licentiates of the Colleges; hence the lack of power. So it is with the government of the Colleges themselves; they are all ruled by small bodies, sometimes self-elected, and not representing the great mass of the members. The College of Physicians of London, which has the widest constitution of all, calls to its comitia the whole body of its Fellows, but still excludes from any share in its government the thousands of its members and licentiates. Until the wise innovation of the present President, its Council was entirely made up of London Fellows, and by them the honours and distinctions of the College are mostly held. If we turn to the College of Surgeons, we find things no better; a Council elected only by the Fellows, and their voting so restricted by the requirement of personal attendance at the poll, that the success of a provincial candidate can only be won by the most vigorous efforts, and the personal sacrifices of his friends.

Can we wonder that Colleges governed in this way are comparatively powerless? When all their resolutions might be uttered in the name and with the force of ten thousand members, they prefer to speak with the small voice of a score or a hundred. Instead of winning respect and attention as the representatives of the profession, they are content to be lightly esteemed as the mouthpieces of the metropolitan schools.

The same radical vice which weakens the power of the Colleges in all the divisions of the kingdom, has, like another Delilah, shorn our Association of its strength. Till the present time, the British Medical Association, the largest and most numerous professional union in the world, has missed the inspiring energy of representative government. The ruling power of the Association, the Committee of Council, when it has demanded the concession of direct representation for the profession on the General Medical Council, has been met over and over again with the taunt of not applying the system to itself. A body composed partly of self-elected members and partly of *ex officio* nominees, it has lacked the strength to grapple with questions of public policy: a strength which can only come to men from a conviction that there is behind them an army of sympathetic thinkers and workers. Individuals, however able when uttering their own opinions, must ever count as units; but less able men may stir a nation, if they have a province at their backs.

The approaching annual meeting at Liverpool will be called upon to consider this subject; and, should the members decide to make the executive a representative council, responsible to and in direct and constant communication with the members of the Association, a new life and a new power will be won for the medical profession. Every Branch will send its representative to the governing body; every Branch will hear and know fully the proceedings of the Council, and will be able, through its representative, to initiate, influence, or control the policy of the Association. Questions affecting the relations of the profession with the public, on which a self-elected committee must ever speak with bated breath and whispering humbleness, will in future be decided by the will of the constituent Branches, or, in other words, by the voice of the members of the Association. When our resolutions and our petitions go forth, swollen by the chorus of ten thousand, aye, and, at no distant day, by the volume of twenty thousand voices, even the dull ears of a House of Commons will be startled into an acute and respectful attention.

Such are some of the causes of political powerlessness that are connected with our institutions; let us now consider those that depend upon ourselves. As a profession we are rapidly becoming, if we have not already become, the most broadly educated class in the community. In addition to the ordinary education of the profession, we have the inestimable advantage of a scientific training. Mr. Gladstone some years ago predicted for us a growing social influence, greater and more expansive than that which accrues to law; and certainly there has existed and does exist, to quote his words, "an opportunity for the medical profession to exercise increased knowledge, and a greater share in the leadership of thought." Six years have passed since these words were spoken, and we still find the influence slow to come. This is, in a great measure, our own fault. As a class we are too timid and too reticent; we fail to take

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our due share in the public work of the communities in which we live. The nature of our daily work is to many of us so absorbing in its interest, and demands so much of our time for calm careful reflection and for scientific investigation, that we turn, with the dislike of philosophers, from the noise and dust of the forum. With some of us possibly there may be a lurking fear that pronounced opinions on political and social questions are apt to injure a doctor in public estimation, and so to lessen his professional influence and his pecuniary profits. In the sad quietude of the sick chamber, where the finer issues of life and death have to be weighed, the brawling politician would jar on the sensitive nerves of the sufferer. Truly; but we need not be brawling politicians, nor need we allow political questions to so occupy our thoughts as to interfere with that absolute concentration of mind on the case of every patient, which is essential to the most perfect performance of our work. Every man needs some variety in the direction and subject of his thoughts. As a class, we are apt from lack of this variety to become, as compared with other classes, rather narrow minded and wanting in sympathy with the great movements going on around us. Some of our greatest medical and surgical minds have found their recreation in a devotion of their leisure to scientific and artistic work outside the professional limits, and have won, as it were, a second fame. Why should not more of us find this recreation in patriotic service to the community? No slavish fear of consequences need check us, for if a calling like ours, which entails so much labour and so little reward, had added to it the mean servitude of reticence from prudential motives, it would justly sink from its position of respect as a free and learned profession.

In my experience, personal and collected, I have been able to find few, if any, examples of permanent injury to a medical man, from any manly and proper action in his capacity as a citizen. I have heard of cases of failure attributed to political partizanship, and also of cases of success, both of which could be as easily explained on ordinary personal grounds. On the other hand, we must all be able to recall instances of the highest professional esteem and success associated with the most pronounced political opinions. The most noteworthy example in our time and in our district, was that of our distinguished associate, W. J. Clement, who sat as Liberal member for Shrewsbury, and who, through a long career, maintained his professional pre-eminence in the most Conservative and exclusive county in England, in spite of the most advanced Radical views. The public do not trust a man in illness because he agrees with them in politics, it is because they have confidence in his professional skill and integrity; and if in any case the scale of favour is turned against us by so slight a thing as political preference, believe me, the balance of esteem between the patient and the doctor is not worth preserving.

We cannot all of us take much share in either local or imperial politics, but some of us can; and those who can should be encouraged by the thought that in town councils, local boards, and boards of guardians, there is plenty of work for them useful to the community and good for the profession. Year by year the statute book receives provisions of a social and sanitary nature, that demand medical knowledge for their most effective administration. If we help in this, we act for the good of our fellow citizens; but if from too close a devotion to work, or from a selfish love of ease, or from a petty fear of making enemies, we shrink from this duty, can we be surprised that the public estimate of us sinks and our influence everywhere falls? In every town and in every district I would gladly see medical men taking their due share in the important and responsible work of local government. Were this done to the extent of our ability and knowledge, we should gain in public esteem; and in proportion to our activity in the respective areas of our labour would be our influence with the legislature on all questions affecting medical interests. Parliamentary leaders, now as in the past, know full well that we have no influence at the polling booths, that our good will counts for little, our enmity for less, and hence the indifference to our protests and the neglect of our claims.

Our almost systematic abstention from local politics has naturally been reflected in the composition of Parliament. In the House of Lords we have no voice, where the Church has its Bench of Bishops, and where the public services of lawyers find their final recognition. In the Commons House we are not much better off: there every class finds more numerous and more powerful advocates. At the last general election, while lawyers stood by scores, not a single medical practitioner went to the poll in the whole of England. In other nations this is not so. In Germany the world-renowned pathologist, Virchow, was the leader of a powerful party in the Prussian and German Chambers. Among the deputies of France, one of the most powerful leaders and the probable successor of Gambetta is a doctor; and till recently a distinguished physiologist held a ministerial portfolio.

In Italy the same conditions hold good, and at the last elections seventeen medical men were elected by the people for parliamentary work. In the assemblies that govern English-speaking nations elsewhere, in those colonies of which we are so justly proud, we find a medical element strong in the legislature. These facts are sufficient to show that there is no valid reason against our seeking a just share in the government of our country. The Press, that mirror of the people's thoughts, has always been favourable to our claims. The demand for sanitary and scientific legislation is on the increase; the work is indeed plentiful, but the labourers are few. It is our apathy and our want of courage in the past that has placed us in the position in which we now are, and I look to the rising generation of the profession to enter on a new and nobler course. With the spread of education among the people there must be a progressive political development, and a steady transfer of more and more power to the great masses of the population. As they gain knowledge and influence, the great questions that affect their health, their happiness, and their lives, must come more and more to the front.

We, as a profession, know the woes and the wants, the sufferings and the sorrows of the people more intimately than any other class, and by our daily work in the homes of the poor, we are trained to observe their social and sanitary needs. All modern sanitary legislation is an honorable record of the self-devotion and self-denial of a profession that has consistently striven to destroy the seeds of disease and death; a profession that has allowed no sordid selfishness to interfere with the full recognition that the prevention of suffering is a nobler office than its cure.

It is always a calamity to a state when any learned and respectable class of its citizens abstains from the exercise of political functions. It is a greater calamity when they do so in the face of law making on which they are capable of wise counsel. Recent parliamentary history, as illustrated by the slow progress of medical reform, the efforts of the anti-vivisectionists, the fate of the Contagious Diseases Acts, and the hitherto happily futile agitation of the anti-vaccinationists, should warn us against the danger of this attitude, and of the desirability of seeking to attain a juster influence in the councils of the nation. Our present political abstention inflicts a double loss; the failure to guide general legislation in right directions, and the lost opportunities of obtaining such purely medical reforms as may be beneficial to the community and just to ourselves. As a class, we stand almost alone in extent and thoroughness of scientific training. We are the only body wise in all the mysteries of the new knowledge. As the power of other learned callings wanes, as the proud predominance of wealth is lessened, it is the scientific intelligence that must gain in power. But power will not come to those who stand aside and look on, either cynically or timidly, at the strife of parties. We must hold ourselves like men, willing to take our share in the struggle. We must remodel our institutions, we must organise and consolidate our profession, and infuse into our ranks the self respect and dignity that come from discipline. I have tried to sketch out the modes in which this may be done, and I have endeavoured to show how the present political impotence of the profession may be converted, under wise guidance, into the leadership of public thought on all great social and sanitary questions.

The progress of civilisation makes these questions every day more pressing, and successive governments are more and more forced to abandon the *laissez faire* principle, and to recognise their responsibilities as the guardians of public health. The people themselves demand this with increasing strength. The legislative era of the trader and the mill-owner must pass away, and the time of the labourer and the artisan must come. To help in these great social changes, to guide them into safe channels, is a high and noble task; it is one for which the medical profession is specially fitted, by its knowledge, by its sympathy, and, above all, by its sincere unselfishness. The fertile fields of this new land of loving labour lie before us in all their fruitful freshness; let us have the courage to claim possession in the name of a high and holy cause—the health and happiness of mankind.

PRESENTATIONS.—Dr. P. Brown, of Blaydon, Newcastle-on-Tyne, has been presented with a portrait of himself and a purse of gold, and a handsome necklace for his wife, as a mark of esteem by his friends and patients.

A LECTURE
ON THE
FUNCTIONAL CARDIAC MURMURS OF ANÆMIA.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
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(Continued from page 1213.)

To the other points previously advanced in support of and against Dr. Balfour's theory, the following must be added.

5. That the pulmonary second sound is accentuated.

We all, of course, know, that in mitral regurgitation, the pulmonary second sound is accentuated in consequence of the increased blood-pressure in the pulmonary artery, which results from the mitral lesion. If, therefore, this accentuation occurs in the earlier stages of chlorosis, and if it cannot be satisfactorily accounted for in any other manner (than as the result of mitral regurgitation), we must, of course, admit that it is strongly corroborative of Dr. Balfour's theory, always premising that there is no fatal objection to that view.

Now, I at once admit that, in the later stages of anæmia, the pulmonary second sound is often intensified, and that the accentuation may be due to the mitral regurgitation which is often present in the advanced stages of that condition. In the earlier stages of chlorosis, too, I have frequently (though not invariably) found the pulmonary second sound louder than the aortic. I have been in the habit of regarding the accentuation, which occurs in the early stages of chlorosis, as apparent rather than real; in other words, I have supposed that the aortic second sound was diminished in intensity, while the pulmonary retained its normal loudness. Possibly, I may be mistaken in this view; and I am certainly not prepared to say that true accentuation of the pulmonary second sound does not occur, even in the earlier stages of chlorosis.

But even granting that the accentuation were always present and well marked, I cannot admit that it is sufficiently strong evidence to counterbalance the grave objections which have been advanced against the mitral regurgitation view. In particular, the objections, which Dr. Russell has so ably, and which I can not only corroborate, but also strengthen—(1) that in the most advanced stages of anæmia, as seen after death, the left auricular appendix is not dilated (in one of my cases it was actually smaller than normal); and (2) that when the right heart becomes dilated, as it does in conditions of anæmia, the appendix of the left auricle recedes from, rather than comes in closer contact with, the chest-wall—seem to me to negative Dr. Balfour's view. I feel obliged, therefore, to suppose, that if the pulmonary second sound is actually intensified, the accentuation must be due to some other cause than mitral regurgitation. Although I have made some inquiries, I have not as yet been able to ascertain whether the anæmic blood passes through the pulmonary capillaries with greater or with less facility than in health; and, until I have definite information on this point, I do not feel in a position to theorise on the matter.

Dr. Russell's Theory.

Let us now turn to Dr. Russell's theory. He believes:

(1) That the murmur heard in the second left interspace, in the earlier stages of chlorosis, is generated in the pulmonary artery.

2. That the murmur is due to a relative constriction of the vessel (*i. e.*, of the pulmonary artery), produced by the pressure of the dilated left auricle, which is situated behind it.

Now, this theory necessarily presupposes that, during the ventricular systole, the pressure of the blood in the left auricle is greater than the pressure of the blood in the pulmonary artery; for otherwise the pulmonary artery could not, of course, be constricted by the pressure of the auricle. That this is so, Dr. Russell maintains; and he contends that the excessive pressure (if I may so term it) in the left auricle is due to a regurgitant current being propelled into it (the left auricle), by the left ventricle, through the mitral orifice.

The explanation which he gives is as follows: "Owing to the tension in the pulmonary vessels, the fulness of the auricle must at all times be increased; in fact, the blood coming from the lungs pours into it as rapidly as it empties itself into the ventricle, the result being that its cavity, although enlarged by sharing in the debilitating influences in existence, is already full before the ventricular systole not only prevents further relief to the tension in the pulmonary circuit, but throws back upon it (the auricle) the blood embraced by the segments of the mitral valve as they swing to close the auriculo-ventricular orifice, as well as the column of regurgitant blood from the ventricle." (*Edinburgh Medical Journal*, August 1882, p. 134.) And again, "The question, then, arises as to what force may act through the left auricle, and is it greater than that of the right ventricle? Take mitral regurgitation: there a stream, at times of considerable magnitude, passes back into the auricle with all the force exerted by the systole of the left ventricle; and, as we cannot assume the left auricle to be a vacuum ready to receive this regurgitating stream, there must be a backward flow through it, nearly as much greater in force than the flow in the pulmonary artery as the systole of the left ventricle is greater than the right.....The next question to consider is, whether the tension in the left auricle is greater than that in the pulmonary artery at the moment of ventricular systole."....." When it is remembered that there is not only a column of blood sent with the force of the left ventricle into this tense auricle, but also that the mitral cusps, instead of being held well down into the ventricle and presenting a concavity towards the auricle, so as thereby to relieve the auricle and 'make room for the returning blood without hindrance,' must, on the contrary, owing to the enfeebled state of the papillary muscles, be allowed greater latitude of movement towards the auricle, it must be granted that the auricular tension bears a fixed relation to the strength of the left ventricle, and is therefore greater than that in the pulmonary artery." (*Ibid.*, November 1882, pp. 411, 412.)

In opposition to this theory, Dr. Balfour maintains that "it is absolutely impossible that the left auricle can ever so compress the pulmonary artery;".....and "that it is obviously impossible that the circulation should be carried on under these conditions." It is unnecessary, I think, to detail the facts and arguments with which Dr. Balfour supports these objections, and the facts and arguments which Dr. Russell urges in reply, for (granting for the moment that Dr. Balfour's objections are invalid) I maintain that, even if such excessive intra-auricular pressure could occur, it certainly is not present in the early stages of chlorosis—the condition which we are now considering. Such excessive intra-auricular pressure could only be produced by extremely free mitral regurgitation. In all cases of mitral regurgitation, there is probably a considerable direct obstacle (both valvular and muscular), in addition to the blood-pressure in the auricle, opposed to the force of the left ventricle; while there is no direct obstacle, but only the blood-pressure in the pulmonary artery, opposed to the force of the right ventricle. We cannot, therefore, with fairness say, because the left ventricle is much stronger than the right, it will in mitral regurgitation raise the blood-pressure in the left auricle higher than the right ventricle will raise the blood-pressure in the pulmonary artery. The right ventricle, though much weaker, is acting (more especially when the tricuspid is sound) at an immense advantage, and undoubtedly propels a much larger quantity of blood into the pulmonary artery than the left ventricle propels (in any ordinary case of mitral regurgitation) into the left auricle.*

Now, there is not sufficient evidence, I maintain, to prove that any regurgitation through the mitral valve occurs in the early stages of chlorosis and anæmia, much less the free regurgitation which would be required to produce the excessive pressure in the left auricle, which Dr. Russell's theory requires.

The only evidence which Dr. Russell produces in favour of mitral regurgitation in the early stages of chlorosis, is an accentuated pulmonary second sound. "It will not be seriously denied here," says Dr. Russell, "that in these affections there is a relative insufficiency of the mitral valve, the result of a debilitated and relaxed condition of the cardiac muscle, including the musculi papillares. This insufficiency, however, is not always evidenced by a *bruit* at the apex, the point at which mitral *bruits* are ordinarily audible; but regurgitation is assumed† from the accentuation of the pulmonary second sound, and from the presence of a systolic murmur in the pulmonary area." (*Edinburgh Medical Journal*, August 1882, p. 130.)

I have already given in detail the facts and arguments which are, in my opinion, opposed to Dr. Balfour's view; and have previously stated that the presence of a systolic murmur in the second left interspace is not, in my opinion, *per se* (I may add, nor when conjoined with an accentuated pulmonary second sound), sufficient evidence of mitral regurgitation. And Dr. Russell himself maintains that this systolic murmur is in reality produced in the pul-

* The reader is referred to the original papers. See the *Edinburgh Medical Journal*, August and September 1882; and November 1882, p. 409.

† Dr. Russell is here speaking of Dr. Balfour's theory. He himself believing that the systolic basic murmur is not mitral, but pulmonary.

monary artery. According to his own showing then, the only evidence of mitral regurgitation which remains is accentuation of the pulmonary second sound. This, I maintain, is insufficient evidence, and I feel obliged therefore to dissent from his theory.

Since this lecture was written, Dr. Russell seems to have modified the view which he originally proposed, inasmuch as he no longer insists that the increased tension of the left auricle (which his theory necessarily supposes is present during the first part of the ventricular systole) is due to mitral regurgitation. In the passage quoted in the foot-note, from his instructive paper in the JOURNAL of June 2nd, he suggests that the increased tension of the left auricle may be due to the incomplete emptying of the left ventricle during its systole, and consequent imperfect relief to the full auricle.*

But if this view be correct, should we not expect to hear a systolic pulmonary murmur as a necessary accompaniment of all cases of organic mitral disease, in which the pulmonary second sound is accentuated? We can hardly suppose that the distention of the left auricle is great in the early stages of chlorosis; and if a small amount of distention is sufficient to constrict the pulmonary artery and to produce a systolic murmur, should we not *a fortiori* expect to have a systolic pulmonary murmur produced in those cases of mitral stenosis, for example, in which we may legitimately conclude that the distension of the auricle is still more considerable? It may, of course, be argued (1) that a systolic murmur is sometimes heard in the pulmonary area in cases of mitral stenosis; and (2) that in those cases of mitral stenosis in which a systolic pulmonary murmur is not present, the left auricle is not dilated. In support of the latter proposition, it may be urged that in mitral stenosis the cardiac muscle is not degenerated, as it is in the cases of anæmia, and that the left auricle, for a time at all events, is able to resist the excessive blood-pressure in its interior, and does not dilate. But looking at the matter from the broad ground of clinical experience, most observers will, I think, agree that cases (such as cases of mitral stenosis, mitral regurgitation, fatty heart, etc.) are frequently met with in which the left auricle is quite as much distended as we can legitimately suppose it is in the earlier stages of chlorosis, and in which there is no pulmonary systolic murmur. If this general proposition be granted, we must of course conclude that the pulmonary murmur met with in the earlier stages of chlorosis, is not produced by the pressure of the distended left auricle upon the pulmonary artery, but that it is due (either wholly or in part) to some other condition or conditions.

For these reasons I am unable to accept Dr. Russell's theory; and there are (as I have already pointed out in detail), in my opinion, grave objections to Dr. Balfour's view. I am compelled, therefore, by the method of exclusion, to fall back upon the purely pulmonary theory and to ask whether there is any conclusive reason why the murmur should not be generated in the pulmonary artery itself, irrespective of any constriction by the pressure of the auricle, such as Dr. Russell's theory implies.†

Dr. Balfour argues that the murmur cannot be pulmonary:

(1.) Because "there are—in chlorosis—no causes of murmur operative at the pulmonary orifice which are not at least as active at the aortic opening, so that a pulmonary murmur would certainly be accompanied by an aortic murmur also, and the latter would, of course, be propagated along the course of the aorta, and more or less distinctly into the carotids." (*Edinburgh Medical Journal*, October 1882, p. 294.)

This argument does not, however, appear to be conclusive.

In the first place, we might as well say, in opposition to Dr. Balfour's own view—the auricular theory—that the murmur cannot be mitral, because there are no causes of murmur operative at the mitral orifice, which are not at least as active at the tricuspid opening, so that a mitral murmur would certainly be accompanied by a tricuspid murmur; and since it is generally admitted, and as Dr. Balfour himself allows in the passage quoted below, that the tricuspid murmur is of later occurrence than the mitral murmur, Dr. Balfour's auricular theory falls to the ground. Dr. Balfour says: "Shortly after the appearance of the primary hæmic murmur, a tricuspid murmur and jugular undulation are found to be developed. This is naturally accompanied by a pulmonary and also by an aortic systolic murmur, the active cause in the production of both these murmurs being the large blood-waves sent on by the dilated and hypertrophied ventricles, as was first, I believe, pointed out by Beau." (*Edinburgh Medical Journal*, October 1882, p. 295.)

In the second place, I am not prepared to admit, unconditionally, that there are no causes of murmur operative at the pulmonary orifice, which are not at least as active at the aortic orifice. It appears to me quite possible that such causes may exist in the respective conditions of the two ventricles; in the respective resistances which the arterial blood meets with at the orifice of the aorta and in the systemic circulation, and which the venous blood meets with at the orifice of the pulmonary artery and in its passage through the lungs; and in the respective physical conditions (thickness of coat, relationship to the chest-wall, etc.) of the aorta and pulmonary artery.

In the third place, I believe that aortic murmurs are sometimes present in the early stages of chlorosis. Possibly they would be more frequently audible in such conditions, if it were not for the fact, that they are so soft and faint as to be obscured at the base by the pulmonary murmur, and of such low tension, and of such little force, as to be inaudible over the course of the aorta and in the carotids.

(2.) Because the point of maximum intensity of the murmur is not over the pulmonary artery at all, but from one to two inches to the left of the sternum in the second interspace. (*Edinburgh Medical Journal*, October 1882, p. 294.) This argument also fails to convince me, for the reasons already detailed. (See p. 1213.)

(3.) Because no murmur of strictly pulmonary origin could possibly be referred to all four orifices in turn, as has been the case with the hæmic murmur; and second, because however singular a murmur of mitral regurgitation in this position may seem to be, its causation is by no means difficult to understand. (*Diseases of the Heart*, second edition, p. 137.)

Neither of these reasons seem to me to exclude the pulmonary hypothesis. The mitral origin of the murmur, which Dr. Balfour supports, would be as effectually excluded by the first reason, as he argues the pulmonary origin is, for no murmur of strictly mitral origin could possibly be referred to all four orifices in turn. The only legitimate conclusion to be drawn from the first reason is, that in chlorosis, murmurs may be generated at more than one orifice, a conclusion which we all allow. The second reason, even if admitted, does not exclude the pulmonary hypothesis, but only shows that a mitral murmur can be heard in the neighbourhood of the pulmonary artery.

I feel compelled, therefore, to differ from Dr. Balfour, for I do not see that any argument which has been as yet advanced, conclusively negatives the purely pulmonary theory.

As I have previously stated, the sudden propulsion of a large blood-wave of abnormal (spanæmic) composition into the vessel, which is possibly dilated, seems to me an efficient cause for the production of the murmur; and we know, as a matter of fact, that in cases of chlorosis these conditions are actually present—the chlorotic heart is unusually irritable, and contracts with unusual suddenness; even in the earlier stages there is some dilatation of the right ventricle; the blood is spanæmic, and in some advanced cases, *i.e.*, fatal cases of pernicious anæmia, the pulmonary artery is dilated.

Dr. Balfour himself states, in the passage I have quoted above, that aortic and pulmonary murmurs do occur in the later stages of chlorosis, and that the active cause in the production of both is the large blood-wave sent on by the dilated and hypertrophied ventricles. Now, if aortic and pulmonary murmurs can be produced by this cause in the later stages of chlorosis, and after, as Dr. Balfour argues, tricuspid and mitral regurgitation have occurred, should they not, *a fortiori*, be produced in the earlier stages, before, as I maintain, there is sufficient evidence of mitral and tricuspid regurgitation, for would not the presence of a leak at the tricuspid and mitral orifices diminish the size of the blood-wave, and so, other things being equal, be likely to interfere with the production of rather than to cause such murmurs?

* "I shall now endeavour to explain the clinical phenomena. The accentuation of the pulmonary second sound, if no lung-affection be present, must be taken as indicating an abnormal accentuation of blood behind the mitral orifice. Whether this be due to the incomplete emptying of the left ventricle during its weakened systole, and consequent imperfect relief to the full auricle, or, from the first, due to a certain amount of regurgitation, or to both these causes, it is unnecessary to discuss here. The fact of accumulation of blood in the pulmonary circuit, including the left auricle, is sufficient for our present purpose, and is warranted by the evidence given by pulsation at the root of the neck, by the course of the external jugulars becoming visible, and perhaps by pulsation appearing over the right ventricle, that a like accumulation is taking place in the right chambers of the heart and the large vessels leading to it."

† There seems to me to be no sufficient evidence to justify the belief, that the murmur heard in the second left interspace, in the early stages of anæmia, is due to tricuspid regurgitation, as Parrot supposed. The mere presence of a murmur in that position, in the absence of the usual signs of tricuspid regurgitation, is insufficient evidence to justify such a belief. It is, however, quite possible that, in the later stages of anæmia, a tricuspid murmur may be heard in this situation, as Dr. Russell supposes.

AN ADDRESS
ON THE
HYGIENE OF ARMIES IN THE FIELD.

*Delivered at the Parkes Museum, June 21st, 1883.**

By ROBERT RAWLINSON, C.B.,
Chief Engineering Inspector to the Local Government Board.

THIS subject is so vast, special, and complicated, that I can only promise to touch the fringe of it, and this in a roundabout way. I will not presume to lay down hard and fast rules by which armies in the field shall be regulated in sanitary matters in the future, but rather describe, in narrative form, some of my own experience, gained during the time I acted as the engineer member of a Sanitary Commission sent out to the army in the Crimea in the spring of 1855.

[Mr. Rawlinson proceeded to read the instructions issued to this committee. It was directed to investigate the condition of every hospital, infirmary, or receptacle for the sick, both as to interior ventilation and cleanliness and external surroundings. At the same time, the fullest powers were given to the Commission to obtain labour and other assistance for the carrying out of their recommendations. Mr. Rawlinson then resumed as follows.]

If General Orders could in all cases have been made applicable, and could have been obeyed, outside comment might cease, and the aid of a specially appointed Sanitary Commission during the Crimean war might not have been needed. It may, however, from experience, be assumed that there never will be General Orders framed sufficient to cover all contingencies; and we may also assume that there will be neglect now and then, from various causes. Some of the links in the chain of regulations will break, and confusion will follow. The General Orders for the army under the command of the Duke of Wellington in the Peninsula, in the Low Countries, and in France, 1809 to 1815, cannot probably be improved upon. Lord Raglan was secretary to the Duke, and he must consequently have been acquainted with the Duke's General Orders; and yet we see the utter confusion into which affairs drifted in the Crimea. The siege of Sebastopol became, however, exceptional.

To whom the failure in the Crimea was due, it is impossible now to say. It was not, however, to any individual, but rather to the absence of an independent sanitary department with the army, and to the want of one home department to direct and control, having also power to order all stores, and to inspect their shipment, and to see that the several stores were so arranged in the transports that they should be available in the order of their necessity, and not to have surgical appliances and medicines placed beneath a massive bulk of ammunition. Blunders of this class do not appear to have been avoided, even in the recent Egyptian campaign. The Royal Commission, which, under the Presidency of Lord Herbert of Lea, inquired into the sanitary state of the army after the Crimean War, resulted in Lord Herbert's regulations. One of these regulations provided that a sanitary officer should be attached to the quarter-master-general's staff. To this officer was to be committed the duty of examining into the sanitary condition of buildings selected for occupation by troops, and into the sanitary condition of towns or villages about to be occupied; he was also to make recommendations for organising a proper sanitary police, to preserve cleanliness, and for the removal of nuisances. But it will be seen that practical lessons, however well taught, and also that subsequent official inquiries, however ably conducted, have led up to very little that has proved to be really useful when the country again enters upon war. The army medical arrangements had drifted back into the old groove, the old forms of blunders and the old stories are repeated—namely, that the existing regulations are supposed to be, if not perfection, all that is requisite. In Government departments, I am sorry to say, that there is not, on all occasions, due respect shown to the feelings of permanent officials; and, in our case, we were not put into communication with the heads of the permanent medical department before leaving London, which, no doubt, gave offence, but for which the members of the Commission were in no sort of way answerable.

[Mr. Rawlinson proceeded to state that, when the Sanitary Commission arrived at the seat of their labours, they found the buildings used as hospitals in an unsanitay condition, the sewers of the great hospital which were foul, were frequently and thoroughly flushed, and their lower ends were covered to prevent the wind blowing up them into the building; the carcases of a certain number of animals which lay in the neighbourhood of the hospital were removed and buried, and many handcart-loads of filth were also removed. The work of scavenging was carried on systematically until the hospital ceased to be needed, owing to the departure of the troops.]

Mr. Rawlinson then continued as follows: The Blue Book Report (1883) on the organisation of the Army Hospital Corps in Egypt reveals many blunders of a type as old as the service, such as confusion in transmitting materials for use, and something worse than confusion in contract supplies, both of materials and of provisions. Can there be no better service in future? War is a blundering, extravagant, and destructive business under any aspect; and the best framed regulations come to be disregarded, and, even where adhered to, they may at times be the worst possible extravagance. The Egyptian Report, 1883, most fully sets forth the confusion into which the regulations fell, and the suffering which resulted. Detachments of the army had, however, to be removed suddenly, and the *impedimenta* necessary for use could not follow as rapidly. Then, provision was made for contingencies which never happened, and, most fortunately for the men, the war came to an abrupt and unexpected termination.

Men in war are loaded like beasts of burden. They have to march under their *impedimenta;* the whole body may be bathed in perspiration; feeding must be irregular, and water may be absent or may be polluted, and in one night's bivouack the body may be chilled, so that fever to a large proportion of the men must be the result. That there must necessarily be great loss of human life in actual war will be self-evident to anyone who knows the least that is possible about the subject. No forethought can fully guard against excessive changes in weather. The fighting portion of a soldier's life is of short duration. It is not in battle that armies are destroyed, but on the field, in camp, and in hospital.

Any buildings to be used by sick or by broken-down and wounded men may, as taught by Sir John Pringle, have the windows removed to prevent injury by polluted air, and any improved apparatus provided for water-supply may be brought into use. Food in a concentrated and portable form may also be served out, and the horrible salt junk and ration-pork be in future dispensed with. A spirit-ration is liable to be most injurious in several ways, and should not be used except as a medicine.

For water-supply, light carts of steel, similar in form to watering-carts in towns, may be of great utility, as one horse or one mule would easily draw to a distance of one or two miles from 100 to 200 gallons of water, to be served out to the men in the positions occupied. Portable water-filters can also be easily arranged, to be similar in form to the light steel water-carts; so that water for hospital purposes may be filtered even in its transmission.

Where an army for a time becomes stationary, a sanitary corps will find ample work to do in improving roads, in surface-draining, in scavenging, and in ventilating any permanent buildings used as hospitals; and if the service will permit the use of working parties, enormous benefits may be secured to entire force in the field. A skilled sanitary officer will be a man of many expedients springing from close and intelligent observations; and, in his works, he will strive to save labour. Every country has its character impressed on its surface contours, and these the geologist and engineer will read at a glance. Wide and flat areas will indicate, as a rule, a soft subsoil; a steep gradient will indicate a subsoil of some hard material, such as gravel; rock will generally show above the surface; where there are mountains, there will usually be, at the base, mounds of material, particles weathered from the rock and admirably suited for road-forming, as it may be excavated and sorted so as to save the labour of quarrying and breaking for road-making. In future wars it is admitted that picks and spades may require to be used as much, if not even more, than rifles. All officers will, therefore, have to learn something of engineering. If soldiers can use pick and spade to provide earthwork shelter from rifle-bullets, they may also use these implements for sanitary purposes. A working army will be more contented if they find that their labour tends to their safety and comfort. Idleness is an incentive to vice, and leads to insubordination. A modern army will be a very different body of men from those forming the Peninsular army under Wellington, and must be treated very differently. Flogging is for ever done with, and it is most disgraceful to have any attempt at its renewal.

The General Orders of the Duke of Wellington are considered good

* The Address has been somewhat condensed.

examples; but the Duke, in the Peninsula, ever did something more than unceasingly refer to even to his own General Orders. His personal observation was incessant, his perceptions rapid; and consequently his instructions, outside any order-book, were practical, being suited to the conditions and requirements of place and time. The suggestions of the great Duke point to something to be done by commanders of regiments outside of cut and dried formal regulations.

I think it may be gathered from my remarks, that I do not set myself up as a practical teacher of army hygiene in the field. The purport of this paper is rather to show that, to preserve an army in health, either in barracks or in the field, will, as in the past so in the future, require active intervention on the part of the commander-in-chief, of the generals, and of the colonels and officers, outside any printed regulations, however full and ample. As the Duke of Wellington explained on one occasion, to the House of Lords, that martial law was no law other than the will of the commander-in-chief; so, in future, the commander-in-chief, during a state of war, must have the power to relax any published General Order or regulation if necessary, to make better provisions for the army. A sanitary staff, as provided for by the late Lord Herbert, distinct and separate from both Commissariat and Army Medical Departments, should be with and part of the army, under the direct control of the commander-in-chief, who shall have power to order and expend in this service as he may think necessary, that is, that any amount of extraneous labour may be provided and paid for which he deems necessary, and the country in which he is can supply.

The army in the Crimea was saved in a great measure by voluntary efforts from home, by relations and the general public shipping out warm clothing, by Florence Nightingale and her lady-nursing, by distribution of food suited to sick men in hospital, and by extra voluntary furnishing of medical comforts, and also by the labours of the Army Sanitary Commission. The expenditures by all these parties were, however, mere fractions in the gross cost of the war; if these entire extras had been provided for, it would only have amounted to about half a week's expenditure of the cost of the war.

In touching on this question of army hygiene, even at this day, I know that I am venturing on disputed ground. But that enormous improvement took place in the British army in the Crimea from some cause or causes, after the advent of the Sanitary Commission, cannot be disputed; but, officially the credit has never been accorded to that commission. The one great fact was, however, made unmistakable, namely, that from the spring of 1855 the health and condition of the British army began to improve, until, by the autumn of that year, the entire force in the field was in a state of health, and was under a less rate of mortality than when in barracks at home, and this continued until the close of the war. The French, the Sardinians, and the Russian soldiers, however, knew of no such abatement of camp and hospital sickness, the destruction of life having gone on up to the close of the war. Full details may be found in the Army Returns of the several nations, and in a pamphlet by Surgeon-General T. Longmore, entitled "The Sanitary Contrasts of the British and French Armies during the Crimean War." 1883.

Without giving the details furnished by Surgeon-General Longmore, I may state, from pp. 17, 18, that the British army in the first winter had 2,286 deaths from fevers of all kinds; in the second winter, the number was reduced to 129. The reduction in the deaths from typhus was from 164 to 16. Amongst the French troops, the deaths from typhus were 90 the first winter, 10,278 the second winter. The French had no sanitary commission, the hospitals remained unscavenged, unventilated, and their hospital drains unimproved, the result being excessive overcrowding, until men and doctors alike perished; the British hospitals being absolutely free from typhus cases. Taking these results into account, Surgeon-General Longmore states: "It is well that the practical lessons in sanitary science afforded by the events of the Crimean War, should not be allowed to pass out of mind." In these remarks I cordially agree.

THE EMBANKMENT VENTILATORS.—The London Trades' Council have issued a circular to the 14,865 working men members in the London district, calling their serious attention to the recent action of Parliament, and especially the Metropolitan Board of Works, "in seeking to deprive the travellers and the workmen permanently employed in carrying on the traffic of the Metropolitan District Railway, of the ventilators recently constructed there for the advantage of the public using the line." A committee has been formed, with Mr. G. Anderson, M.P., as chairman, to oppose the Bill of the Metropolitan Board of Works for the removal of the ventilators.

ABSTRACT OF LECTURES
ON THE
METAMORPHOSIS OF SUCTORIAL FISHES AND BATRACHIA.

Delivered at the Royal College of Surgeons of England.

BY W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE IX.—THE METAMORPHOSIS OF THE BATRACHIANS.

THE change undergone by the Tadpole, in its passage into the Frog, is so great as to merit the name of a metamorphosis. It consists essentially in the reduction and atrophy of a series of provisional embryonic organs, and the appearance of adult organs in their place.

Two pairs of limbs appear nearly simultaneously as small buds, one pair on each side of the body, and anteriorly and posteriorly in relation to its long axis. The hinder pair show themselves at the junction of the tail and body, while the anterior pair are concealed under the opercular membrane. The lungs acquire greater importance, and both branchial and pulmonary respiration go on for some time together. When the adult organs have acquired a sufficient degree of development, the gills are finally entirely lost. There is also a change in the region of the mouth; the horny beak is thrown off, and the mouth loses its suctorial character. The eyes, which have hitherto been concealed under the skin, become exposed on the surface; and at this time the front limbs appear. With these external changes, important internal modifications take place in the mouth, the vascular system, and the visceral arches. A gradual atrophy of the tail occurs, commencing at the apex, and results in the complete absorption of this organ. The long alimentary canal becomes shortened, and the diet of the animal becomes changed from herbivorous to insect-eating or carnivorous. The above are the changes which occur in the metamorphosis of the Frog; but some modifications of this process are found in other Batrachians. Several forms are known which are hatched in the adult form; then metamorphosis seems to take place in the egg, though its exact amount is a matter of doubt. In Pipa, the larva leaves the cells on the back of the mother in a condition closely resembling the adult. The embryo develops a long tail in the egg, which is absorbed before hatching. The larva of Rhinoderma is stated to be without external gills, and appears to be hatched while still in the laryngeal pouch of the male. The tadpole Pseudis paradoxa attains an immensely greater bulk than the adult—a peculiarity which may be a question of nutrition, or may perhaps be explained by supposing that the larva resembles a real ancestral form which was much larger than the existing frog. Another form of perhaps still greater morphological interest is the larva of Dactylethra. Its mouth is not inferior in position, suctorial, and small, but is very wide, like that of Siluroids and Lophius, has an underhung lower jaw, and extremely long tentacle from each upper lip, and possesses no trace of the primordial horny jaws of the ordinary kind. In conformity with these characters, the head is extremely flat or depressed, instead of being thick and high. There are no claspers beneath the chin; the branchial orifice is not confined to the left side, but exists on the right side also. The tail, like the skull, is remarkably chimæroid; it terminates in a thin, long, pointed lash; and the whole caudal region is narrow and elongated, as compared with that of our ordinary Batrachian larvæ. The fore limbs are not hidden beneath the opercular fold. The actual complexity of the organisation of different tadpoles, and their relative size, as compared to the adult, vary considerably; the tadpoles of the toads being the smallest, and those of Pseudis the largest. The external gills reach a very great development in certain forms which are hatched in late larval stages. It seems, however, that this development is due to those gills being especially required in the stages before the hatching. Thus, in Alytes, in which the larva leaves the egg in a stage after the loss of the external gills, these structures reach, in the egg, a great stage of development.

The various features in the anatomy of the Tadpole point to its being a repetition of a primitive vertebrate type, the nearest living approach to which appears to be the Lamprey. The resemblance between the mouths of the Tadpole and the Lamprey is very striking; and many of the peculiarities of the larval skull of the Batrachians, especially the position of Meckel's cartilage and the subocular arch, probably find their parallel in the Lamprey. Th

internal hypoblastic gill-sacs of the Frog, with their branchial processes, are probably equivalent to the gill-sacs of the Lamprey; and it is not improbable that the posterior openings of the gill-pouches of Myxine are equivalent to the original paired openings of the branchial sac of the Tadpole. Though the resemblances between the Lamprey and Tadpole are marked, there is no ground for supposing that the former is closely related to an ancestral form of Amphibian. Of the ancestral stock with a perioral suctorial disc, the Cyclostomata are, according to Balfour, the nearest living representatives; and the resemblances between the Tadpole and the Lamprey are probably due to a common descent from this stock, from which the Ganoids also give evidence of being descended.

ON THE ENTRANCE OF AIR INTO VEINS DURING OPERATIONS.

(The Treatment of the Accident, with two Illustrative Cases.)

By FREDERICK TREVES, F.R.C.S.,

Assistant Surgeon to, and Senior Demonstrator of Anatomy at, the London Hospital.

Among the more serious complications of surgical procedures, and holding a high place in the list of surgical calamities, is the entrance of air into veins during operations. It is well known that in some of the simplest operations about the neck or axillæ this complication may lead to an abruptly fatal result, or may provoke at least a train of most alarming symptoms. The air in such cases is drawn into the thorax through a partly divided vein by the inspiratory movement of the chest, just as air is drawn through the trachea into the lungs. This aspiratory effect of the thorax upon the venous circulation does not appear to extend beyond the vessels of the neck and axilla; and the few reported cases where air is said to have been drawn through wounds in other veins (*e.g.*, the median and long saphenous veins) are open to considerable doubt.

From an examination of the sixty-seven cases collected by Green,* it would appear that the accident has occurred with greatest frequency during the removal of tumours from the cervical and axillary regions. It has been met with also, although in but a comparatively small number of instances, in cases of amputation at the shoulder, in resection of the scapula, in ligature of the subclavian artery, in venesection of the external jugular vein, and, in one instance, during the introduction of a seton in the neck. The cervical veins appear to have been much more frequently the seat of the trouble than have been the veins of the axilla.

That air may enter, it is necessary that the vein be only partly divided. If the vessel be entirely cut across, the limp walls of the divided vein are drawn together during the respiratory movement, and its lumen is more or less entirely closed. This closure is really effected, of course, by atmospheric pressure, and can be well seen in drawing air along a thin India-rubber tube, a part of whose wall has been divided. Veins whose walls are thickened are apt to favour the entrance of air, as are also such vessels as are bound up in inflammatory material, or in the substance of a new growth. The external jugular vein, moreover, is so related to the cervical fascia, and the axillary vein to the costo-coracoid membrane, that those vessels remain patent when cut across. Often the dragging upon the parts, as in removing a tumour, is such as to make some of the veins that have been divided gape and remain open.

Of the symptoms of the accident, it is only necessary to say that the entrance of the air is marked by a very distinct hissing noise, precisely like that heard when air and water are being drawn up by a syringe. The patient, if not anæsthetised, is seized with a sudden terror; there is severe dyspnœa, with hurried and violent inspirations; the action of the heart becomes irregular, and often tumultuous; the pulse sinks; there is more or less profound syncope, and, in some cases, convulsions of a tetanic character, or a violent cough. About two-thirds of the patients so affected die, the majority within a few minutes, the remainder after an interval of hours, or even days. On the other hand, recovery has taken place even after the symptoms have been very severe, and, in nine of the cases collected by Green, no visible ill effects followed upon the accident, although the hissing noise was distinctly heard.

As regards the pathology of the condition, it would appear that the fatal result depends rather upon the rapidity with which the air is introduced, than upon the actual amount that enters, other things being equal.

The air is found to occupy the right auricle, and is often considerable in quantity. It may be found also in the right ventricle, and a little may even have passed as far as the pulmonary artery and its branches.

Death appears to be due to arrest of the pulmonary circulation, and to interference with the heart's mechanism, the mixture of blood and air in the right side of the heart being such as to render the proper working of the tricuspid and pulmonary valves impossible. The dyspnœa is probably entirely due to the sudden interruption in the circulation of blood through the lungs, and, as but little blood can reach the left ventricle, the brain must become anæmic, and thus the condition of faintness be produced.

In connection with the important subject of treatment, a great many very different expedients have been proposed by those who have dealt with the subject. The first step to be taken is obviously to prevent, as promptly as possible, any further entrance of air into the vein.

To attempt to effect this end by ligaturing the vessel—as some suggest—is certainly not advisable. The application of a ligature involves time; and if the operator were fortunate enough to be able to secure the vein during the inspiratory movement, he may have prevented some air from entering, but at the same time he will have certainly prevented its exit during the next expiration. To put a finger upon the wounded vein during inspiration, and remove it during the expiratory movement is certainly a better practice. But with regard to this it must be by no means easy to detect in a large wound the exact vein that is wounded. The hissing sound is the only guide; there is nothing to be seen. One surgeon advises that the finger should be applied at the spot where the bubbles are seen entering the vein. But unfortunately the air does not enter the vessel in the form of bubbles, and, indeed, any bubbles that may be seen represent air that is escaping from the vein. To wait until an expiratory movement had rendered the seat of injury obvious by the issuing of bubbles would not be the best mode of action. The advice of others also that the chest should be so firmly secured as to arrest for a while all respiratory movement, does not appear to be sound. In such a procedure the treatment would seem to be begun at the wrong end.

Without discussing other methods that have been proposed, I think the fact has been somewhat overlooked, that this accident can only occur in what may be termed dry wounds. The wounded vein must be either exposed to the air or be covered by but a slight amount of blood before it can permit of air being drawn into its interior. In a deep wound filled with blood, the accident is impossible, and the strange exemption of tracheotomy wounds from this complication may be in some way due to the free venous bleeding with which they are often associated. It appeared to me that the best precaution to adopt in cases likely to be attended with the aspiration of air into the veins was to have an attendant ready with a sponge filled with water, which could be squeezed into the wound at the first alarm. With such a measure, no time need be wasted in searching for the vein, the entrance of air would be at once arrested, and at the most, a little clean water drawn into the circulation. This plan I adopted in the two cases reported below. Bearing in mind that the wound is most dangerous when most "dry," it will be understood that the accident has often occurred while a tumour has been torn away from its attachments, and also after a deep wound has been well sponged out.

The second step in the treatment of the accident is to endeavour to remove the air that has already entered the chest. This, I think, can be best effected by waiting until the next expiratory movement, and then bringing forcible pressure to bear upon the front of the thorax. The air so expressed bubbles up through the water or blood that still fills the wound, and is obviously unable to re-enter so long as the wound is protected in the way indicated.

The ease with which a large quantity of air was expressed from the chest in the first of the cases below reported, would render it difficult to endorse Mr. Erichsen's statement when he says: "We cannot, by any compression that we may employ, squeeze the air out of the heart." The elasticity of the chest in the young, the superficial position of the right auricle, and the lax walls of that cavity, would appear to be facts opposed to Mr. Erichsen's conclusions.

The suggestion that the air should be sucked out of the auricle through a catheter passed down one of the main veins, cannot be too strongly condemned. One of the strangest proposals current is that artificial respiration should be resorted to in these cases. The

* *American Journal of Medical Sciences*, January 1864, p. 38. See also an excellent article by Marcus Beck in Quain's *Dictionary of Medicine*.

reasons for this proposal are not evident. There is not only quite enough air in the thorax already, but a great deal too much, and the dyspnœa depends not upon lack of air in the lungs, but upon lack of blood. The only probable effect of artificial respiration would be the introduction of more air into the veins.

Lastly, when all the air has been expressed, the wounded vein should be seized (most conveniently with a pair of Spencer Wells's forceps), and either entirely divided or ligatured. This procedure should be adopted during the expiratory movement. By the treatment advocated, the accident may be immediately dealt with, the entrance of air may be immediately arrested, and the parts placed in a convenient condition for the expression of the air drawn in. The following are the cases alluded to. I am indebted to my colleague, Mr. Adams, for being enabled to operate in each instance.

CASE I.—A child, aged 2, was admitted into the London Hospital with severe dyspnœa following the inhalation, some time previously, of a foreign body—a fragment of nutshell. All attempts to remove the substance from the larynx having failed, and the dyspnœa being severe, I performed tracheotomy. The child was very fat and the trachea deep. There was free venous bleeding. Just as the trachea was about to be opened, and immediately after the wound had been sponged out, a hissing sound was heard, and alarming symptoms at one appeared, The child became suddenly collapsed, the pulse became irregular and imperceptible, and the breathing very laboured. In a minute or so the child appeared to be dead. It was impossible to tell the position of the wounded vein, Water was poured into the wound, which was rapidly filling with blood, and forcible pressure was brought to bear upon the thorax. Some twenty bubbles of air at once made their appearance. The wound was kept carefully filled during the next inspiration, and then the chest was again compressed, bringing out more bubbles of air. Guided by the bubbles, the tissues were seized by a pair of clamp forceps about the region of the wounded vein during the next expiration, and the vessel so secured. The parts included in the forceps were cut across, no further trouble occurred, and the child made an excellent recovery. The improvement that followed upon the expression of air from the chest was very marked and immediate. The foreign body was coughed up on the third day after the operation.

CASE II.—In the case of this patient, a man about 50, I was ligaturing the common carotid as a preliminary step to the removal of a large sarcomatous growth of the tonsil. The patient was stout, and had a thick short neck. The tumour greatly embarrassed his breathing. Anticipating trouble, I had a sponge filled with warm water held ready at hand. Before the ligature was applied, a hissing noise was heard, and the wound was thereupon almost immediately filled with water. The patient, in this instance, exhibited no untoward symptoms. The wound being kept filled with water, the thorax was forcibly compressed during the next expiratory movement, and a surprisingly large number of bubbles appeared in the wound. The tissues were seized, and the vein clamped as in the previous case. No further trouble occurred. The operation was completed, and the patient left the hospital greatly relieved. It may be added that, in both cases, the patient was under the influence of an anæsthetic.

ANEURYSM OF THE POPLITEAL ARTERY: DIGITAL COMPRESSION: CURE WITHIN NINE HOURS.

By ARTHUR E. BARKER, F.R.C.S.Eng.,
Assistant-Surgeon to University College Hospital, and Assistant-Professor of Clinical Surgery at University College.

THE following case may serve to encourage many of us whose faith in the advantages of digital compression, as compared with other modes of treating aneurysm, has perhaps begun to languish of late. When the case first came under my notice, I am free to confess that I was not inclined to digital compression. Experience and observation had impressed me rather unfavourably as regards this method. It appeared, on the whole, to possess few advantages over immediate ligature of the femoral artery, now that the latter operation is deprived of almost all its dangers by the antiseptic treatment. It seemed, further, to have several disadvantages not inherent in the latter method, such as more discomfort to the patient and greater loss of time, together with the uncertainty of cure and the difficulty of carrying it out fairly. As to the treatment with Esmarch's bandage, I confess to being still less favourably impressed by it than by either of the methods mentioned, after trying it, and having seen it in the hands of others. I think, too, that these views were shared generally by my colleagues, who saw the case; and we all expressed the opinion that, in our own persons, we would rather submit to ligature of the femoral at once than undergo the more tedious, painful, and uncertain methods alluded to. The patient, however, was a nervous, and, in these matters, somewhat timid man, who could only by much persuasion be induced to enter the hospital; and then only on condition that digital compression, of which he knew something, should be given a thorough trial. I therefore yielded to his wishes, and the result has been above all my expectations.

The clinical notes of the case are as follows.

J. H., aged 42, a sergeant in the Volunteers, served many years in the regular army, and was discharged at the end of his service in good health. In September 1882, while drilling, he caught his foot in a drain and stumbled, giving his right knee "a twist." He was able to continue his drill, but felt a pain in the knee from that time on, most marked when he attempted to kneel at the rifle-range, so that he was soon obliged to give up this practice altogether. This continued, and he was treated elsewhere in various ways for rheumatism, etc., until he presented himself among my out-patients, at University College Hospital, in April 1883. He then complained of vague sensations and pains in the right thigh and calf, and pointed out an erythematous rash over the same area, which, he said, had recently appeared. This rash I set down to the prolonged use of arnica lotion. On his next visit, about a week later, the rash having now disappeared, he drew my attention more closely to the knee, and gave the more definite history as above. I then examined the ham, and at once detected the aneurysm. He stated that his health-sheet was a good one when he left the army, but later we found scars on the genitals and legs, and obtained a history of treatment for venereal disease, almost positively constitutional syphilis. He now, however, appeared strong and well preserved, but had a marked arcus senilis. Nothing abnormal was found in the thoracic or abdominal organs, and his urine was normal.

The aneurysm appeared about the size of a hen's egg, and gave the impression of being of flattened saccular form, from the character of the pulsation and the shape of the area of the latter, which might have been about covered by the palm of the hand. The stroke in the sac could be easily controlled by pressure with the finger on the vessel above. The skin over the tumour was unaffected.

On admission into hospital, I directed the patient to remain in bed, enjoined quiet in every way, and regulated his diet. Then, on April 20th, volunteers having been obtained from among the students, digital compression was commenced at 4.15 P.M. The inner aspect of the thigh had been previously washed, shaved, and then dusted with French chalk. The students were told off in pairs, each pair to be on duty for two hours, and each one of these to compress for ten minutes at a time, while his companion observed the state of the aneurysm, and rested his hand. The pressure I directed to be made with the thumb of one hand, aided by the finger of the other hand, but without any weight or compression. The spot of compression was to be varied a little with each fresh hand, so as to prevent undue tenderness, but enough force was to be employed to completely control the flow of blood. Nothing could exceed the zeal and care with which the students threw themselves into this work, and to this, no doubt, the very successful issue is in a large measure due. The patient lay upon his right buttock, with both thigh and leg slightly flexed, the pressure being applied on the artery a little below Poupart's ligament. In this way, compression was maintained more or less completely, but without any change in the state of the aneurysm until midnight. Then the pulsation was observed to become much feebler, and soon afterwards had ceased entirely. This consolidation of the contents of the sac was accompanied by some cramp-like pains in the leg; but, beyond this, the normal condition of the limb seemed but little disturbed. At no time did it feel cold or numb, or require wrapping up. When the pulsation had quite ceased, I only directed that pressure should be continued for another hour, and that the patient should wear until morning a bag of shot over Poupart's ligament; also that he should have a little morphia to obtain a good sleep. Towards the end of the compression, he was becoming rather uncomfortable, but after the hypodermic injection he obtained some rest, and, when I saw him in the morning, looked very well, though rather tired. The aneurysm was then quite solid, and already considerably reduced in size. The limb was sensibly cooler than its fellow, but was otherwise normal, except for a trifling numbness in one spot in the calf. No arterial stroke could be felt anywhere below the knee.

There is little to be noted after this, except that the solid mass in the ham contracted steadily, and the patient was very comfortable, leaving hospital on the ninth day from the cure. I have seen him

often since, and for the last time on May 31st. He is now walking about freely, and has nothing, except a trace of the same numbness in the calf, to indicate that anything had been the matter, the aching in the knee having disappeared. The tibials cannot yet be felt to pulsate, but the warmth of the limb is hardly at all different from its fellow. On the whole, it is difficult to imagine a better result in every way.

ON PULMONARY CONSUMPTION AND INFECTION.*

By WILLIAM DALE, M.D.Lond.

In presuming to address a few remarks to you on certain new views on pulmonary consumption as a basis for discussion, I hope to learn far more than I profess to teach. I shall therefore attempt nothing further in this paper than the recalling these views to your remembrance, with some brief comments thereon as I proceed; and, since they occupy so large a space in current medical literature, and have been adopted—I think hastily adopted—by many of our medical brethren, their introduction here cannot be considered out of place.

First, then, I judge we must admit that the parasitic micro-organism bacillus is almost invariably present in pulmonary consumption (Koch, Dr. Theodore Williams), notwithstanding that its nature has been questioned, and mainly, I believe, on the ground that aniline dyes, to whose aid we owe its discovery, are, chemically, very uncertain bodies.† But, on the other hand, our present knowledge does not, I submit, entitle us to the inference that this bacterian form is the essential cause of that disease,‡ for it has been well said: "It is quite possible that the evolution and involution of the bacteria in the sputa may proceed without there being necessarily a total causal relationship between the germs and the disease, just as the noise from a cataract may increase or decrease merely as a companion to the varying mass of water rolling, without having anything to do with the cause of the variation in the quantity of water."

Further, Dr. Koch professes to have inoculated this bacillus separately, and produced tubercle in the rodentia; but one may fairly question if he has done so, for other careful observers have made trial of the cultivations and inoculations after Koch's method, and have utterly failed.§

Again, for many years, it has been believed that, by the inoculation of brain, cheese, pus, putrid liver, etc., and even inorganic substances, similar results have been obtained as when tubercle itself was used.

In a letter of mine inserted in the *Medical Times and Gazette*, and transcribed into Braithwaite's *Retrospect*, vol. 86, p. 104, the question is thus raised. "It has long been known that certain bacteria, vibrios, etc., find a proper nidus in the degenerations of tubercle; but they have always been regarded as effects and not causes of pulmonary consumption, so that, in Koch's finding a parasite 'vegetable or animal?' in tubercular matter, there is no new thing, though it may have a new form, and has certainly been honoured with a new name.

"Further, it is well known to physiologists and others who have given special attention to the subject before us, that brain, pus, cheese, putrid muscle, etc., when inoculated, will produce morbid results in various organs, which cannot be distinguished from those produced by the inoculation of tuberculous matter. How, then, can the morbid products of the inoculation of tubercle be considered as in any sense specific?"‖

I have nothing to add to these words, for I contend that the questions they raise are still moot questions; and that, despite the alleged discoveries of Villemin and Koch, we cannot at present say that parasitism is the essential cause of pulmonary consumption. But the chief problem on the question of infection, I judge, to be this: let it be granted that tubercle will produce tubercle in the rodentia, and perhaps in other animals by inoculation, and that none of the substances mentioned above will do so, does this prove that consumption is infectious? I think not; for cow-pock produces cow-pock by inoculation, and in no other way; that is, in no sense can it be said to be infectious. An analogy, though more remote, may be seen in the poison of the snake and the rabid dog.

Finally, it appears to me that both the strong heredity in consumption, and clinical observation, are against the view that it is an infectious disease. For instance, when a family of fine-grown children, to the number of six or seven, or more, living apart and often far separated, are cut off by this disease—say at ages from fifteen to twenty-five—with terrible certainty, all being the victims of an hereditary predisposition or taint, to tell me that this fatality is the result of bacilli, either latent in the system or received from without, is simply to mystify my thoughts of hereditary descent in this matter, and not to enlighten me.

I believe, further, that the question as to the infection of consumption can be answered in no other way than by clinical observation, and that at present it must be answered in the negative; and, moreover—a point of some importance—the most enlightened people of the present day disbelieve it.

An instructive investigation on the subject was undertaken lately by the Cambridge Medical Society; and to the question, "Have you known any instances of consumption being communicated from one person to another?" not only did almost the whole of the members give a negative reply, but the principal medical men of Cambridge—men of large experience—stated, as a comment upon these replies, that they had no experience of the infection of consumption to record. At the same meeting, Mr. Lawrence Humphrey quoted some statistics of the Brompton Consumption Hospital, which I have also seen and quoted elsewhere, referring to the honorary physicians, house-physicians, matrons, dispensers, nurses, and attendants generally, which showed that these attendants were as free from consumption as those of any general hospital in the kingdom, and proved, I think beyond dispute, that the disease cannot be infectious, in the ordinary sense of the term; and truly, if experience on this subject is to be accounted of any value, it points rather to the dread predisposition to consumption, which so widely prevails, as the one essential pre-requisite of the disease, and not to the micro-organism in question—not, in fact, "to the theory which (as Dr. Pollock observes in the Croonian Lectures of this year) has its avowed basis in experiment, and not in clinical observation, and which is yet rather the fruit of the laboratory than of the hospital."

* Read before the East Anglian Branch.

† Dr. Schmidt, of New Orleans, asserts that bacilli are merely fatty crystals soluble in boiling water. Rollin Gregg suggests that they are really only fibrin filaments.

‡ "Bacillus of Tubercle," *Medical Times and Gazette*, November 18th, 1882. Discussion at Medical Society of London, January, 1883.

§ Professor Feltz of Nancy in a note to the *Gazette Hebdomadaire*, March 2nd, 1883, etc.

‖ Dr. Satterthwaite of New York says: "By inoculation of indifferent substances, artificial tuberculosis may be produced" (*Medical Times and Gazette*, January 20th, 1883). See recent controversy between Spina and Stricker on the one side, and Koch on the other; also the experiments of Burdon Sanderson, Wilson Fox, and Andrew Clark, against Villemin, in medical periodicals some years since.

GUNSHOT-WOUND.

By D. G. CRAWFORD, M.B.,
Surgeon, Indian Medical Department.

The patient, Naik (corporal) Ram Sing, was brought into hospital about 5 P.M. on April 6th, 1883, suffering from a gunshot-wound, and was seen within ten minutes.

History.—He was out shooting near the old fort, about two miles from Delhi, with a havildar (sergeant) of the same regiment. The latter states that he was some distance off, and did not see the gun fired, but, on hearing the report, looked round, saw the patient lying on the ground, and ran to help him. The patient states that he was moving about under a tree, looking up into the branches, trying to get a good sitting shot at a dove which he saw, when his foot caught in a root or stone, and he fell, dropping the gun, which was on full cock, and went off. Five pellets struck him, inflicting the following wounds.

(*a*) One pellet entered the thorax, over the eighth left rib, one inch external to the mammillary line.

(*b c*) Two others entered the abdomen, one above the other, in the same line, three inches lower down.

(*d*) One pellet entered the left arm at the outer side of the lower end of the belly of the biceps, half an inch above the bend of the elbow in the flexed arm. At the opposite side of the arm, two inches internal to the middle line of the supinated arm, was a large bruise, but no wound of exit.

(*e*) One pellet entered the right forearm over the radius, half-way between wrist and elbow.

The gun was loaded with, I think, No. 6 shot. With the help of his companion, he walked back to the regimental hospital, a distance of at least two miles.

When seen, immediately after admission, he was much excited, tossing about from side to side, and complaining of pain in the

abdomen, which was somewhat swelled; but was quite able to give a connected account of the accident.

Turpentine stupes were applied to the abdomen, and thirty minims of tincture of opium given. At 8 P.M., an enema was given, and he passed a small stool without blood. At 12 P.M., he passed another small stool, dark, mostly fluid, and containing blood. His stools after that night were normal and regular; they were examined for shot for several days, but none was found. His temperature the evening of the accident was 100.4°, the next night 99.4°, and afterwards normal.

I think it is probable that the shots which struck the abdomen penetrated the splenic flexure of the colon, as shown by the presence of blood in the stools. They must have struck the body with considerable force, for that which struck the left arm had very nearly penetrated it, and the gun must have been close to him when it went off. The patient was a heavy fat man, with a great quantity of subcutaneous fat on the abdomen, to which circumstance he probably owes his escape from worse consequences.

On the sixth day after the accident, the shot which struck the left arm was found under the skin in the centre of the above-mentioned bruise. On the tenth day, the shot which struck the right arm was found under the skin, one inch and a half external (in the supinated arm) to the wound of entrance.

The patient recovered without a bad sign, and asked to be allowed to return to duty on the seventh day after the accident. He was, however, kept in hospital for about a month, and finally discharged on May 8th, the thirty-second day after the accident.

REMARKS.—Apart from the fact that the patient received two shots in the abdomen and one in the thorax, fired from a distance which can hardly have been greater than one yard, and recovered rapidly and easily, this case is, I think, medico-legally interesting. There is no reason to doubt the patient's story, but I should hardly have thought it possible that a man could shoot himself with his own gun* in both arms, as well as in the abdomen and thorax.

TO WHAT EXTENT DOES THE INFLUENCE OF POSITION DURING THE ACT OF MICTURITION AFFECT THE FORMATION OF URINARY CALCULUS?

BY RAGLAN W. BARNES, M.K.Q.C.P.,
Army Medical Department.

To many medical officers serving in India, who have the opportunity of seeing the practice in the civil hospitals and dispensaries up country, it must have been a matter of surprise to note the great number of cases of urinary calculus that apply for assistance, to say nothing of the much greater numbers whose caste, prejudice, and fear of operative interference prevent our seeing; and, although by no means an original idea, it has struck me after operating, and seeing great numbers of cases operated on, that the position of the native's body during micturition has more to answer for in the formation of stone than we are led to suppose. The almost universal position of the native of India during the act of micturition is that of "squatting" on his hams, and from that position he never rises till micturition is finished.

Now when we come to consider the diet, principally rice, highly seasoned food, such as hot curries and "dal" (a highly nitrogenous substance, eaten by the native with avidity), and the quality of the water with which this is washed down, it must be a matter of very little surprise to us to find how favourable a subject he is for the formation of calculus; but when we find, added to this, a distended bladder, and a position assumed in micturition which, to a certain extent, paralyses the action of the muscular organ he wishes to empty, I think we may assert that he does his best to bring about the disease which we are called on to combat. It is plain that, in the majority of cases, he does not empty his bladder, and that a certain amount of urine is left, to set up by its irritating action some vesical inflammation, followed by the deposit of sabulous matters, and the formation of calculus, which generally takes the form of oxalate of lime, or, more rarely, uric acid or urate of ammonia.

I have searched in vain to see if this subject is mentioned in any text-book as a source of stone; and the question arises, if our surmises are correct regarding the influence of position, what measures must be taken to induce our Aryan brother to see the error of his ways, and to assume a position more upright and less hurtful?

Perhaps, as the march of civilisation proceeds in India, he may become morally and physically more upright; but, till that happy day arrives, I am afraid we shall not be able to hang up the lithotomy-knife, and allow the forceps to rust on the wall.

* The gun did not burst. It was a muzzle-loader, and old, but its barrels were not particularly worn.

THERAPEUTIC MEMORANDA.

NOTE ON DISINFECTANTS.

MOST practitioners must have often realised the inefficiency of disinfectants in allaying the fœtor of cancerous ulcers, an annoyance which sometimes troubles patients even more than the pain, or the thought of death.

I have used the whole round of disinfectants for cancerous ulcers, but all have failed in allaying the fœtor, and keeping the ulcer clean. The disinfectants tried were carbolic acid, sanitas, terebene, resorcin, creasote, boroglyceride, chloride of zinc, charcoal, etc. After failure with these, I tried a saturated solution of hyposulphite of soda, added to an equal quantity of water, and found it exceedingly efficacious. The ulcerating surface was well syringed and washed with the solution, and was then covered with rags steeped in the solution. The granulations were kept clean, and the fœtor was well kept under.

Most disinfectants seem to lose their virtue after a few days' application, but I have used this one for months in the same patient with continuous good effects. It is cleanly, has no smell, does not stain, and is very cheap. I venture to recommend it to the favourable consideration of your readers, feeling sure that they will not be disappointed if they try it, and I should be glad to hear the results of their experience. W. E. BUCK, M.A., M.D. (Cantab.)

CANNABIS INDICA.

HAVING reference to the effects of this drug, to which attention has been drawn by several writers in recent numbers of the JOURNAL, the experience I have just had in the case of a lady, aged 60, of rather peculiar temperament, in relation to the action of medicines, may be worth recording. She considers herself unable to bear tonics; but, as she was suffering from severe pain of what I considered a rheumatic nature, in a state of nervous exhaustion, I ordered the following: ℞ Ferri redacti gr. j; ext. cannabis Indicæ gr. ½; fiat pilula ter die sumenda.

About three hours after taking the first pill, she felt so giddy, that she was obliged to lie on the sofa; her fingers became icy cold and benumbed; she heard noises as though omnibuses were driving past, and she had visions of objects passing before her eyes; she felt drowsy, and, as regards her brain, much as she had done after taking opium when sleep had not followed. All these phenomena passed away in a few hours, and she attributed them herself to the iron. She wished to try another pill the next day, and she took one, with just the same results. I then enlightened her as to the effects being, in my opinion, due to the Indian hemp, and this ingredient was omitted from the pill. She then took the iron with impunity for several days.

Being herself anxious to test whether the symptoms above described were really due to the Indian hemp, she again took one of the pills (containing a half-grain of it), and, for the third time, the giddiness, etc., followed about three hours afterwards.

I may add that this lady has had relatives who have been martyrs to gout; she has felt none of its manifestations as regards the joints, although I doubt not some of her ailments may be referable to a gouty diathesis. She possesses a remarkably slow pulse, which seldom beats above forty in the minute.

W. M. KELLY, M.D., Taunton.

OBSTETRIC MEMORANDA.

CASE OF HEMIPLEGIA AFTER PARTURITION.

M. F., a primipara, after suffering slight labour-pains for about three days, was delivered on Sunday, November 19th, 1882, of a full-sized male child. The head was in the first position, but somewhat transverse. The uterine contractions were weak and infrequent; and, after an unsuccessful attempt to stimulate them by means of ergot, delivery was easily completed by the forceps. The patient progressed satisfactorily for thirty-eight hours, when she suddenly discovered that the whole of her left side was paralysed. When I

saw her immediately afterwards, I found the left half of the face and tongue, and the left arm and leg, completely paralysed. There was impairment of sensation in these parts, but not complete anæsthesia. The patient complained of dull headache, and was restless. There was neither sudden pain, nor loss of consciousness. The patient continued in this condition for six days, when voluntary movement began to return in the leg and arm, and progressed steadily, until it was completely restored in from two to three months.

There was no valvular affection, and no history of rheumatism; and the patient was strong and healthy.

WILLIAM WHITE, M.D., Hadfield, Manchester.

SURGICAL MEMORANDA.

DETECTION OF STONE IN THE BLADDER OF CHILDREN.

IN the BRITISH MEDICAL JOURNAL of June 23rd, and under the above heading, Mr. Sansome says (speaking of the possibility of detecting a stone by the bimanual examination of the bladder): "Probably others have noticed this fact, but I have not seen it mentioned before."

I would refer Mr. Sansome to the chapter on stone in the bladder, p. 93, in Bryant's *Practice of Surgery*, where one finds the following paragraph. "In children, the introduction of a finger into the rectum facilitates at times the search, and the pressure of the hand above the pubes facilitates the detection of a stone." This subject is also mentioned on p. 1039 on Holmes' *System of Surgery*, 1870. Harrison, in his work on urinary disorders, draws attention to the necessity of examining the bladder, both by means of the finger in the rectum, and by pressure applied to the suprapubic region, though he does not state that they should be employed simultaneously.

Seven years ago, when I was house-surgeon at St. Bartholomew's Hospital, Mr. Luther Holden demonstrated to me, on a case in the ward, the ease with which a calculus could be detected in a child's bladder by the bimanual method. Since that day I have employed this method as a supplement to the ordinary "sounding" in two cases in which I subsequently performed lithotomy.

F. SWINFORD EDWARDS, F.R.C.S., 93, Wimpole Street, W.

TOXICOLOGICAL MEMORANDA.

POISONOUS UMBELLIFERÆ.

IT is not much the custom in this country to seek one's food in the hedgerow or by the roadside. On the Continent, it is much more so; and amongst the plants which find favour as salads, and for the pot, are various umbelliferæ, which are eagerly sought after by the inhabitants of Brittany, Spain, Greece, and Northern Africa. When one thinks of the strong similarity between the various plants of this group, wholesome and poisonous, it is not at all surprising that accidents should happen, and that those who have twenty times gathered and eaten with impunity, should, on the twenty-first, fall victims to poison. The difficulty of selection becomes still greater if it be true, as is alleged, that the same plant is sometimes poisonous, and sometimes harmless, or poisonous on some soils, and innocent on others. The hemlock-leaved water dropwort is an example of the former; it is said to be dangerous when its juice is yellow, yet may be eaten with perfect safety when the juice is white. The energy of the true hemlock (*Conium maculatum*) seems to depend almost wholly upon the soil in which it grows.

A Greek sailor, on the morning of May 31st last, left his lodgings in company with the little daughter of his former landlady, to gather herbs. They went to the ballast-tips to the east of Cardiff, and picked a quantity of "green stuff," which, he said, he had been waiting for all the spring. He took it to his lodgings, boiled it, and ate it with eggs and bread. He offered it to the child, but she tasted and declined it. This was about 9 o'clock in the evening. After making a hearty meal, he took the child home, and, returning about 11 o'clock, went to bed. About one in the morning, his landlady, hearing a noise in his bedroom, entered, and found him on the floor, his room-mate trying to raise him. He had pain in his stomach, and was faint. Between them, he was taken downstairs, and placed upon a sofa, when he died almost immediately, four hours after his supper. At the necropsy, fourteen hours after death, the stomach was found contracted to the size of a small cricket-ball, and full of a partly digested green herb. All the other organs were healthy, except the liver, which was contracted and "hob-nailed." Some of the plant remained unboiled, but was so withered as to be difficult of recognition. Mr. Storrie, however, the Curator of Cardiff Museum, after careful examination, pronounced it to be *Conium maculatum*, which grows very poisonous indeed on the ballast-tips. At the inquest, I showed some of the unboiled leaves to the jury, several of whom stated that they knew the plant well as one that cows would not touch; another said he had only the day before picked a quantity of it for his rabbits, and that they could eat it with impunity. From the locality whence he said he got it, it is most probable that he had gathered the spring hedge-parsley (*Anthriscus sylvestris*), which grows there in great quantities, and is followed later in the season by the *Torilis anthriscus*. Both are eaten with great relish by the Breton onion-boys, and, when stewed with snails, are considered quite a delicacy.

The Spanish Consul here informs me that both in Spain and Tetuan, the umbelliferæ are commonly eaten both raw and cooked, and that occasionally serious accidents happen in consequence. Only last year, several people died in Asturias from this cause. At Plymouth, some three years ago, five foreign seamen, I am told, from the Mediterranean coast, died of eating the *Sium latifolium*, or broad-leaved water-parsnip; and at Glasgow, not long ago, the already mentioned *Œnanthe crocata*, or hemlock-leaved water-dropwort, poisoned, if it did not kill, four or five persons. As the case of the Greek sailor excited considerable interest here, I offer it to you for publication, in hope that it may prove equally interesting to others. I may add that a very experienced veterinary surgeon informs me that it is a fallacy to suppose that cows will not eat hemlock. He says that, when first turned out to grass, they will eat any green thing, and that he has known many accidents arise thence.

JAMES MILWARD, M.D., Cardiff.

PATHOLOGICAL MEMORANDA.

THE PRESENCE OF BACILLUS TUBERCULOSIS IN AN ABSCESS NEAR THE ANUS.

SIX months ago, a young clerk, aged 21, came under treatment for hæmoptysis and other signs of phthisis. After about three months' treatment, he became strong enough to resume his employment, at which he continued up to the commencement of this month. I saw him on the 5th, when he was suffering acutely from an abscess in the neighbourhood of the anus; and, fearing lest it might burst into the bowel and give rise to a painful blind internal fistula, I opened the abscess at once and let out a quantity of thin curdy fœtid pus.

A microscopic examination of this fluid by a half-inch object-glass, after the usual process of staining, revealed the presence of great quantities of well-marked typical tubercle-bacillus. Now, the presence of these organisms in this situation is interesting, as they tend to throw some light on the well-known connection between fistula and phthisis.

ROBERT C. SMITH, M.D., D.Sc.

PRESENTATIONS.—Mr. Henry C. Nance, house-surgeon to the Whitehaven and West Cumberland Infirmary, has been presented, on leaving, with a handsome gold watch, and a floral album, by the committee and a few friends, as a mark of respect and esteem.— The members of the Wakefield Medical Book Society have subscribed for a solid silver salver, to be presented to Dr. Robert Hollings. It is now on view, and bears the following inscription, "The members of the Wakefield Book Society desire, in this testimonial, to express to Dr. Hollings, on his marriage, their grateful acknowledgment of his zealous and faithful services for fourteen years, as their secretary. June 13th, 1883." On the reverse, are the names of twenty-one subscribers.

SANITARY ASSURANCE ASSOCIATION.—At a recent meeting of the Council of the Sanitary Assurance Association, Sir Joseph Fayrer, K.C.S.I., in the chair, the following resolution, recently passed by a meeting at Conduit Street, was considered, viz.: "That the Council of the Association be requested to consider whether they cannot recommend legislation compelling the builders of all new dwellings to obtain a certificate from some authority or qualified person as to their sanitary condition before it shall be lawful for such buildings to be inhabited." On the motion of Professor Hayter Lewis, seconded by Professor Corfield, a subcommitteewas appointed to consider how best the object of the resolution may be attained, and, if desirable, to draft a Bill, and report to the Council.

DONATIONS.—Mr. David Cagney, Messrs. Beamish and Crawford, and the Cork Distilleries Company, have each given a sum of £50 to the funds of the Cork North Infirmary.

REPORTS OF SOCIETIES.

STAFFORDSHIRE BRANCH.

GENERAL MEETING, MAY 31ST, 1883.

J. Y. TOTHERICK, M.D., President, in the Chair.

Pyosalpinx.—Mr. LAWSON TAIT showed specimens of pyosalpinx, taken from a young married lady, who had a long history of menstrual distress. For four months she had been ill, and seriously ill for some weeks. She had become greatly emaciated, and a well-known physician had discovered a pelvic tumour. When Mr. Tait saw her he made the diagnosis of suppurating Fallopian tubes, a diagnosis which was completely verified at the operation. The removal of the tubes was a very difficult operation, on account of dense pelvic and visceral adhesions. The right tube contained about four ounces of pus and broken-down bloodclot, and the left, about half an ounce. The patient was making an easy recovery.

Rupture of Popliteal Artery and Veins.—Mr. F. E. MANBY showed a specimen of complete traumatic rupture of both popliteal artery and vein (left), complicating a simple fracture of the lower third of the femur. The injury was from direct violence, and there was no evidence that the injury to the vessels was caused by the bone. The interest in the case was in the fact that both ends of the artery were "classically" plugged; and the very great bleeding which had taken place into the muscular planes was almost solely venous. Amputation at the upper third of the thigh failed to save the patient, who died in twelve hours from shock.

Aluminium Probes.—Dr. MALET showed aluminium probes covered with nitrate of silver diluted with nitrate of potassium, and drew attention to their superiority over solutions and brushes for local application.

New Needle-Holder.—Mr. FOLKER exhibited a needle-holder, and a *serre-nœud*, more especially adapted for use in vesico-vaginal fistula, or wherever a suture may require to be tightened at the bottom of a deep and narrow wound. The needle-holder, which is about nine inches in length, consists of a firm, straight handle and stem, into a small hole at the end of which the needle is inserted, and then firmly fixed by the action of a screw at the end of the handle, By reversing this screw, the rod which presses up the needle can be removed, and the instrument thoroughly cleaned. Needles of various sizes are supplied with the holder. The *serre-nœud* is about the same length, having the reverse action of a pair of scissors, the points, containing the holes for the two ends of the suture, opening as the handles are closed. A bend in the shaft of each blade facilitates the opening in a limited space, and the handles having an angular curve, enable the instrument to be used without the fingers being in the way to impede the light. Messrs. Weiss and Son are the makers of both instruments.

Cancer of Pleura and Lung.—Dr. W. G. LOWE showed a right lung taken from a woman aged 47, who had died from cancer of the pleura. The lung was reduced to half its size from pressure of fluid; it had its pleural surface studded over with growths, varying in size from a pin's head to a bean, of whitish cancer (showing a sarcomatous structure under the microscope), and more or less recent lymph. Nearly the whole inner surface of the pleura on the right side was covered with cancerous nodules. The case was interesting because of the rapid development of internal cancer after the removal of scirrhus of the breast, death occurring within three months after operation. The diagnosis of cancer of the pleura was rendered probable (*a*) by the patient having had cancer previously to the attack of pleurisy; (*b*) by rapid return of fluid after removal by tapping; (*c*) by the sanguineous character of the fluid withdrawn; (*d*) by the patient's inability to lie on the affected side, even though a large accumulation of fluid was present.

Excision of the Hip.—Mr. VINCENT JACKSON presented a little boy, aged 4, whose left hip was excised for disease more than twelve months ago. The result was excellent, and his power of walking, save a slight halt, was completely restored. The portions of bones removed were also shown.

Genu Valgum: Osteotomy.—Mr. JACKSON also presented a man, aged 25, six feet two inches in height, the subject of acquired genu valgum of the right lower limb. By occupation he was a rope-spinner, and in following his trade he had to bear a great proportion of his weight whilst standing upon the right leg. Four years ago the genu valgum commenced, and when admitted the deformity was extreme, and great pain in the joint was complained of. The circumference of the right knee measured thirteen and a half inches, that of the left, twelve and a half inches. The nearest point of approximation of the two ankles was nine and a half inches. Osteotomy (with Listerism) of the right thigh-bone, after the method advised by Dr. McEwen, was performed. Five weeks afterwards the splint and dressings were removed. A gypsum bandage being applied to the limb, the patient was allowed to get up and walk. When he was discharged, eleven weeks after operation, the limb was quite straight, the ankles touched, and walking was easily and painlessly performed.

Imperforate Hymen and Retained Menses.—Mr. JACKSON also presented a young girl, aged 20, who three weeks ago had been operated upon for imperforate hymen with retained menses. The operation was performed as follows: Patient's body having been well cleansed in a bath the night before, the genitals were well sponged with carbolised water, and the centre of the hymen linearly punctured with a sharp-pointed tenotome. The parts were now covered with layers of lint saturated with carbolic oil, over this a piece of macintosh sheeting was laid, and after some absorbent wool had been applied, the whole was fixed by a T-bandage. Every six hours the dressings were carefully changed, and the catheter used. This plan continued for twelve days, when all the discharge having completely ceased, the hymen was freely incised. More than forty ounces of treacly fluid escaped.

Debate upon Acute Pneumonia and its Treatment.—Dr. ARLIDGE, who opened the discussion, first called attention to the necessity of rightly defining the disease called pneumonia, and respecting which a record of observations was asked. He pointed out how loosely the term had been used, particularly in reference to morbid anatomy descriptions; that catarrhal and croupous pneumonia were frequently confounded; and that capillary bronchitis was sometimes spoken of as pneumonia. The Collective Investigation Committee doubtless had in view croupous pneumonia—a malady having special characteristics, a definite course marked by a crisis, together with a fever-history and pathological phenomena peculiar to itself. Further, in climatic conditions and geographical distribution, it did not coincide with catarrhal bronchitis and chest-inflammations, the result of cold. The expectoration was well-nigh characteristic; complete recovery of the inflamed lung-tissue might be looked for as a rule; and the disease had no such proclivity to return as the catarrhal affection had; the tendency to death arose mainly from failure of the heart's action; and phthisis and chronic pneumonia were not common sequelæ. On the other hand, it was a malady accompanied, as a rule, by more or less pleurisy, and one that especially fixed on the right side. The conclusion was, that croupous pneumonia was a constitutional affection, marked by the lesion of lung and a form of fever peculiar to itself, having also a well-defined course and a natural tendency to recovery. Dr. Arlidge could not agree with the general opinion that pneumonia especially attacked the strong and robust. It was a common affection of infancy, and he considered that those broken down by vicious courses, or such as had been exposed to debilitating agencies, were more frequently its victims. He had no experience of epidemic pneumonia, although he could speak to the fact of prevalence of pneumonia at one and the same time in a limited area; and further, he had the impression that, after prolonged east winds and the reduced vitality consequent thereupon, pneumonia prevailed more largely. He did not attribute its pernicious effects to the coldness simply of the east wind; but considered there was some hidden noxious quality in that wind which had yet to be made out.—Dr. MCALDOWIE considered that acute croupous pneumonia occurred in two distinct forms; the epidemic or endemic, produced probably by some specific virus, and the ordinary lobar pneumonia, which was also very prevalent at certain periods, but which depended chiefly on meteorological conditions, especially a sudden fall in atmospheric pressure, a low temperature, and sudden changes in temperature. The latter form, he thought, was simply a local inflammation, and not the local manifestation of a general disease. If it were a general disease, selecting the parenchyma of the lungs for its local manifestation, why was the inflammation almost invariably confined to a single lobe? It was the rule to find the whole of the affected lobe, whether it were the upper or the under, completely solidified, whilst the other portions of the lungs were either quite healthy or merely in a state of congestion This was in marked contrast with what was observed in the acute specific fevers. In typhoid fever, the Peyerian glands were affected throughout the intestine. In acute rheumatism, the inflammation shifted from joint to joint, attacking the same tissue in widely distant parts of the body. He thought that acute pneumonia was a disease of healthy chests. Exposure in persons liable to chest-complaints usually produced bronchitis or broncho-pneumonia, and not croupous pneumonia. This was an argument in favour of the

local nature of the latter. He had never met with a patient liable to acute lobar pneumonia. Dr. McAldowie thought that endemic pneumonia was undoubtedly a general disease, and differed markedly in its clinical features from the ordinary lobar pneumonia. His observations were based on an epidemic which prevailed in Stoke in March 1882. The month was exceptionally dry and fine, warm westerly and south-westerly winds prevailed throughout. In all the cases observed, the patients suffered from langour and debility for a day or two before the symptoms of lung-inflammation appeared. In two cases, sickness and vomiting heralded the attack. The disease was of an asthenic type; the pulse rapid and feeble, often intermittent. The temperature, as a rule, was not so high as in the ordinary asthenic form, but it remained elevated longer and always gradually subsided. Rusty sputum was observed in the whole of the cases; in one or two there was hæmorrhage during the early stage of the disease. The course of the disease was slower and less regular than that of simple lobar pneumonia. Physical examination showed that the inflammatory process spread more slowly through the lung-tissue. Quinine in large doses was the treatment adopted in all cases. There was no evidence that the disease was caused by infection in any of the persons attacked.—Dr. W. G. LANE agreed generally with Dr. Arlidge's remarks. Many cases of so-called pneumonia were not cases of real acute pneumonia. The disease was a general rather then a local one, as shown by (1) the want of relation between the febrile disturbance and the local lesion, there often being considerable inflammation of the lung with a normal temperature and a quiet pulse; (2) presence of albumen, in many cases of pneumonia; (3) its sudden attack and prostration of strength, differing much from ordinary acute pleurisy, in which disease patients were sometimes able to walk considerable distances, even in the acute stages. At the same time, the disease differed from the specific fevers, in having no definite period of incubation, in conferring no immunity from future attacks, and in not being contagious. Pneumonia, to his mind, rather resembled a disease like gout. With regard to its causes, Dr. Lane considered that, for the most part, a cold change in the weather was most likely to give rise to the disease—not simply very cold or very hot weather, but sudden alteration in temperature from comparatively mild to cold weather, as when a north-east wind set in after calm weather. He had no experience of pneumonia being associated with, or existing concurrently with, specific fevers, as typhoid or scarlet fever, etc. With regard to treatment, and in sthenic cases, tincture of aconite answered well. The cases requiring most care, and which were the most difficult to treat, were those in which pneumonia occurred in drunkards, in which delirium, resembling delirium tremens, frequently presented itself.—Dr. MALET remarked that it seemed to him a forcible argument for the necessity of the Collective Investigation Committee, that the preceding speakers had differed in many details, and if he had spoken he should, in some degree, have differed from each of them. This evidently showed a want of more accurate information, such as the Committee was endeavouring to obtain.—Dr. REID said that a case to which he was then attending seemed to support the theory of the infectious character of the disease. This case occurred in a house where the patient was on a visit, and simultaneously the occupier of the house was attacked with erysipelas. Both patients were very seriously ill, and the origin of the erysipelas, if not of the pneumonia, was undoubtedly a very unsanitary condition of the house in the shape of an earth-closet on the ground-floor which was used by the whole family, but which, owing to ignorance, never had any earth in it.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, MAY 18TH, 1883.

WILLIAM MOORE, M.D., President, in the Chair.

Living Specimens.—Dr. C. J. NIXON showed a Case of Aortic Aneurysm with Patency of Aortic Valves; Anomalous Physical Signs.—Mr. COPPINGER showed a Case of Paralysis following Gun-shot-wound of the Spinal Cord.

Specimen by Card.— Dr. J. MAGEE FINNY showed a Case of Nodose Condition of the Hairs.

Exophthalmic Goître.—Mr. JOHN B. STORY read a paper recording three cases of exophthalmic goître. The cases occurred in three women, two of them being unmarried. Two of the patients were sisters, and the third exhibited the remarkable, and probably unique, complication of double optic neuritis, which, however, had subsided at the time the patient came under observation. In this patient, the goître was more marked on the left side, and the palpitations did not occur until five years after the goître and exophthalmos; in the other two, the goître and exophthalmos were more marked on the right side, and the palpitations were the earliest symptoms observed. Mr. Story called attention to the support which these cases gave to the theory propounded by Dr. William Fitzgerald in the *Dublin Journal of Medical Science* for March and April 1883.—The PRESIDENT said that, although the disease was almost peculiar to females, he recollected three cases in which it occurred in males, the course being short, not quite eighteen months. On the other hand, he had seen it run on for eight or ten years in females. He instanced a remarkable case in which symptoms of exophthalmic goître occurred temporarily from sudden shock. A young girl opened a letter telling of her brother's death. Her pulse became 140, with exophthalmos and thyroid enlargement. In forty-eight hours, the exophthalmos receded, and her pulse fell to normal. To him, the disease appeared to be of neurotic origin.

Polypus of the Vocal Cord.—Dr. WALTER SMITH related a case in which he had successfully removed a small polypus from the right vocal cord of a lady, aged 30, by Voltolini's sponge-abrasion method. About Christmas 1881, loss of singing voice come on. This was followed by hoarseness, which persisted for a year. In December 1882, the patient consulted Dr. Smith, who recognised the existence of a pale red pyramidal tumour attached to the edge and lower surface of the anterior third of the right vocal cord. After a short preliminary training, he succeeded in passing a moistened sponge, about the size of a hazel-nut, beyond the growth; and then, forcibly withdrawing the sponge through the rima, and bearing towards the right side, was fortunate enough to detach the little tumour, which came up adherent to the sponge, and was preserved. Immediately after the operation, voice was restored, the hoarseness had disappeared, and she was able to sing. Six weeks subsequently, she reported herself as perfectly clear in voice. The operation is a safe and painless one, suited to a limited number of cases.—Dr. BEATTY remarked that the attachment of the tumour to the under part of the vocal cords favoured its removal by Voltolini's method. He had met another case in which, owing to its position anteriorly, this method failed.

Dilatation of the Colon.—Dr. HENRY KENNEDY read a paper on some of the forms of dilatation of the colon. He began by observing that the affection was frequently overlooked; and, in confirmation of this, he detailed some cases which were so obscure as to prevent any diagnosis being arrived at, and others in which the diagnosis was wrong. He believed, nevertheless, that a correct diagnosis could be made; but it was necessary that the idea of such a possibility should, in the first instance, be entertained. The condition of the patients who had this affection was always that of impaired health. With this state, when the patients, who were usually thin, were examined lying on their backs, there was chronic tympany, though not necessarily to a great degree. Pressure on the abdomen did not cause pain. In conjunction with these symptoms, the author stated, that the main characteristics of the disease were the fæca discharges—always dark, pasty, and unformed. He insisted particularly on the persistence of such discharges for weeks, months, and even years, during which periods the patients were constantly subject to attacks of diarrhœa, acute or chronic, and were liable even to perforation of the bowel and rapid death. Having detailed cases, he considered the prognosis should always be guarded. Treatment could much benefit those cases, but he doubted whether a complete cure could be effected.—Dr. GUNN asked if electricity had been tried, and quoted a case of atonic condition of the large bowel in which it seemed to have proved of benefit.—Dr. FINNY, criticising the premises upon which Dr. Kennedy based his cases, said that, although he had laid stress upon three diagnostics of the state of the colon, he had not adduced any conclusive evidence to show that the condition referred to existed. He, too, bore testimony to the great advantages of galvanism, applied by a rectal rheophore, in cases of atony of the bowels.—Dr. WALTER SMITH said it should be borne in mind that there were great difficulties in applying any anatomical rules to the living subject, deduced from the position of parts of the dead body.—Dr. BENNETT having also joined in the discussion, Dr. H. KENNEDY replied. He said he did not use electricity in any of his cases; nor had he had any *post mortem* examination. He saw no reason to dissociate the symptoms.— The PRESIDENT congratulated the Section on the success of its first session, which had now come to a close.

VACCINATION GRANT.—Mr. C. R. Illingworth has received the Government grant for efficient vaccination in the Rishton District of the Blackburn Union.

REVIEWS AND NOTICES.

INDIGESTION, BILIOUSNESS, AND GOUT IN ITS PROTEAN ASPECTS. Part II. Gout in its Protean Aspects. By J. MILNER FOTHERGILL, M.D. London: Baillière, Tindall and Cox. 1883.

DR. FOTHERGILL has been fruitful in works. Although he has shown his capacity for original research, and his ability to supply material for the study of the philosophical inquirer in medicine, his special talent seems to be that of seizing on and selecting the most important facts and conclusions arrived at by other writers, and of dressing them up in such a manner that they may be more thoroughly grasped, and, if we may say so, more pleasurably digested. He has, in short, a clear apprehension of what the busy practitioner requires; that is, a lucid exposition of the accepted truths of modern physic, divorced from the learned jargon of many recent writers, which, whilst pretending to unusual accuracy in defining phenomena, darkens knowledge by its barbaric nomenclature. Moreover, it is clear that Dr. Fothergill has faith in his mission as a writer for the many—the many who will not diligently study a subject right learnedly and drily treated by the systematic writer or the special essayist; otherwise he would not have had courage to address a volume of three hundred octavo pages, on a single disease, to his medical brethren who have emerged from student-life and are actively engaged in the pursuit of their calling; for it is not at all a student's book. Experience undoubtedly has taught him that even such busy people will contentedly wade through many a page, if only a little piquancy be given by a half-colloquial style and the introduction of literary scraps and anecdotes.

Of this work on Gout, we may say, indeed, that it is too diffuse; that quotations are too numerous; that, as a compilation, its building up is too evident, its matter not adequately analysed and digested; and that, if the style be easy and lucid, it is slipshod and frequently ungrammatical; and the impression, on the whole, is forced upon us, that the treatise has been hurriedly put together, probably to meet the exigencies of the publisher. However, where a book has so much that is commendable, it would be invidious to insist upon small defects. In a future edition, the author will have opportunity to discover and remedy them.

Dr. Fothergill has levied contributions from the principal English authorities on gout; and, in respect to this malady, it is the good fortune of English physicians to have more abundant material for its history than their colleagues in any other country. The facts and opinions he has so collected are accompanied by acute and thoughtful comments, and by observations culled from the writer's own experience; but the treatise does not demand a critical examination as a work of original research. Nevertheless, we doubt not, it will be well appreciated by the circle of readers to whom it is especially addressed, and will reap a like success with former literary productions of its author.

RHEUMATISM, GOUT, AND SOME ALLIED DISORDERS. By MORRIS LONGSTRETH, M.D. (Low's Library of Standard Medical Authors.) 8vo, pp. 280. London: Sampson Low, Marston, Searle, and Rivington. 1883.

DR. LONGSTRETH, of Philadelphia, furnishes a very full account of the subjects of which he treats. He views them under varied aspects, always keeping the historical one prominently in sight. His work does not apparently contain much that is novel, but is full of sound judgment and of discriminating criticism. Probably we give our readers the best opportunity of judging for themselves of the work and of its general style by the following extracts from his remarks on the most recent treatment of rheumatism.

"Maclagan wrote: 'Impressed with the fact, that the maladies on whose course they exercise the most beneficial action, are most prevalent in those countries in which the Cinchonaceæ grow most readily, and believing in the miasmatic origin of rheumatism, it seemed to me that a remedy for that disease, was most hopefully to be looked for among those plants and trees, whose favourite habitat presented conditions analogous to those under which the rheumatic miasm seemed most to prevail. A low lying damp locality, and a cold rather than warm climate, are the conditions under which rheumatism is most likely to arise. On reflection, it seemed to me that the plants whose haunts best corresponded to this description were those belonging to the natural order of Salicaceæ, the various forms of willow.'

"This form of argument is not new; it has been applied many times to other diseases and natural products, and often with not greater accuracy than, or perhaps with as much of pure imagination as, in the present instance. The details of this special argument are defective, and to criticise it on no other ground than the error of topography, on which the author quoted seems to rely, is quite sufficient. The quinine-bearing trees grow on mountain elevations, far from swampy regions, and in a climate approaching that of the temperate zone; and the willow's favourite haunt is the swamp, which, if it produce rheumatism, is also the birthplace of intermittent fever.

"Imaginative reasons like this should cast no imputation on the value of a drug, whatever else they may do. The therapeutic means must be tested by its results, and not by the way they were suggested for use. However, when one starts with *a priori* reasons, perhaps dictated by a prejudice in favour of a method of treatment, it is well to be cautious in judging of the results and of the effects on the disease for which it is administered." (Pp. 205-206.)

"The reception given to the alkaline treatment on its announcement thirty or forty years ago, resembles so much that now accorded to salicyl compounds, that one cannot but pause and reflect, make a comparison, and wonder what will be the fate of the new remedies forty years hence. Their application arose, so to speak, at dictation of the terms of the germ-theory (Maclagan would have us believe salicin acts in rheumatism as a germicide), just as the alkaline treatment sprang from the now fallen lactic acid theory. And I think that the salicyls will stand or fall, as stands or falls the test that will soon be applied to the germ-theory." (P. 210.)

DISEASES OF WOMEN. By GRAILY HEWITT, M.D., Professor of Obstetric Medicine at University College, London. Fourth edition. London: Longmans, Green and Co. 1882.

TEN years have elapsed since the last edition of this popular work was published. The work has been revised thoroughly and considerably added to. Dr. GRAILY HEWITT has done great service to gynæcology in elaborating and improving the different varieties of pessaries. His cradle-pessary has long since received the approval of most practical and scientific gynæcologists. The new edition of his work embodies the results of a large clinical experience, and can only be read with pleasure and profit by all medical practitioners. The question as to the nature of hysteria and hystero-epilepsy has much occupied the attention of the author, and the present volume contains a collection of observations on the subject. Dr. Graily Hewitt's valuable work is so well known that it is not necessary to say more of it in noticing this new edition than that it represents ably and clearly the most approved methods in the theory and practice of diseases of women. As might be expected in a teacher of such experience as Dr. Graily Hewitt, the questions dealt with are set forth in a remarkably clear and lucid style. A considerable number of new illustrations have been added, and most of the new figures representing flexions and displacements of the uterus are drawn life size. This is of much advantage to the student, and greatly assists the more ready realisation of the meaning of the illustrations. The work is deservedly a favourite guide with students and practitioners.

CHIRURGIE ORTHOPÉDIQUE: THÉRAPEUTIQUE DES DIFFORMITÉS CONGÉNITALES OU ACQUISES. Par le Dr. L. A. De SAINT-GERMAIN. Recueillies et Publiées par le Dr. PIERRE J. MERCIER. Illustrated. Paris: 1883.

ATLAS DER GELENKKRANKHEITEN. By Dr. AUGUST SCHREIBER. Tübingen: 1883.

THE HYSTERICAL ELEMENT IN ORTHOPÆDIC SURGERY. By Newton M. Shaffer, M.D. New York: 1880.

ORTHOPÆDIC surgery has, during the last few years, emerged from the equivocal position which it at one time occupied, to be placed among the legitimate special departments of medicine. This result is probably due partly to the great increase of scientific research and published clinical work, necessitating the more complete separation of the various classes of diseases one from another for the purposes of study, and partly to the fact that surgeons of repute have devoted themselves to the work. It is not very many years ago that the special study and practice of any branch of medicine was considered as unorthodox, and as almost amounting to empiricism. All that is now changed, and the general voice of the profession is in favour of the division of various classes of disease for the purposes of practice, provided that the men who devote themselves to such specialties have, in the first place, and for a considerable time, practised their profession in all its branches.

Orthopædic surgery offers a wide field for study, and treatises

and monographs upon the subjects which it embraces have been published of late in various countries—America, France, Germany, and this country having each contributed valuable works.

The volume before us, containing the writings of Dr. De SAINT-GERMAIN, collected and published by Dr. Mercier, is remarkable for the number of subjects which it includes, many of which are not usually considered to belong to orthopædic surgery; we may instance deformities of the teeth, strabismus, imperforate anus, and hernia. Notwithstanding this fault, the work is a sound one. The author reviews the various opinions of other writers, and records his own experience, drawing impartial inferences as to the best treatment to be adopted in various cases. He has not availed himself of some of the more recent publications upon orthopædic surgery; but, upon the whole, the book is very fairly and well written. We cannot agree with the author upon several points of treatment, but we consider that the principles by which he is guided are sound ones.

The *Atlas der Gelenkkrankheiten* consists of a series of twenty-three large quarto plates, containing many well-executed illustrations of pathological specimens of joint-diseases. A descriptive text accompanies the plates, and thirty-five pages are devoted to a description of the anatomy of the joints.

The Hysterical Element in Orthopædic Surgery is a valuable contribution to medical literature. Dr. SHAFFER deals chiefly with hysteria in reference to joint-affections, and he illustrates his observations by recording some very instructive cases. It seems to us that hysteria, or neuromimesis, as Sir James Paget has called this morbid condition, is of particular interest to the orthopædic surgeon; and we are very glad to call attention to Dr. Shaffer's able essay upon the subject.

NOTES ON BOOKS.

The Student's Manual of Venereal Diseases. By BERKELEY HILL and ARTHUR COOPER. Third edition. Smith, Elder and Co. 1883.—We are glad to see that this most useful little volume has already reached a third edition. It is intended to serve as an introduction to the larger treatise *On Syphilis and Local Contagious Disorders*, and has been collated with the last edition of that admirable work. In preparing the present issue of their manual, the authors have revised and in great part rewritten the text, besides adding much new matter. The busy practitioner will highly appreciate the chapter on treatment, which is particularly clear and accurate, especially the section on "The Special Treatment of the Affections of Syphilis;" while the concise descriptions of the lesions of the skin, nervous system and organs of special sense will be most useful to the student preparing for examination. Very distinct directions are given as to the cases in which mercury is appropriate, and the various ways in which it may be administered. But the chapter devoted to inherited syphilis and its treatment, is almost too short for so very important a subject. The appendix contains a collection of approved formulæ.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

FLUID CONFECTION OF SENNA.

THE fluid confection of senna, originally introduced by Messrs. Fisher and Haselden, and now made by Messrs. Waugh and Co., of Regent Street, is a palatable preparation, which will be found useful as a laxative and in the treatment of habitual constipation. The dose is, for children, one or two teaspoonfuls, and for adults, a dessert-spoonful or more. We have given it a fair trial, and find that it is popular with patients, and that it is taken without difficulty.

PRESENTATION—Mr. Butterfield, the borough medical officer of health for Bradford, who will shortly enter upon the duties of his new appointment in Kent, has been presented by the officers of the corporation with an oak writing-case, handsomely mounted, and bearing a suitable inscription, together with a pair of Parian figures, representing Spring and Autumn, as a mark of their high esteem.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1883.

SUBSCRIPTIONS to the Association for 1883 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 30th, 1883.

POISONOUS PIGMENTS.

SOME months since, the Council of the National Health Society appointed a committee of medical men, chemists, and others, to collect information as to the effects on health of poisonous pigments and colours in articles of house decoration, domestic use, and wearing apparel, with a view to obtaining legislative prohibition of, or restrictions on, the use of the same. After much consideration, it was deemed expedient to limit their attention for the present to the employment of arsenic, whether as an essential ingredient of the colour, or as an accompaniment either from the use of impure materials, or from its having been employed as a reagent in the preparation of the colour, and not having been subsequently completely removed. The well known Schweinfurt or emerald green is an example of an arsenical colour, being itself arsenite of copper. Most metallic ores contain arsenic; indeed, the arsenic in commerce is obtained from them by the process called roasting, and few metals are entirely free from traces of it; while arsenic acid, being a cheap and powerful reducing agent, is largely used in the preparation of anilin from nitro-benzol, and of the several colours derived from anilin, as magenta, fuchsin, corallin, etc. Some of these, as fuchsin, are in themselves perfectly harmless, but they are, as sold, rarely free from the arsenic employed in their preparation. It is much to be desired that other equally efficient reducing agents should be found, the price of which might render their substitution commercially practicable; and it is a fact that, as regards several of the anilin colours, the problem has already been solved, no arsenic being employed in three at least of the largest German colour-factories.

Before drafting a Bill to restrict the employment of arsenic in British manufactures, the Committee deemed it advisable to ascertain what restrictions, if any, had been imposed in other countries on the use of arsenic and other poisonous pigments in the tinting of wall-papers and various textile fabrics for industrial and decorative purposes, and in painting toys. For this end they applied to Earl Granville, who, in a most courteous reply, undertook to obtain from the agents of the Foreign Office the required information, both in respect of national laws and of local or municipal regulations. Answers have been received and transmitted to the Society from nearly every European State.

As regards Germany, it may be well to explain the relations subsisting between the several States and the Federal Empire of which they are members. The difference between imperial and local legislation is clearly comprehended in Germany. The parliaments and other legislative assemblies of the individual States are not merely administrative bodies, but legislate on all matters of local interest, and on such matters of general importance as have not been dealt with by the Reichstag or Imperial Parliament; while the latter confines its attention to questions equally affecting the whole empire. It thus frequently happens that a law which has been in

force for many years in one or more of the States, and has been found to work advantageously, is made the basis of an imperial law, or even accepted entire by the Reichstag. Thus, it was not until after the wide-spread epidemic of small-pox in 1871, that the stringent vaccination laws of Würtemberg and Nassau were adopted by Prussia; and still more recently, in 1879, the Prussian laws on the question before us have been extended to the whole empire.

There are, besides these, other enactments, closely corresponding with our "Orders in Council," issued by the Emperor with the advice and consent of the Bundesrath (a body of fifty-nine members, appointed annually by the governments of the several States). These orders must be laid before the Reichstag or Imperial Parliament, if sitting, or, if not, at its next meeting. The House can approve or reject them as a whole, but cannot amend or alter them; and, if approved, they have the force of imperial laws. Though Parliament cannot itself alter them, the Council will often do so in deference to the strongly expressed wish of the House.

With these preliminary explanations, we will proceed to an examination of the imperial and local laws which have been communicated to us.

The Imperial Law of May 14th, 1879 (No. 1293), is couched in general terms, and deals with the adulteration or falsification of food and drink, the sale of diseased or unwholesome meat, and of dangerous petroleum, and also regulates the manufacture and sale of all articles of domestic use, of whatever kind, likely to affect injuriously the health of individuals. By this law, the police are authorised to enter all places where such are manufactured or sold, and to take samples for examination or analysis, on certain conditions as to payment and the identification of the article. Local regulations of a more stringent character are not interfered with. Section 5 leaves it to the Emperor and Council to issue orders from time to time prohibiting the use, for any particular purposes, of such colours, substances, etc., in the preparation or packing of the articles in question as may be deemed injurious to health, and to forbid the employment of any process or mode of manufacture calculated to produce such effect.

A graduated series of penalties is laid down, beginning with fines not exceeding 150 marks, or equivalent terms of imprisonment, for the least violation of the provisions of the Act, even if this be the result of pure carelessness. The offender is subject to a fine not exceeding 1,500 marks, or to imprisonment, to which may be added loss of civil rights, and subjection to police surveillance, for adulteration of food. The penalty rises, imprisonment without option of fine for knowingly introducing any poisonous or noxious substance, and penal servitude for not more than five years if any grievous bodily harm follow such introduction, or not exceeding ten years if such mixture be made with knowledge of the probable result, and for not less than ten years, or even for life, if death actually follow as the consequence.

In accordance with Section 5, His Majesty the Emperor issued an order, on May 1st, 1882, specifying the colours which should be deemed poisonous and prohibited in the case of all articles of food and drink. Section 2 of this order forbids the use of the same in the covering or packing of such articles. Section 3 extends the same prohibition, excepting as regards zinc oxide and lead chromate, to the painting and colouring of toys.

Section 4 forbids the use of colours "prepared with arsenic," and of "copper colours containing arsenic," in paper-hangings and materials of dress. Section 5 prohibits the sale of all articles prepared, kept or packed in contravention of any of the preceding provisions.

The order was to come into operation on April 1st of the present year.

When this order was submitted to the Reichstag on December 13th, 1882, the House, apprehending certain difficulties in its application, referred it to a special committee for further consideration. The committee presented their report on February 8th, 1883, in which they recommended that Sections 2 and 3 should, for the present, be suspended, since their enforcement would affect injuriously the German trade in toys, with countries where no such restrictions existed. At the same time, they expressed a hope that the Chancellor would enter into negotiations with other governments, with the aim of coming to an international agreement as to which colours should be held to be poisonous and unsuited for this purpose.

Section 4, which was none other than the law already in force in Prussia since 1854, met with almost unanimous approval, especially the choice of the expression, "prepared with arsenic," in place of "containing arsenic," since it would have the effect of guarding against the danger following the use of arsenic in the preparation of those anilin colours which, though harmless in themselves, are rarely free from it as sold; while, on the other hand, it would not bring the presence of minute and unavoidable contamination by arsenic within the action of the law. One member alone, in a full house, dissented, urging the case of fuchsin, a non-poisonous colour, always prepared by means of, and, as he admitted, seldom, if ever free from arsenic. The suspension of the Sections 2 and 3 was therefore desired by the House, and assented to by His Majesty and Council. The use of Scheele's green and of other arsenical colours for wall-papers and clothing had been prohibited for many years, not only by the laws of Prussia, but by those of nearly every minor State; but these restrictions were at first found to operate injuriously on the Prussian export trade in paperhangings, by placing the manufacturers under an unfair disadvantage when competing with those of such countries as France, who were under no such restrictions; and at their representation an order was issued on December 29th, 1854, permitting the use of arsenical colours in wall-papers intended for exportation only, provided that such papers be prepared and stored in separate buildings and entered in separate order-books, at all times open to inspection by the police.

Very little use has, however, been made of this permission, German manufacturers having found green colours equally applicable, and perfectly free from arsenic.

Anilin works are regulated by an order of the Ministry of Commerce dated June 10th, 1865, by which permission to establish them is granted, only on condition that all arsenic and refuse containing arsenic be kept in separate locked and well-paved rooms; that all operations with arsenical solutions be performed in chambers provided with waterproof floors and courses, and drained into a watertight reservoir beneath the same; that all refuse liquor containing arsenic be evaporated down in a suitable apparatus, and conveyed to such places as the police may approve; that a poison-book be kept, containing full details of the purchases of arsenic and the disposal of arsenical waste; and that, except by special permission, the arsenic acid employed shall not be prepared on the premises.

These restrictions and precautions have turned the attention of the manufacturers to the search after reduction-processes by means of other reagents; and three of the largest firms in Germany—the "Bädische Anilin und Soda-Fabrik" in Ludwigshafen, the colour-works at Höchst am Main, and the "Actien Gesellschaft für Anilin Fabrikation" in Berlin—make anilin colours, as magenta, fuchsin, and rubin, entirely without the use of arsenic.

The Imperial Law of May 14th, 1879, supplemented by the Order in Council, which, as amended, came into operation on April 1st of this year, has superseded all local regulations. We have, however, information as to the legal restrictions already existing in Würtemberg, Saxony, and Hesse, from which it appears that, by an ordinance of the Minister of the Interior, dated January 17th, 1876, regulating the trade in poisons in the kingdom of Würtemberg, the use of arsenical colours in textile fabrics was altogether prohibited, and in paints and wall-decorations, unless, by varnish or other precautions, the separation of the colour were rendered impossible.

In the kingdom of Saxony, legislation has been of a piecemeal character, the use of a green precipitated copper carbonate in cotton-yarn having been forbidden in 1840; of so-called Brazil or Munich red, an arsenical colour, in 1856; of Schweinfurt green for fabrics and papers in 1860; and a "warning" having been issued to the public against the use of arsenical colours in sleeping or much frequented rooms, and in forms easily detached.

In Saxe Coburg and Gotha, ducal edicts of 1836 and 1839 prohibited the use of arsenical pigments for all domestic purposes, and scheduled a list of dangerous articles which may not be introduced into articles of food or drink. With slight differences, the laws of the two duchies agree in prohibiting the use of arsenical, mercurial, and other poisonous colours in the manufacture of candles, toys, wall-papers, textile fabrics, and paints: those of Coburg are the more stringent, allowing none but vegetable colours in candles; while in Gotha, arsenic and mercury alone are prohibited for this purpose, and arsenical paints, only in the case of toys.

The Hessian Criminal Code of October 1855, and a Government order of the following year, specify a number of colours which, though not coming within the category of "direct poisons," are of a "poisonous nature," and injurious to health; and regulated their sale by others than chemists, corresponding thus far to our "Sale of Poisons Act." The use of any of them is prohibited for colouring, tinting, or painting of confectionery, toys, wall-papers, paints for walls and textile fabrics, including carpets, furniture, and clothing. So far as these exceed the recent imperial legislation—for example, the Saxon restrictions on the tinting of candles—they are not superseded by it; otherwise, the Imperial Law is in force in every State.

In Bavaria, a law of June 6th, 1863, as well as the police regulations of December 26th, 1871, are practically superseded by—because nearly identical with—the provisions of the Imperial law and Orders in Council above named, but artificial flowers, window-blinds, and wire gauze for meat-safes, and paints for house-decoration are specified among the articles into the colouring of which arsenic is not admissible.

In Sweden, the question of arsenical colours has been the cause of much discussion at home, and of negotiations with the Governments of other countries. The ordinance of 1876, which regulated the manufacture, storage, and sale of poisons of all kinds, unconditionally prohibited the use of arsenic in wall-papers, blinds, cloth, artificial flowers, and wares of all kinds "printed or painted in water-colours;" as well as in lamp-shades, sealing-wax, wafers, and candles. Technically, carpets, being rarely "printed or painted," might have been considered as outside the Act; but the accidental omission was overruled by the courts, and the whole nation may be said to have gone mad on the subject of arsenical poisoning. Not content with the analyses and certificates of the Government chemists, every purchaser of an article possibly arsenical has it examined by a chemist or chemists of his own selection, until he obtains from one—perhaps the village apothecary—an unfavourable opinion, founded on the presence of a trace of something which, if arsenic, may have come from the reagents employed. In 1879, a Royal decree amended the clauses of the ordinance of 1876 referring to arsenical goods, removing textile fabrics to the second category, and fixing a limit of permissible impurity—viz., that the metallic arsenic deposited in a glass tube of 1½ to 2 millimètres internal diameter, from 440 square centimètres, of articles in the first list (wall-papers, etc.), or from 220 square centimètres of textile fabrics and 21 grains of other articles in the second, by the Babo Fresenius process, shall not produce a black, brown, or even a partially opaque mirror.

In 1881, Messrs. Stoddart of Glenpatrick, and, in 1882, Messrs Crossley of Halifax complained, through Her Majesty's Foreign Office, of the serious interference with their business caused by the condemnatory, and often conflicting, certificates given by various Swedish chemists in respect of carpets which they knew to be practically free from all but the merest traces of arsenic. They asserted that they took every precaution, even to the employment, by Messrs. Crossley, of a resident chemist to examine all colours and wools, and they could not but doubt either the skill of the Swedish chemists, or the accuracy of the methods they employed. They urged, for their own protection and that of manufacturers everywhere, that the Swedish Government should appoint official analysts, and prescribe an uniform method of analysis, a form of certificate, etc. The matter being referred by the Swedish Government to the Medical Board, the latter expressed the opinion that no legislation would meet the evils justly complained of, so long as the present arsenical madness or fashion lasted, since persons could not be restrained from applying to private chemists, even after an official certificate had been given. They could not advise the Government to take the responsibility of appointing so many official analysts as would be required, nor of interfering with the freedom of scientific experts to employ that method which each found to work best; but they did recommend a form of certificate which His Majesty, by a decree of February 1883, made compulsory, in which the chemist, who must describe his qualifications, states that, having examined the superficies or weight of the article prescribed by the decrees of 1879-83, by reduction of the arsenic-sulphide with potassium-cyanide and carbonate of soda, he finds that it contains, or does not contain, the quantity of arsenic prohibited by the law of 1876.

Denmark and Holland stand next, among those countries from which replies have been received, in the stringency of their legislation on the use of poisons in the arts, and are following farther the example of the German Empire. The laws at present in force in Denmark regulate the sale of poisons, prohibit their use in confectionery, wafers, and toys, and specify such colours as may be used for these purposes. But a Bill is under consideration by the Danish Parliament, and will probably become law during the present session, based on that of Germany, prohibiting: 1. The use of arsenic in wall-papers, carpets, window-blinds, artificial flowers, and fabrics of all kinds; in candles, lamp-shades, sealing-wax; also in every description of paint, distemper, or colouring for walls or decorative purposes: 2. The use of lead in toilet articles; of lead in enamelling or tinning of cooking utensils, for which pure tin only shall be employed; of lead or of oxide of zinc in India-rubber for infants, teats, toys, mackintosh sheeting, etc: 3. The use of arsenic, antimony, lead, chromium, cadmium, copper, cobalt, mercury (cinnabar excepted), nickel, or zinc, and of gamboge in toys: 4. Colour-boxes containing any of the above are to be labelled "poisonous colours." 5. For colouring confectionery, foods, and drinks, only harmless colours may be employed, and no metal foil for wrapping the same may contain more than 5 per cent. of lead. A schedule of harmless colours is appended to the Bill.

In Holland, there does not exist any special legislation on the subject; but the new penal code now before the Rigsdag, and which will no doubt receive the sanction of the House, makes it a crime to sell any article of merchandise of a poisonous character without giving the purchaser full information as to its nature and character. If any such article be sold without this notification, the vendor is liable to a fine not exceeding 300 florins, or to imprisonment for a term not exceeding six months, if he did not know the nature of the article, or to a term of imprisonment not exceeding fifteen years if he did. Should death follow as a consequence of such sale, the seller is liable to imprisonment for a term not exceeding one year if he were ignorant of its nature, and to imprisonment for various terms to twenty years, or even for life, according to the degree of culpability, if he knew its nature and the probability of such result.

In France, the use of poisonous colours is prohibited in articles of food; but, as regards articles not intended for consumption, there are, they are informed, no restrictions whatever, beyond a circular issued in 1860, cautioning manufacturers of the responsibility

they incur in case of accidents caused thereby to the operatives engaged, and their liability in consequence to the penal code.

In Italy, the sale of poisons is regulated by law, but there is no national legislation on their use in manufactures. Such restrictions have, however, been imposed in several provinces and municipalities of the kingdom by local laws. The Committee have received the sanitary code of the Commune of Venice, and find that a number of colours (including the juice of the phytolacca, much used in Portugal for tinting port-wine), are prohibited in confectionery and liquors, and in the covers or envelopes of the same. It forbids, also, the use of lead or of copper not tinned and polished in utensils for the preparation of articles of food or drink, and the presence of more than five per cent. of lead in the tinning of the same; also the use of any receptacles for beer of materials other than wood, glass, or earthenware. In pewter pots and similar utensils, metal teapots, etc., there must not be more than five per cent. of lead or of antimony.

In Servia, there are no special regulations respecting wall-papers, etc., but a stringent law regulates the sale of poisons of all kinds, which may be imported or bought by, and sold to, such persons only as are authorised and licensed by the police; any violation of this law, even as regards the kind or quantity named in the permit, being punishable by fine, and, if repeated four times in one year, by forfeiture of the licence. The medical officers and analysts in the service of the State may at any time enter and inspect all places where poisons are manufactured or sold; and, if fatal consequences follow a breach of the law, the offender is amenable to the criminal courts.

In Greece and in Roumania, poisons are not allowed to be sold by any persons other than registered chemists. In Greece, the use of poisonous colours in sweetmeats and liquors is illegal, and those which are prohibited and permitted are respectively specified. Both lists, however, are too limited. In Roumania, tinted wall-papers and dyed fabrics are imported from abroad. But the municipal regulations of the city of Bucharest forbid the use of poisons in cosmetics, and in the papers employed for wrapping sweetmeats, as well as in articles of food and drink.

From Switzerland, they learn that there are no federal laws on the subject; and that, in fourteen of the twenty-five cantons, no restrictions whatever are imposed on the sale or manufacture of poisons. They have been favoured with printed documents from eleven cantons, from which it appears that, in Lucerne and Solothurn, the laws simply regulate the sale of poisons by apothecaries and other licensed persons. In Thurgau, the use of poisonous colours is prohibited in confectionery only. In Aargau, anilin and poisonous colours are forbidden in all articles of food. In Appenzel, arsenic and phosphorus *(sic)* are not allowed in pigments *(farbstoffe)*; while Basel has in one of its laws a single clause directing the attention of the police to the manufacture of "poisonous wares." Geneva, Berne, St. Gall, and Zürich alone have any explicit legislation on this subject. In St. Gall, so far as they have any information, arsenic is the only poisonous colour in respect of which any special enactments have been promulgated, and it is forbidden to be used in wall-papers and paints for internal decoration, window-blinds, lamp-shades, clothing, and generally in all articles of domestic use. In Berne, arsenic, anilins containing arsenic, and metallic colours generally, are forbidden in food and toys, and arsenic in wall-papers and textile fabrics. In Geneva, all poisonous colours, inorganic or vegetable, are prohibited in articles of food or in the envelopes of the same, and arsenic in wall-papers and stuffs of all kinds. Copper culinary utensils are also required to be tinned, and may not be used for certain purposes.

So long since as 1827, the Republic and Canton of Valais adopted a law regulating the sale and employment of poisons whether in the crude state or prepared, and fraught with restrictions and precautions which could not be enforced in a larger or manufacturing community. By one article "the sale of arsenic is prohibited. The use made of it for the destruction of rats may easily be replaced by other substances and preparations." Further regulations are laid down by a sanitary law of 1849, dealing, however, mostly with the sale of drugs by chemists and their relations with medical men.

The most complete regulations are met with in Zürich, where, for the colouring, painting, and ornamentation of articles of food and drink, clothing, the paper envelopes of all kinds of food, confectionery, and tobacco; for toys, perambulators, and their appurtenances, wall-papers, window-blinds, garden awnings, wafers, and culinary utensils; the employment of colours containing any compounds of lead, arsenic, copper, chromium, zinc, antimony, bismuth, or mercury, is prohibited. Poisonous organic colours, as gamboge "cardol," aconite, picric acid, picramic acid, and anilin colours, especially fuchsin, are forbidden in the case of all articles of food or drink, as are all phenol colours, viz., corallin, corallin yellow, azulin, etc. Imported articles containing any of the prohibited colours are not allowed to be sold. The exclusion of zinc and bismuth from paints seems totally uncalled for.

From Austro-Hungary no information has been as yet furnished by Her Majesty's Foreign Office, but the Secretary to the Committee has obtained the Imperial law on the sale of poisons, which, while enjoining ample precautions against accidents from the sale of poisons to private persons, and against dangers to the operatives employed in factories, imposes no restrictions on their use in trades and manufactures, which it appears to assume as a matter of course.

In Spain and Portugal, there are no laws whatever on the question of poisons.

PRELIMINARY EDUCATION FOR THE MEDICAL PROFESSION.

ONE of the most pressing questions in medical education relates to the nature of examinations in arts. Other examinations with which medical licensing bodies have to deal, are the turnpikes on the road to qualification, or the direct portals of the profession itself, but preliminary tests are the gates which admit the youth of the British Islands into the realms of studentship; in fact, they are the preliminaries of a preliminary condition. Certain subtle social questions can never be solved by legislation or by examination, but it is always possible to make a standard which represents an amount of knowledge that every member of a liberal profession should possess. Such a standard in these days need in no way oppress students from the humbler ranks of society. A recent deputation from the Royal College of Surgeons in Ireland to the Vice-President of the Council of Education made a great point of insisting that students who pass a preliminary test in arts should be *bonâ fide* undergraduates; that is to say, supposing that a central licensing body under the new Act allows a student to enter the profession on the strength of having passed an examination in arts at some recognised university, the College forsees an evil which already exists to a certain extent, and which will no doubt be aggravated under the new conditions. Youths will enter a university, and pass a matriculation, simply in order to be able to become medical students; and will then, too often, quit their Alma Mater. Over and above all local considerations which have made the Irish College deem it necessary to memorialise the Home Secretary, the chief evil thus involved lies in the fact that a complete university education in arts is supposed to represent the thorough education requisite for a gentleman and for members of a liberal profession; and this is precisely what is needed for the student about to enter a medical school. A matriculation alone is, therefore, avowedly, a very incomplete test. It is difficult, however, to see in what manner this evil can be remedied, for no student can be compelled to remain as an undergraduate at any university after having matriculated. At present, the most renowned universities in Great Britain and Ireland offer many difficulties to certain classes of students

who desire to enter the medical profession after having studied "letters."

In our notice last week of Dr. McVail's address on Scottish Medical Teaching, delivered last November at the Glasgow Western Medical School, we pointed out that the orator referred to the success of Scottish medical education, particularly in Edinburgh, where it has been unimpeded for a long period by monopoly, and then to the non-success and small reputation of the Arts Faculties of the same universities, compared with what is found in England, and the cause of this lies in the monopoly of teaching still retained in respect of the most important chairs. Unfortunately, a very large number of young men who study medicine in metropolitan hospitals have been prevented from receiving the benefits which these far-famed English Arts Faculties can confer; the reasons why they have been so excluded are manifold, and have often been discussed in our columns. Before any *bonâ fide* undergraduate clause, such as is desired by the Royal College of Surgeons in Ireland, can be made law, arts education at the universities must be facilitated. The English College trusts, for preliminary examinations, to the examining boards recognised by the present Medical Council, and it is for the future reformed Council to consider the subject which we have just discussed.

Scientific preliminary education is another most important feature pertinent to the same question. It is imperative that medical men should be fairly educated in chemistry, and should have at least a fair knowledge of botany. It is not always possible to teach these sciences to schoolboys; and, on the other hand, when the student has entered his hospital, it cannot be doubted that the ever unpopular chemistry lecture is a serious obstacle in the way of the dissector and the student of physiology and histology. Demonstrators often complain how, after chemistry lecture, many students feel that their day has been broken up, and return in a very listless mood to the dissecting-room. As for botany, its abolition as a feature of medical education has been strongly advocated for many years; yet a total ignorance of that science would be very disadvantageous, and the study of the physiology of the vegetable kingdom might be most satisfactorily pursued in the laboratory. In short, it is in every way advisable that the student should enter his hospital well educated in "arts," and possessing a fair knowledge of certain sciences. In order that he may be able to do so, it is necessary that university education in England should be made far more generally accessible than it is at present.

SHIP-SURGEONCIES.

We can no longer claim to be unopposed in our efforts to reform the medical service of the mercantile marine. In its leading articles of the 9th and 11th instant, the *Shipping and Mercantile Gazette* has, on behalf of the shipowners, taken up the gauntlet in truly Quixotic style. The *Gazette* has lost its temper; and, recognising that the arguments which have been adduced on this subject are entirely unanswerable, has descended to the device, more ancient than honourable, of "abusing the plaintiff's attorney." For ourselves, we are content to submit to the unflattering opinion of our cotemporary, even to pass unnoticed his misstatements, and incorrect quotation of our articles; nor do we think that Dr. Irwin needs defence from entirely pointless sneers. It does, however, seem hard upon the medical press generally that the *Gazette* should assign for its contemptuous announcement, "We never read these papers," the apparently paradoxical reason, because, "We find that every week their readers are solemnly informed to give up something indispensable to their comfort under no less a penalty than to die in about a week or so."

Referring to the medical examination of emigrants at the time of embarkation as being, "like, too often, the medical attendance on board ships, is a farce, for which the Board of Trade, and not the shipowner, is responsible," our cotemporary makes this somewhat remarkable statement: "If Dr. Irwin knew a little more about his late business, he would be aware that cases not unfrequently occur where old people and young children insist upon embarking, although they are in a condition that precludes the possibility of their ever reaching America alive." We can understand that elderly persons might, under certain circumstances, be persistent in a desire to join their friends, but that young children, in the lamentable state of health mentioned, should insist on the formidable step of embarkation would be truly phenomenal. We have inquired as to the facts, and we are informed that sick persons of all ages—more especially the old and infirm, who, upon this ground, might be sent back by the American authorities—are not unfrequently refused as passengers. No doubt, some are embarked in such a condition as to require skilled medical attention from the very outset.

On the matter of the statistics of mortality upon the twelve principal transatlantic lines, our cotemporary appears to be somewhat confused. In its first article, it considers the figures quoted by Dr. Irwin, and referred to by us, to be "thoroughly fallacious;" whereas, in its second, eagerness to proclaim the "doctor's inefficiency" betrays it into an admission of "a high mortality." As was stated when these figures were used, they are taken from a return of the Board of Trade to an Order of the House of Commons, dated November 9th, 1882; to which we now refer the *Gazette*.

The writer is eloquent upon the subject of ship-discipline, and the horrors of "a divided authority;" but why he should so trouble himself, we cannot conceive, for, within our knowledge, no one has proposed that the sanitary officer should be allowed any authority, except "in sanitary matters, not involving the safety or general discipline of the ship," which condition clearly provides for such difficulties as those apprehended by our cotemporary.

In all else that it says, this writer unwittingly supports our case as to the grave necessity of reform; but he places himself in the somewhat illogical position of the child who, crying because it is sick, cries still more loudly when the only available remedy is proposed. While declaring the medical service on board ship to be a "farce," the average ship-surgeon to be a "medical fraud," and the entire class to be composed of "raw young practitioners, who alone care to go to sea unless residence on shore has become undesirable," the *Gazette* is bitter in its opposition to reform. Sooner than countenance any movement towards improving the character of the service, which it complains cannot be done "without trebling the market value of the article"—or, in other words, raising the highest possible salary of a ship-surgeon to the extravagantly magnificent sum of £360 *per annum*—our critic prefers the alternative, certainly not reassuring to voyagers, that these "two classes (*i.e.*, the youth just qualified and anxious to travel, or the dull, drunken, and dirty 'bad nut') will always constitute the bulk of the service." Although admitting that the ship-surgeon follows what "must be at best an unpleasant and precarious life, devoid of home corforts," he considers that the surgeon is "tolerably well paid" at the present rate, of from £5 to £10 per month.

Although declaring that the Board of Trade is responsible for defects in the medical service on board ship, and complaining that the ship-owners are "compelled to bear the odium" of shortcomings in the medical officers, yet, when we propose that in real earnest the Board of Trade should undertake the direction and responsibility of the service, the *Gazette* contemptuously replies, "Imagine the Board of Trade offering to direct anything additional just now, with the official mind simply staggering under the load-line question, and a few other little things of the same kind."

Our memory is longer. Referring back to leading articles published in the *Gazette* on February 18th, 1874, and June

7th, 1875, we find that journal advocating that the conditions of employing medical officers in the mercantile marine should be similar to those adopted by the Admiralty, War Office, and India Board. Its recent expressions tally ill with these noteworthy words quoted from the latter article: "Surely, the sanitary condition of passengers leaving our shores, and of the crews who navigate the ships that carry them, is of as much consequence as the health of the seamen of the fleet and of the men who compose our regiments." If such a reflection was opportune when published, it is doubly so at the present time, since the number of passengers from our shores has so immensely increased—from 173,809 in 1875 to 392,514 in 1881. And if our cotemporary will reconsider the suggestions for a Marine Medical Service, which are put forward in our columns, he will find them, in most respects, modelled upon existing conditions of the Royal Naval, Military, and Indian Medical Services; in fact, that, *pari passu*, we ask little more than he himself has advocated.

Further, we may recall to mind, as proof that the present disparity of the service is, if anything, more marked than in 1875, that of 141 medical officers who, during the first six months of last year, were entrusted with full "medical charge" of transatlantic passenger steamers, no fewer than 60 would have been ineligible, through lack of the minimum qualification, for the most junior appointment in the Royal Naval, Army, or Indian Medical Services.

WE are informed that the President of the British Medical Association, Dr. Strange, will probably attend the annual meeting of the North Wales Branch on Tuesday next, July 3rd.

DR. DONALD MACALISTER, Fellow and Medical Lecturer of St. John's College, Cambridge, was, on Thursday, June 14th, elected a member of the Council of that College.

AT the annual meeting of the Metropolitan Counties Branch on July 11th, at the Ship Hotel, Greenwich, the new President, Dr. Hare, will deliver an address on "Good Remedies out of Fashion," in which category come certain forms of treatment by bleeding, leeching, purgatives, and emetics.

LORD HARTINGTON has announced that, in order to afford an opportunity for the statement of Mr. Gibson and others, on the subject of the recent report on the medical department of the Egyptian expedition, he will set apart a special night for the purpose at an early opportunity. The delay, however, is much to be regretted, although in the state of public business, it is considered unavoidable.

FROM Rome, our correspondent writes: The death of Dr. Emilio Cipriani, for long the leading surgeon of Florence, is announced. Exiled in 1848 for the active part he took in the revolutionary movement in Tuscany, he went to Constantinople, and practised there with much success until 1859, when the breaking out of the war against Austria recalled him to Italy. He acted several times as one of the representatives of Florence in the Chamber of Deputies, but was promoted to the rank of Senator under the Cairoli ministry. He had long been in bad health, and died in Rome on the 16th instant.

IMPURE DRUGS.

THE man, Lacante, a wholesale druggist, who has been convicted of adulterating the quinine which he supplied by contract to the Paris Hospital, has been condemned to a year's imprisonment and a fine of fifty francs and the insertion of the judgment at his own expense in a number of the leading newspapers. In many of our hospitals—most of the leading ones, we believe—the purity of the drugs is carefully tested by the chief dispenser. Is it done in all?

SWINEY PRIZE.

NOTICE is given that the next award of this prize will be in January next. Dr. Swiney died in 1844, and in his will he left the sum of £5,000 Consols to the Society of Arts, for the purpose of presenting a prize, every fifth anniversary of the testator's death, to the author of the best published work on jurisprudence. The prize is a cup, value £100, and money to the same amount; the award is made jointly by the Society of Arts and the College of Physicians. The cup now given is made after a design specially prepared in 1849 for the first award, by D. Maclise, R.A. Any person desiring to submit a work in competition, or to recommend any work for the consideration of the judges, can do so by letter addressed to the Secretary of the Society of Arts.

THE HEALTH OF RAMSGATE.

DURING the past five weeks, the death-rate of Ramsgate has been remarkably low, only amounting to 8.5 per 1000; no deaths from zymotic diseases, and, so far as is known, no cases of infectious disease, have existed in the town during that period. Dr. Walford, the medical officer of health, writes "Our means of ascertaining the existence of infectious disease is as effectual as possible. The Ramsgate and St. Lawrence Dispensary forward the weekly return of the sickness on their books. The schools are provided with printed forms to fill up and forward me, with names of children absent through illness, and a fee of 2s. 6d. is paid by the sanitary authority for every return of infectious disease made by medical men, so that I have a very fair means of finding out what is going on, especially as I have always found the greatest willingness on the part of the other practitioners in forwarding notice of their cases."

SOIRÉE AT UNIVERSITY COLLEGE.

THE soirée annually given by the Professors of University College was held on Tuesday, June 19th, and was very largely attended. Visitors were received on the Flaxman staircase by Mr. Berkeley Hill and the deans of the other faculties, and then entered the library, where there was a large collection of paintings and other works of art. Passing through the museum of anatomy, converted into a refreshment-room, the Slade school of fine art was reached, and in its rooms the visitors had an opportunity of observing the result of a year's work of the students; and most were, no doubt, struck by the large number of instances in which the signatures to the best pictures betrayed the foreign origin, or at least the foreign extraction, of the artist. During the evening, two concerts were given in the botanical theatre, the choral numbers being rendered by the Choral Society of University College. Under the central portico, the band of the Coldstream Guards played at intervals.

OVERHEAD WIRES.

SOME serious accidents have already called attention to a public danger which is daily increasing in London and other populous places, in the rapid multiplication of overhead telephone and telegraph wires. With imminent peril to life and limb, these wires are being stretched over streets in all directions, and it seems to be nobody's business to stop, or even to control the nuisance. The Postmaster-General has stated in his place in the House of Commons, that it is not his duty to interfere with the doings of private individuals and of public companies, in the use of telephone and telegraph apparatus, so long as the privileges of the Government postal monopoly are not infringed. The London vestries are now moving in the matter, and they have appointed a deputation to wait upon Sir Charles Dilke, and urge the necessity for immediate administrative interference. It is not difficult to make out a strong case against the increase of wires overhanging public thoroughfares. Such wires are very ugly, and they are really dangerous. At any time they may fall and maim and kill. Some day an extensive fire

or a violent storm may cast down a sheaf of these wires upon the heads of a crowd, and abruptly terminate the nuisance at the cost of a great calamity.

OBTURATOR HERNIA.

VERY interesting statistics on this rare affection are to be found in a pamphlet on *Hernia* by Dr. B. Schmidt, published in 1882 as part of Pitha and Billroth's well-known series. The cases where obturator hernia has been diagnosed during life are reduced to twenty-five; of these, seventeen were subjected to operation, eight were relieved by taxis, but only five altogether were saved by the two methods of treatment. Dr. Hasselwander of Hausham, in Bavaria, records in the *Aerztliches Intelligenzblatt* a successful case of operation for strangulated obturator hernia. The patient, a country-woman, aged 65, had suffered for three days from colicky pains, constipation, and flatulence. On two occasions, she had been seized with vomiting. Her appetite was bad, and she felt pain in the left foot. When first examined, her face showed an anxious expression, her tongue was furred, her body emaciated, and her urine was highly albuminous. The abdomen was distended with flatus. No hernia could at first be detected. There were itching sensations in the left thigh, and numbness in the entire extremity. On closer examination, the depression, plainly marked on the right side, over the adductor longus in Scarpa's triangle, was almost effaced on the left, where the same region was painful on pressure. On deep palpation, an indistinctly circumscribed hard smooth swelling was found on the inner side of the femoral vessels, over the adductor longus. On vaginal examination, fulness could be detected within the left side of the pelvis. Partial reduction was effected; but the symptoms became very serious a few days later, so that an operation at length had to be performed. The adductor longus was laid bare by an incision extending from below the pubes for three inches along the line of its outer border. That muscle was then cleared of the cellular tissue lying in its anterior aspect, and drawn inwards. The fibres of the middle part of the pectineus were divided, and a well-circumscribed swelling was in this manner exposed. The existence of hernia being now certain, the entire incision was enlarged, upon which very troublesome venous hæmorrhage occurred, and it proved difficult to control throughout the remainder of the operation. The external pudic arteries were drawn aside. The swelling was about the size of a pigeon's egg, and very tense; but it fluctuated slightly on pressure. Its surface was of a purple colour. Some strong adhesions were separated by the finger. By the aid of blunt instruments used with great precaution, the sac of the hernia was opened; its outer layer was aponeurotic; its inner coat consisted of a thick œdematous tissue, easily lacerated. There was no fluid in the sac, and the intestine lay immmediately against its inner wall. On widening the incision in the sac by laceration till it became of a sufficient width, the intestine was found to be deeply congested and very tense. The finger was then passed into the neck of the sac, very sharply constricted by the border of the obturator foramen and the ligamentous tissue in the neighbourhood of that region. Incisions were made in the inner and lower borders of the neck of the sac, by means of a straight probe-pointed bistoury. The intestine was then carefully replaced. Only the end of the little finger could be passed into the foramen. The venous hæmorrhage, the depth of the incision, and the lateness of the hour at which the operation was performed, apparently without the aid of any artificial illumination, made the operation very difficult. The wound was covered with an antiseptic plug. The patient passed a motion in the night, and was henceforth relieved from all intestinal troubles, though convalescence was prolonged through suppuration of the wound, the result of the damage done to the cellular tissue in Scarpa's triangle, and its extensive infiltration with venous blood. The patient, at the end of six weeks, was completely restored to health.

WORKHOUSE REVELATIONS.

RECENTLY an inquest was held, at the Buffalo Head Tavern, Marylebone Road, relative to the death of Mary Regan, aged 64, an inmate of the Marylebone Workhouse. It appeared, from the evidence of some relatives, that the deceased had been an inmate of the workhouse for a considerable time. Whenever she had been out for a holiday, and it was time for her to return, she would cry bitterly, stating that, if she did not take some money with her to give the pauper nurses, she would be ill-treated; and that, upon one occasion, when she did not give a nurse any pence, the latter nearly choked her when she was in bed. The deceased had been found dead. The medical officer stated that death was due to heart-disease. There was a general denial, on the part of the inmates, of any ill-treatment of the deceased, or of any complaint made by her; but, despite of that, the fact was established, that the pauper nurses were in the habit of receiving gratuities now and then from the unfortunates committed to their charge; on which the foreman of the jury remarked "that the practice of poor persons giving the pauper nurses pence should be at once put a stop to," in which opinion the coroner agreed. The jury, in returning a verdict in accordance with the medical evidence, added a rider: "That having heard, among other statements, that the assistant-nurses at the workhouse did occasionally take money from the inmates, they would recommend the guardians to inquire into this statement." In commenting on the above revelations, we express our opinion, derived from absolute knowledge of the subject, that much petty tyranny does exist in the various large London and provincial workhouses; and, if abuses such as these can be carried out in one of the best managed establishments in the kingdom, graver ones would be found to exist in other houses under more careless control. The remedy for these and other evils, in our judgment, consists in a more judicious visitation and inquiry by the committee of guardians, who should always make their investigations when the master, matron, and chief officials are not in their company. As for official inquiries conducted by Local Government Board inspectors, their duties are performed in such a perfunctory manner, that it is hopeless to expect any good arising from their inspection. To us, they appear to exist solely with the view to the receipt of so much public money yearly.

QUARANTINE IN THE RED SEA.

WHETHER the Suez Canal Company is or is not the proper body to which to entrust the cutting of a second or parallel canal between the Mediterranean and the Red Sea, is happily a question with which we have nothing to do; but it is due to the Company to say that at least part of the vexatious restrictions that now harass British commerce must not be laid to its charge. That curiously effete and wrong-headed body, the International Sanitary Council of Egypt, is responsible for not a little of the soreness which English shipowners now feel with regard to the canal, and it is a standing wonder that some effort is not made by our Government at home to improve it out of existence. Some time ago Sir Charles Dilke, replying to a deputation of shipowners, made a fine show of official virtue in disclaiming responsibility for the arbitrary and capricious acts of the Council, which were causing common losses to English shipping, and in saying that the Government could no longer consent that an irresponsible body should have the power to make arbitrary laws vexing all the commerce of Great Britain, and uselessly hindering its communications with India. Yet the Council still lives and thrives; for, according to telegrams received, it has excited the usual outburst of indignation in India by again subjecting vessels from Bombay to quarantine. The pretext upon this occasion is the appearance of a cholera epidemic in a village near Bombay. Now the longest period during which cholera poison can lie latent in the system is probably ten days. The voyage from Bombay to Suez is rarely shorter than eleven or twelve days, so that a vessel arriving in the latter port without having had cholera on board may be

admitted to *pratique* with perfect safety. This has been pointed out to the Egyptian Board over and over again, and it now seems to be really time for the British Government to bring some pressure to bear upon it, with a view to putting a stop to this constantly-recurring annoyance. A late official telegram states that vessels leaving Bombay after June 13th will be free from quarantine; but as matters stand, there is no guarantee that the restriction will not be again imposed before the end of the summer. Looking to the exceptional position which this country now holds in Egyptian councils, it is essential that we should use our opportunities for abolishing altogether these absurd and useless restrictions.

M. PASTEUR ON WINE.

THE remarkable researches of Pasteur upon alcoholic ferments have a great influence upon the improvement of brewing of beer, and they promise, it would seem, to have a no less valuable result in the making of wine. The *Pharmaceutical Journal* mentions, that it "seems quite probable that the quality of the wine of any year is as much affected by the particular mould which predominates during the fermentation, as by the amount of sunshine or rain during the growth of the grapes, or even the passage of a comet through the sky. In Germany, it is already the practice to sterilise the must and then to sow it with some selected ferment, a process favourable to the elimination of various 'false' ferments (species of *Dematiei*) that are common to the surface of the grape and other fruit, whilst the custom in some southern countries of decanting the must as soon as the first foaming appears may have the same effect. In a recent communication (*Comptes Rendus*, tome xcvi, p. 1369) M. Le Bel incidentally remarks, that last year none of the grape-collection with which he had to do underwent fermentation influenced by what Pasteur considers to be the true wine ferment, *Saccharomyces ellipsoides*, Rees, but was all fermented by *S. pastorianus*. M. Le Bel also states that a natural must yields a larger proportion of the higher alcohols than a solution of sugar fermented with the same ferment. This observation has an important bearing upon the keeping of the 'wines' now largely manufactured from sugar solution in which grape-skins have been steeped."

GAS-HEATING AND THE ELECTRIC LIGHT.

CONTINUOUS progress is being made in the work of smoke-abatement, and in the introduction of gas as an economical heating and cooking fuel. We are glad to learn, from a correspondent, that Dowson's economic gas has been introduced by Dr. Ancram, at the New County Asylum, Gloucester, with an initial economy of half the cost of coal-fires. It not only does all the heating and cooking, but drives two gas-engines for pumping, laundry work, etc. The Dowson's gas-maker was awarded the gold medal and Siemen's prize, at the Smoke Abatement Exhibition; and it is very satisfactory to find that the practical working at the Gloucester Asylum confirms the tests of the experts, published in the Smoke Abatement Report. The building will also be lit by electric incandescent lights, furnished by motors actuated by the gas-engines.

MUSEUMS OF HYGIENE.

THERE is a project on foot for providing Paris with a Museum of Hygiene. At the instance of MM. Bourneville, Cernesson, and Loiseau, the Municipal Council of Paris voted a sum of about £640 for the initial expenses, and invited the administration which has charge of the medical welfare of the country, "L'Assistance Publique," to proceed at once to the establishment of the museum. Three months have elapsed since this vote was passed, but L'Assistance Publique has not yet taken any steps in the matter. We are informed, however, that the project will not be allowed to drop, and that the French public are gradually becoming more and more interested in questions of hygiene, and that the general press have begun to discuss the advantages to be derived from a permanent exhibition. Meanwhile, in this country, the Parkes Museum is quietly settling down to its work as a centre for education. The first or inaugural lecture, given by Professor De Chaumont, was listened to by an attentive audience, over which Dr. Crawford, the Director-General of the Army Medical Department, presided. Mr. Robert Rawlinson, C.B., in some remarks at this meeting, touched on one important point: the influence of improved sanitary conditions, not only on health of body, but on morality; there had been, and there still was, not only in towns, but in country villages, such a state of things as rendered it absolutely impossible for human beings to be brought up with any pretensions to virtue; in this way, a criminal population was manufactured. Mr. Rawlinson thought we could only look to the State for a real remedy for this condition of things; that the State must compel closer attention to hygienic laws; must compel speculators to build healthy houses, and landlords to keep tenements in a condition in which it is possible for the poor inhabitants to make for themselves healthy homes. We may perhaps be permitted to supplement these remarks by pointing out that much good may also be done by beginning from below; Mr. Rawlinson would begin from above, and give the people healthy homes, and then teach them how to live in them; but by teaching the people what a healthy home should be, and how it may be obtained, a demand for healthy houses would be created; indeed, so much has been done, that the demand already exists: it is being extended by the work of such institutions as the Parkes Museum, the National Health Society, and the Kyrle Society. Much yet remains to be done, but results so far are encouraging. A nation is not strong by reason of its numbers, but in the health, character, and virtue of its people.

THE DUKE OF CONNAUGHT AT ST. THOMAS'S HOSPITAL.

THE Duke of Connaught, who has recently become the President of St. Thomas's Hospital, was accompanied by the Duchess of Connaught, on Saturday, June 23rd, when he distributed the prizes to the successful students in the medical school. Mr. C. S. Sherrington, who took the Grainger Prize, was introduced to His Royal Highness, in a highly complimentary speech, by Dr. Harley, and the same service was performed for Mr. Johnston, the winner of the Cheselden Medal, by Sir William Mac Cormac, and for Messrs. Hull and Caiger, the winners of the Mead Medals, by Dr. Stone. Dr. Ord (Dean of the Medical School), addressing the Duke of Connaught, expressed the gratification which the school felt that the first time on which His Royal Highness had officially come to St. Thomas's, was on an occasion connected with the Medical School. Twelve years and two days earlier the hospital had been opened by Her Majesty the Queen, and, remembering the great part played by noble womanhood in the work carried out within the walls of the hospital, it was most gratifying to be able to welcome the Duchess of Connaught, and to recognise the interest which she displayed in their work. The Duke of Connaught said that he wished particularly to congratulate those gentlemen who had received the prizes, and also those who had received the high testimonials, to which he had listened. He wished to congratulate them not only on the success they had achieved, but also on the hard work in which they had been engaged to obtain these marks of distinction. Their duties had been very arduous and very severe, but he was sure that, entering as they were into so dist guished a profession, they felt an absorbing interest in their work. He was sure that the reports that he had heard, not only from the eloquent speech to which he had just listened, but also from the distinguished staff of the hospital, spoke most highly of the manner in which they had carried out their duties. The Duke concluded by thanking the audience for the enthusiastic manner in which he had been received, and added that

the Duchess equally appreciated the reception. At the conclusion of the Duke's speech, three cheers were given by the students, and their Royal Highnesses were subsequently conducted through part of the hospital.

SEA-BATHING.

AT the present time, when the sea-bathing season is about to commence, it may be useful to recall the chief general indications and contraindications which respectively sanction and forbid bathing in the sea. "Shall I bathe?" This is a question which thousands of health-seekers will be asking of their doctors during the next few weeks. While the stimulus of a fresher air, of change of scene, and of new occupations, together with rest from accustomed work, are the elements from which the weakly, the worn, and the worried reap physical and mental restoration in a sojourn on the sea-coast, it is unquestionable that bathing in the open sea is, in itself, a powerful restorative agency, which many persons many employ with very great advantage. The universal experience of our race, through unnumbered ages, has shown the value of sea-bathing in both preventive and curative medicine. A good rule, laid down by an experienced physician, is this: in all cases showing impaired functional powers, without any manifestation of inflammatory symptoms—in short, in those cases in which the exhibition of alteratives and tonics is indicated—sea-bathing may, with proper precautions, be resorted to; it is contraindicated in persons of plethoric habit of body, in cerebral congestion, in organic disease of the heart, in aneurysm, and in all persons who have not the ability safely to encounter a comparatively severe shock; while it is also to be forbidden at certain periods in which the female constitution is not prepared for the application of powerful remedies. Because it tends, in certain conditions of impaired health, to cause determination of blood to the viscera, bathing in the open sea is generally unsuitable for persons disposed to congestive disorders of the lungs, kidneys, liver, and brain. Albuminuria, advanced anæmia, and a liability to hæmoptysis, are also conditions which are usually accepted as contraindicating sea-bathing. It is hurtful to bathe babies in the sea; children under two years of age are too young to bear with advantage the comparatively severe shock of a cold sea-bath. In old age, when the bodily powers are unequal to a vigorous reaction, sea-bathing may do much harm, especially in the subjects of extreme arterial degeneration. In suitable cases, and under proper precautions as to time of bathing and duration of exposure, a daily bath in the open sea is a valuable restorative. In individuals who are fairly robust, it is a stimulant alterative and tonic, promoting appetite, tissue-change, and excretions, and bracing up the nervous, vascular, and muscular systems. Sea-bathing is especially useful as a powerful and unsurpassed tonic in delayed convalescence from acute diseases, in many chronic affections, and in persons whose strength has become enfeebled by injurious excesses, by mental strain, or by unhealthy occupations.

THE HARVEIAN ORATION.

ALL who have heard or will read Dr. Habershon's thoughtful lecture, which we publish this week, must be struck by the clear manner in which the orator explained the often repeated arguments in favour of experimental research as the sole basis of true science. In order to do so in a manner most pertinent to the subject, a comparison was drawn between the methods of Galen and of Harvey. The earlier philosopher ascertained by experiment that, when an artery was ligatured, and afterwards opened, blood was poured out, proving the nature of its contents to be blood, and not spirit; and Galen also ascertained by experiment that bleeding from the arteries emptied the veins. But he persisted in his belief that the blood passed from one ventricle to another by soaking through pores in the interventricular septum. The fallacy of this doctrine might have been entirely refuted by its own promoter, had he only continued to trust in observation as well as in reason. We all know how great an evil followed; for, through a combination of unfavourable political and social conditions, hindering progress for ages, Galen's error became fossilised and cherished for over a thousand years, when Harvey once more took up the same subject, and, by ending as well as beginning by experiment, succeeded in making the greatest of all discoveries which the history of physiological science can record. It is thus, and not otherwise, that fresh discoveries can be made, and fresh truths can be learnt. It is vain to persuade those who will not be persuaded; but it is well for all members of our profession to bear in mind the wholesome taunt contained in Dr. Balthazar Foster's address, also to be found in the present number of the JOURNAL. The profession has been almost powerless against the attacks of organised bands of sentimentalists, because it has chosen to be so, forgetting, or rather seldom trying, its strength. When its individual members will not allow certain base considerations to deter them from throwing down the gauntlet in its defence, medical journalism will not so frequently be compelled to make wearisome repetitions on the subject of scientific experiment and its obstructors, nor to reiterate arguments which Dr. Habershon has illustrated this week by a simple, though not novel form, in his comparison between Galen and Harvey.

THE SUNDERLAND CATASTROPHE.

RESPECTING the special cases of children rescued from the fatal crush in Victoria Hall, as reported in last week's JOURNAL, Mr. Mordey Douglas informs us that, although Mary E. Fox's symptoms were serious on admission to the Children's Hospital, she rapidly improved, and was sent home on Saturday last. The boy, 9 years of age, who was the last to get his body safely through the door, but received a fracture of the right humerus, from the crowd behind him pressing his arm against the door, is progressing very favourably. Another child, of the same age, was admitted into the hospital a few days after the accident, with a contused wound of the right arm, produced in the same manner. The girl, Howie, is still suffering from nervousness, but no symptoms of internal injury have developed. Mr. James Barron, whose comments on the construction of the Hall, the faultiness of which he had called attention to when it was being built, have appeared in the daily papers, has favoured us with the following statement. "Referring to the lamentable occurrence which took place here in the Victoria Hall, where nearly 200 children lost their lives, it ought to be distinctly understood that the cause of the late accident had nothing whatever to do with the faulty construction of the modes of egress from the hall; that cause concentrates itself entirely in the fact of the recent and unfortunate erection of a strong swing door, on a small landing-place, between two flights of steps mounting to the gallery; the door being supplied with a strong upright bolt which fell into a socket fitted into the floor, for its reception. Here the door was bolted, leaving a space of about eighteen inches between the jamb and the door. The children rushing down a staircase about twelve feet broad, unable to get through the small open space, fell behind the door, and there suffered. My contention, however, has nothing whatever to do with the cause of the late accident; it lies entirely with the modes of egress from the hall, which, in my humble judgment, are fearfully inefficient for the rapid and safe exit of an audience numbering 3,500 people, and under the influence of some cause for fear. The arrangement of the doors leading out of the dress-circle, and the body of the hall, may be said to be admirable contrivances for blocking the rush of the frightened fugitives. Every door in the place is contrived so as to open inwards, in spite of my protests many years ago as a director, and while the building was in progress. The two outer doors are large and wide, but have the same fatal fault as the inner doors; they both open inwards, and cannot possibly be opened if a block should take place. The large west door has a special contrivance of its own for resisting any force applied from within. I therefore contend that the simple remedy for the avoidance of all possible mischief is to remove the ingenious contrivances and erect swing doors (but without the upright bolts and sockets), or so to alter the present doors that they may be made to open outwards, and not inwards." We turned

attention to the danger of doors, so contrived, in a paragraph in the last number of the JOURNAL. Mr. Barron shows us that the hall contained not only the portal which caused this particular accident, but was literally beset with others of the kind. It must be remembered that this arrangement exists in many other public buildings.

OXFORD AND CAMBRIDGE.

PROFESSOR HUMPHRY has been this week translated to the newly-created Professorship of Surgery in the University of Cambridge. This office, created under the provisions of the new University Statutes, is at present unendowed. To fill it, Professor Humphry has resigned the paid Professorship of Anatomy. This is in accordance with the devotion to the progress and completion of the Faculty of Medicine which has been the noble characteristic of his career, and the great work of his life. Through obstacles which would have daunted most men, and in the face of difficulties which few could have overcome, Professor Humphry has laboured for long years to create a true and active School of Anatomy in Cambridge, and to foster the completion of the Faculty of Medicine in the University in all its parts. He can look round and feel nearly content. Surrounded by zealous and sympathetic colleagues, with a school numbering two hundred working students, and nearly, but not yet quite complete in all its arrangements, with a biological department unrivalled in this country, and truly worthy of a great university, he has succeeded in the worthy aspiration of a lifetime. Compare the present position of the two universities of Cambridge and Oxford. Cambridge, with small funds and little or no endowments, but active, earnest, full of life and aspiration, and rejoicing in a great achievement, offers a magnificent prospect for medicine, and is swarming with students of medicine. Oxford, wealthy, laden with endowments specially designed for students and teachers of the medical profession, but perverted for every imaginable vagary which tortuous ingenuity could devise for diverting funds from the real teaching of the essentials of a medical education. The feeble pretence of teaching the "preliminary" and "collateral" subjects of medicine is, as one of the most earnest students of the University wrote last week in our columns—more in sorrow than in anger—a complete and hollow sham. Of the excellent intentions with which this work of obstructive perversion has been carried out, we cannot doubt, in view of recent protestations. the two policies have been carried out with equal vigour in the two Universities. We congratulate Dr. Humphry that his has been the work of successful and vigorous construction; the monument is more lasting than brass. At the base of it, his name will be inscribed in durable characters. No man could desire more. To few is it given to deserve so well, and to achieve so much for his profession, his university, and his country.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE annual marriage-rate of England and Wales during the last quarter of 1882 was 18.1 per 1,000, and was 0.6 below the mean rate in the corresponding quarters of the ten years 1872-81. The annual birth-rate in the first quarter of 1883 was 35.2, and was 1.0 below the mean rate in the ten preceding corresponding quarters. As is usual, the rate was higher amongst the mining populations, and in towns, than in the purely agricultural districts. The excess of births over deaths during the quarter was 85,230; whilst 29,209 English emigrants left these shores during the same three months. The average price of wheat was 41s. 3d., which was below the price of any year since 1879; beef and mutton were dearer than in any year since June 1873. Mild weather prevailed during January and February, whereas during the greater part of March the temperature was unseasonably low, and snow fell frequently. The rainfall at Greenwich was 5.36 inches, and was just above the average. The deaths registered in England and Wales were 146,856; equal to an annual rate of 22.3, and 1.0 below the average rate of the quarter. The death-rate was exceptionally low during January and February, but rose during the cold weather of March, the fatal effect of which was apparently much greater in rural than in urban districts. There were 13,184 deaths from the chief zymotic diseases, corresponding to an annual rate of 2.00 per 1,000, against an average rate of 2.58 for the ten preceding first quarters. The deaths from whooping-cough were 3,462; and were particularly numerous in Cardiff, Plymouth, Hull, Reading, Dudley, and Maidstone. Scarlet fever caused 2,837 deaths, and was prevalent in Sheffield, Leeds, Accrington, and Gloucester. The deaths from fever numbered 2,137; and were numerous in Liverpool, Blackburn, and Gateshead. The deaths from measles were 1,820; from diarrhœa, 1,657; diphtheria, 1,002; and from small-pox, 269. The causes of death were uncertified in only 6,238, or 4.2 per cent. of all the deaths registered; and whereas the proportion of uncertified deaths did not exceed 1.4 per cent. in London, it was as high as 7.1 in Herefordshire, 7.8 in Cornwall, 8.0 in Westmoreland, 10.9 in South Wales, and 11.5 in North Wales, and was 7.2 in Oldham and Wolverhampton, and 9.5 in Halifax. The percentage of deaths in public institutions was 19.3 in Liverpool, 20.8 in London, and 20.2 in Manchester; whereas, in the rest of England and Wales, excluding the twenty-eight chief towns, it did not exceed 7.7 per cent.

LONDON AND PROVINCIAL FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

AT the annual dinner of the West Kent Medico-Chirurgical Society, held at the Holborn Restaurant, on Tuesday, June 26th, Mr. Arthur Durham and Mr. Sydney Jones—both candidates for a seat on the Council—were called upon to return thanks for the toast of "The Royal College of Surgeons." Mr. Durham, in the course of his remarks, stated that he had purposely refrained from answering a letter sent to him by the Association of the Fellows of the College of Surgeons, as he considered it an impertinent interference with the rights of free election. He made an animated attack on what he described as the "Brummagem caucus," which, he said, was endeavouring to set the Provincial against the London Fellows. It was his opinion that those best qualified from their position and standing in the profession, and who were able to best attend to the working of the institution, should alone be selected for seats on the Council, without reference to their places of residence; and he thought that those only who would take the trouble to attend at the College should be allowed to vote. Mr. Sydney Jones, on the other hand, thought that country members ought to be allowed to vote by papers or by proxy. Mr. Thomas Moore, of Blackheath, in proposing the toast of the visitors, took exception to the remarks of Mr. Durham. He was not, at present at all events, a member of the "caucus," but he thought that Mr. Durham entirely misapprehended the aims and intentions of those who were agitating for a reform in the mode of election into the Council. They did not wish to set country against town, as Mr. Durham had remarked, but they did wish to secure to every Fellow of the College the right to vote, without being virtually fined for doing so. When he lived in the country he had to spend perhaps £2 or £3, and sacrifice a "day's work" to record his vote, whilst Mr. Durham could get from his house to the College, in a cab, for a shilling. The universities and other public bodies allowed voting by proxy or by papers, at similar elections; and the College of Surgeons would have to do the same. Mr. Durham, in reply, somewhat modified his views, and was understood to say that it was not so much the voting by papers that he objected to, as voting by proxy, and the attempt to get an undue proportion of country members on the Council. What may be the meaning of that expression we do not apprehend, but perhaps Mr. Durham will be willing to make it clear, and state his plan.

AN ARMY SANITARY SERVICE.

WE publish this week the substance of the address delivered by Mr

Rawlinson, C.B., at the Parkes Museum, on June 21st. It was followed by much warm debate, as is too often the case when the subject of the address is discussed in public. Mr. Edwin Chadwick, C.B., spoke very strongly in favour of the proposition that what he called the "curative" should be separated from the "preventive" service, and urged that the sanitary "service should be put in a position due to its increasing importance; and that recognition, not to say reparation for injurious neglect, should be given for the elaboration of sanitary principles, and for their successful administrative application." The address of Mr. Rawlinson is worthy of examination, as the deliberate expression of opinion by an engineer who has had exceptionally good opportunities for studying the question. The contention of the address was, that the high death-rate in the Crimea having been recognised, by the Commission presided over by Lord Herbert of Lea, to be due to neglect of sanitary precautions, and that Commission having recommended the appointment of a sanitary officer attached to every army in the field, the failure to carry out this recommendation had been the cause of later difficulties, and will, if the country should become involved in a serious war in the future, be productive of misfortunes such as those that occurred in the Crimea. Surgeon-General Mouat, V.C., C.B., and Inspector-General Lawson, felt called upon to repel some of the charges indirectly brought against the services to which they had belonged, and did so with a spirit and acuteness that commanded the praise of Major-General Sir E. Hamley; but we believe that both of these distinguished officers would readily agree that sanitary details require the closest attention both in the field and in camp; and that, as a rule, such details are best entrusted to a special officer. When, however, it is proposed to create a second service, quite independent of the medical service, and responsible only to the Commander-in-Chief, and yet dealing with matters where, in a great degree, the knowledge and experience of medical officers are the most important elements in forming a judgment, we must express our dissent from Mr. Rawlinson's dictum, even though reinforced by the recommendations of a Royal Commission of ancient date.

SCOTLAND.

CHAIR OF MEDICAL JURISPRUDENCE IN ABERDEEN.

THERE are now eight applicants for this chair, viz., six gentlemen practising in Aberdeen, and two Edinburgh candidates. The University Court will probably meet on or about July 11th, to receive the resignation of Dr. Ogston. The resignation must be sanctioned by the Privy Council before an appointment can be made.

ROYAL MATERNITY HOSPITAL, EDINBURGH.

THE appointments for autumn for the Royal Maternity and Simpson Memorial Hospital have been made. Mr. F. W. N. Haultain, M.B., and C.M.; and Mr. J. F. S. Whittingdale, B.A. (Cantab.), and M.B., have been appointed house-surgeons in place of Messrs. G. Armstrong Atkinson, M.B., and C.M.; and John Thomson, M.B. and C.M., whose terms of office expire at the end of July. At that time Dr. J. Halliday Croom will succeed (in rotation) Dr. Keiller as ordinary physician for the autumn months.

PROPOSED RECREATION GROUNDS FOR ABERDEEN UNIVERSITY.

A LARGE meeting of students attending Aberdeen University was held last week, for the purpose of considering a report prepared by a committee appointed at a previous meeting, as to the securing of recreation grounds and a gymnasium for the University. The senatus had previously appointed a committee of professors to consider the proposal, and to confer with the students on the matter. It was unanimously agreed by the students to proceed further with the scheme.

SUDDEN DEATH OF A SURGEON.

MR. JAMES MOIR, Surgeon, died suddenly on the morning of June 27th, in the refreshment-room at the Joint Station, Aberdeen. According to reports published in the daily press, he had walked hurriedly from his residence in Rose Street to catch the twenty minutes to eight Deeside train, with the intention of proceeding to Ballater, to attend the Druggists' annual picnic, and, meeting friends on the platform, he went into the refreshment-room, but almost immediately fell down and expired. Medical aid was immediately summoned, when it was found that death resulted from apoplexy. The deceased was sixty-five years of age, and he leaves a wife and grown-up family.

GLASGOW WESTERN INFIRMARY.

WE understand that the meeting of the managers of this institution and of the medical staff, on the question of the administration of anæsthetics in the hospital, reference to which was made in last week's JOURNAL, has taken place, and was of a most friendly and satisfactory nature. The result of the conference was, to make no radical changes in the system at present carried out; but the general feeling of the staff seemed to be in favour of having, as much as possible, legally qualified gentlemen to fill the posts of resident assistants; and that, for the satisfaction of the managers, each of these gentlemen would hand in to them, on appointment, a certificate from the surgeon under whom he was acting as to his fitness to be trusted with the administration of anæsthetics. It was felt that this would be a guarantee to the public that everything was done in the hospital to render safe the administration of chloroform or any other anæsthetic agent.

ANDERSON'S COLLEGE, GLASGOW.

THE annual report read at the public meeting of the supporters of this institution on the 22nd instant, shows that the academical year just passed has been in every way satisfactory. The classes in all the different departments have shown increased numbers, and the chief cause of complaint seems to be the want of adequate accommodation for the various classes. On the question of the removal of the Medical School further west, so as to be nearer the University and the Western Infirmary, the report states definitely that at present it cannot be done. The directors of the College quite realise, apparently, the position in which the Medical Faculty has been placed by the removal of the University, and the institution of a medical school in connection with the Royal Infirmary, but they are unable to take any action in the matter, as they have not the funds requisite for purchasing ground and erecting the necessary accommodation for a medical school. There was no other business of importance, beyond the re-election of the professors for the ensuing year.

THE HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending June 9th gives a death-rate of 31 per 1,000 living, the number of deaths registered being 604. In the corresponding fortnight of last year, the death-rate was 6 per 1,000 less, being 24.6. The causes which produce this great contrast are still the same, namely, the infectious diseases of children; for, while the deaths from measles, scarlet fever, and whooping-cough numbered 33 last year, this year they amount to 102. Compared, however, with the previous weeks of this year, all these diseases show a decline. The average of the fatal cases of measles was 22.4 months, and of whooping-cough 25 months. Three cases of small-pox were registered during the fortnight, and there has been a slight outbreak of typhus fever during the past month, the number of cases amounting to 23, which is far in excess of what is usual at this season of the year. It will thus be seen that the high death-rate of the past few weeks continues, and indeed, with the exception of Manchester, Glasgow seems to

be the very highest of all towns at the present time. Comparisons have been drawn in some quarters with the rates of mortality in Glasgow ten years ago, before the clearing-out operations of the Improvement Trust and the City Union Railway began to make themselves felt; and it is argued that any good effect arising from these agencies was only temporary, the density of population and overcrowding, so productive of high death-rates, having in reality only been transferred from one quarter of the city to another. We scarcely think that the exceptional state of matters at present existing in Glasgow justifies such a conclusion; for it has been pointed out, on more than one occasion, that the infectious diseases of children are really responsible for the recent high death-rates, and we believe that it could very easily be shown that Glasgow, as in the case of Birmingham, has been largely the gainer by the operations of its Improvement Trust.

REGISTRAR-GENERAL'S RETURNS.

THE returns of the Registrar-General for the week ending June 16th show that the death-rate in the eight principal towns was 24.5 per thousand of estimated population. This rate is 3.7 above that for the corresponding week of last year, but 2.4 below that for the previous week of the present year. The lowest mortality was recorded in Edinburgh, viz., 16.7 per thousand; and the highest in Greenock, viz., 34.2 per thousand. The mortality from the seven most familiar zymotic diseases was at the rate of 5.4 per thousand, or 0.9 above the rate for the previous week. Measles, whooping-cough, and diarrhœa, were the most prevalent of the epidemic diseases, the mortality from these diseases being most marked in Glasgow. There were 8 deaths from measles in Greenock during the week. From acute diseases of the chest 109 deaths were registered, or 3 less than in the previous week. The mean temperature was 54.3°, being 1.7° above that of the week immediately preceding, and 4.8° above that of the corresponding week of last year.

PROSECUTION UNDER THE ALE OF FOOD AND DRUGS ACT.

THE importance of having prescriptions dispensed in strict accordance with the specified compounds stated by the prescriber cannot be over-estimated; and a prosecution of a Glasgow chemist for a neglect of duty on this poi· occurred last week, but under circumstances of such a peculiar ...ture that we have thought it necessary to allude to them, as the case presents some points of interest for medical men, as well as chemists. It appears that a prescription was presented at defender's shop, one of the specified ingredients of which was a certain drug called "methyl salicylatis," which is not a pharmacopœal preparation, but has been introduced from America, and has been so recently brought forward that it is not kept in stock by any chemist in Glasgow. The assistant who made up the medicine, after examining the prescription, came to the conclusion that what was meant was salicylate of soda, and this he supplied instead of the methyl salicylatis. At the trial, this was at once admitted by the defender, who pleaded guilty to an infringement of the strict letter of the Sale of Food and Drugs Act, 1875, but urged in extenuation that no fraud was intended on his part. A modified penalty of £4 was inflicted by the sheriff, as there had been a clear violation of the law; but he pointed out, in giving judgment in the case, that the proper course for the dispenser to have taken when he found he was not acquainted with the drug, and had none of it in stock, was to have communicated with the medical man who gave the prescription, and ascertained from him the nature of the ingredient, and where it could be obtained. With this advice we quite agree, and we also think that medical men, when prescribing recent and somewhat unknown drugs, should do all in their power to render aid to the dispensing chemist in his work, by drawing attention to the ingredient or ascertaining that it is kept in stock by some one before including it in a prescription. In the present instance, no evidence was brought forward to show that the drug had ever been dispensed before in Glasgow; but it was shown that had the words oil of Gaultheria been inserted following the "methyl salicylatis," the dispenser would have had his attention directed to the matter, as this "methyl salicylatis" is a volatile essence obtained from that substance. As we have already remarked, the case is one instructive to both medical men and chemists, showing the necessity of clearness on the part of the former in drawing up their prescriptions, and of inquiry on the part of the latter when any difficulty presents itself.

IRELAND.

REMOVAL OF MAXILLARY TUMOUR BY MEANS OF THE DENTAL ENGINE.

MR. F. A. NIXON successfully removed an osseous tumour of the upper jaw by means of this instrument last Saturday in Mercer's Hospital. The patient was a young country girl, and the tumour, which caused considerable deformity, extended upwards to the floor of the orbit and backwards to the pterygo-maxillary fossæ. A great and important advantage in the operation as performed by Mr. Nixon was that the small circular steel saws used were employed from the mouth, no incision having been made in the cheek, and an unsightly cicatrix consequently avoided. The operation occupied one hour and ten minutes in performance. No difficulty was met with in using the saws, which, being so small in diameter, one-quarter and one-half inch respectively, were readily worked in a limited space, and could be guided by touch alone. This, in a difficultly accessible region such as the pterygo-maxillary fossæ, is an advantage of no little importance. The patient is progressing favourably.

BOVINE LYMPH.

IN the recent report of the Local Government Board for Ireland, there is a report by Dr. Montgomery of the Vaccine Department, Dublin, on some experiments performed by him with calf-vaccine. Last year he obtained, by direction of the Board, from Dr. Warlomont of Brussels, 10 points, 5 tubes, and 1 phial containing a compound, the latter probably a mixture of calf-vaccine, glycerine, and water. This lymph was the thirtieth reproduction from calf to calf, the original source being a case of spontaneous cow-pox, which occurred at Bordeaux in 1881. Dr. Montgomery vaccinated 32 infants with this lymph, of which number 7 were by points, 13 from tubes, and 12 with the compound, with a result that 17 (points 3, tubes 4, and compound 10) produced natural results. A second series of experiments was made with the object of trying to discover for what length of time the calf-vaccine might be kept, with an after-certainty of its producing a typical vesicle. From these Dr. Montgomery has come to the conclusion that the longer calf-lymph is kept, the less likelihood is there of its producing its effect, and that after having been stored for some months, failure follows its use, even although the greatest care be taken in inoculating with it.

CHARGE AGAINST A MEDICAL OFFICER.

A SPECIAL meeting of the Queenstown Dispensing Committee was held on last Saturday for the purpose of considering a correspondence which had taken place between one of the guardians and the Local Government Board, in reference to a charge of neglect brought against Dr. R. H. Townsend. The guardians having considered the matter and read Dr. Townsend's reply, passed the following resolution, the guardian who brought forward the charge alone dissenting. "That, having already investigated the allegations made by Mr. Patrick McCarthy against Dr. Townsend, respecting his treatment of the children Harrington, and having found them to be absolutely groundless, we hereby notify to the Local Government Board this fact, and further state that nothing has transpired since the investigation to warrant us in giving the matter any further consideration."

PROPOSED MEDICAL PROVIDENT SOCIETY.

In the JOURNAL of next week will be published the list of the names of those who have expressed their approval of the proposal to establish a Medical Benefit Society, by letter, or by returning the form of adhesion recently issued.

Preliminary steps are now being taken to obtain an actuarial scheme, for the purpose of laying it before a meeting to be convened at Liverpool, on the occasion of the annual meeting of the Association.

It is particularly requested that gentlemen willing to assist the formation or to become members of a Medical Benefit Society, will send in their names and addresses without delay.

THE INFECTIOUS DISEASES NOTIFICATION BILL.

MR. HASTINGS'S Bill was brought up for second reading on Wednesday, and was disposed of by counting out the House. This has been this session a favourite way of disposing of unpopular measures brought forward by private members. Had it not been thus summarily treated, it would have been rejected by a large majority. So far as we have been able to ascertain, it has few friends, and a host of enemies. There were a large body of members in the precincts of the House who would have registered a hostile vote, had there been a division; and the Bill would have met with very little support in face of the great number of petitions which local members have presented from Branches of the Association, in compliance with the request and on the model furnished by the Parliamentary Bills Committee. It is much to be regretted that, in the face of the opposition expressed by so large a body of the members of the medical profession, Mr. Hastings should have persisted in retaining the form of clause as to notification which was so definitely rejected at the Worcester meeting of the Association, and which has certainly not grown in favour since that date. A graceful concession to the opinion of the profession would have secured a fair promise of success for a measure of which he took the best means of courting defeat.

THE CHOLERA IN EGYPT.

TELEGRAMS which we have received from correspondents at Cairo and Alexandria throw great doubt on the statement that the outbreak at Damietta and Mansourah is one of cholera morbus. It is alleged that the cases have not been so rapid or characteristic in their course as to justify the declaration that the epidemic is an importation of Asiatic cholera. On the contrary, the symptoms are for the most part ill-defined, and the progress of the cases lingering. It is certain that many of them are cases of endemic typhoid fever, others of dysentery, and what is called choleraic fever, which are always apt to be prevalent at this time of the year in these places. The local conditions of heat and filth, and the fouling of the water-supply, are this year aggravated by past neglects and recent events. "Unfortunately, the Sanitary Boards," says one correspondent, "are too apt to tolerate every kind of disease engendering filth in water, air, and soil, and too ready to yield to panic, and to trust to the broken reed of quarantine. Under the present suspicious circumstances, sanitary cordons are justified, but an exaggerated idea of the value of quarantine, and hurry to impose it for other than purely hygienic reason, is the greatest source of our troubles. Enforced cleanliness and isolation of the sick are great needs, and these are being neglected. I have not seen one case yet of true Asiatic cholera, and I do not believe there is any need of panic."

The following telegrams appeared in the papers of Thursday. The number of deaths at Damietta, on Wednesday, was 47, of which 37 were from cholera. At Mansurah there were seven cases, two of which proved fatal. Two cases of cholera have occurred at Port Said, one of which proved fatal. In consequence of the outbreak of cholera in Egypt having been confirmed, the Ottoman Board of Health have sent orders to their agents in the Mediterranean and Red Sea, to put the quarantine regulations rigorously in force. All ships, without exception, coming from Egypt will be required to land their passengers at the quarantine hospitals at Beyrouth or Smyrna, there to remain under supervision for at least ten days before proceeding to any other port of the empire. The Board of Health of Marseilles has ordered terms of quarantine, proportioned to the length of the voyage, to be imposed on arrivals from Egypt, Malta, and Cyprus. Before being admitted to pratique, ships must have been fifteen days out from the places named. In Rome, Signor Berti, Minister of Commerce, replying to a question of Signor San Guiliano, of which he gave notice yesterday, said that ten days' quarantine would be imposed upon all arrivals from Damietta. Signor Mancini, Minister for Foreign Affairs, stated that instructions would be given with a view to induce the International Sanitary Commission sitting at Constantinople to take efficacious steps to prevent the spread of cholera from Egypt. The German Government is considering the advisability of despatching medical experts to Damietta to examine whether the disease, which has here broken out, be really cholera morbus or not.

Steps are being taken by the Chairman of the Parliamentary Bills Committee of the British Medical Association to bring the grievances of the Indian Medical Service before the House of Lords.

THE MEDICAL ACT AMENDMENT BILL.

A DEPUTATION from the Royal College of Surgeons in Ireland, consisting of the president, Mr. Wheeler; the ex-president, Mr. Barton; and Messrs. Rawdon Macnamara and Jacob, waited upon Mr. Mundella, on the 22nd instant, with reference to certain amendments the Council of the College proposed in the Bill. They desired especially that the direct representative of the profession should have a seat on the Medical Board of his own division of the kingdom; also that there should be equality of representation on the divisional boards; and that the primary examination should be conducted by the existing medical authorities, and not by the examining authorities. The President of the College also said that the remission of fees to undergraduates was not sufficiently defined, and that they thought such students should be of three years' standing and *bonâ fide* undergraduates. Mr. Mundella said they seemed to entirely underrate the future functions of the Medical Council. Its functions would be much larger and very much more important than they had been in the past. They said that the direct medical representatives would have no voice in settling schemes and in the work which was performed by the divisional boards. How would the Medical Council be composed? There would be two elected by the registered medical practitioners residing in England, one in Scotland, and one in Ireland. Now, did they suppose that those four gentlemen elected by the medical profession of the United Kingdom would be without a voice upon the Medical Council and upon the whole system of the medical education of the country? He believed they would be the most influential men on that council, and the Medical Council of the future would have the control of the three divisional boards under the supervision of the Medical Council. He was sorry to find them coming at the eleventh hour with a proposal of this kind, which, if carried out, would really wreck the bill. He would give it up at once if he believed that they expressed the opinion of the medical profession. With regard to schemes being made by the Medical Council, he thought that it was much better that the scheme should originate with the divisional board, to be approved by the Medical Council and the Privy Council. But there must be elasticity. In an Act of Parliament neither the scheme nor the curriculum of which the bodies are to conduct the examination could be laid down. There would be a great advance in medical science, and room must be left for it to expand. The Government had followed the lines of the Royal Commissioners closely, and any other proposal could not be accepted now. As to the allocation of the surplus funds by the Medical Council, Mr. Mundella said the deputation need not be afraid that the claims of Ireland would not be attended to. And with regard to the undergraduate question, that would be carefully considered.

THE BRITISH MEDICAL ASSOCIATION: THE FORTHCOMING ANNUAL MEETING IN LIVERPOOL.

WE have been supplied with the following additional particulars respecting the general local attractions of Liverpool.

THE DOCKS.—These extend for eight miles along the western or river boundary of the city, and are a principal attraction. The numerous tram-cars which run from all parts of the city to the pier-head, land passengers near two of the older docks, viz., the "George's" and "Prince's," while from the north to the south of the whole line of docks, tram-cars run at frequent intervals, enabling visitors to reach and visit any particular dock which they may wish to see. The Albert Dock, named after the late Prince Consort, who opened it in 1845, and its warehouses are well worthy of a visit. A very pleasant view of all the docks may be enjoyed by a trip in two or more of the splendid ferry steamers which are constantly passing to and from the Cheshire side of the river.

THE FERRIES.—Steamers ply to Birkenhead every ten minutes, and the short trip, which averages five minutes, affords a splendid view of the river. The most popular of all the ferries to visitors is that to New Brighton, for which steamers start from Liverpool every half hour, calling at Egremont. This trip enables visitors to see the whole of the northern docks to great advantage, as well as New Brighton itself, with its fort and lighthouse, promenade, swimming baths, etc. Again, a sail in the opposite direction, to Rock Ferry or Eastham, affords a view of the southern docks, of the guardship, reformatory, and training ships. Eastham has been styled the "Richmond of the Mersey," and both it and Rock Ferry possess many attractions.

THE PUBLIC BUILDINGS.—Most of these are of modern construction, with all the most recent architectural improvements. Conspicuous amongst them is *St. George's Hall*, which contains the Assize Court and Sheriff's Court, in addition to the great hall, with its magnificent organ, small concert-hall, etc. The assizes commence on Monday, July 30th, and will be continued throughout the whole of the week. Visitors will thus have no difficulty in seeing the great hall, which is the principal attraction, and is open all day during assizes and sessions. The Assize Courts may be visited through the aid of local associates or members of the Bar.

The *Brown Museum* was the gift of the late Sir William Brown, and closely adjoins St. George's Hall, being only separated from it by William Brown Street. Having been erected more than twenty years ago, it has lost its freshness of colour, but is a very handsome building. The *Picton Reading Room*, named after Sir James Picton, and the *Walker Art Gallery*, the splendid gift to the city of Sir Andrew Barclay Walker, are both situated in close proximity to the Brown Museum, and are very handsome structures. Close to them, a new building is being erected, which is to be for the new law-courts for the county sessions and other county business. The white stone of which these buildings are all composed presents a very pleasing appearance, which is, however, soon marred by the smoke and dirt incidental to so large and busy a place. The *Alexandra Theatre* is situated opposite these buildings, and is a handsome and commodious erection. It may be mentioned here that special care is taken to secure proper means of exit from all the Liverpool theatres, no licence being granted until it has been proved to the satisfaction of the police-authorities that the theatre can, when full, be emptied within a few minutes. The *Municipal Offices* are within a short distance of St. George's Hall, and visitors may walk through the various corridors, which give a very good general view of the whole building. The admirable arrangements for extinguishing any fire are visible throughout the whole building, above and below, and are most complete. The Exchange Flags are within sight of the municipal offices, and are the object of much interest from distant visitors. In the centre of the Flags is the bronze monument, erected at a cost of £8,000, to the memory of Nelson, and to commemorate the victory of Trafalgar. The *Town Hall* is on the south side, and is a handsome stone building; and from its balcony, which overlooks the "Flags," many royal and other most distinguished visitors have in times past shown themselves to thousands of Liverpool's citizens, whose loyalty has always been proverbial. The *Exchange News Room*, on the western side, is a splendid apartment, and from an early hour in the forenoon till late in the afternoon presents a very animated appearance, the whirl of business going on continuously, almost without intermission. Many of the offices near are handsome buildings, commanding enormous rentals. In the north-west entrance to the Flags from Chapel Street is a curious relic. It is the foundation-stone found in removing the old Exchange buildings, and placed here. Though only seventy-five years old, it has peculiarities of spelling and lettering, which relegate it to a very past age. The *Liverpool University College* was incorporated by Royal Charter in 1881, and Liverpool may be justly proud of the liberality shown by its citizens in founding and endowing it. Though it is now only five years since the first meeting was held to promote the foundation of the College, it is already well established, with a number of chairs fully endowed, and others partly so. That the College was needed is shown by the fact that, at the end of the first term, 534 students had attended the College classes (independently of the medical school), and by the end of the second term, £880 had been received as fees from the various students. The committee to whom the establishment of the College was entrusted were fortunate enough to secure a block of buildings, together with three or four acres of unoccupied land, in the very centre of the town, and closely adjoining the Royal Infirmary and the School of Medicine. The *Liverpool College* was established between forty and fifty years ago, as the "Collegiate Institution." It has three departments: the Upper, Middle, and Lower School; and has afforded a good education in classics, mathematics, and modern languages, to many who have subsequently become leading citizens, sending also many of its scholars to Oxford and Cambridge, where they have acquired the highest honours.

CHURCHES AND CHAPELS.—Most of the older churches were built in the last or earlier part of the present century, when ecclesiastical architecture was more remarkable for its solidity than for its elegance. The more modern churches in the suburbs are remarkably handsome edifices, both internally and externally, presenting varieties of architecture. Among the Roman Catholic chapels are several good specimens of Pugin's design, and the chapels of Nonconformists are no longer the ugly barn-like structures of the past age, being in many instances so like modern churches that it is difficult to distinguish them. *St. Luke's Church*, which, whether by accident or design, is situated close to Rodney Street, where many physicians and surgeons reside, is, considering that it was built sixty years ago, a very handsome structure, the proportions between the tower and body of the church being perfect. The tower of *St. Nicholas' Parish Church*, often called the *Old Church*, is surmounted by a "lantern spire," which, though small and hardly doing the tower justice, has been much admired. *St. Peter's Cathedral Church*, where the special service is to be held on Tuesday, July 31st, has some oak carving at its east end, but is otherwise unattractive; it is capable of seating about 1,300 persons. *St. Francis Xavier's Roman Catholic Chapel*, situated close to the Liverpool College, where the meetings are to be held, is a handsome structure, with some fine stained glass windows.

THE PARKS, BOTANIC GARDENS, ETC.—These places of recreation are situated very conveniently north, south, and east of the city. On the north is Stanley Park; just beyond the southern boundary is Sefton Park, while near to it, and within the city boundary, is Prince's Park. Wavertree Park and the Botanic Gardens are at the eastern boundary; the gardens are most tastefully laid out. To all these places there is every facility of access, tram-cars running at low fares and frequent intervals; they are greatly appreciated by the public, especially on summer evenings, when band music is provided periodically.

CHARITABLE INSTITUTIONS.—The non-medical charities are even more numerous than the hospitals and dispensaries, described in the JOURNAL of the 9th instant. Two of these are of special interest to medical visitors, viz., *The Blind Asylum* and *School for the Deaf and Dumb*. The former has been in existence for many years, and is well supported; it has always a large number of inmates of both sexes who are taught music, basket and mat-making, needlework, etc., as well as reading and writing. The articles manufactured by the pupils are sold to the public, who largely patronize the institution, and thus render it to a great extent self supporting. Attached to it is *St. Mary's Chapel*, which has always been well attended by the public as well as the inmates and numbers, among its congregation being many doctors and surgeons. The *School for the Deaf and Dumb* affords free education to all the deaf mutes in the city and neighbourhood, boarders being also received on moderate terms. The *Blue Coat Hospital* is the oldest charity, having been founded in 1709; in it 250 boys and 100 girls, 350 children in all, are boarded and educated, until old enough to be placed in situations. There are also *The Orphan Asylums for Boys, Girls, and Infants; The Seamen's Orphanage; Homes for Fallen Women; News Boys' Home; Sheltering Home for Children*, etc. A complete list would occupy a very large space; and it will suffice to say that there is scarcely a charitable want which does not find its supply in Liverpool.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1883:

ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 11th, and October 17th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., September 26th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

November 9th, 1882.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 11th day of July next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, June 14th, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS and explanatory memoranda for the inquiries concerning Acute Pneumonia, Chorea, and Acute Rheumatism, can be had by application to the Honorary Secretaries of the Local Committees appointed by the Branches, or to the Secretary of the Collective Investigation Committee. Of these diseases, each member of the Association is earnestly requested to record at least *one ordinary case* coming under observation during the year.

Inquiries concerning Diphtheria and Syphilis have been prepared, and can be had on application by those willing to contribute information on these subjects. There are two cards on Diphtheria, one containing clinical, the other etiological inquiries, together with an explanatory memorandum. One of these cards is intended to serve as a guide to the systematic examination of a house or district for sanitary purposes. There are also two sets of inquiries concerning Syphilis, one for acquired, the other for inherited, disease. These are accompanied by an explanatory memorandum giving information concerning the most recently observed symptoms of the inherited disease.

All these inquiries will be continued during the present year.

Applications, etc., to be addressed

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea on Wednesday, July 4th. Members wishing to read papers, make communications, or show specimens, are requested to send subject of the same to either of the undersigned.—A. SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 8th, 1883.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Keswick on Friday, July 6th, 1883. Members intending to read papers or show specimens are requested to communicate with RODERICK MACLAREN, Honorary Secretary *pro tem.*, or J. SMITH, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH.—President, Thomas Bridgwater, M.B.; President-elect, Charles J. Hare, M.D.—The thirty-first annual meeting of this Branch will be held at the Ship, Greenwich, on Wednesday, July 11th, at 4 P.M. Dinner at 6.30 P.M.; tickets, 12s. 6d. each, exclusive of wine. Members intending to dine are requested to apply to one of the Secretaries on or before July 7th. —ALEXANDER HENRY, M.D., 132, Highbury Hill, N.; W. CHAPMAN GRIGG, 6, Curzon Street, W., Honorary Secretaries.—June 21st, 1883.

WEST SOMERSET BRANCH.—The annual meeting will be held at the White Hart Hotel, Martock, on Thursday, July 12th. The President-elect, J. D. Adams, M.D., will take the chair at a quarter-past three o'clock punctually. Dinner at 5 o'clock.—W. M. KELLY, M.D., Honorary Secretary, Taunton.—June 20th, 1883.

THAMES VALLEY BRANCH.—The annual meeting of this Branch will be held at the Board Room of the Richmond Hospital, on Thursday, July 5th, at six o'clock. Members who intend to bring forward any communications are requested to give notice to the Honorary Secretary, EDWARD L. FENN.—Richmond, June 19th, 1883.

NORTH WALES BRANCH.—President, Roger Hughes, Esq.—The thirty-fourth annual meeting will be held at the White Lion Royal Hotel, Bala, on Tuesday, July 3rd, at 11.30 (for noon). Members desirous of reading papers are requested to communicate their titles to the Honorary Secretary. Agenda: 12.15, President's Address. Papers: 1. On a New Method of Treating Extensive Lacerated Wounds: by Dr. G. J. Roberts, Festiniog. 2. On Medical Reform—Local: by Dr. S. Griffith, Portmadoc. 3. Paper by Dr. David Lloyd Roberts, Manchester. 4. On Sanitation *v.* Infection in Zymotic Diseases: by Dr. J. R. Hughes, Denbigh. 5. Case of Strangulated Hernia: by Mr. Roger Hughes (deputy). 6. On Fifty Cases of Turning: by Mr. F. H. V. Grosholz, Aberdovey. The President requests the pleasure of members' company at luncheon at the Hotel on the arrival of the morning trains. After the meeting, the members and guests will dine together at 3 o'clock; tickets (inclusive) 10s. 6d. each.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh.—June 20th, 1883.

SHROPSHIRE AND MID-WALES BRANCH.—The annual general meeting of this Branch will be held at the Salop Infirmary on Tuesday, July 3rd, at 1.30 P.M. An address will be given by the President, Dr. Edwyn Andrew. The annual dinner will be held at the Raven Hotel, at 5 P.M. Dinner tickets, including wine, 12s. 6d. each.—EDWARD CURETON, ARTHUR STRANGE, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST SUSSEX DISTRICT.—The next meeting of the above District will take place at Horsham; Mr. Bostock in the chair. Gentlemen intending to read papers or to bring forward subjects for discussion are requested to send notice to the Honorary Secretary, G. B. COLLET, 5, The Steyne, Worthing.—June 20th, 1883.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

THE Fifty-first Annual Meeting of the British Medical Association will be held at Liverpool, on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1883.

President: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

President-elect: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, and Professor of Medicine in University College, Liverpool.

An Address in Surgery will be delivered by REGINALD HARRISON, F.R.C.S., Surgeon to the Royal Infirmary, Liverpool.

An Address in Pathology will be delivered by C. CREIGHTON, M.D., formerly Demonstrator of Anatomy, University of Cambridge.

The business of the Annual Meeting will be conducted in ten sections.

SECTION A. MEDICINE.—*President:* John Cameron, M.D. *Vice-Presidents:* Thomas R. Glynn, M.D.; Frederick T. Roberts, M.D. *Secretaries:* Richard Caton, M.D., 18A, Abercromby Square, Liverpool; Byrom Bramwell, M.D., 23, Drumsheugh Gardens, Edinburgh.

SECTION B. SURGERY.—*President:* Edward R. Bickersteth, F.R.C.S. *Vice-Presidents:* W. Hargreaves Manifold, M.R.C.S.; W. Mitchell Banks, F.R.C.S. *Secretaries:* Rushton Parker, M.B., F.R.C.S., 61, Rodney Street, Liverpool; Edmund Owen, M.B., F.R.C.S., 49, Seymour Street, Portman Square, W.

SECTION C. OBSTETRIC MEDICINE.—*President:* W. M. Graily Hewitt, M.D. *Vice-Presidents:* John Wallace, M.D.; David Lloyd Roberts, M.D. *Secretaries:* John E. Burton, L.R.C.P., 64, Rodney Street, Liverpool; W. C. Grigg, M.D., 6, Curzon Street, Mayfair, W.

SECTION D. PUBLIC MEDICINE.—*President:* T. P. Teale, M.B., F.R.C.S. *Vice-Presidents:* William Carter, M.D.; W. Honner Fitz-Patrick, M.D. *Secretaries:* F. Pollard, M.D., 52, Rodney Street, Liverpool; George Goldie, M.D., 123, Hyde Park Road, Leeds.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* Professor E. A. Schäfer, F.R.S. *Vice-Presidents:* William Stirling, M.D.; Richard Norris, M.D. *Secretaries:* James Barr, M.D., 1, St. Domingo Grove, Everton, Liverpool; A. W. Mayo Robson, F.R.C.S., Hillary Place, Leeds.

SECTION F. PATHOLOGY.—*President:* T. H. Green, M.D. *Vice-Presidents:* E. H. Dickinson, M.D.; Joseph Coats, M.D. *Secretaries:* Frank Thos. Paul, F.R.C.S., 44, Rodney Street, Liverpool; James F. Goodhart, M.D., 27, Weymouth Street, W.

SECTION G. PSYCHOLOGY.—*President:* T. L. Rogers, M.D. *Vice-Presidents:* G. H. Savage, M.D.; D. Yellowlees, M.D. *Secretaries:* G. E. Shuttleworth, M.D., Royal Albert Asylum, Lancaster; W. Julius Mickle, M.D., Grove Hall Asylum, Bow, E.

SECTION H. OPHTHALMOLOGY.—*President:* T. Shadford Walker, M.R.C.S. *Vice-Presidents:* E. Nettleship, F.R.C.S.; C. E. Fitzgerald, M.D. *Secretaries:* E. A. Browne, M.R.C.S., 86, Bedford Street, Liverpool; C. E. Glascott, M.D., 23, St. John Street, Manchester.

SECTION I. DISEASES OF CHILDREN.—*President:* Samuel Jones Gee, M.D. *Vice-Presidents:* M. G. B. Oxley, M.D.; T. R. Jessop,

F.R.C.S. *Secretaries:* H. G. Rawdon, M.D., 42, Rodney Street, Liverpool; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION J. OTOLOGY.—*President:* G. P. Field, M.R.C.S. *Vice-Presidents:* Edward Woakes, M.D.; C. Warden, M.D. *Secretaries:* Thos. Barr, M.D., 10, Albany Place, Sauchiehall Street, Glasgow; R. Williams, L.R.C.P., 82, Rodney Street, Liverpool.

Honorary Local Secretary: Alexander Davidson, M.D., 2, Gambier Terrace, Liverpool.

Honorary Treasurer: W. Mitchell Banks, F.R.C.S., 28, Rodney Street, Liverpool.

TUESDAY, JULY 31ST, 1883.

10.30 A.M.—Church Service at Pro-Cathedral. Sermon by Bishop of Liverpool.
12.0.—Meeting of Committee of Council.
12.30 P.M.—Meeting of the Council, 1882-3.
3 P.M.—First General Meeting: Report of Council and other business. Adjourn at 5 P.M.
8.15 P.M.—Adjourned General Meeting: President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, AUGUST 1ST, 1883.

9.30 A.M.—Meeting of Council, 1883-84.
11 A.M.—Second General Meeting. Address in Surgery.
1 30 to 5 P.M.—Sectional Meetings.
9 P.M.—*Soirée* in the suite of rooms forming the Arts Gallery, the Picton Reading Room, and the Free Library, by the President and Local Committee. To this, ladies will be invited.

THURSDAY, AUGUST 2ND, 1883.

9 A.M.—Meeting of Committee of Council.
10 A.M.—Third General Meeting. Sectional Meetings. Adjourn at 1 P.M.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner in the Philharmonic Hall.

FRIDAY, AUGUST 3RD, 1883.

10 A.M.—Fourth General Meeting. Address in Pathology. Sectional Meetings.
2 P.M.—Concluding General Meeting.
9 P.M.—*Soirée* by the Mayor of Liverpool, at the Town Hall. To this, ladies will be invited.

SATURDAY, AUGUST 4TH, 1883.

Excursions.

ANNUAL MUSEUM.

The museum will be in the same building as the reception-room, the general meetings, and the sectional meetings. In fact, all the business of the annual meeting will be carried on in one building, viz., the College, Shaw Street, Liverpool. The room which is specially devoted to museum purposes is a gallery, 300 feet in length, in the upper story, lighted from the roof. On the same floor are several additional rooms, so that the accommodation for exhibiting drugs and instruments is ample. On the second floor, adjoining the room where the Pathological Section meets, are two class-rooms, one of which will be used for the exhibition of pathological drawings and specimens, the latter for microscopes. A large hall on the ground-floor has been set apart for sanitary appliances, among which it is expected there will be a good exhibition of ambulances.

The museum will comprise: 1. Latest inventions in medical and surgical instruments, and appliances of all kinds, including No. 4. 2. New chemicals and apparatus; new drugs and their preparations; and new articles of diet for invalids. 3. Drawings, diagrams, or models, or apparatus connected with sanitary appliances. 4. Microscopes, thermometers, and other instruments of investigation. 5. Pathological specimens, etc.

Communications should be sent to Dr. Davidson, the General Secretary, 2, Gambier Terrace, Liverpool, or to the following: drugs, Dr. T. Bushby, 32, Clarence Street; surgical instruments, Dr. Alexander, 102, Bedford Street; Rushton Parker, Esq., 61, Rodney Street; sanitary appliances, Dr. Imlach, 16, Canning Street; pathological specimens and drawings, F. T. Paul, Esq., 44, Rodney Street. General Museum Secretary, Dr. Whitford, 37, Shaw Street.

Notice to Exhibitors.—Applications to be made as soon as possible, mentioning the space required. Each object to be accompanied by a written description or reference, and it is important that these descriptions should be sent as early as possible, viz., not later than July 20th. All parcels to be delivered on or after July 23rd, and not later than July 28th, and to be removed within three days after August 3rd; they must be addressed: The Curator of Annual Museum, British Medical Association, the College, Shaw Street, Liverpool. All expenses of carriage and all risk to be borne by the exhibitors. A card bearing the name and address of the exhibitor to be inclosed in each package, ready to be fixed to the outside.

The following papers, etc., have been promised in the various sections.

SECTION A.—MEDICINE.

1. A Discussion on Aphasia will be opened by Professor Gairdner of Glasgow. Dr. Hughlings Jackson, Dr. Broadbent, Dr. Ferrier, Dr. Antoine Cros (Paris) Dr. Thudichum, Dr. W. W. Ireland, Dr. Drummond, Dr. Ross, Dr. G. A. Woods, and Dr. A. Cameron are expected to take part.

2. A Discussion on the Causes and Consequences of Abnormal Tension in the Arteries will be opened by Dr. Broadbent. Dr. Milner Fothergill, Dr. B. Foster, Dr. W. F. Wade, and Dr. Mahomed are expected to take part in it.

3. A Discussion on the Nature of Purpura will be opened by Dr. Stephen Mackenzie. Dr. Finny (Dublin) Dr. B. Foster, Dr. Stainthorpe, and Dr. W. Russell will take part.

The following papers are also promised.

BENNETT, A. Hughes, M.D. 1. Spastic Paralysis. 2. A Case of Hysterical Malingering: Hemianæsthesia: Metalloscopy.
BRAMWELL, Byrom, M.D. Note on the Mechanism of Cheyne-Stokes Respiration.
BRUNTON, T. Lauder, M.D., F.R.S. Headache.
CARTER, William, M.D.
CATON, Richard, M.D.
CROS, A., M.D. (Paris). 1. Sur la Pleximetrie. 2. La Theorie Physiologique de l'Hallucination.
DAVIDSON, Alexander, M.D.
DRUMMOND, David, M.D. 1. Perforating Tumour of the Dura Mater. 2. An Unusual Case of Locomotor Ataxy.
DRYSDALE, C. R., M.D. Recent Innovations in the Doctrine of Phthisis Pulmonalis.
FLINT, Austin, M.D. (New York). Early Tapping in Cases of Ascites.
GABBETT, H. S., M.D. The Diagnostic Value of the Discovery of Koch's Bacilli in Sputum.
GLYNN, T. R., M.D.
GREVES, E. H., M.B. Notes on Cases illustrating Nerve-diseases.
HASSALL, A. H., M.D. 1. Further Observations and requirements on Inhalation in Affections of the Lungs. 2. On the Principles of the Construction of Inhalation Chambers for Diseases of the Throat and Lungs.
LEECH, D. J., M.D. Duration of Action of Medicines.
LITTLE, J. F., Esq. Rheumatic Arthritis or Neurotic Arthritis.
MOORE, W. W., M.D. Source of Heat in Fever.
MORRIS, Malcolm, Esq. The Use of Antimony in certain Skin-Diseases.
MYRTLE, A. S., M.D. Sweating to Death.
OLIVER, George, M.D. Bedside Urinary Testing.
ROSS, James, M.D. Rupture of the Brachial Plexus.
RUSSELL, W., M.D. Three Fatal Cases of Purpura Hæmorrhagica.
SANSOM, A. E., M.D. Note on Percussion as a means of Diagnosis.
SHEARER, George, M.D. The Opium-Habit.
SMITH, Solomon C., M.D. Antiseptic Inhalations.
STRANGE, William, M.D. Sporadic Septicæmia.
THOMSON, G., M.D. Rupture of the Brachial Plexus.
THUDICHUM, J. L. W., M.D. On Hay-fever or Hay-asthma, and its Frequent Connection with Structural Disease of the Nasal Cavity.
WOODS, G. A., Esq. Cerebellar Tumour.

Dr. Byrom Bramwell will give a demonstration on the Microscopic Pathology of the Spinal Cord.

SECTION B.—SURGERY.

1. Mr. Clement Lucas will open a Discussion on Surgical Diseases of the Kidney, and the Operations for their Relief, in which Dr. G. Elder and Mr. Bennett May will take part.

2. A Discussion on the Treatment of Intestinal Obstruction by or without Operative Interference will take place.

The following papers have been promised.

ATKINSON, E., Esq. Drainage of Joints.
BAKER, Morrant, Esq. Removal of the Tongue by Median Division.
BARTLEET, T. H., Esq. Roux's Amputation at the Ankle; its Superiority to Syme's.
BELLAMY, E., Esq. The Clinical Value of the Fasciæ.
BERNARD, Armand, Esq. Observations on Primary Venereal Sores.
BERRY, William, Esq. Strangulated Hernia and its Complications.
BROWNE, J. W., M.D. Cases of Hernia.
CROSS, F. Richardson, Esq. The Treatment of Arthritis by Incision.
DRYSDALE, C. R., M.D. Recent Experiments on the Treatment of Syphilis.
FAGAN, John, L.K.Q.C.P. The Nature, Diagnosis, and Treatment of Hæmarthrosis of the Knee-Joint.
HARDIE, James, Esq. Amputation by Oblique Circular Incision.
HEATH, Christopher, Esq. The Use of Plaster-of-Paris Bandages in the Treatment of Recent Fractures.
JESSOP, T. R., Esq. Some Results derived from Experience in Colotomy.
JONES, Thomas, Esq. Cases of Resection of the Ankle-Joint for Disease and Injury.
LE PAGE, J. F., Esq. The Evacuation of Deep Abscesses: with Exhibition of Deep Abscess Evacuator.
LOWNDES, F. W., Esq. Venereal and Sexual Hypochondriasis.
MORGAN, J. H., Esq. The Operative Proceedings in Cases of Intestinal Obstruction.
MORRIS, Malcolm, Esq. The Comparative Advantages of Scarification and Scraping in the Treatment of Lupus Vulgaris.
NORTON, A. T., Esq. A Case of Excision of the Superior Maxilla for Melanotic Sarcoma of the Antrum.
OWEN, Edmund, Esq. The Treatment of Large Nævi.
PEMBERTON, Oliver, Esq. Gastro-enterotomy.
RABAGLIATI, A., M.D. Cases of Osteotomy.
ROTH, Bernard, Esq. The Treatment of Non-spasmodic Torticollis.
SILCOCK, A. Q., M.D. Some points connected with the Repair of Fractures.

SMITH, E. Noble, Esq. The Treatment of Lateral Curvature of the Spine.
SOUTHAM, F. A., Esq. A Case of Femoral Aneurysm, treated by Injection of Fibrin Ferment, and subsequently by Ligature of the External Iliac Artery.
STOKES, William, Esq. Excision of the Shoulder-joint.
WARREN, —, M.D. 1. Cure of Hernia by Subcutaneous Injection. 2. The Use of the Aspirating Needle in Strangulated Hernia and Obstruction of the Bowels.
WHITEHEAD, Walter, Esq. A Further Series of Twenty-five Cases of Excision of the Tongue with Scissors.

SECTION C.—OBSTETRIC MEDICINE.

Special discussions are expected to take place in this Section on the following subjects.

1. Total or Partial Extirpation of the Uterus for Malignant Disease. Introduced by papers by Professor Schroeder (Berlin) and Dr. Wallace.

2. On Operative Treatment of Uterine Fibromata. Introduced by papers by Dr. Keith, Mr. Knowsley Thornton, and Mr. Lawson Tait. Dr. Wallace has promised to take part.

3. On Metria (so-called Puerperal Fever). Introduced by a paper by Dr. Atthill. Drs. Grigg and T. More Madden have promised to take part.

4. Porro's Operation. Introduced by a paper by Dr. Clement Godson.

The following papers are promised.

ALEXANDER, William, M.D. On Shortening the Round Ligaments for the Cure of some Forms of Uterine Displacement.
BARNES, Fancourt, M.D.
BURTON, J. E., Esq. A Plea for the more Persevering Treatment of Uterine Cancer in Cases in which Operation by Removal is Impracticable.
LE PAGE, John F., Esq. On Axis-Traction in Delivery with Obstetric Forceps. Mr. Le Page will also exhibit Le Page's Axis-Traction Forceps.
MADDEN, T. More, M.D. Further Observations on certain Mental and Nervous Disorders peculiar to Women.
ROBERTS, D. Lloyd, M.D. Inversion of the Uterus.
TAIT, Lawson, Esq. Are Diseases of the Ovary (specially Cystoma) on the Increase?
WILLIAMS, A. Wynn, M.D. 1. On Displacements of the Uterus and their Treatment. 2. On Epithelioma of the Uterus and its Treatment.

SECTION D.—PUBLIC MEDICINE.

Four topics have been selected for discussion in this Section.

1. Directions in which Public Health Law might be advantageously Amended or Extended. Mr. Charles Wills will read a paper on this subject. Mr. Ernest Hart will read one on the Advisability of an Extension of the Law for the Regulation and Registration of Plumbing in Houses. Dr. William Carter will open a discussion on these papers.

2. Quarantine. Dr. Imlach will read a paper on Quarantine; and Dr. Stocker, lately Government Emigration Inspector at Queenstown, will read one on a cognate subject.

3. Disposal of Town-Refuse. Dr. Goldie and Dr. E. Whittle will read papers on this subject.

4. Etiology of Diphtheria and Autumnal Diarrhœa. Drs. Alfred Carpenter, H. J. Alford, and E. F. Willoughby will read papers on Diphtheria; and Mr. M. D. Makuna one on Autumnal Diarrhœa.

Captain Douglas Galton, C.B., F.R.S., has promised to read a paper on Hospital Construction.

The following papers are promised.

DRYSDALE, C. R., M.D. The Mortality of the Rich and the Poor.
HILL, J. Higham, M.D. Suggestions for the better Police Treatment of Persons found Insensible in the Streets, and supposed to be under the Influence of Alcohol.
JAMES, J. Brindley, Esq. On Cremation.
KERR, Norman, M.D. The Present Position of the Habitual Drunkards Movement.
LOWNDES, F. W., Esq. How to Make our own Houses Sanitary, with Personal Experiences.
MAKUNA, M. D., Esq. Small-pox and Vaccination Statistics; Diseases and Injuries to Health Attributed to Vaccination.
MARTIN, Johnson, Esq. On the Injury done to the Health of the Young by the Present System of Education.
MILLICAN, K. W., Esq. Evolution in Disease.
SHEARER, George, M.D. On the Opium-habit.

SECTION E.—ANATOMY AND PHYSIOLOGY.

The following papers have been promised.

ANDERSON, Edward C., M.D. Koumiss: its Modes of Preparation, Varieties, Physiological Uses, etc.
ARCHER, R. S., M.B. Note on Congenital Aortic Bands.
BARR, James, M.D. The Causes and Mechanism of the Cardiac Impulse.
HADDEN, W. B., M.D. Westphal's Phenomenon, or the so-called Paradoxical Contraction of Muscles.
THUDICHUM, J. L. W., M.D. On the Chemical Constitution of the Brain.
WOODS, G. A., Esq. The Anatomy and Physiology of the Sixth Nerve.

Mr. Lennox Browne will exhibit on the magic-lantern screen, by means of oxyhydrogen light, a series of photographs of the Larynx and Soft Palate in the production of various Musical Tones.

Afterwards, Mr. Emil Behnke, from whom the pictures have been taken, will exhibit his Larynx to the members present, so as to demonstrate practically the physiological facts illustrated by the photographs.

Dr. Francis Warner will give a Demonstration of an Apparatus for obtaining Graphic Records of the Movements of Fingers, Hands, Head, etc., and enumerating them and their combinations.

Dr. John Harker will show a sketch of Abnormal Hands and Feet in the case of an Infant.

Mr. Sibley Hicks will exhibit a series of Embryos to illustrate the Development of the Chick.

SECTION F.—PATHOLOGY.

The following discussions will take place.

1. On Micro-organisms in Disease. To be opened by Dr. Dreschfeld.

2. On the Micro-organism of Typhus. To be opened by Drs. Mott and Blore. Drs. Davidson and Baum will take part.

3. On the Pathology of Dropsy. To be opened by Dr. Lauder Brunton. Drs. Saundby and Churton will take part.

4. On Chronic Inflammations of Bone. To be opened by Mr. Charters J. Symonds.

5. On Primary Growths of the Urinary Tract. To be opened by Mr. Frank T. Paul. Mr. Roger Williams and Mr. Rushton Parker will take part in the discussion.

Cirrhosis and allied conditions of the Liver will be brought forward, should time allow.

The following papers have been promised.

HADDEN, W. B., M.D. On Lardaceous Disease of the Suprarenal Capsule.
LE PAGE, John F., Esq. On Neuropathic Plica.
MANSELL-MOULLIN, C., Esq. On some Forms of Osteitis in Hereditary Syphilis.
WINDLE, B. C. A., M.B., and BARLING, H. G., M.B. The Pathology and Relations of Lupus.

It is desired to illustrate in as complete a manner as possible, by means of preparations and microscopical specimens, the Primary Growths of the Urinary Tract, especially of the Kidney, Bladder, and Prostate. The object of this investigation is to collect all the information that is to be obtained in this country, with the view of deciding what are the primary growths that have been met with in this region. The specimens lent will be arranged in the museum, and a report of the investigation will be brought forward in the Pathological Section by Mr. Paul. The Subcommittee will be very glad to receive (1) recent specimens; (2) mounted specimens of rare growths; (3) microscopical sections (these are specially requested). The specimens and sections will be returned to their owners after the meeting.

SECTION G.—PSYCHOLOGY.

The following special subjects have been selected for discussion.

1. The Employment of the Insane. Introduced by Dr. Yellowlees.

2. Bone-Degeneration in the Insane. Introduced by Dr. Wiglesworth.

3. Cerebral Localisation in relation to Psychological Medicine. Introduced by Mr. W. Bevan Lewis.

4. General Paralysis. Introduced (if time permit) by Dr. W. J. Mickle.

SECTION H.—OPHTHALMOLOGY.

Three subjects have been selected for discussion in this Section.

1. On Tests for Colour-sense and for Acuteness of Vision, with special reference to Schools and Sailors. Opened by Dr. W. A. Brailey, followed by Dr. Snellen (Utrecht). Messrs. Nettleship, Fitzgerald, and Higgens have promised to take part.

2. On the Use of the Magnet in Ophthalmic Surgery. Opened by Mr. Simeon Snell, followed by Dr. W. A. McKeown.

3. On the various methods of Treatment for Sloughing Ulcer of the Cornea, with especial reference to Incision and Scraping. Opened by Mr. T. Pridgin Teale.

The following papers have been promised.

ABBOTT, George, Esq. Obstruction of the Nasal Duct, and its Treatment by Styles.
CRITCHETT, G. Anderson, Esq. Ulcers of the Cornea, their Varieties and Treatment.
FORBES, Litton, Esq. 1. On the Relations existing between certain states of the Sexual Organs and Visual Disturbance. 2. The Doctrine of Enucleation.
HIGGENS, Charles, Esq. On the Treatment of Painful Corneal Ulcers by Warmth and Eserine.
JONES, A. Emrys, M.D. 1. A Case of Orbital Abscess Communicating with the Brain. 2. A Case of Embolism (?) of the Central Artery of the Retina connected with Facial Erysipelas.

JULER, Henry, Esq. On the Relative Merits of the Various Methods of Testing the Refraction of the Eye.
LEE, Charles George, Esq. Notes on the Ophthalmic Conditions of Deaf-Mutes.
MCKEOWN, W. A., M.D. The Treatment of Accidental Dislocation of the Lens.
MACNAMARA, Charles, Esq. On the Pathology and Treatment of Zonular Cataract.
MULES, P. H., M.D. An Electric Movement for Carter's Astigmatic Clock.
SHEARS, Charles, M.D. Tobacco Amblyopia.
SNELL, Simeon, Esq. Miners' Nystagmus.
TAYLOR, Charles Bell, M.D. 1. On the Operative Treatment of Sympathetic Ophthalmia, with Cases. 2. On Transplantation of Skin with Temporary Pedicle without Scar. 3. Notes on the Operation for Cataract, with and without Iridectomy.
WATSON, W. Spencer, Esq. Shot-silk Appearance of the Retina.
WOLFE, John R., M.D. 1. On the Transference of Conjunctiva from the Rabbit to the Human Subject for the Cure of Symblepharon. 2. On the Treatment of Suppuration of the Tear-passages.

SECTION I.—DISEASES OF CHILDREN.

Three special subjects have been selected for discussion.

1. Dr. T. Barlow will open a discussion on Rheumatism and its Allies in Children. The following gentlemen have promised to take part in the discussion: Dr. O. Sturges, Dr. Rickards, Dr. Finlayson, Dr. Sansom, Dr. Mahomed, Dr. Ransom, Dr. J. S. Bury, Dr. Donkin, and Dr. Byers.

2. Dr. Ballard: On the Etiology and Pathology of Summer Diarrhœa. The following gentlemen have promised to take part: Dr. Borchardt, Dr. Seaton, Mr. W. Hugh Hughes, Dr. Bruce Low, Dr. Strange, and Dr. Maccall.

3. Mr. Morrant Baker: On Acute Epiphysal Necrosis and its Consequences. The following gentlemen are likely to take part: Mr. J. H. Morgan, Mr. R. W. Parker, Mr. G. A. Wright, Mr. G. Cowell, Mr. E. Owen, and Mr. A. Cæsar.

The following papers are promised.

ASHBY, H., M.D. On Scarlatinal Rheumatism.
BURY, J. S., M.D. A Case of Osteo-malacia in a Child.
DAY, W. H., M.D. A Case of Croupous Pneumonia in a Child, treated successfully by the Cold Bath.
GEE, Samuel J., M.D. Some Kinds of Albuminous and Purulent Urine in Children.
MORGAN, J. H., Esq. A Case of Epiphysal Necrosis of the Humerus, followed by Considerable Shortening of the Arm.
MORISON, B. G., M.B. Infantile Diarrhœa and its Treatment.
OXLEY, M. G. B., M.D. Fatal Case of Chorea in a Child aged 10 Years.
PUGHE, R. N., Esq. Operations for the Radical Cure of Hernia in Childhood.
RAWDON, H. G., M.D. On the Operation for Hare-lip.
STEAVENSON, W. E., M.D. On Electricity in the Treatment of Infantile Paralysis.
STURGES, O., M.D. On the Alliance of Rheumatism and Chorea.
TOMKINS, H., M.D. On the Clinical Features of Typhus Fever in Children.
WRIGHT, G. A., Esq. On the Value of Localising the Primary Lesion in Joint-disease, as an Indication for Treatment.

SECTION J.—OTOLOGY.

Discussions will take place on the following subjects.

1. A discussion on the more serious aspects of Chronic Purulent Inflammation of the Middle-ear will be introduced by Dr. W. Laidlaw Purves.

2. A discussion on the various forms of Artificial Tympanic Membrane, and their Comparative Value, will be introduced by Dr. F. M. Pierce.

The following gentlemen have expressed their intention of taking part in the discussions: Dr. Edward Woakes, Dr. Thomas Barr, Dr. Urban Pritchard, Dr. William A. McKeown, Dr. J. W. Browne, Dr. Richard Ellis, Dr. H. J. Hardwicke.

The following papers have been promised.

BARR, Thomas, M.D. Practical Observations on the Use of the Cotton-Pellet (Yearsley's Artificial Tympanic Membrane) as an Aid to Hearing.
CASSELLS, James P., M.D. An Analysis of Ten Years' Aural Surgery.
FORBES, Litton, Esq. The Indications for, and Therapeutic Value of, Myringectomy.
MCBRIDE, P., M.D. The Prognosis of Chronic Non-Suppurative Inflammation of the Middle-ear.
TORRANCE, Robert, Esq. Deafness in Cerebro-spinal Meningitis.
WILLIAMS, Richard, Esq. A Fatal Case of Chronic Purulent Inflammation of the Middle Ear, from Extension to the Intracranial Cavity.

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Section in which it is to be read, not later than July 25th.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay with the secretaries of the respective Sections.

FRANCIS FOWKE, *General Secretary.*

London, June 21st, 1883.

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

THE thirty-ninth annual meeting of this Branch was held in the Town Hall, Hastings, on Wednesday, June 13th, at 1 P.M. The proceedings commenced with a luncheon in the Grand Jury Room.

Mr. MARSACK, the retiring President, took the chair at the opening, and briefly introduced Dr. Bagshawe, of St. Leonard's, as the President for the ensuing year, congratulating the members on their choice.

Dr. BAGSHAWE then took the chair amidst applause, and expressed his hearty thanks and high appreciation of the honour which had been done him in making him President of the South-Eastern Branch of the Association.

On the motion of Dr. RANKING, a vote of thanks was passed to the retiring President, and suitably acknowledged.

President's Address.—Dr. BAGSHAWE delivered an address on Climate in the Treatment of Consumption.

Dr. MONCKTON (Maidstone) moved a vote of thanks to Dr. Bagshawe for his address. This was seconded by Mr. HARRIS (Worthing), and carried.

Report of Council.—Dr. PARSONS, Honorary Secretary, read the Report of Council, as follows.

The Council has much pleasure in again meeting the members of the Branch, and in presenting to you the report for the past year, being the thirty-ninth report. Few changes have taken place since the last annual meeting; then the Branch consisted of 445 members, now it numbers 461. In the interval, four members have died, and two have removed beyond the area of the Branch.

The Districts continue to manifest their wonted activity, and combined meetings of adjoining Districts have been held as usual, with marked success. The honorary secretaries are entitled to your warmest thanks for their unwearying endeavours to bring new members to our ranks, and especially for the admirable manner in which their onerous duties are performed. It is with extreme regret that your Council learns that the West Kent District is shortly to lose the services of its excellent honorary secretary, Mr. A. H. B. Hallowes; a gentleman whose unvarying courtesy and methodical business habits, have contributed so greatly to the welfare of that District, that his retirement from office is to be deplored. It seems, however, that Mr. Hallowes's health renders this step necessary, in order that he may be the better able to meet the increasing demands which are made upon his leisure. Your Council desires to record its high appreciation of the manner in which Mr. Hallowes has discharged the functions of his office, and to offer him, on your behalf, its most cordial thanks.

It will be in your recollection that, at the annual meeting of the Association at Worcester, the scheme of Professor Humphry, of Cambridge, for the collective investigation of disease was adopted, and a grant of money was made for preliminary expenses from the general funds of the Association. This Branch took up the subject with alacrity, and committees have been appointed in various towns to assist and collect the cards which are to preserve the records of the cases investigated. Here, again, the District secretaries have rendered signal service to the cause, by either performing the duties of collective investigation secretaries themselves, or recommending suitable men resident in their respective Districts for the office. The expenses incidental to such an inquiry, ordered by a general meeting of the Association, naturally fall upon the general funds of the Association.

[The report then gave a summary of the proceedings of the Parliamentary Bills Committee; especially in relation to the Registration of Midwives, the Militia Surgeons, the Notification of Infectious Diseases, and other matters.]

This Branch has loyally supported the action of the Parliamentary Bills Committee; and, during the past year, petitions to both Houses of Parliament in favour of the Medical Acts Amendment Bill, and against compulsory notification of infectious diseases by medical men, have been presented from your Council, and also from thirteen of the most important towns in the Branch; whilst no effort has been spared to secure adequate parliamentary support for these

views by personal application to individual members of the House of Commons.

At the annual meeting of the Association at Worcester last year, the question of the unsatisfactory representation of the Branches in the Committee of Council was discussed by the Council, and it was resolved "That the Committee of Council be requested to consider in which way direct representation of the Branches can best be secured." The Committee of Council referred the matter to a Subcommittee, whose report was presented to the Council at a special meeting held at Birmingham on May 17th for the purpose. With some alterations, this report has been adopted by the Council, and will be submitted for approval at the annual meeting of the Association in Liverpool on July 31st next. A report of the whole proceedings will be found in the JOURNAL for May 26th. Should this alteration in the government of the Association receive the sanction and approval of the annual meeting, it will become necessary so to alter the laws of this Branch as to make them harmonise with the laws of the parent Association. Your Council desires to call attention to one important change; viz., that the Executive Council of this Branch will consist of only half of its present numbers, under the new regulations; and, instead of sending up twenty-two members to the General Council, the Branch will send to the executive body one representative only for every two hundred members, in addition to one for the Branch itself, who need not necessarily be the honorary secretary.

In conclusion, the Council ventures to hope that the adoption of the principle of direct representation by the Association will attract larger numbers than ever to its ranks, and intensify the interest which the members take in the management of its affairs, as well as extend the influence of the Branches for good in their own immediate neighbourhoods.

Dr. CARPENTER (Croydon) moved the adoption of the report, making some remarks on various details referred to.

Dr. TROLLOPE (St. Leonard's) seconded, and said that, after the exhaustive speech of Dr. Carpenter, it was not necessary for him to add anything. What he had said about the notification by medical men of infectious cases to the medical officer of health was of great importance. He deprecated the way in which these officers were appointed, stating that at Hastings the appointment was made by politics, the result being that they had to submit to an officer of another school, who was in alliance with a gentleman who had no proper qualification. They could not consent to a medical officer of this kind interfering with them. He trusted that the mode of appointing medical officers of health would soon be altered. The motion for the adoption of the report was carried.

The Treasurer's Statement was read, showing that the receipts amounted to £161 4s. 3d., and the expenditure £68 14s. 1d., thus leaving a balance in hand of £92 10s. 2d.

Dr. MOORE, in moving the adoption of the treasurer's statement, congratulated the members on the financial condition of the Branch. The motion was unanimously carried.

Collective Investigation.—It was decided to vote the sum of ten guineas towards the expenses of the Collective Investigation Committee.

Council for 1883-84.—The following were elected: *Representatives in the General Council*, F. Bagshawe, M.D.; J. V. Bell, M.D.; R. L. Bowles, M.D.; J. M. Burton, Esq.; Alfred Carpenter, M.D.; G. Eastes, M.B.; J. H. Galton, M.D.; E. Garraway, Esq.; W. J. Harris, Esq.; F. B. Hallowes, Esq.; G. F. Hodgson, Esq.; C. Holman, M.D.; H. Lanchester, M.D.; B. Marsack, Esq.; S. Monckton, M.D.; W. Withers Moore, M.D.; A. Napper, Esq.; A. A. Napper, Esq.; J. Reid, Esq.; E. Noble Smith, Esq.; J. H. Stowers, M.D.; T. Trollope, M.D.; E. W. Thurston, Esq. *Council of Branch*, C. O. Baylis, M.D.; T. S. Byass, M.D.; C. W. Chaldecott, Esq.; T. Eastes, M.D.; J. Ewart, M.D.; E. F. Fussell, M.B.; E. H. Galton, Esq.; C. N. Hayman, M.B.; F. Hetley, M.D.; D. C. Hood, M.D.; F. A. Humphry, Esq.; J. Johnson, M.D.; C. E. Oldman, M.D.; J. T. Penhall, M.D.; J. E. Ranking, M.D.; T. F. Raven, Esq.; G. Rigden, Esq.; B. Roberts, M.D.; H. J. Strong, M.D.; J. S. Turner, Esq.; W. J. Tyson, M.D.; S. Woodman, Esq.; J. L. Worship, Esq.

Vote of Thanks.—Dr. STRONG (Croydon) moved, and Dr. HALL (Brighton) seconded, a vote of thanks to the retiring Council, which was carried.

Secretary.—Dr. Parsons was re-elected Honorary Secretary.

Visit to Battle Abbey.—After the meeting, the company took their places in wagonettes which were in waiting, and were driven to Battle. By the kindness of the Duke of Cleveland, the party visited the Abbey. Mr. T. H. Cole, M.A., accompanied the visitors; and the historical and archæological information he imparted proved highly interesting.

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

THE twenty-seventh annual meeting of this Branch was held at the Infirmary, Hull, on May 30th, when there was a large attendance. Dr. DALY resigned the chair to Dr. LUNN.

Report of Committee.—The report of the committee was read by the Secretary, as follows.

In presenting their report, the committee have to call the attention of the Branch to the following account of the proceedings of the Branch since the last annual meeting. On that occasion, a resolution was passed that there should be a special general meeting, for the purpose of considering the attitude of the Association towards homœopathy, and the work of the Collective Investigation Committee. A meeting was accordingly held on June 22nd, when a dozen members attended. The former subject was discussed, and two resolutions of an abstract nature were passed, and forwarded to the President of the Council, which, we afterwards learnt, exactly coincided with his own views on the matter. Another resolution was passed with the object of eliciting information from the General Secretary with regard to the old by-laws of the Association. The General Secretary, in reply, forwarded copies of resolutions on the subject of homœopathy, passed at several annual meetings of the Association, also resolutions of the Committee of Council, together with other historical information.

The conduct of two gentlemen, both members of the Association, and one a member of our Branch, who were stated to have met a certain homœopathic practitioner in consultation, was referred to and discussed; and a resolution was passed that the Secretary should write to these gentlemen, and inquire whether these consultations had actually taken place. A reply from one of these gentlemen, who lived at a distance from Hull, was received in due course, admitting the fact, but explaining that it was done in ignorance. His letter was discussed at a subsequent meeting, and the matter was allowed to drop. A reply from the other gentleman referred to, a resident in Hull, was also read, but failed to satisfy the Branch, and a resolution was passed requesting him to resign his membership. This was sent to him, but, up to the present time, no reply has been received from him.

It had been intended to hold the usual autumn meeting in September at Withernsea; but, owing to the fact that only a single paper was promised, it was resolved to abandon the meeting. A meeting was, however, held later—viz., on November 8th. At this meeting the question of homœopathy was again discussed, and a resolution was passed as follows:

"That this meeting begs to inquire of the Committee of Council what steps they propose to take to carry out their own proposal, made in their report to the general meeting at Worcester, to obtain 'a full expression of opinion, on the part of the whole Association, as to whether it will tolerate homœopathy in its ranks or not.'"

This resolution was acknowledged by the President of the Council, and replied to by him; he at the same time promising to bring the matter before the next meeting of the Committee of Council.

A circular letter from the Committee of Council, addressed to all the Branches, on the "Representation of the Branches of the Association on the Committee of Council," was received at the beginning of December. A general meeting of the Branch was held on December 16th, to consider the circular, and to frame replies to the questions contained in it. These replies were forwarded, and appear in a report which has been drawn up by the subcommittee, and which has been discussed at a special meeting of the Council, held at Birmingham. The suggestions of the subcommittee have been adopted by the Council, and, if adopted by the annual meeting at Liverpool, will lead to a reconstruction of the executive of the Association.

Further correspondence with the President of the Council took place with regard to the resolution of November 8th, which has been read. Beyond the fact of the resolution having been "mentioned" at a meeting of the Committee of Council, no notice had been taken of it. A request was therefore made, through our representative, for an official reply. Dr. Gibson, being unable to attend the last meeting of the Committee of Council, wrote at length to the President, conveying our request. To this we received the following reply:

"That the Committee of Council fully approves the action of the President of the Council, and endorses the expressions contained in his communications to the Secretary of the East York and North Lincoln Branch."

This was read at the last sessional meeting, on April 7th, and a resolution in reply was sent to Mr. Wheelhouse, as follows:

"That this meeting of the East York and North Lincoln Branch calls upon the Committee of Council to take steps to carry out their own proposal, made in their report to the general meeting at Worcester, to obtain 'a full expression of opinion, on the part of the whole Association, as to whether it will tolerate homœopathy in its ranks or not.'"

To this communication Mr. Wheelhouse sent the following reply, which has not yet been laid before the Branch.

"Hillary Place, Leeds, April 29th, 1883.

"My dear Sir,—I am sorry your Branch should think fit, after the very definite resolutions passed by the Committee of Council at its late meeting, to insist upon its reopening the homœopathic question. I, as President of the Council, have done what I can for your Branch in the matter; and, if it is to be raised again on your behalf, must request you to place it in the hands of your representative on the Committtee.—Yours very truly,

"C. G. WHEELHOUSE."

With regard to the sessional meetings, the Committee feel that, having regard to the difficulty experienced during the past session in obtaining papers and cases, it would be much better if these meetings were held once a month, instead of once a fortnight, as heretofore. A notice of a resolution, which, if carried, would attain this end, appears on the list of agenda. The average attendance at these meetings has been twelve.

The Committee of Council.—Mr. R. H. B. NICHOLSON, in the absence of Dr. GIBSON, gave some account of the proceedings of the Committee of Council during the past year.

New Members.—Dr. Edward Daly and Dr. Robinson were elected members of the Branch.

Council, etc.—Mr. Dix was elected to represent the Branch on the Committee of Council, in the place of Dr. Gibson. Dr. Edward Daly was elected Secretary to the Collective Investigation Subcommittee.

President's Address.—The PRESIDENT read his address, which dealt with the changes which had taken place in medical practice during his career. He passed in review the system of apprenticeship, the difficulty of procuring bodies for dissection, and the few helps the student had in the way of books, compared with those of the present day. The general practice of blood-letting, cupping, and leeching, leading to an abuse of these measures, was noticed, and a quotation from Sir James Paget's address in 1874 was read. The constant use of mercury for obscure diseases was noticed. The introduction of anæsthetics was the next change; and Dr. Lunn stated that he was the first person in Hull to perform an operation with the help of an anæsthetic, sulphuric ether being used. This was in 1846. Antiseptic surgery and the notification of infectious diseases were referred to; and the paper closed with a reference to those members of the Branch who had died during the year.

A vote of thanks was unanimously passed at the conclusion of the address.

Pathological Specimens.—Dr. Macleod showed specimens removed from a patient who had died of scirrhus of the mamma. The axillary glands on the left side were infected, and the left arm was œdematous. The patient died from asphyxia. The heart was found pushed to the right by a mass invading the chest, and the left subclavian passed through this mass, and was nearly occluded. There were nodules in the liver and lungs, and a large milk-spot on the surface of the heart.

Mr. R. H. B. Nicholson showed a patient with lupus non exedens, which had been treated by erasion.

Gunshot Wound.—Dr. LUNN related this case. The record of the case, together with the specimen shown, had been received from the widow of the medical man who attended the case, and she desired that they should be presented to the Museum of the College of Surgeons on account of the great interest attaching to the case. It occurred in 1828, in Ceylon. An officer was firing a musket, when it burst, and a portion of the breech, with a long screw attached, was carried into his forehead. This mass of iron, which was now exhibited, gradually worked its way downwards through the palate, so that the screw projected into the mouth. An unsuccessful attempt was made to remove the screw. The gentleman lived eight years with this mass in his head. He died after a fall from a chair, which set up meningitis and abscess.

Communications.—The following communications were also made.

Dr. Frank Nicholson read a paper on Endocarditis.

Dr. Elliott showed a case of Athetosis. He also read the notes of a case of Acute Ascending Paralysis, which ended in recovery after remaining stationary for three months.

Mr. R. H. B. Nicholson read the notes of a case of Gastrostomy.

Mr. Craven showed a patient on whom Colotomy had been performed for Syphilitic Stricture of the Rectum.

Several cases and papers had to be postponed for want of time.

Dinner.—In the evening, the members dined together at the George Hotel.

June 21st, 1883.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE third general meeting of this session was held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st, 1883. Present, Dr. Totherick, president, in the chair, and forty members.

New Members.—Mr. H. Gardiner Hill, of Coton Hill, Stafford, and Dr. E. Andrew Shrewsbury, were elected members of the Branch.

Specimens.—The following specimens were shown:

1. Mr. L. Tait, Pyosalpinx taken from a young married lady.
2. Mr. T. E. Manby showed specimens of Complete Traumatic Rupture of both Popliteal Artery and Vein (left).
3. Dr. Malet showed Aluminium Probes covered with Nitrate of Silver diluted with Nitrate of Potassium.
4. Mr. Folker exhibited a Needle-holder and a *Serre-nœud*, more especially adapted for use in Vesico-vaginal Fistula.
5. Dr. W. G. Lowe exhibited a Right Lung taken from a woman (aged 47) who had died from Cancer of the Pleura.
6. Mr. Vincent Jackson presented a little boy (aged 4) whose left Hip was Excised for disease, more than twelve months ago.
7. Mr. Jackson showed a man (aged 25), six feet two inches in height, the subject of acquired Genu Valgum of the right lower limb. Three months ago, osteotomy of the thigh-bone was performed.
8. Mr. Jackson showed a young girl, who three weeks ago had been operated upon for Imperforate Hymen and retained Menses.

Debate upon Acute Pneumonia and its Treatment.—Dr. ARLIDGE (chairman of the Collective Investigation Local Committee) opened a discussion upon acute pneumonia and its treatment; the discussion was continued by Dr. MCALDOWIE, Dr. G. H. LOWE, Dr. MALET, and Dr. REID.

Paper.—The following paper was read: Mr. W. H. Folker, Diphtheria.

NORTH OF IRELAND BRANCH: ANNUAL MEETING.

THE fifth annual meeting of this Branch was held in the Board Room of the Belfast Royal Hospital, on Thursday, June 14th. The President (Dr. JOHN MOORE, Belfast) occupied the chair, and there were forty-two other members of the Branch present.

Report of Council.—Dr. DEMPSEY, the Honorary Secretary, read the following Report of Council.

Your Council, in presenting the fifth annual report of the Branch, have much pleasure in congratulating the members on its very prosperous condition.

At the last annual meeting, there were 106 members; two of them have since ceased to be connected with the Branch, while, on the other hand, 47 new members have been elected, making a total of 151. Of the 36 Branches of the Association, ours now occupies the fourteenth place in point of membership, and it includes one-third of the entire profession in Ulster. This success is remarkable, seeing that the Branch has only been a few years in existence; and your Council regard it as an evidence of the necessity which existed for some such bond of union as it affords to the medical practitioners of the province. There are still, however, in Ulster, some members of the Association who are not as yet connected with the Branch; but it is hoped that they will be induced to join by those members who are intimate with them.

Your Council regret to report the death, by drowning, of Dr. Travers B. Barton of Lifford, who had recently become connected with the Branch, and had given promise of being an active member.

One special and four ordinary meetings of the Branch were held during the year. Three of these were in Belfast, one in Londonderry, and one in Armagh.

The meeting in Derry was the first ever held outside Belfast; and the success which attended it, as well as the meeting in Armagh, induces your Council to believe that these reunions in the various central towns of the province will be of great advantage to the profession.

Several important and original papers were read at these meetings.

Amongst the contributors were Dr. John Moore, Sir William Millar, Dr. Browne (Belfast), Professor Dill, Mr. Fagan, Dr. McKeown, Dr. Palmer, Dr. Bernard, Dr. McConnell, Dr. Harkin, Dr. Byers, Dr. Carson, etc.

The able address delivered at the last annual meeting by Dr. Thompson, the retiring President, has been circulated amongst the members.

At the annual meeting, a Subcommittee for the Collective Investigation of Disease was appointed by the Branch to co-operate with the Collective Investigation Committee of the Association. Dr. Mahomed of Guy's Hospital, Secretary of this Committee, visited Belfast in July last, for the purpose of explaining the objects and the method of conducting the investigation. An informal meeting of the town members of Council was called to meet him, and the Council are pleased to report that a number of members have taken an active interest in this work.

The change which has been effected in the system of electing the office-bearers comes into operation at this meeting; and it is hoped that the increased facilities for voting will give the members a greater interest in its management.

The petition which was adopted by the Branch in favour of the militia surgeons was presented in the House of Commons on the 8th instant, by Mr. Ewart, senior member for Belfast.

Our approval was also given to the Registration of Midwives (England) Bill, and a desire expressed that its provisions should be extended to Ireland.

A special meeting of the Council was called, to adopt a petition in favour of the Medical Act Amendment Bill, but, after considerable discussion, it was decided to take no action.

The petition in favour of the Poor-law Officers' Superannuation Bill, which was adopted at the last annual meeting, was sent to the Chairman of the Parliamentary Bills Committee for presentation.

The treasurer's statement showed a balance of £7 18s. 8d. in hand.

The report of Council with the treasurer's statement was received, adopted, and directed to be entered on the minutes.

President's Address.—The PRESIDENT then delivered his retiring address.

Dr. MACONCHY proposed, and Dr. DILL seconded, and it was carried unanimously: "That the best thanks of the Branch be given to Dr. Moore for his excellent address."

Committee for Investigation of Cases.—Dr. BERNARD moved the following resolution, which was carried: "That it be referred to the Council of the Branch to consider the desirability of forming a committee to investigate and report upon cases of interest brought before the meetings."

Communications.—The following communications were made:

1. Dr. Spedding exhibited a new Instrument for the Treatment of Endocervicitis. He also showed a tumour removed from the labium vaginæ.

2. Dr. Dill gave the details of a Case of Anteflexion of the Uterus, and made some remarks on uterine displacements generally, and their different modes of treatment, exhibiting pessaries recommended by various authors.

3. Dr. Byers showed a case of Paralysis presenting some interesting features, and a case of Spina Bifida with Hydrocephalus. He also exhibited a Fibrous Polypus, which he removed from the uterus.

4. Dr. St. George showed a patient upon whom he performed a Rhinoplastic Operation, with excellent result.

5. Dr. Bernard showed a boy with "Claw Hand," and made some remarks on the affection.

6. Dr. Gray read a paper on Puerperal Convulsions.

7. Dr. Maconchy exhibited a Calculus, weighing six and a half ounces, which he recently extracted.

Officers and Council.—The following office-bearers were elected: *President:* Sir William Millar, Londonderry. *Vice-Presidents:* Dr. Maconchy, Downpatrick, and Mr. Fagan, Belfast. *Members of Council:* Dr. J. W. Browne, Dr. Byers, Dr. Cuming, Dr. Dill, Dr. John Moore, Dr. McKeown, Dr. J. W. T. Smith and Dr. Whittla, Belfast; Dr. Bernard, Derry; Dr. D. A. Charles, Cookstown; Dr. Dunlop, Hollywood; Dr. Graves, Cookstown; Dr. Gray, Castlewellar; Dr. Kidd, Ballymena; Dr. Palmer, Armagh, and Dr. Thompson, Omagh. *Honorary Secretary and Treasurer:* Dr. Dempsey, Belfast. *Representatives of the Branch on the Council of the Association:* Dr. Byers, Dr. Cuming, Sir William Millar, Dr. McKeown, Dr. Palmer, Dr. Wheeler. *Representatives on the Parliamentary Bills Committee:* Dr. John Moore and Sir William Millar, Derry. The Council were appointed the Committee for Collective Investigation.

The members dined in the evening at Mr. Fisher's, Dougall Place.

CORRESPONDENCE.

THE MEDICAL PROVIDENT SOCIETY.

SIR,—To think that only about six hundred men are found to support this proposed sick and pension fund, seems to me so utterly amazing, that I cannot believe the members view the matter in its right light.

Surely every man who claims to have the honour of the profession at heart should not withhold his name a day. For what is the source of the heart-burnings and littleness among us but, in the main, downright neediness? But see what would happen if a sound sick-and-pension-fund were founded by the whole Association, or, still better, by the whole profession. Every member of it would at once be lifted into independence. And what this Association has already done to promote goodwill among its members, and among the members of the profession generally, would be as nothing to the goodwill which would follow our forming ourselves into a great brotherhood of mutual help in times of need.

I would put it to the members thus: it is not a matter of self-interest, but for the honour of the profession, that every member of the Association should join; and I would not ask for a few hundreds, but for a few thousands, to join at once. As to what can be done by co-operation, a manager of a London banking company told me, the other day, that, by paying a small sum yearly to a fund at the bank, he would be entitled, when about sixty years of age, to a pension of £300 a year.

Only take away from us the need of gain, and you will go far to take away the greed of gain; and you will open up a new era where all that is now high, and good, and noble, will be higher, and better, and nobler.—I am, etc., ONE WHO HAS SENT IN HIS NAME.

Petworth, June 23rd, 1883.

PRELIMINARY EXPENSES FUND.

THE following additional sums have been received:—

R. W. Edginton, Birmingham, 10s. 6d.; and J. H. Gordon, Salisbury, 10s. 6d.

THE RISKS OF "MASSAGE."

SIR,—In your issue of to-day, I observe a short paper by my friend Dr. Althaus on "The Risks of 'Massage.'" As I believe I was one of the first in this country to draw special attention to the use of this therapeutic agent, I feel that I am in some sense responsible for its having become "as thoroughly fashionable as mesmerism and homœopathy have been at previous periods in the history of medicine;" if such be, indeed, the fact, of which I have no personal knowledge. I do not know if by this juxtaposition Dr. Althaus intends to compare massage to the systems he names; if so, the comparison is most unjust. Mesmerism and homœopathy are what we all know them to be; massage is a thoroughly scientific remedy based on good physiology and sound common sense, the value of which, in properly selected cases, no one who knows anything of the matter can possibly question, and which doubtless, when improperly applied, is capable of doing much injury, as any other powerful treatment, such as mercury or opium, under similar conditions. I am, however, quite in accord with Dr. Althaus as to the importance of accurate diagnosis before resorting to its use; and, on this point, I consider his note of warning well timed. I have myself been so impressed with the extreme difficulty of diagnosis in doubtful cases of impaired motor power, that I have never undertaken the charge of any case of supposed functional disease, as to the nature of which there was the slightest doubt, without having, in the first instance, the advantage of a consultation with some physician known as an expert in diseases of the nervous system. I have thus protected myself from being classed amongst those who, Dr. Althaus thinks it "charitable to assume, are somewhat at sea as to the pathology and diagnosis of diseases of the nervous system." Were it not that the *tu quoque* argument is always a bad one, I might curiously illustrate the difficulty of accurate diagnosis in doubtful cases of neurasthenia by several very remarkable instances which have come under my own observation, in which patients have been for years treated

as subjects of organic spinal disease by some of our most eminent neurologists, in which the error of diagnosis has been conclusively proved by their rapid and complete recovery under appropriate treatment. I am not aware, however, that any advocates of massage have recommended its use, in this country at least, in any of the diseases of the spinal cord which Dr. Althaus mentions. If any have done so, they have surely committed a most grievous error, certain to lead to mischief. In my paper on "The Systematic Treatment of Nerve-Prostration and Hysteria," I have laid special stress on this point, having said, "Nor is it by any means unimportant that his diagnosis should be carefully and thoroughly made. It is often a far more difficult matter to distinguish between hysterical conditions and diseases of the nervous system than is generally supposed to be the case, and I have heard of more than one instance in which very serious mistakes have been made."

May I be permitted to point out here, as I have already more than once done elsewhere, that "massage" is only a part, and by no means the most important part, of true treatment, the results of which, in well selected cases, are so remarkable, that it is not surprising that it should run the risk of being at times injudiciously and indiscriminately applied? If this has occasionally been done by overzealous partisans, as Dr. Althaus supposes to be the case, it is only what invariably happens when any comparatively new subject attracts professional attention.—I am, etc., W. S. PLAYFAIR.

31, George Street, Hanover Square, June 23rd, 1883.

THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

SIR,—It is rumoured that the shipowners of Liverpool have collectively signed, and forwarded to the President of the Board of Trade, a memorial denying the statements made by Dr. Irwin and other gentlemen regarding the position, or rather total absence of position, of surgeons on Atlantic steamers, and the serious consequences to health and life which emigrants have to encounter, owing to the same. As the shipowners have always resolutely declined to receive any report on medical matters from their surgeons, under pain of immediate dismissal, it is difficult to see how they are in a position either to affirm or to deny any statement made by Dr. Irwin or others on the subject. One can only charitably suppose, that this line of policy on their part, hitherto as unalterable and about as reasonable as the "laws of the Medes and Persians," has left them in such a complete state of self-imposed ignorance as to medical affairs on board their own ships, that they cannot at once credit the very moderate statements made in regard to the medical service; for it would be impossible to believe that the blackest of the black sheep, which, with a candour that did them credit, a recent shipowners' deputation to the President of the Board of Trade admitted to be amongst their number, would wish a continuance of such a terrible condition of affairs as has been proved to exist on an emigrant ship to the States.

Their denial of present abuses can therefore carry no weight, since they can produce no reports from any of their surgeons in support of their assertions; and their former attempts at refuting the statements of Mr. Plimsoll and others, together with their very recent effort to recover the arbitrary power of arresting deserting seamen without a warrant, must be a proof to the public that what they wish is a despotism in all things connected with shipping, which despotism they have contrived to establish, and so far to unrelentingly maintain over their surgeons. The result of this has been a great sacrifice of human life at sea and a gross injustice in the treatment of emigrants generally, as it has effectually enslaved the one individual to whom they naturally looked for protection—namely, the surgeon. If the shipowners wish to be credited, let them not incur the onus of denying any charges brought against them, but let them induce or oblige a few of their surgeons to write and declare themselves fully satisfied with the powers entrusted to them for the satisfactory fulfilment of their duties to those under their charge. But any such attempt the shipowners well know would result in failure, as there are many surgeons now at sea who, so far from supporting their employers in defeating praiseworthy efforts made for the public good, will, if present measures fail, even at the sacrifice of their berths (which would assuredly follow), come forward with a weight of evidence which cannot fail to effect the desired end.

The only reason that such further evidence has not been forthcoming is, that surgeons at present in the companies consider it useless to sacrifice their present positions needlessly, when the cause has already been taken up by a higher power than their own combined efforts would be; namely, the British Medical Association, which society is not to be defeated in efforts for the public good, even if the contest last for twenty years. Nor will the Board of Trade be backward in taking severe measures when publicity is given to the manner in which its rules and regulations, both medical and marine, have been set aside, and its officials hoodwinked and deceived, even before the vessel has left port. In short, many companies may think themselves fortunate if an indignant public do not insist on the withdrawal of their passenger-certificates, as not a few, now of high repute, would be condemned as unsafe for conveyance of cargo, let alone hundreds of emigrants.

In some future letter, we will hope to enlighten the ignorance of shipowners, who have so systematically refused their surgeons' private reports on their medical service in a public, and therefore to them less agreeable, manner. Till then, we will observe that, as the emigrant in health is fairly well treated, with the exception that his complaints of bad food are never listened to, so, when sick, he is in a most miserable condition, as no provision whatever has been made for him beyond the providing of a medical practitioner of some description, who is warned to do as little as possible, and who, in doing that little, has often to oppose (if he be conscientious enough to do so) shipowners, masters, pursers, and even chief stewards, who, their credit depending on the amount of goods they do not expend, feel aggrieved if the surgeon order a single cup of beef-tea or arrowroot.

Awaiting the result of the present action on the part of the British Medical and other Associations, we will continue for the present to hope for the best, and "keep our powder dry" for future contingencies. Should, however, present efforts not succeed very soon, neither the British Medical Association nor Dr. Irwin, to whom the travelling public, whether saloon or steerage, owe a large debt of gratitude, will have to support the battle entirely alone, as the United States will not long permit their citizens to undergo the discomforts and dangers they do at present, owing to the undefined powers and position of the medical officers of Atlantic steamers.—I am, sir, your obedient servant, BRACKENTHWAITE.

MILITARY AND NAVAL MEDICAL SERVICES.

PURCHASE OF HOSPITAL SUPPLIES BY MEDICAL OFFICERS.

H. P., a correspondent of great knowledge and authority, writes to us:—

Perhaps no part of Lord Wolseley's published evidence before Lord Morley's Committee has attracted more notice than his repeated complaints against the medical officers for their failure to carry out the responsibilities which, he states, had been placed on them, inasmuch as they did not purchase in the markets whatever they thought best for the sick and wounded in the hospitals. This charge was specifically applied to the neglect of purchasing good bread for the hospital at Ismailia, and of buying bedsteads, whisks, and mosquito-curtains at Cairo. But Lord Wolseley's blame was not confined to the neglect of purchasing these particular articles. His lordship states that he was very angry with "a hospital doctor" the first day that he went over the hospital at Cairo, and that he said to him—"Why don't you go out into the city and get everything that you want?" (See Report, etc., p. 273.) It is quite evident, therefore, that Lord Wolseley considered that, whenever anything was wanting in the hospitals which the medical officers could not obtain directly from the authorised supply-departments, they were to go into the market and buy it; and it is to be presumed that his lordship believed that any expenses so incurred would be ultimately sanctioned and reimbursed by the Finance Department at the War Office. Whether Lord Wolseley's views on this subject are correct or not is a very serious question, not merely as regards the pockets of the medical officers, but also as regards their character and reputation. This is sufficiently shown by Lord Wolseley's censures of medical officers for not buying things that were considered necessary. Hence, it is very important that a definite solution of the question should be obtained. If medical officers are responsible for the purchase of articles of hospital diet, or of hospital furniture, the fact should be made clear to them in the printed regulations which are put into their hands for their guidance. If they are not responsible for such purchases, it is necessary that others should be made aware of the fact. Certainly there is nothing in the latest code of Army Medical Regulation, according to which medical officers are ordered to discharge their duties, which gives sanction to any action of the kind on their part. It might have been expected that something precise on the subject would have

have been found among the conclusions, or recommendations, of Lord Morley's Committee; but the only recommendation bearing upon the subject is the following: "Medical officers should be held responsible for procuring the best quality of supplies obtainable." How these supplies are to be obtained is not mentioned.

Seeing that there are special military departments organised and established for supplying stores of all kinds, including the articles of which the hospital diets are composed, and articles of hospital equipment, it might be well taken for granted that medical officers would be travelling away from their legitimate functions if they trenched upon the duties of those departments, so long as any representatives of them were at hand, and that their conduct in so doing would be regarded as reprehensible. Neither would it be reasonable to suppose that the surgeons could market as well as officers specially trained for the work, even if they could spare the time from their patients for doing so; and it may readily be imagined what confusion in accounts such a double system of purchase would give rise to, and what extra work it would cause in another department, the Finance Department. At page 323 of the Report, a War Office letter is quoted, dated August 5th, 1882, which appears to put the question on a fairly distinct basis, so far as the authorities of that office are concerned. It is signed by the Under Secretary of State for War, but written by direction of the highest authority, the Secretary of State, for the guidance of the various military departments on service with the army in Egypt. This letter states: "It is essential that, except in the case of petty office or departmental purchases (which may be made by the heads of departments), there should be but one purchasing department in the local market, and all articles required should be provided by means of requisitions upon the Commissariat Department." It is sufficiently clear, from this direction of the Minister for War, that, while permission is given to all departments to make certain petty purchases, none is given for the purchase of regular hospital supplies or furniture to any other than the Commissariat Department. Yet, notwithstanding these War Office orders, we find Surgeon-General Sir J. Hanbury stating to the Committee, in reply to Question 11,449: "I gave instructions to all the officers to spend money in the purchase of things; and the more they spent, the more I would be pleased. That was my dictum from the commencement, and it was on the 24th of August that I gave those instructions." And Deputy Surgeon-General Marston says, in his evidence: "I should myself have no hesitation in doing anything of the kind" (that is, ordering things in the markets, and buying them on a large scale) "on my own responsibility, in case of need; but I do not see how the thing could be done generally." This same officer states, in his evidence further on (Question 7,470), that he gave a medical officer an order, saying, "If you do not get the things you want by a certain time" (referring to a requisition made on the Ordnance Store Department, but not naming the time the medical officer was to wait), "purchase them, and I will take the responsibility off your shoulders." Is it not obvious, from these conflicting directions, that more precise rules are required than seem to exist at present for general guidance regarding the purchase of necessaries by what may be called non-purchasing departments of the army; the circumstances under which the power of purchase may be exercised; the means of obtaining money, if they have it not in their own possession; limitations as to amount; the steps to be taken for recovery of the expenditure; and other such matters? Medical officers are left in a state of uncertainty on these points at present; and, while such uncertainty exists, they will naturally hesitate to commit themselves to acts which they may well fear will entail on them ultimately the censure of the central authorities of the War Department.

Events repeat themselves. We have it on record that what has taken place now equally happened in Crimean days. Dr. Menzies, the Principal Medical Officer at Scutari, and also Major Sillery, the Commandant, were accused of not exhibiting any appreciation of their power to use freely the public treasure of England for supplying the deficiencies of the vast hospital under their management. Mr. Kinglake remarks on this subject: "After lengthened inquiry, it seemed to have been considered that Major Sillery, and some of the others concerned in the hospital administration, had constructively a right to draw for all the funds needed; but candid men will admit that the possession of this constructive authority was not like having the power conferred by written orders and warrants." (Kinglake's *Crimea*, vol. vi, p. 151.) So, too, with regard to the verbal directions to medical officers in Egypt to spend money for hospital requisites. It is related of General Sir George Brown, when the troops were dying from cholera in Bulgaria, before the army moved to the Crimea, and when the camp-hospitals were destitute of some of the commonest medicines, such as opium, and other hospital supplies, and the medical officers were complaining of the deficiencies, that Sir George told the surgeons, "you are not to let the sick want for anything—if pouring gold down their throats will save their lives, you are to pour it down." It does not appear that the General told the surgeons how the gold was to be got for being poured down the patients' throats, or how, supposing his blunt expression were to be reduced to the practical result it implied, and gold was to be spent without limits in the purchase of the things needed—opium, for example—the medical officers, who were tied down to their duties on the spot, were to get to the bazaars in Constantinople to buy it. The fact is, those who utter generalities of the kind do not concern themselves with details, which, however, must be considered in practice. They have said that money is to be expended without limit, so that there may be no want of anything; and if, after all, it is asserted that there have been deficiencies, they console themselves with the reflection that the fault is not, at any rate, on their part. Why did not Lord Wolseley and others, who directed medical officers to spend money so freely, give specific instructions in writing on the subject, that could be quoted as a sufficient authority on the money, if necessary, being expended? But the whole subject has now been brought to the front in such a way that surely the authorities will be open to blame if they do not put it on a settled footing for the future.

I may just allude to one other point. Various military officers who have given evidence before Lord Morley's Committee have asserted that, if a combatant officer had been at the head of the hospital at Ismailia, as commandant or governor, there would have been none of the alleged want of supplies there, and that better bread would have been got for the patients. As a fact, there was a commandant at Ismailia, Colonel Sir Owen Lanyon; and it is shown in the published evidence that, with the exception of the first few days after the landing of the troops, he inspected the hospital daily. Is it likely that another commandant in the hospital itself would have mended matters? Major Sillery does not appear to have done so at Scutari. It is just possible, however, that, if there had been a military commandant at the head of the Ismailia hospital, even without any change in its condition, the public would have heard fewer complaints about it.

MEDICAL PRIZES IN THE FRENCH ARMY MEDICAL SERVICE.

A CIRCULAR has been issued during the present month by the French Minister of War, General Thibaudin, instituting two annual prizes, each consisting of a gold medal of the value of 500 francs, to be given to medical officers of the army for the best essays on questions of medicine and surgery; and a triennial prize, of the same value, open to both medical officers and *pharmaciens*, for the best work on a question of chemistry applied to military hygiene. In notifying the establishment of these prizes, the minister states that their purpose is to encourage scientific work among the military medical officers; and he adds that he would have been glad to have made them more numerous, and equal in importance to the prizes accorded to the military surgeons of some other nations, but that the exigencies of the budget would not permit him to give them a higher value. He also remarks that, in other armies, the greater part of similar prizes have sprung from the gifts of private persons; and that, if such gifts were offered for the service of the French Army Medical Department, he would not hesitate to accept them, and to perpetuate the names of the donors, with a view to encourage scientific researches, and in the interests of the army at large.

The conditions under which the prizes are to be allotted are as follows. The consultative sanitary committee of the war department will indicate every year, shortly before the general inspection, the subjects of competition, and they will be inserted in the *Journal Militaire Officiel*. The essays will be addressed, shortly after the general inspection of the following year, to the War Office, to be examined by the sanitary committee; and the committee, in due course, will make known the names of the successful competitors to the War Minister for publication.

VOLUNTEER MEDICAL SERVICE.

SIR,—I shall be greatly obliged by being informed through the columns of the JOURNAL, what subjects to read up in order to undergo the proficiency examination. Probably some of your many readers may have passed, and will give me information on the subject. Also, I shall be glad to receive some hints on the formation of an ambulance corps in connection with a volunteer corps.—I am, sir, yours obediently,

ACTING SURGEON.

HOSPITAL AND DISPENSARY MANAGEMENT.

MEDICAL INSTITUTES OF FRIENDLY SOCIETIES.

A GENERAL practitioner writes to us: "The friendly societies in Kettering are taking steps to provide themselves with a medical institute, similar to those which have been formed in many other towns. These institutes seem to meet the wants of the working people in the larger centres of population; and although they are sometimes carried on in a way which renders them unacceptable to the medical profession, we have no doubt they will continue to spread. They are an outcome of the provident movement, and wherever they are started, the influence of the medical men should be exerted to keep them up to the standard of the best provident dispensaries of the neighbourhood."

THE DELANCEY HOSPITAL.

CHELTENHAM is to be congratulated on its Delancey Fever Hospital. It would be well if all large towns had such an institution; and yet, strange to say, the committee of management do not meet with as much support and encouragement as they have a right to expect.

In the year 1882, as in those which have preceded it, the trustees are enabled to point to the marked success of the Delancey Hospital in checking the spread of infectious disease. Five distinct outbreaks of small-pox have occurred during the year—making twenty in all since the opening of the small-pox block—yet in each instance, by immediate isolation of the patient, vaccination of those who surround him, and complete disinfection of the premises, the extension of the disease has been arrested. Among the 31 cases (some of them very severe) which have been treated during the last nine years in the hospital, there have been but four deaths, and these all occurred in the first three years of the hospital's existence. In the Gabell block, 39 cases of scarlet fever have been treated during the year; amongst these, there was one death, which occurred within twenty-four hours of the patient's admission. A total of 3 deaths out of 195 scarlet fever patients treated during the past seven years is a striking testimony to the excellent sanitary and other arrangements of the hospital, and no less to the advantages derived by both the patient and his friends through immediate removal to its wards. Private families, large business firms, and educational institutions, have in this, as in former years, reaped the benefit of prompt isolation in the stamping out of scarlet fever on its first invasion; and it would be no easy matter to calculate the amount of infectious disease which is thus nipped in the bud by the removal of a scarlet fever patient from crowded shop premises, or from a thriving school.

THE PENDLEBURY HOSPITAL FOR SICK CHILDREN.

THE fifty-fourth report of the General Hospital and Dispensary for Sick Children, Pendlebury, shows that a great amount of good work is being done, on the best lines, and in the wisest spirit. The number of patients treated at the dispensary during 1882 was 6,916; and the number of patients admitted into the hospital was 1,098. But the committee and the medical staff are not contented with merely relieving and curing sickness. They are desirous of utilising the hospital in other ways. They wish to make it a training institution for nurses, and a centre for the diffusion of information respecting children's diseases. In addition to the ordinary staff of nurses, ladies are received as probationers, and trained for one or two years. The medical staff deserve great praise for trying to diffuse sound information respecting the management of infants by means of leaflets; but still more for the full and particular account which they have given of the year's work. *The Abstract of Medical and Surgical Cases* which, in the form of a separate pamphlet, accompanies the report, reflects the utmost credit upon the medical officers, and is likely to be of considerable value in throwing light upon the diseases which are most frequent among the children of the district.

But the Pendlebury Hospital, like some other excellent institutions of the same kind, is sadly crippled for lack of funds. The balance against the hospital on January 1st, 1883, was £4,640. Under these circumstances, any extension of the institution is out of the question; and the new wards for zymotic diseases, as well as the seaside convalescent home, must be set aside at present, and must wait for more prosperous times.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOMENCLATURE OF SMALL-POX.

DEAR SIR,—Unfortunately, this neighbourhood has been infected with small-pox for some months; and, as parochial medical officer, I have had to attend the whole of it. In making the fortnightly returns to the guardians, I have simply put down pure small-pox as variola, and modified as varioloid. At the meeting held on the 16th, a member of the board, who is, I am sorry to say, a clergyman of the Church, got up, with my sheet in his hand, and stated that he had the authority of a medical gentleman for saying that "no such word as varioloid existed, and he (Dr. Donovan) had invented it for his own purposes, to deceive the board." These, my informant states, are the words used. I wrote for a retractation, and this was refused; so I have instructed my solicitors to proceed against the reverend gentleman.

I should like to know whether I have done right in doing so.—I am, dear sir, yours, etc.,

WILLIAM DONOVAN.

The Old Vicarage, Whitwick, June 22nd, 1883.

*** The term "varioloid," although somewhat inappropriate, is frequently used by English writers to designate modified small-pox. The language used by the reverend guardian, if correctly reported, was altogether unjustifiable.

M.B.M.A.—In such a case our correspondent might, we think, very courteously but fully point out that a patient is only able to describe his symptoms, and that his reference as to the physical conditions from which he supposes them to arise is necessarily a matter to him of (often erroneous) conjecture. That skilled medical opinion is the only means by which diagnosis can be made, and that, in such a case, the opinion of the medical officer as to the nature of the ailment, guided by his knowledge, and after listening to the patient's statement, is that which must be relied upon to decide the nature of the complaint and the necessary treatment, dietetic or medical. In this instance, the guardians seem to have ignored this essential element of judgment; and, if they had all the facts before them, they would no doubt see reason to modify the judgment which they have formed on insufficient data.

HEALTH OF FOREIGN CITIES.—It appears, from statistics published in the Registrar-General's return for the week ending the 16th instant, that the death-rate recently averaged 31.9 per 1000 in the three principal Indian cities; it was equal to 27.1 in Bombay, 34.0 in Madras, and 36.1 in Calcutta. Cholera caused 136 deaths in Calcutta and 15 in Bombay; the deaths from small-pox were 30 in Madras and 25 in Bombay. According to the most recent weekly returns, the average annual death-rate in twenty large European cities was equal to 29.3 per 1000 of their aggregate population; this rate was no less than 10.6 above the mean rate last week in twenty-eight of the largest English towns. The rate in St. Petersburg was equal to 33.5, showing a decline from the rates in recent weeks; the 597 deaths included 24 from diphtheria, and 20 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the mean death-rate did not exceed 20.0, the highest rate being 22.1 in Stockholm, where 9 deaths were referred to diphtheria and croup. In Paris, the rate was equal to 27.4, and the deaths included 52 from typhoid fever, 39 from diphtheria and croup, and 21 from small-pox. The 210 deaths in Brussels were equal to a rate of 26.1, and included 16 fatal cases of small-pox. In Geneva, the death-rate did not exceed 19.3; three of the 26 deaths resulted from scarlet fever. In the three principal Dutch cities — Amsterdam, Rotterdam, and the Hague — the mean death-rate was 24.8; the highest rate was 26.4 in Amsterdam, and 7 of the 73 deaths in Rotterdam resulted from small-pox. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 32.0; it ranged from 25.4 and 27.9 in Dresden and Berlin, to 38.5 in Breslau and 45.5 in Prague. The excessive death-rate in Breslau was mainly due to the fatality of diarrhœa; and in Prague the 230 deaths included 9 from small-pox and 8 from measles. In Venice the 61 deaths, including 3 from measles, were equal to a rate of 22.6; no returns were received either from Rome, Naples, or Turin. The 124 deaths in Lisbon included 3 fatal cases of diphtheria, and were equal to a rate of 32.4. The death-rate in four of the principal American cities averaged 24.5, and was equal to 19.4 in Baltimore, 20.3 in Brooklyn, 21.6 in Philadelphia, and 29.0 in New York. Scarlet fever and diphtheria showed fatal prevalence in most of these American cities, and 12 deaths were referred to typhoid fever in Philadelphia.—The return for the week ending the 23rd instant shows that the death-rate in the three principal Indian cities recently averaged 30.6 per 1000; it was equal to 27.9 in Bombay, 28.2 in Madras, and 31.1 in Calcutta. Cholera caused 103 deaths in Calcutta, and small-pox 23 in Madras and 9 in Bombay; "fever" fatality was proportionally largest in Bombay. According to the most recent weekly returns, the average annual death-rate in eighteen

of the largest European cities was 29.5; this rate was no less than 10.8 above the mean rate in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 33.4, and the 595 deaths included 25 from "fever" and 15 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 24.6, ranging from 20.0 in Christiania to 26.7 in Stockholm; scarlet fever caused 4 deaths in Stockholm, and 12 of the 118 deaths in Copenhagen resulted from diarrhœal diseases. The Paris death-rate was equal to 25.1; 45 deaths were referred to "fever" and 41 to measles. In Brussels, the deaths, which included 9 from small-pox and 6 from measles, were equal to a rate of 26.6. The rate in Geneva was but 19.3, although 4 deaths resulted from measles. No return is published from the principal Dutch cities. The Registrar-General's table includes seven German and Austrian cities, in which the death-rate averaged 32.5, and ranged from 25.8 and 27.8 in Dresden and Hamburg, to 37.3 in Munich and 43.9 in Prague. Small-pox caused 12 deaths in Prague and 3 in Vienna; measles showed fatal prevalence in Berlin and Munich. In three of the principal Italian cities, the mean death-rate was 29.2, the rate being equal to 23.7 in Venice, 29.4 in Turin, and 31.5 in Rome; measles caused 10 deaths in Rome, and small-pox 3 in Turin. The 124 deaths in Lisbon, including 4 fatal cases of measles, were equal to a rate of 31.6. In the four principal American cities, the death-rate averaged 23.3, and ranged from 19.6 in Brooklyn, to 25.3 in New York. Scarlet fever was more or less fatally prevalent in all these American cities; measles also caused 23 deaths in New York, and typhoid fever 11 in Philadelphia.

OBITUARY.

BENJAMIN BELL, F.R.C.S.Ed.

On Wednesday, June 13th, the profession in Edinburgh and a wide circle of friends suffered a severe loss in the death of Mr. Benjamin Bell, F.R.C.S.Ed. He was born in 1810, in a family which seems to have a hereditary attachment to the profession; his father and grandfather being members of it, and the succession is now continued in his son, Joseph Bell, M.D., one of the surgeons to the Royal Infirmary, Edinburgh, and Lecturer on Clinical Surgery there. In 1832, Mr. Bell received his diploma as Licentiate of the Royal College of Surgeons, Edinburgh; in 1833, the membership of the Royal College of Surgeons, England; and, in 1835, the fellowship of the Edinburgh College, of which corporation he was elected President in 1864. He entered upon a long and successful career in his native city; and, while he reaped substantial reward in private practice, he devoted his attention to many schemes for the benefit of the public and his profession. The Edinburgh Eye Infirmary owed largely its foundation to him; and his devotion to its interests and service continued throughout his life as surgeon to the institution. He was also surgeon to the Asylum for the Industrious Blind, to the Royal Public Dispensary, and to George Watson's Hospital and Asylum. He was in 1863 appointed an extra professorial examiner for medical degrees in Edinburgh University, which appointment he held for many years. During his busy lifetime, Mr. Bell contributed various papers to the medical journals, and was author of the *Life, Character, and Writings of Benjamin Bell* (author of a *System of Surgery*, and father of Mr. Bell). There was no citizen of Edinburgh more highly respected than the deceased, not only on account of his professional worth, but on account of his upright and blameless life, his amiability of character, and thorough kindness of disposition. He was a leading member of the Free Church of Scotland; and, at the annual meeting of its General Assembly, on various occasions, and notably two years ago, he was thus distinguished by his able advocacy of principles of religious liberty. He was interred, on Saturday last, in the Dean Cemetery, and his remains were followed by a large number of the profession and public.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

Lectures on Surgery.—Professor Humphry has given notice that he will lecture, during the Michaelmas Term, on the Principles of Surgery; during the Lent Term, on Injuries and Diseases, considered more especially in relation to the Anatomy of the parts concerned; and during June, July, and August, on Spinal Diseases. During the Easter Term he will give clinical instruction at Addenbrooke's Hospital. The lectures will be without fee to the students who are entered to the practice of the hospital.

MEDICO-LEGAL NOTES AND QUERIES.

DR. ABRATH AND THE NORTH-EASTERN RAILWAY COMPANY.

In the Court of Appeal of the Supreme Court of Judicature, on June 22nd, an appeal by the North-Eastern Railway Company was heard by the Master of the Rolls and Lords Justices Bowen and Fry. The plaintiff, Dr. Abrath, was indicted, conjointly with one McManus (who was also a plaintiff in the case), for conspiracy to defraud the company, by representing that the injuries which the latter had sustained as a passenger on the defendants' line were of a most serious character—that they had resulted in paralysis—whereas they were of a most trivial nature, whereby the company had been induced to compromise the action for £725 as damages and £300 costs. On information which subsequently came to the knowledge of the directors, to the effect that McManns had shammed his sufferings, and that Dr. Abrath had aided him in this by creating fresh sores on his back where old wounds had existed, and keeping him in bed, so that the neighbours might see him apparently suffering from paralysis, they were charged before the magistrate with conspiracy, were committed for trial, and a true bill found against them by the grand jury, but they were acquitted. On this they brought their action against the company for malicious prosecution; and at the trial, which took place before Mr. Justice Cave at the Durham Assizes, the jury found there was reasonable and probable cause for instituting the prosecution after due inquiries, on which finding the learned judge entered judgment for the defendants. The plaintiffs then applied to the Divisional Court for a new trial, on the grounds that the verdict was against evidence, and the result of misdirection.—Justices Grove and Lopes made the rule absolute for a new trial on the latter ground only, and from this decision the company now appealed.—The Solicitor-General, Mr. Digby Seymour, Q.C., Mr. Gainsford Bruce, and Mr. Walton were counsel for the defendant company; Sir H. Giffard, Q.C., and Mr. M'Clymont represented the plaintiff in the Court below. On the conclusion of the argument, which extended over nearly three days, the Master of the Rolls gave judgment, observing, without derogating from the verdict of the jury, which honourably acquitted Dr. Abrath from the charge of conspiracy, that he was of opinion that the question as to whether the onus of proving that the defendant company had taken all reasonable and proper care before instituting criminal proceedings against him and McManns lay on the plaintiff, was properly laid before the jury, and that therefore there had been no misdirection which would lead the Court to the opinion that the jury had been in any way misled. With regard to the employment of a medical gentleman employed by the railway company to visit McManus in order to determine the extent of his injuries, his lordship, referring to the fact that this gentleman had been described as "a medical detective," said he wished to give it as his emphatic opinion that in any case in which a medical man was engaged, either by an injured person or a railway company, he should strictly confine himself to the cure of his patient, and not be a party to getting up cases which might form the subject of legal proceedings on one side or the other. He was of opinion that the direction of the learned judge at the trial was right, and that the decision of the Court below must be reversed.—The other learned judges concurring, the appeal was allowed, with costs.

MEDICAL CERTIFICATES OF DEATH.

At an inquest recently held in the city of Gloucester, the coroner is reported to have censured a medical practitioner for giving an imperfectly filled-in certificate of death.

It appears that the subject of the inquiry was a girl, two years of age, upon whom a large wooden gate had fallen, causing at the time a bruise on the left side of the head, and concussion of the brain. The deceased was attended by a duly qualified medical man, but she died the same day as the accident occurred, never having recovered consciousness. The certificate of death given stated that the child died from "concussion of the brain," and that the duration of the illness was "two hours." Upon this certificate, the registrar of the district registered the death in the usual way, and the body was accordingly buried; but the coroner, having heard of the case, decided to hold an inquest, the body being exhumed for that purpose; and, on *post mortem* examination, it was found that the deceased had sustained a fracture of the skull, the result of violence.

On summing up, the coroner made some remarks to the following

effect: In the certificate of death given by the medical practitioner who attended the deceased, the primary cause of death was stated to be "concussion of the brain;" thus the certificate was insufficiently and incompletely filled in. Hence the registrar, who was unaware that concussion of the brain was secondary to some injury or violence received by the deceased, registered the death in the usual way as from natural causes, and the body was accordingly buried. A medical certificate of death provided for the primary and secondary cause of death; and, if the medical attendant had done what he should have done—that is, have stated the primary cause of death to be injury to the head, and the secondary cause concussion of the brain—or if the certificate had stated that the concussion of the brain arose from violence to the head, the registrar would not have issued the burial order, but would have given notice to the coroner and to the police, and the inquiry would have been held in due course. He was sorry to have to make any severe remarks upon a certificate given by any medical gentleman. but, if such certificates were allowed to pass unnoticed, deaths might be registered as from natural causes where violence, and perhaps crime, might inadvertently be concealed.

The jury returned a verdict of accidental death, attaching a rider that, in their opinion, the medical man was deserving of censure.

Certificates are too often carelessly filled in, and afford very inadequate information as to the exact cause of death. The primary and secondary causes should, if possible, be stated, with the duration of the illness; and, in cases where death has arisen directly or indirectly from violence of any kind, it is well to withhold the certificate until the coroner has been communicated with.

PUBLIC MORTUARIES AND POST MORTEM EXAMINATIONS.

SIR,—I should like, in the next number of the JOURNAL, to hear your opinion on the following case. The body of an infant was fished out of the canal at a hamlet of an adjoining parish to this (but in the union). The coroner holds an inquest at a little inn in the hamlet aforesaid, which he adjourns, in order that a *post mortem* examination may be made. The police-sergeant—there being no possible convenience for a necropsy in the hamlet—brings the body into Rugby, and takes it to the workhouse, with the idea that the *post mortem* should be made in the workhouse mortuary; but the master refused to receive it. After considerable difficulty, the police-sergeant found the clerk to the Burial Board; and, after having given the said clerk an acknowledgment in writing of his (the sergeant's) liability for the expense of the burial, he was permitted to take it to the mortuary at the Rugby Cemetery, where the examination was accomplished. Where, in a case of this kind, would be the proper and legal receptacle for a body till the making of a *post mortem* examination?—I am, sir, faithfully, JOHN INGLEBY MACKENZIE.

Rugby, June 17th, 1883.

*** Under the provisions of the Public Health Act, 1875, a local or sanitary authority of any district can erect a public mortuary for the reception of such bodies as are awaiting inquest or burial; but the clause relating to it is permissive only; hence the difficulty that often arises as to the disposal and reception of an unclaimed dead body.

The police-sergeant in the case mentioned acted rightly in conveying the body to the workhouse belonging to the parish in which the deceased was found, and it was the duty of the master to have received the same, more especially as the body would ultimately have to be buried at the parish expense.

Mortuaries in cemeteries and churchyards are frequently permitted by arrangements with the authorities to be used as "public mortuaries," and thus the difficulties mentioned in your letter are, to a great extent, overcome. When this is not the case, *post mortem* examinations frequently have to be made in the stables, outhouses, and sometimes in the bedroom in which the deceased may have died, much to the inconvenience of the medical practitioner and all others concerned.

We can only express our surprise that the local authority in Rugby has not yet erected—even on sanitary grounds—a proper public mortuary, with chambers for infectious and non-infectious cases, together with *post mortem* room, etc.

The medical practitioners in the district would do well to take united action in this matter, and bring the subject prominently before the notice of the local board and principal inhabitants of the district.

MEDICAL MEN AS JURORS.

SIR,—There can be no doubt that, if Mr. Knowlson Townsend's name (see JOURNAL, June 23rd, p. 1263) was upon the revised jury-list in the possession of the Clerk of the Peace, he was bound to serve if duly summoned.

It is the duty of the overseers to submit for revision a list of persons liable to serve as jurors to a special petty session of the justices of every division, to be held within the last seven days of September. This list shall have been previously affixed to the doors of all churches and chapels, and shall be open to the inspection of every inhabitant of the division. At the special petty sessions above alluded to, the magistrates, on oath of the party complaining, or other proof, or upon their own knowledge, may strike out the name of any person not qualified or liable to serve on juries.

Mr. Townsend's duty, therefore, for the future, will be to see if his name be upon the list posted on the church and chapel doors; and, if so, he must attend the special petty sessions, of which notice will be given in the list, posted as above, and claim exemption. This claim will, as a matter of course, be allowed, and his name will be struck out.

The overseers in the first instance committed default by inserting Mr. Townsend's name, and if this were wilfully done they would be liable to the penalty prescribed in 6 Geo. IV, c. 50, s. 45. Mr. Townsend, however, condoned the offence, so to speak, by not ascertaining if his name had been inserted.—Your obedient servant, COUNTY MAGISTRATE.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS, Friday, June 22nd.

The Contagious Diseases Acts.—The Earl of CARNARVON, in presenting a petition from the inhabitants of the neighbourhood of Aldershot in favour of the continuance of the above-named Acts, stated that the petitioners deprecated the course that had been taken by the Government, and set forth the good results that had followed the enforcement of the Acts. They also stated that at Aldershot there had not been one single case of hardship caused by the application of those measures since their introduction. He feared that the Bill which had been brought forward for the better protection of young girls could hardly become law this session, and, if it did not, the state of the towns which had formerly been but were no longer subject to the operation of the Contagious Diseases Acts would be very deplorable.—The LORD CHANCELLOR observed that the Bill for the protection of young girls was to be considered in Committee on Monday, and there were reasonable grounds for supposing that it would at any rate pass through their lordships' House during the present session.

The Marquis of HARTINGTON has postponed, until Monday next, his motion for leave to bring in a Bill to amend the Contagious Diseases Acts of 1866 and 1869.

HOUSE OF COMMONS, Monday, June 25th.

Lunacy Reports.—Mr. W. CORBET asked the Secretary of State for the Home Department when the report of the Lunacy Commissioners (England), for the year ended December 31st, 1882, would be laid upon the table; and also the report of the Scotch Commissioners for the same period.—Sir W. HARCOURT: The report is in type, and will soon be presented to the House.—Mr. A. O'CONNOR asked whether, under an Act of Parliament, these papers ought not to be laid on the table within three weeks of the meeting of Parliament; and whether the right hon. gentleman had not previously promised, in reply to a question of his own, that there should be no unnecessary delay.—Sir W. HARCOURT: I cannot answer that question off-hand.—Mr. W. CORBET asked the Chief Secretary for Ireland when the report of the Inspectors of Lunatics (Ireland), for 1882, would be laid upon the table.—Mr. TREVELYAN: It is expected that the report will be laid on the table in the course of this week.

The Contagious Diseases Acts.—Mr. HOPWOOD asked the Secretary to the Admiralty whether his attention had been called to a statement in several newspapers to the following effect: "Last week a large transport entered Portsmouth harbour with time-expired men from India. On the same day several diseased women left the Portsmouth Hospital, presumably with the intention of meeting that transport, and there was no law to prevent it;" and whether there was any foundation for the statement.—Mr. CAMPBELL-BANNERMAN: As soon as the paragraph in question appeared in a London daily newspaper, the visiting-surgeon under the Contagious Diseases Acts at Portsmouth wrote to the Admiralty, under which Department he acts, saying there was no foundation whatever for the statement contained in it. This was stated in the House of Lords by Lord Northbrook on the 13th instant.

Army Hospital Services.—Mr. DAWNAY asked the Secretary of State for War, with reference to Appendix No. 33 in the Army Hospital Services Inquiry Blue-book, whether the list of medical comforts there given, as received at Ismailia, and used on board Her Majesty's ship *Malabar* during the voyage to Portsmouth, represented the total amount consumed by the troops on board that vessel, or whether such list were supplemented, or could have been supplemented, from the ship's stores; and, if not, whether in view of the fact that all such medical comforts were finished by the time the *Malabar* reached Portsmouth, with the exception of a few ounces of brandy, it was considered that five bottles of brandy and the diminutive amount of other articles, given in the aforesaid list, constituted a proper and sufficient store of medical comforts for the use of over two hundred sick and convalescent soldiers during a three weeks' voyage.—The Marquis of HARTINGTON: The form of return in Appendix 33 is

somewhat misleading. It does not represent the provision of medical comforts made at Ismailia for the voyage, but is the medical officer's account of the issues made to patients out of the medical comforts drawn by him from the saloon mess of the *Malabar*. Such medical comforts could have been supplemented from the same source to any extent the medical officer might have required. The medical comforts shown in Appendix 33 are all which were consumed during the voyage. Although the amount may appear small, the medical officer shows in his evidence (Q. 10,133 and 10,134) that they were sufficient for the invalids under his charge, who were, for the most part, convalescents on fresh meat rations, and of whom fifty-six were disembarked at Malta.

Wednesday, June 27th.

Infectious Diseases Notification Bill.—Mr. HASTINGS, in moving the second reading of this Bill, stated that its object was to extend to small towns those powers of dealing with and notifying infectious diseases at present possessed by many large and populous towns under local Acts. He hoped the House would assent to the second reading of the Bill, as it would be the means of saving thousands of valuable lives.—Mr. HOPWOOD, in opposing the Bill, characterised it as one of those fads for interference with personal liberty which were aired at social science congresses. It was a first step towards compulsory isolation, and would have the effect of empowering the medical officer and inspector of a parish to enter a home and remove any sick member of the family, without regard to the feelings or wishes of its other members. (Here the hon. and learned member's remarks were interrupted by an ineffectual attempt to count out the House.) Continuing his argument against the Bill, he contended that the measure would be harsh and oppressive in its operation on the poor man, who, if one of the members of his family was attacked by disease, would have to inform the world of the fact, so that he would lose his employment, and would thus have starvation added to the other misery which invaded his humble home. The measure, moreover, would not really tend to check the spread of disease, because under it, in many instances, the poor man, when sickness visited his household, would not call in the medical officer, but would resort to the herbalist and botanist, who would keep faith with him, and would not make that disclosure of the case which would produce the injury to him that he dreaded. Again, the duty of notifying these diseases, if it was to be cast on anybody at all, ought to be thrown on the medical men; but the medical profession, in a congress hardly less important than that over which the hon. member for East Worcestershire so ably presided, objected to any such proposal. (The hon. and learned gentleman was at this point interrupted by an hon. member calling attention to the fact that there was not a quorum in attendance; and, on the Speaker proceeding to count, it was found that there were not forty members present. The House, therefore, stood adjourned.)

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 21st, 1883.

Brown, Arthur Tresco Franklyn, High Street, Rochester.
Dudley, William, Blackwell Street, Kidderminster.
Irvin, Frederick David, Bolton Park, N.W.
Mason, Francis Gurney, Park Villas, West Ham.
Norris, Edwin John, Barnsdale Road, St. Peter's Park, W.
Sash, Wilson, Laurie Park, Sydenham.
Taylor, Frank, Mile End Road, E.

The following gentlemen also on the same day passed their Primary Professional Examination.

Fisher, Walter Mulrea, Galway Hospital.
Griffin, James Mold, Guy's Hospital.
Newton, Sidney Frederick, Charing Cross.

MEDICAL VACANCIES.

The following vacancies are announced:

ALVERSTOKE MEDICAL BENEFIT SOCIETY.—Medical Practitioner. Salary, £200 per annum. Applications to Mr. John Ellicott, 10, Shaftesbury Terrace, Gosport.

BOROUGH OF BRADFORD.—Medical Officer of Health. Salary, £500 per annum. Applications to the Chairman of the Sanitary Committee, and endorsed "Medical Officer of Health," by June 30th.

BOROUGH OF SHEFFIELD.—Resident Medical Officer. Salary, £200 per annum. Application by July 17th.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the First District. Salary, £40 per annum. Applications by July 2nd.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the Workhouse. Salary, £10 per annum. Applications by July 2nd.

CHURCH STRETTON UNION, Shropshire.—Medical Officer and Public Vaccinator to the Fourth District. Salary, £46 5s. per annum. Applications by July 2nd.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary, £100 per annum. Applications marked "Eastern Dispensary," to the Honorary Secretary, Rev. Conway Joyce, M.A., 6 Richmond Hill, Bath, by July 2nd.

GLASGOW EYE INFIRMARY.—Resident House-Surgeon. Salary, £75 per annum. Applications by July 10th.

GLASGOW ROYAL INFIRMARY.—Physician to a New Department for Skin Diseases. Applications by July 16th.

HEREFORDSHIRE RURAL SANITARY.—Medical Officer of Health. Salary, £500 per annum. Applications by July 3rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant Physician. Applications by July 11th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 30th.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon. Must be doubly qualified. Salary, £80 per annum. Applications to Frederick Eastwood by July 6th.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Must possess one registered qualification. Salary, £40 per annum. Applications to Frederick Eastwood by July 6th.

JOINT COUNTIES ASYLUM, Carmarthen.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Hearder by July 7th.

LEEDS SCHOOL OF MEDICINE.—Resident Curator. Salary, £80 per annum. Applications by July 3rd.

LIVERPOOL NORTHERN HOSPITAL.—Resident House-Surgeon's Assistant. Applications to the Chairman by July 3rd.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Salary, £150 per annum. Applications by June 30th.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—Assistant-Physician. Applications by July 4th.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon. Applications by July 9th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by July 4th.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington, W.—Demonstrator of Physiology and Histology. Salary, £100 per annum. Applications by July 7th.

ST. THOMAS'S HOSPITAL.—Assistant Dental Surgeon. Applications to Mr. Tritton, the Counting House, Westminster Bridge, by July 10th.

STOCKTON-UPON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, £200 per annum. Applications by July 14th.

SUNDERLAND INFIRMARY.—Second House-Surgeon. Salary, £60 per annum. Applications by July 3rd.

TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay.—Junior House-Surgeon. Salary, £90 per annum. Applications to W. H. Kitson, Esq., Hemsworth, Torquay, by July 16th.

WESTERN DISPENSARY, Rochester Row, Westminster.—Consulting Accoucheur. Applications by June 30th.

WILTON UNION.—Medical Officer and Public Vaccinator. Salary, £60 per annum. Applications to G. M. Wilson, 12, Bridge Street, Salisbury, before twelve o'clock, by June 30th.

MEDICAL APPOINTMENTS.

AITKENS, J. A., M.R.C.S.Eng., L.R.C.P., and L.M.Ed. (late House Surgeon), appointed Honorary Surgeon to the Coventry and Warwickshire Hospital.

BACK, H. H., M.B., appointed Resident Clinical Assistant to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

BRYSON, J., M.B., appointed Sanitary Surveyor of the Second Class to the Board of Trade, stationed at Glasgow.

BUTTERFIELD, Harris, M.R.C.S., appointed Medical Officer of Health to the West Kent Sanitary Combined District, *vice* C. O. Baylis, M.D., resigned.

DAVIES, T., L.R.C.P., appointed District Medical Officer to the Machynlleth Union, *vice* Hugh Lloyd, M.R.C.S., deceased.

GRANT, D., M.B., appointed Resident Medical Officer to the Manchester Roya Infirmary, *vice* Graham Steell, M.D., resigned.

HOWE, J. E., M.B., appointed Resident Clinical Assistant to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

HULL, W., M.R.C.S., L.R.C.P., L.S.A., appointed Assistant House-Physician to St. Thomas's Hospital.

JONES, W. Wansbrough, M.A. & M.B.Oxon., B.Sc.Lond., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

JULER, H. E., F.R.C.S., appointed Junior Ophthalmic Surgeon to the St. Mary's Hospital.

MACKERN, George, M.D.Lond., appointed Visiting Physician to the British Hospital, Buenos Ayres, *vice* Dr. J. Peacan, whose term of office has expired.

MACKERN, John, B.A., M.B., appointed Assistant-Physician to the Chelsea Hospital for Women.

MACKEW, S., M.B.Edin., appointed House-Surgeon to the Hertford British Hospital, Rue de Villiers, Paris.

McPHEE, D., M.B., appointed Medical Officer to the Parochial Boards of Strachur and Stralachlan.

MANSELL, E. R., M.R.C.S.Eng., L.S.A., appointed Assistant Surgeon to the East Sussex, Hastings, and St. Leonard's Infirmary.

MARIN, F. B., M.P.S., appointed Assistant-Dispenser to the Surrey Dispensary.

MARSH, G.R., M.R.C.S., appointed House-Surgeon to the Royal Alexandra Hospital for Sick Children, Dyke Road, Brighton.

MARSHALL, John G., B.A., M.B.Cantab., M.R.C.S., appointed House-Surgeon to the Doncaster Infirmary, *vice* W. Walker, M.R.C.S., resigned.

MATHEWS, J. S., L.R.C.P., appointed Workhouse Medical Officer to the Machynlleth Union, *vice* Hugh Lloyd, M.R.C.S., deceased.

MILTON, H. M., M.R.C.S., L.S.A., appointed House-Surgeon (extension) to St. Thomas's Hospital.

MINCHIN, R. G , M.B., appointed Sanitary Surveyor of the Second Class to the Board of Trade, stationed at Queenstown.

MONKS, E. H., M.R.C.S., L.R.C.P.Ed., appointed Honorary Consulting Surgeon to the Royal Albert Infirmary and Dispensary, Wigan.

OGILVIE, George, M.B., B.Sc.Ed., appointed Physician to Out-patients at the North-West London Hospital.

OPENSHAW, T. H., M.R.C.S.E., appointed House-Surgeon to the Poplar Hospital for Accidents, Blackwall.

OWEN, ISAMBARD, M.D., appointed Assistant-Physician to St. George's Hospital, *vice* Herbert Watney, M.D., resigned.

POWELL, J. A., M.B., appointed Resident Medical Officer to the Children's Hospital, Birmingham, *vice* E. Phillips, L.R.C.P., resigned.

PRIESTLY, J., M.R.C.S., appointed Honorary Assistant-Physician to the Hospital for Consumption and Diseases of the Throat, St. John Street, Deansgate, Manchester.

REYNOLDS, W. P., L.R.C.P., appointed Honorary Surgeon to the Stamford Hill and Stoke Newington Dispensary.

ROGERS, E. C., M.R.C.S., appointed Medical Superintendent to the Cambridgeshire Asylum.

ROOCROFT, W. Mitchell, M.R.C.S., L.R.C.P.Ed., appointed Honorary Medical Officer to the Royal Albert Infirmary and Dispensary, Wigan.

ROOCROFT, William, M.R.C.S.Eng., L.S.A., appointed Honorary Consulting Surgeon to the Royal Albert Infirmary and Dispensary, Wigan.

ROUTH, A. J. McC., M.B , appointed Assistant Physician-Accoucheur to the Charing Cross Hospital.

STARLING, E. A., M.R.C.S.E., appointed House-Surgeon to the Coventry and Warwickshire Hospital, *vice* J. A. Aitkins, L.R.C.P., resigned.

STEAVENSON, W. E., M.B.Cantab., M.R.C.S.Eng., S.Sc.Cert.Cantab., L.S.A.Lond., M.R.C.P.Lond., appointed a Casualty-Physician to St. Bartholomew's Hospital.

STEELL, Graham, M.D., appointed Honorary Assistant-Physician to the Manchester Royal Infirmary.

THURSTAN, Edward Paget, M.D., B.A.Cantab, late Obstetric Physician to the Marylebone General Dispensary, Welbeck Street, Cavendish Square, appointed Honorary Consulting Physician to the Tunbridge Wells Amalgamated Friendly Societies.

WESTBROOK, Ernest, L.R.C.S., appointed Assistant House-Surgeon to the Poplar Hospital for Accidents, Blackwall.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

JACKSON—STACEY.—On the 21st instant, at St. Mark's, Sheffield, by the Rev. W. M. Tomlinson, Edward Siddall Jackson, M.B.Edin., Carnforth, Lancashire, second son of William Jackson, M.R.C.S., Bolton-le-Sands, Lancashire, to Nora, second daughter of John Vickers Stacey, Glossop Road, Sheffield.

DEATHS.

CARTER.—On June 22nd, at 74, Rodney Street, Liverpool, aged 16 years, George Humphry, only son of William Carter, M.D.

LAW, Charlotte Elizabeth Hay, wife of A. Roberts Law, M.D., Richmond, Surrey.

MEIKLE.—At Strathearn Leigh, Crieff, Perthshire, on the 22nd instant, Margaret Ballingall Paterson, wife of Thomas H. Meikle, M.D., J.P., resident physician, Strathearn Hydropathic Establishment, Crieff.

OATES.—At Weston-Super-Mare, on June 24th, Joseph Pimlott Oates, M.R.C.S., formerly of Sutton Coldfield, Warwickshire. Aged 75.

WILLIAMS.—On the 22nd instant, at 21, Compton Road, Canonbury Square, London, Patrick St. George Williams, M.R.C.S.E., youngest son of the late Dr. St. George Williams, Indian Medical Service. Beloved and deeply regretted by all who knew him.

DR. WHITE, the late medical superintendent of the Hackney Union Infirmary, has received from the Board of Guardians of that Union, an address, beautifully illuminated and framed, expressive of their sense of the valuable services rendered by him to the institution during the eight years he had been connected with it, and their regret at his resignation.

UNIVERSITY OF DURHAM.—Dr. Dyce Duckworth and Mr. Morrant Baker have been appointed Extra-Examiners in Medicine and Surgery respectively for this year in the University.

HOSPITAL FOR CONSUMPTION, BROMPTON.—From the report for 1882, read at the annual court of the governors of this hospital, it appeared that 1,224 in-patients had been under treatment, and 12,381 persons had received advice and medicine as new out-patient cases during the year.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY. .....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY.....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY. .....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30 Eye, M. W., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Denta Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th. 1; Ophthalmic Department, W. 1; Ear, Th. 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear, and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F. 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2 o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Dr. Barnes: Specimen of Hæmatocele in the Broad Ligament, and other specimens. Dr. Champneys: The Obstetrics of the Kyphotic Pelvis. Mr. Lawson Tait: Note on Uterine Myoma; Three Cases of Pyosalpinx; A Case of Acute Gangrene of the Uterus.

FRIDAY.—Ophthalmological Society, 8.30 P.M. Annual meeting for election of officers, etc. Mr. Snell: Case of Recovery from Sympathetic Iritis. Mr. Swanzy: On a Case of Hemiachromatopsia. Mr. J. E. Adams: 1. An Ophthalmoscope for Artists; 2. Case of a Foreign Body imbedded close to the Yellow Spot, with Normal Vision. Mr. Story: Anomalous Arrangement of Retinal Arteries. Living and Card Specimens.—Dr. Horrocks: Case of Facial, Conjunctival, and probably Retinal Nævus. Mr. Hulke: Drawing from a Case of probably Intra-ocular Cysticercus. Mr. Hodges: Melanotic Sarcoma of Iris (living specimen). Mr. Gunn: Case of Congenital Ptosis.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL ETIQUETTE.

SIR,—I should be obliged if you would inform me through your JOURNAL whether the following conduct is in accordance with medical etiquette.

Mr. A., who resides in our county town, twenty miles from here, where he holds an appointment to the hospital, and practises as a general practitioner and consulting surgeon, is in the habit of taking an annual holiday, generally staying at one of our neighbouring farmhouses, where he sees patients and prescribes for them as if he were at his usual abode. As he frequently meets practitioners in consultation in this neighbourhood, he is well known, and it naturally follows that many cases which would ordinarily be contented to consult the local practitioners, avail themselves of the opportunity of seeking the advice of the provincial gentleman.

This conduct is, perhaps, within the broad limits of what may be, ethically, correct, as the patients seek advice at the (temporary) consulting-room of the medical adviser. This, though, is but the thin end of the wedge, as I have viewed it from the first.

Last year this gentleman visited (at his own home two or three times) a patient who had so consulted him, and whom he knew I was in the habit of attending; in fact, he was informed that I had been seeing the patient for the same disorder some months before. When this gentleman's holidays were finished, he politely wrote to me, telling me all he had done for the case, what he advised, and that the friends understood that I should continue the attendance. I do not know, of course, whether any charges were made for the visits or not.

It is my opinion that such conduct is likely to cause at least friction or ill-feeling between medical men who have hitherto considered themselves thoroughly friendly disposed to each other. I should deem it a favour if you would give me your opinion on the whole subject, and sign myself,

STAY AT HOME.

*** There can, we think, be no objection to the medical man in question seeing patients during his holiday retirement, in consultation with the practitioners in charge of the cases. But he oversteps the limits of professional propriety when he takes ordinary charge of the cases of patients who belong to the medical practitioners of the locality where he is staying; and we hope that he will be very careful as to his actions in such matters, as any injudicious proceeding on his part may have an injurious effect on the feeling of professional amity, which we doubt not, he desires to maintain.

M. B., M. A., Chelsea.—Apply at the Pharmaceutical Society, Bloomsbury Square.

GALIUM APARINE AS A REMEDY FOR CHRONIC ULCERS.

SIR,—If Dr. Quinlan will refer to *The English Physician*, by Nicholas Culpepper, Edit. 1741, page 93, he will find that galium aparine or cleavers was formerly used in the treatment of wounds and ulcers. I quote the passage—"The juice also is very good to close up the lips of green wounds, and the powder of the dried herb strewed thereupon doth the same, and likewise helpeth old ulcers."—I am, sir, yours truly, FRANK QUICK, M.R.C.S.

Coventry, June 19th, 1883.

A STUDENT.—Legislation is impotent to make every man a gentleman, and it cannot reach every case of unbecoming conduct; whatever improves the education of the profession will, it may be hoped, thereby foster gentlemanly bearing.

EMERGENCY CASES.

SIR,—In your last week's issue is an advertisement of an instrument described as "Coxeter's Emergency." From its description the public would be led to consider the case as similar to the one I introduced to the profession in the autumn of last year. My "Pocket Medical Emergency Case," made by Messrs. Arnold and Sons, and noticed in the BRITISH MEDICAL JOURNAL, of February 24th last, forms a compact case (containing hypodermic syringe, discs of morphia, apomorphia, and ergotin, and perles of nitrite of amyl and ether), which can be readily carried in the pocket, and provides for almost every emergency not requiring surgical treatment. I am told that the sale of my instrument has been very large. It is very unsatisfactory to find, however, that an imperfect copy of my instrument case should be offered to the profession under so similar a title without some acknowledgment from the maker as to my invention of the instrument.—Yours,

Haslemere, Surrey, June 15th, 1883. T. FREDERICK PEARSE, M.D.

A RETRACTION.

SIR,—I wrote to you two weeks ago concerning a Mr. G. Watson, since then I have received evidence that the use of my name by that gentleman was an act of imprudence, and not an attempt to deceive. I have reason to believe that he will not use my name in a similar way again, and shall be very glad if you will allow me to retract my former letter.—Yours, etc., M. FOSTER.

New Museums, Cambridge, June 24th.

QUEEN'S HOSPITAL, BIRMINGHAM.

WE have received a letter from Mr. Alexander F. Hawkins, contradicting the report, announced in last week's JOURNAL, that that gentleman is a candidate for the vacant surgeonship to the Queen's Hospital.

ALPHA.—No card enclosed in letter.

MOIST HANDS.

SIR,—Moisture of the hands (local hyperidrosis) is a purely functional disorder of the skin, due to disturbance of the nervous system. I find that stout women—generally servant girls—suffer from it, although the fair votaries of the ballroom and members of good society, together with those of lithe and nervous habit, occasionally come under notice. It may or may not be attended with pain and inflammation, dysidrosis or fætor-osmidrosis, or, more rarely, pigment-chromidrosis. As a rule, the axillæ and feet sympathise more or less. As the condition appears to be due partly to abnormal vascular conditions, but mostly to irritability or undue stimulation of the vaso-motor nerves, probably of central origin, "Mike" will find benefit from the following lotion. ℞ Liq. plumbi subacetatis, ʒiii; sp. vini methylati, ʒj; aquæ rosæ ad ʒx; fiat lotio. The lotion to dry on, and the hands subsequently to be dusted three times daily with powder composed of equal parts of calamine and starch-powders. His patient should wash her hands always in cold water, and well dry them. She should avoid malt and all fermented liquors, pickles, spices, tea and coffee (taking cocoa), and be sparing in the use of sugar. The lotion failing, she should wash her hands thrice daily with carbolic acid soap in a basin of soft water, in which half a drachm of extract of belladonna has been previously dissolved, and take a pill containing valerianate of zinc, 2 grains; quinine, 1½ grains; and extract of belladonna, ¼ grain, with conf. rosæ q. s., t. d. s. A mixture (if any tingling or burning in the fingers), containing bromide of potassium, digitalis, and a vegetable tonic, will complete the treatment. The belladonna, besides causing vaso-motor paralysis, contracts the unstriped muscular fibres surrounding the arterioles going to supply the sweat-gland, and carbolic acid has a benumbing effect on the nervous filaments supplying these and the papillæ of the skin proper.

It is possible for "Mike" to notice an increase of local over general temperature, as occurred once to the writer.—I am, etc., faithfully yours,

Ealing, June 25th, 1883. H. A. SMITH, M.R.C.S., L.R.C.P.Ed.

SIR,—I would advise "Mike" to try the extract or liniment of belladonna, as recommended by Dr. Sidney Ringer, or rub in lightly equal parts of extract of belladonna and glycerine, which I have found to act like a charm.—Yours truly, M. WOODWARD.

Pershore, June 26th, 1883.

AN INQUIRY INTO THE CAUSES OF THE INCREASE OF CANCER.

SIR,—The writer of the above seems to have arrived at a very proper conclusion, from good but insufficient premises, by a faulty method of argument. He argues that the low infant-mortality is followed by a high cancer-mortality, quoting figures that only show a low infant-mortality accompanied by a high cancer-mortality.

As the increase of cancer commences at about the age of thirty-five years, he can only argue from the present low infant-mortality to a high cancer-mortality of thirty-five years hence, and not from the respective rates of one year, as the low infant-mortality produces no influence on the cancer-mortality of the same year.—I am, etc., E. H. MYLES, A. M. D.

Bara Gali, Punjaub.

J. M.—Your communication was duly received, and is in our hands.

THE UNIVERSITY OF ST. ANDREWS.

SIR,—In my letter on this University, published in the JOURNAL of the 16th instant, I unwittingly made a clerical error, which kindly permit me to correct.

The third paragraph commencing, "At Edinburgh, it means almost the entire curriculum," should have been written, "At Glasgow, it means almost the entire curriculum."

The fourth paragraph commencing "At Glasgow," etc., should have been written "At Edinburgh," etc.

This correction is just to Edinburgh University, which, through the influence of the Town Council, is more liberal than Glasgow, in so far as it allows more classes to be taken outside by its candidates for its degree.—Yours faithfully

A ST. ANDREW'S M.D.

F. D.—Your contribution has been received.

PRACTICE OF GERMAN SPAS.

SIR,—Perhaps some member of the Association may be able to tell me what steps should be taken by a M.B. (British) to obtain a doctorate, authorising him to practice in a German spa, and whether or not the examination can be undergone in English.—Yours truly, MEDICAS.

"Quere" should write to the Medical Alliance Association, 130, Stockwell Road, Brixton, S.W.

HUNTER'S "GRAVID UTERUS."

SIR,—I have a subscription copy of a beautiful book of plates, entitled *Hunter's Gravid Uterus*, published by the Sydenham Society in 1851. Can any of your readers kindly tell me what the original cost was, and its value now, previous to disposing of the same?—I am, sir, yours faithfully, MEDICUS.

MEDICAL HERBALISTS.

SIR.—I see that a deputation of medical herbalists—many of them, no doubt, late file-cutters, grinders, and joiners—waited on Mr. Mundella a few days ago, desiring to know if the new Bill will affect them in any way. There can be no objection to these men selling their broom, calumba, and camomiles, etc., but I think it is high time that their visiting and prescribing for patients should be put a stop to. I can point out a case where one of these gentry—formerly a file-cutter, but now flourishing as a medical botanist—visited an infant (charging one shilling for visit and medicine), who died under his care. I said to the father, who told me of this, "But he cannot give a certificate of death." "He did, sir; and it was good enough for the registrar," he replied. Now, I know this registrar is *extremely* particular about death-certificates, and I also know that this herbalist has a son in the town whose name is the same as the father's. His son did not see the child, and there is little doubt that *he* signed the certificate, he being a qualified man.—I am, etc.,

VIGILANS.

The Medical Acts Amendment Bill.

SIR,—Whilst thanking you very much for your comments in the JOURNAL of June 9th, will you allow me to say that I was not writing of what the Bill might be rendered by the proposed amendments, but of it as it now stands, in plain uncontradictable fact. What I mostly complain of now, and what I feel sure that the profession will bitterly complain of hereafter, is, that they have received the pledges of the Reform Committee that the Bill provided for all they desired, and yet, upon examination, it was found to be framed, both in principle and detail, so as to require, in the opinion of competent independent authorities, so many amendments as to take up whole pages of the JOURNAL. For many reasons, the Bill has not, and will not have, the support of the profession generally. Many, I regret to say, do not trouble themselves at all about the Bill, blindly trusting to others; but those who have taken the trouble to read and think, maintain that they have been kept in ignorance of the practical bad effects of the Bill, both upon themselves and the public. May I select one of the reasons of discontent? Is it just or fair to qualified men that, in the future (if the Bill become law), any man, not knowing one drug from another, but who has, or fancies he has, a liking or a "fad" for "physic" or "bone-setting," can and may "set up" next door, and practise without let or hindrance? Now he can be prosecuted under the Apothecaries' Act; if the Bill become law, he cannot be. The pharmaceutical chemists have necessarily an excellent knowledge of drugs and their doses, if not of diseases, but the Bill opens a path for men to practise who know not one drug from another; the country generally—the poor neighbourhoods perhaps mostly—will swarm with these ignorant quacks, and the poor will suffer, who ought to be protected. For Mr. Mundella to say that great good is done by these same quacks is perfectly unintelligible to us. Has anyone yet explained to Mr. Mundella the positive and often grievous harm they do, by treating cases wrongly? We are all very properly anxious in these days to save life by every means in our power, and yet a portal like this is left open, through which I have no hesitation in saying (and I am sure the profession will bear me out) many lives are annually lost.—I am, sir, very faithfully yours,

CHAS. CHAPLE, M.D.St. Andrew's, L.R.C.P.Ed., Member of the British Medical Association.

June 11th, 1883.

*** The education of the profession will be improved by the Medical Bill, which is supported with that object. Numerous amendments have been placed before the members of the Association in the JOURNAL for consideration, but it does not necessarily follow that they will all meet with approval.

SIR,—As you invite suggestions for amendments of the new Medical Bill, I beg to offer one or two.

Suggestion 1: Clause 28, Section 4. I would suggest that, after apothecary, the words "or medical practitioner" be inserted. Reason: As the Bill now stands, any unregistered person might call himself "Professor of Medicine" or "Medical Practitioner," provided he does not represent himself to be registered, or does not use the special designations, physician, surgeon, doctor, or apothecary.

We can scarcely expect the legislature to prevent persons from giving medical advice, but we do expect that unqualified persons shall be prohibited from representing themselves as medical practitioners, and thus leading the public to suppose that they are duly qualified.—I am, etc.,

JAMES GEORGE PARSONS, M.D.

Crofton House, Stokes Croft Road, Bristol, June 11th, 1883.

*** Subclause (3) of Clause 27—"Any person who represents himself to be a registered medical practitioner, or uses any name, title, addition, or description *implying* that he is a registered medical practitioner, shall, on summary conviction, be liable to a penalty not exceeding £20," is intended to embrace such titles.

SIR,—Will you kindly inform me, whether a gentleman having a surgical and midwifery qualification of twenty years' standing, will be, under the new Medical Bill, privileged to practice medicine.—Yours truly,

A MEMBER.

*** Undoubtedly, yes.

HOUSE-SURGEON.—There is an express clause in the Act which provides that no medical officer of a public hospital or like public institution shall have a claim to receive fees for giving evidence at a coroner's inquest concerning any patient treated in the hospital, which does not apply to persons brought in dead.

The Feeding of Infants.

SIR,—The failures in feeding with cow's milk, in my opinion, arise from the admixture of cane-sugar, which I am sure is most offensive to the infant stomach. For thirty-three years, I have constantly used the *Saccharum lactis*, with the best results. It gives all the requisite sweetness to tempt the child to feed, and is also easier digested. It is, no doubt, dearer than ordinary sugar, but that should not be a bar to its use, as it is in itself a food.—Yours truly,

V. POULAIN, M.D., M.R.C.S.

DR. ROBERT LEE is thanked for his letter. The presumption that the two articles are by the same hand is erroneous.

School Board Certificates.

SIR,—Do you not think that the School Board should pay for medical certificates, and will you tell me if I can demand payment from them under the following circumstances? Certainly, the class of people who receive the certificates are not in a position to pay; and, if they were, I do not think it would be right to demand the fee from them. A scholar or pupil teacher is ill; I am attending, and say, "You cannot return to school for another three weeks." This message is carried to the School Board; the officials there send word back, "We require a certificate from the doctor." The patient does not want it; the School Board wants it, and I say they ought to pay a fee for it, say of 2s. 6d., or so. Why should it be expected that medical men should give certificates right and left without remuneration? We do quite enough work at that rate as it is.—Yours, etc.,

VERITAS.

*** The Local Government Board have held that the circumstances of the case must decide the question. In the present instance, the circumstances would certainly indicate that the school authorities might properly be looked to for payment

Vivisection.

SIR,—To prevent misapprehension, I beg leave to forward the enclosed letter from Mr. Lawson Tait relating to Drs. Acland and Brunton. The assertion which Mr. Tait has made as to those gentlemen was never authorised by me, nor ever appeared in any publication issued by the Society.—I remain, sir, your obedient servant,

GEORGE R. JESSE, Honorary Secretary to the Society for the Abolition of Vivisection.

Henbury, Macclesfield, Cheshire.

"7, Great Charles Street, Birmingham, June 4th.

"Dear Sir,—The words marked by inverted commas—"This was practically admitted before the Commission by such good authorities as Dr. Acland and Dr. Lauder Brunton" (Mr. Lawson Tait on Vivisection, Philosophical Society of Birmingham, p. 125)—are being impugned. I believe I got the idea from one of your pamphlets. Can you refer me to it if it is so, as I have failed to find it?—Yours truly, LAWSON TAIT.—George Jesse, Esq., Henbury, Macclesfield."

Melancholia.

SIR,—I shall be obliged for an opinion in the following case. I have a patient, a married lady, who is suffering from melancholia. She has attempted to drown her two children. Her husband is anxious to have her taken care of in her own home. Is this perfectly legal? and, if so, under what conditions?—Yours truly,

E. W.

Boracic Nursery Powder.

MR. S. HUGGETT, 128, Prescot Road, Liverpool, writes to say that he has, for the last eighteen months, publicly introduced and sold a "boracic violet-powder," prepared with pure starch, and delicately perfumed;" such as that which was last week noticed in our columns as the recent introduction of Messrs. Wortley and Co., Manchester.

J. ATKINSON, Acton's works, published by Churchill.

Hay Asthma (Hay Fever).

SIR,—In reply to your correspondent of last week, I find, after more than forty years' suffering from hay-fever, that its usual duration is from the first few days of June to the end of July—that its progress varies according to the amount of exposure to the sun's rays, to dusty weather, and to the smell of most flowers during this period.

As far as my observations go it is incurable; though the severer symptoms can be alleviated by dipping the head in cold water each morning; avoiding the mid-day heat, and all vegetation. But apart from this active form of hay or summer catarrh, there is a chronic or constitutional susceptibility, arising from the smell of hay or straw in the winter time also; so sensitive are some people that they cannot face the horses in driving exercise, and are even liable to be catarrhal and asthmatic, when conversing with those who have been on horse-back.

It may be remarked that these affections belong principally to the upper and middle classes; that they are often associated with eczema and gouty symptoms; and that they are aggravated by any depressing causes.

In my own case gout is inherited through two generations; out of a family of eight, four of us alternately were affected with "hay fever," and several of my own children have symptoms of it in a modified degree.

I would refer your correspondent to Dr. Philipp Phœbus's copious and interesting history of the disease, published at Giessen, in 1862, and to Dr. Thorowgood's valuable *Notes on Asthma* (Churchill's third edition, 1878), for useful hints and treatment.—Your obedient servant,

JOHN J. MERRIMAN.

45, Kensington Square, June 19th, 1883.

SIR,—In reply to your correspondent, Mr. Kesley, who asks for a cure for hay-fever, I beg to inform him that, after twenty-five years' experience of it personally, I have come to the conclusion that the only cure for it is patience, if the sufferer cannot leave Great Britain or Ireland, and let him thank God that there are only thirty days in June.

To relieve the intolerable itching of the conjunctivæ, I have found nothing so good as a solution of two grains of tartrate of morphia to the ounce of water, dropped into the eyes when they begin to be irritable. In addition, I wear goggles with wire-gauze sides, and when I have driving to do a veil made of three ply of fine silk gauze, in the form of a bag open at both ends; one end fits round my hat, and the other has a heavy wire ring about ten inches in diameter attached, which lies on my shoulders, and keeps the veil off my face. These are the only things I have found of any service. The veil is especially comfortable, the only thing against it being its curious appearance. —Yours faithfully,

A SUFFERER.

Medical Provident Society.

SIR,—In the JOURNAL of June 23rd, "Caution" refers to a benefit society of which he is a member. Would he kindly let me know what society it is?—I am, sir, yours truly,

WILLIAM J. STEPHENS.

41, Grand Parade, Brighton, June 24th.

DR. H. AUBREY HUSBAND proposes that a portion of the registration fee paid by every practitioner, when placing his name on the register, be devoted to the formation of a fund for the benefit of the widows and children of medical men. In the colonies, a certain annual sum used to be deducted from the pay of every minister in the Church, and Dr. Husband unfortunately has felt the benefit of such a procedure. The fees required by the advocates in Edinburgh include, Dr. Husband believes, a widow's fund. Were there 26,000 registered medical men, one guinea from the registration fee would at once give a good round sum. Dr. Husband has no faith in voluntary subscription. A short clause in the present Medical Bill would settle the matter. The expense of working would be almost *nil*; a small committee of the Medical Council could do all the necessary work.

Beds.

SIR,—Would some of your numerous correspondents kindly favour me with advice on the subject of beds. A patient of mine in delicate health, a bad sleeper and a bachelor, using a feather bed, is frequently rendered more wretched by the varied ways in which the servants make up the bed. The spiral spring, or French bedstead, appears to me the best and most likely to accommodate itself to the varied form of exhausted nature. The numerously advertised wire and other mattresses, seem to me all very well so far as presenting a perfectly level surface, but utterly failing to support the hollow when yielding to the more prominent parts of the figure.

PERPLEXED.

UNQUALIFIED ASSISTANTS.

SIR,—Permit me to say a few words with respect to the assistant question, which is at present eliciting some attention in your JOURNAL. I have had a great number of assistants in my time, and a few of them were qualified ones. The unqualified assistants, almost without exception, were worth their salaries, but the qualified ones, without exception, were useless, and ignorant of the daily routine of a general practice. If it had been ignorance alone that they possessed, I could have instructed them; but combined with their ignorance was an immense amount of conceit, which formed an impassable bar to their instruction. The qualified assistants that I have had have been all men who have spent the smallest amount of time possible in going through their curriculum, and receiving their diplomas to practise; their salaries were considerably higher than I pay unqualified assistants; and their services were really of no value whatever if we take into account the constant watching that they required for fear they made any serious mistakes, and the number of patients alienated by their supercilious and off-handed manner of speaking and assisting them. They could talk about minute anatomy, microscopical preparations, and a lot of other similar matters, which are all very well in their place, and things not to be despised; but for dispensing they did not know an eight-ounce bottle from a six-ounce; and, for book-keeping, they were far above such drudgery.

I think it is a great shame such raw fellows should be permitted to practise, and the licensing bodies should protect the public by insisting that every student, before he is allowed to pass, should spend one year at least as a pupil with some private practitioner, where he would get an insight into practice; that would take the conceit out of him. or, rather, it would choke its growth.
—I am, etc., J. B. D.

FOOD REFORM JOURNAL.—In reply to "X. Z." (p. 162), the *Food Reform Journal* is published by Messrs. S. W. Partridge and Co., and it may be obtained at the Vegetarian Restaurant, 429, Oxford Street, W. T. G. V.

Dr. DUTTON is thanked for his communication.

THE PARCELS POST, AND THE CARRIAGE OF MEDICINES.

SIR,—I wish to draw the attention of my fellow members to a matter of considerable practical interest, to those of us who, like myself, live in a country village. I refer to the operation of the new parcels post, so far as it concerns the carriage of medicines. As you are aware, letter carriers, and mail cart drivers, have hitherto been allowed to carry medicines for their profit, and the consequence has been, that they have been delivered quickly and cheaply to the great convenience, both of ourselves and our patients. When August 1st arrives, this will be no longer allowed, for all parcels, except newspapers, will be obliged to go through the post. The result will be considerable delay, inconvenience and expense. Each bottle of medicine must go to the post town, in many cases passing its destination on the way, and come back again, being delivered with the letters the next day, so that no medicine can be received the day it is sent off, no matter how urgently it may be needed; and many a poor working man after a hard day's work will be obliged to walk several miles to fetch medicine, and many of the poorest will be unable to get what they may most urgently stand in need of. All parcels weighing between 1 and 3 pounds, will be charged 6d. Bottles must be securely packed to go at all, and this will increase the weight. I find an ordinary 8-ounce bottle, corked, and filled with water, weighs 14½ ounces, and a 10-ounce bottle similarly treated, 1 pound 2 ounces. The 8-ounce mixture, with great care in packing, might perhaps go for 3d., but the 10-ounce must be 6d. A poor patient, living six miles from the doctor, would consequently have to pay, in many cases, three times the amount he has now, and would not receive it until the next day. Say, he requires a renewal three times a week, the cost will be at least 1s. 6d., thus a serious tax will be imposed upon him at a time when he is least able to bear it. I hope some influential members of the Association will take the matter up, and urge the Parliamentary Committee to draw the attention of the Postmaster-General to the serious inconvenience and loss to the public which will result, and urge upon him the withdrawal of the prohibition. Surely it would be as reasonable to make an exception in favour of medicines, as it would be in the case of newspapers, and less likely to be abused.—I am, sir, yours faithfully, CHARLES J. MYERS.

North Somercotes, Great Grimsby, June 23rd, 1883.

SIR,—The danger of a bottle breaking and spoiling articles appears to be the foundation of the objection to postmen carrying medicine. If that be all, then it is simple for each parcel-van to have a strong box, tinned and padded, for carrying bottles of medicine only.—Yours truly, A MEMBER.

SIR,—Would any member of the British Medical Association kindly favour me with the following particulars? The capacity of Gambetta's skull; the measurements of the skull; and the weight of his brain.—Yours faithfully,
G. HOULTON BISHOP.

1, Oxford Mansions, London, June 20th, 1883.

COMMUNICATIONS, LETTERS, etc., have been received from:
Mr. A. Moor, London; Dr. Quinlan, Dublin; Allan Reeve Manby, Swoffham; Rev. A. N. Vawdrey, Helston; Dr. Murrell, London; Mr. R. Strange, Glasgow; Dr. B. Foster, Birmingham; Mr. E. H. Walker, Eastbourne; Dr. A. Creswell Rich, London; Mr. J. Whitehouse, Sunderland; Dr. J. Rogers, London; Dr. Churton, Leeds; Mr. R. G. Salmond, London; Dr. George Mackern, Buenos Ayres; Mr. B. R. Henessy, Corrymore, Swansea; Professor D. McAlister, Liverpool; Mr. W. A. Macleod, Kilmarnock; The Secretary of the Dental Hospital of London Medical Society; Mr. William Donovan, Whitwick, Leicester; Mr. J. Moore, London; Mr. W. G. Smith, Rotherham; Alpha; Dr. F. W. Lowndes, Liverpool; Mr. Mordey Douglas, Sunderland; Dr. E. Paget Thurstan, London; Dr. W. Thornton Pasher, Fort Elliot, Texas; Dr. William Webb, Wirksworth; Mr. R. B. Chaundy, Handsworth; Dr. McKendrick, Glasgow; Mr. George Padley, Swansea; Mr. R. P. Steven, London; Dr. Markham Skerritt, Clifton, Bristol; Mr. Pearce Gould, London; Dr. Murphy, Sunderland; Dr. J. Lowe, Lynn; Mr. Jonathan Hutchinson, London; Mr. C. B. Lockwood, London; Mr. S. Wilson Hope, Petworth; Mr. G. A. Brown, Tredegar; Dr. James Milward, Cardiff; Mr. C. J. Myers, Grimsby; Dr. Sawyer, Birmingham; Dr. Rudderford, London; Mr. Lennox Browne, London; Mr. G. E. Barron, Winkfield; Mr. J. B. Brine, Wimborne; Dr. Byrom Bramwell, Edinburgh; Dr. T. O. Dudfield, London; Sir W. Smart, London; Mr. F. Swinford Edwards, London; Dr. Alfred Wise, London; Mr. H. Aubrey Husband, Edinburgh; Mr. T. P. Wills, Boxhill; Mr. Hugh Rayner, London; Dr. W. S. Playfair, London; Mr. W. J. Stephens, Brighton; Dr. V. Poulain, London; Mr. J. E. Dougherly, Indianapolis; T. G. V.; Dr. James Wallace, Greenock; Mr. A. Eaton, Liverpool; Mr. B. G. Morison, London; Dr. Paget, Cambridge; Mr. C. A. Cornish, Bristol; Dr. J. Cockle, London; Messrs. Gray, Dawes, and Co., London; Mr. J. Finny, London; Dr. J. B. Dickinson, Manchester; Mr. E. C. Beale, Birmingham; Mr. Shirley F. Murphy, London; Dr. J. W. Moore, Dublin; Mr. W. Kay, Farnborough; Mr. J. H. Gordon, Salisbury; Dr. Oliver, Newcastle-on-Tyne; Mr. E. Atkinson, Leeds; The Secretary of the North West London Hospital; Mr. J. B. Lyth, Rotherham; Dr. William Carter, Liverpool; Dr. C. E. Glascott, Manchester; Mr. Darwin Gisborne, London; Our Aberdeen Correspondent; Mr. de Watteville, London; Mr. E. Nettleship, London; Dr. Manson Fraser, London; Dr. Thomas R. Fraser, Edinburgh; Dr. Thudichum, London; Dr. Oliver, Newcastle-on-Tyne; Dr. F. Pollard, Liverpool; Mr. R. Hellis, Barrow-in-Furness; Mr. Sidney Plowman, London; Mr. Whitehouse, Sunderland; Mr. M. Woodward, Pershore; Dr. Savage, London; Mr. Potts, Sunderland; Hepatitis; Mr. John Martin, Castleisland; Mr. S. B. Mason, Pontypool; Mr. James Thompson, Kingswinford; Dr. Fergusson, Peebles; Dr. C. J. Hare, London; Mr. George Eastes, London; Mr. W. Howard, Nailsea; Dr. Rowbotham, Birmingham; Dr. T. Eyton Jones, Wrexham; Dr. Roberts, Brighton; Mr. W. Trenerry, Bristol; Mr. G. W. Daniell, Blandford; Mr. G. E. Williamson, Durham; Dr. F. Dick, Madras; Dr. Carter, Southborough; Mr. E. Watford, Ramsgate: Dr. Michael Foster, Cambridge; Mr. A. J. Reeve Tyler, London; Mr. Herbert Smith, Ealing; Dr. James Thompson, London; Mr. J. F. Herring, Builth; Mr. T. Sympson, Lincoln; Mr. P. J. Lemhan, Salford; Dr. W. C. Wile, Sandy Hook, Connecticut; The Treasurers of St. Mary's Hospital; Mr. J. Barron, Sunderland; Dr. M. Finny, Dublin, etc.

BOOKS, ETC., RECEIVED.

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